

GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 7521

BRECKENRIDGE, TEXAS

January 10, 1961

1178-69

Attaching Period  
New Date - 1/11/61

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 requests administrative approval to convert the following well to a water injection well.

LEASE AND WELL NUMBER

LOCATION

Toomey Allen State No. 2

Unit Letter J, Sec. 28, T18S, R28E

The following data pertinent to the proposed expansion are given:

(1) The proposed injection well is directly offset by a producer 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 No. 2. A copy of this application and a waiver form is being sent to Kersey and Company as they are the offset operator to the proposed expansion. This signed 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 as others, thus, it is desirable to place wells on injection as early as responses warrant in order to maintain a balance.

Oil Conservation Commission  
January 10, 1961  
Page 2

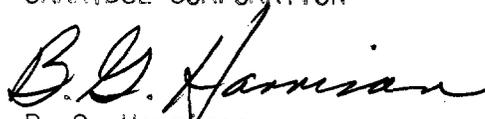
(4) Exhibit No. 3 gives performance curves for the overall water flood project.

Toomey Allen State No. 2 will be re-entered and cleaned out to a total depth of 2298'. Electric and caliper logs will be run. 4-1/2", 9.5# J-55 casing will be run to total depth and cemented with 200 sacks. The 4-1/2" casing will be perforated opposite the First Grayburg formation. Before placing the well on injection, a string of 2-3/8" cement lined tubing with a tension type packer set at a depth well below the top of the cement outside the 4-1/2" casing will be run. Water will be injected down the cement lined tubing into the First Grayburg formation. The well presently has 10" casing set at 261' and cemented and 8-1/4" casing set at 697' and cemented. The amount of cement used on each is not known.

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/vl  
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 Box 752, Breckenridge, Texas MONTH OF January, 1961  
 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	
<u>BEFORE WATERFLOOD RESPONSE</u>										
Toomey Allen State I		10-26	Pump	-	24	4	0	4	TSTM	TSTM
<u>AFTER WATERFLOOD RESPONSE</u>										
Toomey Allen State I		1-3	Pump	-	24	4	0	21	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.

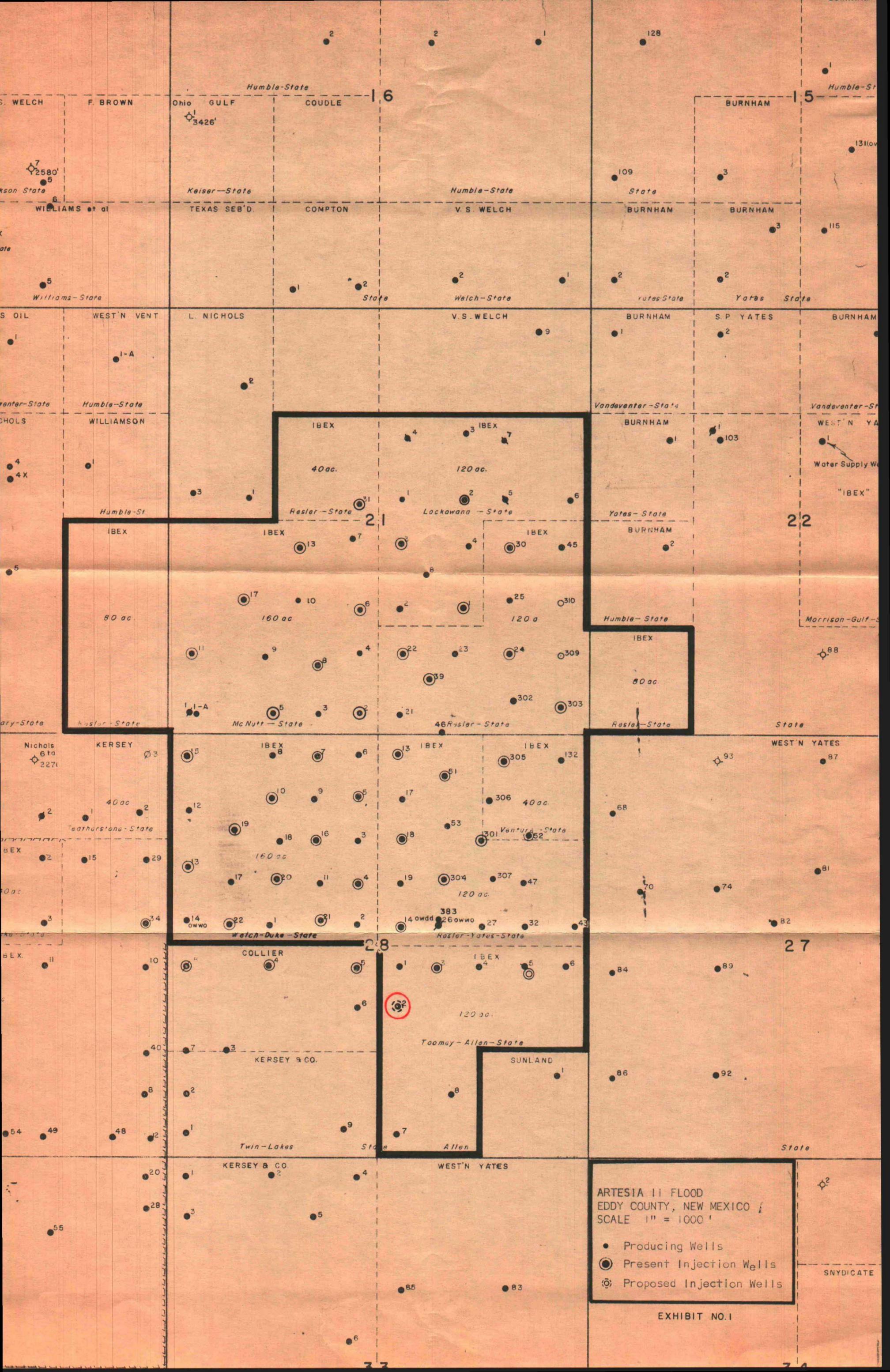
Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

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 10, 1961

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



ARTESIA II FLOOD  
 EDDY COUNTY, NEW MEXICO  
 SCALE 1" = 1000'

- Producing Wells
- ⊙ Present Injection Wells
- ⊖ Proposed Injection Wells

EXHIBIT NO. 1

GRARIDGE CORPORATION

MONTHLY WATER FLOOD REPORT

Injection Well Data

Project: Artesia Flood No. 2

Month: December, 1960

Lease & Well No.	Total Water Input		Injection Pressure	Cumulative Input	
	Month	Avg./Day			
Toomey Allen	3	3,942	127	1055	28,818
Lackawanna State	2	5,644	182	820	12,871
Lackawanna State "A"	1	3,671	118	1040	50,940
	3	4,799	155	1050	63,712
McNutt State	2	5,068	175****	1070	270,677
	5	3,928	136****	1055	90,028
	6	2,710	87	1045	117,140
	8	6,588	213	1055	185,509
	11	5,352	173	1050	70,343
	13	1,861	60	1050	30,104
	17	6,808	220	1055	75,281
Resler Yates State	13	3,720	120	1070	212,616
	14	4,183	144****	1045	26,308
	18	2,607	90****	1060	226,473
	22	3,748	129	1060	138,881
	24	1,456	58**	1050	45,721
	30	1,853	60	1040	12,977
	31	3,932	357*	980	3,932
	39	3,729	120	1065	74,572
	51	7,429	248*****	565	181,443

\* Based on 11 Days  
 \*\* Based on 25 Days  
 \*\*\*\* Based on 29 Days  
 \*\*\*\*\* Based on 30 Days

GR AR I D G E   C O R P O R A T I O N

MONTHLY WATER FLOOD REPORT

Injection Well Data

Project: Artesia Flood No. 2

Month: December, 1960

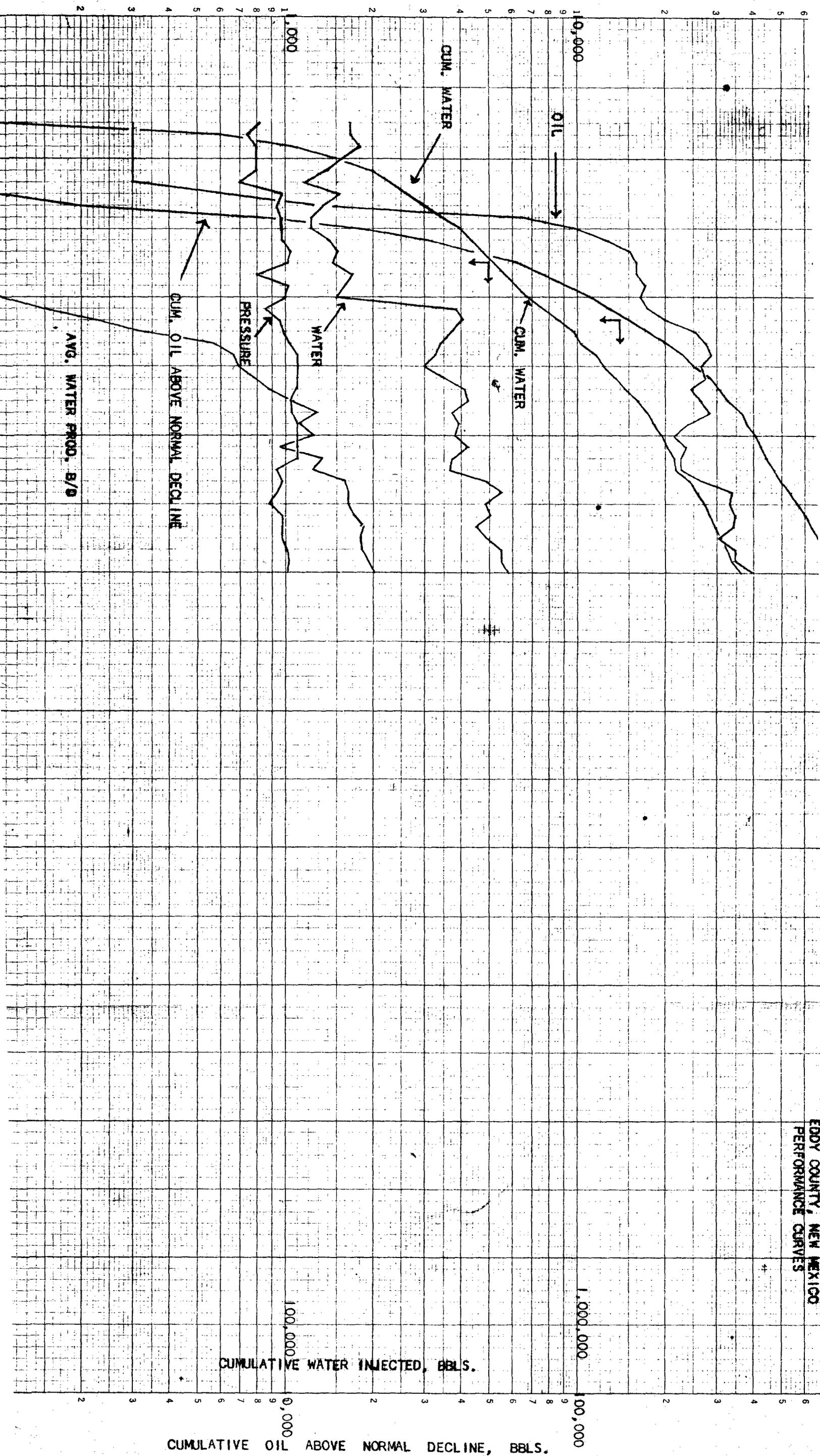
Lease & Well No.	Total Water Input		Injection Pressure	Cumulative Input
	Month	Avg./Day		
Resler Yates State 301	5,656	185*****	1060	92,384
303	2,921	94	1055	26,296
304	5,885	190	1060	67,738
Ventures State 52	3,409	126***	1055	59,400
305	5,910	204****	1020	55,181
Welch Duke State 4	2,828	91	1030	114,462
5	6,077	196	1000	260,634
7	5,418	175	980	298,875
10	6,881	222	1055	137,456
13	4,459	154****	1040	51,772
15	6,193	200	1000	102,673
16	5,077	188***	920	131,955
19	3,877	129*****	1055	65,859
20	6,896	222	1050	80,304
21	4,773	154	1000	66,652
22	7,049	228	920	73,288
Totals (36)	166,337	5,730	1014(avg)	3,603,275

\*\*\* Based on 27 Days  
 \*\*\*\* Based on 29 Days  
 \*\*\*\*\* Based on 30 Days

INJECTION PRESSURE, PSIG.

WATER INJECTION, BBLs/DAY  
 AVG. WATER PROD. BBLs/DAY

OIL PRODUCTION, BBLs/MO.



EDDY COUNTY, NEW MEXICO  
 PERFORMANCE CURVES

# GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

January 9, 1961

Date Received		JAN 16 1961	
ROUTE TO	DATE CHECKED	ROUTE TO	DATE CHECKED
LC		FILE	
OHR		CRA	
TAF		FILE	
FFD		BSE	
WFB		WW	
BGH ✓ 1/16		JWC	
CB ✓ 1-16			
Mail To:	FILE:		
Graham	WR		

Kersey & Company  
 P. O. Box 305  
 Artesia, New Mexico

Gentlemen:

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 following well.

<u>LEASE AND WELL NO.</u>	<u>LOCATION</u>
Toomey Allen State No. 2	Unit Letter J, Sec. 28, T18S, R28E

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

SHL:BGH/vl

Signed by *Harold Kersey*  
 For *KERSEY & Co.*



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

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

January 13, 1961

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of the Graridge Corporation dated January 10, 1961, which seeks administrative approval to convert one well, Toomey Allen State No. 2, Unit Letter J, Section 28, Township 18 South, Range 28 East in Artesia Flood No.2, Eddy County, New Mexico.

In view of the statement that injection will be through 2 3/8" cement lined tubing with a tension type packer set at a depth well below the top of the cement outside the 4 1/2" casing, with injection down the tubing, it appears that there will be no threat of contamination to the fresh waters which may exist in the area. Therefore, this office offers no objection to the granting of this application.

Very truly yours,

S. E. Reynolds  
State Engineer

By: *Frank E. Irby*  
Frank E. Irby  
Chief  
Water Rights Division

FEI/ma  
cc-Graridge Corp.  
F. H. Hennighausen