APPENDIX 17

BATHYMETRIC SURVEY

OF

GARROW LAKE

HYDROGRAPHIC / TOPOGRAPHIC SURVEY
of Garrow Lake
Polaris Mine Closure Project
Nunavut

teck cominco

DATE of SURVEY = August 24-28, 2003
CONTOUR INTERVAL = 2.0 m.
DATUM FOR ELEVATIONS IS MINE CONTROL POINT 84
Depth Sounding & Surveyed Tape Point shown thus....
Survey Control Points shown thus.... ⊕
Spot Elevation shown thus.... x (7)p.j
May.97 (typ.) indicates date of tailing
pile derived from Teck Cominco records

This drawing is based on
the Polaris Mine datum -
Subtract 1000m from elevations
to approximate geodetic elevation datum.

DATE	REVISIONS	DR / CK
-		
-		

FOCUS
Focus Surveys
A DIVISION OF THE FOCUS CORPORATION LTD.
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Calgary (403) 290-2222
Grande Prairie (780) 830-3333
Medicine Hat (403) 527-3707
Regina (306) 585-0537
Port St.John (250) 785-7776

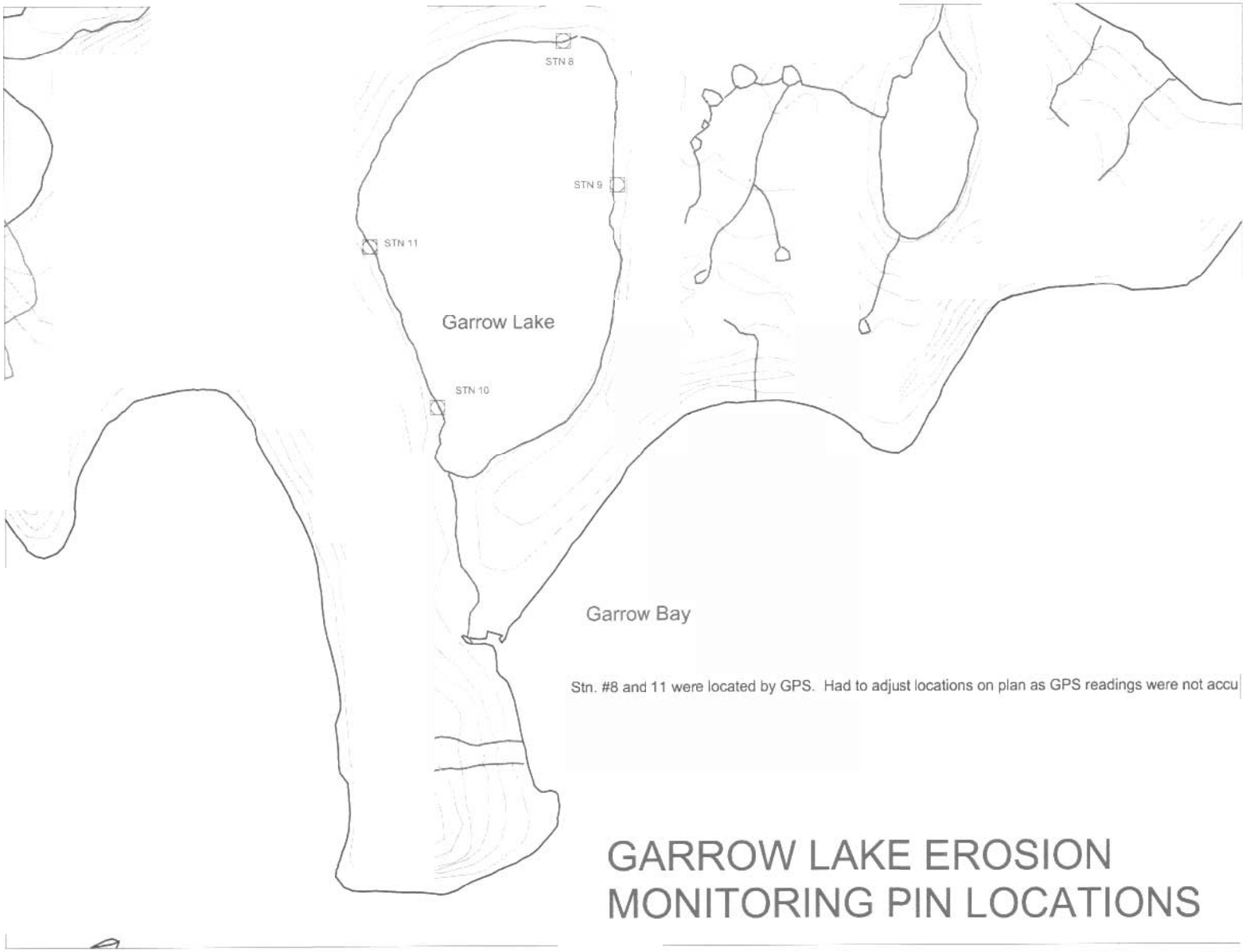
Drawn by : KK	Ck'd by : MT
Date : October 16/03	Scale : 1:5000
Job : 322789-00	FILE No.
Dwg : 322789-00-TP2.0	

APPENDIX 18

RECORD OF

GARROW LAKE

EROSION PIN MONITORING



Stn. #8 and 11 were located by GPS. Had to adjust locations on plan as GPS readings were not accu

GARROW LAKE EROSION MONITORING PIN LOCATIONS

GARROW LAKE EROSION MONITORING PINS

Month	Distance (cm) - Top of Pin to Ground				Photographs Taken
	Stn. 8	Stn. 9	Stn. 10	Stn. 11	
Jul-03	56.5	45.0	61.5	50.0	Yes
Aug-03	56.5	45.0	61.5	50.0	Yes
Sep-03	56.5	44.0	61.0	50.0	Yes
Jul-04					
Aug-04					
Sep-04					

Station # 8 - Garrow Lake North Quadrant
Station # 9 - Garrow Lake East Quadrant
Station # 10 - Garrow Lake South Quadrant
Station # 11 - Garrow Lake West Quadrant

Note - Distance measured is along the side of the pin (not vertical distance)
- Photographs are required of each pin location at the time the measurements are taken

GARROW LAKE

EROSION MONITORING

PHOTOGRAPHS

JULY 2003

JULY 2003

STN 8

STN 9

JULY 2003

STN 10

STN 11

GARROW LAKE

EROSION MONITORING

PHOTOGRAPHS

AUGUST 2003

AUGUST 2003

STN 8

STN 9

AUGUST 2003

STN 10

STN 11

GARROW LAKE

EROSION MONITORING

PHOTOGRAPHS

SEPTEMBER 2003

SEPTEMBER 2003

STN 8

STN 9

SEPTEMBER 2003

STN 10

STN 11

APPENDIX 19

RECORD OF THE

MARINE DOCK AND ADJACENT FORESHORE

EROSION MONITORING

2003 POLARIS TSS DATA - DOCK AND ADJACENT FORESHORE AREA

TSS = (Filter full(g)) - (Filter empty(g)) * (1000 (mL/L) Sample volume (mL)) * 1000mg/g

Normal, Outlined	Background value determined from uninfluenced area each day. Location changes based on observations of wind/ocean direction.
Bold, Italics, Shaded	Exceeds 25 mg/L. over background which is the level permited under the Fisheries Authorization.

Station	Date (dd/mm/yyyy)	Turbidity (NTU)	TSS (mg/L)	Wind Direction	Wind Velocity (mph)	Water Flow Direction	Comments
Note from July 14 to July 27 Used Improper methodology for analyzing sea water. No rinsing of sample to dissolve salt. Resulted in overstatement of TSS							
DS2-800	14/07/2003	1.76	NA		light wind	N	Turbidity measured 16 hours after collecting the sample. Sample Lost
DS2-1000	14/07/2003	3.53	33.8		light wind	N	Turbidity measured 16 hours after collecting the sample.
DS2-1200	14/07/2003	1.54	31.0		light wind	N	Turbidity measured 16 hours after collecting the sample.
DS2-1400	14/07/2003	4.98	39.0		light wind	N	Turbidity measured 16 hours after collecting the sample.
DS2-1600	14/07/2003	2.53	33.0		light wind	N	Turbidity measured 16 hours after collecting the sample.
DS2-1800	14/07/2003	2.33	32.4		light wind	N	Turbidity measured 16 hours after collecting the sample.
DS2-600	16/07/2003	2.03	15.7	SW		N	
DS2-800	16/07/2003	0.55	14.4	SW		N	
DS2-1000	16/07/2003	1.1	15.4	SW		N	
DS2-1200	16/07/2003	0.93	16.9	SW		N	
DS2-1400	16/07/2003	1.41	14.8	SW		N	
DS2-1400 QA/QC Duplicate	16/07/2003	0.79	18.9	SW		N	
DS3-1425	16/07/2003	2.66	16.8	SW		N	
DS3-1425 QA/QC Duplicate	16/07/2003	0.9	19.4	SW		N	
DS2-1600	16/07/2003	1.04	19.2	SW		N	
DS2-1800	16/07/2003	1.07	17.8	SW		N	
DS2-600	17/07/2003	1.14	18.5	S	13	N	
DS2-800	17/07/2003	0.55	16.3	S	13	N	
DS2-1000	17/07/2003	0.66	17.9	S	13	N	
DS2-1200	17/07/2003	1.46	18.2	S	13	N	
DS2-1400	17/07/2003	1.55	20.5	S	13	N	
DS3-1425	17/07/2003	0.65	20.9	S	13	N	
DS3-1425 QA/QC Duplicate	17/07/2003	na	20.9	S	13	N	
DS2-1600	17/07/2003	0.86	20	S	13	N	
DS2-1800	17/07/2003	0.41	18.7	S	13	N	
DS2-1800 QA/QC Duplicate	17/07/2003	na	17.9	S	13	N	
DS2-600	18/07/2003	0.71	16.8	SW	20	N	
DS2-800	18/07/2003	0.62	17.3	SW	20	N	
DS2-1000	18/07/2003	1.25	16.2	SW	20	N	
DS2-1200	18/07/2003	0.57	17.3	SW	20	N	
DS2-1400	18/07/2003	0.41	20.3	SW	20	N	
DS3-1425	18/07/2003	0.68	17.6	SW	20	N	
DS3-1425 QA/QC Duplicate	18/07/2003	na	18.4	SW	20	N	
DS2-1600	18/07/2003	0.92	17.9	SW	20	N	
DS2-1800	18/07/2003	0.92	18.1	SW	20	N	
DS2-1800 QA/QC Duplicate	18/07/2003	na	17.9	SW	20	N	
DS2-600	19/07/2003	1.14	14.9	SW	20	N	Ice packed along shore & light rain
DS2-800	19/07/2003	1.13	14.1	SW	20	N	Ice packed along shore & light rain
DS2-1000	19/07/2003	1.7	15.1	SW	20	N	Ice packed along shore & light rain
DS2-1200	19/07/2003	1.11	17.2	SW	20	N	Ice packed along shore & light rain
DS2-1400	19/07/2003	5.77	21.7	SW	20	N	Big waves icy & light rain
DS3-1425	19/07/2003	3.17	19.3	SW	20	N	Big waves icy & light rain
DS3-1425 QA/QC Duplicate	19/07/2003	4.46	20.4	SW	20	N	Big waves icy & light rain
DS2-1600	19/07/2003	5.26	27.1	SW	20	N	Caused by wave action
DS2-1800	19/07/2003	2.35	19.7	SW	20	N	Big waves icy & light rain

2003 POLARIS TSS DATA - DOCK AND ADJACENT FORESHORE AREA

TSS = (Filter full(g)) - (Filter empty(g)) * (1000 (mL/L) Sample volume (mL)) * 1000mg/g

Normal, Outlined	Background value determined from uninfluenced area each day. Location changes based on observations of wind/ocean direction.
Bold, Italics, Shaded	Exceeds 25 mg/L over background which is the level permited under the Fisheries Authorization.

Station	Date (dd/mm/yyyy)	Turbidity (NTU)	TSS (mg/L)	Wind Direction	Wind Velocity (mph)	Water Flow Direction	Comments
DS2-600	20/07/2003	1.79	15.2	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS2-800	20/07/2003	1.17	17	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS2-1000	20/07/2003	0.84	18.8	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS2-1200	20/07/2003	1.31	14.7	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS2-1400	20/07/2003	0.69	19.6	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS3-1425	20/07/2003	0.91	19.2	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS3-1425 QA/QC Duplicate	20/07/2003	1.63	13	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS2-1600	20/07/2003	0.7	19.2	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS2-1800	20/07/2003	0.36	10.8	SW	5	N	partly cloudy, partly snowing, calm water, ice packed along shore
DS2-600	21/07/2003	0.55	16.8	S	6	S	clear sky, ice moving, small waves
DS2-800	21/07/2003	0.95	18	S	6	S	clear sky, ice moving, small waves
DS2-1000	21/07/2003	0.78	16.4	S	6	S	clear sky, ice moving, small waves
DS2-1200	21/07/2003	0.84	19.8	S	6	S	wind fr N, clear sky, ice moving, waves getting bigger
DS2-1400	21/07/2003	0.48	16.3	S	6	S	clear sky, ice moving,
DS3-1425	21/07/2003	3.06	18.8	S	6	S	clear sky, ice moving,
DS3-1425 QA/QC Duplicate	21/07/2003	0.73	17	S	6	S	clear sky, ice moving,
DS2-1600	21/07/2003	0.69	17.8	S	6	S	clear sky, ice moving, bigger waves from N
DS2-1800	21/07/2003	1.44	19.2	S	6	S	clear sky, ice moving, bigger waves from N
DS2-600	22/07/2003	13.3	36.2	N	13	N	clear sky, windy, small waves
DS2-800	22/07/2003	4.38	24.9	N	13	N	clear sky, windy, small waves
DS2-1000	22/07/2003	19	46.2	N	13	N	clear sky, windy, small waves
DS2-1200	22/07/2003	9.13	33.4	N	13	N	clear sky, windy, small waves
DS2-1400	22/07/2003	0.99	20.4	N	13	N	clear sky, windy, small waves
DS3-1425	22/07/2003	1.05	21.7	N	13	N	clear sky, windy, small waves
DS3-1425 QA/QC Duplicate	22/07/2003	1.89	21.1	N	13	N	clear sky, windy, small waves
DS2-1600	22/07/2003	2.27	22.8	N	13	N	clear sky, windy, small waves
DS2-1800	22/07/2003	5.07	22.3	N	13	N	clear sky, windy, small waves
DS2-600	23/07/2003	0.55	10.7	SW	4	N	foggy, high tide
DS2-800	23/07/2003	0.55	15.9	SW	4	N	foggy, high tide
DS2-1000	23/07/2003	0.46	na	SW	4	N	not measured
DS2-1200	23/07/2003	0.41	7.6	SW	4	N	foggy, high tide, measured using 0.45 micron filter (ran out of glass fiber filters)
DS2-1400	23/07/2003	0.84	9.8	SW	4	N	foggy, high tide, measured using 0.45 micron filter (ran out of glass fiber filters)
DS3-1425	23/07/2003	0.61	15.7	SW	4	N	foggy, high tide, measured using 0.45 micron filter (ran out of glass fiber filters)
DS2-1600	23/07/2003	0.42	15.8	SW	4	N	foggy, high tide, measured using 0.45 micron filter (ran out of glass fiber filters)
DS2-1600 QA/QC Duplicate	23/07/2003	0.42	4.2	SW	4	N	foggy, high tide, measured using 0.45 micron filter (ran out of glass fiber filters)
DS2-1800	23/07/2003	0.49	5	SW	4	N	foggy, high tide, measured using 0.45 micron filter (ran out of glass fiber filters)
DS2-600	24/07/2003	0.53	7.2	S	3	N	clear sky, high tide
DS2-800	24/07/2003	0.51	6.7	S	3	N	clear sky, high tide
DS2-1000	24/07/2003	0.67	7.3	S	3	N	clear sky, high tide
DS2-1200	24/07/2003	1.56	7.6	S	3	N	clear sky, high tide
DS2-1400	24/07/2003	2.05	8.3	S	3	N	clear sky, high tide
DS3-1425	24/07/2003	1.14	7.2	S	3	N	clear sky, high tide
DS2-1600	24/07/2003	0.93	8.7	S	3	N	clear sky, high tide
DS2-1800	24/07/2003	0.94	8.4	S	3	N	clear sky, high tide
DS2-600	25/07/2003	0.82	6.2	S	12	N	light rain, foggy, ice along shore
DS2-800	25/07/2003	0.42	6.4	S	12	N	light rain, foggy, ice along shore
DS2-1000	25/07/2003	0.75	7.5	S	12	N	light rain, foggy, ice along shore
DS2-1200	25/07/2003	0.78	8.2	S	12	N	light rain, foggy, ice along shore
DS2-1400	25/07/2003	1.36	9.3	S	12	N	light rain, foggy, ice along shore,slushy ice front of dock, water from the dock sediment pond silting the water between 1200 and 1400
DS3-1425	25/07/2003	0.71	9.3	S	12	N	light rain, foggy, ice along shore, slushy ice front of dock
DS2-1600	25/07/2003	0.63	7.7	S	12	N	light rain, foggy, ice along shore
DS2-1800	25/07/2003	0.55	7.2	S	12	N	light rain, foggy, ice along shore

2003 POLARIS TSS DATA - DOCK AND ADJACENT FORESHORE AREA

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Bold, Italics, Shaded	Exceeds 25 mg/L. over background which is the level permited under the Fisheries Authorization.

Station	Date (dd/mm/yyyy)	Turbidity (NTU)	TSS (mg/L)	Wind Direction	Wind Velocity (mph)	Water Flow Direction	Comments
DS2-600	26/07/2003	1.01	5.3	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS2-800	26/07/2003	1.04	2.6	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS2-1000	26/07/2003	2.78	7.7	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS2-1200	26/07/2003	0.65	6	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS2-1400	26/07/2003	1.5	9.5	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS3-1425	26/07/2003	1.2	8.3	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS2-1600	26/07/2003	0.54	4.7	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS2-1600 QA/QC Duplicate	26/07/2003	0.5	4.4	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS2-1800	26/07/2003	0.54	5.1	NW	3	N	High tide, ice packed in the Bay, and shore, cloudy
DS2-600	27/07/2003	2.11	11.9	S	5	N	High tide,calm water, cloudy, silting between 600 & 800
DS2-800	27/07/2003	0.81	10.3	S	5	N	High tide,calm water, cloudy, silting between 600 & 801
DS2-1000	27/07/2003	0.69	9.1	S	5	N	High tide, calm water,cloudy
DS2-1200	27/07/2003	0.48	10.4	S	5	N	High tide, calm water,cloudy
DS2-1400	27/07/2003	0.57	9.5	S	5	N	High tide, calm water,cloudy
DS2-1600	27/07/2003	0.58	5.2	S	5	N	High tide, calm water,cloudy,ice packed along shore
DS2-1800	27/07/2003	0.56	2	S	5	N	High tide, calm water,cloudy,ice packed along shore
DS2-1800 QA/QC Duplicate	27/07/2003	0.69	2.3	S	5	N	High tide, calm water,cloudy,ice packed along shore
Changed methodology, started rinsing with 1L distilled water to remove salt from filter paper before weighing.							
DS2-600 Rinsed	28/7/2003	6.17	6.2	S	13	N	600 & 800/ 1L rinsed distilled
DS2-600 Not rinsed	28/7/2003	6.17	20.2	S	13	N	Ice packed in the Bay and shore, raining, high tide
DS2-800 Rinsed	28/7/2003	92.1	***67.2***	S	13	N	Not due to construction activities, Ice packed in bay, should revisit southern silt fence
DS2-800 Not rinsed	28/7/2003	92.1	84	S	13	N	Ice packed in the Bay,and shore,wtaer flow Fr. S to N. Raining, high tide
DS2-1000 Rinsed	28/7/2003	13	9.6	S	13	N	Ice packed in the Bay,and shore. Raining, high tide
DS2-1000 Not rinsed	28/7/2003	13	25.2	S	13	N	Ice packed in the Bay, and shore, wtaer flow Fr. S to N. Raining, high tide
DS2-1200 Rinsed	28/7/2003	7.9	6.6	S	13	N	Ice packed in the Bay,and shore. Raining, high tide
DS2-1400 Rinsed	28/7/2003	3.46	4.2	S	13	N	Ice packed in the Bay,and shore. Raining, high tide
DS2-1400 Not rinsed	28/7/2003	3.46	20	S	13	N	Ice packed in the Bay, and shore, wtaer flow Fr. S to N. Raining, high tide
DS2-1425 Rinsed	28/7/2003	8.08	5.8	S	13	N	Ice packed in the Bay,and shore. Raining, high tide
DS2-1425 Not rinsed	28/7/2003	8.08	18	S	13	N	Ice packed in the Bay, and shore, wtaer flow Fr. S to N. Raining, high tide
DS2-1600 Rinsed	28/7/2003	1.66	3.4	S	13	N	Ice packed in the Bay,and shore. Raining, high tide
DS2-1600 Not rinsed	28/7/2003	1.66	17.4	S	13	N	Ice packed in the Bay, and shore, wtaer flow Fr. S to N. Raining, high tide
DS2-1800 Rinsed	28/7/2003	1.1	1	S	13	N	Ice packed in the Bay,and shore. Raining, high tide
DS2-1800 Not rinsed	28/7/2003	1.1	7.2	S	13	N	Ice packed in the Bay, and shore, wtaer flow Fr. S to N. Raining, high tide
DS2-1800 QA/QC Rinsed	28/7/2003	1.68	0.8	S	13	N	Ice packed in the Bay,and shore. Raining, high tide
DS2-1800 QA/QC Not rinsed	28/7/2003	1.68	6.4	S	13	N	Ice packed in the Bay, and shore, wtaer flow Fr. S to N. Raining, high tide
DS2-600 Rinsed	29/7/2003	9.99	9.9	W	15	N	Ice packed in the Bay and shore, snowing
DS2-600 Not rinsed	29/7/2003	9.99	18.8	W	15	N	Ice packed in the Bay and shore, snowing
DS2-800 Rinsed	29/7/2003	3.95	4.6	W	15	N	Ice packed in the Bay and shore, snowing
DS2-800 Not rinsed	29/7/2003	3.64	33.8	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1000 Rinsed	29/7/2003	4.04	4.7	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1000 Not rinsed	29/7/2003	3.63	23.6	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1200 Rinsed	29/7/2003	2.92	3.8	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1200 Not rinsed	29/7/2003	2.78	23.2	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1400 Rinsed	29/7/2003	1.91	5.2	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1400 Not rinsed	29/7/2003	1.39	34.2	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1425 Rinsed	29/7/2003	3.01	5.3	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1425 Not rinsed	29/7/2003	2.65	***35.6***	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1600 Rinsed	29/7/2003	4.47	4.1	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1600 Not rinsed	29/7/2003	2.12	30.8	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1800 Rinsed	29/7/2003	4.11	2.1	W	15	N	Ice packed in the Bay and shore, snowing
DS2-1800 Not rinsed	29/7/2003	5.79	11.6	W	15	N	Ice packed in the Bay and shore, snowing

2003 POLARIS TSS DATA - DOCK AND ADJACENT FORESHORE AREA

TSS = (Filter full(g)) - (Filter empty(g)) * (1000 (mL/L) Sample volume (mL)) * 1000mg/g

Normal, Outlined	Background value determined from uninfluenced area each day. Location changes based on observations of wind/ocean direction.
Bold, Italics, Shaded	Exceeds 25 mg/L. over background which is the level permited under the Fisheries Authorization.

Station	Date (dd/mm/yyyy)	Turbidity (NTU)	TSS (mg/L)	Wind Direction	Wind Velocity (mph)	Water Flow Direction	Comments
DS2-600 Rinsed	30/07/2003	5.28	7	SW	25	N	Ice packed in the Bay and shore
DS2-600 Not rinsed	30/07/2003	5.28	21.6	SW	25	N	Ice packed in the Bay and shore
DS2-800 Rinsed	30/07/2003	6.08	6	SW	25	N	Ice packed in the Bay and shore
DS2-800 Not Rinsed	30/07/2003	6.08	19.6	SW	25	N	Ice packed in the Bay and shore
DS2-1000 Rinsed	30/07/2003	3.92	8.4	SW	25	N	Ice packed in the Bay and shore
DS2-1000 Not rinsed	30/07/2003	3.92	33	SW	25	N	Ice packed in the Bay and shore
DS2-1200 Rinsed	30/07/2003	2.53	4.4	SW	25	N	Ice packed in the Bay and shore
DS2-1200 Not rinsed	30/07/2003	2.53	22.4	SW	25	N	Ice packed in the Bay and shore
DS2-1400 Rinsed	30/07/2003	3.64	7.6	SW	25	N	Ice packed in the Bay and shore
DS2-1400 Not rinsed	30/07/2003	3.64	4.4	SW	25	N	Ice packed in the Bay and shore
DS2-1425 Rinsed	30/07/2003	4.51	11.4	SW	25	N	Ice packed in the Bay and shore
DS2-1425 Not rinsed	30/07/2003	4.51	***38.8***	SW	25	N	Ice packed in the Bay and shore
DS2-1600 Rinsed	30/07/2003	0.63	3.8	SW	25	N	Ice packed in the Bay and shore
DS2-1600 Not rinsed	30/07/2003	0.63	17.8	SW	25	N	Ice packed in the Bay and shore
DS2-1800 Rinsed	30/07/2003	0.88	3.4	SW	25	N	Ice packed in the Bay and shore
DS2-1800 Not rinsed	30/07/2003	0.88	13.8	SW	25	N	Ice packed in the Bay and shore
DS2-1800 QA/QC Rinsed	30/07/2003	1.27	2.6	SW	25	N	Ice packed in the Bay and shore
DS2-1800 QA/QC Not rinsed	30/07/2003	1.27	15.8	SW	25	N	Ice packed in the Bay and shore
DS2-600	01/08/2003	1.4	2	W	9	N	Partly cloudy, low tide, ice packed in the bay and shore
DS2-800	01/08/2003	1.36	5.9	W	9	N	Partly cloudy, low tide, ice packed in the bay and shore
DS2-1000	01/08/2003	3.03	5.9	W	9	N	Partly cloudy, low tide, ice packed in the bay and shore
DS2-1200	01/08/2003	1.12	2.8	W	9	N	Partly cloudy, low tide, ice packed in the bay and shore
DS2-1400	01/08/2003	5.3	6.3	W	9	N	Partly cloudy, low tide, ice packed in the bay and shore
DS3-1425	01/08/2003	NA	NA	W	9	N	Too much water on dock DS2-1425
DS2-1600	01/08/2003	0.88	10.2	W	9	N	Partly cloudy, low tide, ice packed in the bay and shore
DS2-1800	01/08/2003	0.68	2.1	W	9	N	Partly cloudy, low tide, ice packed in the bay and shore
DS2-1800 QA/QC Duplicate	01/08/2003	0.72	1.5	W	9	N	Partly cloudy, low tide, ice packed in the bay and shore
DS2-600	02/08/2003	0.77	0.6	NW	10	N	Low tide, fogged in, picture taken
DS2-800	02/08/2003	2.79	1.5	NW	10	N	Low tide, fogged in, picture taken
DS2-1000	02/08/2003	1.91	2	NW	10	N	Low tide, fogged in, picture taken
DS2-1200	02/08/2003	1.27	1.1	NW	10	N	Low tide, fogged in, picture taken
DS2-1400	02/08/2003	50.9	***36.2***	NW	10	N	Work stopped during break, loading from stockpile during night shift
DS3-1425	02/08/2003	NA	NA	NW	10	N	Too much water on dock DS2-1425
DS2-1600	02/08/2003	1.3	1.9	NW	10	N	Low tide, fogged in, picture taken
DS2-1800	02/08/2003	0.62	2.3	NW	10	N	Low tide, fogged in, picture taken
DS2-1800 QA/QC Duplicate	02/08/2003	0.9	1.9	NW	10	N	Low tide, fogged in, picture taken
DS2-600	03/08/2003	1.4	1.6	NW	10	NA	Ice along shore, open water in bay, high tide coming in
DS2-800	03/08/2003	0.8	0.9	NW	10	NA	Ice along shore, open water in bay, high tide coming in
DS2-1000	03/08/2003	1.07	1.1	NW	10	NA	Ice along shore, open water in bay, high tide coming in
DS2-1200	03/08/2003	2.07	3.7	NW	10	NA	Ice along shore, open water in bay, high tide coming in
DS2-1400	03/08/2003	NA	NA	NW	10	NA	Too much water on dock DS2-1400
DS3-1425	03/08/2003	3.17	2.2	NW	10	NA	Ice along shore, open water in bay, high tide coming in
DS2-1600	03/08/2003	2.25	3.5	NW	10	NA	Ice along shore, open water in bay, high tide coming in
DS2-1800	03/08/2003	2.02	3.7	NW	10	NA	Ice along shore, open water in bay, high tide coming in
DS2-1800 QA/QC Duplicate	03/08/2003	2.27	26	NW	10	NA	Forgot to rinse sample with distilled water
DS2-600	04/08/2003	35.6	***39.3***	NE	25	S	Wave action, not due to construction activities
DS2-800	04/08/2003	2.33	4.3	NE	25	S	Ice along shore, open water in bay
DS2-1000	04/08/2003	1.02	NA	NE	25	S	Forgot to wiegh empty filter
DS2-1200	04/08/2003	1.31	24.8	NE	25	S	Wave action, not due to construction activities
DS2-1400	04/08/2003	NA	NA	NE	25	S	Too much water on dock DS2-1400
DS3-1425	04/08/2003	0.81	1.9	NE	25	S	Ice along shore, open water in bay
DS2-1600	04/08/2003	2.16	4.4	NE	25	S	Ice along shore, open water in bay
DS2-1800	04/08/2003	2.87	7.2	NE	25	S	Ice along shore, open water in bay
DS2-1800 QA/QC Duplicate	04/08/2003	2.4	5.7	NE	25	S	Ice along shore, open water in bay

2003 POLARIS TSS DATA - DOCK AND ADJACENT FORESHORE AREA

TSS = (Filter full(g)) - (Filter empty(g)) * (1000 (mL/L) Sample volume (mL)) * 1000mg/g

Normal, Outlined	Background value determined from uninfluenced area each day. Location changes based on observations of wind/ocean direction.
Bold, Italics, Shaded	Exceeds 25 mg/L. over background which is the level permited under the Fisheries Authorization.

Station	Date (dd/mm/yyyy)	Turbidity (NTU)	TSS (mg/L)	Wind Direction	Wind Velocity (mph)	Water Flow Direction	Comments
DS2-600	05/08/2003	2.84	5	NE	15	NA	Ice along shore, open water in bay
DS2-800	05/08/2003	0.85	2.4	NE	15	NA	Ice along shore, open water in bay
DS2-1000	05/08/2003	1.56	3.7	NE	15	NA	Ice along shore, open water in bay
DS2-1200	05/08/2003	3.47	5.9	NE	15	NA	Ice along shore, open water in bay
DS2-1400	05/08/2003	NA	NA	NE	15	NA	Too much water on dock DS2-1400
DS3-1425	05/08/2003	2.04	3.8	NE	15	NA	Ice along shore, open water in bay
DS2-1600	05/08/2003	1.48	3.6	NE	15	NA	Ice along shore, open water in bay
DS2-1800	05/08/2003	2.48	4.2	NE	15	NA	Ice along shore, open water in bay
DS2-1800 QA/QC Duplicate	05/08/2003	2.16	6.9	NE	15	NA	Ice along shore, open water in bay
DS2-600	06/08/2003	1.75	1.8	NA	NA	S	Partly cloudy, calm water
DS2-800	06/08/2003	0.64	0.9	NA	NA	S	Partly cloudy, calm water
DS2-1000	06/08/2003	0.75	1	NA	NA	S	Partly cloudy, calm water
DS2-1200	06/08/2003	0.77	1.9	NA	NA	S	Partly cloudy, calm water
DS2-1400	06/08/2003	0.85	1.3	NA	NA	S	Partly cloudy, calm water
DS3-1425	06/08/2003	NA	NA	NA	NA	S	Too much water to access station
DS2-1600	06/08/2003	NA	NA	NA	NA	S	Forgot to write the wieght,filter empty
DS2-1800	06/08/2003	0.97	1.4	NA	NA	S	Partly cloudy, calm water
DS2-1800 QA/QC Duplicate	06/08/2003	1.07	2.8	NA	NA	S	Partly cloudy, calm water
DS2-600	07/08/2003	60.5	93.7	SW	30	N	Cloudy, big waves from SW
DS2-800	07/08/2003	110	***177.2***	SW	30	N	Not due to construction activities, not working in dock cells or along shoreline
DS2-1000	07/08/2003	85	112.4	SW	30	N	Cloudy, big waves from SW
DS2-1200	07/08/2003	84.5	***119.6***	SW	30	N	Not due to construction activities, not working in dock cells or along shoreline
DS2-1400	07/08/2003	139	***206***	SW	30	N	Washing of fines from within cells, asked to reinforce silt fencing along dock cells
DS3-1425	07/08/2003	NA	NA	SW	30	N	Cloudy, big waves from SW
DS2-1600	07/08/2003	54.6	103.2	SW	30	N	Not due to construction activities, not working in dock cells or along shoreline
DS2-1800	07/08/2003	58.5	106.8	SW	30	N	Not due to construction activities, not working in dock cells or along shoreline
DS2-1800 QA/QC Duplicate	07/08/2003	61.5	78.4	SW	30	N	Cloudy, big waves from SW
DS2-600	08/08/2003	2.73	2	S	10	N	Cloudy, foggy, ice packed along shore, open water in the Bay
DS2-800	08/08/2003	1.75	3.1	S	10	N	Cloudy, foggy, ice packed along shore, open water in the Bay
DS2-1000	08/08/2003	1.32	3.3	S	10	N	Cloudy, foggy, ice packed along shore, open water in the Bay
DS2-1200	08/08/2003	1.97	2.2	S	10	N	Cloudy, foggy, ice packed along shore, open water in the Bay
DS2-1400 at 1325	08/08/2003	81.2	***61.2***	S	10	N	Work stopped during break and did not continue during night shift.
DS3-1425 at 1450	08/08/2003	1.38	2.7	S	10	N	Cloudy, foggy, ice packed along shore, open water in the Bay
DS2-1600	08/08/2003	1.34	3	S	10	N	Cloudy, foggy, ice packed along shore, open water in the Bay
DS2-1800	08/08/2003	1.13	***27.1***	S	10	N	Work stopped during break and did not continue during night shift.
DS2-1800 QA/QC Duplicate	08/08/2003	1.23	7.1	S	10	N	Cloudy, foggy, ice packed along shore, open water in the Bay
DS2-600	09/08/2003	5.79	14	SW	15	N	Waves Fr. SW. cloudy, high tide going down
DS2-800	09/08/2003	6.04	18.8	SW	15	N	Waves Fr. SW. cloudy, high tide going down
DS2-1000	09/08/2003	7.7	17.4	SW	15	N	Waves Fr. SW. cloudy, high tide going down
DS2-1200	09/08/2003	8.82	18	SW	15	N	Waves Fr. SW. cloudy, high tide going down
DS2-1400 at 1325	09/08/2003	132	***126***	SW	15	N	Caused by construction activities. Stop work order issued
DS3-1425 at 1450	09/08/2003	2.02	15.2	SW	15	N	Waves Fr. SW. cloudy, high tide going down
DS2-1600	09/08/2003	5.04	13.6	SW	15	N	Waves Fr. SW. cloudy, high tide going down
DS2-1800	09/08/2003	10	31	SW	15	N	Stop work order issued
DS2-1800 QA/QC Duplicate	09/08/2003	14.2	27.6	SW	15	N	Waves Fr. SW. cloudy, high tide going down
DS2-600	10/08/2003	84.6	107.6	W	24	N	Big waves from the South
DS2-800	10/08/2003	18.8	31	W	24	N	Big waves from the South
DS2-1000	10/08/2003	26.6	33.6	W	24	N	Big waves from the South
DS2-1200	10/08/2003	46.2	80	W	24	N	Big waves from the South
DS2-1400 at 1325	10/08/2003	33.5	67.2	W	24	N	Big waves from the South
DS3-1425 at 1450	10/08/2003	25.1	50.8	W	24	N	Big waves from the South
DS2-1600	10/08/2003	41.9	66.4	W	24	N	Big waves from the South
DS2-1800	10/08/2003	6.88	24.8	W	24	N	Big waves from the South
DS2-1800 QA/QC Duplicate	10/08/2003	7.78	24.4	W	24	N	Big waves from the South