



## **THE PURE OIL COMPANY**

SOUTHERN PRODUCING DIVISION • MIDLAND DISTRICT OPERATIONS  
P. O. BOX 671 • MIDLAND, TEXAS • AREA CODE 915—MU 2-3725

April 29, 1965

New Mexico Oil Conservation Commission  
P. O. Box 1980  
Hobbs, New Mexico

Gentlemen:

Attached please find Form C-108, Application To Dispose Of Salt Water Into A Porous Formation.

The proposal is to dispose of produced water from the West Crossroads Devonian Field, Lea County, New Mexico, into The Pure Oil Company's State Lea "H", Well No. 1, a Devonian dry hole in the same field.

Yours very truly,

D. K. Spradlin,  
Petroleum Engineer

DKS:sa  
Attach.

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

Mr. U. D. Sawyer  
Crossroads, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION  
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR <b>The Pure Oil Company</b>		ADDRESS <b>P. O. Box 671, Midland, Texas</b>	
LEASE NAME <b>State - Lea "H"</b>	WELL NO. <b>#1</b>	FIELD <b>West Crossroads Devonian</b>	COUNTY <b>Lea</b>
LOCATION UNIT LETTER <b>L</b> ; WELL IS LOCATED <b>1920</b> FEET FROM THE <b>South</b> LINE AND <b>660</b> FEET FROM THE <b>West</b> LINE, SECTION <b>32</b> TOWNSHIP <b>9 S</b> RANGE <b>36 E</b> N.M.P.M.			
<b>CASING AND TUBING DATA</b>			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING *	11-3/4"	365'	500
INTERMEDIATE *	8-5/8"	4099'	1000
LONG STRING **	4-1/2"	12068(Est)	375 (Est)
TUBING			NAME, MODEL AND DEPTH OF TUBING PACKER
NAME OF PROPOSED INJECTION FORMATION <b>Devonian</b>		TOP OF FORMATION <b>12,058'</b>	BOTTOM OF FORMATION <b>Unknown</b>
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>Casing</b>		PERFORATIONS OR OPEN HOLE? <b>Open Hole</b>	PROPOSED INTERVAL(S) OF INJECTION <b>12,068 - 12,300</b>
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>No</b>	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Devonian Producer-(Dry Hole)</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>No</b>
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>325</b>		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>9855</b>	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>Unknown</b>
ANTICIPATED DAILY INJECTION VOLUME (BBLS.) <b>1000</b>	MINIMUM <b>4000</b>	MAXIMUM <b>Closed</b>	OPEN OR CLOSED TYPE SYSTEM <b>Gravity</b>
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 - <b>Yes</b>		WATER TO BE DISPOSED OF <b>Yes</b>	NATURAL WATER IN DISPOSAL ZONE <b>Yes</b>
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>U. D. Sawyer, Crossroads, New Mexico</b>		ARE WATER ANALYSES ATTACHED? <b>Yes</b>	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL <b>W. K. Byrom, 1000 N. Dal Paso, Hobbs, New Mexico</b>			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? <b>Yes</b>		SURFACE OWNER <b>Yes</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) <b>Yes</b>		ELECTRICAL LOG <b>Yes</b>	
		THE NEW MEXICO STATE ENGINEER <b>Yes</b>	
		DIAGRAMMATIC SKETCH OF WELL <b>Yes</b>	

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

*A. K. Gooden*      Petroleum Engineer      April 28, 1965  
(Signature)      (Title)      (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.

\* Casing strings left in hole at time of abandonment.

\*\* Casing String proposed to be run.

WATER ANALYSIS

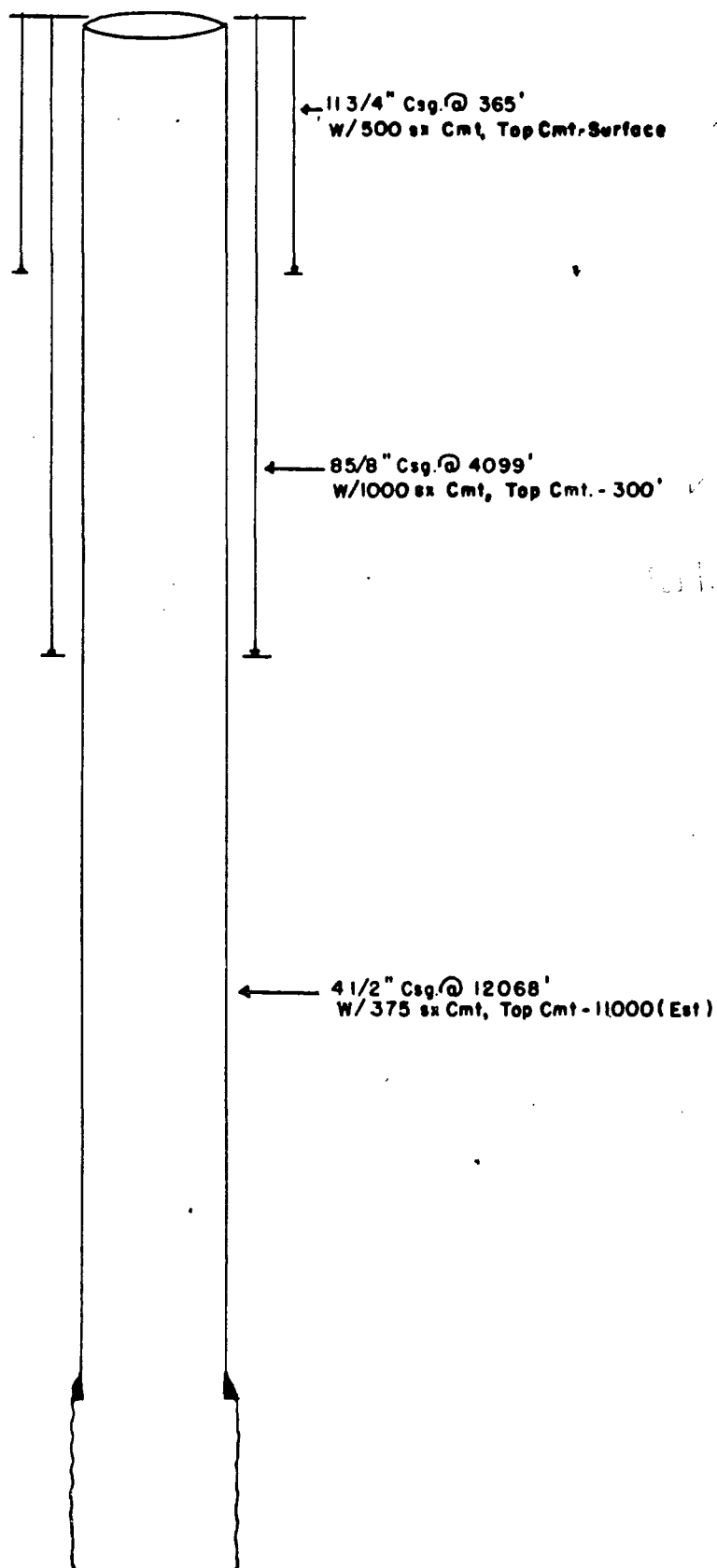
WEST CROSSROADS DEVONIAN - PRODUCED WATER

LEA COUNTY, NEW MEXICO

	<u>PPM</u>	<u>EPM</u>
Calcium	2,120	106
Magnesium	380	28
Sodium	18,175	782
Iron	- -	- -
Hydrogen Sulfide	- -	- -
Chloride	30,800	869
Sulfate	1,800	38
Bicarbonate	535	9
Carbonate	- -	- -
Hydroxide	- -	- -

Specific Gravity - 1.038 @ 80° F.  
PH - 7.3

THE PURE OIL CO. STATE-LEA "H" NO. 1  
DIAGRAMATIC SKETCH OF PROPOSED INJECTION WELL



T.D. 12,300'

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

May 3, 1965

Mr. D. K. Spradlin  
Petroleum Engineer  
The Pure Oil Company  
P. O. Box 671  
Midland, Texas

Dear Mr. Spradlin:

By copy of this letter, the Oil Conservation Commission is advised that I object to the granting of your application to dispose of salt water into your State Lea "H" Well No. 1 for the reason that Rules 701-C and 701-B have not been complied with.

Yours truly,

S. E. Reynolds  
State Engineer

FEI/ma  
cc-Oil Conservation Comm.

By:  
Frank E. Irby  
Chief  
Water Rights Div.