Industrial Waste Monthly Self-Monitoring Report

King County

Send to: King County Industrial Waste Program
201 S. Jackson Street, Suite 513
Seattle, WA 98104-3855
Phone 206-477-5300 / FAX 206-263-3001
Email: info.KCIW@kingcounty.gov

AKC-0002909

Company Name: ALASKAN COPPER WORKS 6TH AVE. S. **Sample Site No.** A-4010 **Permit/DA No.:** 7238-06

Please Specify Month & Year: **Month:** OCTOBER **2015**

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)	C	10.5	10.7		.58	.69			.68		.05			416	
2		10.4	10.5											1269	
3		-------	-------											-------	
4		-------	-------											-------	
5		10.2	10.3											826	
6		10.1	10.2											758	
7		9.9	10.1											804	
(8)	C	9.8	10.3		.21	.24					.05			538	
9		10.2	10.4											203	
10		-------	-------											-------	
11		-------	-------											-------	
12		10.1	10.2											660	
13		10.1	10.3											1335	
14		10.1	10.3											510	
(15)	C	10.1	10.4		.14	.12					.05			606	
16		10.2	10.3											477	
17		-------	-------											-------	
18		-------	-------											-------	
19		10.1	10.3											1016	
20		10.2	10.3											765	
21		10.0	10.2											510	
(22)	C	10.0	10.1		.49	.56			.57		.05			633	
23		10.1	10.1											925	
24		-------	-------											-------	
25		-------	-------											-------	
26		9.9	10.1											640	
27		9.9	10.3											886	
28		10.1	10.2											650	
(29)	C	10.0	10.4		.83	.91			1.04		.05			721	
30		10.3	10.3											856	
31		-------	-------											-------	

Oct 2015

Monthly Min pH	9.8	& Date	10/8/15	Total Monthly Flow (gallons)	16004
Monthly Max pH	10.5	& Date	10/1/15	Maximum Daily Flow	1335 & Date 10/13/15

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

11-5-15 Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

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

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AKC-0002910

Company Name: ALASKAN COPPER WORKS 6TH AVE. S. **Sample Site No.** A-4010 **Permit/DA No.:** 7238-06

Please Specify Month & Year: **Month:** OCTOBER **2015** **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)	C	10.5	10.7		.58	.69			.68		.05			416	
2		10.4	10.5											1269	
3		-------	-------											----------	
4		-------	-------											----------	
5		10.2	10.3											826	
6		10.1	10.2											758	
7		9.9	10.1											804	
(8)	C	9.8	10.3		.21	.24			.22		.05			538	
9		10.2	10.4											203	
10		-------	-------											----------	
11		-------	-------											----------	
12		10.1	10.2											660	
13		10.1	10.3											1335	
14		10.1	10.3											510	
(15)	C	10.1	10.4		.14	.12			.12		.05			606	
16		10.2	10.3											477	
17		-------	-------											----------	
18		-------	-------											----------	
19		10.1	10.3											1016	
20		10.2	10.3											765	
21		10.0	10.2											510	
(22)	C	10.0	10.1		.49	.56			.57		.05			633	
23		10.1	10.1											925	
24		-------	-------											----------	
25		-------	-------											----------	
26		9.9	10.1											640	
27		9.9	10.3											886	
28		10.1	10.2											650	
(29)	C	10.0	10.4		.83	.91			1.04		.05			721	
30		10.3	10.3											856	
31		-------	-------											----------	

Monthly Min pH	9.8	& Date	10/8/15
Monthly Max pH	10.5	& Date	10/1/15

Total Monthly Flow (gallons): 16004

Maximum Daily Flow: 1335 & Date: 10/13/15

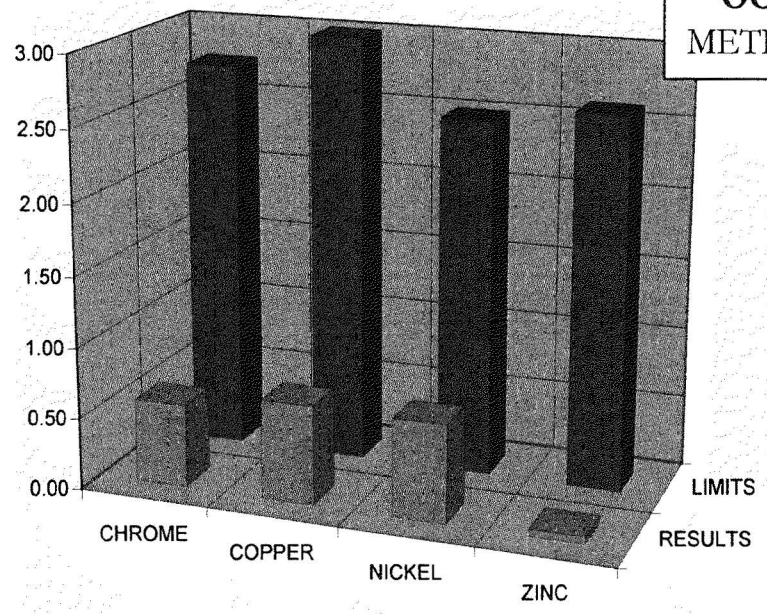
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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.

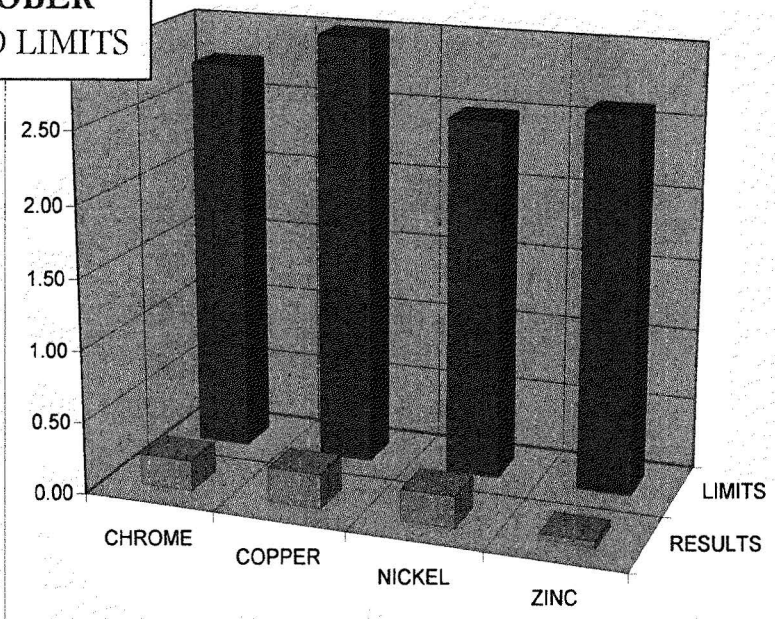
Signature of Principal Executive or Authorized Agent — Date 11-5-15

PLEASE CIRCLE ALL PERMIT VIOLATIONS

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

OCTOBER
METRO LIMITS





ALASKAN COPPER WORKS	ALASKAN COPPER WORKS
3200 FACILITY	3200 FACILITY
OCTOBER 1, 2015	OCTOBER 8, 2015
COMPOSITE M136825	COMPOSITE M136835

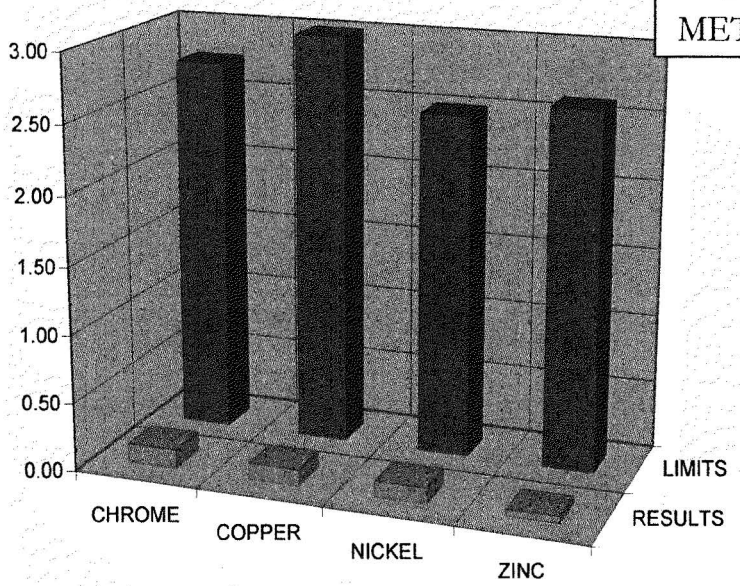
VISUAL REPRESENTATION OF THE LAB RESULTS

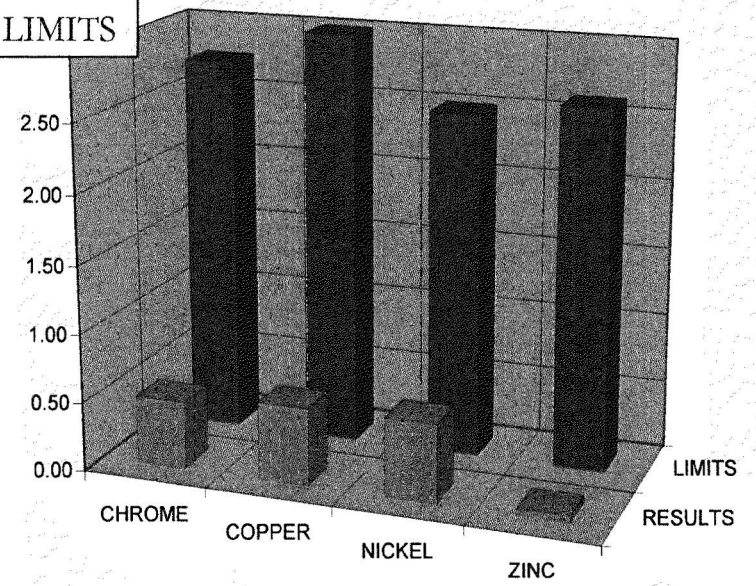
NOTE: ALL LABORATORY RESULTS HAVE BEEN CHANGED FROM **ppb** TO **ppm** FOR REPORTING PURPOSES

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.58	0.69	0.68	0.05
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.21	0.24	0.22	0.05
LIMITS	2.75	3.00	2.50	2.61

OCTOBER
METRO LIMITS





ALASKAN COPPER WORKS
3200 FACILITY
OCTOBER 15, 2015
COMPOSITE M136834

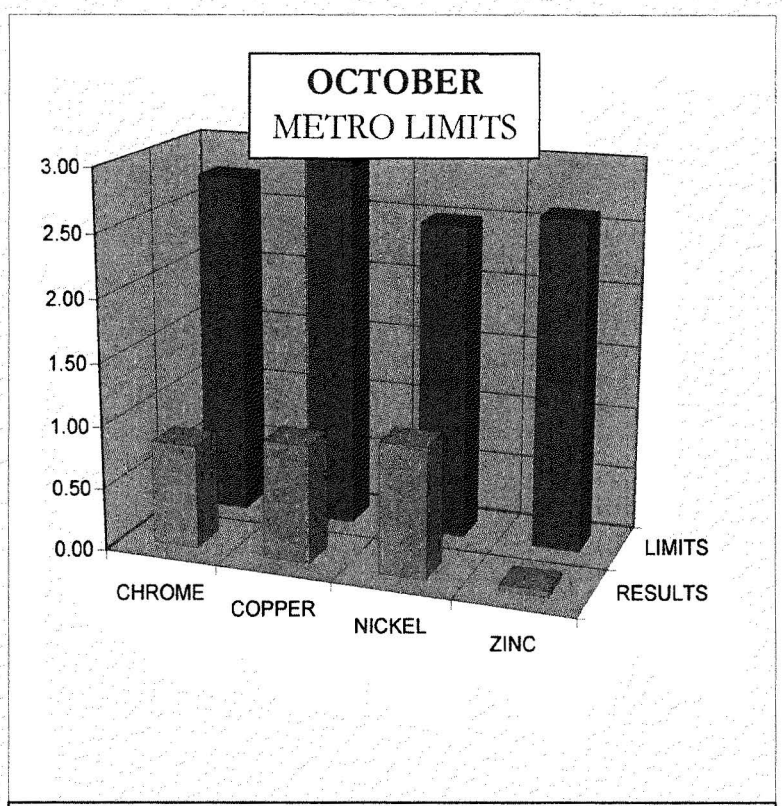
ALASKAN COPPER WORKS
3200 FACILITY
OCOTOBER 22, 2015
COMPOSITE M136833

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	0.14	0.12	0.12	0.05
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.49	0.56	0.57	0.05
LIMITS	2.75	3.00	2.50	2.61



ALASKAN COPPER WORKS
3200 FACILITY
OCTOBER 29, 2015
COMPOSITE M136832

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	0.83	0.94	1.04	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:	M136825	Client:	Alaskan Copper Works
Date Received:	10/01/15	Project:	Metro Self Monitor, M136825
Date Extracted:	10/01/15	Lab ID:	510013-01 x10
Date Analyzed:	10/05/15	Data File:	510013-01 x10.069
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	82	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	588
Copper	694
Nickel	687
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M136835	Client:	Alaskan Copper Works
Date Received:	10/08/15	Project:	Metro Self Monitor PO M136835
Date Extracted:	10/09/15	Lab ID:	510135-01 x10
Date Analyzed:	10/09/15	Data File:	510135-01 x10.021
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

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

Analyte:	Concentration ug/L (ppb)
Chromium	211
Copper	244
Nickel	223
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M136834	Client:	Alaskan Copper Works
Date Received:	10/15/15	Project:	Metro Self Monitor, PO 136834
Date Extracted:	10/16/15	Lab ID:	510230-01 x10
Date Analyzed:	10/16/15	Data File:	510230-01 x10.020
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	91	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	147
Copper	129
Nickel	123
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M136833	Client:	Alaskan Copper Works
Date Received:	10/22/15	Project:	Metro Self Monitor, PO M136833, F&BI 510349
Date Extracted:	10/30/15	Lab ID:	510349-01 x10
Date Analyzed:	10/30/15	Data File:	10-3
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	95	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	492
Copper	567
Nickel	573
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M136832	Client:	Alaskan Copper Works
Date Received:	10/29/15	Project:	Metro Self Monitor, M136832, F&BI 510451
Date Extracted:	10/30/15	Lab ID:	510451-01 x10
Date Analyzed:	10/30/15	Data File:	10-3
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

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

Analyte:	Concentration ug/L (ppb)
Chromium	836
Copper	913
Nickel	1,040
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 7, 2015 by Friedman & Bruya, Inc. from the Landau Associates Alaskan Copper SW 1198001.030.031, F&BI 510096 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Landau Associates
510096 -01	CB330001-100715

All quality control requirements were acceptable.

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	9-28	7 AM	3.8	13	8.1	10.35	–	–	4930	3	118	126	99				
		3 PM	3.5	13	9.60	10.24	–	–	132.7	4	122	126	88				
		11PM	3.5	10	9.96	10.30	–	–	436.7	23	126	123	83				
TUESDAY	9-29	7 AM	3.5	10	9.81	10.27	–	–	436.7	23	119	127	77				
		3 PM	3.5	10	9.70	10.19	–	–	Ø	1	124	128	75				
		11PM	3.5	8	10.81	10.13	–	–	313.0	1	126	122	70				
WEDNESDAY	9-30	7 AM	3.5	8	10.74	10.12	–	–	313.0	1	128	128	68				
		3 PM	3.5	8	10.58	10.08	–	–	Ø	Ø	120	128	67				
		11PM	3.3	6	9.77	10.73	–	–	416.4	Ø	125	128	66				
THURSDAY	10-1	7 AM	3.3	6	9.62	10.70	–	–	416.4	Ø	127	126	64				oakite heater needs reset
		3 PM	3.0	5	10.42	10.57	–	–	419.3	27	126	121	63				
		11PM	2.8	1	10.00	10.54	–	–	1269.7	45	118	126	63				
FRIDAY	10-2	7 AM	2.8	1	7.93	10.47	–	–	1269.7	49	126	128	63				Replaced fused Oakite fixed !!
		3 PM	2.8	16	9.97	10.57	–	–	341.7	16	120	124	126				⑤
		11PM	2.3	14	10.99	10.52	–	–	826.1	40	126	122	123				
SATURDAY																	
SUNDAY																	

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

AKC-0002920

REF. DWG NO. 500-0007 REV. A 1

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	10/5	7 AM	2.2	13		10.21	—	—	826.1	44	121	128	131				
		3 PM	1.7	13	9.87	10.32	—	—	434.6	4	126	118	121				
		11PM	1.7	8	9.56	10.22	—	—	758.8	12	125	120	118				
TUESDAY	10/6	7 AM	1.5	8		10.19	—	—	758.8	16	127	128	108				~~pac press wont open~~ Fixed ☺
		3 PM	1.5	8	9.59	10.10	—	—	Ø	28	127	118	121				
		11PM	1.2	5	9.67	10.20	—	—	804.1	10	126	119	122				
WEDNESDAY	10/7	7 AM	1.2	5	9.79	10.17	—	—	804.1	14	18	128	114				
		3 PM	1.2	5	9.77	10.13	—	—	Ø	19	128	128	119				
		11PM	1.0	2	10.62	9.97	—	—	538.6	16	125	120	115				
THURSDAY	10/8	7 AM	1.0	2	8.47	9.93	—	—	538.6	19	120	126	105				
		3 PM	1.0	2	10.47	9.86	—	—	Ø	4	112	111	125				
		11PM	1.7	15	9.56	10.35	—	—	203.8	4	108	103	121				
FRIDAY	10/9	7 AM	0.7	15	8.31	10.31	—	—	203.8	7	105	109	108				
		3 PM	1.7	15	10.90	10.27	—	-	Ø	3	98	98	128				
		11PM	1.5	14	9.73	10.40	—	—	660.8	37	118	116	123				
SATURDAY																	
SUNDAY																	

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

AKC-0002921

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	10-12	7 AM	1.5	14		10.26	—	—	660.8	40	89	86	123				
		3 PM	1.2	13	9.68	10.17	—	—	758.6	45	91	107	121				
		11PM	.5	11	11.09	10.18	—	—	1335.5	1	126	124	116				
TUESDAY	10-13	7 AM	.5	11.09	11.	10.15	—	—	1335.5	7	128	127	106				Red light keeps coming on for no reason?
		3 PM	.4	11	10.89	10.13	—	—	Ø	3	119	128	128				
		11PM	.2	8	11.35	10.33	—	—	510.3	Ø	119	127	121				
WEDNESDAY	10-14	7 AM	.2	8	9.60	10.31	—	—	510.3	Ø	128	128	109				
		3 PM	.2	8	9.65	10.28	—	—	Ø	8	128	129	127				
		11PM	.Ø	5	9.91	10.15	—	—	606.0	3	118	116	122				
THURSDAY	10-15	7 AM	30.1	5	8.40	10.15	—	—	606.0	1	126	127	102				
		3 PM	29.8	5	10.13	10.12	—	—	Ø	11	119	122	95				
		11PM	29.9	1	9.68	10.41	—	—	477.9	5	123	124	88				
FRIDAY	10-16	7 AM	29.9	1	10.77	10.36	—	—	477.9	8	127	128	82				Oakite tank needs reset — please
		3 PM	29.8	15	9.81	10.37	—	—	920.1	8	121	122	78				
		11PM	29.9	12	10.07	10.20	—	—	1016.2	6	118	125	75				
SATURDAY	10-17		29.9	12	10.90	10.13	—	—	1016.2	9	109	111	70				
SUNDAY																	

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

AKC-0002922

39881.2

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	10-19	7 AM	29.9	12	3.56	10.18	—	—	1016.2	3	127	120	65				2 metro cycles on second shift
		3 PM	29.8	10	9.60	10.31	—	—	Ø	13	125	124	124				
		11PM	29.5	8	10.23	10.37	—	—	Ø	Ø	119	118	124				
TUESDAY	10-20	7 AM	29.5	8	10.90	10.33	—	—	Ø	3	128	130	109				4 metro cycles
		3 PM	29.4	8	9.91	10.28	—	—	Ø	1	121	114	128	Honeywell Recorder 765			
		11PM	29.4	5	9.61	10.31	—	—	Ø	1	121	120	122				
WEDNESDAY	10-21	7 AM	29.4	5	10.15	10.27	—	—	Ø	4	127	129	117				Paddle wheel was Stuck from debri Cleand off is working good! for 2010-1
		3 PM	29.4	4	9.58	10.08	—	—	272.0	9	119	122	128	Honeywell Recorder 510			
		11PM	28.9	1	11.15	10.13	—	—	633.9	1	118	119	123				
THURSDAY	10-22	7 AM	28.9	1	10.28	10.08	—	—	633.9	1	128	129	109				
		3 PM	28.7	1	9.58	10.17	—	—	245.1	11	119	126	128				
		11PM	28.4	13	10.45	10.19	—	—	925.2	16	118	118	124				
FRIDAY	10-23	7 AM	28.4	13	9.95	10.16	—	—	925.2	16	128	128	109				
		3 PM	28.1	13	10.46	10.16	—	—	235.1	17	127	128	125				
		11PM	27.8	10	10.49	10.18	—	—	640.9	4	119	118	119				
SATURDAY																	
SUNDAY																	

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

AKC-0002923

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	10-26	7 AM	27.8	10	2.51	9.94	—	—	640.9	7	121	110	117				
		3 PM	26.7	10	9.92	10.18	—	—	666.0	44	122	125	124				
		11PM	26.7	8	9.59	10.01	—	—	886.5	58	126	118	120				
TUESDAY	10-27	7 AM	26.7	8	12.05	10.03	—	—	886.5	86	128	129	107				
		3 PM	26.5	8	9.56	9.96	—	—	359.4	6	127	122	121				
		11PM	26.5	5	11.17	10.33	—	—	650.4	12	119	118	122				
WEDNESDAY	10-28	7 AM	26.5	5	18.83	10.27	—	—	650.4	12	128	128	109				
		3 PM	25.9	5	10.02	10.28	—	—	434.0	21	125	119	129				
		11PM	25.7	1	11.30	10.16	—	—	721.3	34	126	118	116				
THURSDAY	10-29	7 AM	25.7	1	10.15	10.12	—	—	721.3	34	124	128	108				
		3 PM	25.7	16	9.70	10.06	—	—	213.0	11	128	120	129				
		11PM	25.5	12	9.64	10.13	—	—	856.9	1	127	126	123				
FRIDAY	10-30	7 AM							856.9	8	118	128	110				
		3 PM	24.9	11	9.80	10.31	—	—	83.9	6	127	129	129				
		11PM	24.8	10	11.40	10.35	—	—	749.1	29	128	122	123				
SATURDAY												36					
SUNDAY	11-2-15		24.8	10	3.60	10.27	—	—	749.1	36	120	109	125				

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