

GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

January 22, 1960

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

Re: Application For Administrative
Approval To Convert Three Wells
To Water Injection Wells in
Artesia Flood Nos. 2 and 3
Eddy County, New Mexico

Gentlemen:

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

<u>LEASE</u>	<u>WELL NO.</u>	<u>LOCATION</u>
Resler Yates State	34	"H", Sec. 29, SE, SE, NE
Resler Yates State	14	"G", Sec. 28, SW, SW, NE
McNutt State	13	"K", Sec. 21, NW, NE, SW

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 Artesia Flood Nos. 2 and 3. A copy of this application and a waiver form is being sent to Mr. Harold Kersey as he is the offset operator to the proposed expansion. This waiver will be forwarded to you as soon as it is received.

(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 a flood balance.

January 22, 1960

(4) Exhibit No. 3 gives performance curves for the overall waterflood project.

The subject wells have been or will be completed in the following manner.

McNutt State No. 13 was drilled to a total depth of 2090'. The 8 5/8" OD 24# surface casing was set at 556' and cemented with 150 sacks. Four and one-half inch OD 9.5# J-55 casing was set at 2085' and cemented with 125 sacks.

Resler Yates State No. 14. Remedial work is now being done on this well as approved by Order No. R-1534 in Oil Conservation Commission Case No. 1797. Injection will be as approved by this order.

Resler Yates State No. 34. Approval to re-drill this unorthodox location was granted by New Mexico Oil Conservation Commission Order No. R-966-E. We plan to clean out to a total depth of 2050' with cable tools. Seven inch surface casing will be set at 300' and cemented with 100 sacks cement. Four and one-half inch 9.5# casing will be set at 2045' and cemented with 125 sacks cement.

Before placing McNutt State No. 13 and Resler Yates State No. 34 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 4 1/2" casing. Injection in each well will be through perforations into the 1st Grayburg formation.

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

Yours very truly,

GRARIDGE CORPORATION



B. G. Harrison

Manager of Secondary Recovery

SHL:BGH:gl

Attachments

cc: Oil Conservation Commission, Artesia
State Engineers Office
Graham office
Mr. Cliff Chapman
Mr. Paul Darnell

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Graridge Corporation POOL Artesia
ADDRESS P. O. Box 752, Breckenridge, Texas MONTH OF January, 19 60
SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X..... (Check One)
(See Instructions on Reverse Side)

Artesia Flood No. 2

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	
<u>BEFORE WATERFLOOD RESPONSE</u>										
Welch Duke State	14	9-17	Pump	--	24	2	4.4	2.3	TSTM	TSTM
Resler Yates St.	19	11-1	Pump	--	24	6	2.6	3.0	TSTM	TSTM
McNutt State	10	6-17	Pump	--	24	1	1.0	1.0	TSTM	TSTM
<u>AFTER WATERFLOOD RESPONSE</u>										
Welch Duke State	14	1-8	Pump	--	24	20	1.0	18.0	TSTM	TSTM
Resler Yates St.	19	12-11	PUMP	--	24	25	10.2	23.7	TSTM	TSTM
McNutt State	10	1-9	Pump	--	24	10	0	4.4	TSTM	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 January 22, 1960

Graridge Corporation
Company
By B. G. Harrison
B. G. Harrison
Managero of Secondary Recovery
Title

GRARIDGE CORPORATION

MONTHLY WATER FLOOD REPORT

Page 11.

Injection Well Data

Project: Artesia Flood No. 2

Month: December, 1959

Lease & Well No.	Total Water Input		Injection Pressure	Cumulative Input
	Month	Avg./Day		
Lackawanna St. 1-A	2,583	83	880	4,984
3-A	4,801	155	580	8,202
McNutt 2	8,662	279	1,180	198,614
5	2,716	88	595	45,622
6	4,310	139	930	77,463
8	6,438	208	910	115,137
11	4,371	141	930	8,367
17	3,617	241	900	3,617
Resler Yates 13	3,386	109	1,160	165,907
18	4,839	156	1,160	182,828
22	5,432	175	1,140	90,335
24	5,093	164	900	8,981
39	1,811	58	990	38,971
51	2,551	88	1,160	135,547
301	3,188	103	910	33,849
304	1,783	58	980	17,885
Ventures St. 52	3,653	118	890	7,231
305	3,095	100	895	28,378
Welch Duke St. 4	4,401	142	1,040	71,551
5	7,069	228	1,090	190,208

Exhibit 2

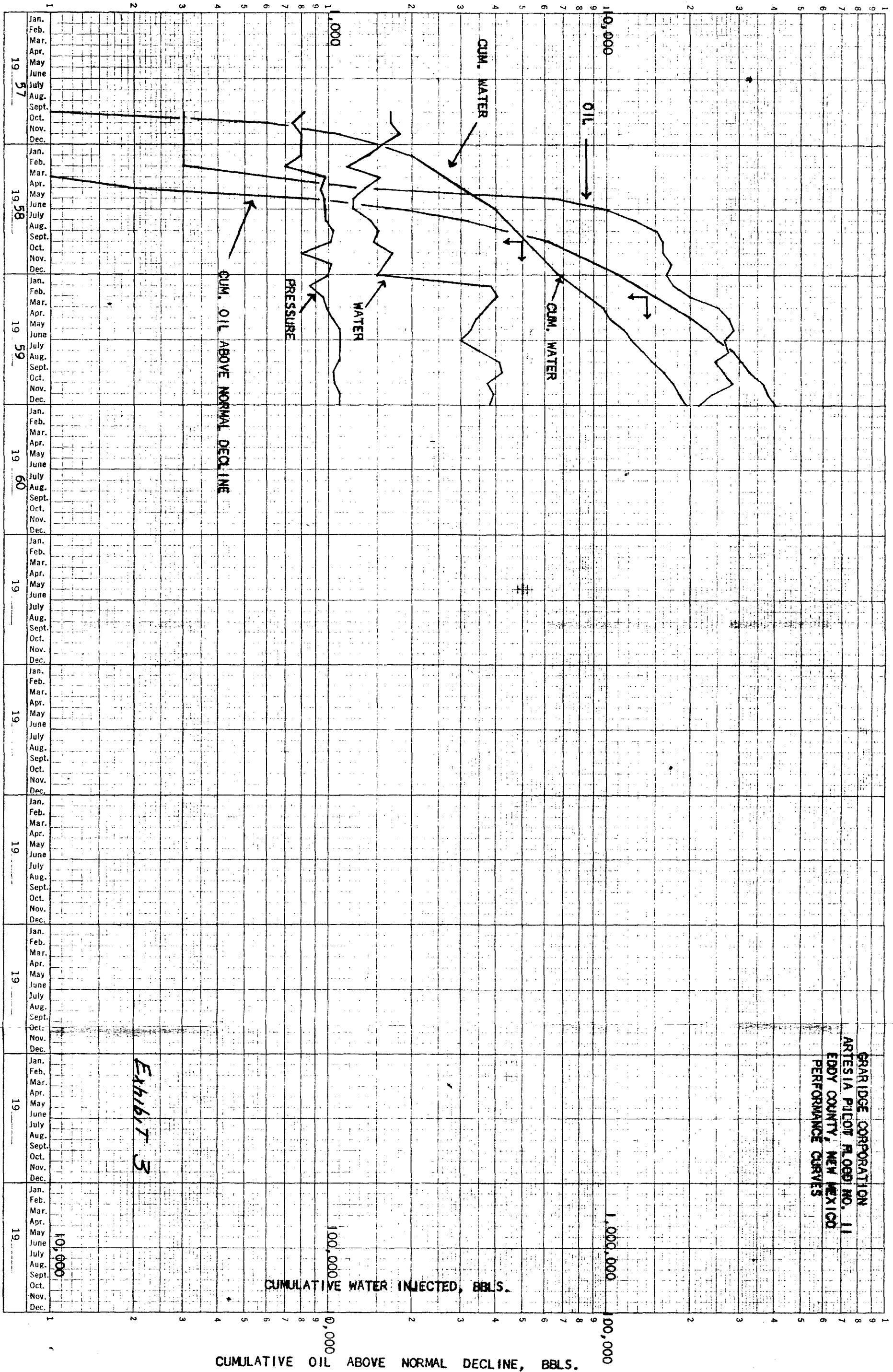
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INJECTION PRESSURE, PSIG.

WATER INJECTION, BBL/DAY

OIL PRODUCTION, BBL/MO.



GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

January 27, 1960

Oil Conservation Commission
State Capitol Building
Santa Fe, New Mexico

Gentlemen:

Attached is a waiver from Mr. Harold Kersey indicating he as an offset operator has no objection to the expansion of Artesia Flood Nos. 2 and 3 in Eddy County by conversion of Resler Yates Well No. 34, Section 29, Resler Yates State Well No. 14, Section 28, and McNutt State No. 13, Section 21 to water injection wells.

Your cooperation in expediting this application will be appreciated.

Yours very truly,

GRARIDGE CORPORATION

S. H. Lindley, Jr.
S. H. Lindley, Jr.
Engineer

SHL:gl

Attachment

cc: Graham office

GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

January 22, 1960

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 Artesia Flood Nos. 2 and 3 in Eddy County, New Mexico. The expansion is to include the Resler Yates State Well No. 34 in Unit Letter "H", Section 29, Resler Yates State Well No. 14 in Unit Letter "G", Section 28, and McNutt State No. 13 in Unit Letter "K", Section 21 as injection wells.

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

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.

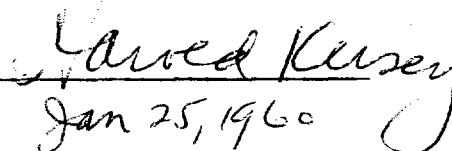
Yours very truly,

GRARIDGE CORPORATION



B. G. Harrison
Manager of Secondary Recovery

Signed By:



Jan 25, 1960

SHL:BGH:gl



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

February 6, 1960

ADDRESS CORRESPONDENCE TO:
P. O. BOX 1079
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 for administrative approval to convert three wells to water injection wells in the Artesia Flood Nos. 2 and 3, Eddy County, New Mexico submitted January 27, 1960 by the Graridge Corporation. The wells involved in the application are:

1. Resler Yates State 34 in the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 29, Township 18 South, Range 28 East.
2. Resler Yates State 14 in the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 28, Township 18 South, Range 28 East.
3. McNutt State 13 in the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 21, Township 18 South, Range 28 East.

I have studied the available records on these wells and the casing and cementing program proposed in the application and find no reason to believe that the granting of this application would constitute a threat to any fresh waters which may exist in the area. Therefore, this office offers no objection to the granting of the application.

Yours truly,

S. E. Reynolds
State Engineer

By: 
Frank E. Irby
Chief
Water Rights Division

FEI/ma
cc-B. G. Harrison

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