

Savings for the Week: \$848.91

Costs for the Week: \$2,960.17

Four Stage Washer
Feb 23, 2009 to Mar 01, 2009

Analyst Comments:

- (1) Water use was high on Monday and Tuesday.
- (2) Stage #1 bottom spray pressure was low early in the week, then adjusted upward.
- (3) All other process charts show good control for the week.

Usages for the Week

Parameter	02/23	02/24	02/25	02/26	02/27	02/28	03/01	Total
Operating Hours	16	21	20	20	3	0	0	80
Finishing - Natural Gas Therm	567	631	624	614	95	0	0	2,531
Stage 1 - Cleaner Gal	4	0	0	0	0	0	0	4
Total Plant - Water Gal	2,561	2,544	375	277	147	0	0	5,904
Washer - Electricity kW	3,773,632	4,905,536	4,831,552	4,758,016	664,000	0	0	18,932,736

Cost for the Week

Parameter	02/23	02/24	02/25	02/26	02/27	02/28	03/01	Total
Finishing - Natural Gas Therm	\$567.00	\$631.00	\$624.00	\$614.00	\$95.00	\$0.00	\$0.00	\$2,531.00
Stage 1 - Cleaner Gal	\$68.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$68.00
Total Plant - Water Gal	\$26.63	\$26.46	\$3.90	\$2.88	\$1.53	\$0.00	\$0.00	\$61.40
Washer - Electricity kW	\$59.75	\$77.67	\$76.50	\$75.34	\$10.51	\$0.00	\$0.00	\$299.77
Daily Total	\$721.38	\$735.13	\$704.40	\$692.22	\$107.04	\$0.00	\$0.00	\$2,960.17

Cost per Hour

Parameter	02/23	02/24	02/25	02/26	02/27	02/28	03/01
Finishing - Natural Gas Therm	\$34.72	\$30.53	\$30.94	\$30.96	\$33.57	\$0.00	\$0.00
Stage 1 - Cleaner Gal	\$4.16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Plant - Water Gal	\$1.63	\$1.28	\$0.19	\$0.15	\$0.54	\$0.00	\$0.00
Washer - Electricity kW	\$3.66	\$3.76	\$3.79	\$3.80	\$3.71	\$0.00	\$0.00

Benchmarks

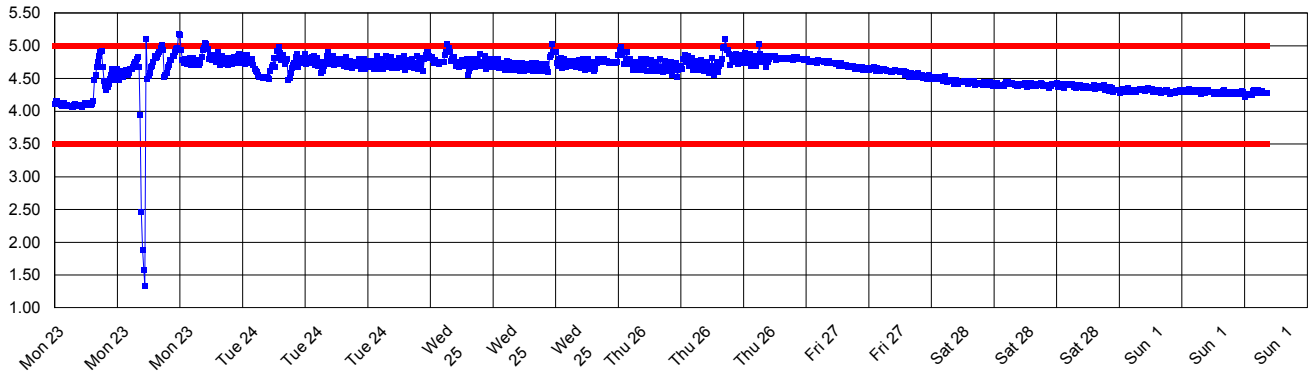
Benchmark	Description	Cost per Hour
Finishing - Natural Gas \$/hr	Sept 2007	\$ 23.7200
Stage 1 - Cleaner \$/hr	2006 Usage Rate	\$ 9.7300
Total Plant - Water \$/hr	Sept 2007	\$ 2.3700
Washer - Electricity \$/hr	Sept 2007	\$ 3.9100

Cost Inputs

Input	Unit	Cost
Finishing - Natural Gas	Therms	\$ 1.0000000000
Stage 1 - Cleaner	gallons	\$ 17.0000000000
Total Plant - Water	gallons	\$ 0.0104000000
Washer - Electricity	kW	\$ 0.0000158333

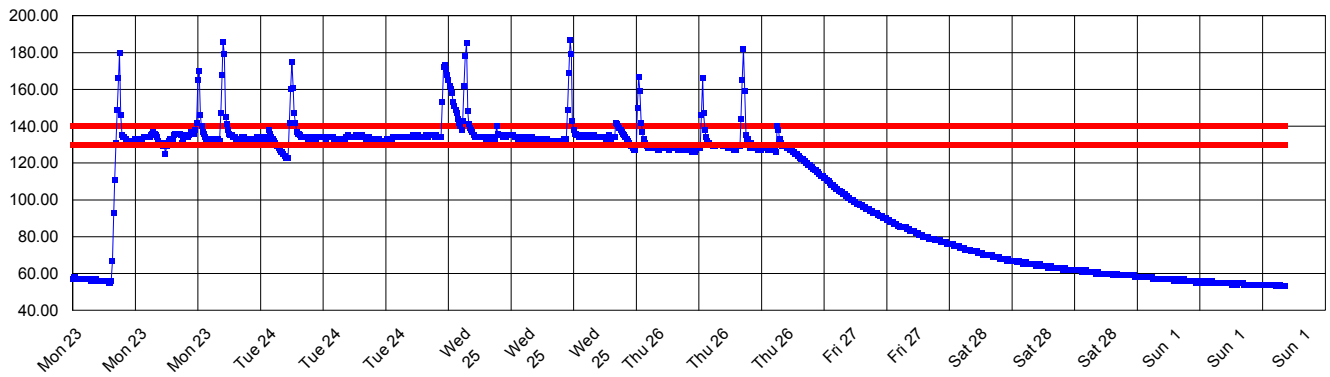
Four Stage Washer

Stage 1 - Cleaner - % Concentration



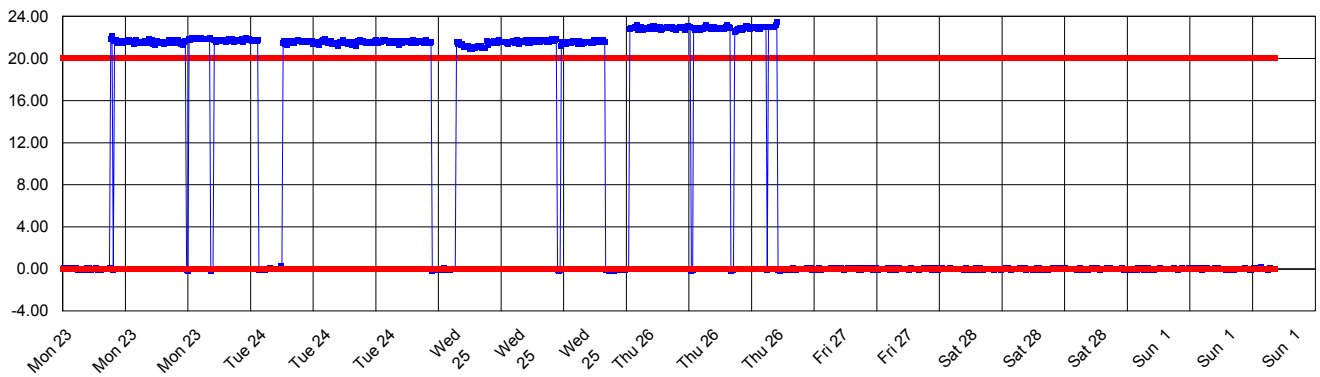
Four Stage Washer

Stage 1 - Cleaner - Temperature



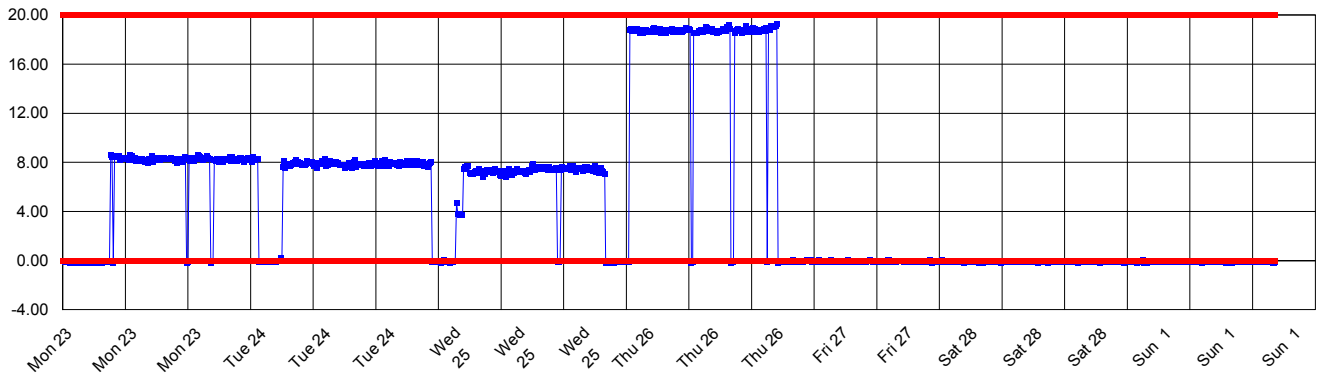
Four Stage Washer

Stage 1 - Cleaner - Top Spray Pressure



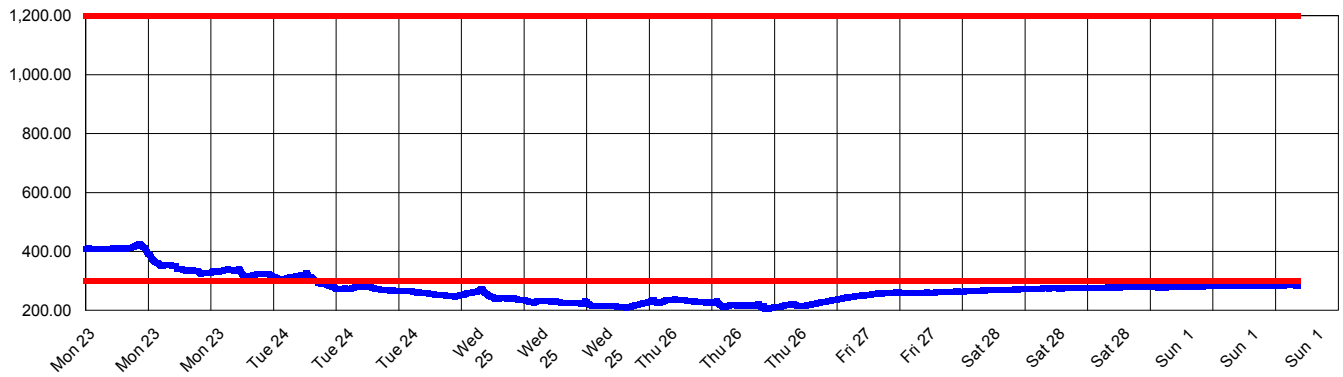
Four Stage Washer

Stage 1 - Cleaner - Bottom Spray Pressure



Four Stage Washer

Stage 4 - Seal Rinse - Conductivity



Four Stage Washer

Stage 4 - Seal Rinse - Temperature

