King County

Industrial Waste Monthly Self-Monitoring Report

Send to: King County Industrial Waste
130 Nickerson Street, Suite 200
Seattle, WA 98109-1658
Phone 206-263-3000 / FAX 206-263-3001
Email: info.KCIW@kingcounty.gov

AKC-00030681

Company Name: ALASKAN COPPER WORKS **Sample Site No.** A-4010 **Permit/DA No.:** 7238-5

Please Specify Month & Year: **Month:** AUGUST **2014** **This form is available at www.kingcounty.gov/industrialwaste.**

All units are mg/l unless otherwise noted. Note: For cyanide, circle test performed - amenable or total ▼

Sample Date (circle)	Sample Type C (Composite) G (grab) BC (batch)	pH Min	pH Max	Cadmium, Cd	Chromium, Cr	Copper, Cu	Lead, Pb	Mercury, Hg	Nickel, Ni	Silver, Ag	Zinc, Zn	Cyanide (CN) Amenable (A) or Total (T)	Nonpolar Fats, Oils, & Grease (Average of 3 grabs)	Daily Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1		10.5	10.9											876	
2		---------	---------											---------	
3		---------	---------											---------	
4		10.5	10.6											905	
5		10.5	10.7											1081	
6		10.5	10.6											1244	
(7)	C	10.4	10.5		.27	.19					05			490	
8		10.3	10.4											1103	
9		---------	---------											---------	
10		---------	---------											---------	
11		10.1	11.1											789	
12		10.8	11.0											1381	
13		10.7	10.9											1060	
(14)	C	10.5	10.7		.49	.25								1044	
15		10.2	10.5											1660	
16		---------	---------											---------	
17		---------	---------											---------	
18		10.2	10.4											1232	
19		10.3	10.5											1223	
20		10.4	10.8											1082	
(21)	C	10.5	10.7		.39	.32			.35		.05			1251	
22		10.3	10.5											2034	
23		---------	---------											---------	
24		---------	---------											---------	
25		9.9	10.2											1869	
26		10.0	10.4											1151	
27		10.3	10.4											1155	
(28)	C	10.2	10.3		.24	.24			.25		.05			793	
29		10.3	10.3											714	
30		---------	---------											---------	
31		---------	---------											---------	

Aug 2014

Monthly Min pH	9.9	& Date	8/25/14	Total Monthly Flow (gallons)	24137		
Monthly Max pH	11.1	& Date	8/11/14	Maximum Daily Flow	2034	& Date	8/22/14

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent

Date 8/9/14

PLEASE CIRCLE ALL PERMIT VIOLATIONS **Due Date:** Monthly report is due by the 15th of each month.

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130 Nickerson Street, Suite 200
Seattle, WA 98109-1658
Phone 206-263-3000 / FAX 206-263-3001
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AKC-00030695

Company Name: ALASKAN COPPER WORKS **Sample Site No.** A-4010 **Permit/DA No.:** 7238-5

Please Specify Month & Year: **Month:** AUGUST **2014** **This form is available at www.kingcounty.gov/industrialwaste.**

All units are mg/l unless otherwise noted. Note: For cyanide, circle test performed - amenable or total ▼

Sample Date (circle)	Sample Type C (Composite) G (grab) BC (batch)	pH Min	pH Max	Cadmium, Cd	Chromium, Cr	Copper, Cu	Lead, Pb	Mercury, Hg	Nickel, Ni	Silver, Ag	Zinc, Zn	Cyanide (CN) Amenable (A) or Total (T)	Nonpolar Fats, Oils, & Grease (Average of 3 grabs)	Daily Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1		10.5	10.9											876	
2		---------	---------											----------	
3		---------	---------											----------	
4		10.5	10.6											905	
5		10.5	10.7											1081	
6		10.5	10.6											1244	
(7)	C	10.4	10.5		.27	.19			.19		.05			490	
8		10.3	10.4											1103	
9		---------	---------											----------	
10		---------	---------											----------	
11		10.1	11.1											789	
12		10.8	11.0											1381	
13		10.7	10.9											1060	
(14)	C	10.5	10.7		.49	.25			.26		.05			1044	
15		10.2	10.5											1660	
16		---------	---------											----------	
17		---------	---------											----------	
18		10.2	10.4											1232	
19		10.3	10.5											1223	
20		10.4	10.8											1082	
(21)	C	10.5	10.7		.39	.32			.35		.05			1251	
22		10.3	10.5											2034	
23		---------	---------											----------	
24		---------	---------											----------	
25		9.9	10.2											1869	
26		10.0	10.4											1151	
27		10.3	10.4											1155	
(28)	C	10.2	10.3		.24	.24			.25		.05			793	
29		10.3	10.3											714	
30		---------	---------											----------	
31		---------	---------											----------	

Monthly Min pH	9.9	& Date	8/25/14	Total Monthly Flow (gallons)	24137	
Monthly Max pH	11.1	& Date	8/11/14	Maximum Daily Flow	2034	& Date 8/22/14

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

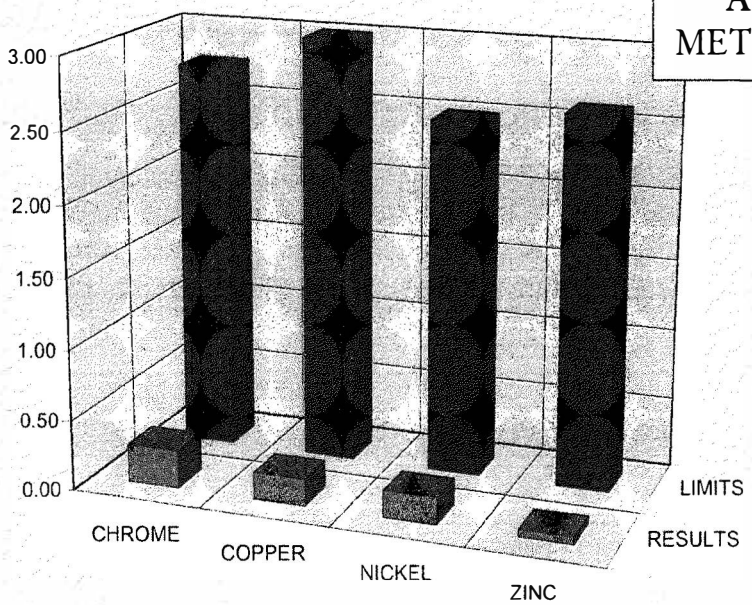
James Brown 8/9/14

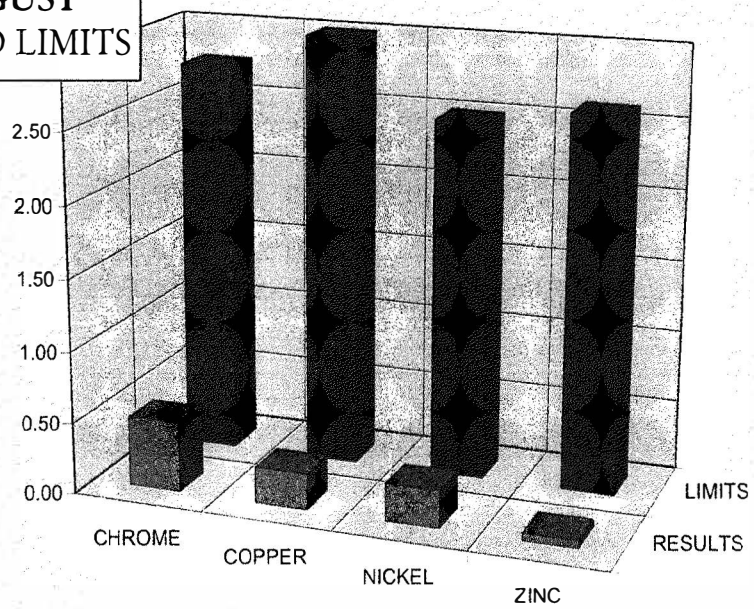
Signature of Principal Executive or Authorized Agent Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

Due Date: **Monthly report is due by the 15th of each month.**

AUGUST
METRO LIMITS





ALASKAN COPPER WORKS 3200 FACILITY AUGUST 7, 2014 COMPOSITE M134722	ALASKAN COPPER WORKS 3200 FACILITY AUGUST 14, 2014 COMPOSITE M134760

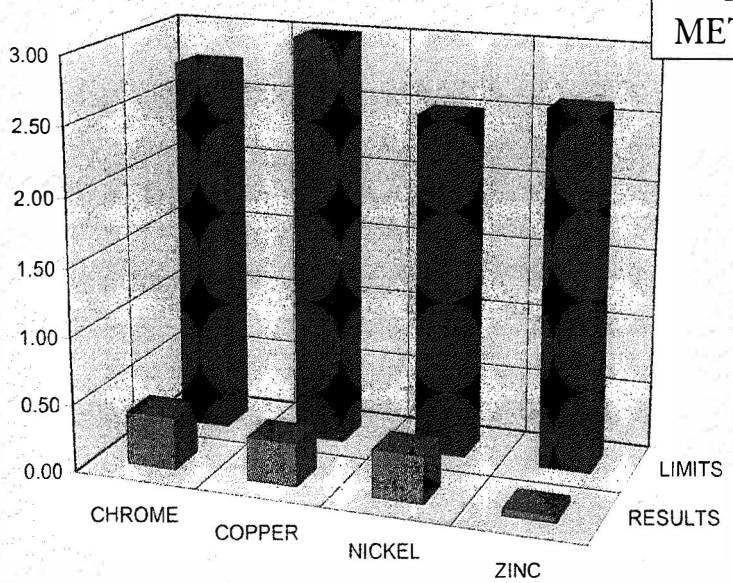
VISUAL REPRESENTATION OF THE LAB RESULTS

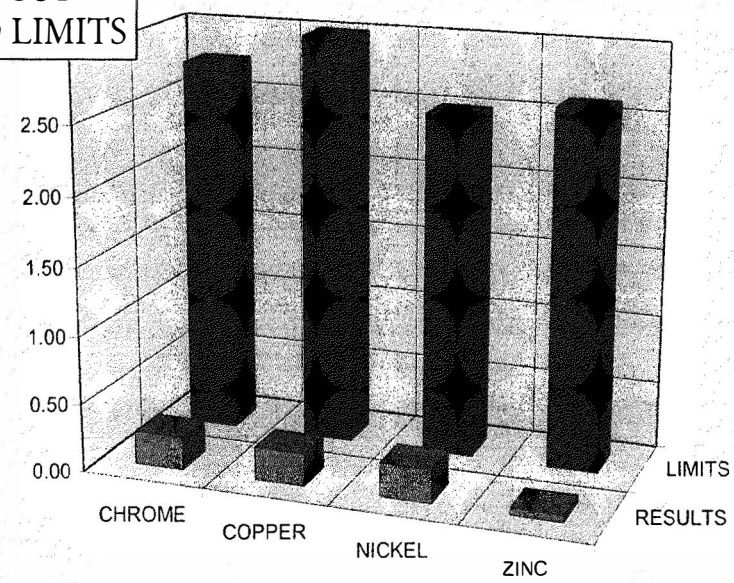
NOTE: ALL LABORATORY RESULTS HAVE BEEN CHANGED FROM **ppb** TO **ppm** FOR REPORTING PURPOSES

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.27	0.19	0.19	0.05
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.49	0.25	0.26	0.05
LIMITS	2.75	3.00	2.50	2.61

AUGUST
METRO LIMITS





ALASKAN COPPER WORKS 3200 FACILITY AUGUST 21, 2014 COMPOSITE M134795	ALASKAN COPPER WORKS 3200 FACILITY AUGUST 28, 2014 COMPOSITE M134837

VISUAL REPRESENTATION OF THE LAB RESULTS

NOTE: ALL LABORATORY RESULTS HAVE BEEN CHANGED FROM **ppb** TO **ppm** FOR REPORTING PURPOSES

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.39	0.32	0.36	0.05
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.24	0.24	0.25	0.05
LIMITS	2.75	3.00	2.50	2.61

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M134722	Client:	Alaskan Copper Works
Date Received:	08/07/14	Project:	Metro Self Monitor M134722, F&BI 408103
Date Extracted:	08/13/14	Lab ID:	408103-01 x10
Date Analyzed:	08/13/14	Data File:	408103-01 x10.026
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	94	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	275
Nickel	199
Copper	197
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/14
Date Received: 08/07/14
Project: % of Acid PO M134723, F&BI 408102
Date Extracted: 08/07/14
Date Analyzed: 08/07/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR SPECIFIC GRAVITY @ 15.56 °C

Sample ID Laboratory ID	Specific Gravity
M134723A Sm Tank 408102-01	1.25
M134723B Lg Tank 408102-02	1.18

Note: The third significant digit is an estimate

AKC-0003073

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M134760	Client:	Alaskan Copper Works
Date Received:	08/14/14	Project:	M134760, F&BI 408225
Date Extracted:	08/18/14	Lab ID:	408225-01 x10
Date Analyzed:	08/19/14	Data File:	408225-01 x10.032
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	90	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	494
Nickel	268
Copper	252
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M134795	Client:	Alaskan Copper Works
Date Received:	08/21/14	Project:	METRO Self Monitor M134795
Date Extracted:	08/25/14	Lab ID:	408338-01 x10
Date Analyzed:	08/25/14	Data File:	408338-01 x10.042
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	94	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	390
Nickel	355
Copper	320
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M134837	Client:	Alaskan Copper Works
Date Received:	08/28/14	Project:	METRO Self Monitor M134837
Date Extracted:	09/03/14	Lab ID:	408452-01 x10
Date Analyzed:	09/03/14	Data File:	408452-01 x10.060
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	93	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	240
Nickel	252
Copper	248
Zinc	<50

AKC-0003076

REF. DWG NO. 500-0007 REV. A 1594

DAILY LOG

DAY	DATE	TIME	CAUSTIC LEVEL	FLOC. LEVEL	pH READING PROCESS MONITOR	pH READING OUTPUT MONITOR	pH PAPER PROCESS MONITOR	pH PAPER OUTPUT MONITOR	FLOWMETER	CYCLES	TEMP F° LARGE TANK	TEMP F° SMALL TANK	TEMP F° OAKITE TANK	REVETMENT LARGE RINSE	REVETMENT LARGE ACID	REVETMENT SMALL TANKS	COMMENTS,PROBLEMS;& REMARKS (W/O#)
MONDAY	7-28	7 AM	8.4	4	10.85	10.53	–	–	879	13	121	128	136				
		3 PM	7.9	10	9.62	10.47	–	–	658	22	122	126	116				
		11PM	7.6	8	9.73	10.61	–	–	1322	1	127	123	120				
TUESDAY	7-29	7 AM	7.6	8	10.95	10.58	–	–	1322	12	119	123	150				
		3 PM	7.0	8	10.20	10.50	–	–	193	17	119	127	130				
		11PM	6.5	2	9.92	10.68	–	–	1139	4	120	121	148				
WEDNESDAY	7-30	7 AM	6.5	2	8.52	10.53	–	–	1159	4	128	129	152				
		3 PM	6.2	1	9.83	10.36	–	–	Ø	20	128	128	136				
		11PM	6.3	13	9.79	10.77	–	–	959	Ø	119	118	122				
THURSDAY	7-31	7 AM	6.3	13	9.34	10.66	–	–	959	2	128	124	155				
		3 PM	5.1	10	10.19	10.53	–	–	489	11	124	129	123				
		11PM	5.3	9	9.72	10.61	–	–	876	29	126	121	121				
FRIDAY	8-1	7 AM	5.3	9	9.68	10.55	–	–	876	33	116	129	150				
		3 PM	5.0	9	10.18	10.58	–	–	248	28	127	128	132				
		11PM	5.0	2	9.87	10.92	–	–	905	Ø	120	120	114				
SATURDAY																	
SUNDAY																	

\WOUT\500-0007, 03/04/99

AKC-0003077

REF. DWG NO. 500-0007 REV. A 1594

DAILY LOG

DAY	DATE	TIME	CAUSTIC LEVEL	FLOC. LEVEL	pH READING PROCESS MONITOR	pH READING OUTPUT MONITOR	pH PAPER PROCESS MONITOR	pH PAPER OUTPUT MONITOR	FLOWMETER	CYCLES	TEMP F° LARGE TANK	TEMP F° SMALL TANK	TEMP F° OAKITE TANK	REVETMENT LARGE RINSE	REVETMENT LARGE ACID	REVETMENT SMALL TANKS	COMMENTS, PROBLEMS, & REMARKS (W/O#)
MONDAY	8-4	7 AM	5.0	2	10.03	10.65	-	-	905	9	119	110	106				
		3 PM	4.3	1	10.41	10.54	-	-	737	38	118	127	127				
		11PM	4.3	13	9.89	10.61	-	-	1081	69	122	127	127				
TUESDAY	8-5	7 AM	4.3	13	8.05	10.57	-	-	1081	73	127	127	128				
		3 PM	3.2	13	9.67	10.57	-	-	98	21	127	119	122				
		11PM	2.7	7	10.21	10.70	-	-	1244	23	125	118	111				
WEDNESDAY	8-6	7 AM	2.7	7	8.59	10.10	-	-	1244	26	126	120	149				
		3 PM	2.7	5	9.22	10.57	-	-	Ø	6	118	107	132				
		11PM	2.2	1	9.69	10.63	-	-	490	Ø	114	102	121				
THURSDAY	8-7	7 AM	2.2	1	9.65	10.58	-	-	490	Ø	109	95	148				pac press lines "Hissing" again - shut air off
		3 PM	1.7	16	9.95	10.47	-	-	660	9	122	127	132				
		11PM	1.5	14	10.35	10.47	-	-	1103	13	125	121	120				
FRIDAY	8-8	7 AM	1.5	14	10.93	10.43	-	-	1103	13	128	126	151				
		3 PM	1.5	14	7.82	10.57	-	-	Ø	7	127	129	131				
		11PM	0.7	10	10.13	10.40	-	-	789	Ø	119	120	119				
SATURDAY																	
SUNDAY																	

\WOUT\500-0007, 03/04/99

AKC-0003078

REF. DWG NO. 500-0007 REV. A 1594

DAILY LOG

DAY	DATE	TIME	CAUSTIC LEVEL	FLOC. LEVEL	pH READING PROCESS MONITOR	pH READING OUTPUT MONITOR	pH PAPER PROCESS MONITOR	pH PAPER OUTPUT MONITOR	FLOWMETER	CYCLES	TEMP F° LARGE TANK	TEMP F° SMALL TANK	TEMP F° OAKITE TANK	REVETMENT LARGE RINSE	REVETMENT LARGE ACID	REVETMENT SMALL TANKS	COMMENTS,PROBLEMS,& REMARKS (W/O#)
MONDAY	8-11	7 AM	0.7	10	9.65	10.19	–	–	789	Ø	128	110	86	–			
		3 PM	0.7	8	10.96	10.13	–	–	313	Ø	126	123	122				
		11PM	0.7	1	9.80	11.14	–	–	1381	2	127	117	124				
TUESDAY	8-12	7 AM	0.7	1	9.76	10.94	–	–	1381	2	123	120	137				
		3 PM	0.7	1	10.26	10.82	–	–	274	Ø	126	122	120				
		11PM	0.4	13	9.75	11.04	–	–	1060	5	118	118	111				
WEDNESDAY	8-13	7 AM	0.4	13	9.69	10.79	–	–	1060	5	123	126	126				
		3 PM	0.4	12	10.75	10.83	–	–	125	Ø	125	118	128				
		11PM	0.4	8	9.74	10.93	–	–	1044	16	127	124	117				
THURSDAY	8-14	7 AM	0.4	8	9.76	10.72	–	–	1044	21	126	123	129				
		3 PM	8.0	5	9.56	10.68	–	–	527	2	126	122	130				
		11PM	7.9	1	9.76	10.57	–	–	1660	40	127	117	118				
FRIDAY	8-15	7 AM	7.9	1	9.89	10.27	–	–	1610	40	128	126	148				
		3 PM	7.8	13	9.20	10.51	–	–	370	18	124	118	128				
		11PM	7.8	9	10.24	10.59	–	–	1232	23	127	123	114				
SATURDAY																	
SUNDAY																	

..\WOUT\500-0007, 03/04/99

AKC-0003079

REF. DWG NO. 500-0007 REV. A 1594

DAILY LOG

DAY	DATE	TIME	CAUSTIC LEVEL	FLOC. LEVEL	pH READING PROCESS MONITOR	pH READING OUTPUT MONITOR	pH PAPER PROCESS MONITOR	pH PAPER OUTPUT MONITOR	FLOWMETER	CYCLES	TEMP F° LARGE TANK	TEMP F° SMALL TANK	TEMP F° OAKITE TANK	REVETMENT LARGE RINSE	REVETMENT LARGE ACID	REVETMENT SMALL TANKS	COMMENTS,PROBLEMS,& REMARKS (W/O#)
MONDAY	8/18	7 AM	7.8	9	9.78	10.26	–	–	1232	23	122	113	110				
		3 PM	7.3	8	9.83	10.35	–	–	1034	28	119	118	119				
		11PM	7.0	5	9.63	10.41	–	–	1223	Ø	120	122	128				
TUESDAY	8/19	7 AM	7.0	5	9.60	10.35	–	–	1223	Ø	126	130	131				
		3 PM	6.3	5	9.75	10.44	–	–	1686	35	125	127	125				
		11PM	6.2	2	10.59	10.51	–	–	2305	64	125	123	118				
WEDNESDAY	8/20	7 AM	6.2	2	10.24	10.44	–	–	2305	64	127	129	134				
		3 PM	5.5	1	10.51	10.53	–	–	869	38	130	119	128				
		11PM	5.3	15	9.81	10.80	–	–	1251	Ø	125	123	116				
THURSDAY	8/21	7 AM	5.3	15	10.29	10.78	–	–	1251	Ø	125	129	135				
		3 PM	5.0	14	9.74	10.76	–	–	724	20	124	128	127				
		11PM	4.5	10	9.94	10.58	–	–	2034	16	123	128	109				
FRIDAY	8/22	7 AM	4.5	10	9.87	10.50	–	–	2034	16	128	125	125				
		3 PM	4.0	8	9.65	10.39	–	–	588	2	125	125	128				
		11PM	3.3	1	10.23	10.43	–	–	1869	20	126	119	115				
SATURDAY																	
SUNDAY																	

..\WOUT\500-0007, 03/04/99

AKC-0003080

REF. DWG NO. 500-0007 REV. A 1594

DAILY LOG

DAY	DATE	TIME	CAUSTIC LEVEL	FLOC. LEVEL	pH READING PROCESS MONITOR	pH READING OUTPUT MONITOR	pH PAPER PROCESS MONITOR	pH PAPER OUTPUT MONITOR	FLOWMETER	CYCLES	TEMP F° LARGE TANK	TEMP F° SMALL TANK	TEMP F° DAKITE TANK	REVETMENT LARGE RINSE	REVETMENT LARGE ACID	REVETMENT SMALL TANKS	COMMENTS,PROBLEMS,& REMARKS (W/O#)
MONDAY	8-25	7 AM	3.3	1	9.80	9.94	-	-	1869	20	118	112	107				
		3 PM	3.0	16	9.61	10.00	—	—	168	Ø	119	128	121				
		11PM	2.4	12	10.33	10.23	—	—	1151	32	122	116	128				
TUESDAY	8-26	7 AM	2.4	12	10.24	10.13	-	—	1151	32	128	128	131				
		3 PM	2.4	12	9.51	10.03	—	—	[illegible]	[illegible]	127	120	129				
		11PM	1.7	7	9.89	10.45	—	—	1155	4	118	124	117				
WEDNESDAY	8-27	7 AM	1.7	7	9.82	10.36	-	—	1155	4	127	125	136				
		3 PM	1.5	7	9.68	10.31	—	—	223	28	127	121	130				
		11PM	1.2	2	10.39	10.42	—	—	793	4	118	115	118				
THURSDAY	8-28	7 AM	1.2	2	10.21	10.34	-	-	793	4	126	128	138				
		3 PM	1.0	2	9.61	10.25	—	—	Ø	15	123	118	127				
		11PM	.007	Ø	10.06	10.39	—	-	714	31	119	120	115				
FRIDAY	8-29	7 AM	.007	Ø	9.88	10.31	-	-	714	31	127	128	134				
		3 PM	.007	14	9.52	10.32	—	-	197	5	119	121	128				
		11PM	.007	10	9.80	10.34	—	—	654	16	123	118	110				
SATURDAY																	
SUNDAY																	

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