# GRARIDGE CORPORATION

IBEX BUILDING 1 3 BPOST OFFICE BOX 752 "BRECKENRIDGE TEXAS

October 20, 1959

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

> RE: Application For Administrative Approval To Convert One Well To Water Injection Well 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 well to water injection well.

Lease	Well No.	<u>Location</u>
Ventures State	52	Unit Letter A, Sec. 28,T18S,R28E

The following data pertinent to the proposed expansion are given:

- 1. The proposed injection well is 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. I indicates all offset operators and injection wells in Artesia Flood No. 2. A copy of this application has been sent to Western Yates Company as they are offset operators to the proposed expansion and their 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 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.

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

-2-

The subject well has been completed in the following manner. The well was cleaned out to a depth of 2140'. Gamma ray neutron and caliper logs were run. The 4 1/2" 9.5# casing was set at 2088' and cemented with 400 sacks.

Before placing this well on injection, a string of 2 3/8" cement lined tubing will be run with a temsion type packer and set at a depth of approximately 2060' which is well below the the top of the cement outside the 4 1/2" 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 Engineers Office Attn: Mr. Frank Irby

Graham

Mr. Cliff Chapman Mr. Paul Darnell

# GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

October 8, 1959

RECEIVED OCT 1 2 1959

Western Yates Company P. O. Box 427 Artesia, New Mexico

ATTENTION: Mr. Bill Macey

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 Ventures State Well No. 52 located in NE/4 of NE/4 of Section 28, T-18S, R-28E, as an injection well.

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 your company has no objection to the proposed expansion.

Yours very truly,

GRARIDGE CORPORATION

B. G. Harrison

Manager of Secondary Recovery

Signed by Walcon

For Western Development Company of Delaware & Yates Brothers

SHL:BGH:gl

# NEW MEXICO OIL CONSERVATION COMMISSION

# GAS-OIL RATIO REPORT

OPERATOR Gra	ridge	Corpora	ition		POO	L Art	esia	·····	***************************************	
ADDRESS P. O.	Box 75	2, Bred	kenridge,	Texas	MON	TH OF	0cto	ber		, 19. 59
SCHEDULED TEST	X					everse Side)	SPECIAL	TEST		(Check One
	Well	Date of	Producing	Choke	Test	Daily	Produ	action Dur	ring Test	GOR
Lease	No.	Test	Method	Size	Hours	Allowable Bbls.	Water Bbls.	Oil <b>B</b> bls.	Gas • MCF	Cu. Ft. Per Bbl.
ntures State	306	8-18	Pumping		24	8	5.7	8	TSTM	

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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	<b>Oct</b> ober 8, 1959	Graridge Corporation
		By A. H. Lindley, Jr.  Engineer
		Title

### NEW MEXICO OIL CONSERVATION COMMISSION

# GAS-OIL RATIO REPORT

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OULED TEST	- Х						SPECIAL	TEST		(Check One
	1					Daily	Prod	uction Du	ring Test	GOR
Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Allowable Bbls.	Water Bbls.	Oil Bbls.	Gas MCF	Cu. Ft. Per Bbl.
State	306	9-24	Pumping		24	8	11.5	17.3	TSTM	
	P. O.  OULED TEST	Lease P. O. Box 7	Lease Well Date of Test	Lease Well Date of Producing Method	Lease Well Date of Producing Choke Size	Lease Well No. Date of Method Choke Size Hours	Lease Well No. Date of Method Choke Size Hours Allowable Bbls.  Date of Method Choke Size Hours Allowable Bbls.	COMPLETION TEST	COMPLETION TEST SPECIAL TEST SPECIAL TEST (Sec Instructions on Reverse Side)  Lease Well No. Date of Test Method Size Hours Allowable Bbls. Production Du Water Bbls.	COMPLETION TEST SPECIAL TEST (See Instructions on Reverse Side)  Well No. Date of Test Method Size Hours Daily Allowable Bbls. Production During Test Bbls. MCF

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

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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 October 8, 1959	Graridge Corporation
	By S.H. Lindley, Jr.
	Engineer
	Title

## BRARIDGE CORPORATION

# Monthly Water Flood Report

# Injection Well Date

Project: Artesia Floss No. 2	 Month: August, 1959
	Field: Artesia

Formation: 1st Grayburg

Leese &	Effective Acre-Feet Total lbs		Avg/ Day	B/D/ Ac-Ft.	IBEX# Net Input	inject- ion Pressure	Total	Cumulative ibex * Net Shis.	Net B/ Net AF
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5		3,170			·	1100		<b>34.</b> 109	
6		3,779	140			<b>96</b> 0		55,584	
8	·	8,795	284			920		84.896	
Resier Yates State 13		4,368	141			1115		150,506	
18		5,610	181	,		1.100		160,977	
22	·	7,152	23!			1090		65,235	والمرواق والمراجعة و
39	·	2,333	75	·		1020		30,028	
51		3,246	105			1090		123,355	
301		4,998	161			1000		HB. 262	
304		3,811	123			1 005		5,148	1

Remarks:

continued

Exhibit II

(2)

## GRARIDGE CORPORATION

# Monthly Water Flood Report

# Injection Well Data

Project:	Artesia Flood No. 2	Month: August 1959
	•	Field: Artesia
		Formetion: 1st Grayburg

Leone 4	Effective Acre-Feet	Total	Water Avg/		IBEX*	Inject-	Total	Cumulative   lbex **	input Net B/
Hell No.	Total Ibe	K Mo.	Dev	Ac-Ft.	input	Pressure	Bhis	Net Bbls.	Net AF
•					•				eren.
Ventures St.3	05	7.461	240			960		8,650	
telch Duke St	4	6,264	202			1100		49,282	
5		6,637	214			1105		164,751	
7		6,916	223		-	910		193,223	
10		7,624	246			920		75,287	
15		4,760	154			925		23,849	
16	•	5,000	200			645		49,495	·
## 19		1,883	314			10.35		1,883	
## 20		1.558	222			790		1.558	والمراق المراقع
21		7,702	248		والمنابعة والمناسبة والمناسبة	980	والمراجعة المراجعة المراجعة	8.134	
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Totals (21)		109,601	4.016			995 (avg	)	1,478,448	

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<sup>\*\*</sup> Injection commenced in Welch Duke State No. 19 August 26 and In Welch Duke State No.20 on August 25.

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INJECTION PRESSURE, PSIG.

WATER INJECTION, BBLS/DAY

OIL PRODUCTION, BBLS/MO.

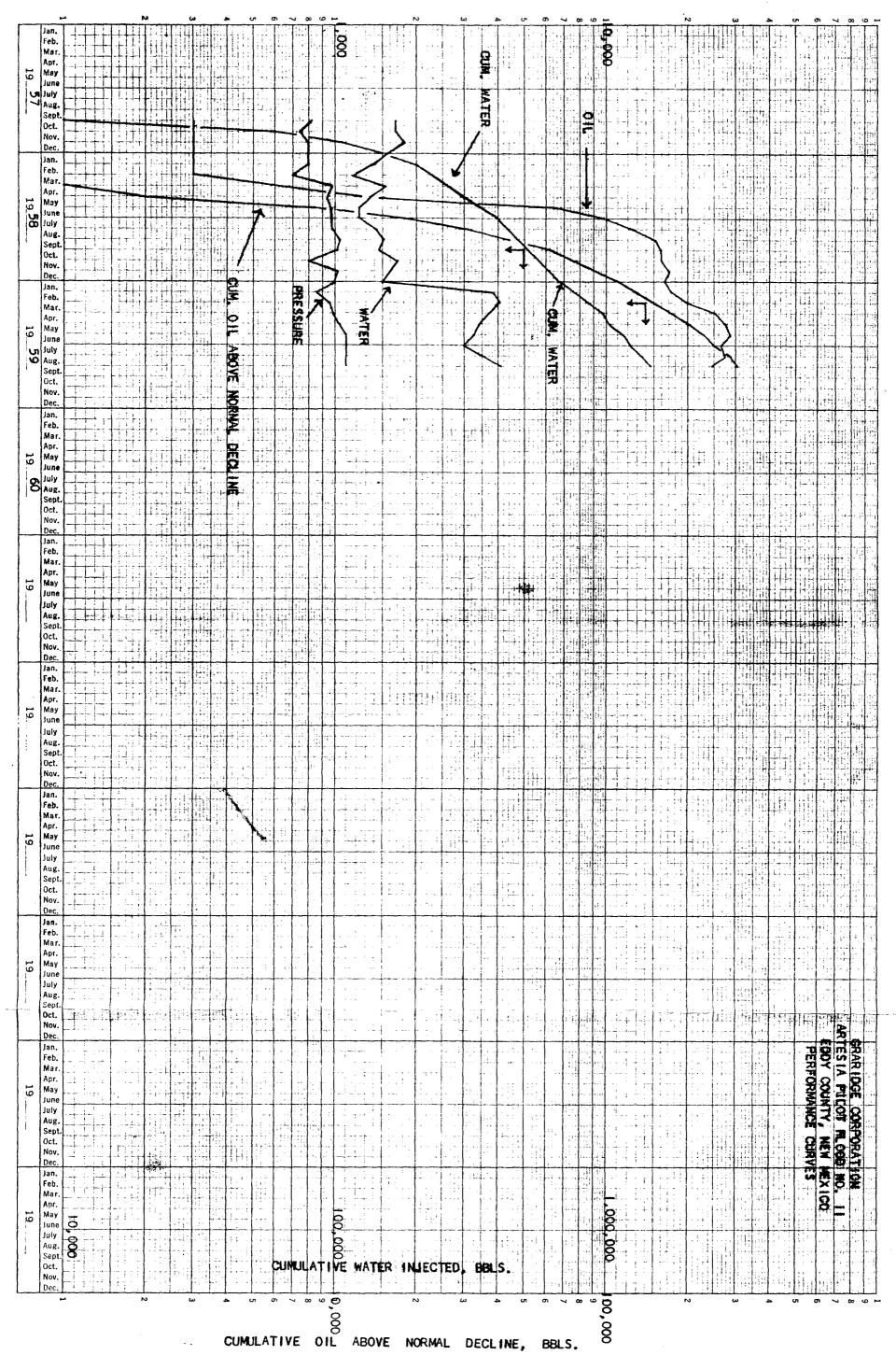


Exhibit III



# STATE OF NEW MEXICO

# STATE ENGINEER OFFICE SANTA FE

S.E.REYNOLDS STATE ENGINEER

October 23, 1959

./ 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 Graridge Corporation application for administrative approval to convert one well to water injection well in Artesia Flood #2, Eddy County, New Mexico which was submitted on October 20, 1959. The well to be converted is Ventures State #52 in the NE4NE4 of Section 28, Township 18 South, Range 28 East.

After reviewing the statements in this application pertaining to the casing and cementing program and the tubing and packer arrangement to be used in the injection, it is my opinion that threat of contamination to fresh waters is not likely to occur as a result of the construction and use of this well. Therefore, this office offers no objection to the granting of the application.

Yours truly,

S. E. Reynolds State Engineer

Frank E. Irby

Chief

Water Rights Division

FEI/ma

cc-Graridge Corporation F. H. Hennighausen

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