



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANADARK

August 4, 1969

PH 1 193
WIX - 320

New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

June Aug 21

RE: Grier Federal Well No. 17,
Square Lake Field,
Eddy County, New Mexico

Gentlemen:

Under the provisions of Rule 701-E-5 of the Rules and Regulations of the New Mexico Oil Conservation Commission, Anadarko Production Company hereby re-submits its application as requested by your letter of June 24, 1969 for administrative approval to convert to water injection its Grier Federal Well No. 17 located 330 feet FNL and 330 feet FEL of Section 31-T16S-R31E, Square Lake Field, Eddy County, New Mexico. Water injection will be into the oil productive Premier Sand (Zone 6) of the Grayburg formation and Lovington Sand (Zone 8) of the San Andres formation.

The well proposed for conversion to water injection is offset to the east by Newmont Oil Company's State "R" Well No. 1 that responded to water injection operations by Newmont during July, 1961, and that has recovered 39,572 barrels of waterflood oil to January 1, 1969. The west offset location, Anadarko's Grier Federal Well No. 11, responded to water injection operations during February, 1967 and produced 600 barrels of oil during June, 1969 which represents an increase from approximately 60 barrels of oil per month prior to response.

The north offset to the subject well, Newmont's J.N. Fidel Federal Well No. 1, responded to water injection operations during March, 1961 and has recovered 30,468 barrels of waterflood oil as of January 1, 1969. This well is now producing 5 barrels of oil and 61 barrels of water per day.

August 4, 1969

The waterflood project on the portion of Anadarko's Grier Federal lease located in Sections 30 and 31-T16S-R31E as shown on the attached map was approved by New Mexico Oil Conservation Commission Order No. R-2977 as amended by Order No. R-2977-A and R-2977-B. This order permitted the cooperative waterflood development of this portion of the Square Lake Field by Ryder Scott Management Company, Stallworth Oil and Gas, Inc., Newmont Oil Company, and Anadarko Production Company (successor to Cima Capitan Incorporated and Western Oil Fields, Inc.).

To support this application for administrative approval to convert Grier Federal Well No. 17 to water injection, we are attaching data required under the provisions of Rule 701-B. This data includes (1) a plat showing the proposed water injection well and offset operations, (2) a log of the proposed water injection well, (3) a diagrammatic sketch of the proposed water injection well completion on which we have indicated the zones to be open for injection and the type and quantity of water to be injected, and (4) a OCC Form C-116 showing well tests of offset wells to the proposed water injection well affected by water injection operations.

The conversion of this well to water injection is needed to accomplish maximum recoveries of oil from the oil productive reservoir under the Grier Federal lease.

Your approval at your earliest convenience will be appreciated

Very truly yours,

ANADARKO PRODUCTION COMPANY



C.W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/nl

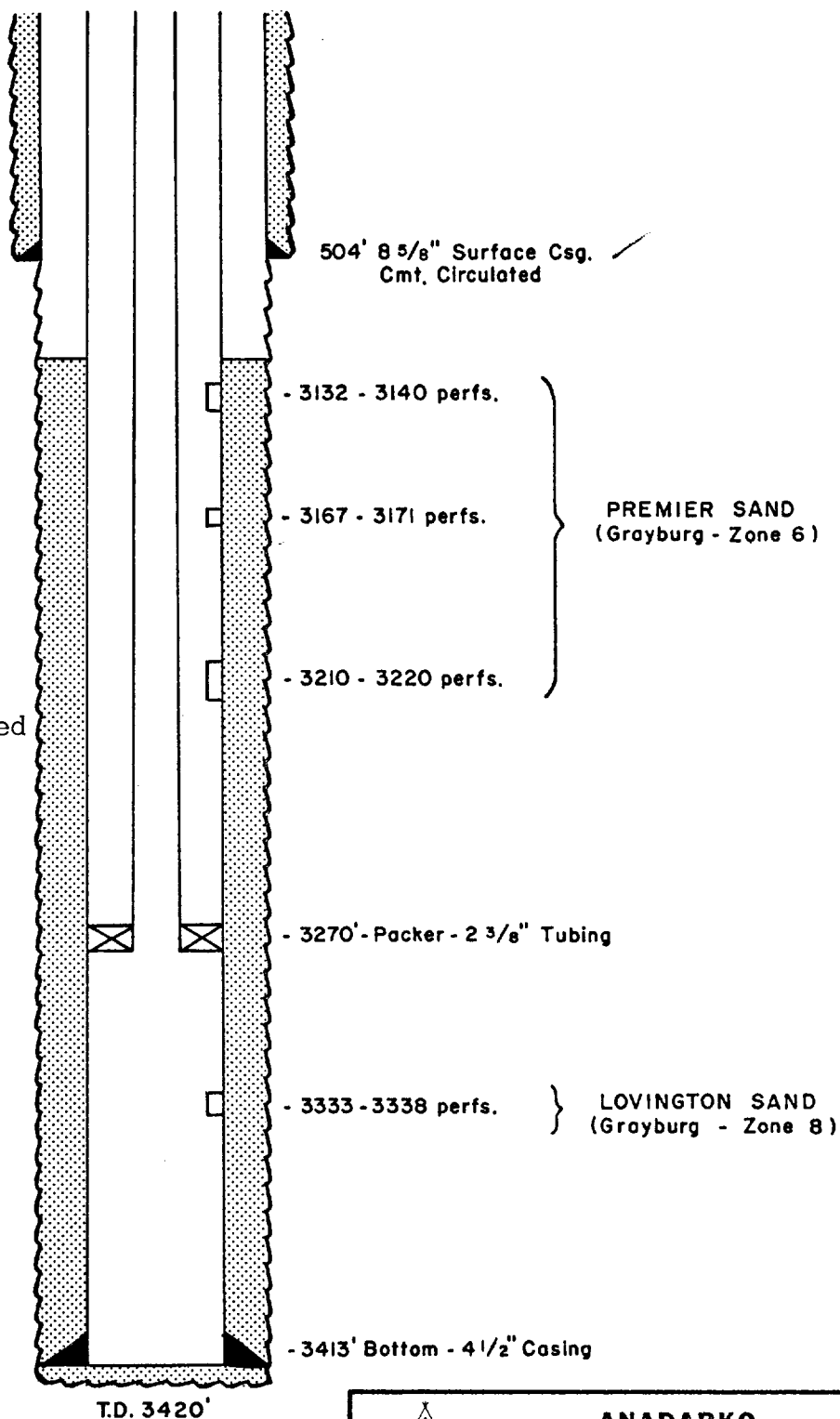
Encl:

cc: United States Geological Survey
Artesia, New Mexico

Newmont Oil Company
Artesia, New Mexico

Fluid Injection Rate: 200 B/D in
Premier Sand
100 B/D in
Lovington Sand

Injected fluid source to be fresh
water purchased from Ryder Scott
Management Company and produced
water.



WELL LOCATION

330' FNL & 660' FEL
SEC. 31 - T16S - R31E



**ANADARKO
PRODUCTION COMPANY**

**WELL BORE DIAGRAM
GRIER FEDERAL NO.17
EDDY COUNTY, NEW MEXICO**

SCALE IN FEET

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO TESTS

C-116

Revised 1-1-65

Operator As Shown		Pool Square Lake		County Eddy											
Address As Shown		TYPE OF TEST - (X)		Completion ☐ Special ☒											
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	FBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL.		
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.	GAS M.C.F.
Newmont Oil Company, State "R"	1	Artesia, New Mexico				6-61	-	-	-	24	0	36	1	TSTM	-
	1	D	32	16S	31E	7-61	-	-	-	24	0	36	4	TSTM	-
	1	D	32	16S	31E	12-61	-	-	-	24	0	36	50	TSTM	-
	1	D	32	16S	31E	7-63	-	-	-	24	10	36	23	TSTM	-
	1	D	32	16S	31E	7-65	-	-	-	24	26	36	4	TSTM	-
	1	D	32	16S	31E	12-68	-	-	-	24	26	36	3	TSTM	-
J.N. Fidel Federal	1	P	30	16S	31E	12-60	-	-	-	24	0	36	5	TSTM	-
	1	P	30	16S	31E	3-61	-	-	-	24	0	36	7	TSTM	-
	1	P	30	16S	31E	12-61	-	-	-	24	21	36	93	TSTM	-
	1	P	30	16S	31E	12-62	-	-	-	24	92	36	7	TSTM	-
	1	P	30	16S	31E	12-68	-	-	-	24	61	36	5	TSTM	-
Anadarko Production Company, Fort Worth, Texas Grier Federal	11	B	31	16S	31E	11-65	T.A.	-	-	24	0	36	2	TSTM	-
	11	B	31	16S	31E	1-67	P	-	-	24	1	36	14	TSTM	-
	11	B	31	16S	31E	5-68	P	-	-	24	1	36	14	TSTM	-
X	Production tests of wells offsetting Anadarko's Grier Federal Well No. 17 before and after stimulation by water injection operations.														

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° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

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.

ATTACHMENT

ANADARKO PRODUCTION COMPANY
APPLICATION FOR ADMINISTRATIVE APPROVAL

TO

CONVERT GRIER FEDERAL WELL NO. 17 TO INJECTION

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

C. W. Lumbhoff

(Signature)

Superintendent Secondary Rec. Div.

(Title)

August 1, 1969

(Date)

42 6 27
9 27
NEW MONT OIL COMPANY

ROOM 303, FIRST NATIONAL BANK BUILDING

P.O. Box 1305

ARTESIA, NEW MEXICO 88210

RECEIVED
JUN 24 1969
JUN 24 1969
June 24, 1969

NEW MEXICO
DISTRICT OFFICE

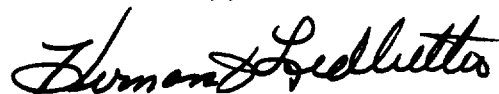
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Sir:

Newmont Oil Company has no objection to granting administrative approval to convert to injection by Anadarko Production Company of their:

Grier Federal No. 17
330' FNL and 660' FEL
Section 13 - T16S - R31E
Square Lake Field
Eddy County, New Mexico

Yours truly,



Herman J. Ledbetter
Division Superintendent

HJL/wm

*Application returned to sender
6-24-69*