

166
J. M. Huber Corporation

1900 Wilco Building
Midland, Texas 79701

OIL AND GAS
DIVISION

April 23, 1975

RECEIVED

TELEPHONE
MUTUAL 2-3794

APR 24 1975

O. C. C.
ARTESIA, OFFICE

Mr. W.A. Gressett
New Mexico Oil Conservation Commission
Drawer DD
Artesia, New Mexico 88210

Re: Application to Dispose of
Salt Water into Terra State #2
760' FSL & 2280' FEL, Section
14-T23S-R26E, Eddy County,
New Mexico

Dear Mr. Gressett:

Enclosed in triplicate are "Application to Dispose of Salt Water into a Porous Formation" in the above captioned well along with copies of Waiver of Objection, Plats, Diagrammatic Sketch of proposed disposal well, and water analyses of water to be injected.

If there are any questions concerning this enclosed application, please call this office for clarification.

We await the Commission's earliest consideration and approval of this application.

Very truly yours,

J.M. HUBER CORPORATION

James R. Sutherland

James R. Sutherland
District Production Manager

JRS:mt

Enclosures

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

Form C-108
Revised 1-1-65

APR 20 1975

OIL CONSERVATION COM.

Santa Fe

OPERATOR J.M. Huber Corporation		ADDRESS 1900 Wilco Bldg., Midland, Texas 79701	
LEASE NAME Terra State	WELL NO. 2	FIELD South Carlsbad Delaware - Wildcat	COUNTY Eddy
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 760 FEET FROM THE South LINE AND 2280 FEET FROM THE East LINE, SECTION 14 TOWNSHIP 23S RANGE 26E NMPM.			

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	8-5/8"	582'	420	Surface	Circulated
INTERMEDIATE					
LONG STRING	4-1/2"	5300'	1200	900'	Temperature Sur.
TUBING	2-3/8"	1930.91'	NAME, MODEL AND DEPTH OF TUBING PACKER Halliburton R-4 1930.91' KB		
NAME OF PROPOSED INJECTION FORMATION Delaware			TOP OF FORMATION 1933' KB		BOTTOM OF FORMATION 5244' KB
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Perforations			
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Wildcat Evaluate Delaware Oil Potential		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 4491-4497' & 4500-4514' CIBP @ 4460', 3770-3790' CIBP @ 3740'					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 375'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None Known		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 10,200' (Canyon)	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 200	MINIMUM 1000	MAXIMUM Open	OPEN OR CLOSED TYPE SYSTEM Open	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 1000
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes			WATER TO BE DISPOSED OF Yes		
			NATURAL WATER IN DISPOSAL ZONE Yes		
			ARE WATER ANALYSES ATTACHED? Yes		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Dr. Robert A. Rubenstein, 6505 Alvarado Road, San Diego, California 92120					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Mobil Oil Corporation, P.O. Box 1800, Hobbs, New Mexico 88240					
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APR 24 1975					
O. C. C.					
ARTESIA, OFFICE					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes		SURFACE OWNER Yes		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes		PLAT OF AREA Yes		ELECTRICAL LOG Yes	
				DIAGRAMMATIC SKETCH OF WELL Yes	

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

James R. Sutherland
James R. SutherlandDistrict Production Manager
(Title)March 13, 1975
(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

DOWELL**DOWELL** DIVISION OF THE DOW CHEMICAL COMPANY

OIL CONSERVATION COMMISSION

LABORATORY LOCATION **Midland** API WATER ANALYSIS REPORT FORMDATE **4/1/75**LAB NO. **MX 24327**

Company J. M. Huber		Sample No.		Date Sampled	
Field		Legal Description		County or Parish Eddy	
Lease or Unit Terra State		Well #1		Depth 11200	
Type of Water (Produced, Supply, etc.) Produced		Formation Marrow Sand		Water, B/D	
Sampling Point		Sampled By			

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	<u>22,483</u>	<u>978</u>
Calcium, Ca	<u>4,600</u>	<u>230</u>
Magnesium, Mg	<u>1,095</u>	<u>90</u>
Barium, Ba		

ANIONS

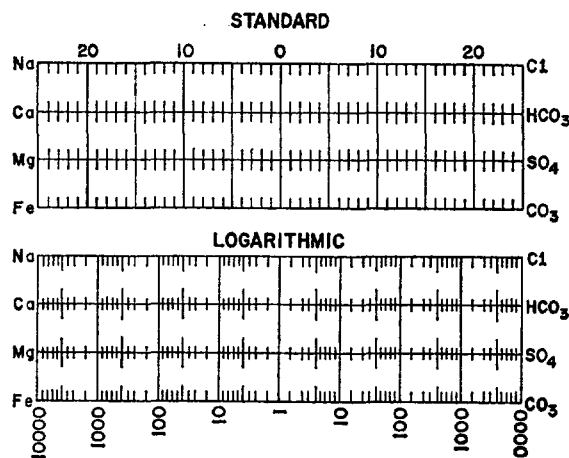
Chloride, Cl	<u>45,795</u>	<u>1,291</u>
Sulfate, SO ₄	<u>100</u>	<u>(2)</u>
Carbonate, CO ₃	<u>0</u>	<u>0</u>
Bicarbonate, HCO ₃	<u>293</u>	<u>5</u>

Total Dissolved Solids (calc.)

Iron, Fe (total)	<u>1,676</u>
Sulfide, as H ₂ S	<u>None</u>

OTHER PROPERTIES

pH	<u>6.55</u>
Specific Gravity, 60/60 F.	<u>1.049</u>
Resistivity (ohm-meters) _____ F.	

WATER PATTERNS — me/l**REMARKS & RECOMMENDATIONS:**

Dale Criddle - Regional Lab

TO: J. M. Huber Corporation
 1900 Wilco Building
 Midland, Texas 79701
 Attn: Mr. Jim Sutherland

Tulsa Lab, Midtex Lab, Crenshaw

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O. C. C.
 ARTESIA, OFFICE

DOWELL**DOWELL** DIVISION OF THE DOW CHEMICAL COMPANYLABORATORY LOCATION **Midland** API WATER ANALYSIS REPORT FORMDATE **4/1/75**LAB NO. **MX 24326**

Company J. M. Huber		Sample No.		Date Sampled	
Field		Legal Description		County or Parish Eddy	
Lease or Unit Sorenson		Well #1		Depth 11200	
Type of Water (Produced, Supply, etc.) Produced		Formation Marrow Sand		Water, B/D	
Sampling Point		Sampled By			

DISSOLVED SOLIDS**CATIONS**

	mg/l	me/l
Sodium, Na (calc.)	<u>18,736</u>	<u>815</u>
Calcium, Ca	<u>2,000</u>	<u>100</u>
Magnesium, Mg	<u>974</u>	<u>80</u>
Barium, Ba		

ANIONS

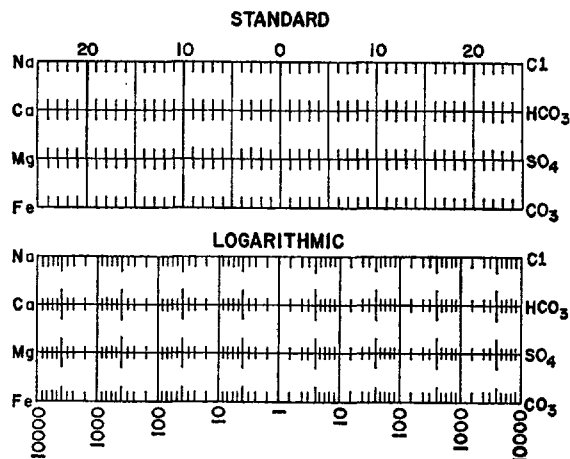
Chloride, Cl	<u>35,145</u>	<u>991</u>
Sulfate, SO ₄	<u>Trace</u>	<u>---</u>
Carbonate, CO ₃	<u>0</u>	<u>0</u>
Bicarbonate, HCO ₃	<u>232</u>	<u>4</u>

Total Dissolved Solids (calc.)

Iron, Fe (total) 1,117
Sulfide, as H₂S None

OTHER PROPERTIES

pH	<u>6.4</u>
Specific Gravity, 60/60 F.	<u>1.036</u>
Resistivity (ohm-meters) — F.	

WATER PATTERNS — me/l**REMARKS & RECOMMENDATIONS:**

Dale Criddle - Regional Lab

TO: J. M. Huber Corporation
1900 Wilco Building
Midland, Texas 79701
Attn: Mr. Jim Sutherland

Tulsa Lab, Midtex Lab, Crenshaw

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ANALYST'S OFFICE

gem

March 13, 1975

WAIVER OF OBJECTION
TO PROPOSED USE OF
THE J. M. HUBER CORPORATION
TERRA STATE No. 2
760' FSL & 2280' FEL
SECTION 14-T23S-R26E
EDDY COUNTY, NEW MEXICO
AS A SALT WATER DISPOSAL WELL

Mr. W. A. Gressett
New Mexico Oil Conservation Commission
Drawer DD
Artesia, New Mexico 88210

Dear Mr. Gressett:

As surface owner under the captioned well, I have been duly informed by J. M. Huber Corporation of their Application to utilize the Terra State No. 2 as a Salt Water Disposal well and do hereby waive any objection to the granting of this application.

Yours very truly,

Robert A. Rubenstein
Robert A. Rubenstein
Surface Owner

Date: 3/25/75

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APR 24 1975

O. C. C.
ARTESIA, OFFICE

WAIVER OF OBJECTION TO
PROPOSED USE OF THE J.M.
HUBER CORPORATION TERRA
STATE NO. 2, 760' FSL &
2280' FEL SECTION 14,
T23S-R26E, EDDY COUNTY,
NEW MEXICO AS A SWD WELL.

Mr. W.A. Gressett
New Mexico Oil Conservation Commission
Drawer DD
Artesia, New Mexico 88210

Dear Mr. Gressett:

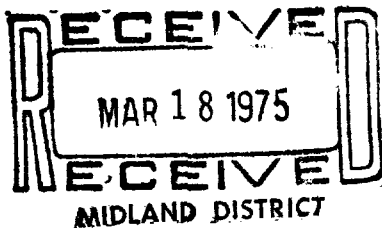
As an authorized representative of the below named off-
set operator, I have been duly informed by J.M. Huber
Corporation of their application to utilize the Terra
State No. 2 as a SWD well, and do hereby waive any
objection to the granting of this application.

Yours very truly,

MOBIL OIL CORPORATION
Offset Operator

By: *J. Davis*

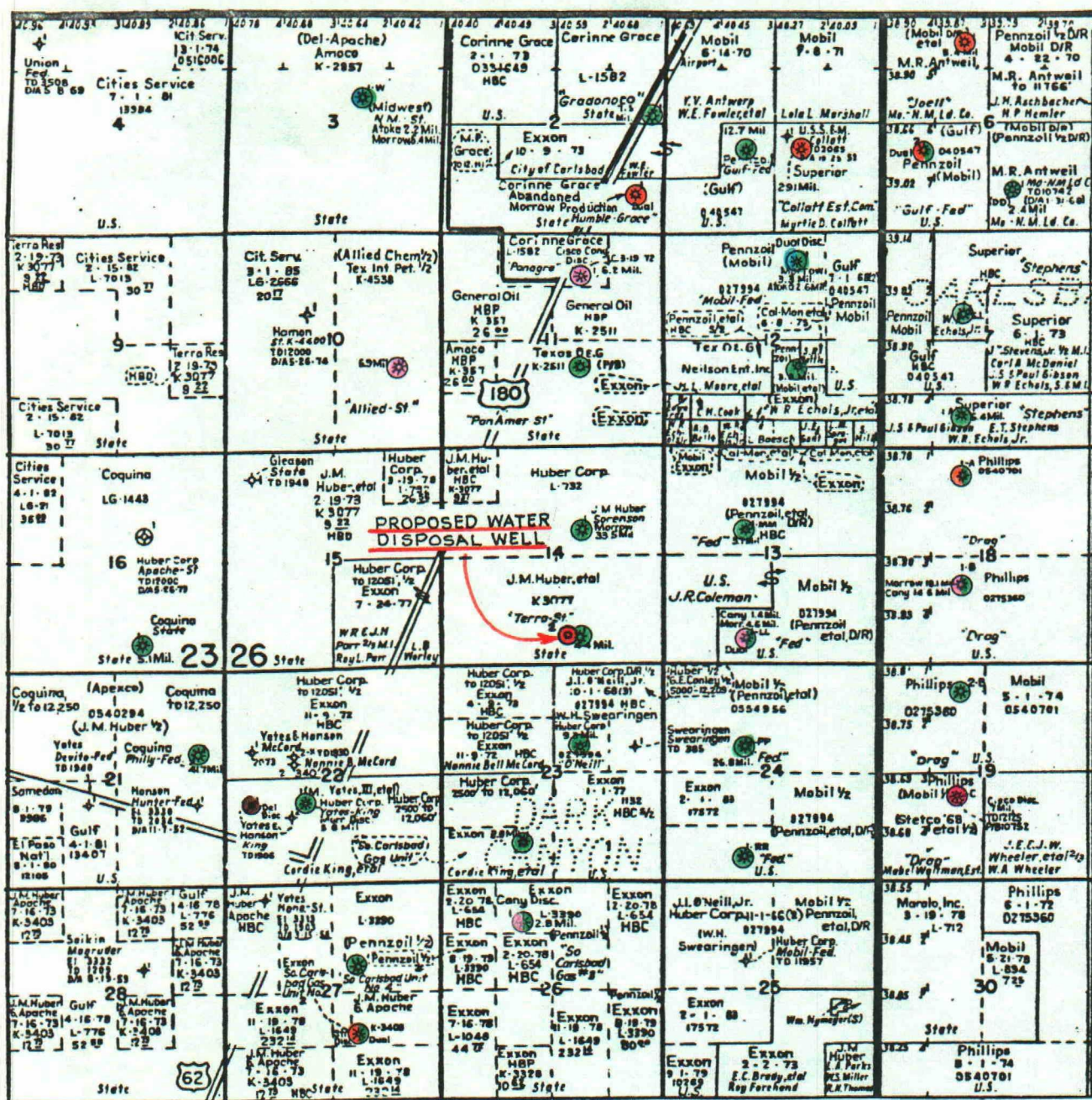
Date: 3/17/75



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O. C. C.
ARTESIA, OFFICE



C 36 22 26 Safety Pine

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ARTESIA, OFFICE

LEGEND

- Delaware Producer
- Cisco
- Canyon
- Strawn
- Atoka
- Morrow

J. M. HUBER CORPORATION

Terra-State No. 2

Proposed Water Disposal Well

Scale: 1" = 4000' 3-10-75

PROPOSED SALT WATER DISPOSAL WELL DIAGRAMMATIC SKETCH

J.M. HUBER CORPORATION — TERRA STATE NO.2

760' FSL & 2280' FEL Sec.14-T23S- R26E Eddy County, New Mexico

Top of cement @ 900' by
Temperature Survey.

1919.91' (60 Jts) 2-3/8"
4.7# EUE Aztec V-55 Tubing

Perf. 4 squeeze holes @ 2300'
established circulation,
cemented w/250 sx class "C"
w/4% gel & 0.3% FLAC. Dowell
drillable retainer set @
2251.57', WOC 40 Hrs. Drld.
out retainer & 49' cement.

McCullough Super Mac CIBP @
3740', pressure tested CIBP
to 3500 psi w/ fresh water
held O.K.

Baker CIBP @ 4460'

Drld. 12 1/4" hole to 582', set
8-5/8" 24# K-55 ST&C Csg. @
582', centralizers @ 517',
442' & 372', insert float @
549.62', cemented w/180 sx.
Class "C" w/ 1/2# celloflake
per sack & 2% CaCl₂, tailed
in w/240 sx Class "C" w/ 1/4#
celloflake per sack & 2%
CaCl₂, cement circulated.

4 1/2" x 2-3/8" Halliburton
Model R-4 Pkr. set @ 1930.91'
w/ 10 points tension (Packer
I.D. 1.937").

1960-1968' 4 HPF
1976-1984' 4 HPF

4 Squeeze holes @ 2300'

2653-2660' 4 HPF

2825-2831' 4 HPF
2837-2843' 4 HPF
2901-2909' 4 HPF

3770-3790' 4 HPF

4491-4497' 4 HPF
4500-4514' 4 HPF

Drld. 7-7/8" hole to 5300',
Ran 3405.38' 4 1/2" 11.6# J-55
LT&C Csg. (108 Jts) and
1913.71' 4 1/2" 10.5# K-55 ST&C
Csg. (59 Jts) w/30 central-
izers on 100' centers. Csg.
set @ 5300', Float collar @
5266.48', cemented w/950 sx
Class "C" w/ 4% gel & 0.5%
FLAC.

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O. C. C.
ARTESIA, OFFICE

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE NEW MEXICO 87501

May 2, 1975

C
O
P
Y

J. M. Huber Corporation
1900 Wilco Building
Midland, Texas 79701

Re: Administrative Order
No. SWD-166

Gentlemen:

Enclosed herewith please find Administrative
Order No. SWD-166 for the following well:

Terra State Well No. 2,
located in Unit O of Section
14, Township 23 South,
Range 26 East, NMPM, Eddy
County, New Mexico.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/CU/og

cc: Oil Conservation Commission
Drawer DD
Artesia, New Mexico