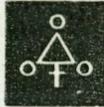


Means Laboratories, Inc.



ANALYTICAL & CONSULTING CHEMISTS
419 N. HANDLEY ☉ TELEPHONE AM 2-6331
Wichita 3, Kansas

Walters Drilling Company
510 Orpheum Building
Wichita, Kansas

DATE: April 11, 1963

LAB. NO.: 17131

WATER ANALYSIS (corrected)

Sample:
Top of swab, out
of hole while swabbing
Dickman SW Well
#4 Injection Well
Color -- Brown

<u>Ions</u>	<u>Mg./liter</u>	<u>Reacting Values</u>
Calcium	1,048	4.84
Magnesium	59	.44
Sulfates	2,030	3.90
Chlorides	17,170	44.71
Bicarbonates	546	.47
N. Carbonates	Nil	
Iron	150	
Sodium	11,132	44.71
Bromides	21	.01
Hydrogen Sulfide	96	.29
Barium	Nil	
Strontium	14	
Potassium	21	
Total Solids	32,287	
Specific Gravity	1.025 @ 22°C	
pH	6.6	
Suspended Solids	14 PPM	
Precipitated Solids	9,000	
Hydrogen Sulfide		
Iron Sulfide		
Calcium Sulfate		

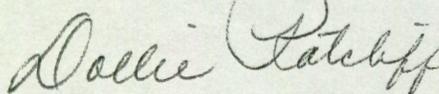
Walters Drilling Company
Page 4
April 11, 1963

WATER ANALYSIS

Sample:
Bottom of Swab,
Out of Hole while
swabbing. Dickman #4
SW Well

<u>Ions</u>	<u>Mg./liter</u>	<u>Reacting Values</u>
Calcium	1,084	5.15
Magnesium	52	.41
Sulfates	2,014	3.98
Chlorides	16,846	45.14
Bicarbonates	551	.86
N. Carbonates	Nil	
Iron	20	
Sodium	10,758	44.45
Bromides	21	.02
Hydrogen Sulfide	92	
Strontium	10	
Barium	Nil	
Potassium	21	
Total Solids	31,469	
Specific Gravity	1.022 @ 22°C	
pH	6.5	
Suspended Solids	Nil	
Precipitated Solids	1,300 PPM	

RESPECTFULLY SUBMITTED,
MEANS LABORATORIES, INC.



Dollie Ratcliff

DRR/vs
Lab. No. 17131



GORDON LAB, INC.

925 PATTON ROAD • P. O. BOX 605 • GREAT BEND, KANSAS 67530

WATER ANALYSIS

DATE November 10, 1976

to Walters Drilling Company

Mr. Walter Zimmerman

Great Bend, Kansas

1. Dickman SWD 2. Schaben #1

	<u>DICKMAN SWD</u> 1.	<u>SCHABEN #1</u> 2.	3.	
Specific Gravity	1.023	1.022		Milligrams per liter
Chlorides	19,500	17,400		Milligrams per liter
Calcium	1,500	1,800		Milligrams per liter
Magnesium	525	433		Milligrams per liter
Sulfates	1,640	1,720		Milligrams per liter
Bicarbonates	403	488		Milligrams per liter
Iron	0	0		Milligrams per liter
Hydrogen Sulfide	20	20		Milligrams per liter
Barium	0	0		Milligrams per liter
pH	6.7	7.0		
Sulfate Reducing Bacteria				

Walt:

This Dickman SWD analysis represents the composite of all waters disposed into the disposal well. The Schaben analysis is Cherokee in origin. We see no problem in mixing the Cherokee and Mississippi waters - both are very similar in mineral content. We recommend continuation of present treating program on the Dickman SWD.

Grady Bolding

cc: Wichita Office

RESPECTFULLY SUBMITTED

LABORATORY ANALYST

Manning/Medlock

BY R. H. Hausler

R. H. Hausler

To convert to parts per million, divide by specific gravity.



GORDON LAB, INC.

925 PATTON ROAD • P. O. BOX 605 • GREAT BEND, KANSAS 67530

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