



SKELLY OIL COMPANY

P. O. Box 1650
TULSA 2, OKLAHOMA

November 4, 1964

MAINTENANCE
NOV 9 AM '64

Handwritten notes and signatures, including '13' and a signature.

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: **Many Rocks-Gallup**
Pressure Maintenance Project No. 3
San Juan County, New Mexico

Mobil Oil Co., 500 Petroleum Club Bldg., Denver, Colorado
Atlantic Refining Co., 760 Petroleum Club Bldg., Denver, Colorado
Tidewater Oil Co., Midland, Texas
Texaco, Inc., P. O. Box 2100, Denver, Colorado
Humble Oil & Refining Co., P. O. Box 120, Denver, Colorado
Cities Service Oil Co., P. O. Box 97, Hobbs, New Mexico
Murphy Corporation, Murphy Bldg., El Dorado, Arkansas
Texas Pacific Oil Co., 1700 Broadway, Denver, Colorado
State Engineer, P. O. Box 1079, Santa Fe, New Mexico

Gentlemen:

We are enclosing notice, proof of service, and a copy of our application to convert additional wells for injection in Pressure Maintenance Project No. 3 in the Many Rocks-Gallup Pool.

Since the expansion and conversion of these wells for injection is of a routine nature, and since there is very little time before winter sets in, we would greatly appreciate your executing a waiver, which is attached for your convenience, and forwarding it to the Oil Conservation Commission so that approval can be given at the earliest possible time.

Yours very truly,

GEORGE W. SELINGER

RJJ:br
Encl.

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

← COPY FOR [unclear]

RECEIVED
NOV 19 64

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:

We have received application, notice, and proof of service filed November 4, 1964, for conversion of five additional wells for injection. These wells are Skelly Oil Company's Navajo "M" Well Nos. 8 and 12, and Navajo "P" Well Nos. 7, 9 and 11.

This is to advise that the undersigned, as an interested party, under Rule 11 of Order No. R-2664 hereby waives objection to the granting of the application.

Yours very truly,

MURPHY CORPORATION

By *L. L. [Signature]*
Date 11-16-64

cc-Mr. George W. Selinger
Skelly Oil Company
P. O. Box 1650
Tulsa, Oklahoma 74102



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

November 13, 1964

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

S. E. REYNOLDS
STATE ENGINEER

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 4, 1964 which seeks administrative approval to convert the following wells to water injection in their Many Rocks Gallup Pressure Maintenance Project No. 3, San Juan County:

Skelly Navajo "M" Well No. 8	SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Sec. 34, T. 32N, R17W
Skelly Navajo "M" Well No. 12	NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Sec. 34, T. 32N, R17W.
Skelly Navajo "P" Well No. 7	NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Sec. 35, T. 32N, R17W.
Skelly Navajo "P" Well No. 9	SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Sec. 35, T. 32N, R17W.
Skelly Navajo "P" Well No. 11	NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Sec. 35, T. 32N, R17W.

The diagrammatic sketches of the 5 wells indicate that injection will be down the casing since no tubing is shown on the sketch. It is noted on the sketches that there is considerable space between the top of the cement surrounding the production casing and the bottom of the cement surrounding the surface casing and therefore the casing program is not considered adequate for injection wells.

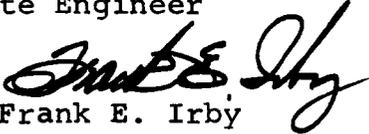
The diagrammatic sketch showing the completion of their Navajo "P" well No. 6 which is the injection well authorized by Order R-2664 following the hearing on Case 2994 shows that injection would be through 2 3/8 inch tubing under a retrievable type packer set well below the top of the cement surrounding the production casing.

NOV 16 1964

This office offers no objection to the granting of the application provided Skelly Oil Company is willing to complete the 5 proposed injection wells in accordance with the diagrammatic sketch labeled Exhibit B submitted at the hearing in Case 2994, February 19, 1964.

Very truly yours,

S. E. Reynolds
State Engineer

By: 
Frank E. Irby
Chief
Water Rights Div.

FEI/ma
cc-Skelly Oil Co.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF SKELLY OIL COMPANY
FOR AN ORDER APPROVING THE CONVERTING
OF FIVE ADDITIONAL PRODUCING WELLS TO
WATER INJECTION SERVICE IN ITS MANY
ROCKS-CALLUP PRESSURE MAINTENANCE
PROJECT NO. 3.

NOTICE AND PROOF OF SERVICE

To: Mobil Oil Company
500 Petroleum Club Building
Denver, Colorado

Humble Oil & Refining Company
P.O. Box 120
Denver, Colorado

Atlantic Refining Company
700 Petroleum Club Building
Denver, Colorado

Cities Service Oil Company
P.O. Box 97
Hobbs, New Mexico

Tidewater Oil Company
Midland, Texas

Murphy Corporation
Murphy Building
Eadsburg, Arkansas

Tenaco, Inc.
P.O. Box 2100
Denver, Colorado

Texas Pacific Oil Company
1700 Broadway
Denver, Colorado

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

Please take notice that on the 4th day of November, 1964,

Skelly Oil Company did file with the New Mexico Oil Conservation Commission its application for an order approving the conversion of five additional producing wells within the Pressure Maintenance Project No. 3 to water injection service. A copy of said application is served upon each of you herewith. This notice is given and Proof of Service hereinbelow made in support of said application and pursuant to the provisions of Rule 11 of the Special Rules and Regulations for the Many Rocks-Callup Pressure Maintenance Project No. 3, which said rule is fully set forth in Order No. R02604 in this case.

SKELLY OIL COMPANY

BY *Raymond E. [Signature]*

P.O. Box 1650
Tulsa, Oklahoma

EXHIBIT 'A'

To Application of Skelly Oil Company for
Converting Additional Injection Wells in Many Rocks Pressure Maintenance Project No. 3
Many Rocks-Callup Pool

San Juan County, New Mexico

PROOF OF SERVICE

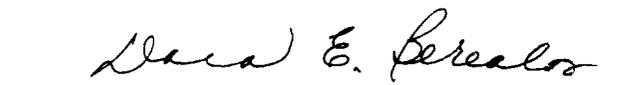
GEORGE W. SELINGER, Affiant herein, being first duly sworn on oath deposes and says that on November 4, 1964, he did give notice of the application of Skelly Oil Company described above to the parties listed above by sending a copy of the above notice, together with copies of the application and exhibits attached thereto (which said application and exhibits are exact copies of the application and exhibits filed with the Commission in this matter), by registered United States mail at Tulsa, Oklahoma, addressed to the operators named above at the addresses set forth above.



GEORGE W. SELINGER

Subscribed and sworn to before me this 4th day of November, 1964.

My Comm. Exp. 12/31/65
Notary Public, Tulsa



Notary Public in and for
Tulsa County, Oklahoma

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF SKELLY OIL COMPANY
FOR AN ORDER APPROVING THE CONVERTING
OF FIVE ADDITIONAL PRODUCING WELLS TO
WATER INJECTION SERVICE IN ITS MANY
ROCKS-GALLUP PRESSURE MAINTENANCE
PROJECT NO. 3.

NOTICE AND PROOF OF SERVICE

To: Mobil Oil Company
500 Petroleum Club Building
Denver, Colorado

Atlantic Refining Company
760 Petroleum Club Building
Denver, Colorado

Tidewater Oil Company
Midland, Texas

Texaco, Inc.
P.O. Box 2100
Denver, Colorado

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

Humble Oil & Refining Company
P.O. Box 120
Denver, Colorado

Cities Service Oil Company
P.O. Box 97
Hobbs, New Mexico

Murphy Corporation
Murphy Building
Eldorado, Arkansas

Texas Pacific Oil Company
1700 Broadway
Denver, Colorado

Please take notice that on the 4th day of November, 1964,
Skelly Oil Company did file with the New Mexico Oil Conservation Com-
mission its application for an order approving the conversion of five
additional producing wells within the Pressure Maintenance Project No.
3 to water injection service. A copy of said application is served
upon each of you herewith. This notice is given and Proof of Service
hereinbelow made in support of said application and pursuant to the
provisions of Rule 11 of the Special Rules and Regulations for the
Many Rocks-Gallup Pressure Maintenance Project No. 3, which said rule
is fully set forth in Order No. R-2664 in this case.

SKELLY OIL COMPANY

George W. [Signature]

P.O. Box 1650

Tulsa, Oklahoma

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF SKELLY OIL COMPANY FOR
AN ORDER APPROVING THE CONVERTING OF
FIVE ADDITIONAL PRODUCING WELLS TO
WATER INJECTION SERVICE IN ITS MANY
ROCKS-GALLUP PRESSURE MAINTENANCE
PROJECT NO. 3.

Case No. _____

Order No. _____

TO: THE HONORABLE OIL CONSERVATION COMMISSION, STATE OF NEW MEXICO
AND THE SECRETARY-DIRECTOR THEREOF:

COMES NOW, the Applicant herein, Skelly Oil Company, a Delaware corporation, authorized to do business in the State of New Mexico, as owner and operator of the Many Rocks-Gallup Pressure Maintenance Project No. 3 and hereby makes application to the New Mexico Oil Conservation Commission and the Secretary-Director thereof for an order authorizing the conversion of five additional producing wells to water injection service. This application is made pursuant to Rule 11 of the said Rules and Regulations relating to the Many Rocks-Gallup Pressure Maintenance Project No. 3 as promulgated in Order No. R-2664 of the Commission. In support hereof, Applicant respectfully alleges and states:

I.

On March 13, 1964, this Commission entered its Order No. R-2664 in this case, which said order authorized Applicant to institute a Pressure Maintenance Project in the Many Rocks-Gallup Pool, San Juan County, New Mexico, by injecting water into the Gallup formation in certain wells described in said order in accord with the Special Rules and Regulations governing the operation of said project, all as set forth in Rules 1 through 11, inclusive, promulgated in said order.

II.

Rule 11 of said order provides that conversion of additional producing wells to water injection service shall be accomplished only after approval thereof by the Secretary-Director of the Commission, such permission to be obtained according to the procedure prescribed in said Rule 11 and according to Rule 701-B of the General Rules of this Commission.

III.

Applicant requests authority to convert into water injection and to operate as water injection wells, those certain wells now producing from the Gallup formation as follows:

<u>WELL</u>	<u>LOCATION</u>
SKELLY Navajo "M" Well No. 8	SE/4 NE/4 of Section 34-T 32N-R17W
SKELLY Navajo "M" Well No. 12	NE/4 NW/4 of Section 34-T32N-R17W
SKELLY Navajo "P" Well No. 7	NW/4 SE/4 of Section 35-T32N-R17W
SKELLY Navajo "P" Well No. 9	SE/4 NW/4 of Section 35-T32N-R17W
SKELLY Navajo "P" Well No. 11	NW/4 NW/4 of Section 35-T32N-R17W

All of said wells are owned and operated by Applicant and lie within the presently existing project area.

IV.

In support of this application, Applicant attaches hereto as Exhibit "A" a plat showing:

1. The present project area of the Many Rocks-Gallup Pressure Maintenance Project No. 3.
2. The location of the proposed wells more particularly described above in Section III which it is proposed to convert to water injection wells.
3. All wells completed in the Gallup formation located within the project area and all wells within two miles of the proposed injection wells.
4. All offsetting operators within two miles of the proposed injection wells.

Further in support of this application, Applicant attaches hereto as Exhibits "B", "C", "D", "E", and "F" schematic diagrams of these wells which are proposed to be converted to injection which said diagrams describe fully the cementing, casing, perforated intervals, and depth of said wells and further showing that the injection of water will be confined to the Gallup formation in said wells.

VI.

Further in support of this application, Applicant attaches hereto as Exhibits "G", "H", "I", "J", and "K" formation density logs of the proposed injection wells.

VII.

Applicant attaches hereto as Exhibit "L" proof of service of a complete copy of this application, on all operators of oil and gas leasehold estates within a two mile radius of the proposed injection wells.

VIII.

Applicant attaches hereto as Exhibit "VII" a table indicating, with respect to the proposed injection wells, the zones into which water will be injected into said wells, the kind of fluid to be injected into said wells, the anticipated daily amounts of water that will be injected into said wells, and the source of said water.

IX.

Applicant attaches hereto as Exhibit "VIII" a table summarizing the status of water injection at the Many Rocks-Gallup Pressure Maintenance Project No. 3, including accumulated injection per well and average daily rates of injection per well.

X.

Applicant attaches hereto as Exhibit "IX" a table summarizing completion and production data on all wells within the Many Rocks-Gallup Pressure Maintenance Project No. 3 area.

XI.

Applicant believes and states that it will be in the interest of conservation and the prudent development to convert the wells more particularly described in Section III hereof to water injection service and to operate said wells as water injection wells as herein requested. Conversion of said wells is necessary to obtain the greatest ultimate recovery of oil and gas from the Gallup formation within the area.

WHEREFORE, Applicant respectfully requests that the Secretary-Director of the Commission administratively approve and issue an order granting Applicant authority to convert the above-described wells to water injection service and operate the entire Pressure Maintenance Project No. 3, and the wells located thereon as heretofore authorized by this Commission in Order No. R-2004, and according to all of the terms and provisions set forth in the Special Rules and Regulations governing the operation of said project as contained in said order.

Dated this 4th day of November, 1964.

Respectfully submitted,

SEELY OIL COMPANY

BY: [Signature]

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NOV 23 1964

MAIL ROOM

NOV 22 PM 12 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

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

Dear Mr. Porter:

We have received application, notice, and proof of service
filed November 4, 1964, for conversion of five additional wells for
injection. These wells are Skelly Oil Company's Navajo "M" Well
Nos. 8 and 12, and Navajo "P" Well Nos. 7, 9 and 11.

This is to advise that the undersigned, as an interested
party, under Rule 11 of Order No. R-2664 hereby waives objection to
the granting of the application.

Yours very truly,

MOBIL OIL COMPANY

By H.H. Caruth, Jr.

Date 11/20/64

cc-Mr. George W. Selinger
Skelly Oil Company
P. O. Box 1650
Tulsa, Oklahoma 74102

SCHEMATIC DIAGRAM
 SKELLY NAVAJO "M" WELL NO. 8

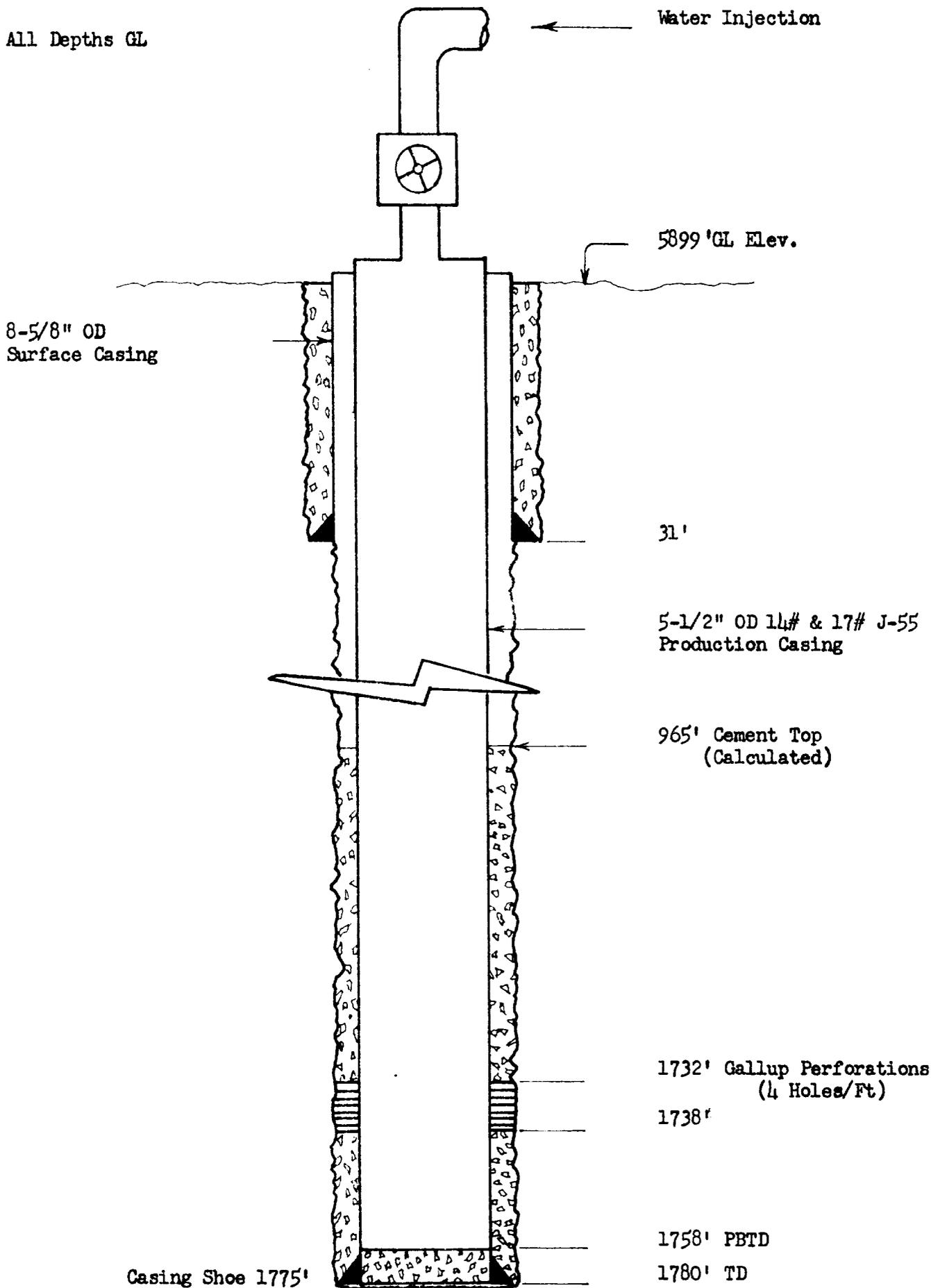


EXHIBIT "B"

To Application of Skelly Oil Company for
 Converting Additional Injection Wells in Many Rocks Pressure Maintenance Project No. 3
 Many Rocks - Gallup Pool
 San Juan County, New Mexico

SCHMATIC DIAGRAM

SKELLY NAVAJO "M" WELL NO. 12

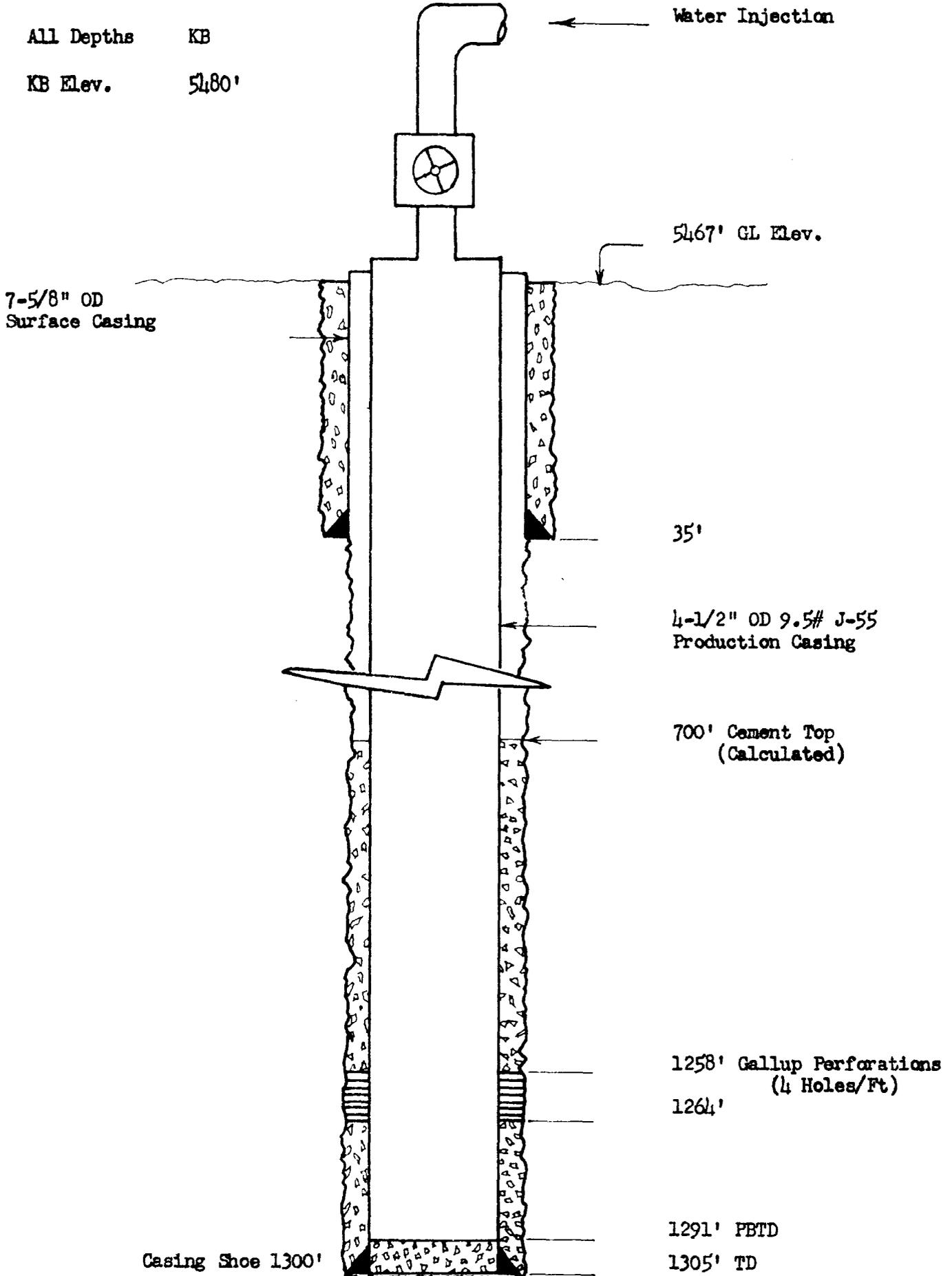


EXHIBIT "C"

To Application of Skelly Oil Company for
 Converting Additional Injection Wells in Many Rocks Pressure Maintenance Project No. 3
 Many Rocks - Gallup Pool
 San Juan County, New Mexico

SCHMATIC DIAGRAM

SKELLY NAVAJO "P" WELL NO. 7

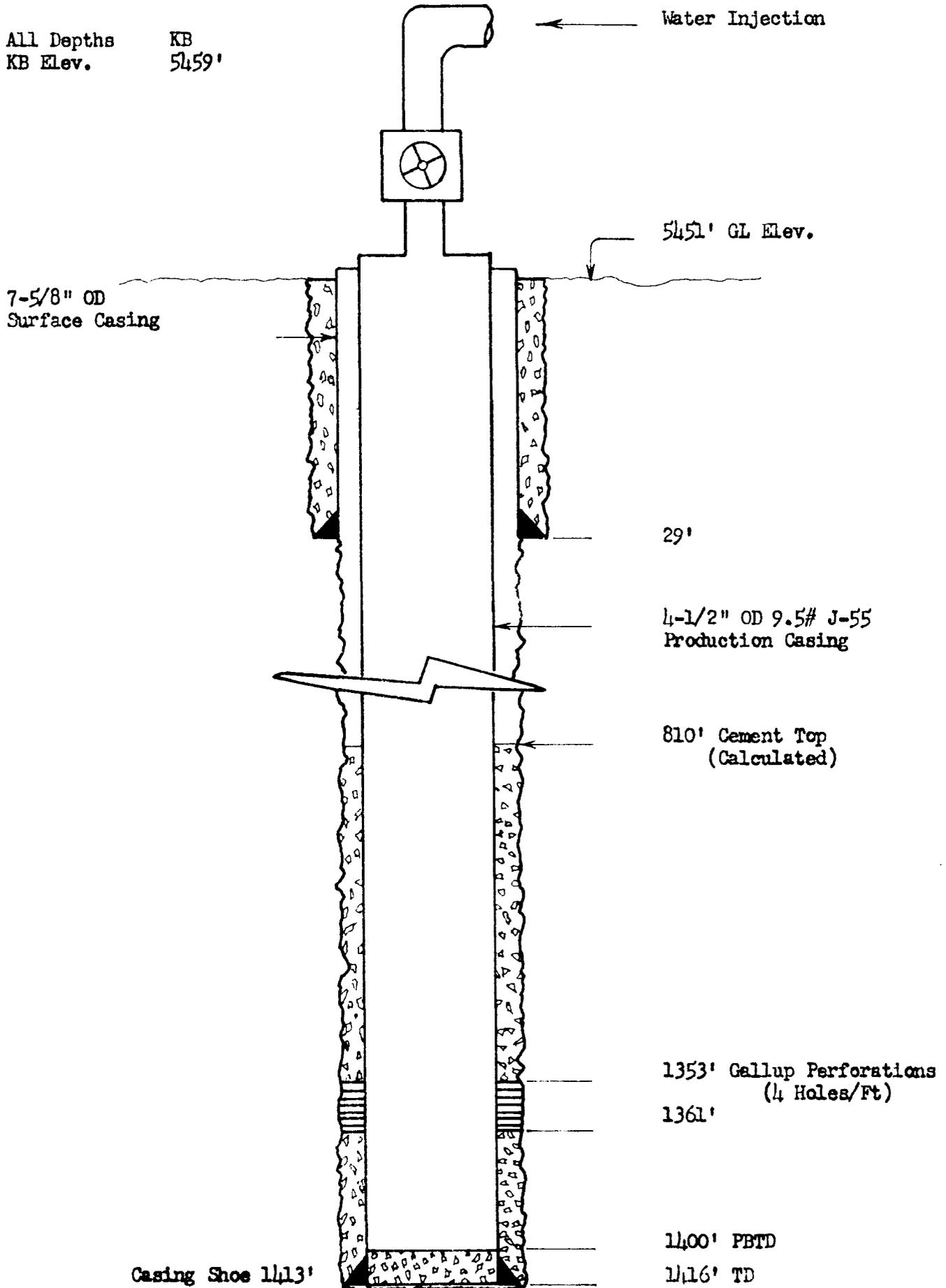


EXHIBIT "D"

To Application of Skelly Oil Company for
Converting Additional Injection Wells in Many Rocks Pressure Maintenance Project No. 3
Many Rocks - Gallup Pool
San Juan County, New Mexico

SCHMATIC DIAGRAM

SKELLY NAVAJO "P" WELL NO. 9

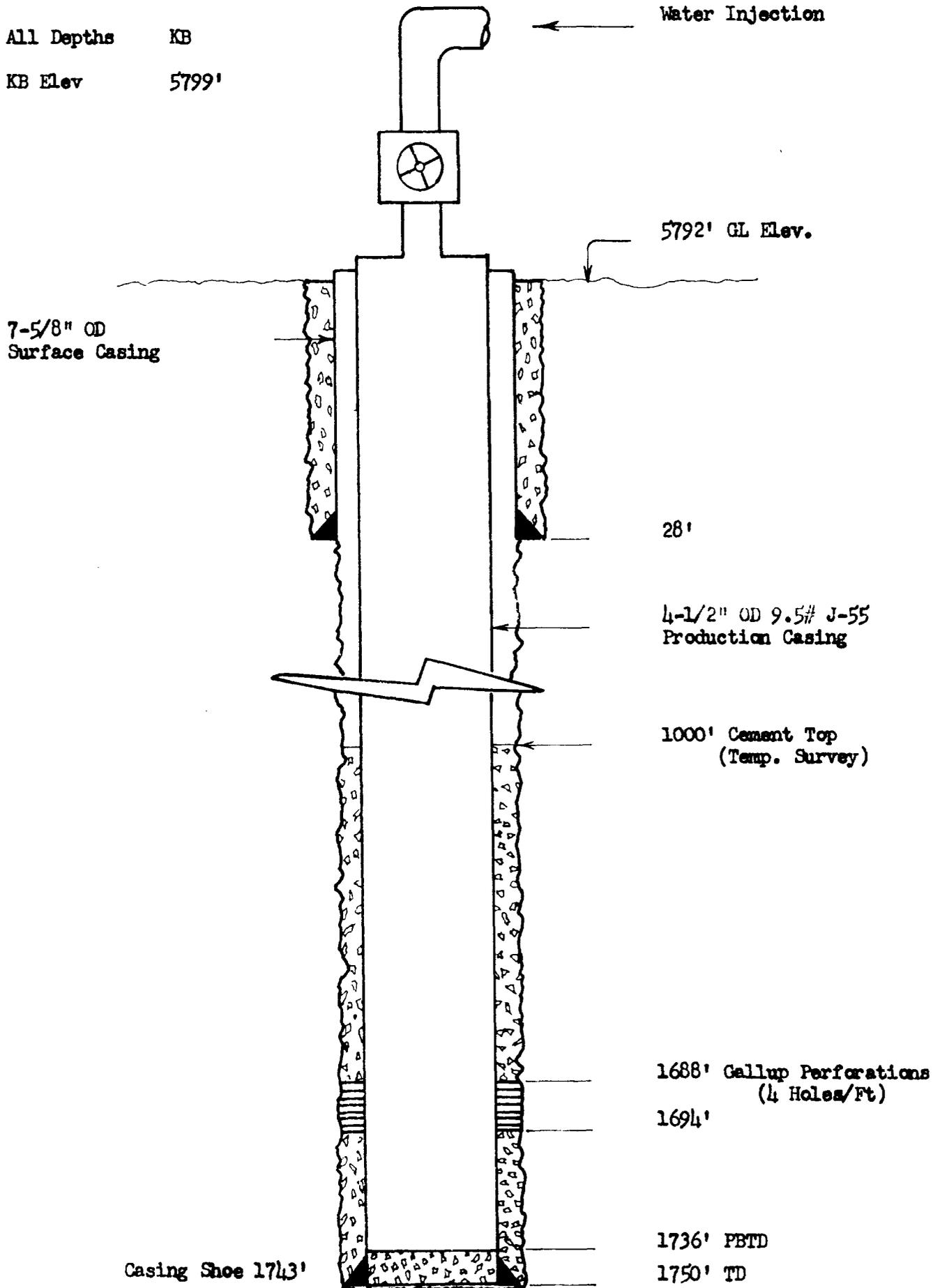


EXHIBIT "E"

To Application of Skelly Oil Company for
Converting Additional Injection Wells in Many Rocks Pressure Maintenance Project No. 3
Many Rocks - Gallup Pool
San Juan County, New Mexico

SCHEMATIC DIAGRAM
 SKELLY NAVAJO "P" WELL NO. 11

All Depths KB
 KB Elev. 5919'

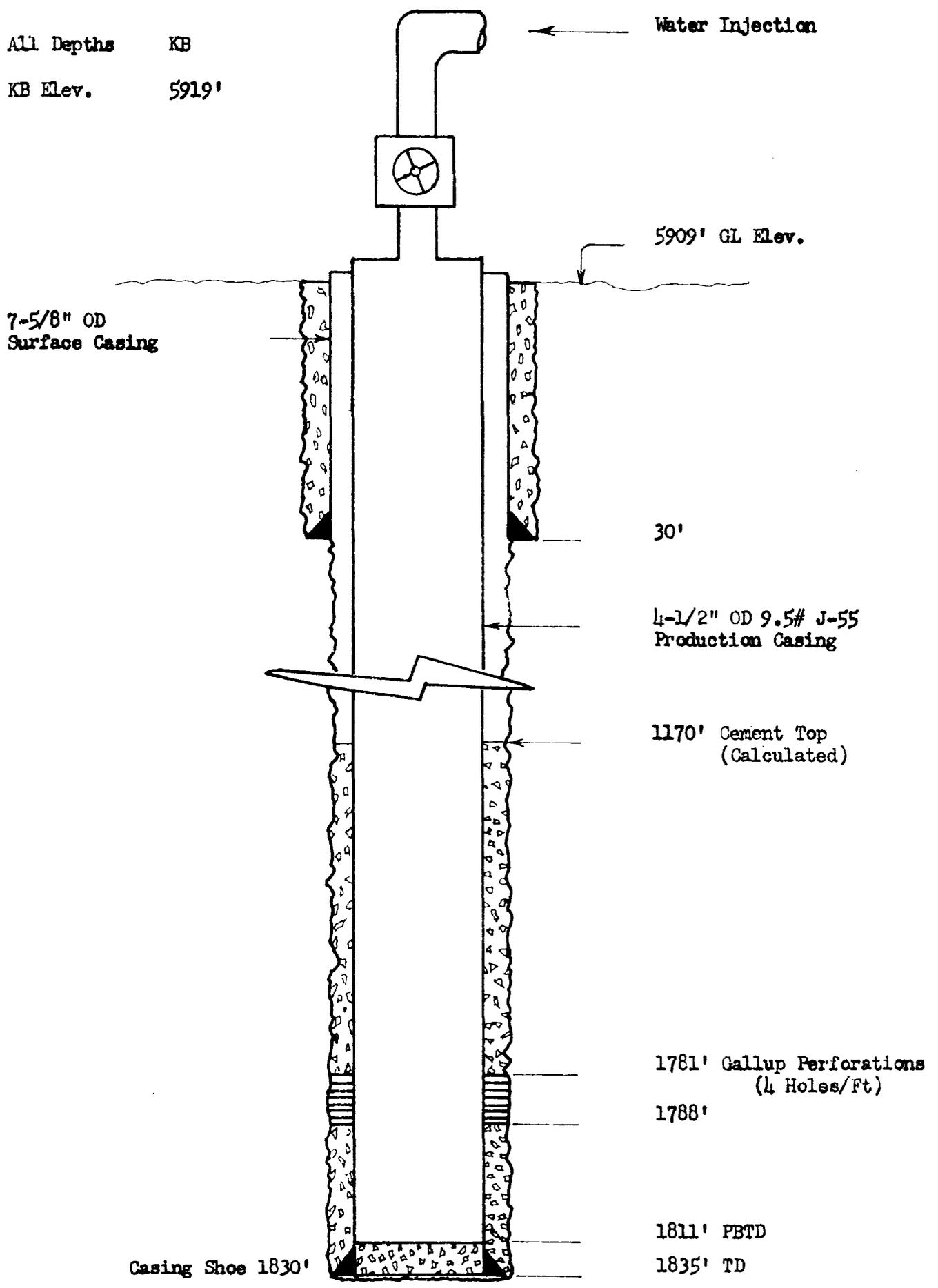


EXHIBIT "F"

To Application of Skelly Oil Company for
 Converting Additional Injection Wells in Many Rocks Pressure Maintenance Project No. 3

HUMBLE OIL & REFINING COMPANY

CENTRAL REGION

P. O. Box 120
Denver, Colorado
November 11, 1964

NOV 13 AM 10

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

Dear Sir:

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

We are enclosing a waiver of objections to the granting of the Application of Skelly Oil Company for Expansion and Conversion of certain wells in the Many Rocks-Gallup Pool which was filed on November 4, 1964.

Very truly yours,

HUMBLE OIL & REFINING COMPANY

By: 
F. E. Dickerson

FED:jk

Enclosure

cc: Skelly Oil Company w/enc.
P. O. Box 1650
Tulsa, Oklahoma 74102

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:

We have received application, notice, and proof of service filed November 4, 1964, for conversion of five additional wells for injection. These wells are Skelly Oil Company's Navajo "M" Well Nos. 8 and 12, and Navajo "P" Well Nos. 7, 9 and 11.

This is to advise that the undersigned, as an interested party, under Rule 11 of Order No. R-2664 hereby waives objection to the granting of the application.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

By 
Denver Area Production Manager
Date November 11, 1964

cc-Mr. George W. Selinger
Skelly Oil Company
P. O. Box 1650
Tulsa, Oklahoma 74102

ATLANTIC

THE ATLANTIC REFINING COMPANY

INCORPORATED - 1870

PETROLEUM PRODUCTS

November 12, 1964

NORTH AMERICAN PRODUCING DEPARTMENT
ROCKY MOUNTAIN DISTRICT

S. L. SMITH, MANAGER

C. M. BONAR, GEOLOGICAL

FRANK P. CASTLEBERRY, LAND

R. O. CHILDERS, DRILLING & PRODUCTION

DAVID B. DAVIDSON, GEOPHYSICAL

T. O. DAVIS, ENGINEERING

K. W. KESSLER, ADMINISTRATIVE

SUITE 1500
SECURITY LIFE BUILDING
1616 GLENARM
DENVER, COLORADO 80202
266-3741

NOV 13 1964
11 13 AM '64

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

Dear Mr. Porter:

Enclosed is a waiver signed by Tidewater Oil Company,
a working interest owner in the Many Rocks pressure
maintenance project operated by Atlantic.

Yours very truly,

T. O. Davis

T. O. Davis

TOD:sw

cc: Mr. George W. Selinger
Skelly Oil Company
P. O. Box 1650
Tulsa, Oklahoma 74102

Tidewater Oil Company
Attention: Mr. R. H. Coe
Post Office Box 1231
Midland, Texas

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

MAILED

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

'64 Nov 13 PM 11

Dear Mr. Porter:

We have received application, notice, and proof of service filed November 4, 1964, for conversion of five additional wells for injection. These wells are Skelly Oil Company's Navajo "M" Well Nos. 8 and 12, and Navajo "P" Well Nos. 7, 9 and 11.

This is to advise that the undersigned, as an interested party, under Rule 11 of Order No. R-2664 hereby waives objection to the granting of the application.

Yours very truly,

TIDEWATER OIL COMPANY

By *R. H. Coe*
R. H. Coe, District Production Manager
Date November 10, 1964

cc-Mr. George W. Selinger
Skelly Oil Company
P. O. Box 1650
Tulsa, Oklahoma 74102

MANY ROCKS-GALLUP PRESSURE MAINTENANCE PROJECT NO. 3

PROPOSED INJECTION WELLS

Proposed Injection Well	"M" No. 8	"M" No. 12	"P" No. 7	"P" No. 9	"P" No. 11
Zone of Injection	Gallup Sand				
Injected Fluid	Formation Water				
Anticipated Daily Injection	280 Barrels	240 Barrels	300 Barrels	300 Barrels	160 Barrels
Water Source	Morrison Formation				

EXHIBIT "M"

To Application of Skelly Oil Company for

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

Many Rocks-Gallup Pool

San Juan County, New Mexico

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

SCHLUMBERGER**FORMATION DENSITY LOG**

Gamma-Gamma

SCHLUMBERGER WELL SURVEYING CORPORATION

Houston, Texas

COUNTY SAN JUAN, NEW MEX
 FIELD or LOCATION UNDESIGNATED
 WELL NAVAJO "M"-8
 COMPANY SKELLY OIL CO.

COMPANY SKELLY OIL COMPANYWELL NAVAJO "M"-8FIELD UNDESIGNATEDCOUNTY SAN JUAN STATE NEW MEXICO
 Location: 775' FNL & 1980' FNL
 Sec. 34 Twp. 32N Rge. 17W

 Other Services:
1-GR

 Permanent Datum: GL; Elev.: 5899'
 Log Measured From GL, - Ft. Above Perm. Datum
 Drilling Measured From GL

 Elev.: K.B. --
 D.F. --
 G.L. 5899'

Date	4-5-63
Run No.	ONE
Type Log	GAMMA-GAMMA
Depth—Driller	1775
Depth—Logger	1779
Bottom logged interval	1778
Top logged interval	1400
Type fluid in hole	CRUDE OIL
Salinity, PPM Cl.	--
Density	--
Level	FULL
Max rec. temp., deg F.	87
Operating rig time	1 1/2 HOURS
Recorded by	WOOD
Witnessed by	MR. KRUG & MR. GEORGE

RUN No.	BORE-HOLE RECORD			CASING RECORD			
	Bit	From	To	Size	Wgt.	From	To
1	6 3/4	CSG	TD	8 5/8		SURFACE	32

FOI C 4484

EXHIBIT "G"

To Application of Skelly Oil Company for

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

Many Rocks - Gallup Pool