



Pre-Permitting Environmental / Socio-Economic Data Report Series

Report Series H- Macroinvertebrates and Periphyton

Report H-6 Ambient Water Quality Measurements 2004-2007

Submitted to the Alaska Department of Natural Resources April 2009

Preliminary data. Do not cite or quote.

The Pebble Partnership is providing environmental and socio-economic baseline data collected to inform the development of the Pebble Project to state and federal agencies, project stakeholders and the general public prior to project permitting as part of its commitment to full and open disclosure.

A comprehensive Environmental Baseline Document (EBD) will subsequently be prepared and appended to future project permit applications. The EBD will also be made publicly available when complete.

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REPORT H-6.1
 Ambient Water-quality Measurements, Mine Study Area, June 2004

Site ID	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Temperature (°C)	Relative Conductivity (mS/cm)	Specific Conductivity (mS/cm)	pH
CR199A	10.9	96	9.3	47	66	7.9
KC100A	10.2	85	7.4	33	50	7.1
NK100A	12.6	105	7.5	26	39	7.0
NK100B04	14.8	120	6.6	28	43	7.4
NK100C	11.3	103	11.3	34	46	7.6
NK119A	11.8	101	8.6	18	26	6.8
SK100A	12.1	104	8.7	29	42	6.8
SK100B	12.8	109	8.4	29	42	6.8
SK100C	11.8	104	10.0	29	41	7.3
SK100F	9.5	96	15.0	28	34	6.1
SK100G	9.6	91	12.9	40	52	7.0
SK119A	13.9	112	6.3	21	32	6.3
UT100B	11.8	106 ^a	11.1	44	60	7.4
UT100C	12.1	104	8.8	43	63	7.1
UT100D	12.2	100	6.9	53	81	7.7
UT100E	13.7	108	5.1	55	89	7.0
UT119A	13.4	106	5.3	42	68	(b)

Notes:

- a. Calculated value—there was a recording error on the field data sheet.
- b. Instrument malfunction.



REPORT H-6.2
Ambient Water-quality Measurements, Mine Study Area, August 2004

Site ID	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Temperature (°C)	Relative Conductivity (mS/cm)	Specific Conductivity (mS/cm)	pH
Big Wiggly Lake	12.6	136	19.0	53	60	8.5
Frying Pan Lake	11.1	132	23.0	62	64	7.5
KC100A	12.5	105	7.9	41	61	6.5
NK100A	10.2	107	18.0	45	52	8.0
NK100C	10.3	103	15.3	54	66	7.1
NK119A	10.5	99	11.9	33	44	7.3
SK100A	12.5	128	16.6	38	45	6.9
SK100B	14.5	124	7.7	33	49	6.9
SK100F	10.7	125	23.5	58	59	7.3
SK100G	8.6	90	16.8	66	79	6.5
SK119A	11.6	107	11.8	36	48	7.6
UT100B	13.1	123	15.0	58	72	7.7
UT100C	10.9	111	15.4	59	73	6.9
UT100D	10.7	107	15.2	92	113	6.4
UT100E	14.6	120	7.2	61	93	7.3
UT119A	13.1	109	7.7	51	75	6.4
UT138A	(a)	(a)	(a)	(a)	(a)	7.6

Note:

- a. Instrument malfunction.

REPORT H-6.3
Ambient Water-quality Measurements, Mine Study Area, June 2005

Site ID	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Temperature (°C)	Relative Conductivity (mS/cm)	Specific Conductivity (mS/cm)	pH
Big Wiggly Lake	(a)	(a)	12.6	37	48	7.5
Frying Pan Lake	(a)	(a)	15.0	35	44	7.2
NK100A	(a)	(a)	9.9	28	40	6.8
NK100C	(a)	(a)	10.7	49	37	7.1
SK100B	(a)	(a)	7.8	28	43	6.7
UT100B	(a)	(a)	13.6	51	65	7.6
UT100D	(a)	(a)	11.3	63	86	7.2
UT138A	11.8	107	11.0	52	71	7.3

Note:

- a. Instrument malfunction.



REPORT H-6.4
Ambient Water-quality Measurements, Mine Study Area, June 2007

Site ID	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Temperature (°C)	Relative Conductivity (mS/cm)	Specific Conductivity (mS/cm)	pH
SK100A	8.44	72.80%	8.82	0.03	0.04	6.38
NK100A	11.96	104.00%	9.22	0.03	0.04	6.87
NK100C	10.92	101.50%	12.04	0.04	0.05	7.09
SK100B	12.83	103.50%	6.18	0.03	0.04	5.98
NK119A	11.81	98.50%	7.47	0.02	0.03	6.29
SK100D	7.57	68.60%	10.96	0.03	0.04	6.67
UT100B	8.49	75.80%	10.35	0.05	0.07	7.10
UT100C	8.21	79.50%	13.86	0.05	0.07	7.67
UT100D	8.81	75.50%	8.54	0.07	0.10	7.15
UT119A	8.77	74.50%	8.78	0.05	0.08	7.15

REPORT H-6.5
Ambient Water-quality Measurements, Transportation Corridor, August 2004

Site ID	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Temp (°C)	Relative Conductivity (mS/cm)	Specific Conductivity (mS/cm)	pH
Bear Den Creek	11.8	105	10.2	45	63	7.13
Red Creek	10.4	97	13.2	24	31	6.89
Ursa 100B	13.0	118	11.0	52	71	7.16

REPORT H-6.6
Ambient Water-quality Measurements, Transportation Corridor, June 2005

Site ID	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Temp (°C)	Relative Conductivity (mS/cm)	Specific Conductivity (mS/cm)	pH
Bear Den Creek	12.3	99	6.2	56	36	7.0
Red Creek	12.7	101	5.5	12	20	6.2
Ursa 100B	11.0	97	10.0	49	69	7.2



REPORT H-6.7

Ambient Water-quality Measurements, Cook Inlet Drainages, August 2004 and June 2005

Site ID	Year	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Temp (°C)	Relative Conductivity (mS/cm)	Specific Conductivity (mS/cm)	pH
Unnamed creek	2004	11.1	100	10.7	23.2	0.032	7.7
Y Valley Creek	2004	9.5	(a)	8.8	30.3	0.046	7.1
Y Valley Creek	2005	12.7	99	4.8	25.0	0.040	6.4

Notes:

- a. No measurement because of instrument malfunction.