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-0003325

Company Name: ALASKAN COPPER WORKS 3600 E. MARGINAL WAY **Sample Site No.** A-4009 **Permit/DA No.:** 7201-4

Please Specify Month & Year: **Month:** DECEMBER **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)	Nonpolar Fats, Oils, & Grease (Average of 3 grabs)	Daily Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1															
2															
3															
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27															
28															
29															
30															
31															

Dec 2013

NOT IN USE T

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

1/9/14 Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

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

King County

Industrial Waste Monthly Self-Monitoring Report

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

AKC-0003326

Company Name: ALASKAN COPPER WORKS 3600 E. MARGINAL WAY **Sample Site No.** A-4009 **Permit/DA No.:** 7201-4

Please Specify Month & Year: **Month:** DECEMBER **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)	Nonpolar Fats, Oils, & Grease (Average of 3 grabs)	Daily Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1															
2															
3															
4															
5															
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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 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: Tomoyo Yamm Date: 1/9/14

PLEASE CIRCLE ALL PERMIT VIOLATIONS

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

Industrial Waste Monthly Self-Monitoring Report

King County

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

AKC-0003327

Company Name: ALASKAN COPPER WORKS 3200 6TH AVE. S. Sample Site No. A-4010 Permit/DA No.: 7238-05

Please Specify Month & Year: Month: DECEMBER 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)	Nonpolar Fats, Oils, & Grease (Average of 3 grabs)	Daily Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1		--------	--------												
2		10.3	10.7											1001	
3		10.7	10.7											1128	
4		10.4	10.6											533	
(5)	C	10.3	10.4		.42	.43			.46		.01			730	
6		10.2	10.3											353	
7		———	———											----------	
8		———	———											----------	
9		10.0	10.4											614	
10		10.4	10.6											548	
11		10.5	10.6											914	
(12)	C	10.1	10.4		.33	.32			.35		.01			1317	
13		9.9	10.0											1095	
14		———	———											----------	
15		———	--------											----------	
16		9.8	10.4											902	
17		10.0	10.3											1416	
18		9.8	10.7											1237	
(19)	C	10.2	10.7		.23	.17			.17		.01			891	
20		10.0	10.2											1092	
21		———	--------											----------	
22		--------	--------											----------	
23		9.7	9.9											1021	
24		--------	———											----------	CHRISTMAS
25		———	———											----------	HOLIDAY
26		9.5	10.1											1102	
(27)	C	9.9	10.7		.16	.24			.23		.06			1068	
28		--------	--------											----------	
29		--------	———											----------	
30		10.2	10.4											708	
31		10.0	10.3											1060	

Monthly Min pH	9.5	& Date	12/26/13	Total Monthly Flow (gallons)	18730
Monthly Max pH	10.7	& Date	12/2/13	Maximum Daily Flow	1416 & Date 12/17/13

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

James Brown 1/9/14 Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

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

Industrial Waste Quarterly Self-Monitoring Report

King County

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-0003328

Company Name: **ALASKAN COPPER WORKS 6TH AVE. S.**

This form is available at www.kingcounty.gov/industrialwaste.

Please specify year: **2013** **QUARTER 4** **Sample Site No.:** **A-40102** **Permit/DA No.:** **7238-05**

All units are mg/l unless otherwise noted. Note: Write in self-monitoring parameters, if not provided, e.g. Silver (Ag); delete or ignore FOG or SS, if not required.

Month	Sample Date	Sample Type C (Composite) G (Grab) BC (Batch)	pH	Chrome, Cr	Silver, Ag	Non-Polar fats, oils & grease (FOG) (Record average only)	Settleable Solids (ml/L)	Discharge Volume on sample day (gallons)	Total Monthly Flow (gallons)
October									1150
	Total volume discharged for October								
November									950
	Total volume discharged for November								
December									1000
	12/12	G	6.24	1.23	.11				
	Total volume discharged for December								

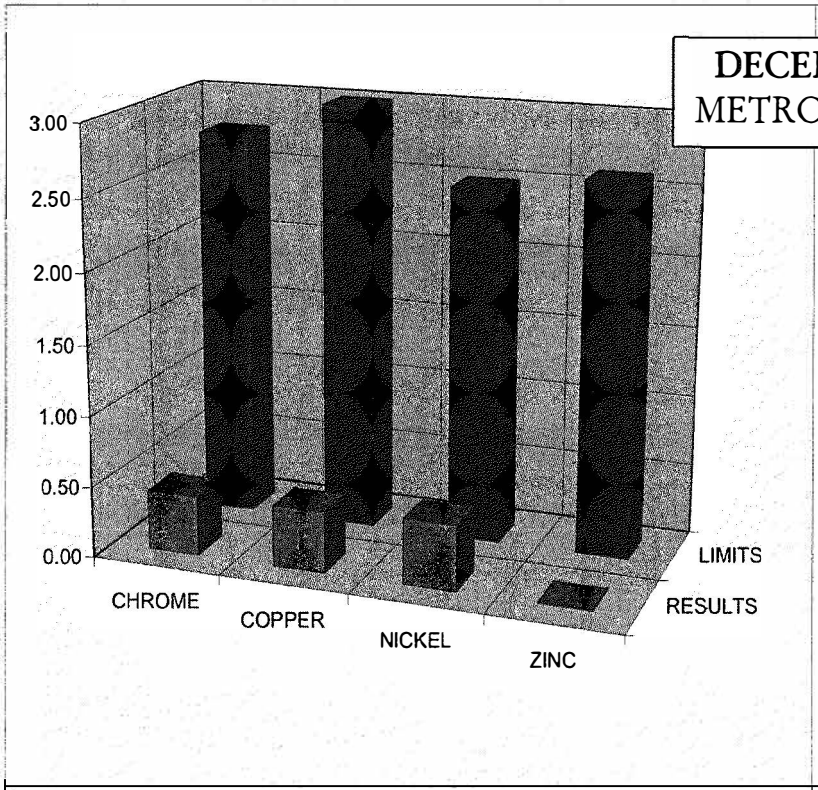
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

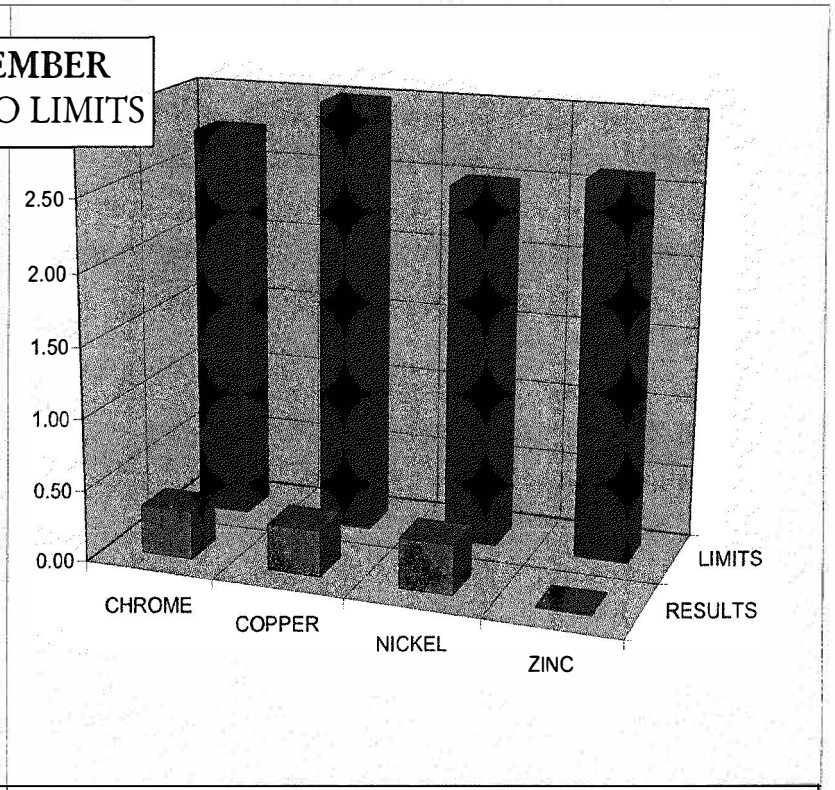
Signature of Principal Executive or Authorized Agent

1/9/14
Date

→ Maximum daily flow from this quarter: **50** **gallons.** Date on which maximum daily flow occurred: **12/12**

Due Date: **Fourth Quarter Report is due by January 15 of each year.**





ALASKAN COPPER WORKS 3200 FACILITY DECEMBER 5, 2013 COMPOSITE M001329	ALASKAN COPPER WORKS 3200 FACILITY DECEMBER 12, 2013 COMPOSITE M133499

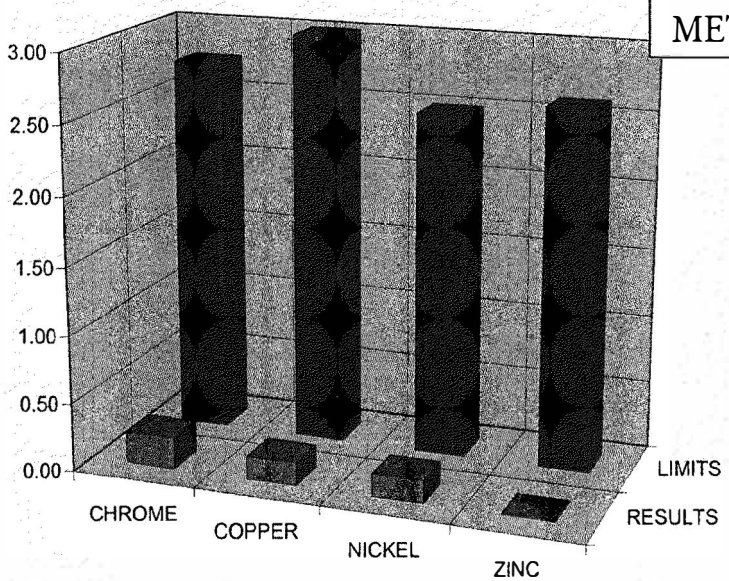
VISUAL REPRESENTATION OF THE LAB RESULTS

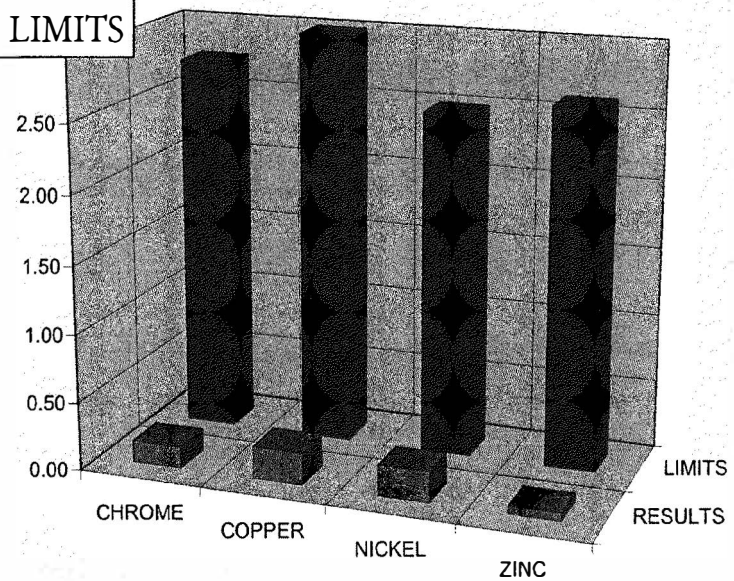
NOTE: ALL LABORATORY RESULTS HAVE BEEN CHANGED FROM **ppb** TO **ppm** FOR REPORTING PURPOSES

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.42	0.43	0.46	0.01
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.33	0.32	0.35	0.01
LIMITS	2.75	3.00	2.50	2.61

DECEMBER
METRO LIMITS





ALASKAN COPPER WORKS
3200 FACILITY
DECEMBER 19, 2013
COMPOSITE M001384

ALASKAN COPPER WORKS
3200 FACILITY
DECEMBER 27, 2013
COMPOSITE M133596

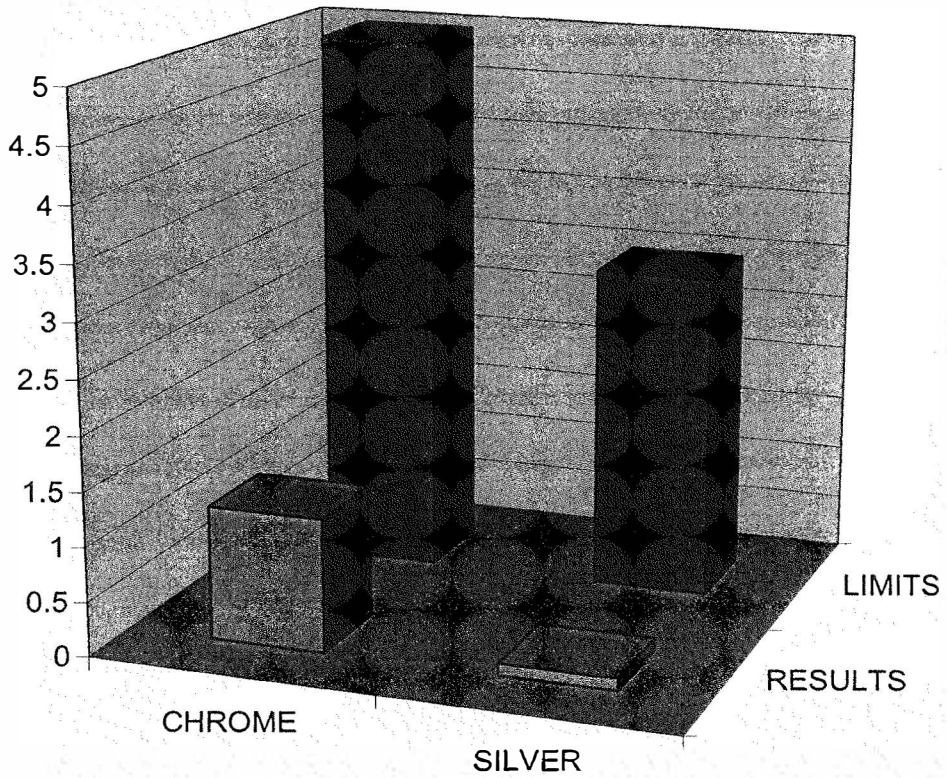
VISUAL REPRESENTATION OF THE LAB RESULTS

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

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.23	0.17	0.17	0.01
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.16	0.24	0.23	0.06
LIMITS	2.75	3.00	2.50	2.61

3Rd
QUARTER



ALASKAN COPPER WORKS
3200 X-RAY DEPT.
DECEMBER 12, 2013
GRAB M133498

	CHROME	SILVER
RESULTS	1.23	0.11
LIMITS	5.00	3.00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/17/13
Date Received: 12/12/13
Project: X-Ray Self Monitor M133498, F&BI 312188
Date Extracted: NA
Date Analyzed: 12/13/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR pH USING EPA METHOD 9040C

Sample ID Laboratory ID	pH
M133498 312188-01	6.24

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M001329	Client:	Alaskan Copper Works
Date Received:	12/05/13	Project:	M001329, F&BI 312075
Date Extracted:	12/10/13	Lab ID:	312075-01 x10
Date Analyzed:	12/10/13	Data File:	312075-01 x10.049
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	104	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	424
Nickel	464
Copper	436
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M133499	Client:	Alaskan Copper Works
Date Received:	12/12/13	Project:	Metro Self Monitor M133499
Date Extracted:	12/13/13	Lab ID:	312187-01 x10
Date Analyzed:	12/13/13	Data File:	312187-01 x10.070
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	333
Nickel	353
Copper	325
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M133500A Sm Tank	Client:	Alaskan Copper Works
Date Received:	12/12/13	Project:	Acid Tanks M133500, F&BI 312190
Date Extracted:	12/13/13	Lab ID:	312190-01 x10,000
Date Analyzed:	12/13/13	Data File:	312190-01 x10,000.043
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)
Copper	1,330,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M001384	Client:	Alaskan Copper Works
Date Received:	12/19/13	Project:	METRO Self Monitor M001384, F&BI 312315
Date Extracted:	12/20/13	Lab ID:	312315-01 x10
Date Analyzed:	12/20/13	Data File:	312315-01 x10.076
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	231
Nickel	177
Copper	173
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M133596	Client:	Alaskan Copper Works
Date Received:	12/27/13	Project:	M133596, F&BI 312403
Date Extracted:	12/27/13	Lab ID:	312403-01 x10
Date Analyzed:	12/30/13	Data File:	312403-01 x10.027
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	97	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	168
Nickel	234
Copper	249
Zinc	62.3

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	12-2-13	7 AM	23.3	12	12.17	10.30	–	✓	1001	13	127	122	119				
		3 PM	22.6	10	11.15	10.45	–	–	727	Ø	125	117	127				
		11PM	23.0	10	10.63	10.76	–	–	1128	Ø	123	108	115				
TUESDAY	12-3-13	7 AM	23.0	10	10.63	10.76	–	–	1128	Ø	124	117	108				
		3 PM	22.6	10	10.38	10.77	–	–	184	Ø	131	120	124				
		11PM	22.6	10	10.28	10.71	–	–	533	Ø	126	114	117				
WEDNESDAY	12-4-13	7 AM	22.6	10	9.57	10.67	–	–	533	Ø	121	125	110				
		3 PM	22.1	10	10.93	10.56	–	–	174	Ø	130	130	126				
		11PM	22.1	10	10.65	10.44	–	–	730	Ø	134	111	112				
THURSDAY	12-5-13	7 AM	22.3	9	11.11	10.52	–	–	730	Ø	136	121	111				
		3 PM	22.1	8	10.53	10.41	–	–	Ø	Ø	135	119	134				
		11PM	22.0	8	10.97	10.37	–	–	353	2	126	110	114				
FRIDAY	12-6-13	7 AM	22.0	8	10.28	10.33	–	–	353	2	116	90	107				
		3 PM	21.9	8	10.04	10.26	–	–	Ø	Ø	115	124	122				
		11PM	22	8	10.98	10.24	–	–	614	Ø	125	112	113				
SATURDAY																	
SUNDAY																	

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

AKC-0003338

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	12-9	7 AM	21.8	8	10.6	10.13	—	—	614	Ø	92	47	87				
		3 PM	21.8	8	11.43	10.04	—	—	Ø	Ø	127	134	121				
		11PM	21.5	8	10.02	10.42	—	—	548	Ø	123	95	114				
TUESDAY	12-10	7 AM	21.5	8	11.01	10.42	-	-	548	Ø	122	120	110				
		3 PM	21.5	8	11.29	10.62	—	—	246	Ø	123	116	120				Need to check-pac press
		11PM	21.7	8	10.52	10.68	—	—	914	11	118	101	110				
WEDNESDAY	12-11	7 AM	21.7	8	10.23	10.66	-	-	914	11	125	116	108				
		3 PM	21.7	8	11.65	10.50	—	—	240	Ø	125	128	129				
		11PM	21.6	7	10.83	10.56	—	—	1317	Ø	118	59	112				
THURSDAY	12-12	7 AM	21.6	7	10.16	10.49	-	-	1317	Ø	118	82	109				
		3 PM	21.7	7	10.24	10.19	—	—	504	2	120	127	120				
		11PM	21.2	7	10.26	10.19	—	—	1095	5	123	117	118				
FRIDAY	12-13	7 AM	21.2	7	11.82	10.02	-	-	1095	5	123	127	116				
		3 PM	20.9	7	9.83	10.00	—	—	Ø	Ø	124	135	130				
		11PM	20.7	7	10.19	9.91	—	—	902	Ø	120	119	113				
SATURDAY																	
SUNDAY																	

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

AKC-0003339

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	12-16	7 AM	20.7	7	11.44	9.82	–	–	902	Ø	130	107	118				
		3 PM	21.0	7	11.26	10.02	–	–	610	2	121	118	104				
		11PM	21.1	7	9.73	10.47	–	–	1416	8	117	128	94				
TUESDAY	12-17	7 AM	21.1	7	11.56	10.37	–	–	1416	11	128	128	88				
		3 PM	20.6	7	9.97	10.12	–	–	559	3	126	128	82				
		11PM	20.6	7	10.64	10.07	–	–	1237	5	137	123	75				
WEDNESDAY	12-18	7 AM	20.7	7	10.60	10.34	–	–	1237	5	120	124	71				
		3 PM	20.7	7	12.28	9.83	–	–	Ø	Ø	121	120	68				- OAKITE TANK Not heating up?
		11PM	21.1	7	10.04	10.77	–	–	891	9	127	126	63				
THURSDAY	12-19	7 AM	21.1	7	10.32	10.72	–	–	891	9	127	127	60				
		3 PM	21.0	7	10.06	10.63	–	–	711	Ø	120	128	126				
		11PM	21.1	7	10.20	10.24	–	–	1092	2	116	121	119				
FRIDAY	12-20	7 AM	21.1	7	10.51	10.20	–	–	1092	2	133	128	108				
		3 PM	20.9	6	10.60	10.11	–	–	1322	Ø	129	122	119				
		11PM	20.9	6	10.18	10.00	–	–	2113	1	119	115	122				
SATURDAY																	
SUNDAY																	

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

AKC-0003340

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	12/23	7 AM	20.9	6	10.16	9.71	–	–	2113	1	124	113	120				Forgot to Reset ? 2113 1092 1021
		3 PM	20.6	6	9.60	9.78	–	–	2844	8	128	128	126				
		11PM	20.5	6	10.27	9.94	–	–	3305	Ø	124	124	123				
TUESDAY	12/24	7 AM															21 3305 2113 1102
		3 PM															
		11PM															
WEDNESDAY	12/25	7 AM	20.5	6	10.15	9.56	–	–	3305	3	122	127	62				
		3 PM															
		11PM															
THURSDAY	12/26	7 AM	20.5	6	10.15	9.56	–	–	1102	3	122	127	62				4373 3305 1068
		3 PM	20.5	6	10.36	9.69	–	–	3307	4	119	124	96				
		11PM	20.5	6	10.72	10.13	–	–	4373	2	122	125	117				
FRIDAY	12/27	7 AM	20.5	6	10.29	9.98	–	–	4373	2	124	128	104				
		3 PM	20.4	6	10.21	9.98	–	–	169	5	127	126	123				
		11PM	20.2	6	11.50	10.75	–	–	1065	6	134	126	118				
SATURDAY																	
SUNDAY																	

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