

GRARIDGE CORPORATION

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Producers of Oil and Gas
due 9-17-58
BRECKENRIDGE, TEXAS
MAIN OFFICE
August 30, 1958

1958 SEP 2 AM 8:28

Oil Conservation Commission
State of New Mexico
State Capitol Building
Santa Fe, New Mexico

RE: Application For Administrative
Approval To Convert Six Unit Wells
To Water Injection Wells In
North Caprock Queen Unit No. 1
Lea & Chaves Counties, New Mexico

Dear Sirs:

In accordance with Commission Order No. R-972-B, issued on August 6, 1958, Graridge Corporation as Unit Operator respectively requests administrative approval to convert the following wells to water injection wells:

UNIT NO.	LOCATION
5-12	NW 1/4 SW 1/4
6-4	SW 1/4 NW 1/4 Sec. 5, T-13-S, R-32-E
6-6	NW 1/4 NW 1/4 Sec. 6, T-13-S, R-32-E
6-12	SE 1/4 NW 1/4 Sec. 6, T-13-S, R-32-E
31-12	NW 1/4 SW 1/4 Sec. 6, T-13-S, R-32-E
36-16	NW 1/4 SW 1/4 Sec. 31, T-12-S, R-32-E
	SE 1/4 SE 1/4 Sec. 36, T-12-S, R-31-E

*CORRECTED BY
LETTER OF
9/4/58* →

The following data pertinent to the proposed expansion are given:

- (1) Each proposed injection well is directly offset by a producing well which has shown response to the water flood project. See Attached Form C-116 and Exhibit No. 1.
- (2) Five of the six wells requested have undergone remedial work and readied for water injection. The one remaining well will require only routine cleanout operations to be completed for water injection. It is believed that this work will have been completed at the time administrative approval is granted.

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- (3) Exhibit No. 2 indicates present injection well data. It is evident that some of the injection wells are not as receptive to water injection as others thus it is desirable to place wells on injection as early as responses warrant in order to maintain balance.
- (4) Exhibit No. 3 gives performance curves for the overall water flood project.

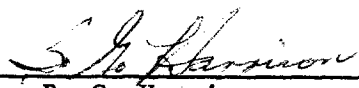
Attached Exhibit No. 1 indicates all offset operators and all injection wells in both North Caprock Queen Unit Nos. 1 and 2 as is required by Order No. R-972-B. It will be noted that justification for conversion of Unit 6-12 to a water injection well is the increased production in Unit No. 7-3 in North Caprock Queen Unit No. 2. This would "back up" the Ambassador flood, preserve unit equities and provide the necessary lease line cooperation.

Copies of this application are being sent to Ambassador Oil Corporation and to Great Western Drilling Company as they are offset operators to the proposed expansion. We are submitting waiver letters to the offset operators and will forward these to the Commission as soon as possible.

Any consideration by the Commission in expediting this matter will be greatly appreciated.

Yours very truly,

GRARIDGE CORPORATION

BY 
B. G. Harrison
Manager of Secondary Recovery

BGH/ect
cc:

Monthly Water Flood Report

Injection Well Data

Project: CAPROCK QUEEN UNIT NO. 1Month: JULY, 1958FIELD: Caprock QueenFormation: Queen Sand

Lease & Well No.	Total Water Input Month	Average Per Day	Flow * Net Input	Inject- ion Pressure	Total Barrels
Unit #31-2 **	2,734	304		0	2,734
Unit #31-8 **	2,927	326		630	2,927
Unit #31-10	12,598	406		0	225,535
Unit #31-14	3,890	125		900	57,110
Unit #31-16	10,684	345		300	245,468
Unit #32-12 **	1,800	200		20	1,800
Unit #32-14 **	2,174	242		850	2,174
Unit # 6-2	12,563	405		450	237,243
Unit # 6-8	11,388	367		900	119,207
Unit # 5-4	5,593	180		800	217,719
Totals (10)	66,351	2,901		485 Avg.	1,111,917

Remarks:

* Or Graridge

** Water Injection commenced July 23, 1958.

Exhibit No. 2

10,000

1,000

1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960

Primary Life of the Total Unit Area.

Primary Life of the Pilot Flood Area.

Water Injection Std. (4-15-57)

Unitized (3-10-58)

CUMULATIVE OIL ABOVE NORMAL DECLINE

CUMULATIVE WATER INJECTION

GARIBAY CORPORATION
North Garroch Queen Unit
Lea & Chavez Counties, New Mexico
Performance Curves

10,000

Water Disjected (Bbls/Mo.)
Cumulative Oil Produced & Water Injected, bbls.

Exhibit No. 3