



Water Analysis Report by Baker Petrolite

OXY USA
LD4 FEDERAL COM.
WELL # 1
STACKPACK
Account Manager
FRANK WONER

Summary		Analysis of Sample 114152 @ 75°F					
Sampling Date	12/18/98	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date	1/6/99	Chloride	127	3.58	Sodium	42.3	1.84
Analyst	JOANNA REGAN	Bicarbonate	329	5.40	Magnesium	0.10	0.01
		Carbonate	0.00	0.00	Calcium	0.80	0.04
TDS (mg/l or g/m³)	720.746	Sulfate	15.0	0.31	Strontium	0.03	0.00
Density (g/cm³ or tonne/m³)	1.003	Phosphate	N/A	N/A	Barium	0.09	0.00
Anion/Cation Ratio	1.01	Borate	N/A	N/A	Iron	202	7.23
		Silicate	N/A	N/A	Potassium	4.00	0.10
Carbon Dioxide	110 PPM				Aluminum	N/A	N/A
Oxygen					Chromium	N/A	N/A
					Copper	N/A	N/A
					Lead	N/A	N/A
		pH at time of sampling		6.65	Manganese	N/A	N/A
		pH at time of analysis			Nickel	N/A	N/A
		pH used in Calculations		6.65			

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000bbl					
Temp.	Gauge Press.	Calcite CaCO ₃	Gypsum CaSO ₄ · 2H ₂ O	Anhydrite CaSO ₄	Celestite SrSO ₄	Barite BaSO ₄	CO ₂ Press.
°F	psi	Index Amount	Index Amount	Index Amount	Index Amount	Index Amount	psi
80	0.	-2.44	-4.40	-4.48	-4.18	-0.55	1.05
100	0.	-2.30	-4.41	-4.42	-4.17	-0.69	1.37
120	0.	-2.15	-4.41	-4.33	-4.14	-0.81	1.72
140	0.	-1.99	-4.40	-4.23	-4.11	-0.91	2.08

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

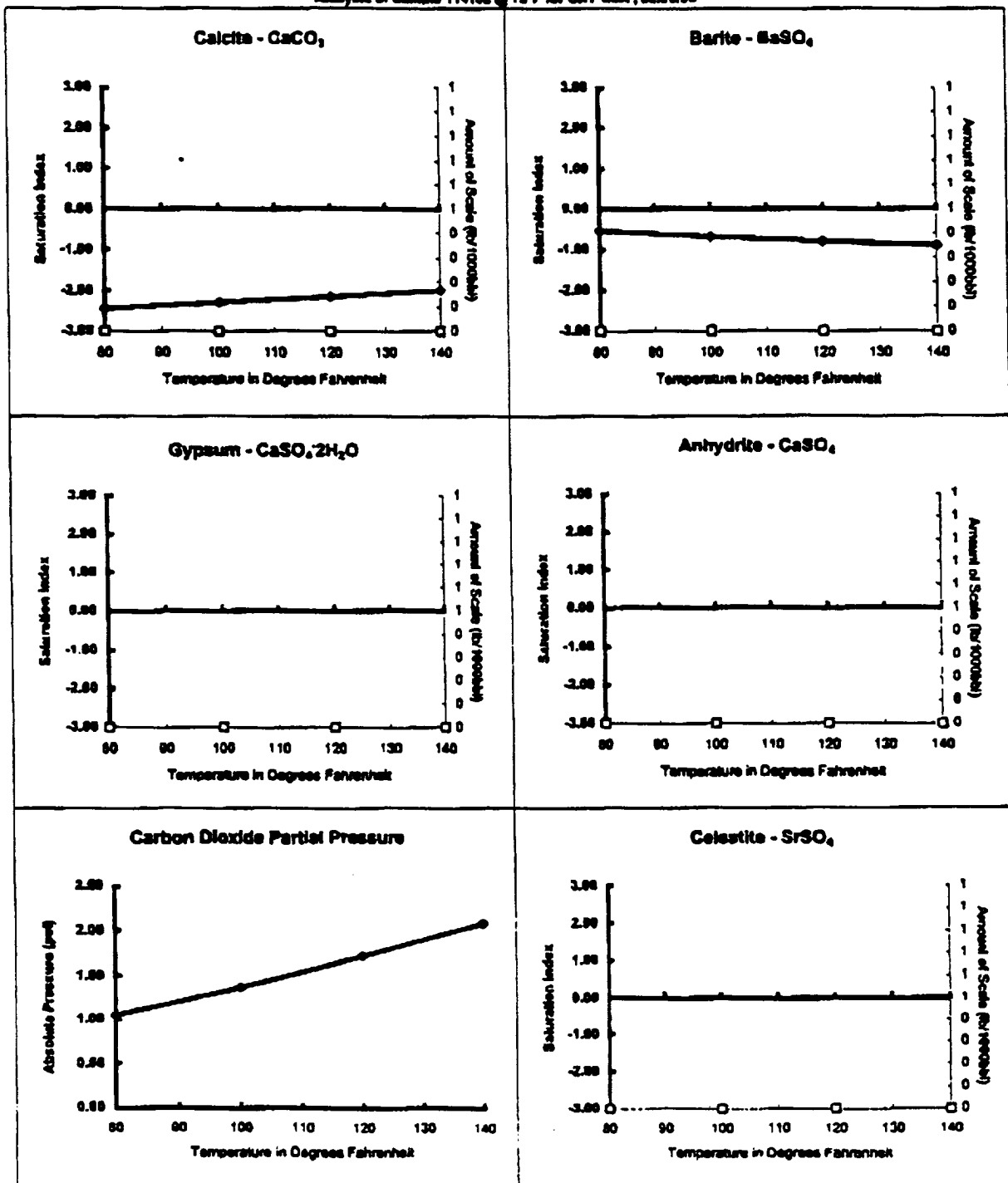
Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.

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Scale Predictions from Baker Petrolite

Analysis of Sample 114153 @ 75°F for QFY USA, Jan/98



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