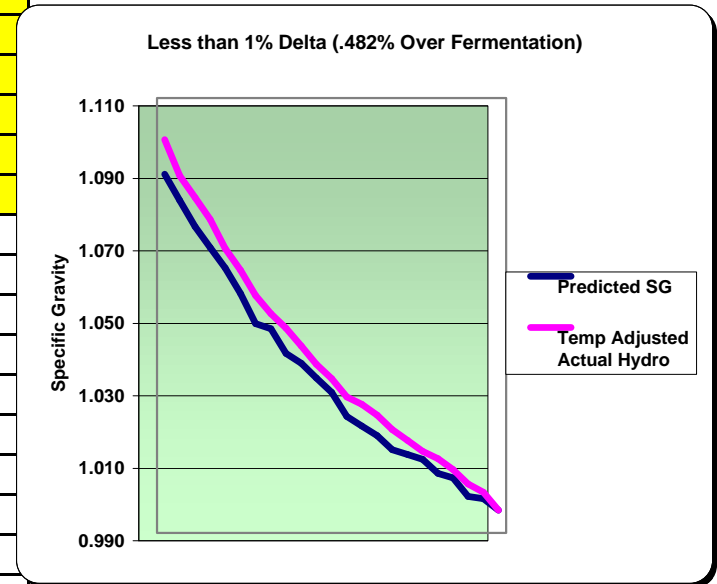


Brix to SG Conversion Utilizing Refractometer

Yeast pitched @ Enter Starting Brix (OB)
 8:32AM 7/19 @ 22.4% Brix 22.400

Date Time	Refractometer Readings (AB)	Predicted SG	Predicted Brix (Plato)	Actual Hydro	Enter Temp. in °F	Temp Adjusted Actual Hydro	Temp Adj. Actual Brix (Plato)	Delta "Predicted From Adjusted SG"	Percent Error from Prediction SG
20-Jul 8:20 AM	22	1.089	21.3	1.096	80.0	1.0985	23.4	0.0095	0.87%
21-Jul 7:15 AM	21	1.082	19.6	1.086	80.0	1.0885	21.2	0.0068	0.63%
21-Jul 7:10 PM	20	1.074	18.0	1.080	80.0	1.0825	19.8	0.0080	0.75%
22-Jul 6:20 AM	19.2	1.069	16.7	1.074	80.0	1.0765	18.5	0.0078	0.73%
22-Jul 7:10 PM	18.4	1.063	15.4	1.066	80.0	1.0685	16.6	0.0054	0.51%
23-Jul 7:16 AM	17.4	1.056	13.8	1.060	80.0	1.0625	15.3	0.0064	0.61%
23-Jul 9:07 PM	16.2	1.048	11.8	1.053	80.0	1.0555	13.6	0.0078	0.74%
24-Jul 8:45 AM	16	1.046	11.5	1.048	80.0	1.0505	12.5	0.0041	0.40%
24-Jul 9:07 PM	15	1.040	9.8	1.044	80.0	1.0465	11.5	0.0070	0.67%
25-Jul 6:40 AM	14.6	1.037	9.2	1.039	80.0	1.0415	10.3	0.0047	0.45%
25-Jul 8:05 PM	14	1.033	8.2	1.034	80.0	1.0365	9.1	0.0037	0.36%
26-Jul 8:20 AM	13.4	1.029	7.2	1.030	80.0	1.0325	8.1	0.0038	0.37%
26-Jul 10:55 PM	12.4	1.022	5.6	1.025	80.0	1.0275	6.9	0.0054	0.53%
27-Jul 8:40 AM	12	1.019	4.9	1.023	80.0	1.0255	6.4	0.0061	0.59%
27-Jul 6:15 PM	11.6	1.017	4.3	1.020	80.0	1.0225	5.7	0.0057	0.56%
28-Jul 7:20 AM	11	1.013	3.3	1.016	80.0	1.0185	4.7	0.0056	0.55%
28-Jul 9:38 PM	10.8	1.012	3.0	1.013	80.0	1.0155	3.9	0.0039	0.39%
29-Jul 6:55 AM	10.6	1.010	2.6	1.010	80.0	1.0125	3.2	0.0022	0.22%
29-Jul 7:30 PM	10	1.006	1.7	1.008	80.0	1.0105	2.7	0.0041	0.40%
30-Jul 6:35 AM	9.8	1.005	1.3	1.005	80.0	1.0075	1.9	0.0024	0.23%
31-Jul 6:30 AM	9	1.000	0.0	1.001	80.0	1.0035	0.9	0.0035	0.35%
31-Jul 10:04 PM	8.9	0.999	-0.1	0.999	78.0	1.0012	0.3	0.0018	0.18%
1-Aug 6:51 PM	8.4	0.996	-1.0	0.994	78.0	0.9962	-1.0	0.0000	0.00%

Period of heavy bubbles effecting Hydro
 Period of heavy bubbles effecting Hydro, spinning doesn't help
 Heavy bubbles, spin helps but raises quickly to 1.085



0.482% Average Delta Over Fermentation.

$$*SG = 1.001843 - 0.002318474(OB) - 0.000007775(OB^2) - 0.000000034(OB^3) + 0.00574(AB) + 0.00003344(AB^2) + 0.000000086(AB^3)$$

*SG = Specific Gravity, OB = Original Brix, AB = Actual Brix (Brix Readings During Fermentation)

$$\text{Brix (Plato)} = -676.67 + 1286.4*SG - 800.47*(SG^2) + 190.74*(SG^3)$$

*Formula was derived from the 69th edition (1988-1989) of the CRC Handbook of Chemistry and Physics, "Concentrative Properties of Aqueous Solutions: Conversion Tables", Table 88 Sucrose