OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

August 12, 1975

Hiram W. Heith & Dalton Haines
Box 844
Kermit, Texas 79745

Re: Administrative Order SWD-170

Gentlemen:

Enclosed herewith please find Administrative Order SWD-160 for the following described well:

State C Well No. 1 located in
Unit J, Section 16, Township
21 South, Range 34 East, NMPM,
Lea County, New Mexico.

Very truly yours,

JOE D. RAMEY
Secretary-Director

JDR/CU/og

cc: Oil Conservation Commission
Box 1980
Hobbs, New Mexico

Form C-108
Revised 3-1-68

NEW MEXICO OIL CONSERVATION COMMISSION

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

OPERATOR	ADDRESS
Hiram W. Keith & Dalton Haines	Box 844, Kermit, Texas 79745

LEASE NAME	WELL NO.	FIELD	COUNTY
State C	1	West Wilson	Lea

LOCATION

UNIT LETTER J ; WELL IS LOCATED 1980 FEET FROM THE S LINE AND 1980 FEET FROM THE E LINE, SECTION 16 TOWNSHIP 21 RANGE 34E NMPM.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13	210	75	Surface	
INTERMEDIATE					
LONG STRING	7	3850	250	2025	Calculations
TUBING			NAME, MODEL AND DEPTH OF TUBING PACKER		

NAME OF PROPOSED INJECTION FORMATION	TOP OF FORMATION	BOTTOM OF FORMATION
Seven Rivers & Yates	3936	3948

IS INJECTION THROUGH TUBING, CASING, OR ANNULUS?	PERFORATIONS OR OPEN HOLE?	PROPOSED INTERVAL(S) OF INJECTION
Casing	O.H.	3850-3948

IS THIS A NEW WELL DRILLED FOR DISPOSAL?	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED?	HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE?
NO	Producing	NO

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	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA
350 ft. EST.	NONE	NONE

ANTICIPATED DAILY INJECTION VOLUME (BBLS.)	MINIMUM	MAXIMUM	OPEN OR CLOSED TYPE SYSTEM	IS INJECTION TO BE BY GRAVITY OR PRESSURE?	APPROX. PRESSURE (PSIG)
200	180	220	Closed	Gravity	0

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 —	WATER TO BE DISPOSED OF	NATURAL WATER IN DISPOSAL ZONE	ARE WATER ANALYSES ATTACHED?
	Yes	Yes	Yes

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)

State Land

LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (½) MILE OF THIS INJECTION WELL

NONE

HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL
	NO	No other Operators

ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)	PLAT OF AREA	ELECTRICAL LOG	DIAGRAMMATIC SKETCH OF WELL
	Yes	None made	NO

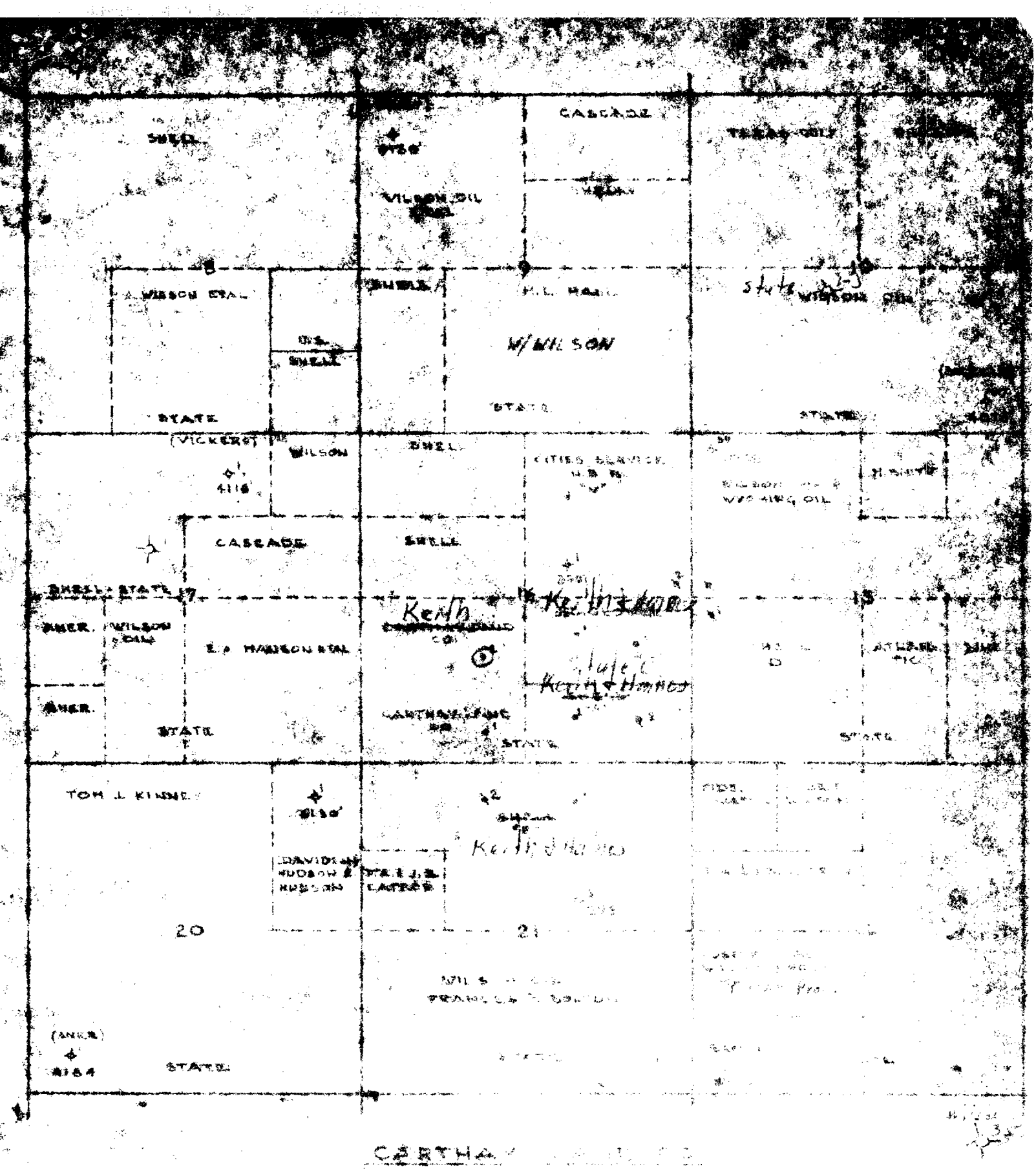
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Hiram W. Keith — (Signature)

Co-owner & Operator — (Title)

8-1-75 — (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.



CARTHAGE

SEC. 16

2000

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

WATER ANALYSIS REPORT

COMPANY Keith - Haines ADDRESS Lea, New Mexico DATE 2/21/74

SOURCE State #1 (Discharge Pump) DATE SAMPLED ——— ANALYSIS NO. 7753

Analysis		Mg/L		*Meq/L	
1. PH	6.9				
2. H_2S (Qualitative)	Pos.				
3. Specific Gravity	1.005				
4. Dissolved Solids		~~11,922~~			
5. Suspended Solids					
6. Phenolphthalein Alkalinity ($CaCO_3$)					
7. Methyl Orange Alkalinity ($CaCO_3$)		990			
8. Bicarbonate (HCO_3)	HCO_3	1,208	÷ 61	19.8	HCO_3
9. Chlorides (Cl)	Cl	4,150	÷ 35.5	117	Cl
10. Sulfates (SO_4)	SO_4	2,579	÷ 48	54	SO_4
11. Calcium (Ca)	Ca	1,000	÷ 20	50	Ca
12. Magnesium (Mg)	Mg	316	÷ 12.2	26	Mg
13. Total Hardness ($CaCO_3$)		3,800			
14. Total Iron (Fe)		7.0 ppm			
15. Barium (Qualitative)					
16.					

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION

50	Ca ←	→ HCO_3
26	Mg →	→ SO_4
115	Na ←	→ Cl

19.8	
54	
117	

Saturation Values Distilled Water 20°C

$CaCO_3$ 13 Mg/L

$CaSO_4 \cdot 2H_2O$ 2,090 Mg/L

$MgCO_3$ 103 Mg/L

Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
$Ca(HCO_3)_2$	81.04		19.8		1,604
$CaSO_4$	68.07				2,043
$CaCl_2$	55.50				
$Mg(HCO_3)_2$	73.17				
$MgSO_4$	60.19		24		1,450
$MgCl_2$	47.62		2		95
$NaHCO_3$	84.00				
Na_2SO_4	71.03				
NaCl	58.45		115		6,730

REMARKS CC/ (4) McNeilly (1) Hall/ (1) Pate

Respectfully submitted
TRETOLITE COMPANY
By Stallcup