



WATER ANALYSIS REPORT

COMPANY Cities Service Oil Co. ADDRESS Bazine, Kansas DATE: 7-15-64
 SOURCE O'Brien A #1 DATE SAMPLED 7-13-64 ANALYSIS NO. AW 2935 GB

Analysis	Mg/L	*Meq/L
1. PH <u>7.3</u>		
2. H ₂ S (Qualitative) <u>Neg.</u>		
3. Specific Gravity <u>1.030</u>		
4. Dissolved Solids	<u>— —</u>	
5. Suspended Solids	<u>— —</u>	
6. Phenol Alkalinity (CaCO ₃)	<u>— —</u>	
7. M. O. Alkalinity (CaCO ₃)	<u>352</u>	
8. Bicarbonate (HCO ₃)	<u>425</u>	<u>6.9</u>
9. Chlorides (Cl)	<u>19,400</u>	<u>546</u>
10. Sulfates (SO ₄)	<u>2,420</u>	<u>50</u>
11. Calcium (Ca)	<u>1,460</u>	<u>73</u>
12. Magnesium (Mg)	<u>481</u>	<u>40</u>
13. Total Hardness (CaCO ₃)	<u>5,630</u>	
14. Total Iron (Fe)	<u>3.4 ppm</u>	
15. Barium (Qualitative)		
16.		

*Milli equivalent per liter

PROBABLE MINERAL COMPOSITION

	*		*	
73	Ca	← HCO ₃	6.9	Compound
40	Mg	← SO ₄	50	Equiv. Wt.
	Na	← Cl	546	X
				Meq/L = Mg/L
				Ca (HCO ₃) ₂ 81.04 <u>6.9</u> <u>559</u>
				Ca SO ₄ 68.07 <u>50</u> <u>3,010</u>
				Ca Cl ₂ 55.50 <u>16</u> <u>888</u>
				Mg (HCO ₃) ₂ 73.17 _____
				Mg SO ₄ 60.19 _____
				Mg Cl ₂ 47.62 <u>40</u> <u>1,900</u>
				Na HCO ₃ 84.00 _____
				Na ₂ SO ₄ 71.03 _____
				Na Cl 58.46 <u>490</u> <u>28,700</u>

Saturation Values	Distilled Water 20°C
Ca CO ₃	13 Mg/L
Ca SO ₄	2,980 Mg/L
Mg CO ₃	106 Mg/L

REMARKS To: Mr. Ray Keesling, Box 809, Great Bend, Kansas
cc: McNally, Tenan, Samuelson, Robinson

Respectfully submitted
TRETOLITE COMPANY

E. W. Jenisch



TRETOLITE DIVISION
389 Marshall Avenue / Saint Louis 19, Missouri / WO 1-3500

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KONTOL[®]
CORROSION INHIBITOR
CORROSION RATE REPORT

Test period: 7-17-64 to 8-10-64 Date: 8-19-64

Company: Cities Service Oil Co. City, State: _____

Field, Lease, Well: O'Brain A1 Shut-down time & cause: _____

Estimated Production During Test: Oil: 45 Water: 45 Gas: _____

Coupon numbers: 21298 21299

Wt. loss, grams: .0588 .0778

Avg. wt. loss: .068 Factor: 21.5 MPY: 1.46

Inhibitor used during test _____, Quantity used _____ =

_____ ppm based on total fluids, or _____ quarts per MMCF.

Comments:

Report submitted to: _____

CC: _____

Respectfully submitted,
PETROLITE CORP. TRETOLITE DIV.

NOTE: See Reverse Side for Interpretation.

E. W. Jenisch