

Water Analysis Report

Production Company:	PEAKVIEW ENERGY COMPANY LLC	Sales Rep:	Kelly Mecham
Well Name:	KOWACH 1-9,MOFFAT	Lab Tech:	Edith Payne
Sample Point:	Wellhead		
Sample Date:	6/17/2020	Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)	
Sample ID:	WA-403378		

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations	mg/L	Anions	mg/L
Test Date:	6/22/2020	Sodium (Na):	19655.80	Chloride (Cl):	33000.00
System Temperature 1 (°F):	250	Potassium (K):	71.51	Sulfate (SO4):	0.00
System Pressure 1 (psig):	500	Magnesium (Mg):	165.94	Bicarbonate (HCO3):	439.00
System Temperature 2 (°F):	90	Calcium (Ca):	1219.04	Carbonate (CO3):	
System Pressure 2 (psig):	60	Strontium (Sr):	180.86	Hydroxide(HO):	
Calculated Density (g/ml):	1.0348	Barium (Ba):	147.83	Acetic Acid (CH3COO)	
pH:	6.81	Iron (Fe):	11.91	Propionic Acid (C2H5COO)	
Calculated TDS (mg/L):	54947.33	Zinc (Zn):	0.00	Butanoic Acid (C3H7COO)	
CO2 in Gas (%):		Lead (Pb):	0.00	Isobutyric Acid ((CH3)2CHCOO)	
Dissolved CO2 (mg/L):	128.00	Ammonia NH3:		Fluoride (F):	
H2S in Gas (%):		Manganese (Mn):	0.01	Bromine (Br):	
H2S in Water (mg/L):	1.00	Aluminum (Al):	0.00	Silica (SiO2):	55.43
Tot. SuspendedSolids(mg/L):		Lithium (Li):		Calcium Carbonate (CaCO3):	
Corrosivity(LanglierSat.Indx)	0.00	Boron (B):	22.78	Phosphates (PO4):	11.92
Alkalinity:		Silicon (Si):	25.91	Oxygen (O2):	

Notes:

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
90.00	60.00	0.47	28.63	0.00	0.00	1.02	0.83	0.19	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108.00	109.00	0.53	32.65	0.00	0.00	0.94	0.81	0.30	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126.00	158.00	0.61	37.72	0.00	0.00	0.90	0.80	0.42	4.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143.00	207.00	0.70	43.50	0.00	0.00	0.89	0.79	0.53	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161.00	256.00	0.80	49.62	0.00	0.00	0.89	0.79	0.65	6.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179.00	304.00	0.90	55.96	0.00	0.00	0.91	0.80	0.75	6.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197.00	353.00	1.01	62.41	0.00	0.00	0.95	0.81	0.86	7.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
214.00	402.00	1.13	68.83	0.00	0.00	1.00	0.82	0.95	7.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
232.00	451.00	1.25	75.09	0.00	0.00	1.06	0.84	1.05	7.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250.00	500.00	1.38	81.07	0.00	0.00	1.13	0.85	1.13	7.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

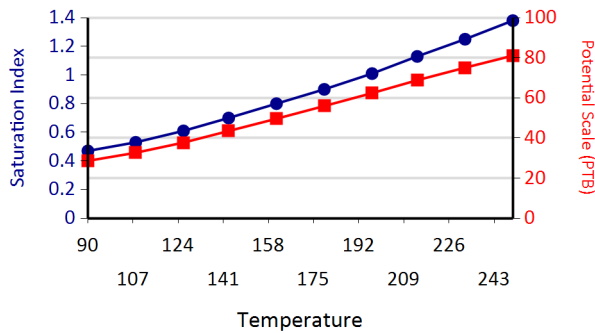
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Temp (°F)	PSI	Hemihydrate CaSO ₄ •0.5H ₂ O		Anhydrate CaSO ₄		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
90.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	2.29
108.00	109.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	3.92
126.00	158.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78	5.46
143.00	207.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.43	6.72
161.00	256.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	1.33	3.10	7.63
179.00	304.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	7.94	0.68	7.59	3.77	8.25
197.00	353.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73	18.66	1.23	14.75	4.45	8.65
214.00	402.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.64	30.89	1.79	22.60	5.13	8.90
232.00	451.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.55	44.22	2.34	30.85	5.81	9.05
250.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.44	58.11	2.88	39.12	6.48	9.13

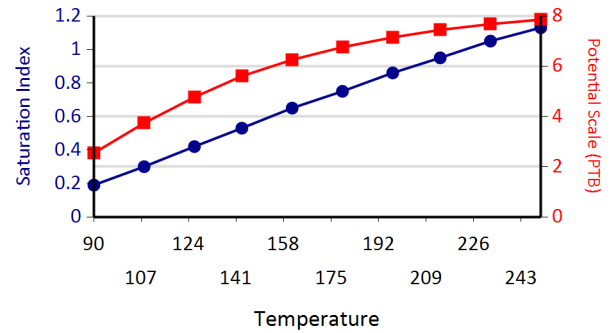
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Sulfide Iron Carbonate Fe Silicate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Iron Sulfide Iron Carbonate Mg Silicate Ca Mg Silicate Fe Silicate

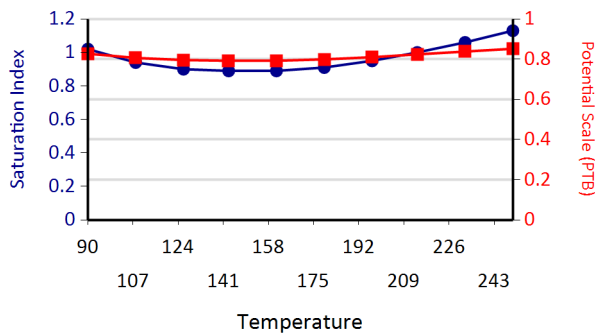
Calcium Carbonate



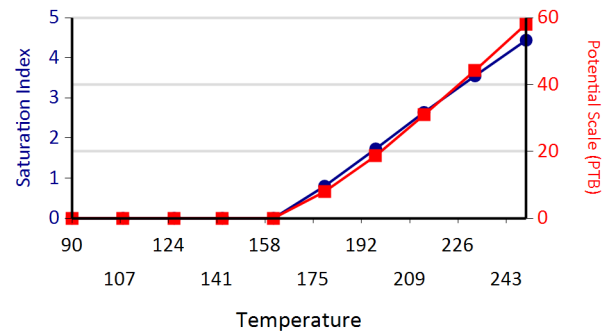
Iron Carbonate



Iron Sulfide

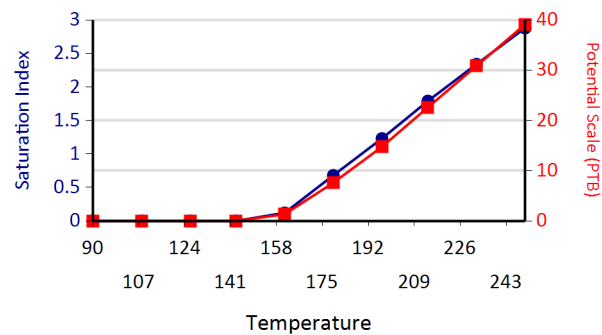


Mg Silicate



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Ca Mg Silicate



Fe Silicate

