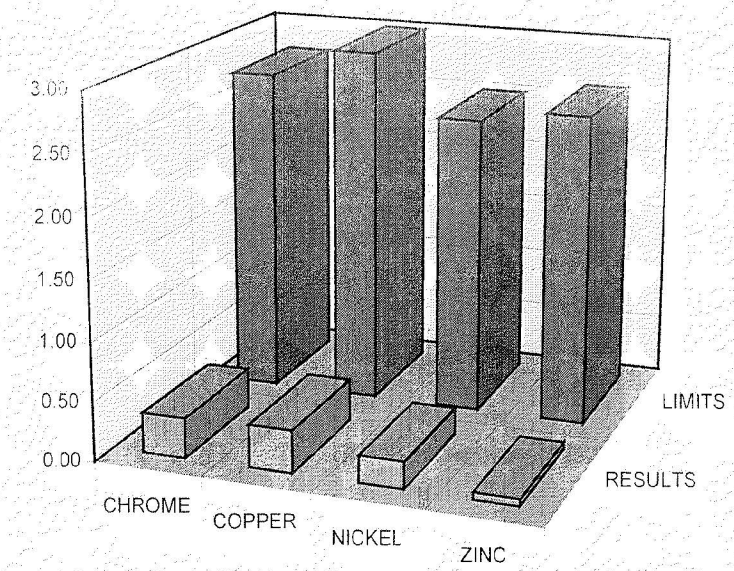
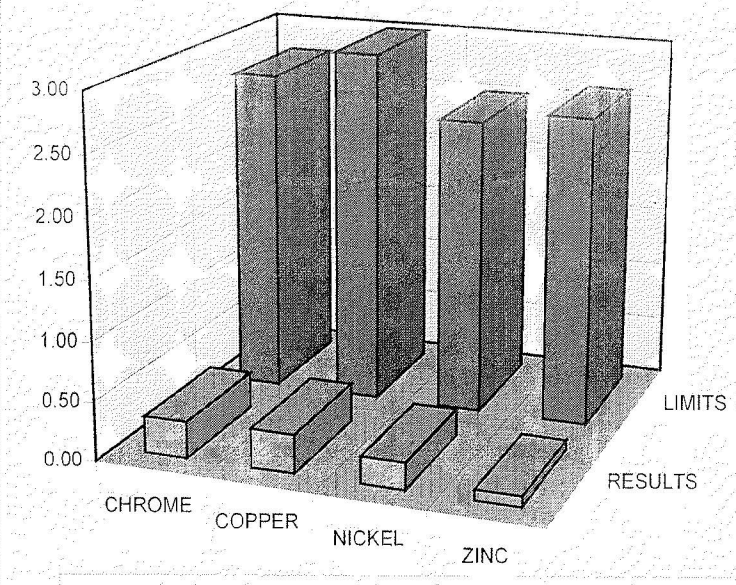
MAY
METRO LIMITS





ALASKAN COPPER WORKS
3200 FACILITY
MAY 3, 2001
COMPOSITE M65933

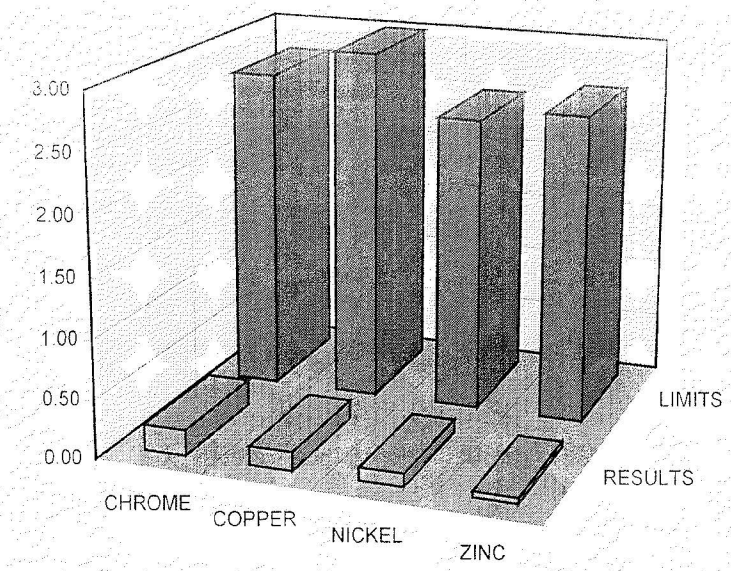
ALASKAN COPPER WORKS
3200 FACILITY
MAY 10, 2001
COMPOSITE M65982

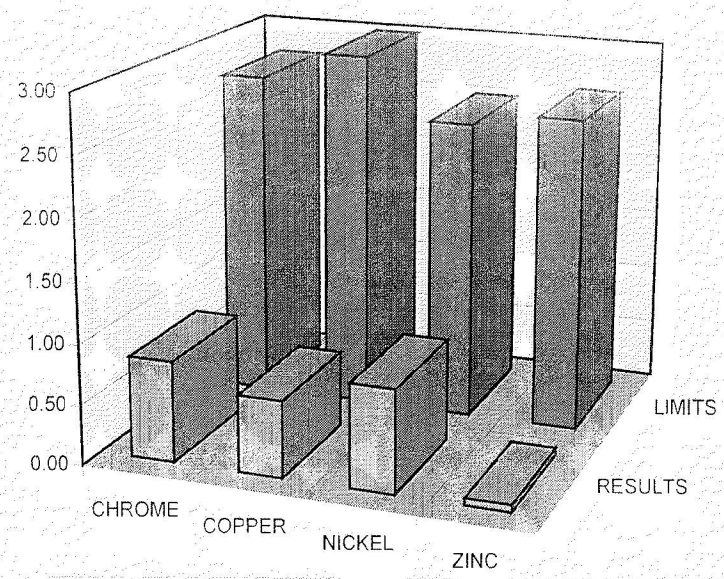
VISUAL REPRESENTATION OF THE LAB RESULTS

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.34	0.36	0.23	0.06
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.31	0.33	0.23	0.09
LIMITS	2.75	3.00	2.50	2.61

MAY
METRO LIMITS





ALASKAN COPPER WORKS
3200 FACILITY
MAY 17, 2001
COMPOSITE M66075

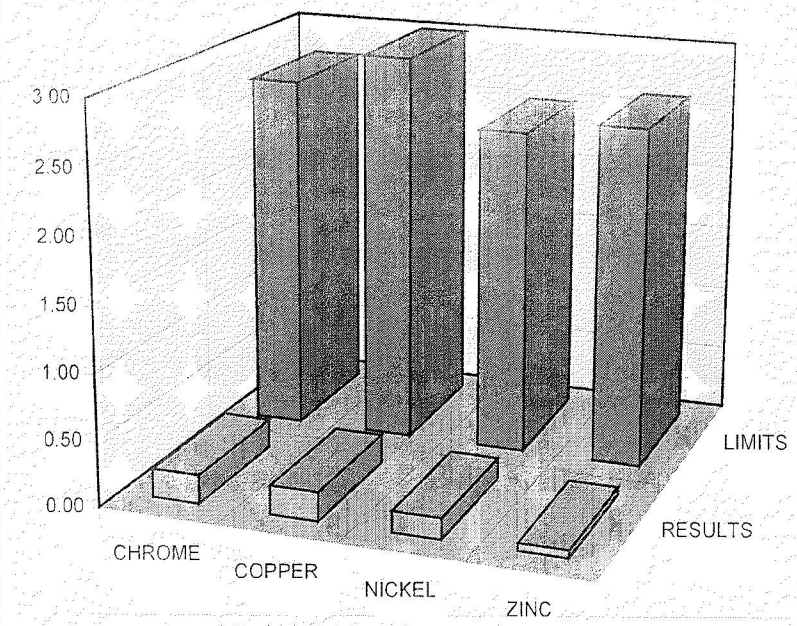
ALASKAN COPPER WORKS
3200 FACILITY
MAY 24, 2001
COMPOSITE M66173

VISUAL REPRESENTATION OF THE LAB RESULTS

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.22	0.16	0.11	0.05
LIMITS	2.75	3.00	2.50	2.61

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.84	0.64	0.86	0.06
LIMITS	2.75	3.00	2.50	2.61

MAY
METRO LIMITS



ALASKAN COPPER WORKS
3200 FACILITY
MAY31, 2001
COMPOSITE M85457

VISUAL REPRESENTATION OF THE LAB RESULTS

	CHROME	COPPER	NICKEL	ZINC
RESULTS	0.22	0.22	0.16	0.06
LIMITS	2.75	3.00	2.50	2.61

KING COUNTY
Department of Natural Resources

Waste Discharge Self-Monitoring Report

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

AKC-0009676

Company Name: Alaskan Copper Works Month: MAY 20 01 No. of Employees (per day) Average: ____ Maximum: ____

Sample Site No.: A-4010 Permit/DA No.: 7238 All units mg/l unless otherwise noted Industry Type: ____

Sample Date (circle)	Sample Type C (composite) or G (grab)	pH Min	pH Max	Cadmium, Cd	Chromium, Cr	Copper, Cu	Lead, Pb	Mercury, Hg	Nickel, Ni	Silver, Ag	Zinc, Zn	Cyanide, CN,A	Cyanide, CN,T	Fats, Oils and Grease (FOG)	Total Toxic Organics (TTO)	Other Parameters			✓check maximum	Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1		10.3	10.7																	1470	
2		10.4	10.8																	1606	
3	C	10.3	10.5		.34	.36			.23		.06									1477	
4		10.3	10.7																	1409	
5																					
6																					
7		10.4	10.6																	1044	
8		10.3	10.6																	1389	
9		10.3	10.6																	1754	
10	C	10.7	10.7		.31	.33			.23		.09									1294	
11		10.6	11.0																	1271	
12																					
13																					
14		10.4	10.7																	1317	
15		10.3	10.8																	1612	
16		10.2	10.3																✓	2069	
17	C	10.2	10.3		.22	.16			.11		.05									1690	
18		10.4	10.8																	1208	
19																					
20																					
21		10.5	10.5																	975	
22		10.4	10.6																	1003	
23		10.7	11.0																	1435	
24	C	10.5	10.7		.84	.64			.86		.06									1516	
25		10.3	10.6																	1254	
26																					
27																					
28																					
29		10.2	10.4																	1514	
30		10.4	10.5																	2215	
31	C	10.5	10.6		.22	.22			.16		.06									1520	
Monthly Minimum		10.2																		975	
Monthly Maximum		11.0																		2069	
Average		10.5																		32042	Total Monthly Flow (Gallons)

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: [signature] Date: 6/15/01

Please circle all permit violations

1330 (Rev. 1/00)

KING COUNTY
Department of Natural Resources

Waste Discharge Self-Monitoring Report

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

AKC-0009677

Company Name: Alaskan Copper Works Month: MAY 2001 No. of Employees (per day) Average: ____ Maximum: ____

Sample Site No.: A-8009 Permit/DA No.: 7201 All units mg/l unless otherwise noted Industry Type: ____

Sample Date (circle)	Sample Type C (composite) or G (grab)	pH Min	pH Max	Cadmium, Cd	Chromium, Cr	Copper, Cu	Lead, Pb	Mercury, Hg	Nickel, Ni	Silver, Ag	Zinc, Zn	Cyanide, CN,A	Cyanide, CN,T	Fats, Oils and Grease (FOG)	Total Toxic Organics (TTO)	Other Parameters			✓check maximum	Flow (GPD) Industrial	Notes (Indicate Batch Discharges)
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					
25																					
26																					
27																					
28																					
29																					
30																					
31																					
Monthly Minimum																					
Monthly Maximum																					
Average																				Total Monthly Flow (Gallons)	

Not in use this month

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: 6/15/01

Please circle all permit violations

1330 (Rev. 1/00)

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	4/30	7 AM	31.3	12	10.04	10.19	—	—	1616	77	121	117	103				
		3 PM	31.0	8	9.86	10.35	—	—	624	21	121	128	128				
		11PM	30.5	5	9.59	10.36	—	—	1470	54	128	118	130				
TUESDAY	5/1	7 AM	30.0	7	11.66	10.36	—	—	1470	70	112	116	136				
		3 PM	30.0	19	9.94	10.77	—	—	817	18	124	125	126				
		11PM	29.6	15	9.68	10.51	—	—	1523	48	124	118	130				
WEDNESDAY	5/2	7 AM	29.6	15	9.88	10.51	—	—	1606	50	118	116	133				Forgot to Reset flow & cycles
		3 PM	29.3	14	10.07	10.80	—	—	2383	78	128	122	126				
		11PM	28.5	10	10.42	10.49	—	—	3007	110	124	120	126				
THURSDAY	5/3	7 AM	28.6	10	10.31	10.80	—	—	1477 / 3083	124	116	117	127				
		3 PM	28.0	8	10.13	10.48	—	—	705	40	124	122	125				
		11PM	27.5	5	9.78	10.34	—	—	1409	76	121	126	126				
FRIDAY	5/4	7 AM	27.1	7	11.70	10.34	—	—	1409	90	114	120	127				
		3 PM	26.7	5	9.85	10.32	—	—	692	34	125	121	130				
		11PM	26.5	3	9.77	10.72	—	—	1044	61	126	122	128				
SATURDAY																	
SUNDAY																	

3083
1604
1477

653

6945
629

WOUT\500-0007, 03/04/99

AKC-0009678

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	5/7	7 AM	26	2	11.40	10.53	–	–	1044	73	121	124	103				Forgot to Reset Flow; Cycles
		3 PM	25.5	15	9.84	10.49	–	–	1902	93	123	127	129				
		11PM	25.4	14	10.53	10.62	–	–	2433	122	119	131	129				
TUESDAY	5/8	7 AM	25.4	14	9.65	10.63	–	–	1389 / 2433	54 / 127	117	115	132				2433 / 1044 / 1389 — 127 / 73 / 54
		3 PM	24.9	9	10.05	10.43	–	–	1321	17	126	122	129				
		11PM	24.6	7	9.74	10.35	–	–	1754	42	124	123	125				
WEDNESDAY	5/9	7 AM	24.1	7	12.20	10.36	–	–	1754	60	116	118	131				
		3 PM	23.9	5	10.14	10.54	–	–	677	16	120	130	128				
		11PM	23.3	3	9.77	10.67	–	–	1294	42	122	121	124				
THURSDAY	5/10	7 AM	23.4	3	9.68	10.72	–	–	1294	43	113	117	130				
		3 PM	22.8	18	10.97	10.76	–	–	629	22	125	120	126				
		11PM	22.9	15	10.09	10.70	–	–	1271	24	120	131	124				
FRIDAY	5/11	7 AM	22.9	15	9.68	10.79	–	–	1271	24	111	121	130				
		3 PM	22.6	14	9.74	11.06	–	–	673	11	128	123	130				
		11PM	22.6	10	10.81	10.60	–	–	1317	17	122	126	125				
SATURDAY																	
SUNDAY																	

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

AKC-0009679

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	5/14	7 AM	22.6	10	10.43	10.41	—	—	1317	17?	125	130	78				forgot to Reset Flow & Cycles
		3 PM	22.6	7	10.76	10.77	—	—	1096 / 2413	14 / 81	127	125	125				
		11PM	22.6	5	9.81	10.70	—	—	2929	40	109	107	124				
TUESDAY	5/15	7 AM	22.4	5	9.58	10.73	—	—	1612 / 2529	26 / 48	101	98	131				
		3 PM	21.9	19	9.83	10.86	—	—	533	32	106	127	125				
		11PM	21.4	17	9.69	10.36	—	—	1131	52	119	128	127				
WEDNESDAY	5/16	7 AM	21.4	14	9.57	10.28	—	—	1690	74	121	123					1752 / 1690 / 0062
		3 PM	21.4	13	9.79	10.31	—	—	1752	80	124	129	128				
		11PM	21.2	12.5	10.01	10.31	—	—	2069	107	123	126	124				
THURSDAY	5/17	7 AM	21.2	13	9.59	10.36	—	—	2069	111	118	115	130				
		3 PM	20.1	12	10.01	10.37	—	—	655	22	125	124	129				
		11PM	20.1	10	10.23	10.29	—	—	1208	28	116	111	124				
FRIDAY	5/18	7 AM	20.1	10	9.72	10.42	—	—	1208	38	113	116	126				
		3 PM	20.1	8	9.93	10.85	—	—	380	19	123	128	128				
		11PM	19.6	5	10.03	10.59	—	—	975	30	118	118	127				
SATURDAY																	
SUNDAY																	

AKC-0009680

\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	5/21	7 AM	19.1	5	10.75	10.56	—	—	975	88	82	76	122	—	—	—	why was H_2O turned off to Boiler?
		3 PM	19.0	5	9.58	10.54	—	—	476	4	85	122	130	—	—	—	
		11PM	18.8	3	9.77	10.55	—	—	1003	25	103	120	127	—	—	—	
TUESDAY	5/22	7 AM	18.8	3	9.79	10.67	—	—	1003	28	98	116	132				
		3 PM	18.7	18	10.33	10.44	—	—	684	5	116	123	128				
		11PM	18.7	15	9.61	10.67	—	—	1305	16	121	121	124				
WEDNESDAY	5/23	7 AM	18.8?	13	9.85	11.02	—	—	1435	25	113	117	127				
		3 PM	18.3	10	10.43	10.87	—	—	5.88	71	121	129	127				
		11PM	18.0	8	10.01	10.72	—	—	1465	39	122	124	128				
THURSDAY	5/24	7 AM	18.1	8	9.61	10.72	—	—	1516	47	115	123	125				forgot to Reset flow & cycles
		3 PM	18.1	7	9.56	10.60	—	—	2041	55	125	92?	130				2151
		11PM	17.1	3	10.13	10.50	—	—	2770	76	122	131	127				
FRIDAY	5/25	7 AM	17.1	3	10.33	10.62	—	—	1254 / 2770	36 / 83	118	122	125				2770 − 1516 = 1254
		3 PM	16.8	17	9.85	10.55	—	—	717	38	122	131	130				
		11PM	16.6	14	10.11	10.36	—	—	1397	61	123	122	124				
SATURDAY																	
SUNDAY																	

AKC-0009681

..\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	5/28	7 AM															
		3 PM															
		11PM															
TUESDAY	5/29	7 AM	16.4	14	10.25	10.21	—	—	1514	81	114	112	69				
		3 PM	15.4	11	9.72	10.22	—	—	1222	25	119	126	84				
		11PM	14.9	10	10.21	10.43	—	—	2215	74	124	126	128				
WEDNESDAY	5/30	7 AM	14.9	9	9.83	10.54	—	—	2215	82	114	119	126				
		3 PM	14.4	7	9.60	10.46	—	—	680	19	122	126	126				
		11PM	13.8	5	9.99	10.46	—	—	1520	70	119	125	126				
THURSDAY	5/31	7 AM	13.9	7	11.90	10.53	—	—	1520	77	114	128	126				
		3 PM	13.1	5	10.86	10.55	—	—	881	26	115	124	126				
		11PM	12.6	3	10.88	10.62	—	—	1547	54	123	127	128				
FRIDAY	6/1	7 AM	12.7	3	9.51	10.54	—	—	1547	67	118	120	129				
		3 PM	11.6	16	10.14	10.38	—	—	790	62	120	121	125				
		11PM	11.1	12	9.71	10.22	—	—	1794	112	126	125	127				
SATURDAY																	
SUNDAY																	

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

AKC-0009682