

Case no. -

LAW OFFICES

WATSON & WATSON
AMERICAN HOME BUILDING
P. O. DRAWER E
ARTESIA, NEW MEXICO 88210

AREA CODE 505
746-4151 - 746-2201

NEIL B. WATSON
FRED A. WATSON

February 15, 1974

New Mexico Oil Conservation Commission,
State Land Office Building,
Santa Fe, New Mexico 87501.

Gentlemen:

Re: Application of Murphy Minerals Corporation for authority to institute a waterflood project by injecting water into the Metex Sand and Premier Sand in the Grayburg Formation and the Lovington Sand in the San Andres Formation in applicant's wells in E $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 11 and W $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 12, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.

I herewith enclose the above Application to establish a waterflood project, in triplicate, with all copies being complete with exhibits. Please set this Application for hearing before an Examiner and notify us of the date and time of such hearing.

Very truly yours,


Fred A. Watson.

FAW:js
Enc.

cc: Murphy Minerals Corporation,
P. O. Drawer 2164,
Roswell, New Mexico 88201.

cc: Mr. D. R. Layton,
1506 West Avenue M,
Lovington, New Mexico 88260.

DOCKET MAILED
Date 3-1-74

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

IN RE: APPLICATION OF MURPHY MINERALS CORPORATION FOR AUTHORITY TO INSTITUTE A WATERFLOOD PROJECT BY INJECTING WATER INTO THE METEX SAND AND PREMIER SAND IN THE GRAYBURG FORMATION AND THE LOVINGTON SAND IN THE SAN ANDRES FORMATION IN APPLICANT'S WELLS IN E $\frac{1}{2}$ NE $\frac{1}{4}$ OF SECTION 11 AND W $\frac{1}{2}$ NW $\frac{1}{4}$ OF SECTION 12, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Case No. 5191

A P P L I C A T I O N

COMES NOW Murphy Minerals Corporation and hereby makes application for authority to institute a water flood project in E $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 11 and W $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 12, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico, by the injection of brine water into the Metex Sand and Premier Sand in the Grayburg Formation and the Lovington Sand in the San Andres Formation under said lands and, in support of this application, states:

1. The lands involved in this application, to wit, E $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 11 and W $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 12, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico, are covered by subsisting United States Oil and Gas Lease LC 029338(b), and applicant, Murphy Minerals Corporation, is the record owner of said Oil and Gas Lease and is the operator of said lease. Applicant seeks an order for authority to institute a waterflood project, which will be a secondary recovery project, because the wells on applicant's lease have been essentially depleted by primary means.

2. That applicant seeks authority for injection of water into the Metex Sand and the Premier Sand in the Grayburg Formation and the Lovington Sand in the San Andres Formation through two of

applicant's wells, being the Gissler "B" No. 2 Well in NW $\frac{1}{4}$ NW $\frac{1}{4}$ of said Section 12 and the Gissler "B" No. 4 Well in SE $\frac{1}{4}$ NE $\frac{1}{4}$ of said Section 11, said two proposed injection wells being indicated by red circles on Exhibit "1", the plat attached to this application.

3. That the formations to be flooded are the Metex Sand and the Premier Sand in the Grayburg Formation and the Lovington Sand in the San Andres Formation, found at the following depths in the proposed injection wells:

Gissler "B" No. 2 Well, NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 12, T. 17 S., R. 30 E., N.M.P.M.

Metex Sand - 3050 feet to 3060 feet below the surface
Premier Sand - 3180 feet to 3190 feet below the surface
Lovington Sand - 3208 feet to 3218 feet below the surface

Gissler "B" No. 4 Well, SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 11, T. 17 S., R. 30 E., N.M.P.M.

Metex Sand - 2930 feet to 2940 feet below the surface
Premier Sand - 3022 feet to 3029 feet below the surface
Lovington Sand - 3173 feet to 3179 feet below the surface

4. That there are attached to this application and made a part hereof the following exhibits, to wit:

Exhibit "1" is a plat showing the locations of the proposed injection wells circled in red and outlining the lands included in this application in yellow. Said plat also shows other wells within a radius of two miles and other lessees with respect thereto.

Exhibits "2-A" and "2-B" are, respectively, diagrammatic sketches of the proposed injection wells, to wit, the Gissler "B" No. 2 and Gissler "B" No. 4 Wells, showing the proposed manner of equipping said injection wells.

Said proposed injection wells have been producing from the Metex and Premier Sands of the Grayburg Formation and the Lovington Sand of the San Andres Formation. Logs of the proposed injection wells are not available.

5. That the kind of fluid to be injected will be pressured brine water furnished by the offset operator, and the anticipated

volume and pressure will be approximately 400 barrels per well per day at 1800 psi.

6. That applicant is filing this application in accordance with the provisions of Rule 701, and applicant requests an allowable to be assigned, as provided in Rule 701.

WHEREFORE, applicant requests a hearing before an Examiner and requests authority for said waterflood project and the assignment of an allowable, all pursuant to Rule 701.

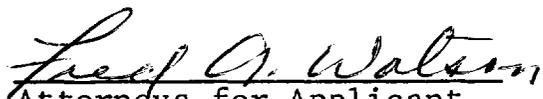
MURPHY MINERALS CORPORATION

by



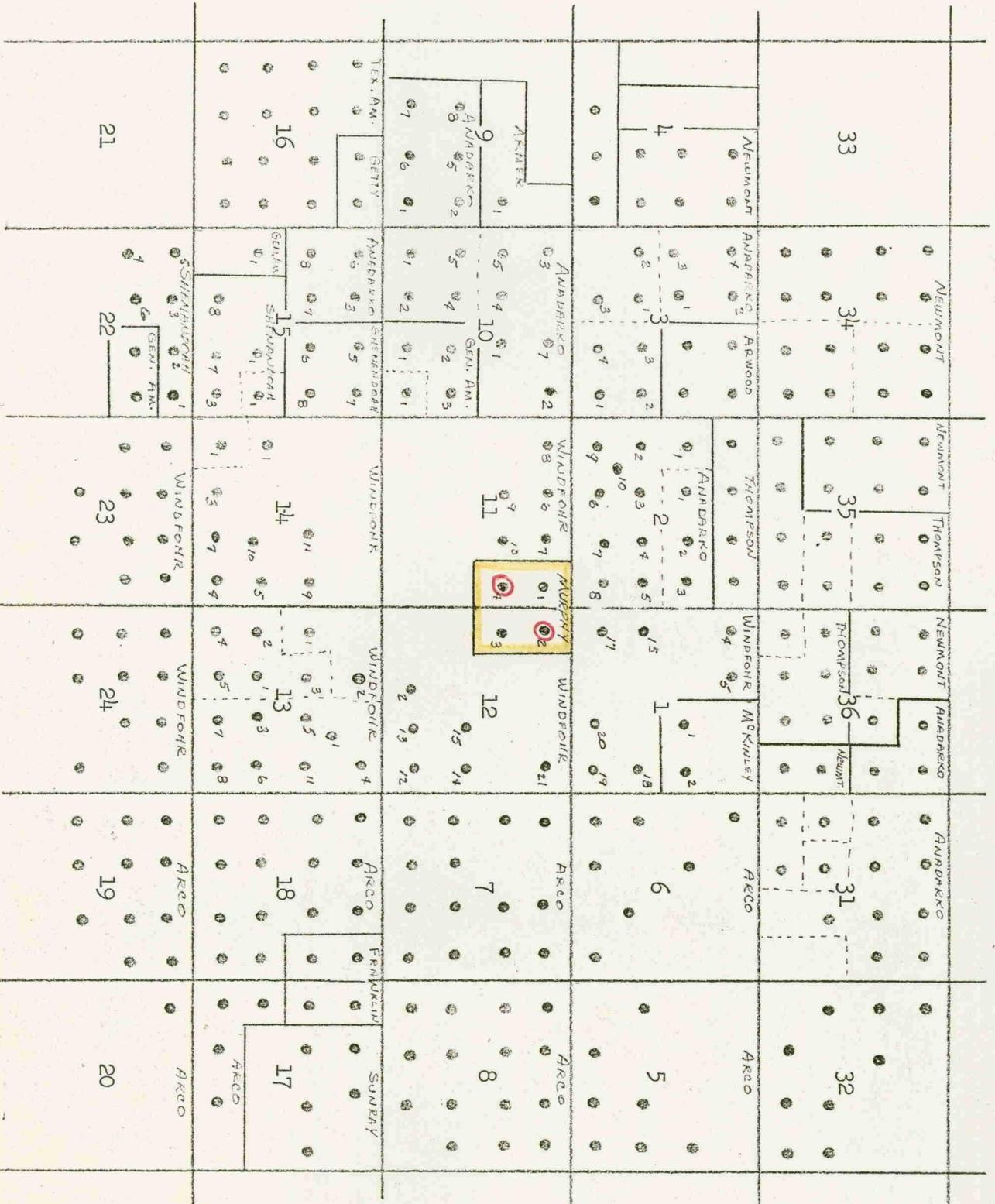
President

WATSON & WATSON


Attorneys for Applicant,
P. O. Drawer E,
Artesia, New Mexico 88210.

TWP. 16 S

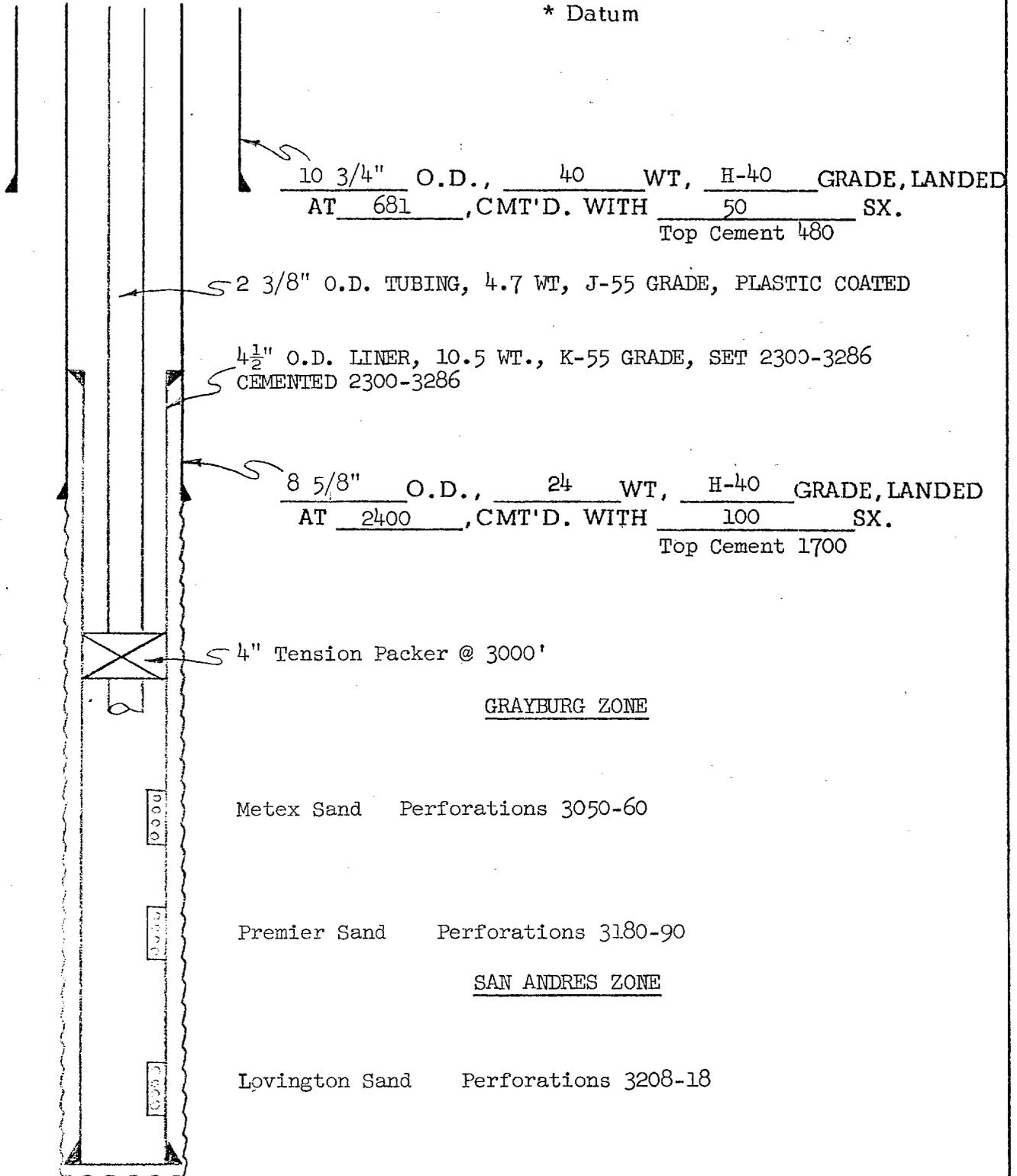
TWP. 17 S



SQUARE LAKE AND GRAYBURG JACKSON FIELD AREA
GRAYBURG & SAN ANDRES FORMATIONS

EXHIBIT "2-A"

KB Elev. _____
 DF Elev. _____
 GL Elev. * 3765
 * Datum

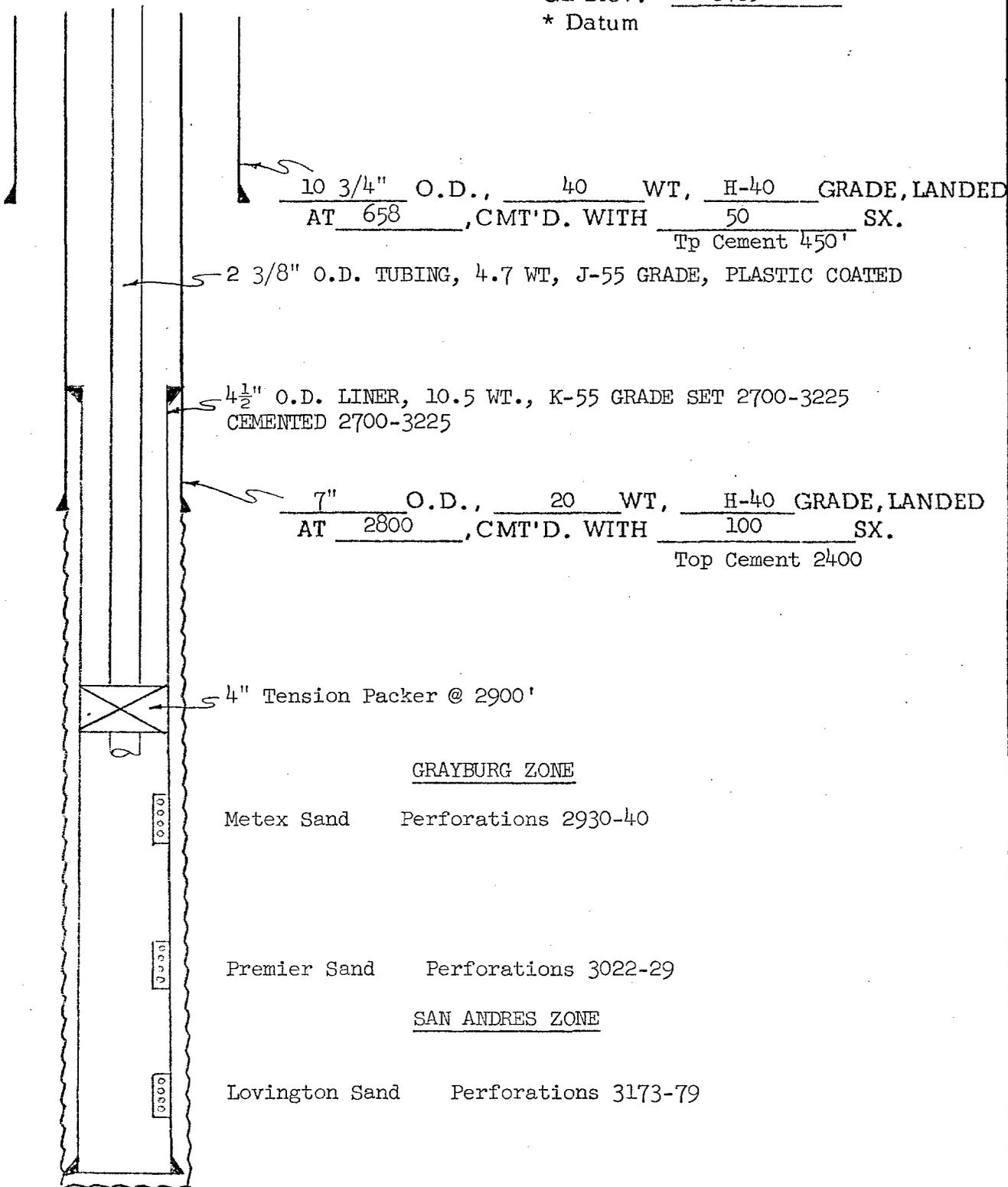


WELL NAME & NO. GISSLER B # 2
 FIELD SQUARE LAKE, GRAYBURG SAN ANDRES
 COUNTY EDDY STATE NEW MEXICO
 LOCATION 660 FNL 660 FWL Unit D
 Section 12, Twp. 17 S, Rge. 30 E

PBTD 3285
 TD 3286

EXHIBIT "2-B"

KB Elev. _____
 DF Elev. _____
 GL Elev. * 3739 _____
 * Datum



PBTD 3224 _____
 TD 3225 _____

WELL NAME & NO. GISSLER B #4
 FIELD SQUARE LAKE, GRAYBURG SAN ANDRES
 COUNTY EDDY STATE NEW MEXICO
 LOCATION 1980 FNL 330 FEL Unit H
 Section 11, Twp. 17 S, R 30 E