King County

Industrial Waste Monthly Self-Monitoring Report

Mail or FAX to: King County Industrial Waste
130 Nickerson Street, Suite 200
Seattle, WA 98109-1658
Phone 206-263-3000 / FAX 206-263-3001

AKC-00031196

Company Name: ALASKAN COPPER WORKS 6TH AVE. S. **Sample Site No.** A-4010 **Permit/DA No.:** 7238-05

Please Specify Month & Year: **Month:** APRIL **2013** **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)	NP Fats, Oils, and Grease (Average of 3 grabs)	Daily Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1		10.8	10.8											1217	
2		10.4	10.5											1760	
3		10.0	10.4											1275	
(4)	C	10.0	10.0		.32	.68			.43		.01			1192	
5		9.8	10.1											777	
6		—	—											—	
7		—	—											—	
8		9.9	10.3											1688	
9		10.1	10.3											1874	
10		10.1	10.2											1341	
(11)	C	9.9	10.2		.28	.50					.04			2031	
12		9.9	10.2											743	
13		9.8	9.8											921	
14		—	—											—	
15		10.3	10.7											717	
16		10.4	10.7											1700	
17		10.2	10.5											1597	
(18)	C	10.0	10.4		.26	.34					.01			1198	
19		9.9	10.0											908	
20		—	—											—	
21		—	—											—	
22		9.5	10.4											1040	
23		10.2	10.4											1067	
24		10.1	10.3											1070	
(25)	C	10.1	10.5		.14	.15			.12		.01			1320	
26		10.1	10.4											907	
27		9.5	9.9											1282	
28		—	—											—	
29		9.5	10.3											729	
30		10.2	10.3											834	
31		—	—											—	

April 2013

Monthly Min pH	9.5	& Date	4/22/13	Total Monthly Flow (gallons)	29188
Monthly Max pH	10.8	& Date	4/1/13	Maximum Daily Flow	2031 & Date 4/11/13

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 5/10/13

PLEASE CIRCLE ALL PERMIT VIOLATIONS

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

King County

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

AKC-0003197

Company Name: ALASKAN COPPER WORKS 6TH AVE. S. **Sample Site No.** A-4010 **Permit/DA No.:** 7238-05

Please Specify Month & Year: **Month:** APRIL **2013** **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)	NP Fats, Oils, and Grease (Average of 3 grabs)	Daily Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1		10.8	10.8											1217	
2		10.4	10.5											1760	
3		10.0	10.4											1275	
(4)	C	10.0	10.0		.32	.68			.43		.01			1192	
5		9.8	10.1											777	
6		—	—											—	
7		—	—											—	
8		9.9	10.3											1688	
9		10.1	10.3											1874	
10		10.1	10.2											1341	
(11)	C	9.9	10.2		.28	.50			.33		.04			2031	
12		9.9	10.2											743	
13		9.8	9.8											921	
14		—	—											—	
15		10.3	10.7											717	
16		10.4	10.7											1700	
17		10.2	10.5											1597	
(18)	C	10.0	10.4		.26	.34			.25		.01			1198	
19		9.9	10.0											908	
20		—	—											—	
21		—	—											—	
22		9.5	10.4											1040	
23		10.2	10.4											1067	
24		10.1	10.3											1070	
(25)	C	10.1	10.5		.14	.15			.12		.01			1320	
26		10.1	10.4											907	
27		9.5	9.9											1282	
28		—	—											—	
29		9.5	10.3											729	
30		10.2	10.3											834	
31		—	—											—	

Monthly Min pH	9.5	& Date	4/22/13	Total Monthly Flow (gallons)	29188
Monthly Max pH	10.8	& Date	4/1/13	Maximum Daily Flow	2031 & Date 4/11/13

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

5/10/13
Date

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

AKC-0003199

Company Name: ALASKAN COPPER WORKS E. MARGINAL WAY **Sample Site No.** A-4010 **Permit/DA No.:** 7201-4

Please Specify Month & Year: **Month:** APRIL **2013** **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)	NP Fats, Oils, and Grease (Average of 3 grabs)	Daily Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
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24															
25															
26															
27															
28															
29															
30															
31															

NOT IN USE THIS MONTH

Monthly Min pH _____ & Date _____ Total Monthly Flow (gallons) _____

Monthly Max pH _____ & Date _____ Maximum Daily Flow _____ & Date _____

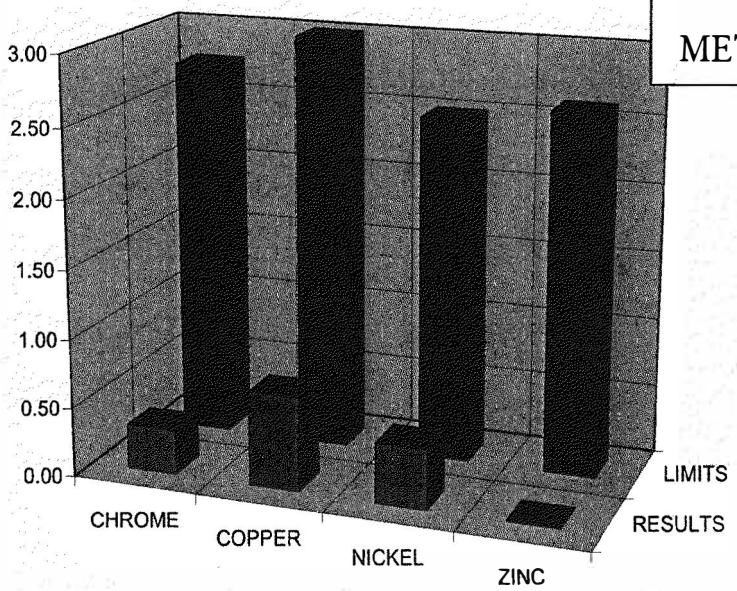
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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 laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

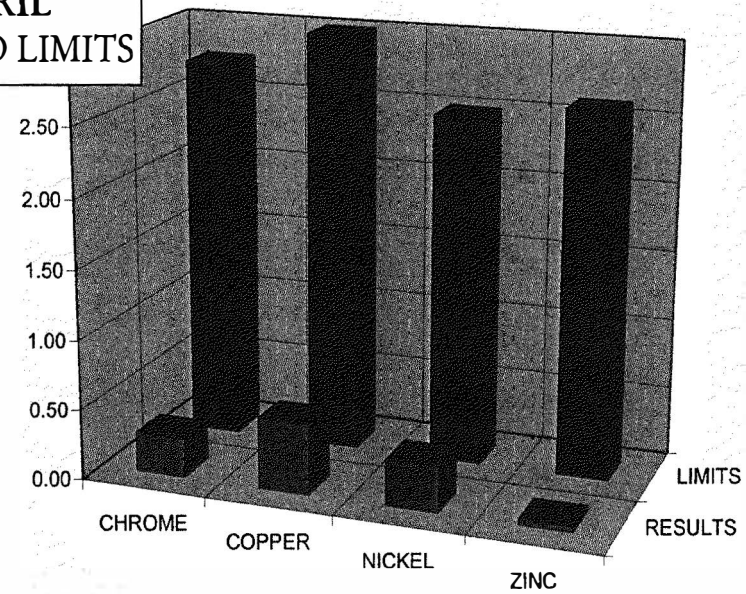
Signature of Principal Executive or Authorized Agent: Tomek Tomczyk Date: 5/10/13

PLEASE CIRCLE ALL PERMIT VIOLATIONS

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

APRIL
METRO LIMITS





ALASKAN COPPER WORKS
3200 FACILITY
APRIL 4, 2013
COMPOSITE M00263

ALASKAN COPPER WORKS
3200 FACILITY
APRIL 11, 2013
COMPOSITE M00325

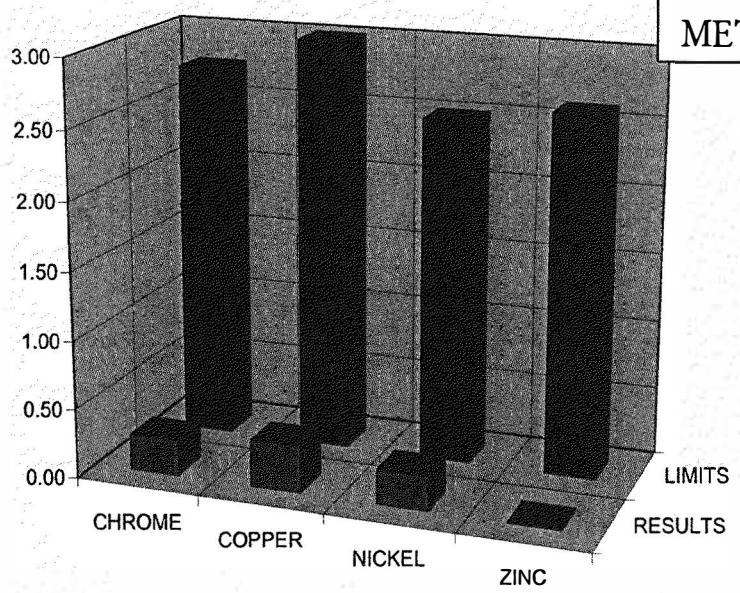
VISUAL REPRESENTATION OF THE LAB RESULTS

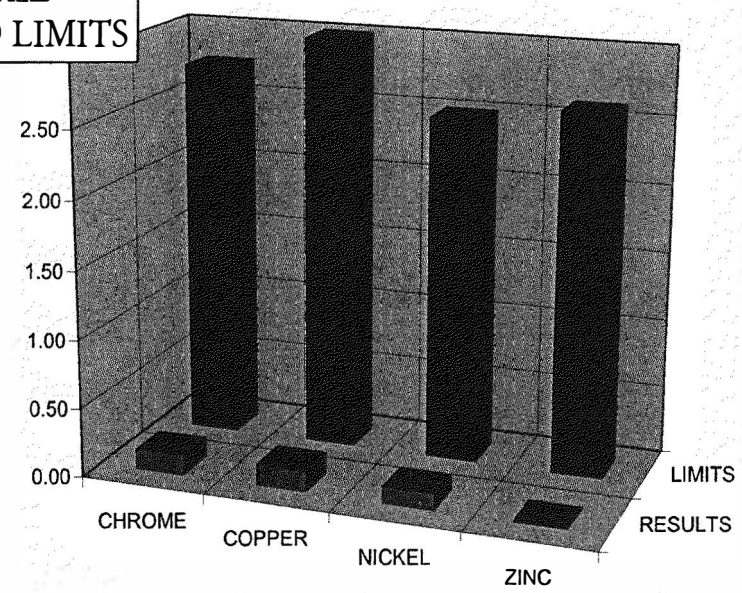
NOTE: ALL LABORATORY RESULTS HAVE BEEN CHANGED FROM **ppb** TO **ppm** FOR REPORTING PURPOSES

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.32	0.68	0.43	0.01
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.28	0.50	0.33	0.04
LIMITS	2.75	3.00	2.50	2.61

APRIL
METRO LIMITS





ALASKAN COPPER WORKS
3200 FACILITY
APRIL 18 , 2013
COMPOSITE M000374

ALASKAN COPPER WORKS
3200 FACILITY
APRIL 25, 2013
COMPOSITE M000405

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	0.26	0.34	0.25	0.01
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.14	0.15	0.12	0.01
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:	M00263	Client:	Alaskan Copper Works
Date Received:	04/04/13	Project:	Metro Self Monitor, PO M00263, F&BI 304117
Date Extracted:	04/08/13	Lab ID:	304117-01 x10
Date Analyzed:	04/08/13	Data File:	304117-01 x10.032
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Chromium	327
Nickel	435
Copper	687
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M00325	Client:	Alaskan Copper Works
Date Received:	04/11/13	Project:	Metro Self Monitor M00325, F&BI 304238
Date Extracted:	04/15/13	Lab ID:	304238-01 x10
Date Analyzed:	04/15/13	Data File:	304238-01 x10.041
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	86	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	288
Nickel	339
Copper	507
Zinc	46.4

AKC-0003202

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M000374	Client:	Alaskan Copper Works
Date Received:	04/18/13	Project:	Metro Self Monitor M000374, F&BI 304354
Date Extracted:	04/22/13	Lab ID:	304354-01 x10
Date Analyzed:	04/22/13	Data File:	304354-01 x10.046
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Chromium	266
Nickel	252
Copper	344
Zinc	17.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M000375A Sm tank	Client:	Alaskan Copper Works
Date Received:	04/18/13	Project:	% of Acid M000375, F&BI 304353
Date Extracted:	04/22/13	Lab ID:	304353-01 x10,000
Date Analyzed:	04/22/13	Data File:	304353-01 x10,000.048
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	96	60	125
Indium	92	60	125
Holmium	97	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	3,060,000
Nickel	3,700,000
Copper	958,000
Zinc	11,100
Arsenic	<10,000
Silver	<10,000
Cadmium	<10,000
Lead	<10,000
Iron	17,200,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M000405	Client:	Alaskan Copper Works
Date Received:	04/25/13	Project:	Metro Self Monitor M000405, F&BI 304475
Date Extracted:	04/29/13	Lab ID:	304475-01 x10
Date Analyzed:	04/30/13	Data File:	304475-01 x10.027
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	86	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	147
Nickel	125
Copper	153
Zinc	13.6

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	4-1-13	7 AM	7.1	0	11.59	10.88	-	-	1217	17	126	126	40				
		3 PM	6.5	13	10.63	9.99	—	—	1760	25	124	128	123				
		11PM	6.5	13	10.56	9.99	—	-	1760	25	128	118	114				
TUESDAY	4-2-13	7 AM	6.5	13	11.04	9.71	—	—	1260	25	128	128	120				
		3 PM	6.5	11	10.01	10.59	—	—	637	2	126	127	121				
		11PM	6.4	8	9.76	10.48	—	—	1275	5	127	126	126				
WEDNESDAY	4-3-13	7 AM	6.4	8	10.26	10.60	—	—	1275	5	127	128	121				
		3 PM	6.2	6	9.64	10.08	—	—	1162	10	127	128	122				
		11PM	6.2	5	9.97	10.01	—	—	1192	11	120	126	118				
THURSDAY	4-4-13	7 AM	6.2	5	9.60	10.03	—	—	1192	11	124	128	135				
		3 PM	5.9	5	9.61	10.06	—	-	249	11	125	122	118				
		11PM	6.0	1	9.71	10.03	—	—	777	16	126	122	124				
FRIDAY	4-5-13	7 AM	5.9	1	9.65	9.96	—	-	777	17	120	128	125				
		3 PM	5.7	16	10.02	9.85	—	—	777	1	119	129	124				Alot of cycles - Suspended 2 tanks - cleaned with pump
		11PM	5.4	15	10.18	10.13	—	-	1688	72	122	122	127				
SATURDAY																	
SUNDAY																	

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

AKC-0003206

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	4-8	7 AM	5.4	15	10.35	9.99	–	–	1688	75	127	126	68				
		3 PM	4.3	13	10.63	9.90	–	–	724	3	95	118	123				
		11PM	3.8	8	9.84	10.34	–	–	1824	22	123	123	122				
TUESDAY	4-9	7 AM	3.8	8	11.44	10.32	–	–	1874	28	bpw	126	142				
		3 PM	3.6	5	9.66	10.28	–	–	222	4	120	126	121				
		11PM	3.6	1	9.84	10.19	–	–	1341	18	122	124	120				
WEDNESDAY	4-10	7 AM	3.6	1	9.76	10.16	–	–	1341	18	123	128	139				No Reset 8
		3 PM	3.6	15	9.58	10.22	–	–	1643	21	134	128	121				
		11PM	3.6	13	10.60	10.15	–	–	2031	27	132	128					
THURSDAY	4-11	7 AM	3.6	13	10.24	10.21	–	–	2031	27	128	118					
		3 PM	3.1	13	10.23	10.03	–	–	165	4	132	128					
		11PM	3.1	10	10.35	9.97	–	–	743	10	119	128					
FRIDAY	4-12	7 AM	3.1	10	10.14	10.20	–	–	743	11	130	125	Exp				
		3 PM	3.2	10	10.20	10.23	–	–	407	3	135	124	96				
		11PM	2.9	8	9.77	9.99	–	–	921	12	131	117	117				
SATURDAY		1 PM	2.9	8	9.68	9.88	–	–	921	12	119	114	94				
		6 PM	2.9	8	10.02	9.89	–	–	217	2	122	119	91				
SUNDAY																	

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

AKC-0003207

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	4-15	7 AM	2.9	8	9.82	10.72	—	—	2[illegible]	2	122	122	119				
		3 PM	2.9	5	10.40	10.49	—	—	900	4	126	119	128				
		11PM	2.9	2	10.21	10.72	—	—	1700	4	121	128	121				
TUESDAY	4-16	7 AM	2.9	2	10.55	10.73	—	—	1700	4	124	118	128				
		3 PM	2.8	2	9.57	10.63	—	—	687	2	121	119	124				
		11PM	2.6	14	9.80	10.41	—	—	1597	9	121	126	121				
WEDNESDAY	4-17	7 AM	2.6	14	9.75	10.45	—	—	1552	9	112	124	128				
		3 PM	2.6	14	10.14	10.28	—	—	174	Ø	124	128	124				
		11PM	2.6	10	9.65	10.56	—	—	1198	6	125	126	120				
THURSDAY	4-18	7 AM	2.6	10	9.52	10.41	—	—	1198	8	126	125	122				
		3 PM	2.6	10	9.94	10.25	—	—	289	8	120	123	124				
		11PM	2.4	8	9.66	10.09	—	—	908	23	125	119	120				
FRIDAY	4-19	7 AM	2.4	8	10.33	9.99	—	—	908	26	122	124	128				
		3 PM	2.4	5	9.72	9.97	—	—	427	13	131	120	124				
		11PM	2.3	3	11.10	10.02	—	—	1040	34	130	122	121				
SATURDAY																	
SUNDAY																	

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

AKC-0003208

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	4-22	7 AM	2.2	3	10.14	9.56	—	-	1040	34	112	126					
		3 PM	1.9	16	10.38	10.11	—	—	188	2	124	129	82				
		11PM	1.7	15	9.76	10.42	—	—	1067	12	121	116	121				
TUESDAY	4-23	7 AM	1.7	15	10.11	10.24	—	—	1067	13	122	123	126				-fan broke above door - turned off breaker
		3 PM	1.7	13	10.42	10.26	—	—	370	3	128	121	124				
		11PM	1.4	12	9.70	10.44	—	—	1070	12	126	116	120				
WEDNESDAY	4-24	7 AM	1.4	12	9.70	10.28	—	—	1070	12	122	117	125				
		3 PM	1.4	9	10.08	10.17	—	—	177	4	129	122	121				
		11PM	.9	4	10.49	10.36	—	—	1320	27	137	117	118				
THURSDAY	4-25	7 AM	.9	4	11.51	10.17	—	—	1320	33	124	124	125				
		3 PM	.7	16	10.25	10.10	—	—	234	Ø	126	121	124				
		11PM	.7	15	10.52	10.54	—	—	907	7	137	116	130				
FRIDAY	4-26	7 AM	.7	15	10.79	10.44	—	—	907	7	130	128	116				
		3 PM	3.4	12	10.21	10.30	—	—	535	6	119	127	125				
		11PM	2.9	10	10.72	10.18	—	—	1282	26	125	125	121				
SATURDAY	4-27	6:00AM	2.9	10	9.99	9.99	—	—	1282	27	114	114	107				
		1:00	2.9	10	10.00	9.80	—	—	1282	1	117	121	101				
		9:00	2.7	8	10.83	9.56	—	—	2011	1	125	105	93				
SUNDAY																	

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