

GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

March 2, 1961

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 Wells 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 water injection well.

<u>LEASE</u>	<u>WELL NO.</u>	<u>LOCATION</u>
Toomey Allen	16	Unit 1, Section 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. 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 Western Yates Company as they are 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.

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

WFX-78
Waiting Period
Due Date March 21

Oil Conservation Commission
March 2, 1961
Page 2

Toomey Allen Well No. 16 was completed in the following manner:

8-5/8" surface casing is set at 321' and cemented with 150 sacks, the cement circulated. The hole was drilled to a total depth of 2151'. 4½" casing is set at 2150' and cemented with 150 sacks. The 4½" casing will be perforated opposite the First Grayburg formation. Before placing the well on injection, 2-3/8" cement lined tubing will be run with a tension type packer set at a depth well below the cement outside the 4½" casing. Water will be injected down the tubing through casing perforations into the First Grayburg formation.

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

Yours very truly,

GRARIDGE CORPORATION

A handwritten signature in cursive script, reading "B. G. Harrison".

B. G. Harrison
Manager of Secondary Recovery

BGH/vl
Attachments (4)

cc: Oil Conservation Commission
P.O. Drawer DD
Artesia, New Mexico

Mr. Frank Irby

Graham Office

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR.....Graridge Corporation..... POOL.....Artesia.....
ADDRESS.....Box 752, Brocktonridge, Texas..... MONTH OF.....March....., 1961
SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST.....X..... (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	4	10/25/60	Pump	--	24	20	0	9.7	TSTM	TSTM
<u>AFTER WATERFLOOD RESPONSE</u>										
Toomey Allen	4	2-22-61	Pump	--	24	20	0	21.5	TSTM	TSTM
ILLEGIBLE										

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.

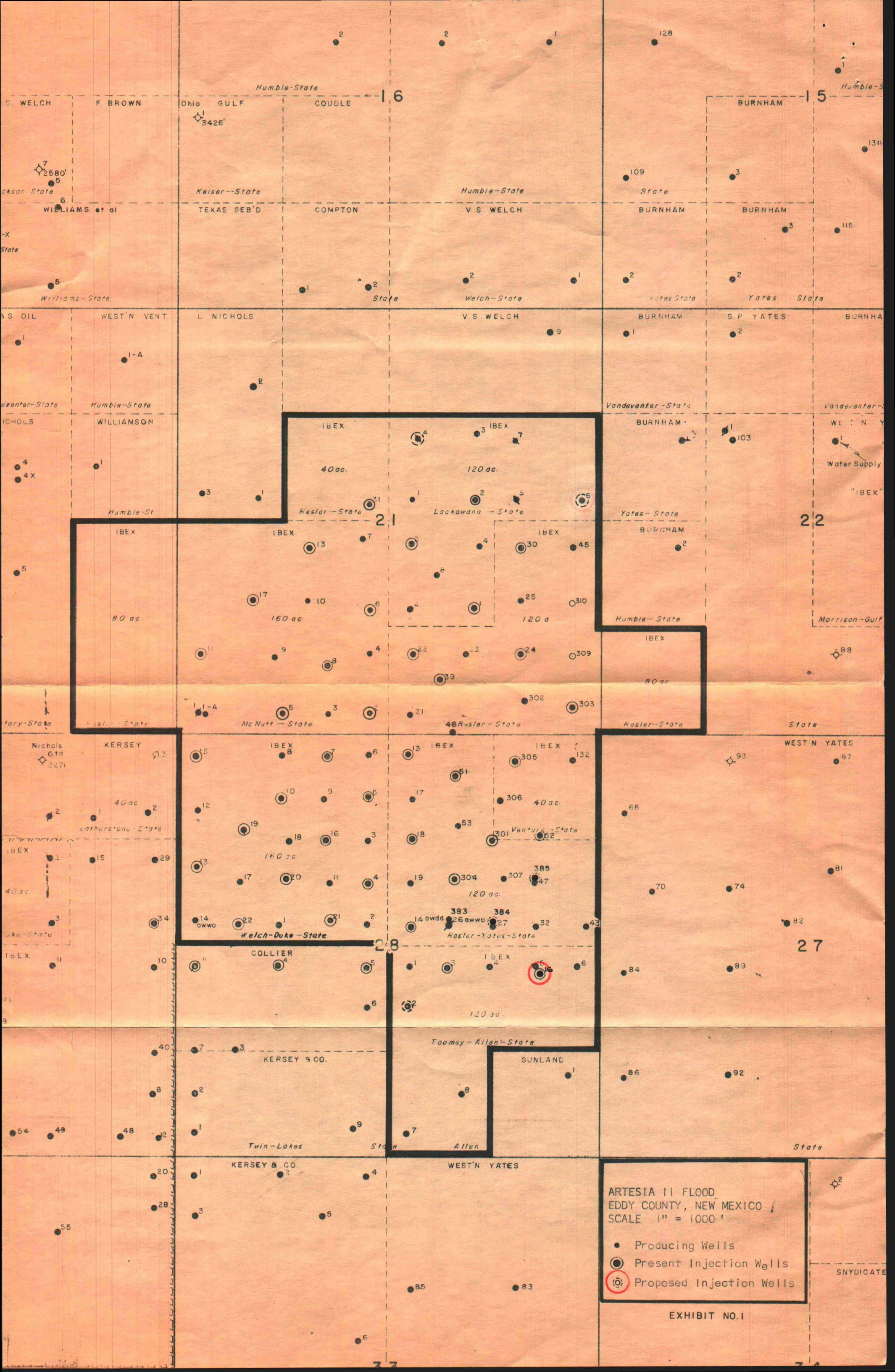
Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission. In accordance with Rule 301 and Appropriate Pool Rules.

(I certify that the information given is true and complete to the best of my knowledge.)

Date.....March 2, 1961.....

GRARIDGE CORPORATION
Company

By.....S. H. Lindley, Jr......
Engineer
Title



GR AR I D G E C O R P O R A T I O N

MONTHLY WATER FLOOD REPORT

Page 11.

Injection Well Data

Project: Artesia Flood No. 2

Month: January, 1961

Lease & Well No.	Total Water Input		Injection Pressure	Cumulative Input
	Month	Avg./Day		
Lackawanna State 2	4,893	158	920	17,764
Lackawanna State "A" 1	3,528	114	1040	54,468
3	5,263	170	1050	68,975
McNutt State 2	6,513	210	1075	277,190
5	3,697	119	1055	93,725
6	3,564	115	1055	120,704
8	5,737	185	1050	191,246
11	6,103	197	1055	76,446
13	4,702	174***	1050	34,806
17	5,403	174	1055	80,684
Resler Yates State 13	3,719	120	1075	216,335
14	5,483	177	1040	31,791
18	3,496	113	1065	229,969
22	4,037	130	1065	142,918
24	2,361	84*****	1050	48,082
30	1,765	57	1040	14,742
31	7,059	228	1020	10,991
39	4,152	134	1065	78,724
51	6,508	210	500	187,951
301	7,250	234	1060	99,634

* Based on 14 days
 ** Based on 19 days
 *** Based on 27 days
 **** Based on 28 days
 ***** Based on 29 days
 ***** Based on 30 days

EXHIBIT 2

GRADIDGE CORPORATION

MONTHLY WATER FLOOD REPORT

Page 11.
(2)

Injection Well Data

Project: Artesia Flood No. 2

Month: January, 1961

Lease & Well No.	Total Water Input		Injection Pressure	Cumulative Input
	Month	Avg./Day		
Resler Yates State 303	2,764	89	1055	29,060
304	4,870	157	1050	72,608
Toomey Allen 3	4,049	131	1055	32,867
Ventures St. 52	3,942	127	1060	63,342
305	4,967	166*****	1045	60,148
Welch Duke State 4	904	48**	1020	115,366
5	4,839	156	1000	265,473
7	5,754	186	1000	304,629
10	7,420	240	1045	144,876
13	5,294	171	1040	57,066
15	6,376	206	1005	109,049
16	6,029	208*****	930	137,984
19	856	61*	1060	66,715
20	6,708	216	1045	87,012
21	5,395	174	1020	72,047
22	5,994	193	870	79,282
TOTALS (36)	171,394	5,632	1020(avg)	3,774,669

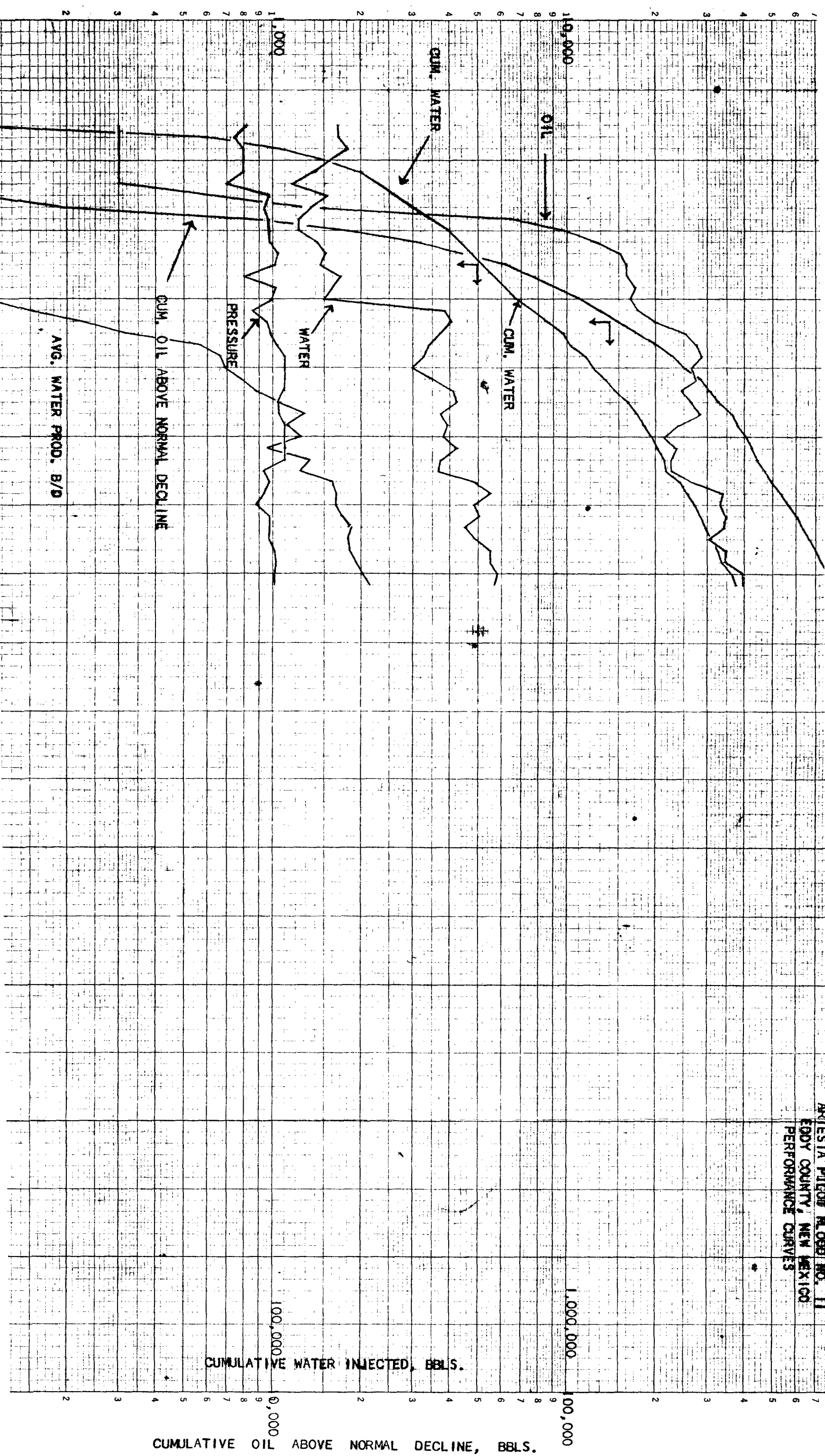
KEUFFEL & ESSER CO.

MADE IN U.S.A.

INJECTION PRESSURE, PSIG.

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

OIL PRODUCTION, BBL/DAY



AKIESIA PULCOB FLOOR NO. 11
EDDY COUNTY, NEW MEXICO
PERFORMANCE CURVES

GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

March 2, 1961

Date Received MAR 7 1961

ROUTE TO

ROUTE TO

LC

OUR

TAF

FFD

WEB

BGH ✓

CRA

JIM

BGE

WEW

JWC

Mail To:

Graham

FILE:

WR

Western Yates, Inc.
P. O. Box 427
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.

LEASE	WELL NO.	LOCATION
Toomey Allen	16	Unit 1, Sec. 28, T18S, R28E

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

B. G. Harrison
Manager of Secondary Recovery

BGH/vl

SIGNED BY *M. E. Spitzer*
Chairman of Operating Committee
FOR WESTERN-YATES



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

March 8, 1961

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

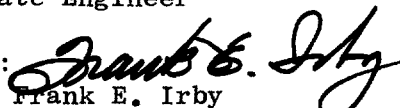
Dear Mr. Porter:

Reference is made to the application of the Graridge Corporation dated March 2, 1961, which seeks administrative approval to convert one well, Toomey Allen, Well No. 16, Unit 1, Section 28, Township 18 South, Range 28 East, Eddy County, New Mexico, to water injection well.

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 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.

Yours truly,

S. E. Reynolds
State Engineer

By: 
Frank E. Irby
Chief
Water Rights Division

ma
cc-Graridge Corp.
F. H. Hennighausen

OIL CONSERVATION COMMISSION

~~XXXXXXXX~~ DRAWER DD

~~XXXXXXXXXXXXXXXXXXXX~~
ARTESIA, NEW MEXICO

DATE March 9, 1961

OIL CONSERVATION COMMISSION
BOX 311
SANTA FE, NEW MEXICO

Re: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC _____
WFX

Gentlemen:

I have examined the application dated March 9, 1961
for the Graridge Corp. Toomey Allen # 16, Unit I, 28-183-28E
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Their application on this well seems to be O. K.

Yours very truly,

OIL CONSERVATION COMMISSION

M. L. Armstrong

M. L. Armstrong
Supervisor, District No. 2

MLA/sa