



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

Site Information

Company	Maralo
Field	Jal Mat Yates
Point	Injection Water
Date	11/20/96

Water Analysis (mg/L)

Calcium	922
Magnesium	729
Barium	0
Strontium	0
Sodium*	8077
Bicarbonate Alkalinity	1,220
Sulfate	2,036
Chloride	14,000

* - Calculated Value

Appended Data

Dissolved CO ₂	149 mg/L
Dissolved O ₂	N/A PPE
H ₂ S	222 mg/L
Iron	0 mg/L
TDS	27022 mg/L
Total Hardness	5300 mg/L

Physical Properties

Ionic Strength*	0.53
pH†	6.84
Temperature	86°F
Pressure	100 psia

* - Calculated Value † - Known/Specified Value

Calcite Calculation Information

Calculation Method	Value
pH	6.84
Bicarbonate Alkalinity Correction(s)	Value
None Used	---

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	0.29	147.8
Gypsum (Calcium Sulfate)	-0.57	N/A
Hemihydrate (Calcium Sulfate)	-0.49	N/A
Anhydrite (Calcium Sulfate)	-0.82	N/A
Barite (Barium Sulfate)	N/A	N/A
Celestite (Strontium Sulfate)	N/A	N/A