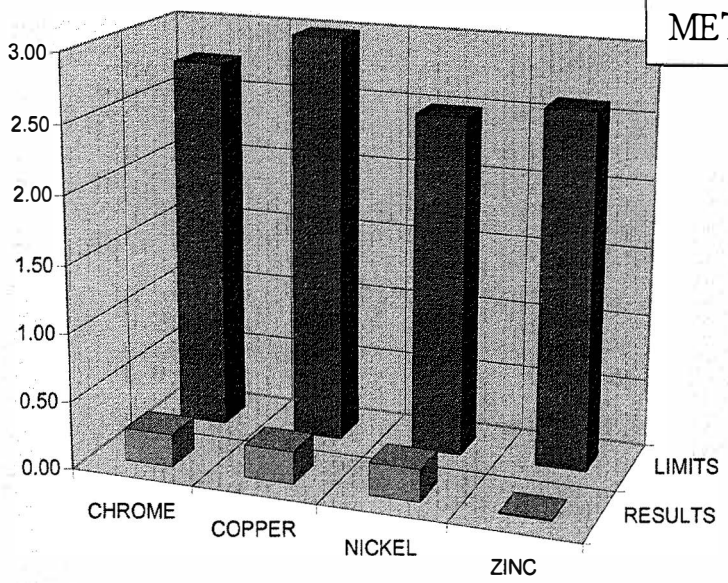
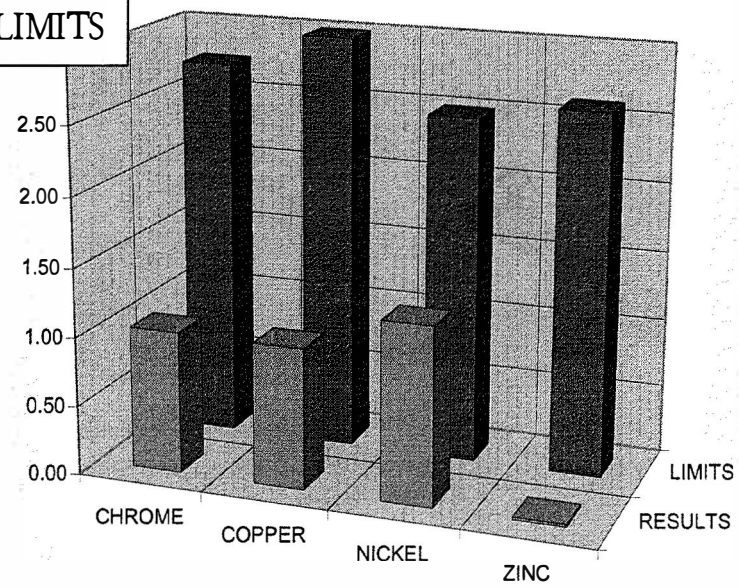
DECEMBER
METRO LIMITS





ALASKAN COPPER WORKS
3200 FACILITY
DECEMBER 16, 2010
COMPOSITE M126853

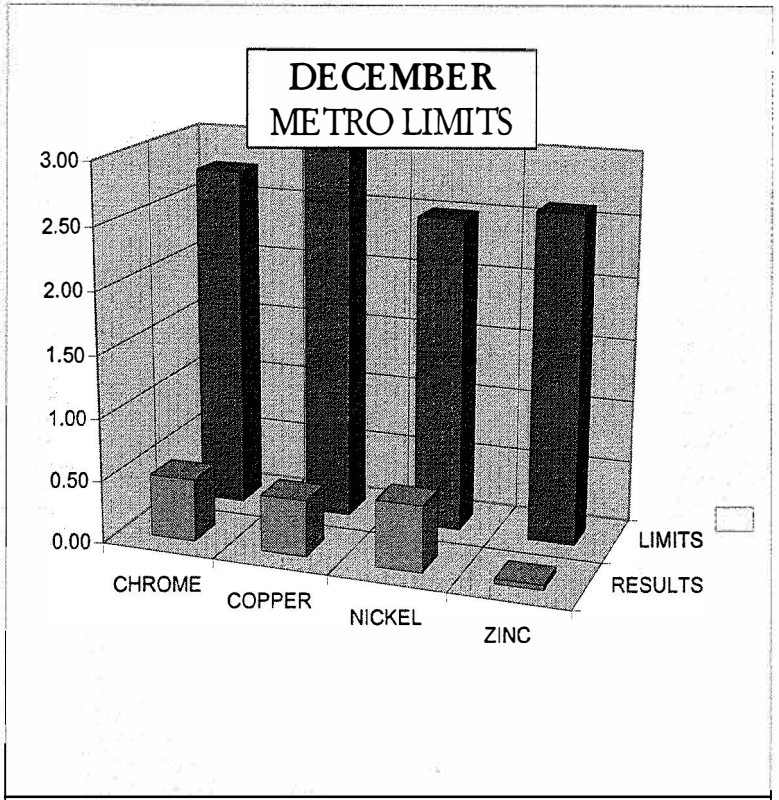
ALASKAN COPPER WORKS
3200 FACILITY
DECEMBER 22 , 2010
COMPOSITE M126911

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	0.24	0.24	0.24	0.01
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	1.03	1.02	1.29	0.02
LIMITS	2.75	3.00	2.50	2.61



ALASKAN COPPER WORKS
3200 FACILITY
DECEMBER 29, 2010
COMPOSITE M126957

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	0.50	0.45	0.53	0.04
LIMITS	2.75	3.00	2.50	2.61

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	11/29	7 AM	3.5	7	8.00	9.50	—	—	531	109	99	83	111				56
		3 PM	3.6	5	9.58	10.05	—	—	947	40	109	96	126				
		11PM	2.5	15	12.08	9.62	—	—	1729	68	113	98	120				16
TUESDAY	11/30	7 AM	2.5	16	[illegible]	[illegible]	—	—	1720	27	117	[illegible]	130				
		3 PM	8.8	15	9.58	9.57	—	—	675	88	116	109	115				
		11PM	8.5	13	11.64	9.53	—	—	1069	132	121	115	124				16
WEDNESDAY	12/1	7 AM	8.5	13	10.99	9.49	—	—	1069	132	119	112	129				checkpoint
		3 PM	7.7	8	9.96	9.67	—	—	831	4	125	1.2	118				
		11PM	7.8	20	9.99	9.68	—	—	1670	26	120	118	122				16
THURSDAY	12/2nd	7 AM	7.5	18	9.59	9.59	—	—	1670	27	119	119	124				
		3 PM	7.5	17	9.74	9.59	—	—	1676	9	124	127	110				
		11PM	7.5	15	10.57	9.94	—	—	969	32	121	124	126				16
FRIDAY	12/3rd	7 AM	7.3	15	7.35	9.84	—	—	969	41	120	122	132				64
		3 PM	7.0	15	10.09	9.96	—	—	760	60	119	121	120				
		11PM	6.3	13	10.08	9.87	—	—	1112	68	124	116	121				16
SATURDAY	4th																
SUNDAY	5th																

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

AKC-0004556

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	12/6	7 AM	6.3	13	6.84	9.76			1112	74	96	92	124				
		3 PM	5.9	12	9.96	9.67	–	–	514	32	107	103	126				
		11PM	5.8	10	9.65	9.57	–	–	888	44	114	108	118				16
TUESDAY	12/7	7 AM	6.0	10	9.77	9.51			1035	44	114	109	131				
		3 PM	5.6	9	10.57	9.46	–	–	355	31	118	112	116				
		11PM	5.0	7	7.22	8.60	–	–	1108	66	123	113	122				16
WEDNESDAY	12/8	7 AM	5.0	7	9.45	9.46	–	–	1108	69	121	110	139				
		3 PM	4.0	4	9.70	9.50	–	–	759	16	122	120	118				Chemicals Prime
		11PM	3.7	16	11.29	9.43	–	–	1490	43	123	125	125				
THURSDAY	12/9	7 AM	3.8	15	11.2	9.35	–	–	1490	43	119	122	133				64
		3 PM	3.5	13	9.52	9.73	–	–	615	31	122	124	113				
		11PM	2.5	13	10.03	9.72	–	–	969	67	127	127	126				16
FRIDAY	12/10	7 AM	2.5	13	9.80	9.65	–	–	969	67	123	125	134				
		3 PM	2.5	10	11.16	9.54	–	–	585	12	127	119	116				16
		11PM	2.5	8	9.65	9.64	–	–	1010	41	119	118	125				Flowing to MCT
SATURDAY	12/11																
SUNDAY	12/12																

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

AKC-0004557

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	12/13	7 AM	2.2	8	6.67	9.76	—	—	1115	48	83	82	128				
		3 PM	2.2	4	11.01	9.58	—	—	841	37	94	100	128				
		11PM	2.0	15	11.72	9.59	—	—	1604	90	105	109	124				16
TUESDAY	12/14	7 AM	2.0	15	10.42	9.52	—	—	1604	90	106	105	138				
		3 PM	1.5	13	10.00	9.50	—	—	1206	41	114	108	114				
		11PM	1.0	10	9.57	9.47	—	—	2128	101	117	115	124				16
WEDNESDAY	12/15	7 AM	1.0	10	9.85	9.37	—	—	2128	107	115	116	139				64 Cleaned probe
		3 PM	29.7	7	9.76	9.66	—	—	699	67	118	121	120				
		11PM	29.7	7	10.75	9.66	—	—	879	84	124	126	126				16
THURSDAY	12/16	7 AM	30.0	7	8.13	9.57	—	—	879	100	121	122	135				
		3 PM	29.2	6	9.74	9.81	—	—	798	11	126	124	115				
		11PM	29.0	10	10.71	9.85	—	—	1158	46	124	120	126				16
FRIDAY	12/17	7 AM	28.9	17	10.41	9.81	—	—	1158	46	120	117	130				
		3 PM	28.6	15	9.94	9.94	—	—	595	36	123	120	117				
		11PM	28.4	15	9.72	9.90	—	—	927	67	126	121	126				16
SATURDAY	12/18																
SUNDAY	12/19																

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

AKC-0004558

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	12/20	7 AM	28.9	15	12.0	9.7	—	—	927	80	91	91	135				
		3 PM	28.5	18	10.49	9.55	—	—	282	25	99	99	126				
		11PM	27.9	12	9.55	9.73	—	—	842	53	105	103	127				16
TUESDAY	12/21	7 AM	27.7	12	9.52	9.64	—	—	842	58	104	103	131				Forgot to Reset flow & cycles
		3 PM	26.8	10	10.56	9.73	—	—	1542	78	107	116	112				
		11PM	26.7	8	9.74	9.70	—	—	1930	92	114	121	124				16
WEDNESDAY	12/22	7 AM	26.4	8	9.52	9.71	—	—	1930	95	118	119	139				
		3 PM	26.2	6	10.55	9.5	—	—	918	20	115	123	128				
		11PM	25.7	18	9.67	10.05	—	—	1524	47	115	119	125				16
THURSDAY	12/23	7 AM	26.0	18	9.40	9.92	—	—	1524	51	111	115	133				
		3 PM	24.9	17	11.02	9.97	—	—	303	36	114	121	122				
		11PM	24.7	17	12.40	9.95	—	—	841	59	119	126	125				16
FRIDAY	12/24	7 AM															
		3 PM															
		11PM															
SATURDAY	12/25																
SUNDAY	12/26																

AKC-0004559

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

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	12/27	7 AM															
		3 PM															
		11PM															
TUESDAY	12/28	7 AM	24.5	17	10.99	9.63	—	—	841	60	115	122	141				
		3 PM	24.1	15	10.21	9.52	—	—	769	20	117	124	113				
		11PM	24.1	12	9.63	9.48	—	—	1189	46	122	122	126				No
WEDNESDAY	12/29	7 AM	23.9	12	9.88	9.45	—	—	1189	46	118	118	136				Check pressure
		3 PM	23.8	10	9.71	9.70	—	—	464	5	123	119	125				
		11PM	23.5	8	9.72	9.55	—	—	1194	63	124	116	122				not flowing
THURSDAY	12/30	7 AM	23.2	8	9.30	9.60	—	—	1284	66	120	115	138				
		3 PM	23.1	6	4.40	9.52	—	—	194	12	124	120	120				
		11PM	22.0	19	9.61	9.76	—	—	840	79	125	121	120				not flowing at shut down
FRIDAY	12/31	7 AM	22.4	19	10.41	9.86	—	—	1052	82	117	118	134				
		3 PM	21.5	18	9.86	9.59	—	—	388	36	122	124	121				
		11PM	21.2	17	9.51	9.63	—	—	626	50	122	117	126				not flowing
SATURDAY	1/1																
SUNDAY	1/2																

AKC-0004560

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

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-0004561

Company Name: ALASKAN COPPER WORKS 6TH AVE. S. **Sample Site No.** A4010 **Permit/DA No.:** 7238-04

Please Specify Month & Year: **Month:** DECEMBER **2010** **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		9.5	9.6											1069	
(2)	C	9.6	9.9		.58	.35			.60		.01			1670	
3		9.8	10.0											969	
4		---------	---------											----------	
5		---------	---------											----------	
6		9.6	9.7											1112	
7		9.5	9.6											1035	
(8)	C	9.5	9.6											1108	
9		9.5	9.8		.24	.16			.21		.02			1490	
10		9.5	10.0											969	
11		---------	---------											----------	
12		---------	---------											----------	
13		9.5	9.7											1115	
14		9.5	9.5											1604	
15		9.5	9.6											2128	
(16)	C	9.5	9.9		.24	.24			.24		.01			879	
17		9.8	9.9											1158	
18		---------	---------											----------	
19		---------	---------											----------	
20		9.6	9.7											927	
21		9.6	9.7											842	
(22)	C	9.6	10.0		1.03	1.02			1.29		.04			1930	
23		9.9	10.0											1524	
24		---------	---------											----------	
25		---------	---------											----------	
26		---------	---------											----------	
27		---------	---------											----------	
28		9.5	9.6											841	
(29)	C	9.5	9.7		.50	.45			.53		.04			1189	
30		9.6	9.7											1284	
31		9.6	9.9											1052	

Monthly Min pH	9.5	& Date	12-1-10	Total Monthly Flow (gallons)	25895
Monthly Max pH	10.0	& Date	12-3-10	Maximum Daily Flow	2128 & Date 12-15-10

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

1/12/11
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

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-0004562

Company Name: ALASKAN COPPER WORKS E. MARGINAL WAY **Sample Site No.** A4009 **Permit/DA No.:** 7201-04

Please Specify Month & Year: **Month:** DECEMBER **2010** **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															
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31															

NOT IN USE THIS MONTH

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

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

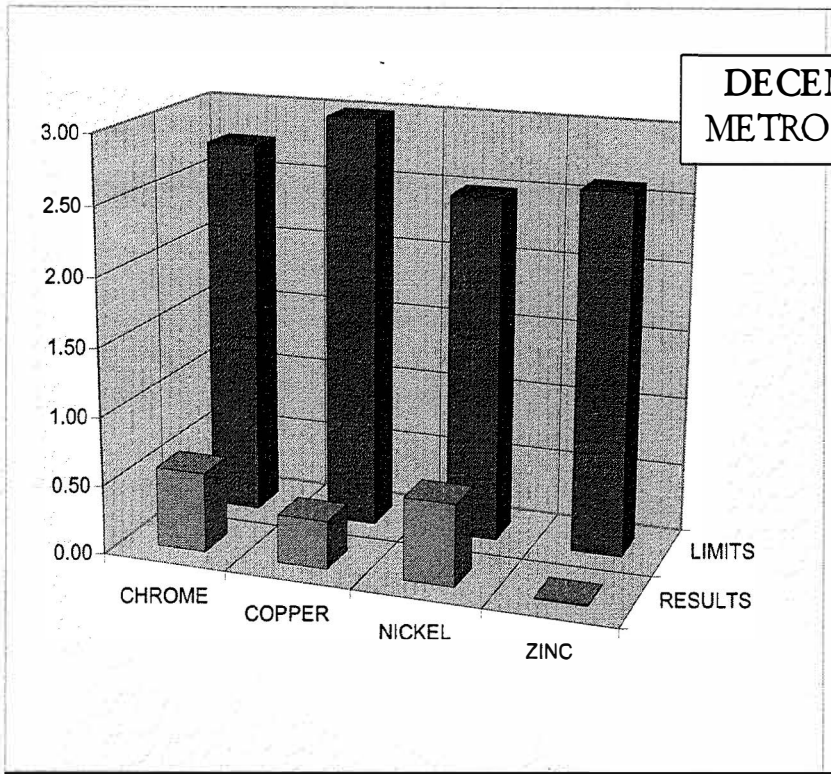
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

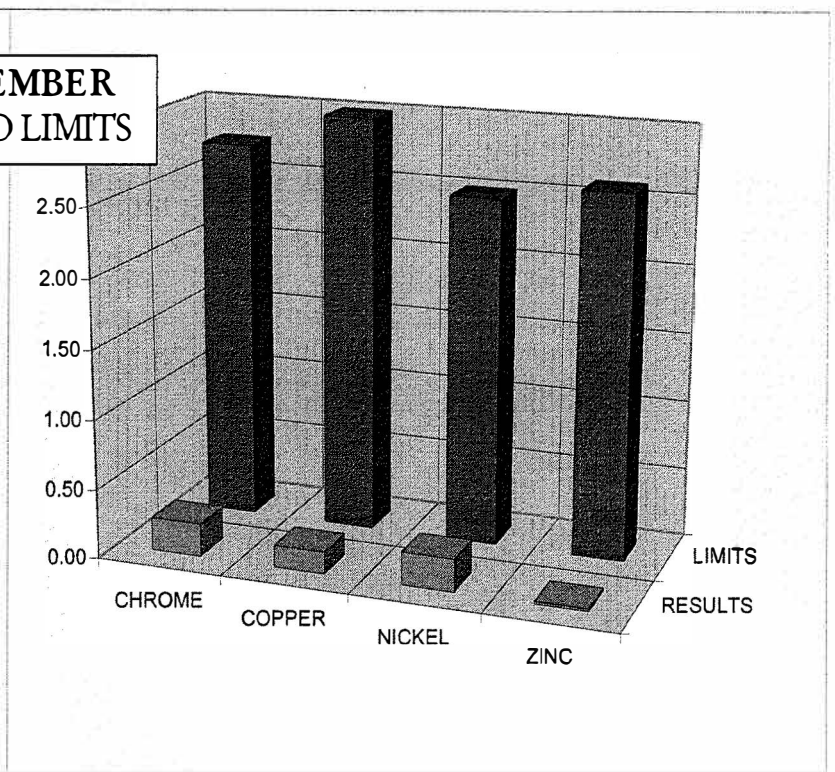
Signature of Principal Executive or Authorized Agent

1/12/11
Date

PLEASE CIRCLE ALL PERMIT VIOLATIONS

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





ALASKAN COPPER WORKS 3200 FACILITY DECEMBER 2, 2010 COMPOSITE M06419	ALASKAN COPPER WORKS 3200 FACILITY DECEMBER 8, 2010 COMPOSITE M126769

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	0.35	0.60	0.01
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.24	0.16	0.24	0.02
LIMITS	2.75	3.00	2.50	2.61