

RESEARCH DEPARTMENT
WATER ANALYSIS

205.31

Well No. 1 Lab. No. 2-11-537
County San Juan State New Mexico
Blk. 12 Section 12 T. 29N R. 17W
Exact Location 770' From N & 1090' From W Lines Sample Series No. M-70
Producing Stratum Entrada PBTD From Total Depth 2190
Stratum Yielding Sample Entrada To
Conditions of Well Drill Pipe
Sample Collected From Drill Pipe Method Used From Drill Pipe Breakout
Collected by A. W. Rothe Date Collected 4-30-54 Date Received 5-12-54
Transmitted Letter by L. D. Speer, Jr. Date 4-30-54 File GEF-2033-251.3

Radicle	Per Cent by Analysis	(a) P. P. M.	(b)	(a) X (b)	Per Cent Reacting Value	Calculated Compound	P. P. M.
Na	33.37	3,010	.0411	130.75	47.45	Na ₂ SO ₄	6,503
Ca	.81	73	.0499	3.62	1.34	NaCl	2,221
Mg	.14	12	.0422	1.07	.42	NaHCO ₃	69
Fe						CaSO ₄	
						CaCl ₂	
SO ₄	49.75	4,397	.0208	91.40	33.76	CaCO ₃	132
Cl	14.73	1,347	.0287	37.97	14.03	Ca(HCO ₃) ₂	
CO ₂	2.06	180	.0333	5.99	2.21	MgSO ₄	
HCO ₃		0	.0164			MgCl ₂	
H ₂ S						MgCO ₃	45
						Mg(HCO ₃) ₂	
Total solids as a summation of radicles						9,020	P.P.M.
Total solids by evaporation and ignition of residue at low red heat						10,050	P.P.M.
Sample as received. Resistivity ohms/MM. <u>410</u> at <u>77°F</u> pH Value <u>11.50</u> Specific Gravity <u>60° 60°F</u> <u>1.0095</u>							

PROPERTIES OF REACTION IN PER CENT

PRIMARY SALINITY: SO₄ + Cl with equal value Na (K) 94.52 %
SECONDARY SALINITY: If SO₄ + Cl is greater than Na (K) %
Then SO₄ + Cl = with equal value of Ca + Mg 1.06 %
PRIMARY ALKALINITY: Excess Na (K) over SO₄ + Cl = with equal value of CO₂ + S %
SECONDARY ALKALINITY: Excess Ca + Mg over SO₄ + Cl = with equal value of CO₂ + S 4.42 %
CHLORIDE SALINITY: Cl = (SO₄ + Cl) X 100% 3.30 %
SULPHATE SALINITY: SO₄ = (SO₄ + Cl) X 100% 3.30 %

NOTE: Multiply Parts per Million by .0543 to obtain Grains per Gallon

REMARKS:

This analysis indicates contamination, probably from drilling fluid and is not considered representative of formation water.

cc: C. F. Bedford
C. L. Kelley
L. D. Speer, Jr.

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Roswell Dist. Office	
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Analy. OD Bedford Date 5-11-54