



Saturation Index Calculations

Champion Technologies, Inc
(Based on the Tomson-Oddo Model)

Site Information

Company	Sonat Raton LLC
Field	VPR A
Point	15
Date	9/25/1999

Water Analysis (mg/L)

Calcium	68
Magnesium	51
Barium	0
Strontium	0
Sodium*	988
Bicarbonate Alkalinity	1,390
Sulfate	21
Chloride	970

* - Calculated Value

Appended Data

CO2	2 mg/L
H2S	0 mg/L
Iron	8 mg/L

TD5-3,488

Physical Properties

Ionic Strength*	0.05
pH†	7.80
Temperature	90°F
Pressure	50 psia

* - Calculated Value † - Known/Specified Value

Calcite Calculation Information

Calculation Method	Value
pH	7.80
Bicarbonate Alkalinity Correction(s)	Value
None Used	---

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	1.03	53.1
Gypsum (Calcium Sulfate)	-3.14	N/A
Hemihydrate (Calcium Sulfate)	-2.91	N/A
Anhydrite (Calcium Sulfate)	-3.39	N/A
Barite (Barium Sulfate)	N/A	N/A
Celestite (Strontium Sulfate)	N/A	N/A