

OIL CONSERVATION COMMISSION  
Alto DISTRICT

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE 5-18-78

RE: Proposed MC \_\_\_\_\_  
Proposed DHC 1 \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed SWD ✓ \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated 5-8-78  
for the Petro Lewis Corp. Boling Inc #5 C-22-19N-3W  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Corrected copy

Yours very truly,

AR Kendrick

OIL CONSERVATION COMMISSION  
Ayles DISTRICT

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE 5-12-78

RE: Proposed MC ☒  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

*Carl Allrog*

Gentlemen:

I have examined the application dated 5-8-78  
for the Petro-Lewis Corp. Third Lower Permian, #5 C-22-19N-30  
Operator Lease and Well No. Unit, S-T-R  
and my recommendations are as follows: Boiling Prod.

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

AR Kendrick

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U.S.G.S.	
LAND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
5. State Oil & Gas Lease No. NM-1696

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work b. Type of Well OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> <input checked="" type="checkbox"/> OTHER CONVERT TO SWD SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7. Unit Agreement Name	
2. Name of Operator PETRO-LEWIS CORPORATION		8. Farm or Lease Name FLUID POWER PUMP CO.	
3. Address of Operator BOX 509 LEVELLAND TEXAS, 79336		9. Well No. 5-	
4. Location of Well UNIT LETTER _____ LOCATED 400 FEET FROM THE NORTH LINE AND 1980 FEET FROM THE WEST LINE OF SEC. 22 TWP. 19 RGE. 3 NMPM		10. Field and Pool, or Wildcat ENTRADA	
12. County SANDOVAL			
19. Proposed Depth PBSD @3800'		19A. Formation GALLUP	
20. Rotary or C.T. ROTARY			
21. Elevations (Show whether DF, RT, etc.) 6896'GR, 6910'FB		21B. Drilling Contractor N/A	
22. Approx. Date Work will start 5-78			

## PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
13 3/4"	10 3/4"	32.74#	241'	150sx.	surface
8 3/4"	7"	20 & 23#	5436'	450sx.	3020'

5-8-78 PETRO-LEWIS CORPORATION, PROPOSES TO RECOMPLETE THE GALLUP FORMATION AS A SALT WATER DISPOSAL, PURSUANT TO THE ENTRADA PLUG BACK APPROVED ON 2-2-78. THIS CONVERSION TO SWD WILL BE PERFORMED IN THE FOLLOWING MANNER;

- 3020' existing TOC, perf. & squeeze above TOC & bring cement top to est. 2000'.
- GIH & clean out, pressure test squeeze perfs, & run CBL from TD to New TOC +100'.
- 2894'-3375', perforate Gallup & break down formation W/1500gal, 15%HCL, acid if required.
- 2800', run 2 7/8" injection tubing, W/ UNI-PACKER-1, & set. Place well on injection. *Load back side w/ BACTERIAL SIDE PACKER FLUID AND CORROSION PROTECTION.*

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

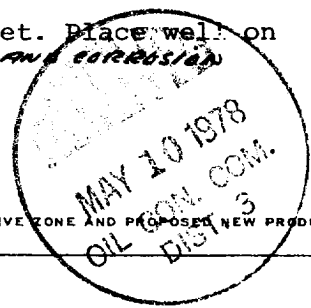
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed [Signature] Title SENIOR DRILLING FOREMAN Date 5-8-78

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



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

OPERATOR <b>PETRO - LEWIS CORPORATION</b>		ADDRESS <b>BOX 509 LEVELLAND, TEXAS 79336</b>	
LEASE NAME <b>FLUID POWER PUMP COMPANY</b>	WELL NO. <b>5-</b>	FIELD <b>ENTRADA</b>	COUNTY <b>SANDOVAL</b>
LOCATION UNIT LETTER _____; WELL IS LOCATED <b>400</b> FEET FROM THE <b>NORTH</b> LINE AND <b>1980</b> FEET FROM THE <b>WEST</b> LINE, SECTION <b>22</b> TOWNSHIP <b>19</b> RANGE <b>3</b> NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	<b>10 3/4</b>	<b>241'</b>	<b>150sxs</b>	<b>circulated</b>	<b>surface</b>
INTERMEDIATE					
LONG STRING	<b>7</b>	<b>5436</b>	<b>450sxs</b>	<b>3020'</b>	<b>CBL LOG 12-8-73</b>
TUBING	<b>2 7/8</b>	<b>2800'</b>	NAME, MODEL AND DEPTH OF TUBING PACKER <b>GUIBERSON, UNI-PACKER-I @2800'</b>		
NAME OF PROPOSED INJECTION FORMATION <b>GALLUP</b>			TOP OF FORMATION <b>2894'</b>		BOTTOM OF FORMATION <b>3550'</b>
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>THROUGH TUBING</b>		PERFORATIONS OR OPEN HOLE? <b>PERFORATIONS</b>		PROPOSED INTERVAL(S) OF INJECTION <b>2900'-3400'</b>	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>NO</b>		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>OIL PRODUCER (ENTRADA)</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>YES</b>	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH <b>5346'-76', Set CIRC &amp; SQUEEZE W/100sx C1 "C" @5300', &amp; SPOT 100" CMT on top of retainer</b>					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>2894', MANCOS</b>		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>3550', LOWER MANCOS</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) <b>5000</b>	MINIMUM <b>2000</b>	MAXIMUM <b>5000</b>	OPEN OR CLOSED TYPE SYSTEM <b>CLOSED</b>	IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>PRESSURE</b>	APPROX. PRESSURE (PSI) <b>200#</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>ENTRADA</b>	NATURAL WATER IN DISPOSAL ZONE <b>GALLUP</b>	ARE WATER ANALYSES ATTACHED? <b>YES</b>
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>STATE</b>					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL <b>YATES PETROLEUM, 207 WEST 4th STREET ARTESIA, NEW MEXICO, 88210</b>					

HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER <b>YES</b>	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL <b>YES</b>
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)	PLAT OF AREA <b>ON FILE USGS, NMOCC</b>	ELECTRICAL LOG <b>ON FILE USGS, NMOCC</b>
		DIAGRAMMATIC SKETCH OF WELL <b>ATTACHED</b>

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

*Donald R. Sappley*  
(Signature)

**SENIOR DRILLING FOREMAN**  
(Title)

**5-8-78**  
(Date)

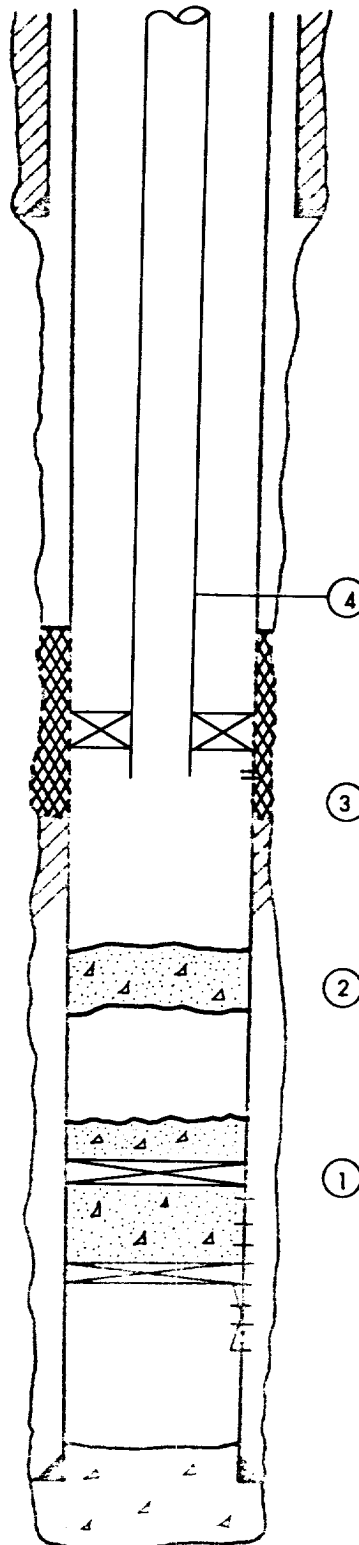
NOTE: Should waivers from the surface owner and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. 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.

# BOLING FEDERAL #5 SCHEMATIC DIAGRAM

10 3/4" 32.75'  
241' (180 Sx "A")  
C. to Surf

T.C. ± 2950'

7" 20' & 20'  
5436' (350 Sx POZ +)  
100 Sx "G"



## PROPOSED WORK

- ① Set CICR ± 5300'. Squeeze perfs 5346'-5360'. Spot 100' cmt. on CICR.
- ② Spot cement plug 3800'-4300'.
- ③ Shoot holes and squeeze above top of existing cement. Clean out, test & log. Perforate Gallup approximately 2894' to 3375'. Stimulate w/acid if required.
- ④ Run 2 7/8" tubing, set packer approximately 2800' and place on injection.

Perfs 5346'-5360'

CICR 5360

PSTD 5394'

TD 5450'



# TRETOLITE DIVISION

369 Marshall Avenue / Saint Louis, Missouri 63119  
(314) WD 1-3500/TWX 910-760-1660/Telex 44-2417

## WATER ANALYSIS REPORT

COMPANY 1951 - 1951 ADDRESS 0000 DATE: 0/00/00

SOURCE 1951 - 1951 DATE SAMPLED 0/00/00 ANALYSIS NO. 0000

Analysis

Mg/L

\*Meq/L

1. pH 7.5

2. H<sub>2</sub>S (Qualitative) 0

3. Specific Gravity 1.000

4. Dissolved Solids 0

5. Suspended Solids 0

6. Phenolphthalein Alkalinity (CaCO<sub>3</sub>) 0

7. Methyl Orange Alkalinity (CaCO<sub>3</sub>) 0

8. Bicarbonate (HCO<sub>3</sub>) 0 ÷ 61 0 HCO<sub>3</sub>

9. Chlorides (Cl) 0 ÷ 35.5 0 Cl

10. Sulfates (SO<sub>4</sub>) 0 ÷ 48 0 SO<sub>4</sub>

11. Calcium (Ca) 0 ÷ 20 0 Ca

12. Magnesium (Mg) 0 ÷ 12.2 0 Mg

13. Total Hardness (CaCO<sub>3</sub>) 0

14. Total Iron (Fe) 0

15. Barium (Qualitative)

16. Strontium

\*Milli equivalents per liter

### PROBABLE MINERAL COMPOSITION

Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
Ca (HCO <sub>3</sub> ) <sub>2</sub>	81.04				
Ca SO <sub>4</sub>	68.07				
Ca Cl <sub>2</sub>	55.50				
Mg (HCO <sub>3</sub> ) <sub>2</sub>	73.17				
Mg SO <sub>4</sub>	60.19				
Mg Cl <sub>2</sub>	47.62				
Na HCO <sub>3</sub>	84.00				
Na <sub>2</sub> SO <sub>4</sub>	71.03				
Na Cl	58.46				

Saturation Values Distilled Water 20°C

Ca CO<sub>3</sub> 13 Mg/L

Ca SO<sub>4</sub> • 2H<sub>2</sub>O 2,090 Mg/L

Mg CO<sub>3</sub> 103 Mg/L

REMARKS 1951 - 1951

Respectfully submitted  
TRETOLITE COMPANY