LAW OFFICES

A. J. LOSEE

CARPER BUILDING - P. O. DRAWER 239
ARTESIA, NEW MEXICO 88210

6 April 1970

AREA CODE 505 746-3508

W/X-337

Mr. A. L. Porter, Jr. Secretary-Director New Mexico Oil Conservation Commission P. O. Box 2008 Santa Fe, New Mexico

Dear Mr. Porter:

JOEL M. CARSON

Enclosed herewith please find triplicate copies of Application of Agua, Inc. for amendment to Order No. (R-2515) Eastcap Queen Pool Unit, Chaves County, New Mexico.

We ask that you set this case for hearing before the examiner in Santa Fe on April 29, 1970, and advise us of such setting.

Very truly yours,

A. J. Losee

AJL:jw Enclosure

cc: Mr. Ralph Gray w/enclosure

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF AGUA, INC. FOR AMENDMENT OF ORDER R-2515, EASTCAP QUEEN UNIT WATER-FLOOD PROJECT, CHAVES COUNTY, NEW MEXICO

Case No.

APPLICATION

COMES AGUA, INC., by its attorney, A. J. Losee, and in support of this application, states:

- 1. That heretofore on July 9, 1963, the Oil Conservation Commission of the State of New Mexico (the "Commission") entered its Order No. R-2515 authorizing Continental Oil Company to institute the Eastcap Queen Unit Waterflood Project, Chaves County, New Mexico.
- 2. That effective April 1, 1970, Aqua, Inc. took over operations of the Eastcap Queen Unit and proposes to shut-in most of the present water injection wells and to convert the hereinafter described wells to water injection, to-wit:

Unit Well No. 2 located in NW/4 SW/4 Section 23, Unit Well No. 5 located in NW/4 NE/4 Section 27, Unit Well No. 11 located in NW/4 SW/4 Section 27, Unit Well No. 13 located in NW/4 SE/4 Section 27, Unit Well No. 20 located in NW/4 NE/4 Section 34, Unit Well No. 22 located in NW/4 NW/4 Section 35, Unit Well No. 28 located in NW/4 SW/4 Section 34, Unit Well No. 30 located in NW/4 SW/4 Section 34.

All of said wells are located in Township 14 South, Range 31 East, N.M.P.M., Chaves County, New Mexico.

3. The unit has essentially reached the end of profitable waterflood operation utilizing the present injection patterns, and the operator proposes to convert the

above numbered wells to water injection for the purpose of recovering oil that would not otherwise be recovered under the present injection pattern.

4. The available electric logs and the diagrammatic sketches of each of the proposed new water injection wells will be submitted by operator at the hearing on this application.

The approval of this application will be in the interests of conservation and will prevent waste and protect correlative rights.

WHEREFORE, applicant prays that an order be entered authorizing the amendment of Order No. R-2515 of the Commission to permit the conversion to water injection of eight additional wells in the Eastcap Queen Unit, Chaves County, New Mexico.

AGUA, INC.

A T Tage

P. O. Drawer 239 Artesia, New Mexico 88210

Attorney for Applicant

RALPH L. GRAY
PETROLEUM ENGINEERING - PRODUCTION
CONSULTANT
P. O. BOX 198
ARTESIA, NEW MEXICO
April 8, 1970

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

Attention: Mr. George Hatch, Attorney

Dear Sir:

Mr. Jerry Losee has filed an application for Agua, Inc., to change some injection patterns on the East Caprock Unit waterflood project which Agua purchased from Continental Oil Company as of April 1, 1970. Mr. Losee advises me that there is a possibility that this amendment can be accomplished administratively but that it will be necessary for us to furnish diagrammatic sketches of proposed injection wells.

I am attaching a sketch which is typical of most of the proposed injection wells, and a tabulation is also attached which shows specific data for each of the proposed injection wells for the various points shown on the diagrammatic sketch. The attached sketch shows an open hole completion, although in some cases casing is cemented close to bottom and the pay is perforated. This is indicated on the tabulation. In either case, we propose to inject through a string of tubing which will probably be protected internally and a packer will be set inside of the production string just above the pay interval.

We propose to continue the waterflood program essentially as Continental has been conducting with the exception of this change in injection pattern.

Your approval of this program will be appreciated.

Yours very truly,

RALPH L. GRAY

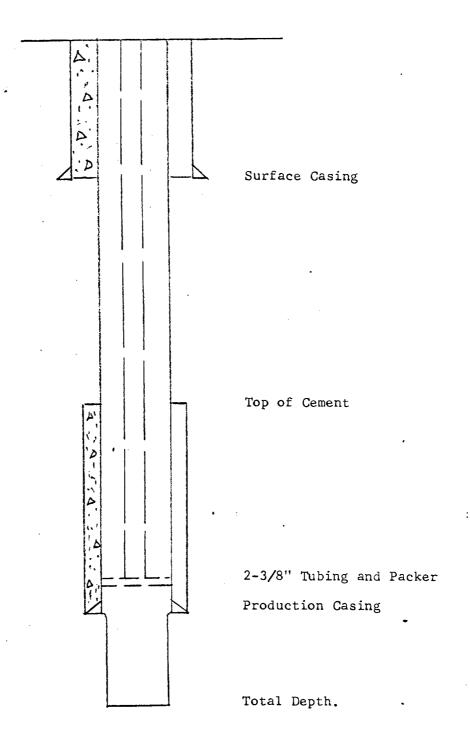
RLG:1w

Encls.

cc: Mr. Jerry Losee
Agua, Inc.

DIAGRAMMATIC SKETCH

TYPICAL INJECTION WELL



	#30	#28	#22	. #20	#13	#11	#±	# 2	PROPOSED INJECTION WELL
•	7-5/8" - 314' 200 sx.	8-5/8" - 280' 150 sx.	8-5/8" - 311' 175 sx.	7-5/8" - 305' 175 sx.	8-5/8" - 259' 150 sx.	8-5/8" - 233' 150 sx.	8-5/8" - 195' 125 sx.	8-5/8" - 196' 125 sx.	SURFACE CASING AND CEMENT
•	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	ESTIMATED TOP OF CEMENT
	$4\frac{1}{2}$ " - 3086 700 sx	$5\frac{1}{2}$ " - 3092' 75 sx.	$5\frac{1}{2}$ " - 3137' 200 sx.	$4\frac{1}{2}$ " - 3084 800 sx.	$4\frac{1}{2}$ " - 3086. 75 sx.	$4\frac{1}{2}$ " - 3105 75 sx.	$4\frac{1}{2}$ " - 3127 150 sx.	$4\frac{1}{2}$ " - 3136 150 sx.	PRODUCTION STRING AND GEMENT
	Surface	2617†	1822'	Surface	2724'	2744'	2402'	2411'	ESTIMATED TOP OF CEMENT
	3114'	3103'	3142'	3110'	3110'	3125′	3128'	3136'	TOTAL
	0. н.	О. н.	3105-15	0. н.	0. н.	О. н.	3099-3103	3098-3104	CASING PERFS.