



SKELLY OIL COMPANY

P. O. Box 1650
TULSA 2, OKLAHOMA

November 19, 1964

PRODUCTION DEPARTMENT

C. L. BLACKSHER, VICE PRESIDENT

W. P. WHITMORE, MGR. PRODUCTION

W. D. CARSON, MGR. TECHNICAL SERVICES

ROBERT G. HILTZ, MGR. JOINT OPERATIONS

GEORGE W. SELINGER, MGR. CONSERVATION

Re: Application of Skelly Oil Company for
Expansion and Conversion of Additional Wells,
Many Rocks Gallup Pressure Maintenance
Project No. 3, San Juan County, New Mexico

Mr. A. L. Porter, Jr., Secretary-Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Porter:

By application dated November 4, 1964, we applied for administrative approval for expansion so as to convert five additional wells for injection purposes in the Many Rocks Gallup Pressure Maintenance Project No. 3. We sent copies and requested waivers from all interested parties, including the State Engineer. We have just received a copy of a letter dated November 13, 1964, addressed to you from the State Engineer expressing their concern about the amount of cement surrounding the casing in the wells proposed to be converted for injection. They also suggest that the five additional wells should have tubing and packer in them.

We do not feel that it is necessary to inject thru tubing and packer in these wells, as the time during which the wells will be utilized for injection purposes will be relatively short, and considering the quality of the water we can foresee no predictable hazard to any fresh water strata in the area, if there is any. Location of these wells is on the top of a mesa. We wish, also, to call to your attention the fact that other operators in the Many Rocks Gallup Pool are not using tubing and packer for injection, but are injecting thru the casing similar to the manner we propose in our wells.

We prefer to inject thru the casing as outlined in our application, but would be willing, if necessary, to take periodic tests to make sure the injected water is being confined to the intended horizon.

Yours very truly,

George W. Selinger
by *R. J. [unclear]*

RJJ:br

cc-State Engineer

P. O. Box 1079

Santa Fe, New Mexico

Attn: Mr. Frank E. Irby



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

December 1, 1964

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

87501

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

Dear Mr. Porter:

Reference is made to the application of Skelly Oil Company submitted November 4th which seeks administrative approval to convert 5 wells to water injection in their Many Rocks Gallup Pressure Maintenance Project No. 3 in San Juan County. Further reference is made to my letter addressed to you under date of November 13, 1964 and Mr. Selinger's letter to you dated November 19, 1964. Mr. Selinger writes in generalities without any statements of specific fact and I hope that this does not indicate an intention to evade the facts. The basis for his feeling that no tubing and packer should be required appears to be a relatively short time during which the wells will be utilized for injection purposes and a consideration of the quality of the water.

A relatively short time is naturally a relative matter. If the matter relates to geologic eons then the time of use could exceed the life expectancy of the best casing ever manufactured. If it relates to a year then the period of operation could be quite short and well within the life expectancy of old used casing. Although I am inclined to think that the period of time is somewhere between these extreme examples, there is no information contained in the application or Mr. Selinger's letter on which I might base such thinking. If Mr. Selinger can submit convincing factual data to the effect that the casing will withstand the



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GEORGE W. SELINGER, MGR. CONSERVATION

December 28, 1964

Re: Application of Skelly Oil Company for
Expansion and Conversion of Additional Wells,
Many Rocks-Gallup
Pressure Maintenance Project No. 3
San Juan County, New Mexico

State Engineer
P. O. Box 1079
Santa Fe, New Mexico

Attention: Mr. Frank E. Irby

Gentlemen:

This is in answer to your recent letter addressed to Mr. A. L. Porter, Jr., Secretary-Director of the Oil Conservation Commission, in which you raise certain questions as to the length of time for the project, and other pertinent facts relating to the water injection program. In answer to those questions which you raise, we would like to state the following:

The expected life of the project is seven years.

Both Humble and Atlantic are injecting water down the casing in their Many Rocks projects. Humble has been injecting the same source water down the casing for approximately four years in the Horseshoe Gallup Pool and have had no evidence of internal casing corrosion.

Completion data for the proposed injection wells is as follows:

Navajo "M" No. 8: Completed April 15, 1963 with 5 1/2" OD Casing with the top 1457 feet being new 14#/ft., J-55, and used condition "B" 15.5#/ft., J-55 and used 17#/ft., J-55 and N-80 on the bottom.

Navajo "M" No. 12: Completed December 27, 1963 with all new 4 1/2" OD, 9.5#/ft., J-55 casing.

Navajo "P" No. 7: Completed July 13, 1963 with all new 4 1/2" OD, 9.5#/ft., J-55 casing.

State Engineer
December 28, 1964
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Navajo "P" No. 9: Completed August 5, 1963 with all new 4 1/2" OD, 9.5#/ft., J-55 casing.

Navajo "P" No. 11: Completed September 28, 1963 with all new 4 1/2" OD, 9.5#/ft., J-55 casing.


Daily readings will be taken, at each injection well, of the injection pressure and volume of water being injected. Tentative plans are for installation of test facilities whereby monthly production tests can be taken on each producing well.

Each Skelly well in this project area was drilled with air and drilled dry and dusted from surface to total depth. This indicates that there are not any water zones above the producing formations that could be contaminated by the injection fluids.

We hope that the above answers your questions and will enable our application for expansion and conversion of additional wells to be processed.

Yours very truly,

(Signed) GEORGE W. DELINGOLLY



RJJ:br

cc-Mr. A. L. Porter, Jr., Secretary-Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

SCHLUMBERGER**FORMATION DENSITY LOG**

Gamma-Gamma

SCHLUMBERGER WELL SURVEYING CORPORATION

Houston, Texas

COUNTY SAN JUAN, NEW MEX

FIELD or

LOCATION UNDESIGNATEDWELL NAVAJO P-11COMPANY SKELLY OIL CO.COMPANY SKELLY OIL COMPANYWELL NAVAJO P-11FIELD UNDESIGNATEDCOUNTY SAN JUAN STATE NEW MEXICO

Location:

810' FNL & 510' FWL

Sec. 35 Twp. 32N Rge. 17W

Other Services:

I-GR

Permanent Datum: G.L.; Elev.: 5914'Log Measured From K.B., 5 Ft. Above Perm. DatumDrilling Measured From K.B.Elev.: K.B. 5919'D.F. --G.L. 5914'Date 9-5-63Run No. ONEType Log FORMATION DENSITY LOGDepth—Driller 1835Depth—Logger 1836Bottom logged interval 1835Top logged interval 1500Type fluid in hole OILSalinity, PPM Cl. --Density --Level FULLMax rec. temp., deg F. *Operating rig time 1 1/2 HOURSRecorded by DILLIWitnessed by MR. BOTKIN

RUN

BORE-HOLE RECORD

CASING RECORD

No.	Bit	From	To	Size	Wgt.	From	To
1	6 3/4	CSG.	T.D.	7"	-	1835	20

A-BET-32W2

EXHIBIT "K"

To Application of Skelly Oil Company for

Inverting Additional Injection Wells in Many Rocks Pressure Maintenance Project No. 3

Many Rocks - Gallup Pool

San Juan County, New Mexico