



Saturation Index Calculations

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

Site Information

Company	Sorat Raton LLC
Field	VPR A
Point	13
Date	9/25/1999

Water Analysis (mg/L)

Calcium	144
Magnesium	39
Barium	0
Strontium	0
Sodium*	1485
Bicarbonate Alkalinity	74
Sulfate	62
Chloride	2,182

* - Calculated Value

Appended Data

CO2	2 mg/L
H2S	0 mg/L
Iron	98 mg/L

TDS - 4,751

Physical Properties

Ionic Strength*	0.08
pH†	7.10
Temperature	90°F
Pressure	50 psia

* - Calculated Value † - Known/Specified Value

Calcite Calculation Information

Calculation Method	Value
pH	7.10
Bicarbonate Alkalinity Correction(s)	Value
None Used	---

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	0.27	42.3
Gypsum (Calcium Sulfate)	-2.42	N/A
Hemihydrate (Calcium Sulfate)	-2.21	N/A
Anhydrite (Calcium Sulfate)	-2.67	N/A
Barite (Barium Sulfate)	N/A	N/A
Celestite (Strontium Sulfate)	N/A	N/A