

WFF-22

GRARIDGE CORPORATION
IBEX BUILDING POST OFFICE BOX 752
BRECKENRIDGE, TEXAS

November 16, 1959

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

Re: Application For Administrative Approval To Convert Two Wells To Water Injection Wells In Artesia Flood No. 2, Eddy County, New Mexico

Gentlemen:

In accordance with Commission Order No. R-966-E, Graridge Corporation respectively request administrative approval to convert the following wells to water injection wells.

<u>Lease</u>	<u>Well No.</u>	<u>Location</u>
Welch Duke State	22	Unit Letter E, Sec. 28, T-18S, R-28E
Welch Duke State	13	Unit Letter E, Sec. 28, T-18S, R-28E

The following data pertinent to the proposed expansion are given:

1. The proposed injection wells are directly offset by a producing well which has shown response to the waterflood project. See attached Form C-116 and Exhibit No. 1.
2. Exhibit No. 1 indicates all offset operators and injection wells in the Artesia Flood No. 2. A copy of this application has been sent to Mr. Harold Kersey as he is the offset operator to the proposed expansion and his signed waiver is enclosed.
3. Exhibit No. 2 indicates present injection well data. It is evident that some of the injection wells are not as

November 16, 1959

receptive to water injection as others, thus, it is desirable to place wells on injection as early as responses warrant in order to maintain flood balance.

4. Exhibit No. 3 gives performance curves for the overall water flood project.

The subject wells have been completed in the following manner.

Welch Duke State No. 22 was drilled to a total depth of 2055', 4½" OD 9.5# casing was set at 2055' and cemented with 456 sacks of cement, held 425 psi pressure for 24 hours. The 8 5/8" OD 28# surface pipe was set at 512' and cemented with 150 sacks of cement, held 250 psi for 12 hours. Well was perforated from 2008' to 2024' and acidized with 250 gallons Dowell Type "X" Acid.

Welch Duke State No. 13 was cleaned out to a total depth of 2018'. The 4½" OD 9.5# J-55 casing was set at 1986' and cemented with 565 sacks of cement, held 900 psi pressure for 24 hours.

Before placing these wells on injection, a string of 2 3/8" cement lined tubing will be run with a tension type packer in each well and set at a depth well below the top of the cement outside the 4½" casing.

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

Very truly yours,

GRARIDGE CORPORATION



B. G. Harrison
Manager of Secondary Recovery

SHL:BGH:gl

Attachments

cc: State Engineer Office, Attn: Mr. Frank Irby
Oil Conservation Commission, Artesia
Graham Office
Mr. Paul Darnell
Mr. Cliff Chapman

GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

November 13, 1959

Mr. Harold Kersey
P. O. Box 305
Artesia, New Mexico

Dear Sir;

It is the desire of Graridge Corporation to expand the water injection program in the Artesia No. 2 Flood in Eddy County, New Mexico. The expansion is to include the Welch Duke State Well No. 22 located in Unit Letter E, Section 28, T-18S, R-28E and Welch Duke State No. 13 located in Unit Letter E, Section 28, T-18S, R-28E as injection wells.

A fifteen-day waiting period is set up by the Commission unless waivers are obtained from all operators offsetting the proposed expansion.

In order to expedite matters, please sign and return one copy of this letter to this office, if you have no objection to the proposed expansion.

Yours very truly,

GRARIDGE CORPORATION

B. G. Harrison
B. G. Harrison
Manager of Secondary Recovery

Signed by *Harold Kersey*

SHL:BGH:rd
cc: Graham

Date Received NOV 19 1959			
ROUTE TO		ROUTE TO	
IC	DATE CHECKED	CRA	DATE CHECKED
CHR			
TAS		BCE	
FFD		NEW	
WFB		JWC	
BGH			
Mail To:		FILE:	
Graham		5.	

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Graridge Corporation POOL Artesia
 ADDRESS Box 752, Beckenridge, Texas MONTH OF November, 19 59
 SCHEDULED TEST COMPLETION TEST _____ SPECIAL TEST _____ (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	
Welch Duke State	17	6-30	Pump		24		20	1		TSTM

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 November 16, 1959

Graridge Corporation
 Company
 By S.H. Lindroy, Jr. S.H. Lindroy, Jr.
 Engineer
 Title

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Granidge Corporation POOL Artesia
 ADDRESS Box 752, Dumas, Texas MONTH OF November, 19 59
 SCHEDULED TEST COMPLETION TEST _____ SPECIAL TEST _____ (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	
Welch Duke State	17	11-16-59	Pump		24	10	77	6.5		TSTM

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 November 16, 1959

Granidge Corporation
 Company
 By S.H. Lindley, Jr.
 Engineer
 Title

MONTHLY WATER FLOOD REPORT

Injection Well Data

Project: Artesia Flood No 2

Month: September, 1959

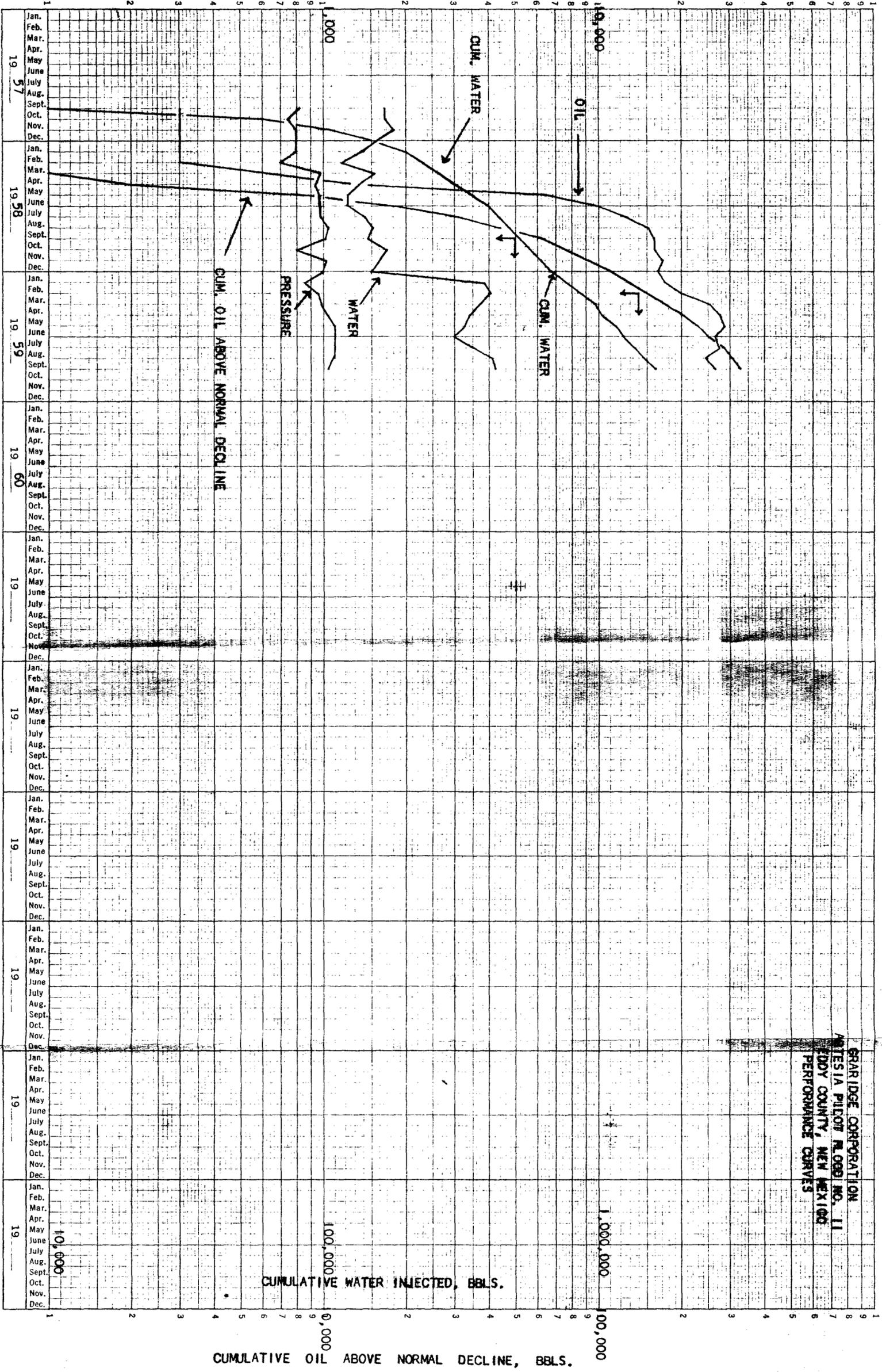
Lease & Well No.	Total Water Input		Injection Pressure	Cumulative Input
	Month	Avg./Day		
McNutt St. 2	3,599	120	1,130	177,835
5	3,158	105	1,130	37,267
6	6,425	214	1,020	62,009
8	9,490	316	980	94,386
Resler Yates St. 13	4,514	150	1,130	155,020
18	6,333	210	1,125	167,310
22	7,574	252	1,120	72,809
39	2,801	93	1,120	32,829
51	3,364	112	1,125	126,719
301	4,879	163	1,020	23,141
304	4,187	140	1,055	9,335
Ventures St. 305	7,122	238	970	15,772
Welch Duke St. 4	6,641	222	1,120	55,923
5	5,654	189	1,100	170,405
7	8,449	282	955	201,672
10	7,398	246	985	32,685
15	5,613	187	960	29,462
16	7,295	304	940	56,790
19	6,812	227	1,070	8,695
20	6,116	204	860	7,674
21	7,774	260	900	15,908
Totals (2)	125,198	4,234	1,038 (avg)	1,603,646

Exhibit No. 2

INJECTION PRESSURE, PSIG.

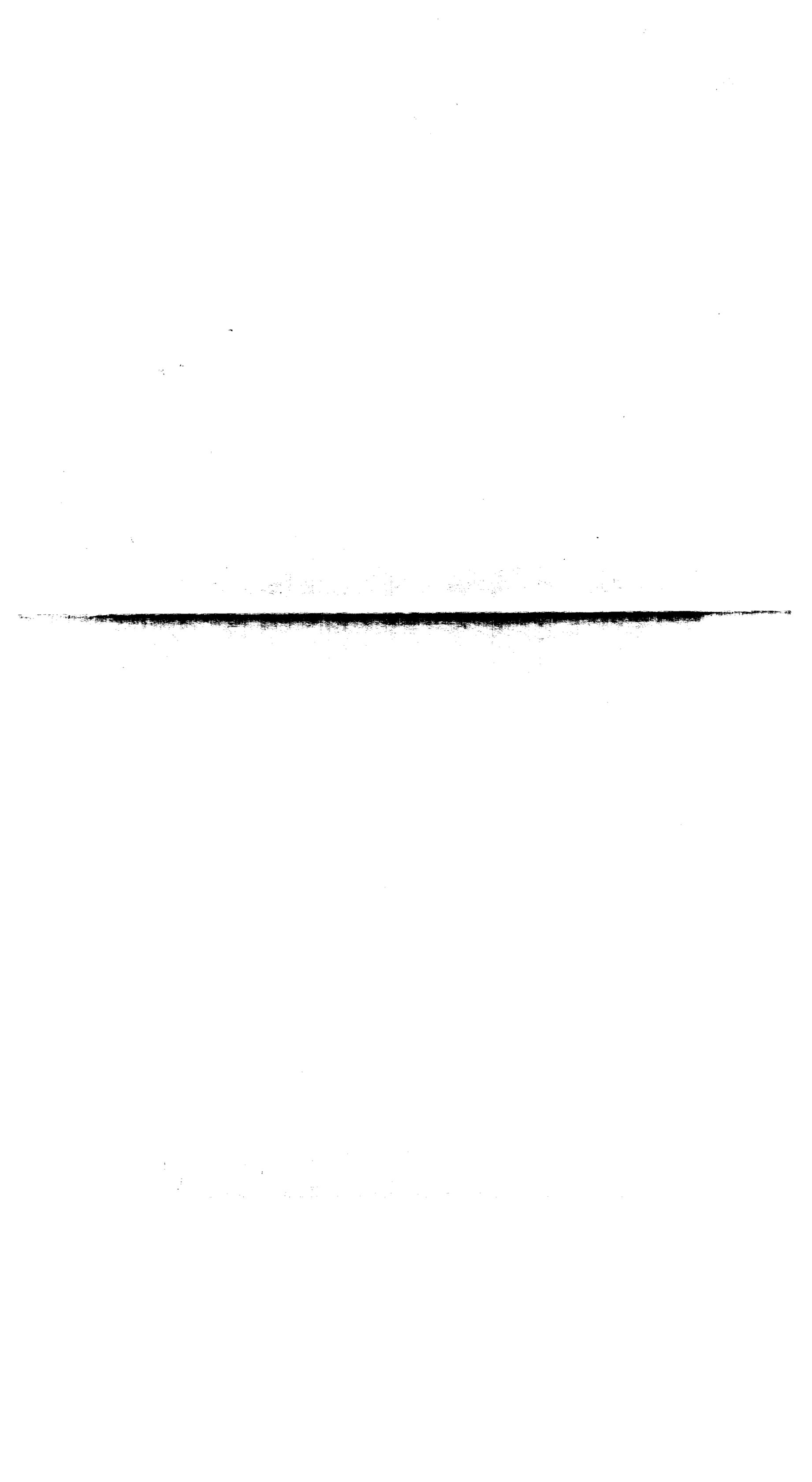
WATER INJECTION, BBL/DAY

OIL PRODUCTION, BBL/MO.



GRARIDGE CORPORATION
 ARTESIA PILOT FLOOD NO. 11
 EDY COUNTY, NEW MEXICO
 PERFORMANCE CURVES

Exh. 6.7 N. 3



LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

November 25, 1959

ADDRESS CORRESPONDENCE TO:
P. O. BOX 1079
SANTA FE, N. M.

File: Graridge Corporation

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, N. M.

Attn. Mr. Jim Kapteina

Dear Mr. Kapteina:

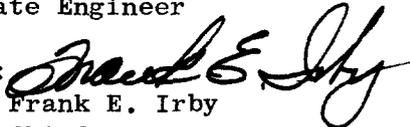
Reference is made to our telephone conversation this morning which pertains to the application of the Graridge Corporation submitted to you under date of November 16, 1959, seeking administrative approval to convert two wells to water injection wells in the Artesia Flood #2, Eddy County, New Mexico.

The wells which they propose to convert are wells Nos. 13 and 23 on the Welch Duke State Lease and their locations are Unit Letter E, Section 28, Township 18 South, Range 28 East. After reviewing the application and all of the attachments, I find no reason to believe that the sub-surface waters in this area will be contaminated. Therefore, this office offers no objection to the granting of this application.

Yours truly,

S. E. Reynolds
State Engineer

FEI/ma
cc-F. H. Hennighausen

By: 
Frank E. Irby
Chief
Water Rights Division