



R. C. TUCKER, PRES.

June 22, 1959

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

New Mexico Oil Conservation Commission
Mabry Building
Santa Fe, New Mexico

re: Application for Administrative Approval
for conversion of Unit Well to a Water
Injection Well. North Central Caprock
Queen Unit, Lea and Chaves Counties, New
Mexico.

Gentlemen:

As provided in the Oil Conservation Commission Order No. R-1311,
Great Western Drilling Company, as Operator of the North Central Caprock
Queen Unit, requests administrative approval for the conversion of the
following Unit Well to a Water Injection Well:

Well Number

13-8

Location

SE/4 of the NE/4 of Section 13,
T-13-S, R-31-E.

As evidenced by the copy of the enclosed New Mexico Oil Conserva-
tion Commission Form C-116, Well No. 18-5, located in the SW/4 of the NW/4
of Section 18, T-13-S, R-32-E, Lea County, New Mexico, has experienced
response to the injection of water into the pilot waterflood area. The
enclosed New Mexico Oil Conservation Commission Form C-115 shows that Well
No. 18-5 produced only about 2 barrels of oil per day during the month of
May. The well is now producing 17 barrels of oil per day. The stimulated
well is a direct offset to the proposed injection well, therefore, as pro-
vided in your Order No. R-1311, Great Western Drilling Company applies for
the expansion of the North Central Caprock Queen Unit by reason of the
conversion of Well No. 13-8.

We respectfully submit that the ultimate recoverable oil from the
Caprock Queen reservoir will be decreased and waste will occur, due to an
unbalanced condition in the pattern flooding network if Unit Well No. 13-8



New Mexico Oil Conservation Commission
Santa Fe, New Mexico

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is not converted to an injection well at this time. There is attached to this application a plat of the area, showing the North Central Caprock Queen Unit outlined in yellow, the injection wells outlined in red and the proposed new injection well outlined in green. This plat also shows the names of all offset operators.

Waivers from offset operators are being requested and these waivers will be forwarded to the Commission at such time as they are executed, so as to decrease the required 15 days interim period set up by the Commission order for administrative approval.

Yours very truly,

GREAT WESTERN DRILLING COMPANY



J. T. Hampton

JTH/mls

cc: Mr. S. E. Reynolds, State Engineer
P. O. Box 1079
Santa Fe, New Mexico

Graridge Corporation
P. O. Box 752
Breckenridge, Texas

Ambassador Oil Corporation
3109 Winthrop
Fort Worth, Texas

Gulf Oil Corporation
P. O. Box 962
Roswell, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION
MAIN OFFICE OCCGAS-OIL RATIO REPORT
1959 JUN 25 AM 8:21

OPERATOR Great Western Drilling Company POOL Caprock Queen
 ADDRESS P. O. Box 1659, Midland, Texas MONTH OF June, 1959
 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	
North Central Caprock Queen Unit Tract 2	18-5	6-18	Pump		24	3	0	17	TSTM	TSTM
Great Western Drilling Company requests a top allowable on the above well. Prior experience in the field, recently Well No. 18-3, shows gains to top allowable within a week after the first major increase.										

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 19 June 1959 Great Western Drilling Company
 By S/ O. H. Crews
General Superintendent
 Title

C O P Y

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

Sheet No.

OPERATOR'S MONTHLY REPORT

The following is a correct report of all oil and gas producing wells of Great Western Drilling Company
 (Company or Operator)
North Central Caprock

Lease Queen Unit Pool Caprock Queen County Lea and Chaves for month of May, 1959

State Land; Lease No. Assignment No. Government Lease No. Pat. Land.

FOLLOWING TO BE REPORTED ON UNIT BASIS

FOLLOWING TO BE REPORTED ON UNIT BASIS											
LOCATION					OIL AND WATER (BBLs.)				(1) Total Gas Prod. MCF	No. Days Produced	Show Whether Flowing Pumping Gas Lift. or Dead
Well No.	Unit Letter	Sec.	Twp.	Rge.	Net Oil Allowable	(1) Net Oil Prod.	(3) Gravity	(2) Water			
SCHEDULE ATTACHED:											
TOTALS											

(1) Distribution to units based on: Test Meter Estimate

(2) Method of determining water production: Shake out Estimate Draw Off

(3) Report distillate, condensate or other liquid hydrocarbons (other than oil) in this column, starting with *

FOLLOWING TO BE REPORTED ON LEASE BASIS

No. of Wells	Total on Hand Beginning of Month (Barrels)	Scheduled Allowable for Month	Actual Amount of Oil Produced	Over- Produced	Under- Produced	DISPOSITION OF OIL			Total on Hand End of Month (Barrels)	Total Capacity of Lease Tanks
						Barrels to Pipe Line	Bbls. to Truck or Tank Car	Transporter		
30	2643	4867	2707		2160	2161		Service Pipe Line Co.	3189	7140

GAS

USED FOR GAS LIFT

..... MCF Used on Lease MCF Used on Lease
 MCF Sold to MCF On Lease
 MCF Blown to Air, (By Difference) MCF On Lease

Remarks:

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

Signed: s/O. H. Crews

Representing Great Western Drilling Company Position General Superintendent
 (Company or Operator)

Address Box 1659, Midland, Texas Date: 8 June 1959

C O P Y

OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Sheet No.....

OPERATOR'S MONTHLY REPORT

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						Barrels to Pipe Line	Bbls. to Truck or Tank Car	Transporter		
16	1680	9827	3324		6503	3571		Texas-New Mex Pipe Line Co.	1433	4810

GAS

USED FOR GAS LIFT

.....MCF Used on LeaseMCF Used on Lease

MCF Sold to.....MCF On.....Leas.....

.....MCF Blown to Air, (By Difference)MCF On.....Leas

Remarks:

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

Signed :

Representing: **Great Western Drilling Company** Position _____
(Company or Operator)

Address: Date:

Production by Wells
Supplement Form C-115
May, 1959

Tract No.	Well No.	Unit	Location		Sec.	Oil Allowable	Oil Production	Water Production	Days Produced	Status
1	17-3	C	17	13	32	124	64	0	30	P
	17-4	D	17	13	32	0	0	0		Input
2	18-4	D	18	13	32	0	0	0		Input
	18-1	A	18	13	32	93	57	0	31	P
	18-2	B	18	13	32	0	0	0		Input
	18-8	E	18	13	32	0	0	0		Input
	18-3	C	18	13	32	124	239	0	31	P
	18-5	E	18	13	32	93	65	0	31	P
	18-6	F	18	13	32	93	0	0		Input
3	18-11	K	18	13	32	186	108	0	31	P
	18-14	N	18	13	32	93	0	0		Input
4	13-8	H	13	13	31	124	149	6	31	P
5	18-12	L	18	13	32	0	0	0		Input
	18-13	M	18	13	32	124	36	0	30	P
6	13-9	I	13	13	31	93	1	0	8	P
7	13-2	B	13	13	31	93	0	0		Input
	13-7	G	13	13	31	124	44	0	14	P
8	13-3	C	13	13	31	155	61	2	26	P
9	13-1	A	13	13	31	93	84	0	31	P
10	13-5	E	13	13	31	93	11	0	2	P
11	13-16	P	13	13	31	775	161	5	20	P
12	13-11	K	13	13	31	155	76	5	31	P
	13-12	L	13	13	31	93	76	2	31	P
	13-10	J	13	13	31	62	75	5	31	P
14	13-6	F	13	13	31	124	18	0	17	P
15	13-4	D	13	13	31	620	243	36	26	P
16	19-4	D	19	13	32	372	181	9	20	P
19	14-1	A	14	13	31	93	239	0	31	P
	14-7	G	14	13	31	713	439	0	31	P
	14-8	H	14	13	31	155	200	0	31	P
TOTAL						4867	2707	78		

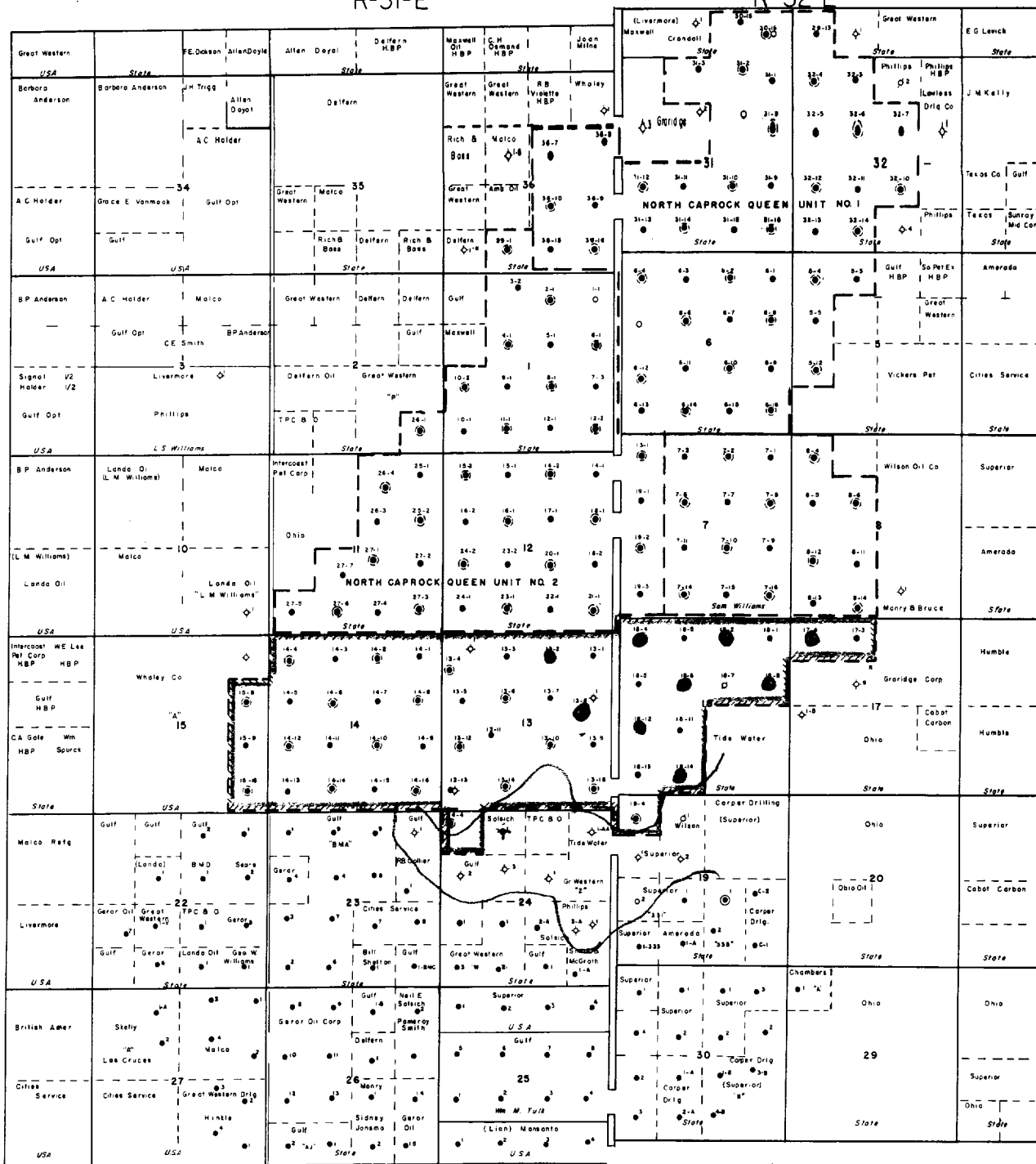
Production by Wells
Supplement Form O-115

May, 1959

Tract No.	Well No.	Unit	Start	Stop	Sec.	Oil Allowable	Oil Production	Water	Days Produced	Notes
17	14-16	P	14	13	31	620	115	0	29	P
18	13-13	M	13	13	31	1116	90	0	31	P
20	14-9	X	14	13	31	93	75	0	29	P
21	14-15	G	14	13	31	589	119	0	29	P
22	13-14	N	13	13	31	217	72	20	25	P
23	14-2	B	14	13	31	186	79	4	30	P
24	14-10	J	14	13	31	496	134	0	29	P
25	14-3	C	14	13	31	652	292	0	29	P
26	14-4	D	14	13	31	620	313	0	31	P
	14-5	E	14	13	31	930	313	0	31	P
27	14-6	F	14	13	31	1116	768	0	31	P
28	14-14	M	14	13	31	961	280	0	31	P
	14-11	K	14	13	31	992	280	0	31	P
29	14-12	L	14	13	31	310	152	0	31	P
	14-13	M	14	13	31	403	152	0	31	P
31	24-4	D	24	13	31	496	90	10	31	P
TOTAL						9827	3824	34		

R-31-E

R-32-E



T-12-S

T-13-S

NORTH CENTRAL CAPROCK QUEEN UNIT

OPERATED BY
GREAT WESTERN DRILLING COMPANY

CAPROCK QUEEN POOL

LEA AND CHAVES COUNTIES, NEW MEXICO



LEGEND

- Producer
- ⊙ Injection well
- ⊕ Proposed injection well
- ◇ Dry hole

July 8, 1959

C
O
P
Y

Great Western Drilling Company
Box 1659
Midland, Texas

Attn. Mr. John T. Hampton

Dear Mr. Hampton:

Reference is made to the application of Great Western Drilling Company dated June 22, 1959 to convert well 13-8 in the North Central Caprock Queen Unit.

The information before this office indicates that only a single casing wall protects the zone between 224 feet and 2370 feet. The top of the anhydrite was shown as 1440 feet.

This office will offer no objection to the conversion of this well, provided injection is made through tubing and packer with packer set at 1500 feet or deeper.

Yours truly,

S. E. Reynolds
State Engineer

By: *N. E. Gray*

D. E. Gray
Engineer

Water Rights Division

DEG/mm

cc-Mr. A. L. Porter, Jr.
F. H. Hennighausen

Dec

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a fast telegram	
TELEGRAM	
DAY LETTER	
NIGHT LETTER	

WESTERN UNION

TELEGRAM

MAIN OFFICE OCC

1206 (4-55)

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise the message will be sent at the full rate	
FULL RATE	
LETTER TELEGRAM	
SHORE-SHIP	

NO. WDS.-CL. OF SVC.	PD. OR COLLECT	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED
	1959 JUN 25	8:14 AM	State Engineer	

Send the following message, subject to the terms on back hereof, which are hereby agreed to

June 25, 1959

John T. Hampton
Great Western Drilling Company
Midland, Texas

Please forward at your earliest convenience well construction data including casing and cementing program on your well #13-8 located in the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 13, Township 13 South, Range 31 East, in order that I may determine what action should be taken with respect to a waiver on your application.

Frank E. Irby
Chief
Water Rights Division