

Savings for The Week: \$1,590.66

Costs for the Week: \$5,777.12

Mill 1 & 2 Coolant Sump

Mar 14, 2011 to Mar 20, 2011

Analyst Comments

- 1) Coolant cost control program is working very well.
- 2) All process charts indicated good control for the entire week.
- 3) Program to automate make-up water will be reviewed this Friday.

Usages for the Week

Parameter	03/14	03/15	03/16	03/17	03/18	03/19	03/20	Total
Operating Hours	23.00	20.67	21.83	16.50	20.83	0.00	1.00	103.83
Coolant	49.43	41.36	35.36	10.50	91.32	56.21	10.93	295.11
Water Make-up gallons	886.54	679.88	1,196.39	890.19	1,311.80	0.00	0.00	4,964.80
Mill 1 Electric Welder 1000 kW	26,603.39	17,735.30	21,221.76	14,247.94	13,383.17	0.00	1,029.50	94,221.06
Mill 2 Electric Welder 1000 kW	8,394.88	4,148.67	6,482.75	4,264.96	6,004.22	0.00	702.34	29,997.82

Cost for the Week

Parameter	03/14	03/15	03/16	03/17	03/18	03/19	03/20	Total
Coolant	\$553.12	\$462.82	\$395.68	\$117.50	\$1,021.87	\$628.99	\$122.31	\$3,302.28
Water Make-up gallons	\$11.60	\$8.90	\$15.66	\$11.65	\$17.17	\$0.00	\$0.00	\$64.99
Mill 1 Electric Welder 1000 kW	\$516.11	\$344.06	\$411.70	\$276.41	\$259.63	\$0.00	\$19.97	\$1,827.89
Mill 2 Electric Welder 1000 kW	\$162.86	\$80.48	\$125.77	\$82.74	\$116.48	\$0.00	\$13.63	\$581.96
Daily Total	\$1,243.69	\$896.27	\$948.81	\$488.30	\$1,415.16	\$628.99	\$155.90	\$5,777.12

Cost per Hour

Parameter	03/14	03/15	03/16	03/17	03/18	03/19	03/20	Avg/hr
Coolant	\$24.05	\$22.39	\$18.13	\$7.12	\$49.06		\$122.31	\$25.75
Water Make-up Gal	\$0.50	\$0.43	\$0.72	\$0.71	\$0.82		\$0.00	\$0.63
Mill 1 Electric Welder 1000 kW	\$22.44	\$16.65	\$18.86	\$16.75	\$12.46		\$19.97	\$17.60
Mill 2 Electric Welder 1000 kW	\$7.08	\$3.89	\$5.76	\$5.01	\$5.59		\$13.63	\$5.60

Benchmarks

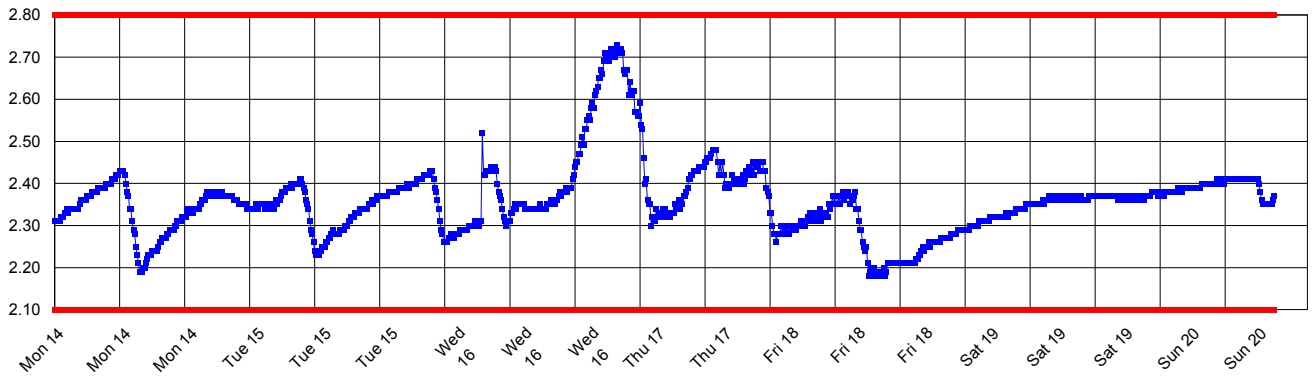
Benchmark	Description	Cost per Hour
Coolant \$/hr	11/15/2010 to 2/14/2011	\$ 44.9100
Water Make-up \$/hr	11/15/2010 to 2/14/2011	\$ 0.6000
Mill 1 Electric Welder 1000 \$/hr	11/15/2010 to 2/14/2011	\$ 16.7100
Mill 2 Electric Welder 1000 \$/hr	11/15/2010 to 2/14/2011	\$ 8.7400

Cost Inputs

Input	Unit	Cost
Coolant	gallons	\$ 11.1900000000
Water Make-up	gallons	\$ 0.0130899000
Mill 1 Electric Welder 1000	kW	\$ 0.0194000000
Mill 2 Electric Welder 1000	kW	\$ 0.0194000000

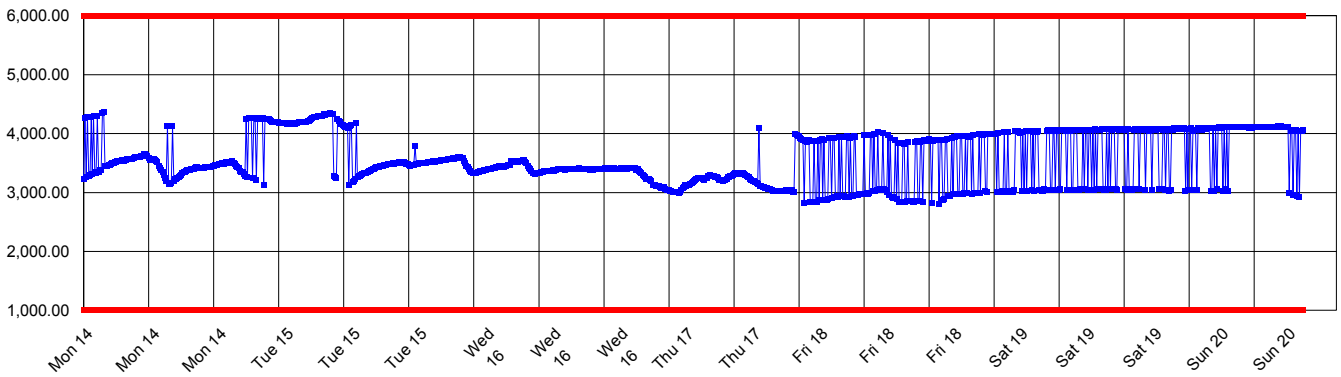
Mill 1 & 2 Coolant Sump

Brix



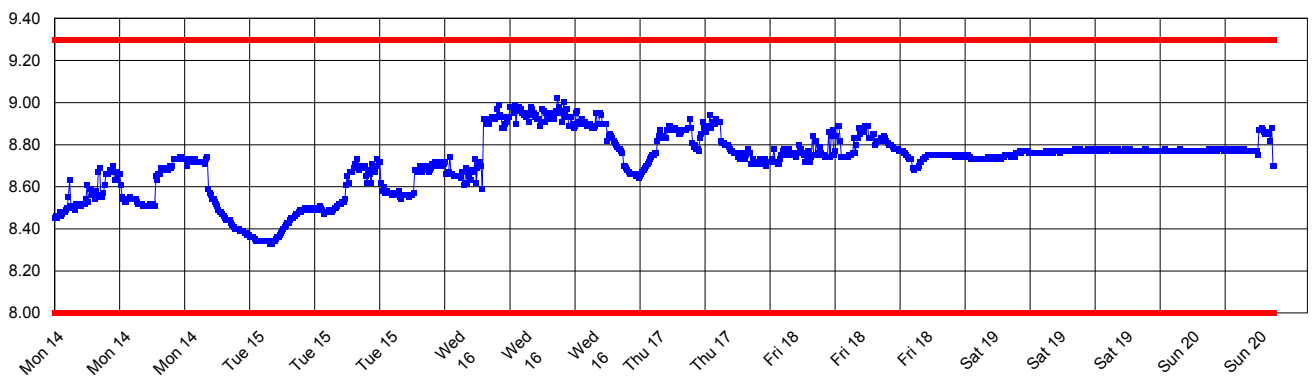
Mill 1 & 2 Coolant Sump

Coolant Conductivity



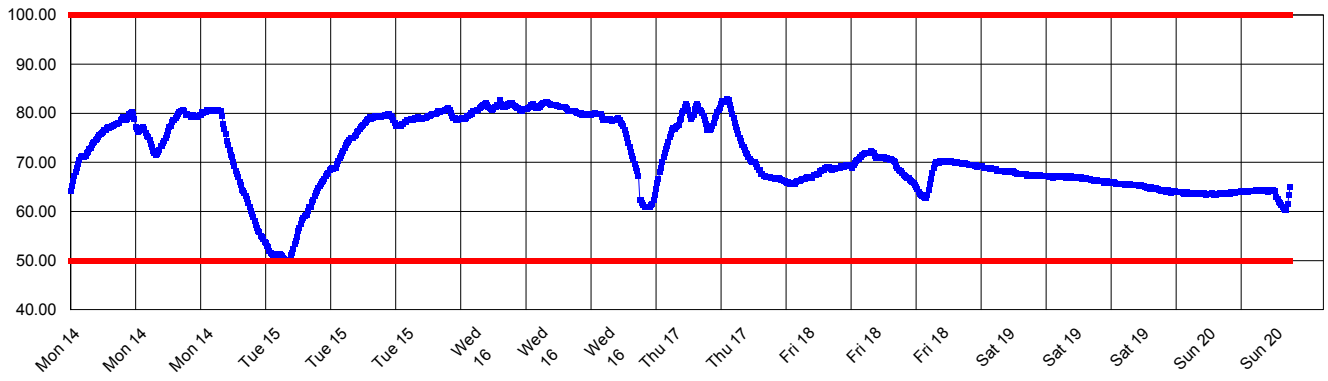
Mill 1 & 2 Coolant Sump

Coolant pH



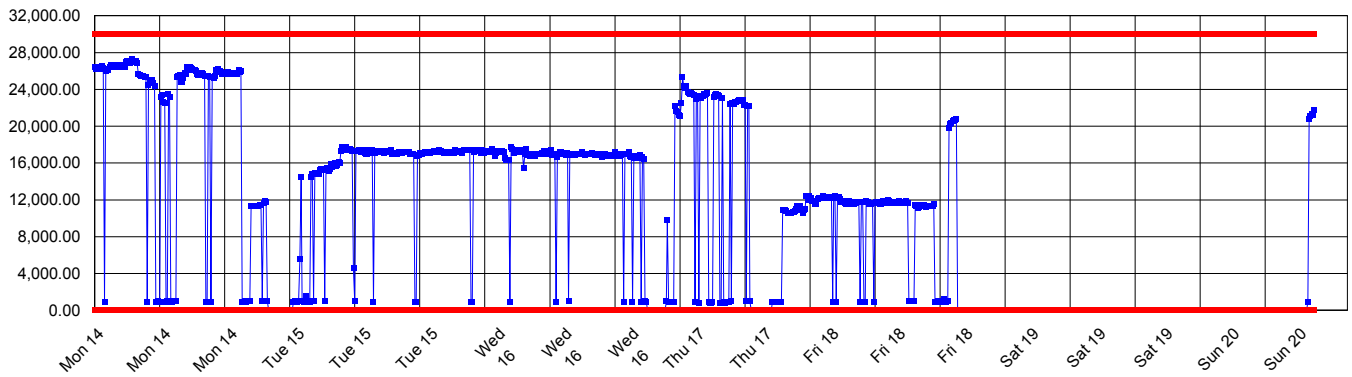
Mill 1 & 2 Coolant Sump

Coolant Temperature



Mill 1 & 2 Coolant Sump

Mill 1 Electric Welder Rate



Mill 1 & 2 Coolant Sump

Mill 2 Electric Welder Rate

