

Attachment X.IV. Limnology and Support Environmental Information

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**Table X.IV-1
Supporting Environmental Variables and Limnology Data for Lakes and Streams in the Kiggavik Project Area, Fall 2007**

Sub-Basin	Waterbody/ Watercourse	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Conductivity (µS/cm)	pH
Willow Lake	Pointer Lake	PRL-001	25-Aug-07	4.9	75-100	-	none	north	moderate	1.9	3.0	0.0	7.16	11.9	12	9.9
												0.5	7.18	11.8	12	9.4
												1.0	7.18	11.8	12	9.2
												1.5	7.18	11.8	12	8.9
												2.0	7.19	11.8	12	8.7
												2.5	7.19	11.8	12	8.6
												2.6	7.18	11.5	12	8.3
												2.7	7.18	10.7	12	8.4
												2.8	7.21	6.8	13	8.4
	Pointer/Rock Stream	PRROS-001	27-Aug-07	5.8	75-100	light	rain	north	moderate	1.0	1.0	0.0	7.20	11.8	14	8.4
Lower Lake	Sik Sik Lake	SSL-001	25-Aug-07	7.0	75-100	light	rain	north east	moderate	0.9	1.7	0.0	6.30	11.9	54	7.8
	Willow Lake	WIL-001	28-Aug-07	6.7	75-100	light	rain	north	moderate	2.0	2.0	1.0	6.25	12.0	54	7.7
	End Grid	EGL-001	28-Aug-07	4.0	75-100	-	none	north	light	1.0	1.0	0.0	7.60	12.1	18	8.6
	Andrew Lake	ANL-001	27-Aug-07	5.0	75-100	light	rain	north west	moderate	1.0	1.0	0.0	7.37	11.9	25	7.7
	Shack Lake	SHL-001	26-Aug-07	8.0	75-100	-	none	north east	light	1.0	1.0	0.0	7.42	11.6	30	7.6
	Shack/Lower Stream	SHLWS-001	26-Aug-07	8.0	75-100	-	none	north east	light	1.3	1.3	0.0	7.37	12.0	33	8.0
Caribou Lake	Lower Lake	LWL-001	29-Aug-07	5.0	75-100	-	none	north	moderate	-	1.0	0.0	8.71	12.0	33	7.5
	Ridge Lake	RDL-001	02-Sep-07	7.0	75-100	-	none	east	light	3.0	7.1	0.0	8.34	11.8	34	7.5
												0.0	7.74	11.9	17	7.3
												1.0	7.67	11.9	17	7.3
												2.0	7.58	11.9	17	7.2
												3.0	7.30	11.9	17	7.2
												4.0	7.16	11.9	17	7.2
												5.0	7.08	11.9	17	7.2
												6.0	6.97	11.8	17	7.1
												6.5	6.92	10.7	21	6.6
												0.0	7.80	11.9	17	7.2
	Cirque Lake	CQL-001	01-Sep-07	6.0	75-100	-	none	south east	light	3.5	3.5	1.0	7.58	11.9	17	7.2
												2.0	7.28	11.9	17	7.2
												3.0	7.23	11.9	17	7.2
												0.0	6.96	11.8	11	7.3
												1.0	6.87	11.8	11	7.1
												2.0	6.83	11.8	11	7.0
												3.0	6.82	11.8	11	7.0
												4.0	6.80	11.8	11	6.9
												4.5	6.79	10.9	11	6.8
	Crash Lake	CRL-001	31-Aug-07	3.0	75-100	-	none	north west	light	2.2	5.0	0.0	5.16	12.1	25	7.3
	Crash/Fox Stream	CRFXS-001	31-Aug-07	3.0	75-100	-	none	north west	light	1.0	1.0	0.0	4.95	12.1	25	7.1
Skinny Lake	Fox Lake	FXL-001	30-Aug-07	4.5	75-100	-	none	north	moderate	0.5	0.5	0.0	7.72	11.6	16	7.6
	Fox/Caribou Stream	FXCBS-001	30-Aug-07	4.5	75-100	-	none	north	moderate	NC	2.6	0.0	7.34	12.0	7	7.3
	Skinny Lake	SKL-001	03-Sep-07	7.0	75-100	-	none	west	light	4.8	6.0	0.0	8.01	11.7	16	7.1
												1.0	8.00	11.7	16	7.1
												2.0	7.96	11.6	16	7.1
												3.0	7.89	11.7	16	7.1
												4.0	7.84	11.6	16	7.1
												5.0	7.70	11.6	16	7.0
												5.5	7.66	10.8	16	6.9

Note: Dissolved oxygen concentrations that were less than the CWQG of 9.5 mg/L are bolded.

Values of pH that were outside of the Canadian Water Quality Guidelines (CWQG) of pH 6.5 to 9 are bolded.

^(a) = Station code is comprised of three letter waterbody code and station number.

°C = degrees Celsius; % = percent; Precip = precipitation; m = metre; mg/L = milligrams per litre; µS/cm = microSiemens per centimetre; Aug = August; Sep = September; - = not collected or not applicable.

Table X.IV-2
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Summer 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Willow Lake	Pointer Lake	PRL-001-U08	31-Jul-08	13	25-50	-	none	south east	moderate	2.90	2.90	0.1	14.80	10.2	13	7.6
												1.0	14.80	10.2	13	7.5
												2.0	14.74	10.2	13	7.4
												2.5	14.69	10.2	13	7.4
		PRL-AN01-U08	1-Aug-08	20	<25	-	none	south	heavy	-	-	0.3	15.53	10.1	12	7.3
		PRL-GN01-U08	31-Jul-08	16	25-50	-	none	south	heavy	2.50	-	0.3	15.07	10.2	12	7.2
		PRL-GN02-U08	31-Jul-08	16	25-50	-	none	south	heavy	2.00	-	0.3	15.07	10.2	13	7.1
		PRL-MT01-U08	31-Jul-08	16	25-50	-	none	south	heavy	-	-	0.2	16.46	10.3	12	7.1
		PRL-MT02-U08	31-Jul-08	16	25-50	-	none	south	heavy	-	-	0.2	16.46	10.3	12	7.1
		PRL-MT03-U08	31-Jul-08	16	25-50	-	none	south	heavy	-	-	0.2	16.12	10.4	13	7.3
		PRL-MT04-U08	31-Jul-08	16	25-50	-	none	south	heavy	-	-	0.2	16.73	10.4	12	7.3
		PRL-MT05-U08	31-Jul-08	16	25-50	-	none	south	heavy	-	-	0.4	16.73	10.4	12	7.3
	Rock Lake	ROL-GN01-U08	30-Jul-08	15	25-50	-	none	south east	light	0.90	-	0.3	13.55	10.6	16	7.2
		ROL-GN02-U08	30-Jul-08	15	25-50	-	none	south east	light	0.90	-	0.3	13.46	10.5	16	7.2
		ROL-MT01-U08	30-Jul-08	15	25-50	-	none	south east	light	0.40	-	0.3	13.73	10.6	16	7.5
		ROL-MT02-U08	30-Jul-08	15	25-50	-	none	south east	light	0.40	-	0.3	13.73	10.6	16	7.5
		ROL-MT03-U08	30-Jul-08	15	25-50	-	none	south east	light	0.40	-	0.3	13.70	10.6	15	7.5
		ROL-MT04-U08	30-Jul-08	15	25-50	-	none	south east	light	0.40	-	0.3	13.70	10.6	15	7.5
		ROL-MT05-U08	30-Jul-08	15	25-50	-	none	south east	light	0.60	-	0.3	13.56	10.6	15	7.1
Lower Lake	Mushroom Lake	MSL-001-U08	25-Jul-08	17	75-100	-	none	west	moderate	5.00	8.20	0.3	17.92	9.4	21	7.2
												1.0	17.91	9.4	21	7.2
												2.0	17.93	9.4	21	7.2
												3.0	17.90	9.4	21	7.1
												4.0	17.74	9.4	21	7.1
												5.0	17.14	9.4	21	7.1
												6.0	16.41	9.2	21	7.1
												7.0	15.60	8.9	21	7.1
												8.0	14.85	7.6	21	7.0
		MSL-AN01-U08	24-Jul-08	25	<25	-	none	-	calm	2.40	-	0.3	17.24	9.5	20	6.4
		MSL-GN01-U08	23-Jul-08	19	<25	-	none	north	moderate	4.20	-	0.3	16.65	9.5	20	7.4
		MSL-GN02-U08	24-Jul-08	20	<25	-	none	-	calm	4.60	-	0.3	17.24	9.5	20	6.4
		MSL-GN03-U08	24-Jul-08	25	<25	-	none	south	light	2.40	-	0.3	17.24	9.5	21	6.4
		MSL-MT01-U08	23-Jul-08	19	<25	-	none	north	light	-	-	0.2	16.12	10.2	21	7.4
		MSL-MT02-U08	23-Jul-08	19	<25	-	none	north	light	-	-	0.2	16.12	10.2	21	7.4
	End Grid Lake	MSL-MT03-U08	23-Jul-08	19	<25	-	none	north west	light	-	-	0.2	17.53	10.0	20	7.3
		MSL-MT04-U08	23-Jul-08	19	<25	-	none	north west	light	-	-	0.2	17.57	10.0	20	7.4
		MSL-MT05-U08	23-Jul-08	19	<25	-	none	north west	light	-	-	0.2	16.05	10.0	21	7.3
		EGL-GN01-U08	25-Jul-08	19	75-100	-	none	west	moderate	0.80	-	0.3	17.83	9.7	28	7.4
		EGL-MT01-U08	25-Jul-08	19	75-100	-	none	west	moderate	0.40	-	0.3	18.87	9.6	28	7.6
		EGL-MT02-U08	25-Jul-08	19	75-100	-	none	west	moderate	0.40	-	0.3	18.44	9.7	28	7.4
		EGL-MT03-U08	25-Jul-08	19	75-100	-	none	west	moderate	0.40	-	0.3	18.13	9.5	28	7.5
		EGL-MT04-U08	25-Jul-08	19	75-100	-	none	west	moderate	0.40	-	0.3	18.13	9.5	28	7.4
		EGL-MT05-U08	25-Jul-08	19	75-100	-	none	west	light	0.60	-	0.3	18.20	9.6	28	7.4
	Cigar Lake	CGL-GN01-U08	22-Jul-08	15	75-100	-	none	south west	moderate	2.20	-	0.3	18.01	9.6	9	6.7
		CGL-GN02-U08	22-Jul-08	15	75-100	-	none	south west	moderate	2.30	-	0.3	17.98	9.5	9	6.9
		CGL-MT01-U08	22-Jul-08	12	75-100	-	none	south	light	0.30	-	0.2	17.37	9.7	9	6.6
		CGL-MT02-U08	22-Jul-08	12	75-100	-	none	south	light	0.30	-	0.2	17.02	9.6	14	6.6
		CGL-MT03-U08	22-Jul-08	15	75-100	-	none	south west	moderate	0.30	-	0.2	17.97	9.6	9	6.9
		CGL-MT04-U08	22-Jul-08	15	75-100	-	none	south west	moderate	0.30	-	0.2	17.97	9.6	9	6.9
		CGL-MT05-U08	22-Jul-08	15	75-100	-	none	south southwest	moderate	0.30	-	0.3	18.27	9.6	9	6.9

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Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Lower Lake	Knee Lake	KNL-AN01-U08	22-Jul-08	17	75-100	-	none	south west	light	-	-	0.2	18.65	9.6	39	7.7
		KNL-GN01-U08	22-Jul-08	17	75-100	-	none	south west	light	0.70	-	0.3	17.94	9.7	38	7.6
		KNL-MT01-U08	22-Jul-08	17	75-100	-	none	south	light	0.20	-	0.1	17.52	9.3	38	7.7
		KNL-MT02-U08	22-Jul-08	17	75-100	-	none	south	light	0.20	-	0.1	17.52	9.3	38	7.7
		KNL-MT03-U08	22-Jul-08	17	75-100	-	none	south	light	0.20	-	0.1	17.75	9.4	38	7.7
		KNL-MT04-U08	22-Jul-08	17	75-100	-	none	south	light	0.20	-	0.1	17.81	9.4	38	7.7
		KNL-MT05-U08	22-Jul-08	17	75-100	-	none	south	light	0.20	-	0.1	18.18	9.5	38	7.5
		KNL-MT06-U08	22-Jul-08	17	75-100	-	none	south	light	0.20	-	0.1	18.18	10.0	38	7.5
	Lunch Lake	LUL-AN01-U08	23-Jul-08	17.5	25-50	-	none	north west	light	-	-	0.1	18.70	9.8	32	7.5
		LUL-GN01-U08	23-Jul-08	17.5	<25	-	none	north west	light	1.20	-	0.1	16.74	9.4	31	7.4
												0.5	16.72	9.4	31	7.4
												1.0	16.72	9.4	31	7.4
		LUL-MT01-U08	23-Jul-08	17.5	0	-	none	north west	light	-	-	0.2	16.07	10.0	32	8.0
		LUL-MT02-U08	23-Jul-08	17.5		-	none	north west	light	-	-	0.2	16.70	10.0	32	8.0
		LUL-MT03-U08	23-Jul-08	17.5	0	-	none	north west	light	-	-	0.2	16.16	9.9	31	7.7
	Andrew Lake	LUL-MT04-U08	23-Jul-08	17.5	0	-	none	north west	light	-	-	0.2	16.16	9.9	31	7.7
		LUL-MT05-U08	23-Jul-08	17.5	0	-	none	north west	light	-	-	0.2	16.29	9.9	31	7.6
		LUL-MT06-U08	23-Jul-08	17.5	0	-	none	north west	light	-	-	0.2	16.27	10.2	31	7.6
		ANL-GN01-U08	26-Jul-08	14	75-100	-	none	north west	heavy	0.80	-	0.3	16.50	9.7	27	7.3
		ANL-GN02-U08	26-Jul-08	14	75-100	-	none	north west	heavy	0.60	-	0.3	15.90	9.7	29	7.4
		ANL-MT01-U08	26-Jul-08	14	75-100	-	none	north west	heavy	0.40	-	0.2	16.19	9.8	27	7.4
		ANL-MT02-U08	26-Jul-08	14	75-100	-	none	north west	heavy	0.40	-	0.2	16.19	9.8	27	7.4
	Shack Lake	ANL-MT03-U08	26-Jul-08	14	75-100	-	none	north west	heavy	0.40	-	0.2	15.92	9.7	29	7.4
		ANL-MT04-U08	26-Jul-08	14	75-100	-	none	north west	heavy	0.40	-	0.2	15.92	9.7	29	7.3
		SHL-GN01-U08	27-Jul-08	10	50-75	-	none	north west	heavy	1.20	-	0.3	13.47	10.3	32	7.4
		SHL-GN02-U08	27-Jul-08	10	50-75	-	none	north west	heavy	1.30	-	0.3	12.62	10.8	30	7.5
		SHL-MT01-U08	27-Jul-08	10	50-75	-	none	north west	heavy	0.40	-	0.3	12.08	10.7	31	7.5
		SHL-MT02-U08	27-Jul-08	10	50-75	-	none	north west	heavy	0.30	-	0.3	12.08	10.2	31	7.5
		SHL-MT03-U08	27-Jul-08	10	50-75	-	none	north west	heavy	0.30	-	0.3	13.27	10.3	32	7.5
	Lower Lake	SHL-MT04-U08	27-Jul-08	10	50-75	-	none	north west	heavy	0.30	-	0.3	13.27	10.3	32	7.5
		SHL-MT05-U08	27-Jul-08	10	50-75	-	none	north west	heavy	0.40	-	0.3	11.85	11.0	32	7.4
		LWL-001-U08	28-Jul-08	9	25-50	-	none	north west	moderate	-	1.00	0.3	13.10	10.6	35	7.8
		LWL-AN01-U08	28-Jul-08	15	25-50	-	none	north west	moderate	1.00	-	0.3	13.10	10.6	36	7.8
		LWL-GN01-U08	28-Jul-08	9	25-50	-	none	north west	moderate	1.00	-	0.3	12.38	10.5	36	7.5
		LWL-GN02-U08	28-Jul-08	9	25-50	-	none	north west	moderate	1.00	-	0.3	12.05	10.5	36	7.5
		LWL-GN03-U08	29-Jul-08	12	75-100	light	rain	north west	light	0.90	-	0.3	13.84	10.7	35	7.7
		LWL-GN04-U08	29-Jul-08	12	75-100	light	rain	north west	light	0.90	-	0.3	13.67	10.9	36	7.7
		LWL-MT01-U08	28-Jul-08	9	25-50	-	none	north west	moderate	0.30	-	0.2	10.30	10.8	36	7.6
		LWL-MT02-U08	28-Jul-08	9	25-50	-	none	north west	moderate	0.30	-	0.2	10.30	10.8	36	7.6
		LWL-MT03-U08	28-Jul-08	9	25-50	-	none	north west	moderate	0.70	-	0.3	12.31	10.4	35	7.5
		LWL-MT04-U08	28-Jul-08	9	25-50	-	none	north west	moderate	0.70	-	0.3	12.31	10.4	35	7.5
		LWL-MT05-U08	28-Jul-08	9	25-50	-	none	north west	moderate	0.60	-	0.3	12.43	10.5	36	7.5
		LWL-MT06-U08	29-Jul-08	12	75-100	light	rain	north west	light	0.60	-	0.3	13.51	10.4	36	7.9
		LWL-MT07-U08	29-Jul-08	12	75-100	light	rain	north west	light	0.60	-	0.3	13.51	10.4	36	7.9
		LWL-MT08-U08	29-Jul-08	12	75-100	light	rain	north west	light	0.70	-	0.3	13.18	10.8	36	7.8
		LWL-MT09-U08	29-Jul-08	12	75-100	light	rain	north west	light	0.70	-	0.3	13.18	10.8	36	7.8
		LWL-MT10-U08	29-Jul-08	12	75-100	light	rain	north west	light	0.60	-	0.3	13.61	10.6	36	7.6
Caribou Lake	Ridge Lake	RDL-GN01-U08	5-Aug-08	12	75-100	-	none	north	light	-	-	0.3	14.33	10.1	18	7.1
		RDL-GN02-U08	5-Aug-08	12	75-100	-	none	north	light	-	-	0.3	14.19	10.2	18	7.1
	Fox Lake	FXL-001-U08	3-Aug-08	20	75-100	-	none	west	light	2.70	2.70	2.7	15.80	10.2	15	7.2
		FXL-GN01-U08	3-Aug-08	20	75-100	-	none	west	light	2.60	-	0.3	15.78	10.1	15	7.5
		FXL-GN02-U08	3-Aug-08	20	75-100	-	none	west	light	2.60	-	0.3	16.01	10.2	15	7.4
		FXL-MT01-U08	3-Aug-08	20	75-100	-	none	west	light	0.40	-	0.3	16.56	10.3	16	7.7
		FXL-MT02-U08	3-Aug-08	20	75-100	-	none	west	light	0.40	-	0.3	16.56	10.3	16	7.7
		FXL-MT03-U08	3-Aug-08	20	75-100	-	none	west	light	1.00	-	0.3	16.05	10.3	15	7.2
		FXL-MT04-U08	3-Aug-08	20	75-100	-	none	west	light	1.00	-	0.3	16.05	10.3	15	7.2

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Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Summer 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Caribou Lake	Caribou Lake	CBL-001-U08	2-Aug-08	15	<25	-	none	south east	moderate	2.70	2.70	0.3	15.63	10.2	18	7.5
												1.0	15.49	10.2	18	7.4
												2.0	15.40	9.3	18	7.4
												2.5	15.36	7.4	18	7.4
		CBL-GN01-U08	2-Aug-08	15	<25	-	none	south east	moderate	2.40	-	0.3	15.04	10.1	18	7.1
		CBL-GN02-U08	2-Aug-08	15	<25	-	none	south east	moderate	1.60	-	0.3	14.69	10.1	19	7.2
		CBL-MT01-U08	2-Aug-08	15	<25	-	none	south east	moderate	0.40	-	0.3	14.10	10.5	17	7.0
		CBL-MT02-U08	2-Aug-08	15	<25	-	none	south east	moderate	0.40	-	0.3	14.10	10.5	17	7.0
		CBL-MT03-U08	2-Aug-08	15	<25	-	none	south east	moderate	0.50	-	0.3	14.42	10.2	18	7.3
		CBL-MT04-U08	2-Aug-08	15	<25	-	none	south east	moderate	0.50	-	0.3	14.42	10.2	18	7.3
		CBL-MT05-U08	2-Aug-08	15	<25	-	none	south east	moderate	0.50	-	0.3	14.42	10.2	18	7.3
	Calf Lake	CFL-GN01-U08	4-Aug-08	10	75-100	light	rain	south east	light	1.00	-	0.3	14.09	10.1	21	7.5
		CFL-GN02-U08	4-Aug-08	10	75-100	light	rain	south east	light	1.00	-	0.3	13.93	10.1	20	7.5
		CFL-MT01-U08	4-Aug-08	10	75-100	light	rain	south east	light	0.40	-	0.3	13.66	10.2	20	7.7
		CFL-MT02-U08	4-Aug-08	10	75-100	light	rain	south east	light	0.40	-	0.3	13.66	10.2	20	7.7
		CFL-MT03-U08	4-Aug-08	10	75-100	light	rain	south east	light	0.40	-	0.3	13.99	10.5	20	7.5
		CFL-MT04-U08	4-Aug-08	10	75-100	light	rain	south east	light	0.40	-	0.3	13.99	10.5	20	7.5
Judge Sissons Lake	Judge Sissons Lake	JSL-001-U08	25-Jul-08	13	75-100	light	rain	east	light	5.50	9.70	0.1	10.75	12.0	21	7.1
												0.5	10.74	12.0	21	7.1
												1.0	10.73	12.0	21	7.0
												1.5	10.72	12.0	21	7.0
												2.0	10.72	12.0	21	7.0
												2.5	10.72	12.0	20	7.0
												3.0	10.70	12.0	20	7.0
												3.5	10.67	12.0	21	7.0
												4.0	10.68	12.0	21	7.0
												4.5	10.61	12.0	21	7.0
												5.0	10.25	12.1	20	7.0
												5.5	10.19	12.1	20	6.9
												6.0	9.87	12.1	20	6.9
												6.5	9.17	12.2	20	7.0
												7.0	8.71	12.3	20	7.0
												7.5	8.30	12.4	20	6.9
												8.0	7.97	12.3	21	6.9
												8.5	7.87	12.3	21	6.9
												9.0	7.83	12.3	21	6.9
		JSL-002-U08	25-Jul-08	13	75-100	-	none	east	light	5.5	19.1	0.1	10.58	12.0	20	7.0
												0.5	10.54	12.0	20	7.0
												1.0	10.56	12.0	20	7.0
												1.5	10.56	12.0	20	7.0
												2.0	10.55	12.0	20	7.0
												2.5	10.55	12.0	20	7.0
												3.0	10.55	12.0	20	7.0
												3.5	10.47	12.0	20	7.0
												4.0	10.16	12.1	20	7.0
												4.5	9.68	12.3	20	6.9
												5.0	9.60	12.3	20	6.9
												5.5	9.29	12.3	20	6.9
												6.0	9.14	12.3	20	6.9
												6.5	8.96	12.4	20	6.9
												7.0	8.80	12.3	20	6.9
												7.5	8.71	12.3	20	6.8
												8.0	8.64	12.3	20	6.8
												8.5	8.53	12.3	20	6.8
												9.0	8.46	12.3	20	6.8
												9.5	8.39	12.3	20	6.8

Table X.IV-2
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Summer 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Judge Sissons Lake	Judge Sissons Lake	JSL-002-U08	25-Jul-08	13	75-100	-	none	east	light	5.5	19.1	10.0	8.31	12.3	20	6.8
												10.5	8.25	12.3	20	6.8
												11.0	8.20	12.3	20	6.8
												11.5	8.11	12.3	20	6.8
												12.0	8.09	12.3	20	6.8
												12.5	8.06	12.3	20	6.8
												13.0	8.05	12.3	20	6.8
												13.5	7.97	12.3	21	6.7
												14.0	7.80	12.3	21	6.8
												14.5	7.61	12.4	21	6.7
												15.0	7.50	12.4	21	6.7
												15.5	7.42	12.4	21	6.7
												16.0	7.26	12.4	21	6.7
												16.5	7.13	12.2	21	6.7
												17.0	7.06	12.1	21	6.6
												17.5	7.01	12.1	21	6.6
												18.0	6.96	12.1	21	6.6
												18.5	6.86	12.0	21	6.6
												18.7	6.84	11.8	21	6.6
		JSL-003-U08	27-Jul-08	10	<25	-	none	north	moderate	4.20	4.20	0.1	14.88	9.6	17	7.3
												0.5	14.88	9.6	17	7.3
												1.0	14.88	9.6	17	7.3
												1.5	14.89	9.5	17	7.3
												2.0	14.89	9.5	17	7.2
												2.5	14.89	9.5	17	7.2
												3.0	14.89	9.5	17	7.2
		JSL-004-U08	27-Jul-08	12	<25	-	none	north	moderate	5.25	6.90	3.5	14.89	9.5	17	7.2
												0.1	15.23	9.5	19	7.1
												0.5	15.24	9.5	19	7.1
												1.0	15.24	9.5	19	7.1
												1.5	15.25	9.5	19	7.1
												2.0	15.24	9.5	19	7.0
												2.5	15.24	9.5	19	7.0
												3.0	15.23	9.5	19	7.1
												3.5	15.25	9.5	19	7.1
												4.0	15.23	9.5	19	7.0
												4.5	15.22	9.5	19	7.0
												5.0	15.16	9.5	19	7.1
		JSL-005-U08	26-Jul-08	13	75-100	-	none	north west	light	6.00	8.40	5.5	15.08	9.6	19	7.0
												6.0	15.00	9.6	19	7.0
												0.1	12.37	11.5	19	7.1
												0.5	12.37	11.4	19	7.1
												1.0	12.36	11.4	19	7.1
												1.5	12.36	11.4	19	7.1
												2.0	12.35	11.4	19	7.1
												2.5	12.33	11.4	19	7.1
												3.0	12.26	11.4	19	7.1
												3.5	12.16	11.4	19	7.1
												4.0	11.69	11.5	19	7.1
												4.5	11.03	11.8	20	7.1
												5.0	10.57	11.9	20	7.1
												5.5	9.97	12.0	20	7.1
												6.0	9.89	12.0	20	7.0
												6.5	9.82	12.0	20	7.0
												7.0	9.54	12.1	20	7.0
												7.5	9.41	12.1	20	7.0
												8.0	9.34	12.1	20	7.0

Table X.IV-2
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Summer 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Judge Sissons Lake	Judge Sissons Lake	JSL-AN01-U08	28-Jul-08	12	<25	-	none	north	light	5.00	-	0.1	11.00	-	-	-
		JSL-AN02-U08	29-Jul-08	10	75-100	-	none	-	calm	1.00	-	-	11.42	10.6	20	7.2
		JSL-AN03-U08	30-Jul-08	12	<25	-	none	-	calm	1.00	-	0.1	11.57	10.4	19	6.9
		JSL-AN04-U08	31-Jul-08	12	<25	-	none	south	light	1.00	-	0.1	11.88	10.7	20	7.4
		JSL-AN05-U08	31-Jul-08	13	<25	-	none	south	light	1.10	-	0.2	12.10	10.8	20	7.4
		JSL-AN06-U08	31-Jul-08	14	<25	-	none	south east	light	2.20	-	0.2	13.80	10.3	21	7.2
		JSL-AN07-U08	1-Aug-08	12	<25	-	none	south east	moderate	-	-	0.3	11.94	11.7	21	6.9
		JSL-AN08-U08	1-Aug-08	13	<25	-	none	south east	moderate	7.50	-	0.5	12.67	11.4	20	7.1
		JSL-GN01-U08	28-Jul-08	9	50-75	-	none	north west	light	5.75	-	0.1	11.00	-	-	-
		JSL-GN02-U08	28-Jul-08	12	<25	-	none	north	light	5.00	-	0.1	11.00	-	-	-
		JSL-GN03-U08	31-Jul-08	12	<25	-	none	south	light	2.10	-	0.1	12.02	10.8	20	7.5
		JSL-GN04-U08	31-Jul-08	14	<25	-	none	south east	light	1.50	-	0.2	14.90	10.2	20	7.3
		JSL-GN05-U08	1-Aug-08	13	<25	-	none	south east	moderate	6.75	-	0.5	12.67	11.4	20	7.1
		JSL-MT01-U08	25-Jul-08	15	75-100	-	none	east	light	0.30	-	0.3	10.64	11.8	21	7.5
		JSL-MT02-U08	25-Jul-08	15	75-100	-	none	east	light	0.30	-	0.3	10.62	11.7	21	7.5
		JSL-MT03-U08	25-Jul-08	15	75-100	-	none	east	light	0.20	-	0.2	10.68	11.6	21	7.4
		JSL-MT04-U08	25-Jul-08	15	75-100	-	none	east	light	0.20	-	0.2	10.69	11.5	21	7.4
		JSL-MT05-U08	25-Jul-08	15	75-100	-	none	east	light	0.35	-	0.4	10.65	11.6	21	7.2
		JSL-MT06-U08	25-Jul-08	15	75-100	-	none	east	light	0.35	-	0.4	10.65	11.6	21	7.2
Siamese Lake	Siamese Lake	SML-001-U08	04-Aug-08	-	75-100	light	rain	south east	light	6.25	11.30	0.1	14.42	9.7	15	6.3
												1.0	14.42	9.7	15	6.2
												2.0	14.43	9.7	15	6.1
												3.0	14.43	9.7	15	6.1
												4.0	14.43	9.7	15	6.1
												5.0	14.43	9.7	15	6.2
												6.0	14.43	9.8	15	6.2
												7.0	14.42	9.7	15	6.1
												8.0	14.42	9.7	15	6.2
												9.0	14.42	9.7	15	6.1
												10.0	14.42	9.7	15	6.2
												11.0	14.41	9.5	15	6.2
		SML-002-U08	04-Aug-08	-	75-100	light	rain	south east	light	6.25	10.00	0.1	14.85	9.6	15	6.5
												1.0	14.86	9.6	15	6.6
												2.0	14.85	9.6	15	6.5
												3.0	14.86	9.6	15	6.5
												4.0	14.86	9.6	15	6.6
												5.0	14.86	9.6	15	6.5
												6.0	14.86	9.6	15	6.5
												7.0	14.86	9.6	15	6.6
												8.0	14.86	9.6	15	6.5
												9.0	14.86	9.6	15	6.6
												9.5	14.85	9.4	15	6.5
		SML-AN01-U08	5-Aug-08	12	75-100	-	none	north	moderate	2.50	-	0.1	14.60	9.7	15	7.2
		SML-AN02-U08	5-Aug-08	14	75-100	-	none	north	light	5.75	-	0.1	14.58	9.6	15	7.0
		SML-GN01-U08	5-Aug-08	12	75-100	-	none	north	moderate	2.50	-	0.1	14.60	9.7	15	7.2
		SML-GN02-U08	5-Aug-08	14	75-100	-	none	north	light	5.75	-	0.1	14.58	9.6	15	7.0

Notes: Dissolved oxygen concentrations that were less than the CWQG of 9.5 mg/L are bolded.
pH values that were outside of the Canadian Water Quality Guidelines (CWQG) of pH 6.5 to 9 are bolded.
^(a) = Station code is comprised of three letter waterbody codes, sampling method, sampling effort, season code year. Station code for water quality sampling stations consist of three letter waterbody code, station number, season code, and year.
°C = degrees Celsius; % = percent; Precip = precipitation; m = metre; mg/L = milligrams per litre; µS/cm = microSiemens per centimetre; AN = angling; GN = gill net; MT = minnow trap; Jul = July; Aug = August; - = not collected or not applicable; < = less than.

Table X.IV-3
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Fall 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Willow Lake	Pointer Lake	PRL-001-F08	02-Sep-08	6	<25	-	none	-	calm	3.10	3.10	0.1	8.28	11.52	14	7.0
												1.0	8.28	11.52	14	6.9
												2.0	8.28	11.48	14	6.9
												2.8	8.27	11.46	14	7.0
		PRL-002-F08	02-Sep-08	11	75-100	-	none	-	calm	1.10	1.10	0.2	8.90	11.28	20	6.7
												0.5	8.88	11.25	20	6.7
		PRL-003-F08	03-Sep-08	7	75-100	-	none	north east	light	1.50	1.50	0.2	8.71	11.42	15	6.9
												0.5	8.74	11.39	15	6.8
												1.0	8.74	11.39	15	6.9
		PRL-004-F08	02-Sep-08	15	<25	-	none	-	calm	2.40	2.40	0.1	8.75	11.49	14	7.0
												0.2	8.43	11.50	14	7.0
												0.3	8.43	11.49	14	7.0
												0.5	8.34	11.53	14	6.9
												1.0	8.27	11.54	14	7.0
												1.5	8.23	11.47	14	6.9
												2.0	8.25	11.48	14	7.0
		PRL-005-F08	03-Sep-08	7	75-100	-	none	north east	light	2.30	2.30	0.2	8.67	11.50	14	7.0
												0.5	8.67	11.45	14	7.0
												1.0	8.67	11.43	14	7.0
												1.5	8.67	11.43	14	7.0
												2.0	8.67	11.42	14	7.0
		PRL-AN01-F08	03-Sep-08	8	75-100	-	none	north east	light	2.00	-	0.2	8.79	11.58	14	6.8
		PRL-AN02-F08	03-Sep-08	8	75-100	-	none	north east	light	2.30	-	0.2	8.70	11.70	14	6.7
		PRL-AN03-F08	03-Sep-08	8	75-100	-	none	-	calm	2.00	-	0.2	8.72	11.65	14	6.7
		PRL-AN04-F08	03-Sep-08	8	75-100	-	none	north east	light	2.30	-	0.2	8.82	11.59	14	6.7
		PRL-AN05-F08	03-Sep-08	8	75-100	-	none	north east	light	2.10	-	0.2	8.87	11.59	14	6.7
	Sik Sik Lake	SSL-001-F08	04-Sep-08	5	75-100	-	none	north	light	1.50	1.50	0.2	7.64	11.68	61	7.6
		SSL-002-F08	04-Sep-08	5	75-100	-	none	north	light	1.50	1.50	0.2	7.29	11.68	61	7.5
		SSL-003-F08	04-Sep-08	5	75-100	-	none	north	light	1.10	1.10	0.2	7.59	11.68	61	7.6
	Rock Lake	ROL-001-F08	04-Sep-08	5	75-100	-	none	north	light	1.20	1.20	0.2	7.55	11.67	22	7.5
		ROL-002-F08	04-Sep-08	5	75-100	-	none	north	light	1.20	1.20	0.2	6.87	11.98	21	7.2
		ROL-003-F08	04-Sep-08	5	75-100	-	none	north	light	1.10	1.10	0.2	7.62	11.69	23	7.2
	Willow Lake	WIL-001-F08	05-Sep-08	6	75-100	-	none	south west	light	1.90	1.90	0.2	7.49	11.56	21	7.1
		WIL-002-F08	05-Sep-08	6	75-100	-	none	south west	light	1.40	1.40	0.2	7.21	11.69	21	7.1
		WIL-003-F08	05-Sep-08	6	75-100	-	none	south west	light	1.10	1.10	0.2	6.55	11.85	22	6.8
		WIL-004-F08	05-Sep-08	6	75-100	-	none	south west	light	1.40	1.40	0.2	7.33	11.63	21	7.0
		WIL-AN01-F08	05-Sep-08	6	75-100	-	none	south west	light	-	-	0.2	7.05	11.84	21	6.9
Lower Lake	Mushroom Lake	MSL-001-F08	04-Sep-08	5	75-100	light	rain	north west	light	3.00	8.80	0.1	8.21	11.35	24	6.9
												1.0	8.23	11.31	24	7.0
												2.0	8.24	11.29	24	7.0
												3.0	8.23	11.38	24	7.0
												4.0	8.24	11.38	24	7.0
												5.0	8.24	11.27	24	7.0
												6.0	8.23	11.28	24	7.0
												7.0	8.19	11.28	24	7.0
		MSL-002-F08	04-Sep-08	4	75-100	-	none	north	light	1.70	1.70	0.1	8.20	11.35	24	6.9
												0.5	8.22	11.33	24	6.9
												1.0	8.23	11.33	24	7.0
												0.2	7.27	11.47	25	6.9
												0.5	7.29	11.42	25	6.9
												0.8	7.26	11.40	25	6.9
		MSL-AN01-F08	04-Sep-08	6	75-100	-	none	north west	light	1.50	-	0.2	8.09	11.51	24	6.8
		MSL-AN02-F08	05-Sep-08	6	75-100	-	none	west	light	1.60	-	0.2	7.87	11.46	24	7.1
	End Grid Lake	EGL-001-F08	03-Sep-08	9	75-100	-	none	north	light	0.90	0.90	0.2	9.06	11.43	31	7.6
		EGL-002-F08	04-Sep-08	6	75-100	-	none	west	light	0.80	0.80	0.2	6.29	11.40	33	7.4

Table X.IV-3
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Fall 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Lower Lake	Cigar Lake	CGL-001-F08	26-Aug-08	6	75-100	light	rain	east	heavy	3.60	3.60	0.3	8.84	10.94	10	6.3
												1.0	8.69	10.94	10	6.4
												2.0	8.77	10.84	10	6.3
												3.0	8.31	10.79	10	6.4
		CGL-AN01-F08	26-Aug-08	6	75-100	light	rain	east	heavy	3.60	-	0.2	7.32	11.31	10	6.4
		CGL-AN02-F08	26-Aug-08	6	75-100	light	rain	east	heavy	3.60	-	0.2	7.32	11.31	10	6.4
	Knee Lake	KNL-001-F08	26-Aug-08	7	75-100	light	rain	east	heavy	0.80	0.80	0.2	6.01	12.09	46	6.8
		KNL-AN01-F08	26-Aug-08	7	75-100	light	rain	east	heavy	-	-	0.5	6.02	12.52	46	6.9
	Lunch Lake	LUL-001-F08	27-Aug-08	7	75-100	light	rain	east	moderate	1.50	1.60	0.2	6.02	12.09	46	6.8
												1.0	7.03	11.59	40	7.4
	Andrew Lake	LUL-AN01-F08	27-Aug-08	7	75-100	moderate	rain	east	heavy	1.50	-	0.2	7.01	11.60	40	7.4
		ANL-001-F08	02-Sep-08	7	25-50	-	none	-	calm	0.90	0.90	0.2	6.48	12.10	42	7.4
	Shack Lake	ANL-AN01-F08	02-Sep-08	7	25-50	-	none	-	calm	-	-	0.2	8.09	11.48	35	7.5
		SHL-001-F08	03-Sep-08	8	75-100	-	none	north	light	1.60	1.60	0.2	8.02	11.63	36	7.7
	Lower Lake	SHL-AN01-F08	02-Sep-08	7	25-50	-	none	-	calm	-	-	0.2	9.11	11.39	35	7.7
		LWL-001-F08	05-Sep-08	7	75-100	-	none	west	light	1.20	1.20	0.1	9.09	11.71	35	7.3
												0.5	6.92	11.72	42	7.1
												0.8	6.93	11.70	42	7.1
		LWL-002-F08	05-Sep-08	6	75-100	light	rain	north west	light	1.20	1.20	0.1	6.96	11.88	41	7.1
												0.5	6.97	11.89	41	7.1
												0.8	6.96	11.88	41	7.1
		LWL-003-F08	08-Sep-08	1	75-100	-	none	north west	light	1.30	1.30	0.1	5.45	11.99	41	7.2
												0.5	5.45	11.96	41	7.2
												0.8	5.45	11.88	41	7.2
		LWL-AN01-F08	05-Sep-08	7	75-100	-	none	west	light	1.20	-	0.2	5.45	11.88	41	7.2
Caribou Lake	Ridge Lake	RDL-001-F08	06-Sep-08	1	50-75	-	none	north west	light	4.00	6.10	0.2	6.92	11.72	42	7.1
												1.0	6.56	11.77	19	7.1
												2.0	6.57	11.77	19	7.1
												3.0	6.58	11.77	19	7.1
												4.0	6.59	11.76	19	7.1
												5.0	6.60	11.76	19	7.1
												5.5	6.61	11.75	19	7.1
		RDL-AN01-F08	06-Sep-08	1	50-75	-	none	north west	light	-	-	0.2	6.61	11.75	19	7.1
	Cirque Lake	CQL-001-F08	07-Sep-08	2	75-100	-	none	north west	light	2.20	5.20	0.2	6.56	11.77	19	7.1
												1.0	5.95	11.61	13	7.1
												2.0	5.99	11.60	13	7.1
												3.0	5.99	11.60	13	7.1
												4.0	5.97	11.60	13	7.0
												4.5	5.88	11.60	13	7.0
	Crash Lake	CQL-AN01-F08	07-Sep-08	2	75-100	-	none	north west	light	2.20	5.20	0.1	5.94	11.50	13	6.9
												0.3	5.92	11.61	13	7.1
												0.2	5.98	11.66	13	6.9
		CQL-GN01-F08	07-Sep-08	2	75-100	-	none	north west	light	2.20	-	0.2	4.71	12.91	29	7.0
	Fox Lake	CRL-001-F08	06-Sep-08	4	75-100	-	none	north west	light	0.90	0.90	0.1	4.71	12.91	29	7.0
												1.0	6.44	11.92	18	7.1
												2.0	6.45	11.88	18	7.1
		FXL-001-F08	07-Sep-08	2	75-100	-	none	-	calm	2.50	2.50	0.1	6.46	11.88	18	7.0
	Caribou Lake	FXL-AN01-F08	07-Sep-08	2	75-100	-	none	-	calm	2.50	-	0.1	6.44	11.92	18	7.1
												0.1	6.32	12.07	18	6.9
												0.1	6.97	11.89	21	7.1
												1.0	7.00	12.01	21	7.1
												2.0	7.01	12.16	21	7.1
												2.3	7.02	12.14	21	7.1
	Calf Lake	CBL-001-F08	06-Sep-08	1	25-50	-	none	north west	moderate	2.50	2.50	0.1	6.97	11.89	21	7.1
												1.0	6.97	11.89	21	7.1
												0.1	6.58	12.00	21	7.1
	Calf Lake	CBL-AN02-F08	06-Sep-08	2	25-50	-	none	north west	moderate	1.90	-	0.1	7.14	12.07	22	6.9
												0.2	7.14	12.07	22	6.9

Table X.IV-3
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Fall 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Judge Sissons Lake	Judge Sissons Lake	JSL-001-F08	28-Aug-08	10	75-100	light	rain	north east	light	5.75	9.60	0.2	10.45	10.54	20	7.0
												1.0	10.46	10.53	20	7.0
												2.0	10.46	10.53	20	7.0
												3.0	10.45	10.52	20	7.0
												4.0	10.45	10.51	20	7.0
												5.0	10.44	10.51	20	7.0
												6.0	10.43	10.51	20	7.0
												7.0	10.36	10.52	20	7.0
												8.0	10.32	10.51	20	7.0
												9.0	10.29	10.50	20	7.0
		JSL-002-F08	26-Aug-08	4	75-100	light	rain	east	moderate	5.00	19.50	0.1	11.49	10.43	20	6.6
												1.0	11.49	10.42	20	6.6
												2.0	11.50	10.42	20	6.6
												3.0	11.50	10.42	20	6.6
												4.0	11.50	10.42	20	6.6
												5.0	11.49	10.42	20	6.6
												6.0	11.50	10.41	20	6.6
												7.0	11.49	10.41	20	6.6
												8.0	11.51	10.41	20	6.7
												9.0	11.50	10.41	20	6.7
												10.0	11.50	10.41	20	6.7
												11.0	11.49	10.41	20	6.7
												12.0	11.48	10.41	20	6.7
												13.0	11.50	10.40	20	6.7
												14.0	11.48	10.41	20	6.7
												15.0	11.48	10.40	20	6.8
												16.0	11.48	10.40	20	6.8
												17.0	11.48	10.41	20	6.8
												18.0	11.48	10.40	20	6.8
												19.0	11.47	10.40	20	6.8
		JSL-006-F08	28-Aug-08	8	75-100	light	rain	east	moderate	1.70	1.70	0.1	8.80	10.88	20	6.9
												0.5	8.83	10.86	20	6.9
												1.0	8.81	10.87	20	6.9
		JSL-007-F08	29-Aug-08	4	75-100	-	none	west	moderate	1.00	1.00	0.2	7.79	11.26	20	7.0
												1.0	7.80	11.24	20	7.0
												0.2	6.95	11.38	27	7.0
		JSL-008-F08	30-Aug-08	6	75-100	-	none	south west	light	1.20	1.20	0.5	6.94	11.39	27	7.0
												0.8	6.94	11.38	27	7.0
												0.2	10.78	10.39	20	6.8
		JSL-AN01-F08	27-Aug-08	7	75-100	moderate	rain	east	moderate	4.00	-	0.2	10.81	10.40	20	6.8
		JSL-AN02-F08	27-Aug-08	6	75-100	moderate	rain	east	moderate	3.90	-	0.2	10.72	10.52	20	6.9
		JSL-AN03-F08	27-Aug-08	6	75-100	moderate	rain	east	moderate	3.90	-	0.2	8.86	10.89	20	7.0
		JSL-AN04-F08	29-Aug-08	4	75-100	-	none	west	light	2.10	-	0.2	10.81	10.40	20	6.8
		JSL-GN01-F08	27-Aug-08	6	75-100	moderate	rain	east	moderate	3.90	-	0.2	10.72	10.52	20	6.9
		JSL-GN02-F08	28-Aug-08	6	75-100	moderate	rain	east	moderate	3.90	-	0.2	8.77	11.14	15	6.8
Siamese Lake	Siamese Lake	SML-001-F08	31-Aug-08	10	25-50	-	none	-	calm	6.00	12.00	1.0	8.79	11.11	15	6.8
												2.0	8.78	11.11	15	6.8
												3.0	8.78	11.08	15	6.8
												4.0	8.73	11.09	15	6.8
												5.0	8.72	11.07	15	6.8
												6.0	8.71	11.08	15	6.8
												7.0	8.70	11.04	15	6.8
												8.0	8.69	11.08	15	6.8
												9.0	8.69	11.05	15	6.8
												10.0	8.69	11.07	15	6.8
												11.0	8.69	11.07	15	6.8
												11.5	8.70	10.33	15	6.9

Table X.IV-3
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Fall 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Siamese Lake	Siamese Lake	SML-002-F08	30-Aug-08	7	75-100	-	none	south west	moderate	5.75	10.10	0.2	8.80	11.28	15	7.0
												1.0	8.77	11.24	15	7.0
												2.0	8.76	11.22	15	7.0
												3.0	8.75	11.21	15	7.0
												4.0	8.74	11.20	15	7.0
												5.0	8.73	11.19	15	6.9
												6.0	8.73	11.18	15	6.9
												7.0	8.72	11.17	15	6.9
												8.0	8.72	11.16	15	6.9
												9.0	8.71	11.16	15	6.9
												9.5	8.72	11.14	15	6.9
		SML-AN01-F08	31-Aug-08	6	75-100	-	none	-	calm	2.30	-	0.1	8.71	11.06	15	6.9
		SML-AN02-F08	31-Aug-08	8	75-100	-	none	-	calm	1.50	-	0.1	8.59	11.19	15	6.9
Skinny Lake	Skinny Lake	SKL-001-F08	01-Sep-08	4	25-50	-	none	west	light	4.75	12.80	0.2	8.31	11.16	17	7.0
												1.0	8.34	11.14	17	6.9
												2.0	8.35	11.14	17	6.9
												3.0	8.37	11.13	17	6.9
												4.0	8.38	11.13	17	6.8
												5.0	8.83	11.13	17	6.8
												6.0	8.38	11.12	17	6.8
												7.0	8.38	11.12	17	6.8
												8.0	8.38	11.11	17	6.8
												9.0	8.39	11.10	17	6.8
												10.0	8.39	11.10	17	6.8
												11.0	8.39	11.08	17	6.9
												12.0	8.39	11.09	17	6.8
												12.5	8.39	10.93	17	6.9
		SKL-002-F08	01-Sep-08	5	50-75	-	none	west	light	4.70	4.70	0.2	8.14	11.15	17	6.8
												1.0	8.15	11.13	17	6.8
												2.0	8.13	11.10	17	6.8
												3.0	8.11	11.10	17	6.8
		SKL-003-F08	01-Sep-08	6	75-100	-	none	west	light	2.00	2.00	4.0	8.01	11.10	17	6.8
												0.2	7.42	11.41	19	6.8
												1.0	7.41	11.38	19	6.8
												1.5	7.42	11.37	19	6.8
												0.2	8.76	11.05	13	6.6
												1.0	8.76	11.02	13	6.6
Squiggly Lake	Squiggly Lake	SQL-001-F08	01-Sep-08	8	75-100	-	none	west	light	6.00	17.60	2.0	8.76	11.02	13	6.5
												3.0	8.75	11.02	13	6.5
												4.0	8.71	11.03	13	6.5
												5.0	8.73	11.01	13	6.6
												6.0	8.71	11.01	13	6.6
												7.0	8.72	11.01	13	6.6
												8.0	8.73	11.01	13	6.6
												9.0	8.72	11.01	13	6.6
												10.0	8.68	11.01	13	6.6
												11.0	8.65	11.02	13	6.6
												12.0	8.63	11.02	13	6.6
												13.0	8.61	11.03	13	6.6
												14.0	8.59	11.03	13	6.6
												15.0	8.58	11.04	13	6.6
												16.0	8.56	11.05	13	6.6
												17.0	8.55	11.05	13	6.6

Table X.IV-3
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Fall 2008

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Squiggly Lake	Squiggly Lake	SQL-002-F08	01-Sep-08	9	75-100	-	none	west	light	6.00	12.00	0.2	8.62	11.12	13	6.6
												1.0	8.61	11.11	13	6.6
												2.0	8.61	11.10	13	6.6
												3.0	8.61	11.08	13	6.6
												4.0	8.59	11.09	13	6.6
												5.0	8.57	11.08	13	6.6
												6.0	8.54	11.08	13	6.6
												7.0	8.54	11.07	13	6.6
												8.0	8.53	11.08	13	6.6
												9.0	8.53	11.08	13	6.6
												10.0	8.49	11.08	13	6.6
												11.0	8.44	11.09	13	6.6
												11.5	8.43	11.08	13	6.7
	Squiggly Lake	SQL-003-F08	01-Sep-08	8	75-100	-	none	west	light	5.50	13.80	0.2	8.80	11.03	13	6.7
												1.0	8.80	11.01	13	6.7
												2.0	8.79	10.99	13	6.7
												3.0	8.79	10.99	13	6.7
												4.0	8.79	10.98	13	6.7
												5.0	8.79	10.97	13	6.7
												6.0	8.79	10.96	13	6.7
												7.0	8.79	10.96	13	6.7
												8.0	8.78	10.96	13	6.7
												9.0	8.79	10.96	13	6.8
												10.0	8.78	10.95	13	6.7
												11.0	8.78	10.94	13	6.7
												12.0	8.77	10.95	13	6.7
												13.0	8.77	10.95	13	6.7

Note: Dissolved oxygen concentrations that were less than the CWQG of 9.5 mg/L are bolded.
pH values that were outside of the Canadian Water Quality Guidelines (CWQG) of pH 6.5 to 9 are bolded.
^(a) = Station code is comprised of three letter waterbody code station number or sampling method and effort, season code, and year.
°C = degrees Celsius; % = percent; Precip = precipitation; m = metre; mg/L = milligrams per litre; µS/cm = microSiemens per centimetre; AN = angling; GN = gill net; Aug = August; Sep = September; - = not collected or not applicable; < = less than.

Table X.IV-4
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Summer and Fall 2009

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Willow Lake	Pointer Lake	PRL-AN01-F09	22-Aug-09	11	<25	-	none	north	light	-	-	0.2	10.65	11.6	16	7.4
		PRL-AN02-F09	23-Aug-09	-	<25	-	none	north	light	3.0	3.0	0.2	8.83	11.9	14	7.1
		PRL-AN03-F09	23-Aug-09	10	<25	-	none	north	light	3.0	3.0	0.2	11.95	12.0	15	7.0
		PRL-GN01-F09	22-Aug-09	7	75-100	-	none	north	moderate	2.5	2.5	0.2	8.71	11.8	14	7.5
		PRL-GN02-F09	22-Aug-09	7	75-100	-	none	north	moderate	-	-	0.2	8.71	11.8	14	7.5
		PRL-GN03-F09	23-Aug-09	15	<25	-	none	north	light	3.0	3.0	0.2	9.61	11.3	13	7.2
		PRL-GN04-F09	23-Aug-09	15	<25	-	none	-	calm	3.0	3.0	0.2	9.61	11.3	13	7.2
		PRL-MA001-F09	22-Aug-09	7	50-75	-	none	north	moderate	-	-	0.0	8.71	11.8	14	7.5
		PRL-MA002-F09	22-Aug-09	7	50-75	-	none	north	moderate	-	-	0.0	9.48	11.8	16	7.3
		PRL-MA003-F09	23-Aug-09	-	25-50	-	none	north	light	-	-	0.0	8.83	11.9	14	7.1
	Sik Sik Lake	SSL-BIC001A-F09	18-Aug-09	12	75-100	light	rain	south west	light	1.5	1.5	0.5	12.35	10.7	58	8.2
		SSL-BIC001B-F09	18-Aug-09	12	75-100	light	rain	south west	light	1.4	1.4	0.5	12.53	10.1	58	8.2
		SSL-BIC001C-F09	18-Aug-09	12	75-100	light	rain	south west	light	1.5	1.5	0.5	12.56	10.5	58	8.1
		SSL-BIC001D-F09	18-Aug-09	12	75-100	light	rain	south west	light	1.4	1.4	0.0	12.56	10.1	58	8.1
		SSL-BIC001E-F09	18-Aug-09	12	75-100	light	rain	south west	light	1.4	1.4	1.0	12.59	10.0	58	8.1
												0.0	12.37	10.2	57	8.1
												1.0	12.38	10.1	57	8.0
		SSL-WQ001-F09	18-Aug-09	12	75-100	light	rain	south west	light	1.5	1.5	0.5	12.35	10.7	58	8.2
		SSL-WQ01-U09	22-Jul-09	10	50-75	-	none	south east	light	1.3	1.3	0.0	13.27	10.3	52	7.6
	Rock Lake	ROL-BIC001A-F09	19-Aug-09	12	75-100	light	rain	south	moderate	1.2	1.2	0.5	10.43	10.8	16	8.0
		ROL-BIC001B-F09	19-Aug-09	12	75-100	light	rain	south	moderate	1.1	1.1	0.5	10.44	11.0	16	8.0
		ROL-BIC001C-F09	19-Aug-09	12	75-100	light	rain	south	moderate	1.1	1.1	0.5	10.63	10.9	16	8.0
		ROL-BIC001D-F09	19-Aug-09	12	75-100	light	rain	south	moderate	1.0	1.0	0.5	10.62	11.0	16	7.9
		ROL-BIC001E-F09	19-Aug-09	12	75-100	light	rain	south	moderate	0.9	0.9	0.5	10.58	11.3	16	7.9
		ROL-MA001-F09	19-Aug-09	-	75-100	light	rain	south	light	-	-	0.2	10.08	11.3	16	7.9
		ROL-MA002-F09	19-Aug-09	-	75-100	light	rain	south	light	-	-	0.2	10.71	10.9	16	7.9
		ROL-MA003-F09	19-Aug-09	-	75-100	light	rain	south	light	-	-	0.2	10.63	11.5	15	7.8
		ROL-WQ01-U09	22-Jul-09	14	75-100	-	none	south east	light	0.9	0.9	0.0	12.36	10.6	13	7.6
		ROL-WQ001-F09	19-Aug-09	12	75-100	light	rain	south	moderate	1.1	1.1	0.5	10.51	10.6	16	8.1
	Willow Lake	WIL-BIC001A-F09	20-Aug-09	9	75-100	-	none	north west	light	1.9	1.9	0.0	10.77	10.6	16	7.9
												1.0	10.79	10.6	16	7.9
												1.5	10.79	10.3	16	7.9
		WIL-BIC001B-F09	20-Aug-09	9	75-100	-	none	north west	light	1.4	1.4	0.0	10.80	10.4	17	8.2
												1.0	10.78	10.5	17	8.1
		WIL-BIC001C-F09	20-Aug-09	9	75-100	-	none	north west	light	1.6	1.6	0.0	10.81	10.8	16	7.8
												1.0	10.82	10.7	16	7.8
		WIL-BIC001D-F09	20-Aug-09	9	75-100	-	none	north west	light	1.9	1.9	0.0	10.74	10.7	17	7.8
												1.0	10.76	10.7	17	7.8
												1.5	10.74	10.7	16	7.8
		WIL-BIC001E-F09	20-Aug-09	9	75-100	-	none	north west	light	1.8	1.8	0.0	10.70	11.0	17	7.7
												1.0	10.68	10.8	17	7.7
												1.5	10.70	10.8	17	7.7
		WIL-MA001-F09	20-Aug-09	11	75-100	light	rain	north west	light	-	-	0.2	10.73	11.2	16	7.7
		WIL-MA002-F09	20-Aug-09	11	75-100	light	rain	north west	light	-	-	0.2	11.11	11.4	16	7.7
		WIL-MA003-F09	20-Aug-09	11	75-100	light	rain	north west	light	-	-	0.2	11.86	11.2	16	7.6
		WIL-WQ01-U09	22-Jul-09	14	75-100	-	none	south east	light	1.75	-	0.0	12.90	10.4	15	7.5
		WIL-WQ001-F09	20-Aug-09	9	75-100	-	none	north west	light	1.4	1.4	0.0	10.80	10.4	17	8.2
												1.0	10.78	10.5	17	8.1

Table X.IV-4
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Summer and Fall 2009

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Lower Lake	Andrew Lake	ANL-BIC001A-F09	21-Aug-09	10	75-100	-	none	north	light	0.9	0.9	0.5	9.94	11.4	31	7.2
		ANL-BIC001B-F09	21-Aug-09	10	75-100	-	none	north	light	0.9	0.9	0.5	9.80	11.4	31	7.2
		ANL-BIC001C-F09	21-Aug-09	10	75-100	-	none	north	light	0.8	0.8	0.5	10.16	11.2	31	7.2
		ANL-BIC001D-F09	21-Aug-09	10	75-100	-	none	north	light	0.9	0.9	0.5	10.27	11.3	31	7.2
		ANL-BIC001E-F09	21-Aug-09	10	75-100	-	none	north	light	0.8	0.8	0.5	10.49	11.4	31	7.2
		ANL-GN01-F09	21-Aug-09	10	75-100	-	none	north	light	1.0	1.0	0.0	9.65	11.1	31	7.2
		ANL-GN02-F09	21-Aug-09	11	75-100	-	none	north	light	1.0	1.0	0.0	9.58	11.2	31	7.3
		ANL-MT01-F09	21-Aug-09	11	75-100	-	none	north	light	0.5	0.5	0.0	9.58	11.2	31	7.3
		ANL-MT02-F09	21-Aug-09	11	75-100	-	none	north	light	1.0	1.0	0.0	9.58	11.2	31	7.3
		ANL-MT03-F09	22-Aug-09	11	75-100	-	none	north	light	1.0	1.0	0.0	9.58	11.2	31	7.3
		ANL-MT04-F09	22-Aug-09	11	75-100	-	none	north	light	1.0	1.0	0.0	9.58	11.2	31	7.3
		ANL-MT05-F09	21-Aug-09	11	75-100	-	none	north	light	0.75	0.75	0.0	9.58	11.2	31	7.3
		ANL-WQ001-F09	21-Aug-09	10	75-100	-	none	north	light	0.9	0.9	0.5	9.80	11.2	31	7.3
Judge Sissons Lake	Judge Sissons Lake	JSL-AN01-F09	24-Aug-09	9	<25	-	none	-	calm	1.5	1.5	0.2	9.08	11.2	20	7.1
		JSL-AN02-F09	24-Aug-09	13	<25	-	none	south	light	0.5	0.5	0.0	12.19	11.54	19	7.2
		JSL-BIC002D-F09	19-Aug-09	8	75-100	moderate	rain	south east	moderate	7	14.5	0.1	11.37	9.98	21	7.7
												1.0	11.39	9.89	21	7.6
												2.0	11.38	9.87	21	7.6
												3.0	11.38	9.87	21	7.5
												4.1	11.39	9.85	21	7.5
												5.0	11.38	9.85	21	7.5
												6.0	11.39	9.85	21	7.5
												7.1	11.38	9.84	21	7.5
												8.1	11.38	9.84	21	7.4
												9.0	11.39	9.83	21	7.4
												10.0	11.39	9.83	21	7.4
												11.1	11.39	9.83	21	7.4
												12.0	11.38	9.83	21	7.4
												13.0	11.38	9.82	21	7.3
		JSL-BIC006B-F09	20-Aug-09	9	75-100	-	none	north west	moderate	1.5	1.5	0.0	10.80	11.11	21	7.8
												0.5	10.84	10.95	21	7.8
												1.0	10.86	10.9	21	7.8
		JSL-BIC006C-F09	20-Aug-09	9	75-100	-	none	north west	moderate	1.4	1.4	0.0	10.89	11.03	21	7.7
												0.5	10.90	10.95	21	7.7
												1.0	10.90	10.91	21	7.7
		JSL-BIC006D-F09	20-Aug-09	9	75-100	-	none	north west	moderate	2.0	2.0	0.0	11.01	10.96	21	7.6
												0.5	11.02	10.91	21	7.6
												1.1	11.02	10.88	21	7.6
												1.5	11.02	10.84	21	7.6
		JSL-BIC006E-F09	20-Aug-09	9	75-100	light	rain	north west	moderate	2.5	2.5	0.0	11.09	10.98	21	7.4
												0.5	11.10	10.9	21	7.4
												1.0	11.10	10.86	21	7.4
												1.5	11.10	10.83	21	7.4
												2.0	11.10	10.81	21	7.4
		JSL-BIC007A-F09	21-Aug-09	7	50-75	-	none	north west	calm	0.8	0.8	0.1	9.69	10.69	21	8.4
												0.5	9.41	10.66	21	8.3

Table X.IV-4
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Summer and Fall 2009

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Judge Sissons Lake	Judge Sissons Lake	JSL-BIC007B-F09	21-Aug-09	7	50-75	-	none	north west	calm	0.8	0.8	0.0	9.41	11.1	21	8.3
												0.5	9.43	10.81	21	8.3
		JSL-BIC007C-F09	21-Aug-09	7	50-75	-	none	north west	calm	1.0	1.0	0.0	10.09	11.03	21	8.2
												0.5	10.03	10.92	21	8.2
		JSL-BIC007D-F09	21-Aug-09	7	50-75	-	none	north west	calm	1.2	1.2	0.0	10.34	10.95	21	8.2
												0.5	10.34	10.92	21	8.2
												1.0	10.35	10.87	21	8.2
		JSL-BIC007E-F09	21-Aug-09	7	50-75	-	none	north west	calm	0.8	0.8	0.0	10.32	10.95	21	8.1
												0.5	10.34	10.95	21	8.1
		JSL-BIC008A-F09	21-Aug-09	4	75-100	-	none	north east	light	0.9	0.9	0.0	8.10	11.01	24	8.1
												0.5	8.15	10.96	25	8.1
		JSL-BIC008B-F09	21-Aug-09	4	75-100	-	none	north east	light	1.0	1.0	0.0	8.42	11.21	21	8.0
												0.5	8.45	11.13	21	8.1
		JSL-BIC008C-F09	21-Aug-09	4	75-100	-	none	north east	light	1.0	1.0	0.0	8.48	11.23	22	8.2
												0.5	8.52	11.14	21	8.2
		JSL-BIC008D-F09	22-Aug-09	4	75-100	-	none	north east	light	1.1	1.1	0.0	8.46	11.26	21	8.1
												0.5	8.48	11.22	21	8.1
		JSL-BIC008E-F09	22-Aug-09	4	75-100	-	none	north east	light	0.9	0.9	0.0	8.88	11.26	20	8.0
												0.5	8.92	11.21	20	8.0
		JSL-GN01-F09	24-Aug-09	13	<25	-	none	south	light	2.5	2.5	0.2	10.78	11.1	21	7.2
												1.0	10.53	11.08	21	7.2
												2.0	10.43	11.08	21	7.1
												2.3	10.11	11.2	21	7.1
		JSL-MA001-F09	24-Aug-09	13	0	-	none	south	light	-	-	0.0	12.19	11.54	19	7.2
		JSL-MA002-F09	25-Aug-09	13	0	-	none	-	calm	-	-	0.0	8.96	11.21	23	7.4
		JSL-MA003-F09	25-Aug-09	13	0	-	none	-	calm	-	-	0.0	11.35	11.25	21	7.8
		JSL-WQ001-F09	19-Aug-09	9	75-100	light	rain	south east	moderate	8	9.4	0.1	11.26	9.88	21	7.2
												1.0	11.26	9.85	21	7.3
												2.0	11.27	9.85	21	7.3
												3.0	11.27	9.84	21	7.2
												4.0	11.27	9.83	21	7.2
												5.0	11.28	9.82	21	7.2
												6.0	11.28	9.82	21	7.2
												7.0	11.28	9.82	21	7.2
												8.0	11.28	9.81	21	7.2
												8.5	11.28	9.81	21	7.2
												9.1	11.27	9.4	21	7.2

Table X.IV-4
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Summer and Fall 2009

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Judge Sissons Lake	Judge Sissons Lake	JSL-WQ002-U09	22-Jul-09	14	75-100	-	none	south east	moderate	8	20.6	0.3	5.60	12.86	21	7.5
												1.0	5.57	12.85	21	7.5
												2.0	5.55	12.84	21	7.4
												3.0	5.51	12.87	21	7.3
												4.0	5.37	12.84	21	7.3
												5.0	5.32	12.85	21	7.3
												6.0	5.30	12.84	21	7.3
												7.0	5.27	12.84	21	7.2
												8.0	5.24	12.83	21	7.2
												9.0	5.21	12.84	21	7.2
												10.0	5.21	12.82	21	7.2
												11.0	5.19	12.82	21	7.2
												12.0	5.15	12.84	22	7.1
												13.0	5.16	12.84	22	7.1
												14.0	5.12	12.84	22	7.1
												15.0	5.08	12.84	22	7.1
												16.0	5.08	12.84	22	7.1
												17.0	5.08	12.84	22	7.1
												18.0	5.08	12.84	22	7.1
												19.0	5.08	12.83	22	7.0
												19.5	5.08	12.57	22	7.0
		JSL-WQ002-F09	18-Aug-09	10	75-100	moderate	rain	south west	moderate	7.1	16.5	0.1	11.58	10.03	21	7.7
												1.1	11.58	9.97	21	7.6
												2.0	11.57	9.96	21	7.6
												3.0	11.58	9.95	21	7.6
												4.1	11.58	9.94	21	7.5
												5.1	11.58	9.94	21	7.5
												6.0	11.56	9.93	21	7.5
												7.1	11.55	9.93	21	7.5
												8.1	11.54	9.93	21	7.5
												9.1	11.52	9.93	21	7.5
												10.0	11.48	9.94	21	7.4
												11.0	11.48	9.94	21	7.4
												12.0	11.44	9.94	21	7.4
												13.0	11.45	9.94	21	7.4
												14.0	11.43	9.94	21	7.4
												15.0	11.41	9.94	21	7.4
												16.1	11.41	9.93	21	7.4
		JSL-WQ006-F09	20-Aug-09	9	75-100	light	rain	north west	moderate	1.7	1.7	0.0	10.83	10.88	21	7.9
												0.5	10.85	10.82	21	7.9
												1.0	10.85	10.76	21	7.9
												1.5	10.85	10.51	21	7.9
		JSL-WQ007-F09	21-Aug-09	7	50-75	-	none	north west	calm	0.8	0.8	0.1	9.69	10.69	21	8.4
												0.5	9.41	10.66	21	8.3
		JSL-WQ008-F09	22-Aug-09	4	75-100	-	none	north east	light	0.9	0.9	0.0	8.10	11.01	24	8.1
												0.5	8.15	10.96	25	8.1

Notes: Dissolved oxygen concentrations that were less than the CWQG of 9.5 mg/L are bolded.

pH values that were outside of the Canadian Water Quality Guidelines (CWQG) of pH 6.5 to 9 are bolded.

^(a) = Station code is comprised of three letter waterbody code station number or sampling method and effort, season code, and year.

°C = degrees Celsius; % = percent; Precip = precipitation; m = metre; mg/L = milligrams per litre; µS/cm = microSiemens per centimetre; AN = angling; GN = gill net; MT = minnow trap; WQ = water quality; BIC = benthic invertebrate community; MA = aquatic macrophyte; Jul = July; Aug = August; - = not collected or not applicable.

Table X.IV-5
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Winter 2009

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Ice Thickness (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Lower Lake	Mushroom Lake	MSL-001-W09	7-May-09	-10	<25	-	none	-	calm	2.0	7.3	2.0	2.32	12.29	49	7.4
												3.0	2.96	11.69	48	7.34
												4.0	2.91	11.74	48	7.27
												5.0	2.88	11.95	48	7.23
												6.0	2.87	11.74	48	7.18
												7.0	2.87	9.6	48	7.12
Judge Sissons Lake	Judge Sissons Lake	JSL-001-W09	7-May-09	-5	-	-	-	-	-	1.8	18.5	2.0	1.18	13.48	25	7.57
												3.0	1.48	12.77	23	7.51
												4.0	1.63	12.46	23	7.47
												5.0	1.80	11.17	23	7.43
												6.0	1.89	10.6	23	7.39
												7.0	2.03	9.76	23	7.34
												8.0	2.16	8.97	23	7.26
												9.0	2.28	7.97	24	7.19
												10.0	2.44	6.91	25	7.12
												11.0	2.55	6.0	26	7.06
												12.0	2.63	5.15	27	6.99
												13.0	2.74	4.15	27	6.92
												14.0	2.83	3.16	29	6.86
												15.0	2.94	2.26	29	6.8
												16.0	3.05	1.33	31	6.73
Siamese Lake	Siamese Lake	SML-001-W09	08-May-09	-15	50-75	-	none	south east	moderate	0.5	11.3	2.0	1.24	14.5	21	7.08
												3.0	1.66	13.1	19	7.04
												4.0	2.09	11.2	19	6.97
												5.0	2.38	8.9	20	6.87
												6.0	2.80	5.14	22	6.74
												7.0	3.03	2.48	22	6.64
												8.0	3.13	1.26	23	6.58
												9.0	3.35	0.49	25	6.5
												10.0	3.61	0.21	43	6.37
												11.0	3.91	0.2	106	6.3
		SML-002-W09	08-May-09	-15	25-50	-	none	east	light	1.8	9.7	2.0	2.06	16.24	25	7.9
												3.0	1.78	12.75	20	7.87
												4.0	2.27	9.44	19	7.76
												5.0	2.69	6.09	22	7.65
												6.0	3.00	3.33	25	7.51
												7.0	3.25	1.72	28	7.37
												8.0	3.52	0.45	59	7.05
		SML-003-W09	08-May-09	-10	75-100	light	Snow	east	light	1.96	7.8	9.0	3.82	0.24	143	6.78
												2.0	1.16	16.47	22	6.78
												3.0	1.72	15.03	20	6.77
												4.0	2.09	12.93	21	6.73
												5.0	2.43	10.9	21	6.69
		SML-004-W09	08-May-09	-15	50-75	-	none	south east	moderate	2.1	3.1	6.0	2.85	6.17	23	6.61
												7.0	3.25	2.77	26	6.49
												2.5	1.81	16.83	30	6.8
												3.0	1.61	15.45	24	6.82
												2.5	1.40	17.49	35	7.97
		SML-005-W09	08-May-09	-15	25-50	-	none	east	light	2.0	4.1	3.0	1.69	16.68	34	7.9
												3.5	1.86	16.07	33	7.85
												4.0	2.04	15.66	33	7.81

Table X.IV-5
Supporting Environmental Variables and Limnology Data for Lakes in the Kiggavik Project Area, Winter 2009

Sub-Basin	Waterbody	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Ice Thickness (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Siamese Lake	L2 (unnamed lake)	L2L-001-W09	06-May-09	-5	50-75	-	none	-	calm	1.78	4.0	2.0	0.83	16.86	28	6.4
												3.0	1.44	17.42	31	6.3
												3.5	1.47	17.07	30	6.4
		L2L-002-W09	06-May-09	-5	50-75	-	none	-	calm	1.6	5.5	2.0	0.84	15.67	25	6.2
												3.0	1.44	13.95	23	6.3
												4.0	1.78	12.6	22	6.3
												5.0	2.08	11.48	26	6.3
												5.4	2.24	8.35	28	6.2
												2.0	0.93	16.65	27	6.7
		L2L-003-W09	08-May-09	-5	50-75	-	none	-	calm	1.6	7.4	3.0	1.30	15.15	25	6.6
												4.0	1.72	13.9	24	6.6
												5.0	2.02	12.88	24	6.6
												6.0	2.40	11.33	26	6.6
												7.0	2.81	7.62	29	6.5
												2.0	0.48	16.48	25	6.6
		L2L-004-W09	06-May-09	-5	50-75	-	none	-	calm	1.7	8.0	3.0	1.42	14.48	22	6.6
												4.0	1.82	12.38	22	6.6
												5.0	2.08	11.25	23	6.6
												6.0	2.31	9.68	24	6.5
												7.0	2.45	8.89	26	6.5
												7.5	2.54	9.26	29	6.4
		L2L-005-W09	06-May-09	-5	50-75	-	none	-	calm	1.7	4.1	2.0	2.20	17.65	30	6.8
												2.5	1.75	17.09	29	6.4
												3.0	1.73	17.08	29	6.4
												3.5	1.75	16.58	29	6.4
Long Lake	Long Lake	LNL-001-W09	06-May-09	-8	50-75	-	none	-	calm	1.78	2.3	2.0	1.62	3.4	89	6.1
		LNL-002-W09	06-May-09	-8	50-75	-	none	-	calm	1.8	2.5	2.0	1.37	3.13	90	6.0
												2.3	1.73	2.08	103	6.0
Audra Lake	Audra Lake	AUL-003-W09	05-May-09	-15	50-75	-	none	south east	light	2.0	4.3	2.0	1.06	15.71	52	7.2
												2.5	1.56	14.53	49	7.1
												3.0	1.88	13.72	48	7.1
												3.5	2.11	12.89	47	7.0
		AUL-004-W09	05-May-09	-15	50-75	-	none	south east	light	1.8	2.25	1.9	0.80	4.41	274	6.4
		AUL-005-W09	05-May-09	-15	50-75	-	none	south east	light	1.7	6.8	1.8	0.50	17.38	48	7.1
												2.5	1.70	14.29	40	7.1
												3.0	2.00	12.88	42	7.0
												3.5	2.24	10.34	41	7.0
												4.0	2.53	8.7	44	6.9
												4.5	2.68	8.69	48	6.8
												5.0	2.73	8.86	50	6.8
												5.5	2.89	8.24	56	6.7
												6.0	3.14	6.91	57	6.7
Baker Lake	Qinguq Bay	QNB-001-W09	05-May-09	-12	50-75	-	none	south west	moderate	1.75	4.5	2.0	2.75	9.15	115	6.1
												2.5	2.47	7.49	123	6.0
												3.0	2.75	5.81	130	5.9
												3.5	2.82	4.41	129	6.0

Notes: Dissolved oxygen concentrations that were less than the CWQG of 9.5 mg/L are bolded.
pH values that were outside of the Canadian Water Quality Guidelines (CWQG) of pH 6.5 to 9 are bolded.
At the time of the survey, Sik Sik, Rock, Willow and Andrew lakes were frozen at the bottom.
^(a) = Station code is comprised of three letter waterbody code, station number, season code, and year.
°C = degrees Celsius; % = percent; Precip = precipitation; m = metre; mg/L = milligrams per litre; µS/cm = microSiemens per centimetre; - = not collected or not applicable.

Table X.IV-6
Supporting Environmental Variables and Limnology Data for Streams in the Kiggavik Project Area, Spring 2008

Sub-Basin	Watercourse	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Willow Lake	Northeast Inflow of Pointer Lake	NEPLS-001-P08	22-Jun-08	8	75-100	-	none	north west	light	0.15	0.15	0.2	4.92	12.5	15	7.2
		NEPLS-AN01-P08	24-Jun-08	11	50-75	-	none	south west	light	-	-	0.1	6.75	11.6	17	7.2
		NEPLS-AN02-P08	24-Jun-08	10	75-100	-	none	north east	light	-	-	0.1	6.75	11.6	17	7.2
		NEPLS-BP01-P08	17-Jun-08	8	75-100	light	rain	south	moderate	0.50	-	0.1	3.73	11.9	18	7.3
		NEPLS-BP02-P08	17-Jun-08	8	75-100	light	rain	south	moderate	0.25	-	0.1	4.80	12.3	27	6.9
		NEPLS-BP03-P08	17-Jun-08	8	75-100	light	rain	south	moderate	-	-	0.1	5.22	12.1	27	7.0
		NEPLS-BP04-P08	17-Jun-08	8	75-100	light	rain	south	moderate	-	-	0.1	5.18	12.0	27	7.0
		NEPLS-BP05-P08	24-Jun-08	11	50-75	-	none	south west	light	-	-	0.1	6.75	11.6	17	7.2
	Northwest Inflow of Pointer Lake	NWPLS-001-P08	21-Jun-08	-	-	-	-	-	-	-	-	0.1	6.21	12.5	19	7.3
		NWPLS-AN01-P08	24-Jun-08	15	25-50	-	none	south west	light	-	-	0.1	9.97	10.9	21	7.3
		NWPLS-BP01-P08	24-Jun-08	15	25-50	-	none	south west	light	-	-	0.1	9.97	10.9	21	7.3
		NWPLS-BP02-P08	24-Jun-08	15	<25	-	none	south west	light	-	-	0.1	11.19	10.4	18	7.1
	Pointer/Rock Stream	PRROS-001-P08	20-Jun-08	12	75-100	-	none	south east	light	0.75	0.75	0.2	1.91	13.3	18	7.2
		PRROS-AN01-P08	20-Jun-08	12	75-100	-	none	south east	light	0.75	-	0.2	1.91	13.3	18	7.2
	Sik Sik/Rock Stream	SSROS-001-P08	19-Jun-08	3	75-100	moderate	rain	south east	light	0.20	0.20	0.2	2.44	13.3	13	6.6
		SSROS-AN01-P08	20-Jun-08	10	75-100	-	none	south east	light	-	-	0.1	2.36	12.9	14	7.2
		SSROS-BP01-P08	20-Jun-08	10	75-100	-	none	south east	light	0.25	-	0.1	2.36	12.9	14	7.2
	Rock/Willow Stream	ROWIS-001-P08	18-Jun-08	12	0	-	none	-	calm	0.20	0.20	0.2	3.38	13.2	16	6.7
		ROWIS-BP01-P08	19-Jun-08	5	75-100	light	rain	south east	light	-	-	0.1	3.30	13.4	17	6.9
	Willow/Judge Sissons Stream	WIJSS-001-P08	18-Jun-08	10	0	-	none	south west	light	0.25	0.25	0.2	3.08	13.1	17	7.1
		WIJSS-BP01-P08	19-Jun-08	5	75-100	light	rain	south east	light	-	-	0.1	2.47	12.9	15	7.4
Lower Lake	Mushroom/End Grid Stream	MSEGS-001-P08	23-Jun-08	9	75-100	-	none	north	light	0.40	0.40	0.3	7.16	12.2	19	7.2
		MSEGS-BP01-P08	23-Jun-08	9	75-100	-	none	north	light	0.80	-	0.2	7.16	12.2	19	7.2
	End Grid/Shack Stream	EGSHS-001-P08	23-Jun-08	11	75-100	-	none	north	light	0.50	0.50	0.3	10.14	12.1	21	7.3
		CGLUS-001-P08	22-Jun-08	11	75-100	-	none	north	moderate	0.60	0.60	0.3	5.88	12.7	13	7.2
	Cigar/Lunch Stream	CGLUS-AN01-P08	22-Jun-08	11	75-100	-	none	north	moderate	0.60	-	0.3	5.88	12.7	13	7.2
		CGLUS-BP01-P08	22-Jun-08	11	75-100	-	none	north west	moderate	1.00	-	0.3	5.88	12.7	13	7.2
	Knee/Lunch Stream	KNLUS-001-P08	22-Jun-08	11	75-100	-	none	north	light	1.00	1.00	0.3	10.55	12.1	20	7.3
		KNLUS-BP01-P08	23-Jun-08	12.5	75-100	-	none	north	light	1.12	-	0.3	10.55	12.1	20	7.3
	Lunch/Andrew Stream	LUANS-001-P08	22-Jun-08	11	75-100	-	none	north west	light	1.30	1.30	0.3	4.12	11.6	15	7.2
		LUANS-AN01-P08	22-Jun-08	11	75-100	-	none	north west	light	-	-	0.3	4.21	11.6	15	7.2
		LUANS-BP01-P08	22-Jun-08	11	75-100	-	none	north west	light	0.80	-	0.1	4.48	11.2	14	7.1
	Andrew/Shack Stream	ANSHS-001-P08	22-Jun-08	8	75-100	-	none	north	light	1.00	1.00	0.3	7.86	11.1	17	7.2
		ANSHS-AN01-P08	22-Jun-08	8	75-100	-	none	north	light	1.00	-	0.3	7.86	11.1	17	7.2
		ANSHS-AN02-P08	22-Jun-08	8	75-100	-	none	north	light	1.30	-	0.3	7.86	11.1	17	7.2
		ANSHS-BP01-P08	22-Jun-08	7	75-100	-	none	north	light	0.80	-	0.3	7.01	11.6	16	7.2
		ANSHS-BP02-P08	22-Jun-08	7	75-100	-	none	north	light	1.20	-	0.4	7.01	11.6	16	7.2
	Shack/Lower Stream	SHLWS-001-P08	20-Jun-08	13	25-50	-	none	north west	light	-	0.80	0.3	5.71	11.6	15	7.5
		SHLWS-AN01-P08	20-Jun-08	11	75-100	-	none	south	light	-	-	0.1	5.12	11.2	17	7.0
		SHLWS-AN02-P08	20-Jun-08	11	75-100	-	none	north west	light	-	-	0.1	9.40	10.6	16	7.5
		SHLWS-AN03-P08	20-Jun-08	11	75-100	-	none	north west	light	-	-	0.1	9.44	10.6	16	7.5
		SHLWS-BP01-P08	20-Jun-08	11	75-100	-	none	south	light	-	-	0.1	5.12	11.2	17	7.0
		SHLWS-BP02-P08	20-Jun-08	11	75-100	-	none	south	light	-	-	0.1	5.12	11.2	17	7.0
	Lower/Judge Sissons Stream	LWJSS-001-P08	18-Jun-08	9	<25	-	none	north	light	0.70	0.70	0.3	6.38	12.2	15	7.2
		LWJSS-AN01-P08	20-Jun-08	10	25-50	-	none	south east	light	-	-	0.3	10.41	10.9	17	7.6
		LWJSS-BP01-P08	18-Jun-08	9	<25	-	none	north	light	-	-	0.1	8.10	11.5	19	7.7
Caribou Lake	Ridge/Crash Stream	RDCRS-001-P08	24-Jun-08	14	50-75	-	none	north west	light	0.40	0.40	0.2	9.98	13.0	15	7.5
	Cirque/Crash Stream	CQCRS-001-P08	24-Jun-08	14	50-75	-	none	north west	light	0.20	0.20	0.1	5.20	13.0	12	6.9
	Crash/Fox Stream	CRFXS-001-P08	24-Jun-08	14	50-75	-	none	north west	light	0.30	0.30	0.2	12.16	12.5	16	7.1
	Fox/Caribou Stream	FXCBS-001-P08	24-Jun-08	14	50-75	-	none	north west	light	0.40	0.40	0.3	6.00	12.6	18	6.8
		FXCBS-BP01-P08	24-Jun-08	11	<25	-	none	west	light	0.50	-	0.3	6.17	12.6	18	7.2
	Caribou/Calf Stream	CBCFS-001-P08	24-Jun-08	10	25-50	-	none	north west	light	0.60	0.60	0.3	7.02	12.8	16	7.6
		CBCFS-AN01-P08	24-Jun-08	10	25-50	-	none	north west	light	0.60	-	0.6	7.02	12.8	16	7.6
	Calf/Judge Sissons Stream	CFJSS-001-P08	24-Jun-08	14	50-75	-	none	north west	moderate	1.00	1.00	0.3	8.20	13.4	18	7.4
		CFJSS-AN01-P08	22-Jun-08	14	50-75	-	none	north west	moderate	1.00	-	0.1	6.92	13.1	18	6.8
		CFJSS-BP01-P08	24-Jun-08	9	<25	-	none	-	calm	1.00	-	0.3	5.88	13.2	18	7.3

Notes: Dissolved oxygen concentrations that were less than the CWQG of 9.5 mg/L are bolded.
pH values that were outside of the Canadian Water Quality Guidelines (CWQG) of pH 6.5 to 9 are bolded.
^(a) = Station code is comprised of five letter or sampling method and effort number waterbody code, station number, season code and year.
°C = degrees Celsius; % = percent; Precip = precipitation; m = metre; mg/L = milligrams per litre; µS/cm = microSiemens per centimetre; AN = angling; BP = backpack electrofishing; Jun = June; - = not collected or not applicable.

Table X.IV-7
Supporting Environmental Variables and Limnology Data for Streams in the Kiggavik Project Area, Fall 2008

Sub-Basin	Watercourse ^(a)	Station Code ^(b)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Willow Lake	Northeast Inflow of Pointer Lake	NEPLS-002-F08	29-Aug-08	5	75-100	-	none	west	light	-	0.30	0.2	7.04	11.0	40	6.6
	Northwest Inflow of Pointer Lake	NWPLS-002-F08	30-Aug-08	6	75-100	-	none	south west	light	-	0.25	0.2	5.56	11.2	26	6.6
	Pointer/Rock Stream	PRROS-002-F08	30-Aug-08	6	75-100	light	rain	south west	light	-	0.15	0.2	6.83	11.7	14	6.7
	Sik Sik/Rock Stream	SSROS-002-F08	30-Aug-08	6	75-100	moderate	rain	south west	light	-	0.30	0.2	6.24	11.4	45	6.6
	Rock/Willow Stream	ROWIS-002-F08	30-Aug-08	6	75-100	-	none	south west	light	-	0.20	0.2	6.87	11.9	22	6.3
	Willow/Judge Sissons Stream	WIJSS-002-F08	30-Aug-08	6	75-100	-	none	south west	light	0.25	0.50	0.2	7.29	13.1	20	7.1
Lower Lake	Mushroom/End Grid Stream	MSEGS-002-F08	29-Aug-08	5	75-100	light	rain	west	light	-	0.22	0.2	5.97	11.1	27	6.9
	End Grid/Shack Stream	EGSHS-002-F08	29-Aug-08	5	75-100	light	rain	west	light	-	0.25	0.2	5.76	11.8	33	7.0
	Cigar/Lunch Stream	CGLUS-002-F08	28-Aug-08	8	75-100	-	none	east	light	-	0.33	0.2	6.96	11.1	31	7.3
	Knee/Lunch Stream	KNLUS-002-F08	28-Aug-08	8	75-100	light	rain	east	light	-	0.15	0.2	6.87	11.7	46	7.1
	Lunch/Andrew Stream	LUANS-002-F08	28-Aug-08	8	75-100	light	rain	east	light	-	0.15	0.2	7.20	11.4	38	7.1
	Andrew/Shack Stream	ANSHS-002-F08	28-Aug-08	8	75-100	light	rain	east	light	-	0.15	0.2	7.40	11.8	32	6.9
	Shack/Lower Stream	SHLWS-002-F08	29-Aug-08	5	75-100	light	rain	west	light	-	0.20	0.2	6.44	12.8	33	7.0
	Lower/Judge Sissons Stream	LWJSS-002-F08	29-Aug-08	5	75-100	-	none	west	light	-	0.30	0.2	7.37	11.2	36	6.9
Caribou Lake	Ridge/Crash Stream	RDCRS-002-F08	31-Aug-08	6	75-100	-	none	-	calm	-	0.27	0.2	9.42	11.8	20	6.8
	Cirque/Crash Stream	CQCRS-002-F08	31-Aug-08	6	75-100	-	none	-	calm	-	0.20	0.2	8.61	11.9	14	6.6
	Crash/Fox Stream	CRFXS-002-F08	31-Aug-08	6	75-100	-	none	-	calm	-	0.40	0.4	7.31	11.4	26	6.8
	Fox/Caribou Stream	FXCBS-002-F08	31-Aug-08	6	75-100	-	none	-	calm	-	0.25	0.3	8.14	12.0	16	6.9
	Caribou/Calf Stream	CBCFS-002-F08	31-Aug-08	6	75-100	-	none	-	calm	-	0.25	0.3	6.95	11.9	21	6.8
	Calf/Judge Sissons Stream	CFJSS-002-F08	31-Aug-08	6	75-100	-	none	-	calm	-	0.10	0.3	6.36	11.7	23	6.8
Access Local Study Area ^(c)	Km 174.8 (X18, Thelon River)	THR-AN01-F08	09-Sep-08	0	75-100	-	none	north west	light	0.50	0.50	0.2	6.57	11.8	27	7.4
		THR-AN02-F08	09-Sep-08	0	75-100	-	none	north west	light	1.50	1.50	0.2	6.66	11.9	28	7.4
		THR-AN03-F08	09-Sep-08	0	75-100	-	none	north west	light	1.00	1.00	0.2	6.93	12.0	27	7.3
	Alternate X28	X28-AN01-F08	09-Sep-08	5	75-100	-	none	north west	moderate	-	-	0.2	5.88	12.3	111	7.1
		X28-AN02-F08	09-Sep-08	5	75-100	-	none	north west	moderate	-	-	0.2	5.86	12.1	110	7.4
		X28-AN03-F08	10-Sep-08	2	-	-	none	-	calm	1.50	1.50	0.2	3.98	11.8	106	7.4
	Alternate X33	X33-AN01-F08	10-Sep-08	5	-	-	-	west	moderate	1.00	1.00	0.2	4.66	12.7	19	7.6
		X33-AN02-F08	10-Sep-08	5	75-100	light	rain	west	moderate	1.00	1.00	0.2	4.88	12.6	19	7.5
		X33-AN03-F08	10-Sep-08	5	75-100	light	rain	west	moderate	1.50	1.50	0.2	5.08	12.7	18	7.2

Notes: Dissolved oxygen concentrations that were less than the CWQG of 9.5 mg/L are bolded.
pH values that were outside of the CWQG of pH 6.5 to 9 are bolded.
^(a) = Number represents EBA's road crossing name; information in parenthesis represents Golder's road crossing name.
^(b) = Station code consists of three or five letter water body code, station number or sampling method and effort number, season code and year is comprised of waterbody code-station number/fishing effort-season code and year.
^(c) = The proposed access road crosses sub-basins of several watersheds.

°C = degrees Celsius; % = percent; Precip = precipitation; m = metre; mg/L = milligrams per litre; Km = kilometres; µS/cm = microSiemens per centimetre; AN = angling; Aug = August; Sep = September; - = not collected or not applicable.

Table X.IV-8
Supporting Environmental Variables and Limnology Data for Streams in the Kiggavik Project Area, 2009

Sub-Basin	Watercourse ^(a)	Station Code ^(b)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Willow Lake	Northeast Inflow of Pointer Lake	NEPLS-BP01-P09	25-Jun-09	9	50-75	-	none	-	calm	-	-	0.2	6.73	10.8	24	6.5
		NEPLS-FN01-P09	24-Jun-09	14	75-100	-	none	north west	light	-	-	0.2	10.24	11.0	23	6.6
		NEPLS-WQ001-P09	22-Jun-09	17	<25	-	none	south	light	-	0.2	0.1	14.40	10.7	16	6.7
		NEPLS-WQ002-F09	24-Aug-09	8	0	-	none	-	calm	-	0.25	0.0	5.77	11.3	39	7.9
	Northwest Inflow of Pointer Lake	NWPLS-BP01-P09	30-Jun-09	13	<25	-	none	-	calm	-	-	0.2	12.71	9.8	21	6.7
		PRROS-AN01-P09	26-Jun-09	12	75-100	-	none	south	light	-	-	0.2	4.29	12.9	16	7.9
	Pointer/Rock Stream	PRROS-AN02-P09	27-Jun-09	5	75-100	-	none	north west	light	-	-	0.2	3.82	12.6	16	7.3
		PRROS-AN03-P09	27-Jun-09	8	75-100	-	none	south west	light	-	-	0.2	4.31	12.5	16	7.3
		PRROS-BP01-P09	25-Jun-09	18	50-75	-	none	south	light	-	-	0.2	4.58	12.8	17	6.5
		PRROS-BP02-P09	26-Jun-09	7	75-100	-	none	south	light	-	-	0.2	3.28	12.7	17	6.7
		PRROS-BP03-P09	26-Jun-09	19	<25	-	none	south	light	-	-	0.2	5.21	12.5	17	6.5
		PRROS-FN01-P09	24-Jun-09	14	25-50	-	none	north west	light	-	-	0.2	4.57	13.0	18	6.5
		SSROS-BP01-P09	25-Jun-09	14	<25	-	none	south west	light	-	-	0.2	11.33	11.3	22	6.6
		SSROS-BP02-P09	27-Jun-09	11	75-100	-	none	north west	light	-	-	0.2	11.90	9.2	24	6.8
	Sik Sik/Rock Stream	SSROS-FN01-P09	24-Jun-09	8	<25	-	none	north west	light	-	-	0.2	11.51	11.4	11	7.0
		SSROS-WQ001-P09	22-Jun-09	12	<25	-	none	-	calm	-	0.23	0.2	8.32	10.0	21	7.7
		SSROS-WQ002-F09	23-Aug-09	9	<25	-	none	north west	light	0.12	0.12	0.0	13.11	10.5	45	7.7
		ROWIS-AN01-P09	25-Jun-09	15	50-75	-	none	south east	light	-	-	0.2	7.22	13.0	18	7.9
	Rock/Willow Stream	ROWIS-AN02-P09	26-Jun-09	12	50-75	-	none	south	light	-	-	0.2	8.21	12.0	17	7.6
		ROWIS-AN03-P09	27-Jun-09	4	75-100	-	none	north	moderate	-	-	0.2	7.01	11.9	18	7.7
		ROWIS-BP01-P09	25-Jun-09	12	25-50	-	none	south east	light	-	-	0.2	8.30	13.0	18	7.8
		ROWIS-BP02-P09	25-Jun-09	12	25-50	-	none	south east	light	-	-	0.2	8.30	13.0	18	7.8
		ROWIS-BP03-P09	26-Jun-09	15	25-50	-	none	south	light	-	-	0.2	8.36	12.0	17	7.6
		ROWIS-BP04-P09	27-Jun-09	4	75-100	-	none	north	moderate	-	-	0.2	6.71	11.8	18	7.6
		ROWIS-FN01-P09	24-Jun-09	8	<25	-	none	north west	light	-	-	0.2	4.60	13.2	17	6.9
		ROWIS-WQ001-P09	22-Jun-09	12	25-50	-	none	south east	light	-	0.42	0.2	9.74	12.6	16	7.3
		ROWIS-WQ002-F09	23-Aug-09	8	<25	-	none	north west	light	0.35	0.35	0.1	8.21	12.0	17	8.0
		WIJSS-AN01-P09	25-Jun-09	8	25-50	-	none	east	calm	-	-	0.2	2.62	13.1	17	8.0
	Willow/Judge Sissons Stream	WIJSS-AN02-P09	25-Jun-09	13	25-50	-	none	east	light	-	-	0.2	3.18	13.0	17	7.9
		WIJSS-AN03-P09	26-Jun-09	7	75-100	-	none	south west	light	-	-	0.2	3.53	12.3	17	7.9
		WIJSS-AN04-P09	27-Jun-09	12	25-50	-	none	north	moderate	-	-	0.1	6.48	12.3	18	7.6
		WIJSS-AN05-P09	29-Jun-09	-	<25	-	none	south east	light	-	-	0.0	-	-	-	-
		WIJSS-AN06-P09	29-Jun-09	-	<25	-	none	south east	light	-	-	0.0	-	-	-	-
		WIJSS-BP01-P09	25-Jun-09	12	25-50	-	none	east	calm	-	-	0.2	3.73	13.0	17	7.9
		WIJSS-BP02-P09	26-Jun-09	5	75-100	-	none	south west	light	-	-	0.2	3.28	12.3	17	8.0
		WIJSS-FN01-P09	24-Jun-09	8	<25	-	none	north west	light	-	-	0.3	2.17	13.3	18	7.2
		WIJSS-WQ001-P09	22-Jun-09	12	25-50	-	none	south east	light	-	0.41	0.2	12.84	12.1	17	7.2
		WIJSS-WQ002-F09	22-Aug-09	7	25-50	-	none	north east	light	0.15	0.15	0.2	9.83	11.8	17	7.9
Lower Lake	Lunch/Andrew Stream	LUANS-AN01-P09	28-Jun-09	15	<25	-	none	north west	light	-	-	0.2	11.18	11.5	14	7.8
		LUANS-BP01-P09	28-Jun-09	18	<25	-	none	north west	light	-	-	0.2	13.01	11.2	14	7.7
		LUANS-FN01-P09	28-Jun-09	11	<25	-	none	north west	light	-	-	0.2	9.48	11.8	15	7.7
	Andrew/Shack Stream	ANSHS-AN01-P09	29-Jun-09	10	<25	-	none	west	light	-	-	0.2	12.99	10.8	18	7.5
		ANSHS-BP01-P09	29-Jun-09	16	<25	-	none	west	light	-	-	0.2	16.12	10.1	14	7.4
		ANSHS-FN01-P09	28-Jun-09	10	<25	-	none	north west	light	-	-	0.2	12.15	10.9	18	7.8

Table X.IV-8
Supporting Environmental Variables and Limnology Data for Streams in the Kiggavik Project Area, 2009

Sub-Basin	Watercourse ^(a)	Station Code ^(b)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Secchi Depth (m)	Maximum Depth (m)	Profile Depth (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH
Aniguq River	Aniguq River	AQR1-AN1-F09	25-Aug-09	12	<25	-	none	north west	calm	-	-	0.2	11.93	11.3	29	8.1
		AQR3-AN1-F09	26-Aug-09	7	<25	-	none	north west	light	-	-	0.2	10.05	11.4	31	8.1
		AQR3-AN2-F09	26-Aug-09	7	<25	-	none	north west	light	-	-	0.2	10.05	11.4	31	8.1
		AQR3-AN3-F09	26-Aug-09	7	<25	-	none	north west	light	-	-	0.2	10.05	11.4	31	8.1
		AQR3-AN4-F09	26-Aug-09	7	<25	-	none	north west	light	-	-	0.2	10.05	11.4	31	8.1
		AQR3-AN5-F09	26-Aug-09	7	<25	-	none	north west	light	-	-	0.2	10.05	11.4	31	8.1
		AQR-WQ001-F09	25-Aug-09	-	0	-	none	-	-	0.12	-	0.0	10.02	11.5	30	8.1
Access Local Study Area ^(c)	Km 6.7 (NC30)	NC30-OBS1-U09	23-Jul-09	15	75-100	-	none	south	light	-	-	0.2	18.61	10.4	45	7.7
	Km 11.3 (NC29)	NC29-BP1-U09	23-Jul-09	16	75-100	-	none	north east	light	-	-	0.2	14.40	10.7	16	7.6
	Km 15.6 (NC27)	NC27-BP1-U09	23-Jul-09	-	75-100	-	none	-	calm	-	-	0.2	12.49	6.1	40	6.6
	Km 17.2 (NC26)	NC26-BP1-U09	23-Jul-09	15	75-100	-	none	south	light	-	-	0.2	13.41	10.3	19	7.5
		NC26-BP2-U09	23-Jul-09	15	75-100	-	none	south	light	-	-	0.2	13.41	10.3	19	7.5
	Km 100.2 (NC24)	NC24-BP1-U09	23-Jul-09	12	75-100	-	none	-	calm	-	-	0.2	9.59	4.5	35	7.5
	Km 107.8 (NC23)	NC23-BP1-U09	24-Jul-09	14	75-100	-	none	south west	light	-	-	0.2	12.14	8.9	37	7.2
	Km 109.8 (NC22.5)	NC22.5-BP1-U09	24-Jul-09	10	75-100	-	none	south	light	-	-	0.2	13.21	10.0	11	8.4
	Alternate NC17	NC17-BP1-U09	24-Jul-09	20	25-50	-	none	south east	light	-	-	0.2	12.99	8.1	27	6.8
	Km 127.5 (NC16)	NC16-BP1-U09	24-Jul-09	13	50-75	-	none	south	light	-	-	0.2	16.8	10.1	59	7.4
	Km 129.2 (NC15)	NC15-BP1-U09	25-Jul-09	10	75-100	-	none	west	moderate	-	-	0.2	15.29	9.8	14	7.9
	Km 145.3 (NC13)	NC13-BP1-U09	26-Jul-09	7	75-100	-	none	north	light	-	-	0.2	14.87	9.5	24	8.7
	Km 147.1 (NC12)	NC12-BP1-U09	26-Jul-09	10	75-100	-	none	south	light	-	-	0.2	12.67	10.2	21	7.8
	Km 147.6 (NC11.5)	NC11.5-BP1-U09	22-Jul-09	16	75-100	-	none	south	moderate	-	-	0.2	18.26	9.2	36	7.9
	Km 157.3 (NC10)	NC10-BP1-U09	22-Jul-09	14	75-100	-	none	south	moderate	-	-	0.2	12.81	9.4	88	8.2
	Km 157.7 (NC09)	NC09-BP1-U09	22-Jul-09	14	75-100	-	none	south	moderate	-	-	0.2	13.32	9.8	110	7.9
	Km 172.2 (NC03)	NC03-BP1-U09	22-Jul-09	10	75-100	-	none	east	moderate	-	-	0.0	-	-	-	-
	Km 174.8 (NC01, Thelon River)	NC01-AN1-U09	22-Jul-09	10	25-50	-	none	south east	moderate	-	-	0.0	-	-	-	-
		NC01-BP1-U09	22-Jul-09	10	50-75	-	none	north	moderate	-	-	0.0	-	-	-	-
	Alternate EC22	EC22-OBS2-F09	30-Aug-09	-	-	-	-	-	-	-	-	0.2	18.79	9.1	32	8.0
	Km 193.3 (EC21)	EC21-OBS1-F09	2-Sep-09	-	75-100	-	-	-	heavy	-	-	0.0	-	-	-	-
	Km 203.0 (EC10)	EC10-OBS2-F09	30-Aug-09	-	-	-	-	-	-	-	-	0.2	11.15	10.5	67	8.0
	Km 209.4 (EC4)	EC4-OBS2-F09	30-Aug-09	-	-	-	-	-	-	-	-	0.2	13.90	10.3	46	7.8
	Km 212.2 (EC3)	EC3-OBS1-F09	30-Aug-09	-	-	-	-	-	-	-	-	0.2	10.00	11.5	55	7.9
	Km 213.1 (EC2)	EC2-OBS1-F09	29-Aug-09	13	25-50	-	none	west	light	-	-	0.2	13.24	10.4	84	7.7
	Alternate W1	W1-BP1-U09	26-Jul-09	18	50-75	-	none	south	light	-	-	0.2	19.01	9.7	28	8.1
	Alternate W2	W2-BP1-U09	26-Jul-09	12	75-100	-	none	east	light	-	-	0.2	16.44	9.0	17	7.0
	Alternate W3	W3-BP1-U09	25-Jul-09	-	75-100	light	rain	-	calm	-	-	0.2	12.76	8.4	24	7.2
	Alternate W5	W5-BP1-U09	25-Jul-09	-	75-100	moderate	rain	south	light	-	-	0.2	13.95	3.8	154	6.4
	Alternate W6	W6-BP1-U09	26-Jul-09	-	75-100	-	none	east	light	-	-	0.0	12.98	9.9	92	7.3
	S03	S03-BP1-F09	29-Aug-09	13	<25	-	none	south west	light	-	-	0.2	12.77	10.8	37	8.3
	S05	S05-BP1-F09	28-Aug-09	-	25-50	-	none	west	light	-	-	0.2	14.00	11.0	39	8.0
	S11	S11-BP1-F09	28-Aug-09	19	<25	-	none	-	calm	-	-	0.2	16.71	11.1	33	7.9
	S13	S13-BP1-F09	28-Aug-09	14	50-75	-	none	-	calm	0.6	-	0.2	13.76	11.4	30	8.1
	S14	S14-BP1-F09	28-Aug-09	14	75-100	-	none	-	calm	-	-	0.2	11.20	8.3	140	7.8

Notes: Dissolved oxygen concentrations that were less than the CWQG of 9.5 mg/L are bolded.

pH values that were outside of the Canadian Water Quality Guidelines (CWQG) of pH 6.5 to 9 are bolded.

^(a) = Number represents EBA's road crossing name, information in parenthesis represents Golder's road crossing name

^(b) = Station code consists of three or five letter water body code, station number or sampling method and effort number, season code and year is comprised of waterbody code-station number/fishing effort-season code and year

^(c) = The proposed access road crosses sub-basins of several watersheds

°C = degrees Celsius; % = percent; Precip = precipitation; m = metre; mg/L = milligrams per litre; µS/cm = microSiemens per centimetre; Km = kilometre; AN = angling; GN = gill net; OBS = observation; BP = backpack electrofishing; WQ = water quality; FN = fyke net; Jun = June; Jul = July; Aug = August;

Sep = September; - = not collected or not applicable.

Table X.IV-9
Supporting Environmental Variables and Limnology Date for Ponds and Streams in the Kiggavik Project Area, Spring 2010

Sub-Basin	Waterbody/Watercourse	Station Code ^(a)	Date	Air Temperature (°C)	Cloud Cover (%)	Precip Rate	Precip Type	Wind Direction	Wind Rate	Maximum Depth (m)	Depth of Reading (m)	Water Temperature (°C)	Dissolved Oxygen (mg/L)	pH
Willow Lake	Northeast Inflow of Pointer Lake	NEPLS-BP01-P10	7-Jul-10	-	75-100%	Moderate	Rain	North East	Light	0.8	-	-	-	-
		NEPLS-BP02-P10								0.4	-	-	-	-
		NEPLS-BP03-P10								0.6	-	-	-	-
	Upper Tributary to Northeast Inflow of Pointer Lake	T-NEPLS-BP01-P10	4-Jul-10	5.7	75-100%	Moderate	Rain	East	Heavy	0.6	0.3	4.2	11.7	7.3
		T-NEPLS-BP02-P10								0.4	0.3	4.2	11.7	7.3
	Northwest Inflow of Pointer Lake	NWPLS-BP01-P10	2-Jul-10	10.3	75-100%	-	None	North East	Light	0.3	0.2	7.7	11.5	7.7
		NWPLS-BP02-P10								0.3	0.2	7.7	11.5	7.7
		NWPLS-BP03-P10								0.5	0.2	7.7	11.5	7.7
	Pointer Pond	PP-AN01-P10	3-Jul-10	11.8	75-100%	-	None	North East	Light	-	0.1	4.2	12.1	-
	Lower Lake	Pond 1	P1-AN01-P10	30-Jun-10	13.1	75-100%	-	None	South West	Light	-	0.7	11.3	10.2
P1-BP01-P10			Light				Rain	0.6			0.3	11.9	10.1	8.8
P1-MT01-P10				29-Jun-10				0.7			0.7	11.9	10.1	8.8
P1-MT02-P10								0.7			0.7	12.0	10.0	-
P1-MT03-P10								0.6			0.6	11.4	9.8	8.3
P1-MT04-P10								0.5			0.5	11.3	10.2	7.8
Pond 2		P2-AN01-P10	30-Jun-10	11.3	75-100%	Light	Rain	South West	Moderate	-	0.6	11.4	10.5	7.3
		P2-BP01-P10				-	None			0.6	0.3	11.4	10.5	7.3
		P2-MT01-P10								0.2	0.2	11.5	10.5	7.4
		P2-MT02-P10								0.3	0.3	11.4	10.5	7.3
		P2-MT03-P10								0.3	0.3	11.4	10.5	7.3
		P2-MT04-P10								0.3	0.3	11.4	10.4	7.2
Pond 3		P3-AN01-P10	1-Jul-10	7.2	75-100%	Moderate	Rain	South West	Moderate	-	0.5	7.8	11.6	7.9
		P3-BP01-P10				-	None			0.6	0.3	8.0	11.2	7.8
		P3-MT01-P10				Moderate	Rain			0.3	0.3	7.8	11.2	7.7
		P3-MT02-P10								0.2	0.2	8.0	11.2	7.8
		P3-MT03-P10								0.3	0.3	8.0	11.0	7.4
		P3-MT04-P10								0.3	0.3	7.8	11.6	7.9
Pond 4		P4-AN01-P10	1-Jul-10	7.2	75-100%	Moderate	Rain	South West	Moderate	-	0.7	11.1	10.5	7.3
		P4-BP01-P10	-			None	0.6			0.5	11.1	10.5	7.3	
		P4-MT01-P10	30-Jun-10			Moderate	Rain		Light	0.3	0.3	11.1	10.5	7.3
		P4-MT02-P10								0.3	0.3	11.1	10.6	7.3
		P4-MT03-P10								0.4	0.4	11.0	10.5	7.2
		P4-MT04-P10								0.5	0.5	11.0	10.5	7.2
Pond 5		P5-AN01-P10	1-Jul-10	13.2	75-100%	-	None	South West	Light	-	0.8	11.4	10.6	7.3
		P5-BP01-P10							Moderate	0.5	0.3	11.4	10.6	7.3
		P5-MT01-P10								0.2	0.2	11.5	10.5	7.5
		P5-MT02-P10								0.3	0.3	11.3	10.6	7.4
		P5-MT03-P10								0.3	0.3	11.6	10.6	7.4
		P5-MT04-P10								0.3	0.3	11.4	10.6	7.3
Pond 6		P6-AN01-P10	3-Jul-10	9.1	75-100%	-	None	South East	Moderate	-	0.4	8.5	10.6	7.5
		P6-BP01-P10				Light	Rain			0.4	0.3	8.8	10.6	7.5
		P6-MT01-P10				-	None		Light	0.4	0.4	8.5	10.6	7.5
		P6-MT02-P10								0.3	0.3	8.6	10.7	7.5
		P6-MT03-P10								0.4	0.4	8.5	10.9	7.5
		P6-MT04-P10								0.4	0.4	8.6	10.4	7.9
Pond 7		P7-AN01-P10	3-Jul-10	9.1	75-100%	-	None	South East	Moderate	-	0.5	8.3	10.5	7.3
		P7-BP01-P10				Light	Rain			0.4	0.3	8.3	10.5	7.3
		P7-MT01-P10				-	None			0.3	0.3	8.3	10.5	7.3
		P7-MT02-P10								0.3	0.3	8.3	10.6	7.1
		P7-MT03-P10								0.3	0.3	8.2	10.8	7.2
		P7-MT04-P10								0.3	0.3	8.2	10.5	7.2
Pond 8		P8-AN01-P10	4-Jul-10	6.8	75-100%	-	None	East	Heavy	-	0.7	5.1	11.7	7.6
		P8-BP01-P10		6.9						0.5	0.3	6.8	11.5	7.3
		P8-MT01-P10		6.8						0.3	0.3	5.1	11.7	7.6
		P8-MT02-P10								0.3	0.3	5.1	11.7	7.6
		P8-MT03-P10								0.3	0.3	5.1	11.4	7.5
		P8-MT04-P10								0.3	0.3	5.1	11.4	7.5
		P8-MT05-P10								0.2	0.2	5.0	11.5	7.3
		P8-MT06-P10								0.2	0.2	5.0	11.5	7.3
		P8-MT07-P10								0.3	0.3	4.9	11.9	7.2
		P8-MT08-P10								0.3	0.3	4.9	11.9	7.2

Notes: Dissolved oxygen concentrations that were less than the Canadian Water Quality Guidelines (CWQG) of 9.5 mg/L are bolded.

^(a) Station code is comprised of two letter waterbody code or five to seven watercourse code-sampling method, sampling effort, season code, and year.

Values of pH that were outside of the CWQG of pH 6.5 to 9 are bolded.

°C = degrees Celsius; % = percent; Precip = precipitation; m = metres; mg/L = milligrams per litre; Jun = June; Jul = July; - = not applicable or not collected.

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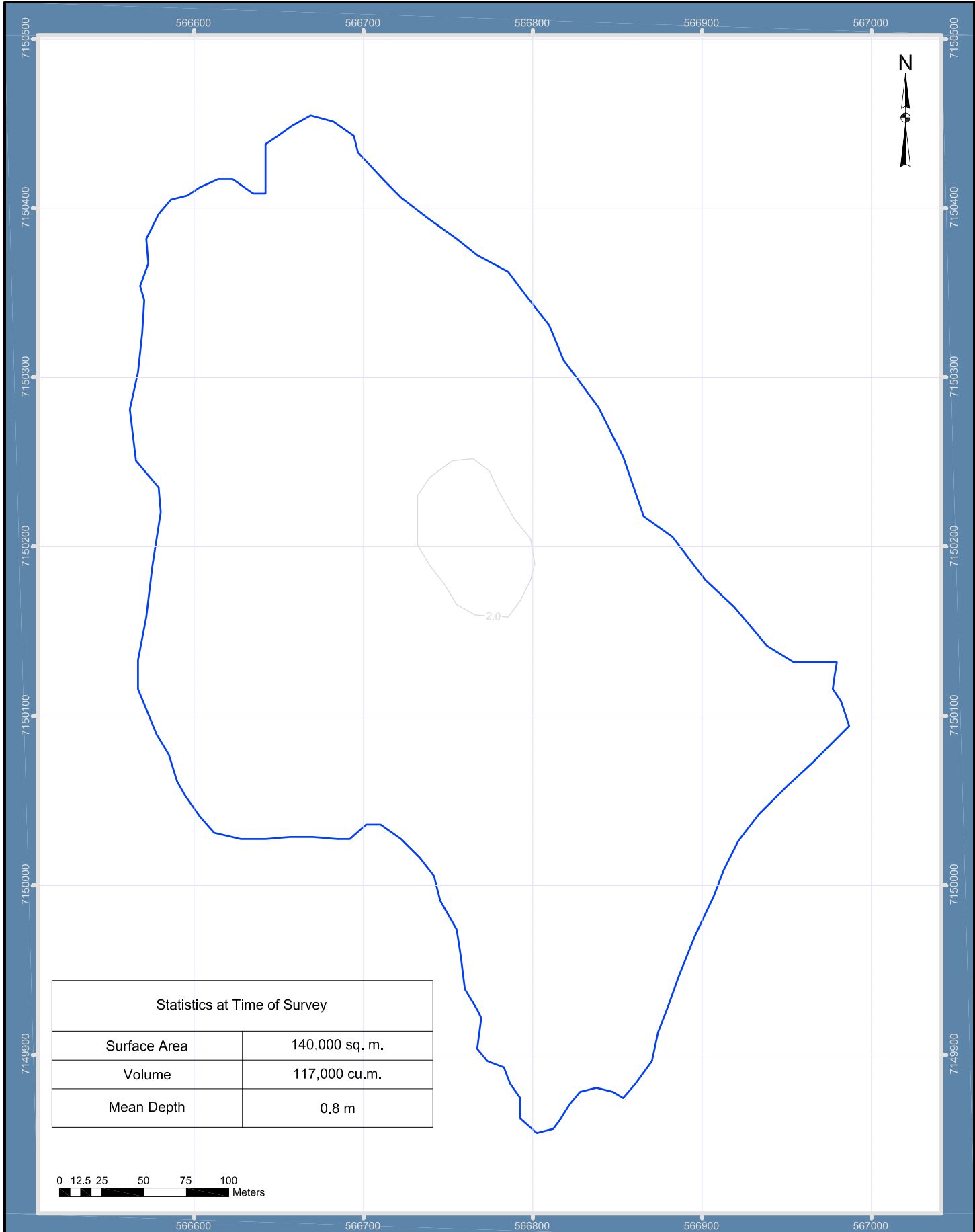
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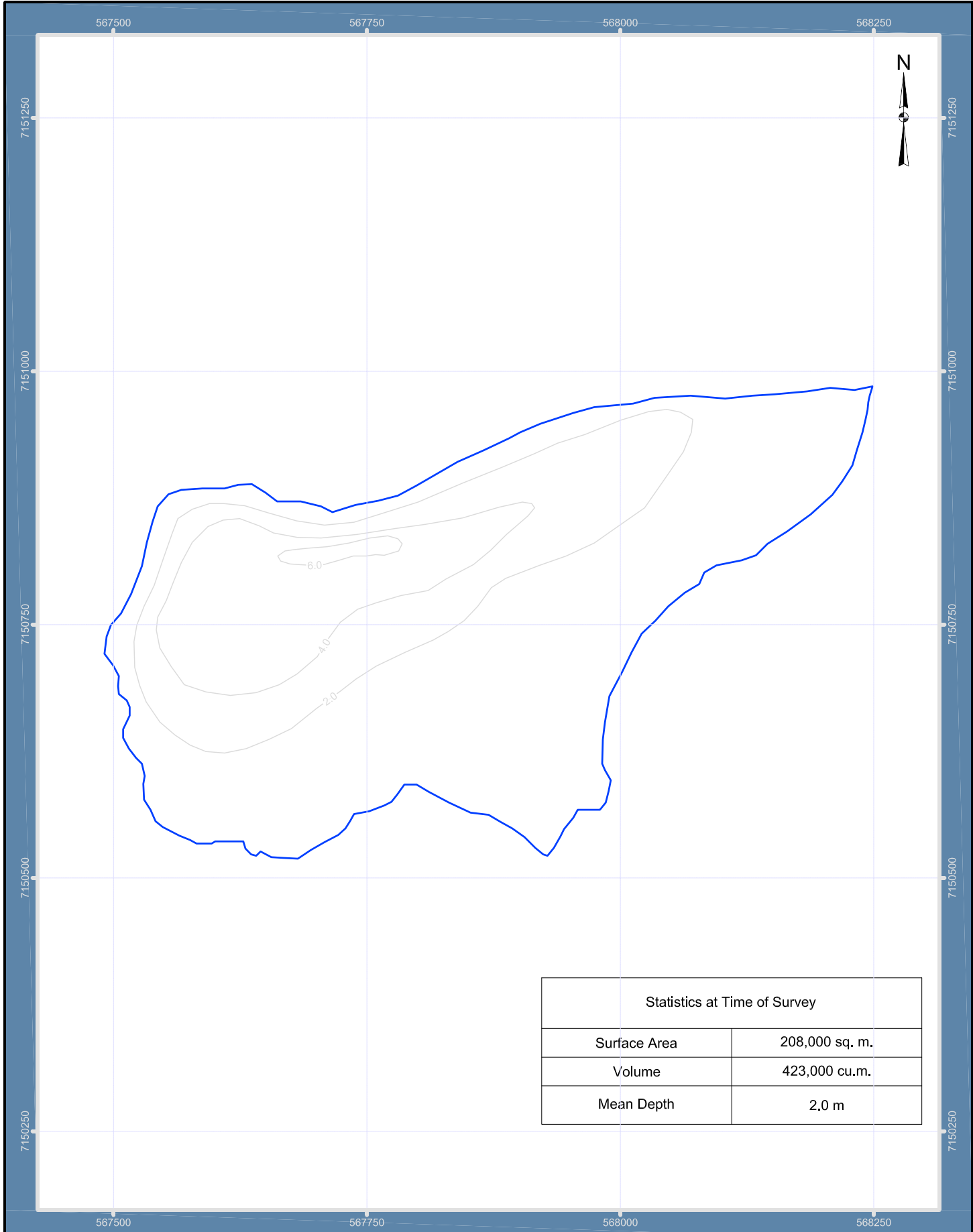
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FIGURE X.IV-1
 BATHYMETRY MAP
 MEADOW LAKE

KIGGAIVIK PROJECT - EIS





Statistics at Time of Survey	
Surface Area	208,000 sq. m.
Volume	423,000 cu.m.
Mean Depth	2.0 m

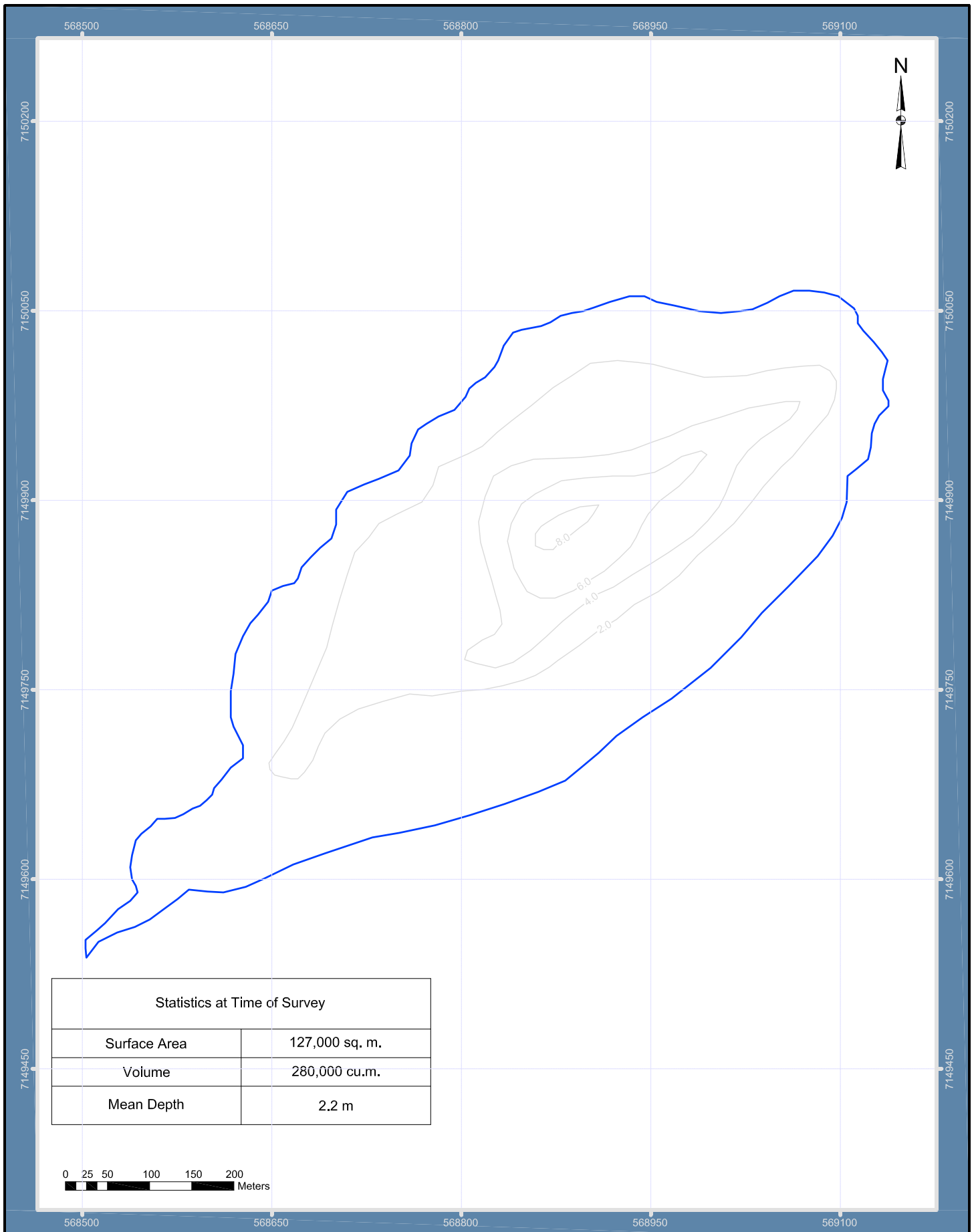
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FIGURE X.IV-2
 BATHYMETRY MAP
 FELSENMEER LAKE

KIGGAVERK PROJECT - EIS





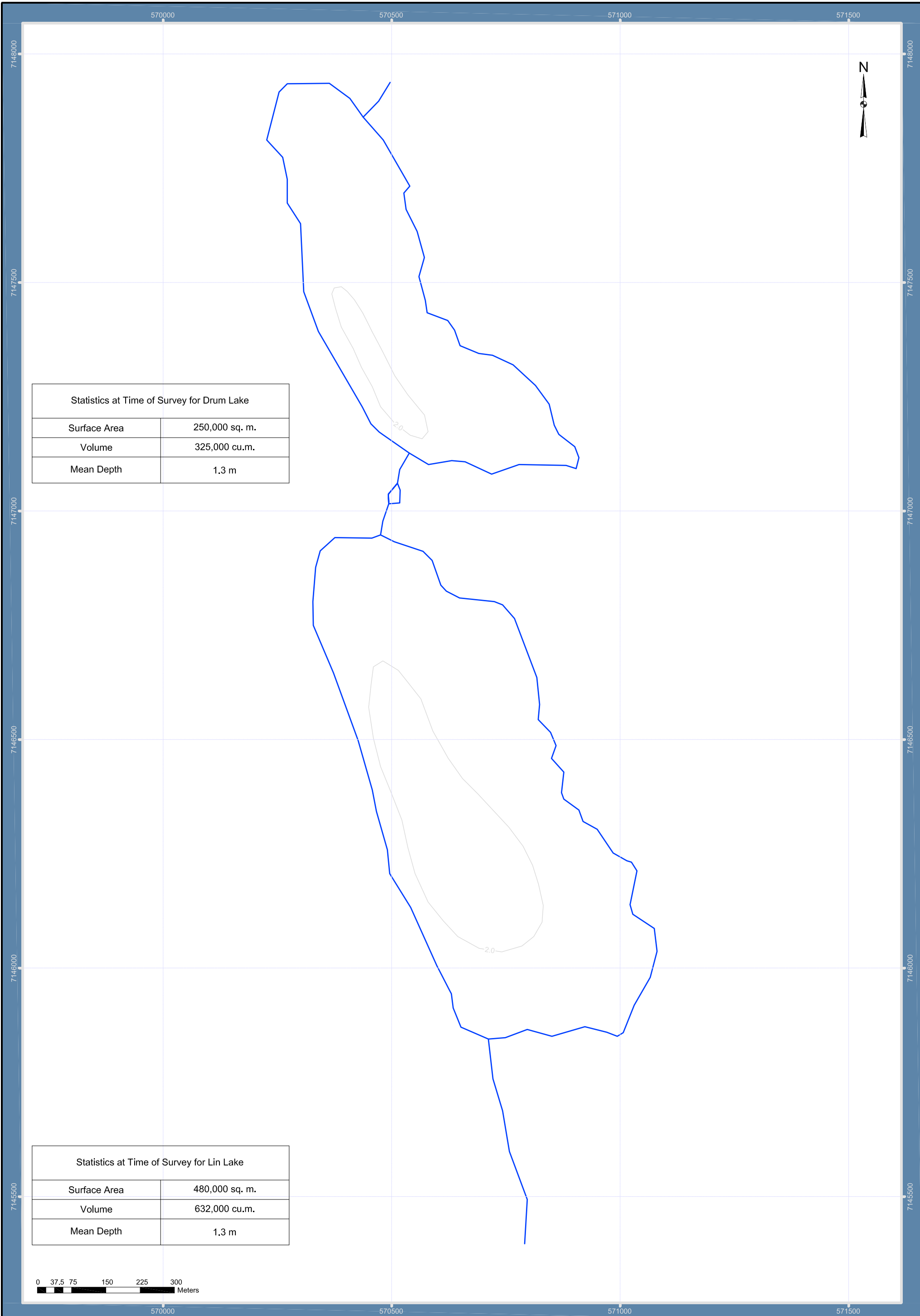
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Date: 11/28/09
File: K108C274
Data Sources: BEAK 1990, AREVA 2006

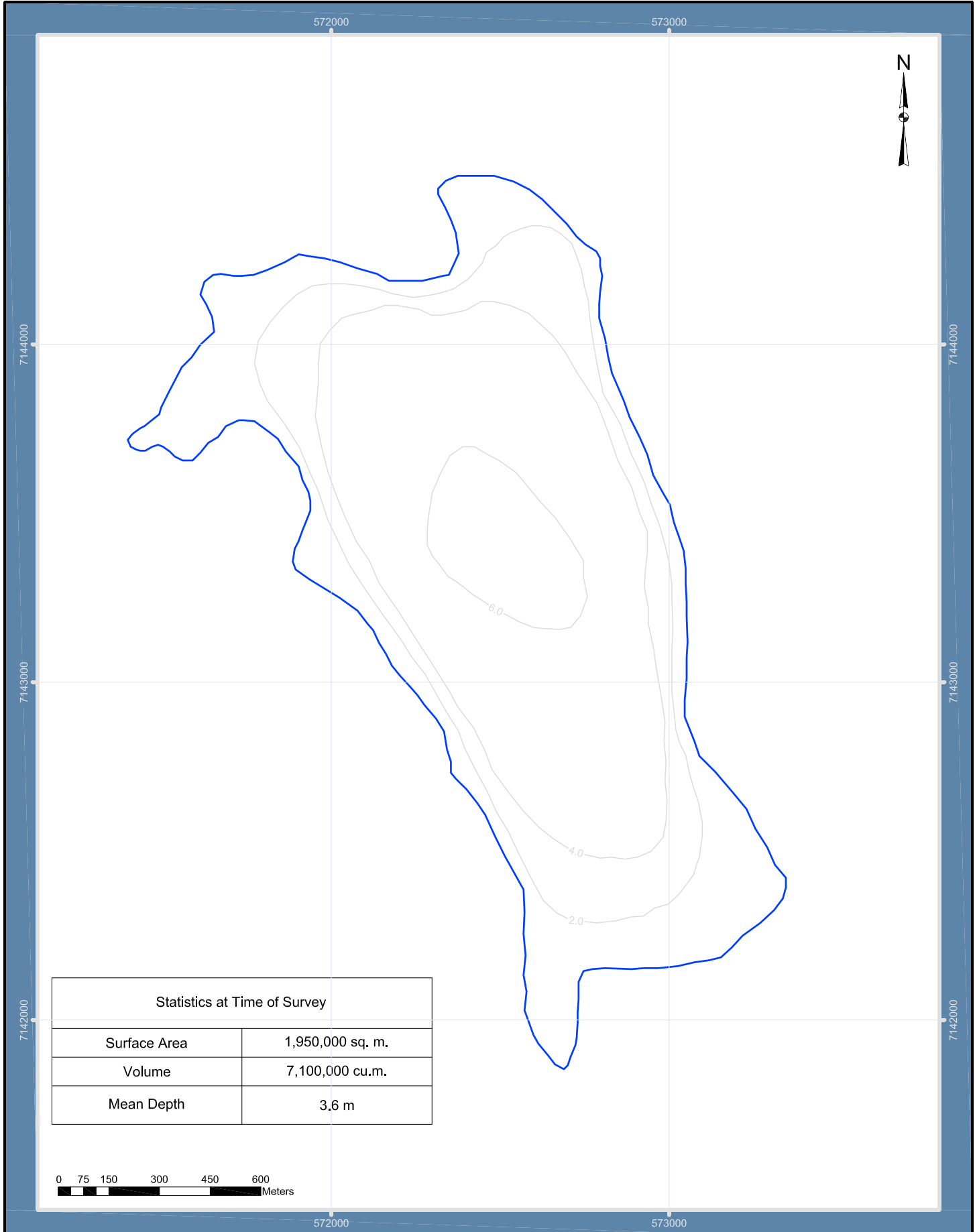
Scale: 1:4000

FIGURE X.IV-3
BATHYMETRY MAP
ESCARPMENT LAKE

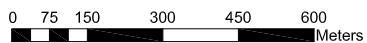
KIGGAVERK PROJECT - EIS







Statistics at Time of Survey	
Surface Area	1,950,000 sq. m.
Volume	7,100,000 cu.m.
Mean Depth	3.6 m

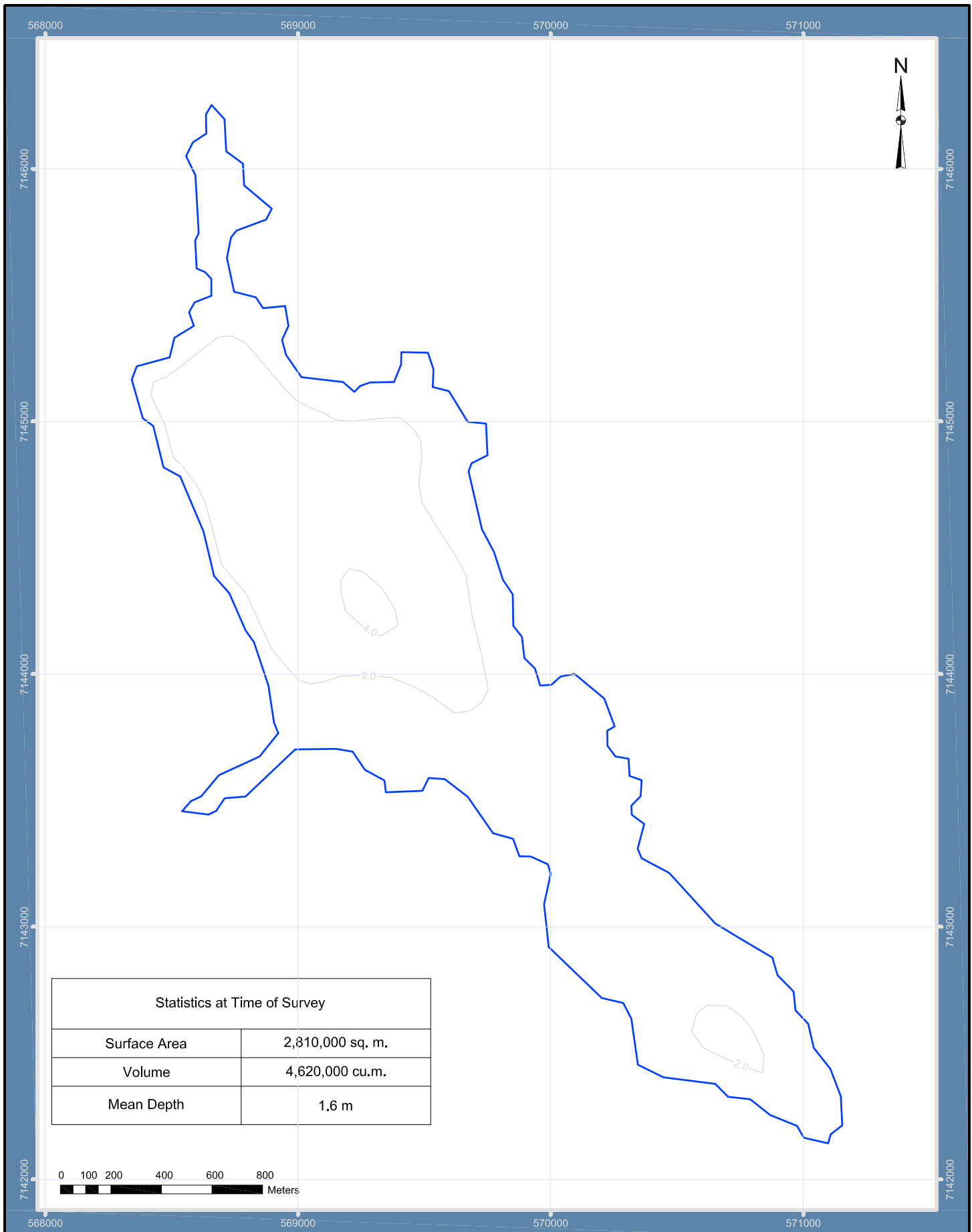


Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 11/28/09
File: K108C276
Data Sources: BEAK 1990, AREVA 2006

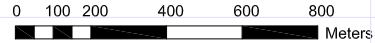
FIGURE X.IV-5
BATHYMETRY MAP
SCOTCH LAKE

KIGGAVIK PROJECT - EIS





Statistics at Time of Survey	
Surface Area	2,810,000 sq. m.
Volume	4,620,000 cu.m.
Mean Depth	1.6 m



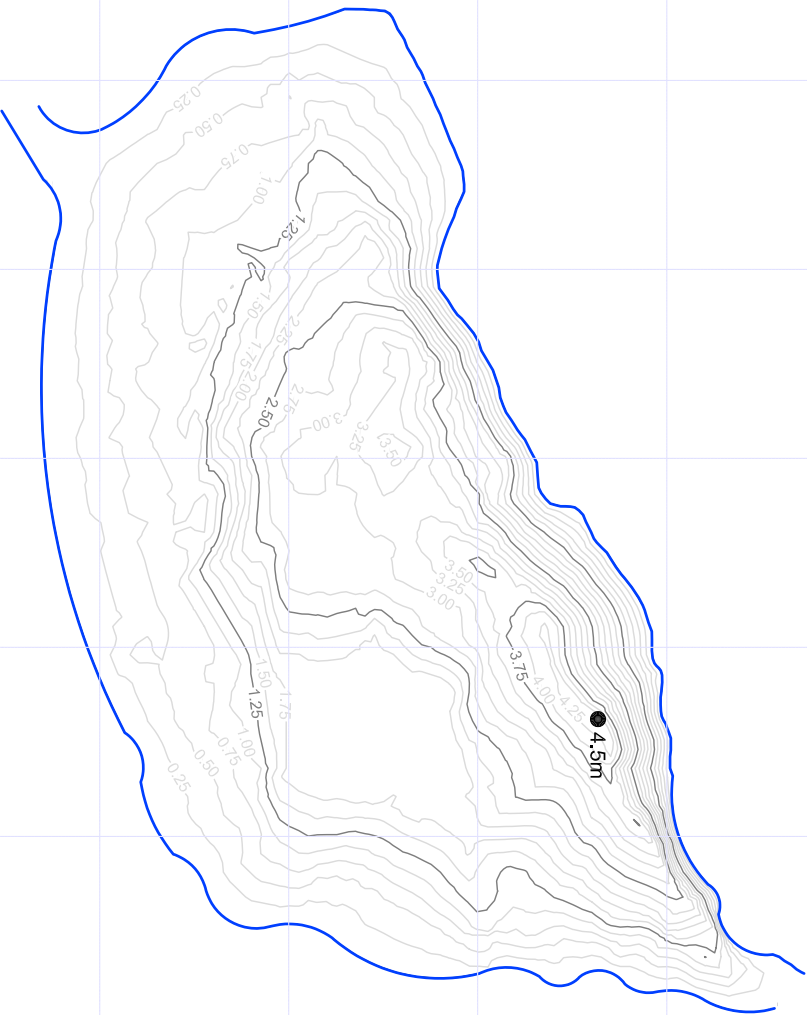
Projection: NAD 1983 UTM Zone 14N
 Creator: AKG
 Date: 11/28/09
 File: K108C273
 Data Sources: BEAK 1987b, AREVA 2006

FIGURE X.IV-6
 BATHYMETRY MAP
 JAEGER LAKE
 KIGGAVIK PROJECT - EIS



Statistics at Time of Survey	
Elevation	N/A
Maximum Length	315 m
Surface Area	30,918 sq. m.
Volume	44,688 cu. m.
Mean Depth	1.45 m
Maximum Depth	4.5 m
Perimeter, Main Shore	815 m

- Note:
1. Data derived from bathymetric mapping conducted in spring 2010, and generated with Autodesk AutoCAD Civil 3D.
 2. Elevation determined from NTS data.
 3. Bathymetric maps are not for navigation or design purposes. Bathymetric data was collected along transects and the depth data between the transects has been interpolated. Bathymetric contours shown at 0.25m intervals.

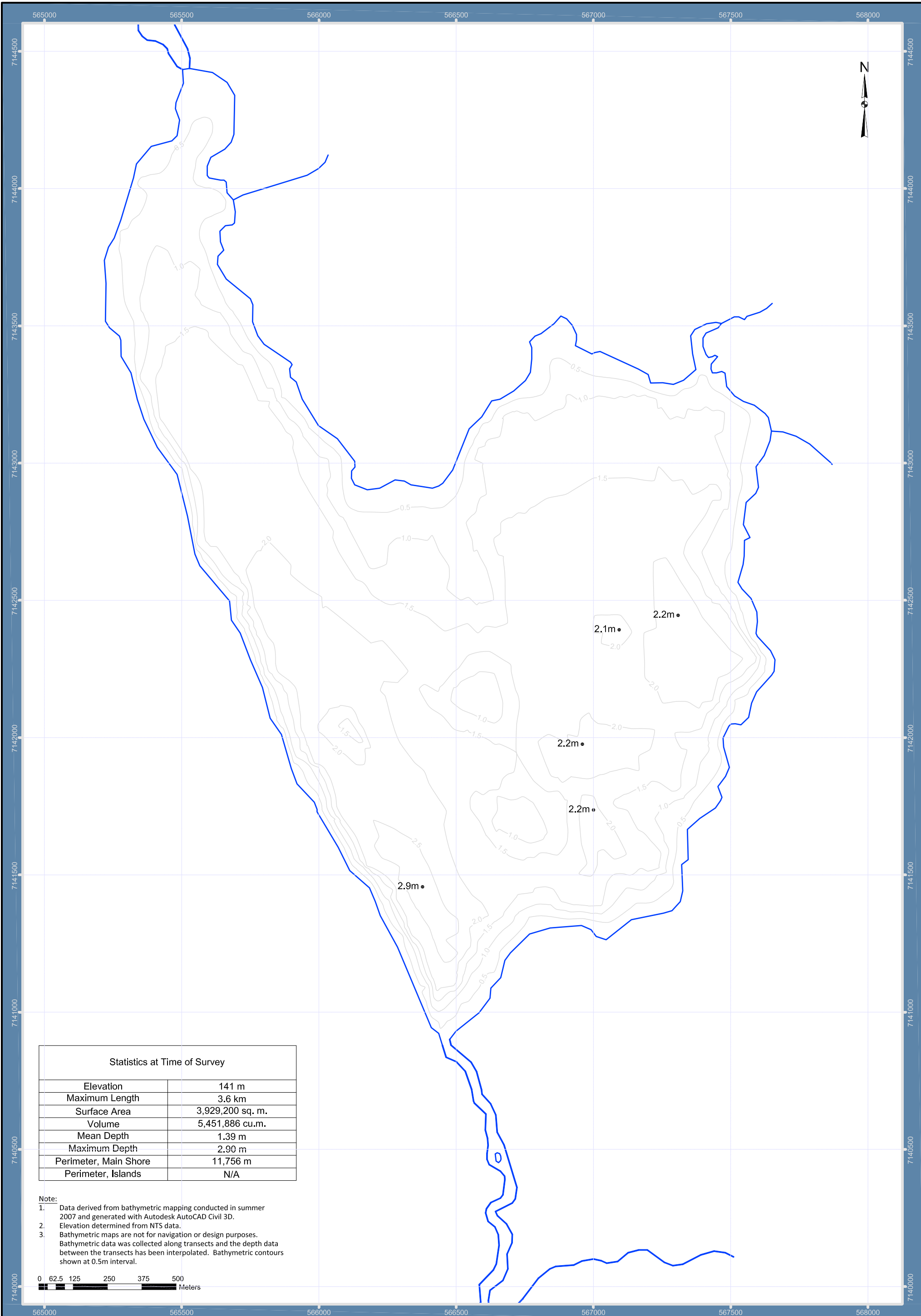


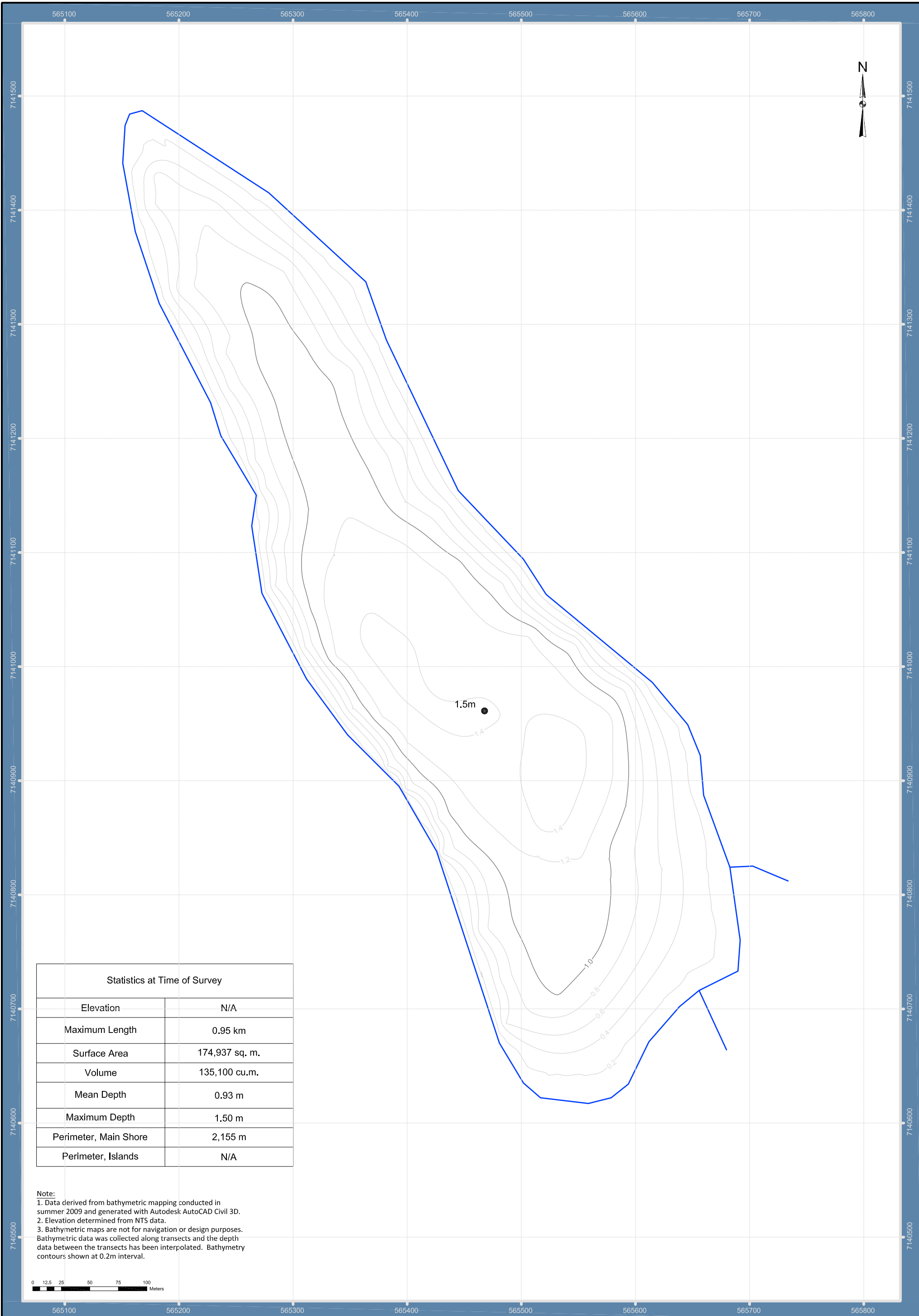
Projection: NAD 1983 UTM Zone 14N
Creator: TAH
Date: 09/02/11
File: K08C352
Data Sources:

FIGURE X.IV-7
BATHYMETRY MAP
PONTIER POND

KIGGAVIK PROJECT - EIS

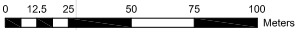






Statistics at Time of Survey	
Elevation	N/A
Maximum Length	0.95 km
Surface Area	174,937 sq. m.
Volume	135,100 cu.m.
Mean Depth	0.93 m
Maximum Depth	1.50 m
Perimeter, Main Shore	2,155 m
Perimeter, Islands	N/A

Note:
1. Data derived from bathymetric mapping conducted in summer 2009 and generated with Autodesk AutoCAD Civil 3D.
2. Elevation determined from NTS data.
3. Bathymetric maps are not for navigation or design purposes. Bathymetric data was collected along transects and the depth data between the transects has been interpolated. Bathymetry contours shown at 0.2m interval.

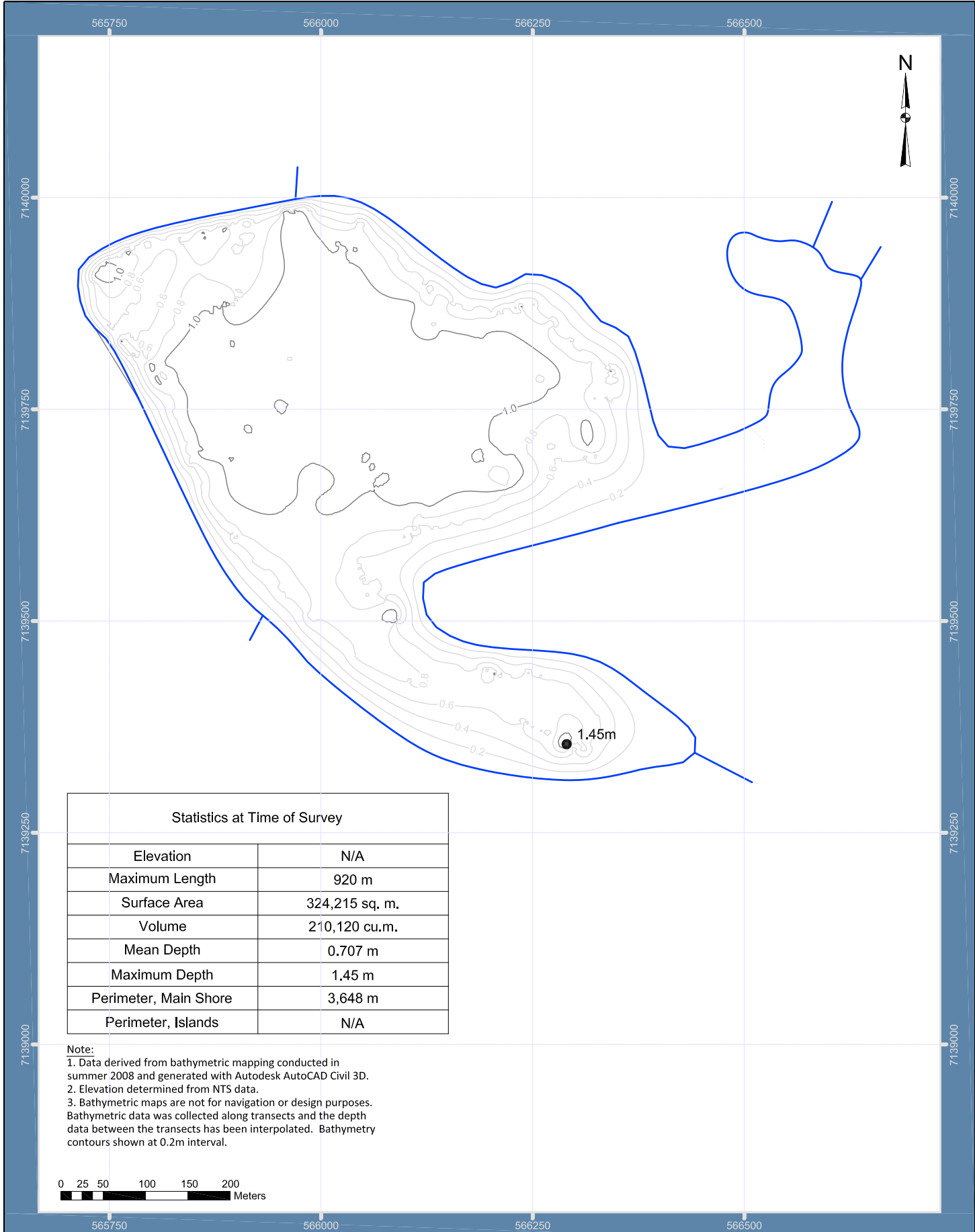


Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: KI08C260
Data Sources: NTS MapSheet 66A05

FIGURE X.IV-9
BATHYMETRY MAP
SIK SIK LAKE

KIGGAVIK PROJECT - EIS





Projection: NAD 1983 UTM Zone 14N

Creator: AKG

Date: 03/02/11

File: K108C267

Data Sources: NTS Mapsheet 66A05

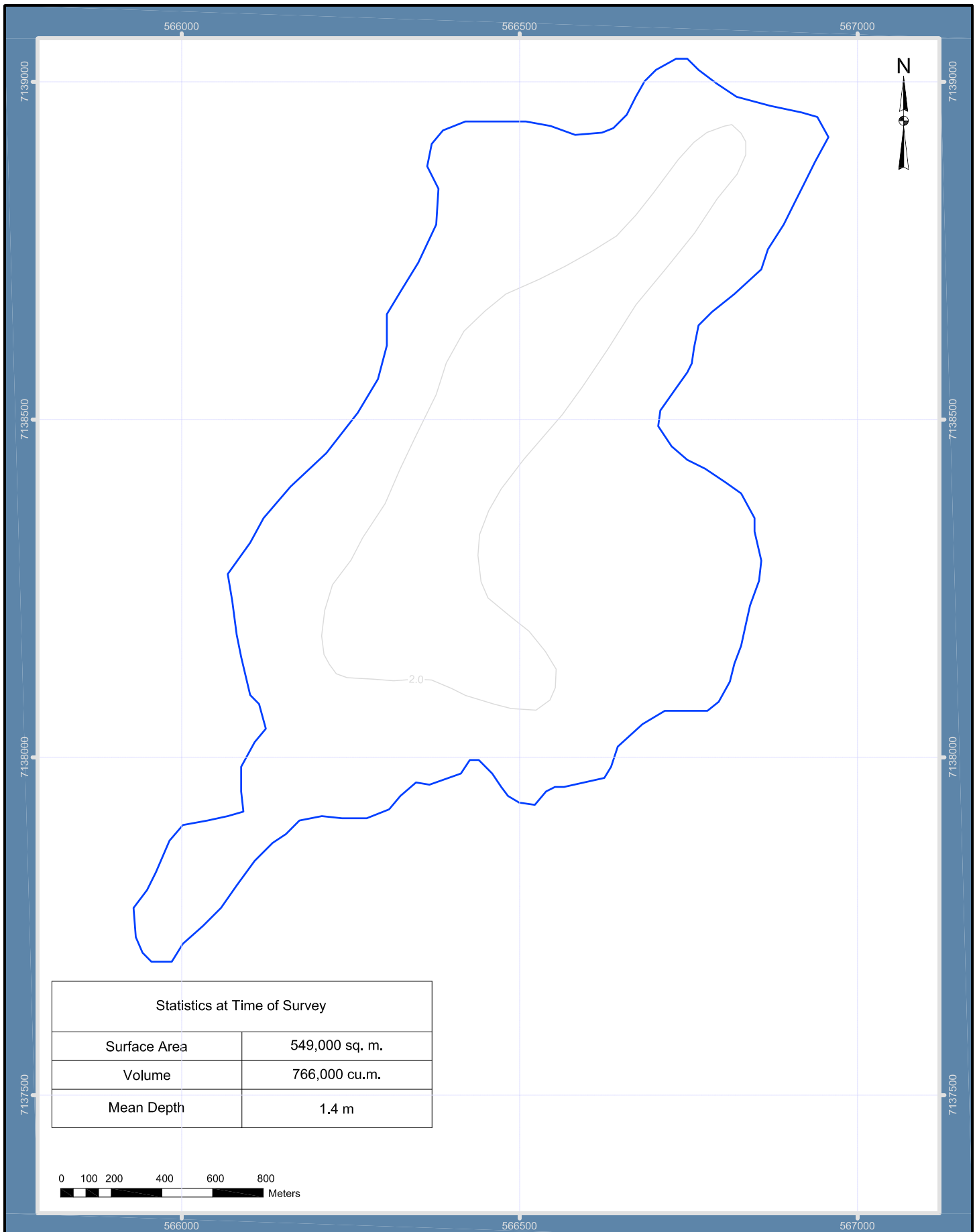
Scale: 1:6000

FIGURE X.IV-10

BATHYMETRY MAP
ROCK LAKE

KIGGAVERK PROJECT - EIS





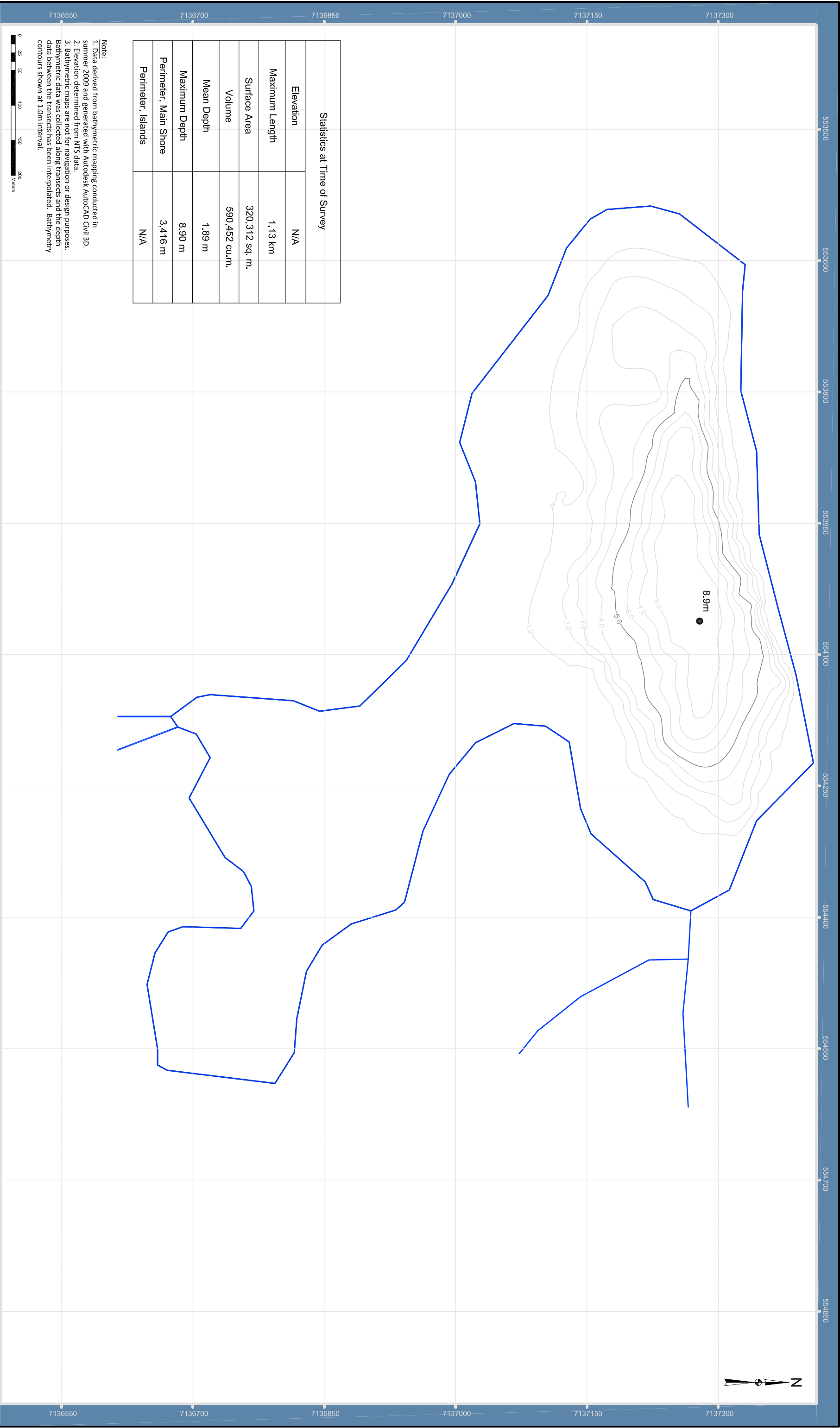
Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K108C277
Data Sources: BEAK 1990, AREVA 2006

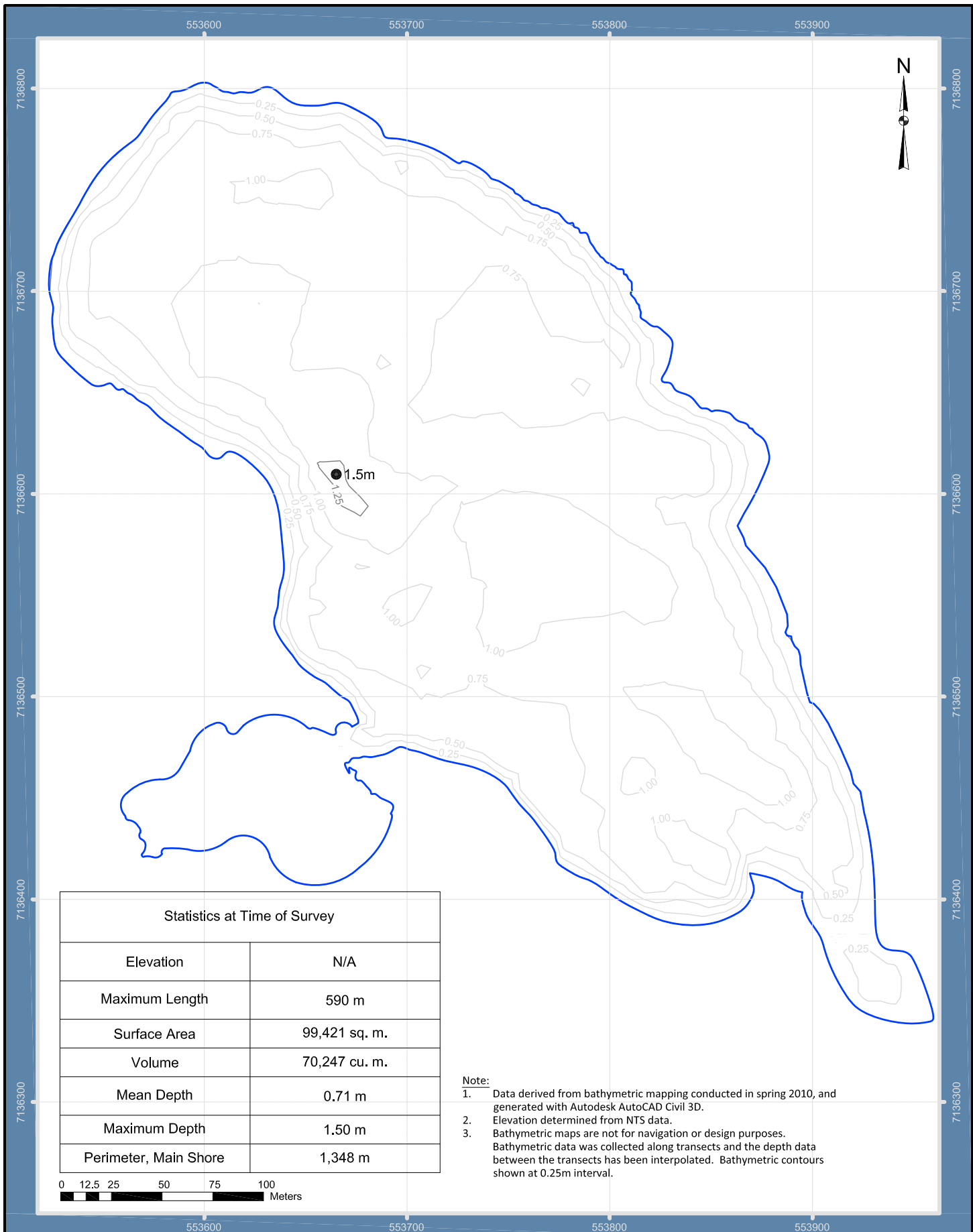
Scale: 1:7500

FIGURE X.IV-11
BATHYMETRY MAP
WILLOW LAKE

KIGGAVERK PROJECT - EIS







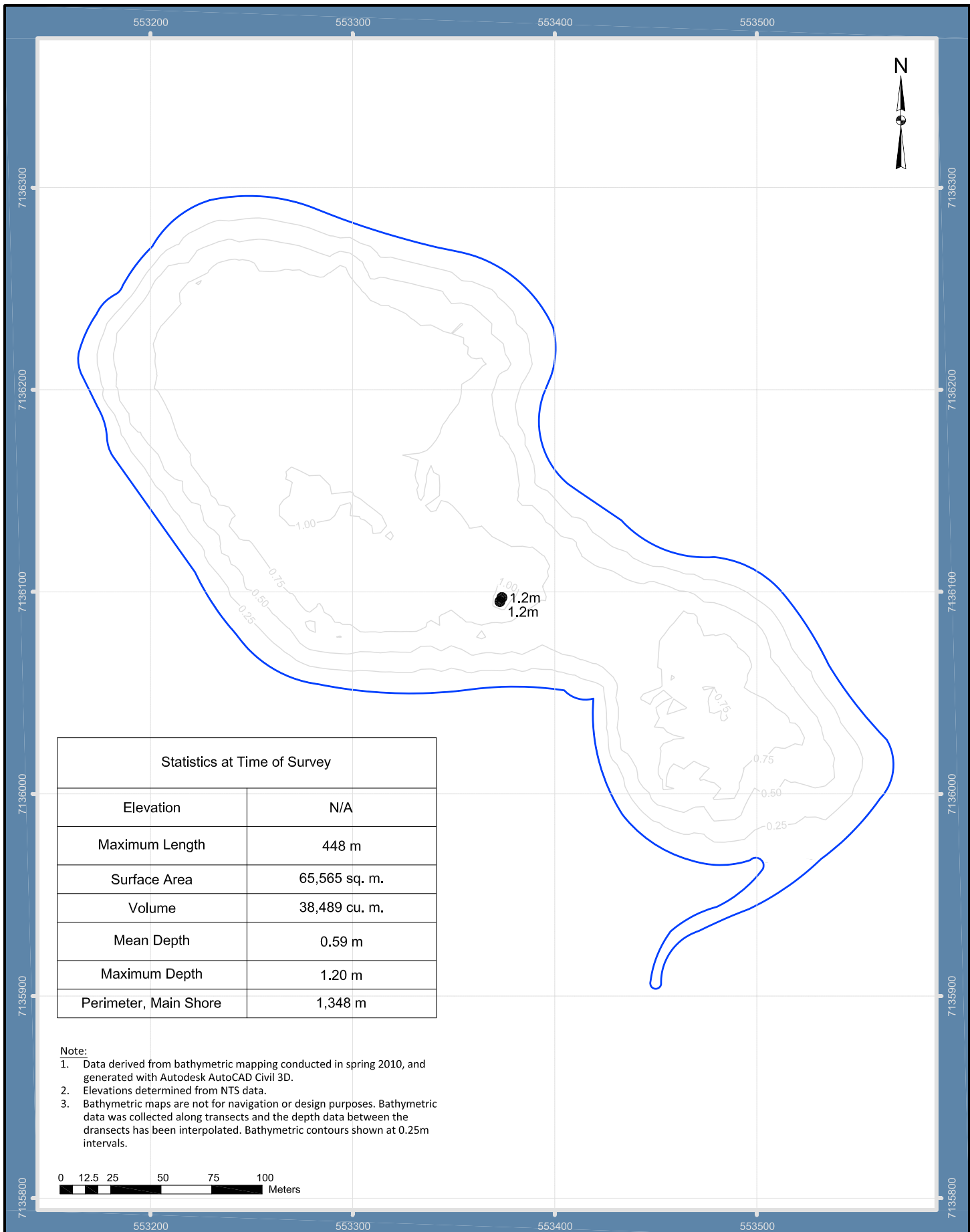
Projection: NAD 1983 UTM Zone 14N
 Creator: TAH
 Date: 03/02/11
 File: K108C294
 Data Sources:

Scale: 1:2,500

FIGURE X.IV-13 BATHYMETRY MAP POND 1

KIGGAVIK PROJECT - EIS





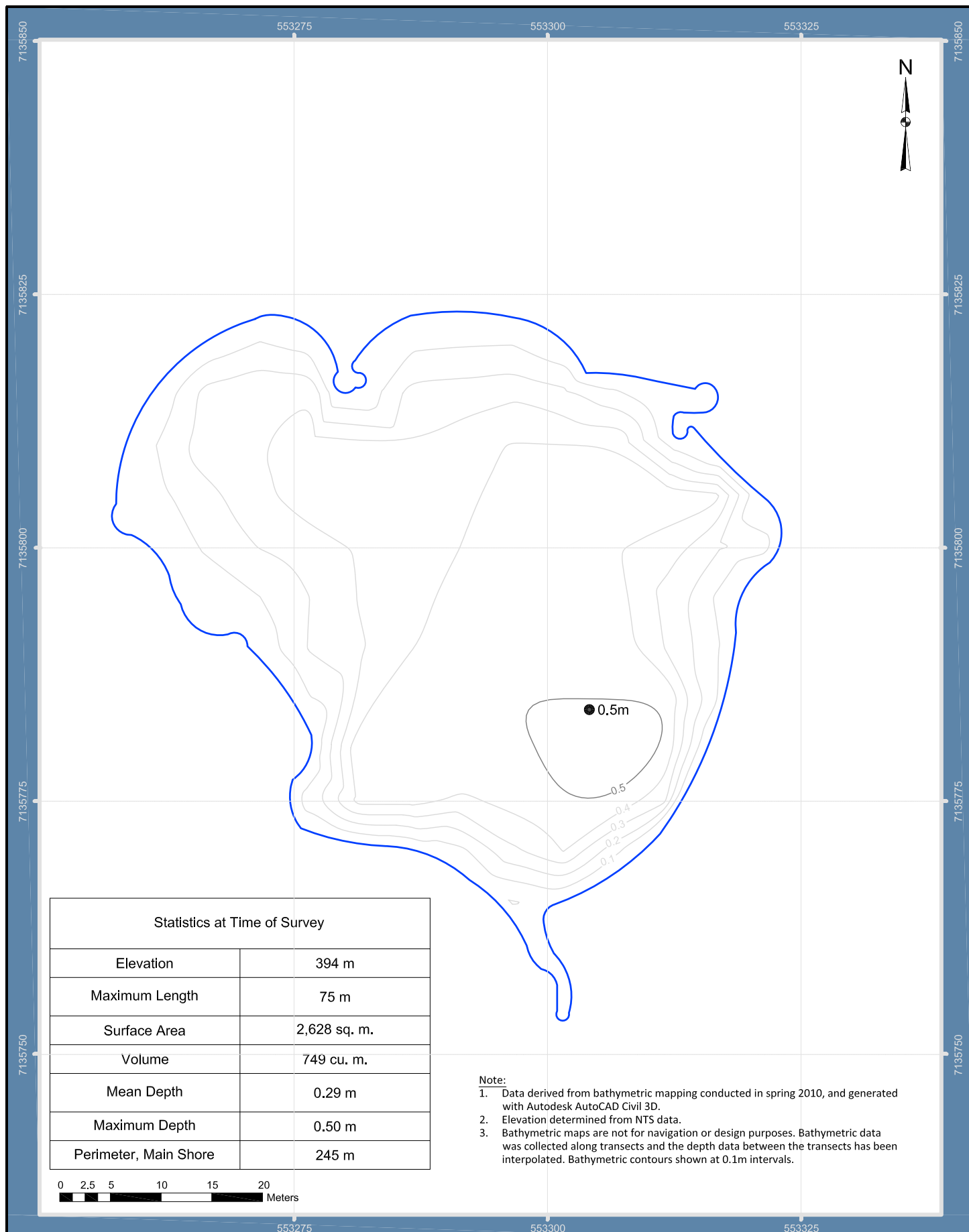
Projection: NAD 1983 UTM Zone 14N
 Creator: TAH
 Date: 03/02/11
 File: K108C295
 Data Sources:

Scale: 1:2,500

FIGURE X.IV-14
 BATHYMETRY MAP
 POND 2

KIGGAIVIK PROJECT - EIS



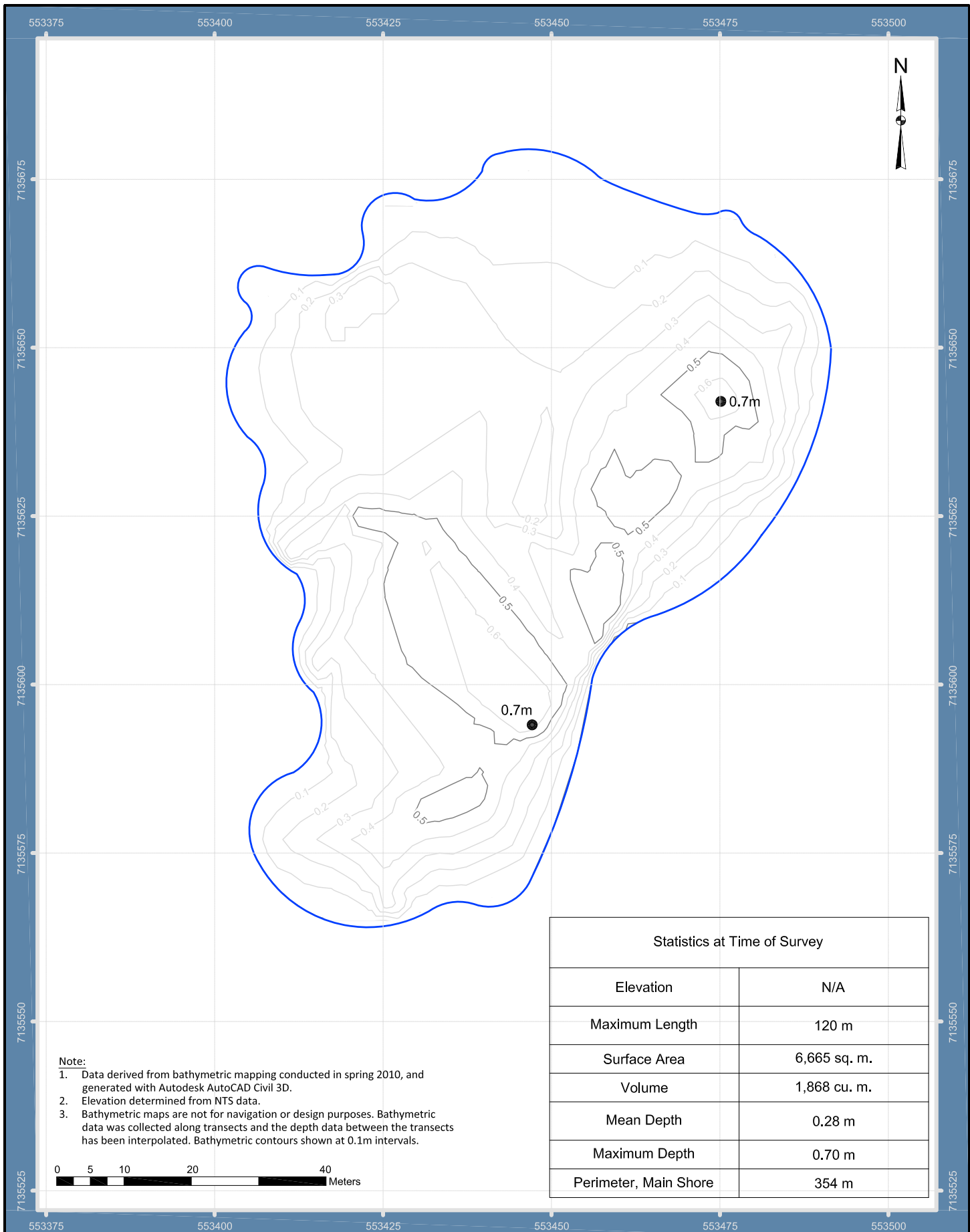


Projection: NAD 1983 UTM Zone 14N
 Creator: TAH
 Date: 03/02/11
 File: KI08C296
 Data Sources:

Scale: 1:500

FIGURE X.IV-15
 BATHYMETRY MAP
 POND 3
 KIGGAVIK PROJECT - EIS





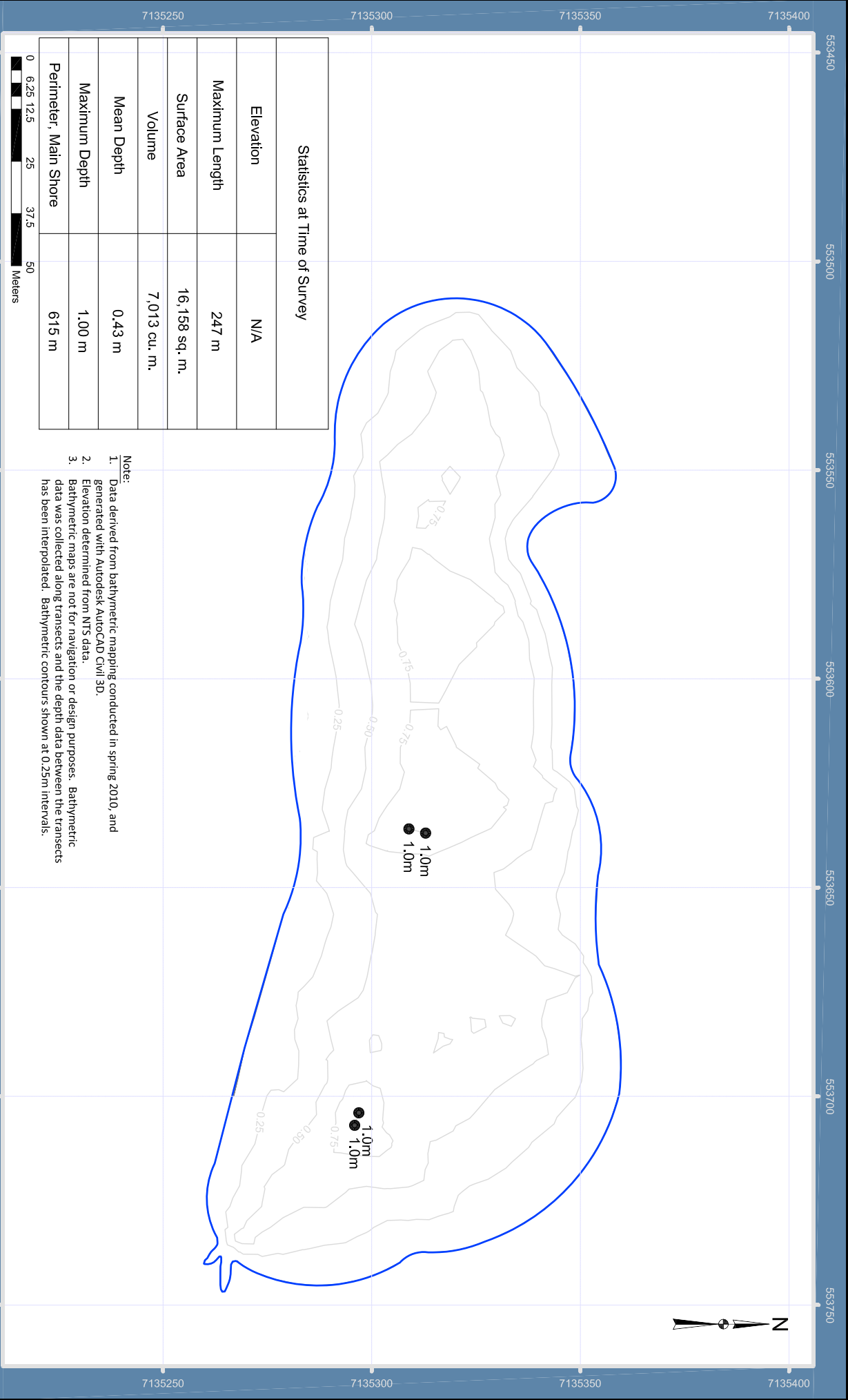
Projection: NAD 1983 UTM Zone 14N
 Creator: TAH
 Date: 03/02/11
 File: K108C297
 Data Sources:

Scale: 1:750

FIGURE X.IV-16
 BATHYMETRY MAP
 POND 4

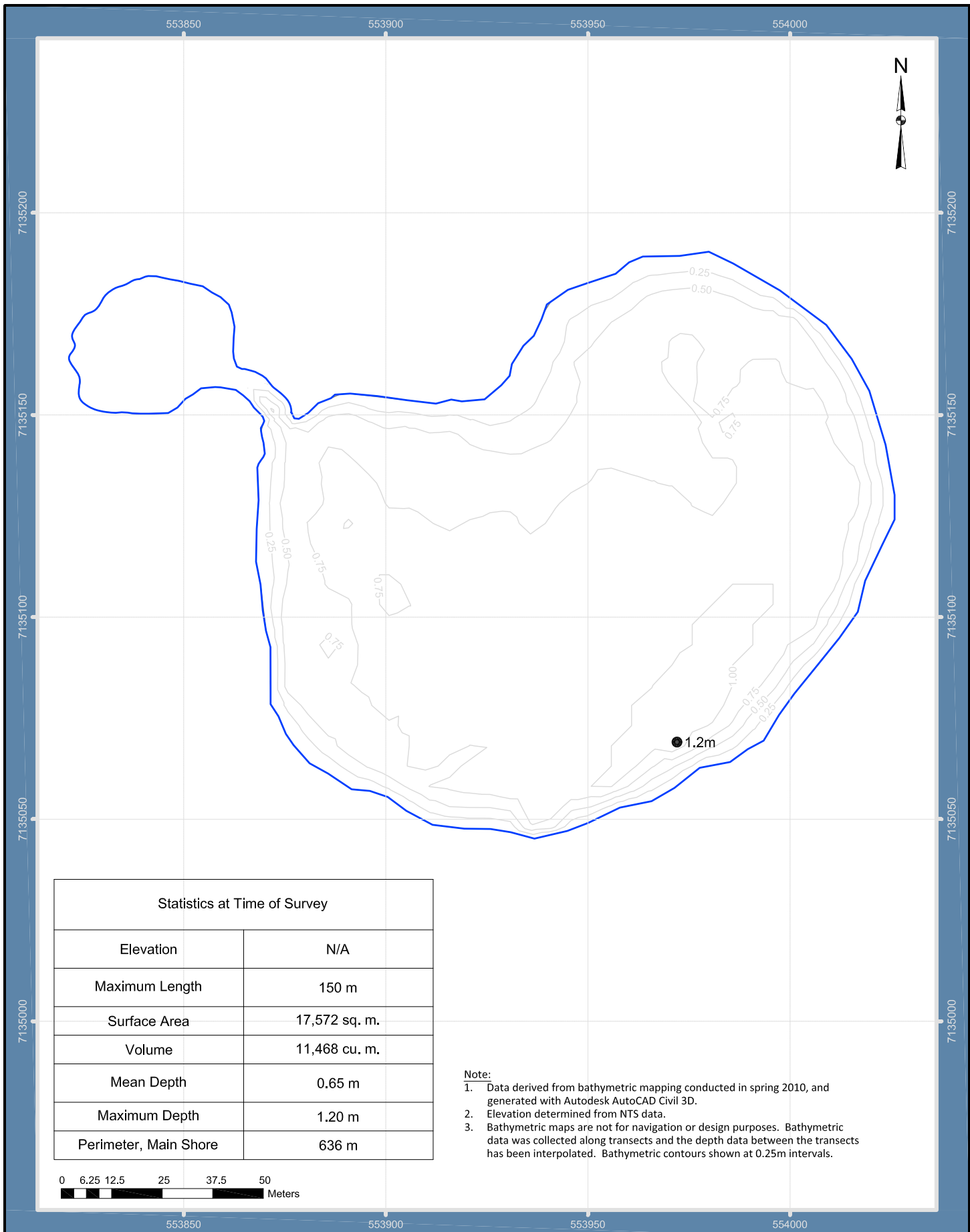
KIGGAVERK PROJECT - EIS





Projection: NAD 1983 UTM Zone 14N
Creator: TAH
Date: 03/02/11
File: K08C238
Data Sources:
Scale: 1:1,250

FIGURE X.IV-17
BATHYMETRY MAP
POND 5
KIGGAVIK PROJECT - EIS



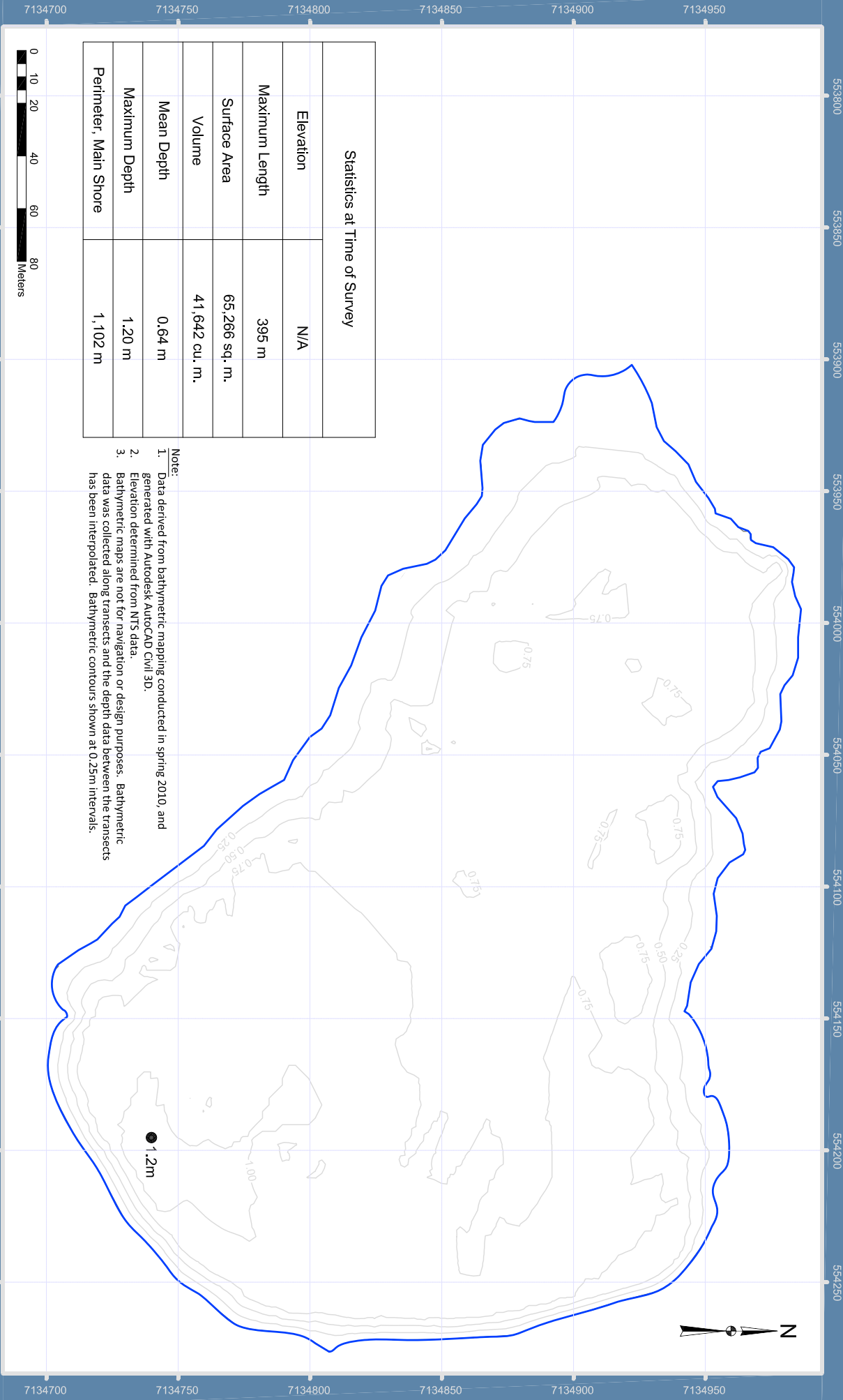
- Note:**
1. Data derived from bathymetric mapping conducted in spring 2010, and generated with Autodesk AutoCAD Civil 3D.
 2. Elevation determined from NTS data.
 3. Bathymetric maps are not for navigation or design purposes. Bathymetric data was collected along transects and the depth data between the transects has been interpolated. Bathymetric contours shown at 0.25m intervals.

Projection: NAD 1983 UTM Zone 14N
 Creator: TAH
 Date: 03/02/11
 File: K108C299
 Data Sources:

Scale: 1:1,250

FIGURE X.IV-18
 BATHYMETRY MAP
 POND 6
 KIGGAIVIK PROJECT - EIS



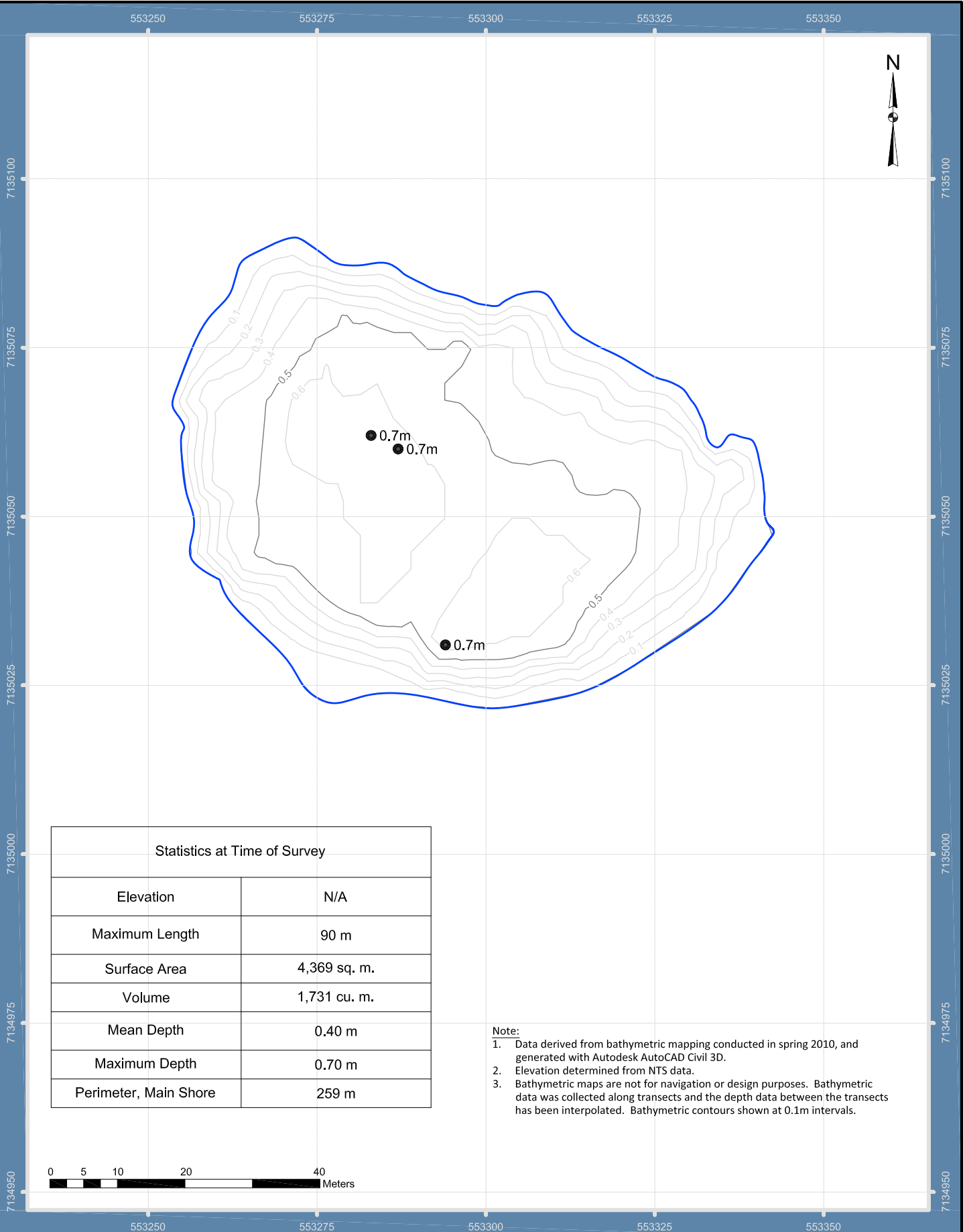


Statistics at Time of Survey	
Elevation	N/A
Maximum Length	395 m
Surface Area	65,266 sq. m.
Volume	41,642 cu. m.
Mean Depth	0.64 m
Maximum Depth	1.20 m
Perimeter, Main Shore	1,102 m

- Note:
1. Data derived from bathymetric mapping conducted in spring 2010, and generated with Autodesk AutoCAD Civil 3D.
 2. Elevation determined from NTS data.
 3. Bathymetric maps are not for navigation or design purposes. Bathymetric data was collected along transects and the depth data between the transects has been interpolated. Bathymetric contours shown at 0.25m intervals.

Projection: NAD 1983 UTM Zone 14N
Creator: TAH
Date: 03/02/11
File: K08C300
Data Sources:

FIGURE X.IV-19
BATHYMETRY MAP
POND 7
KIGGAVIK PROJECT - EIS



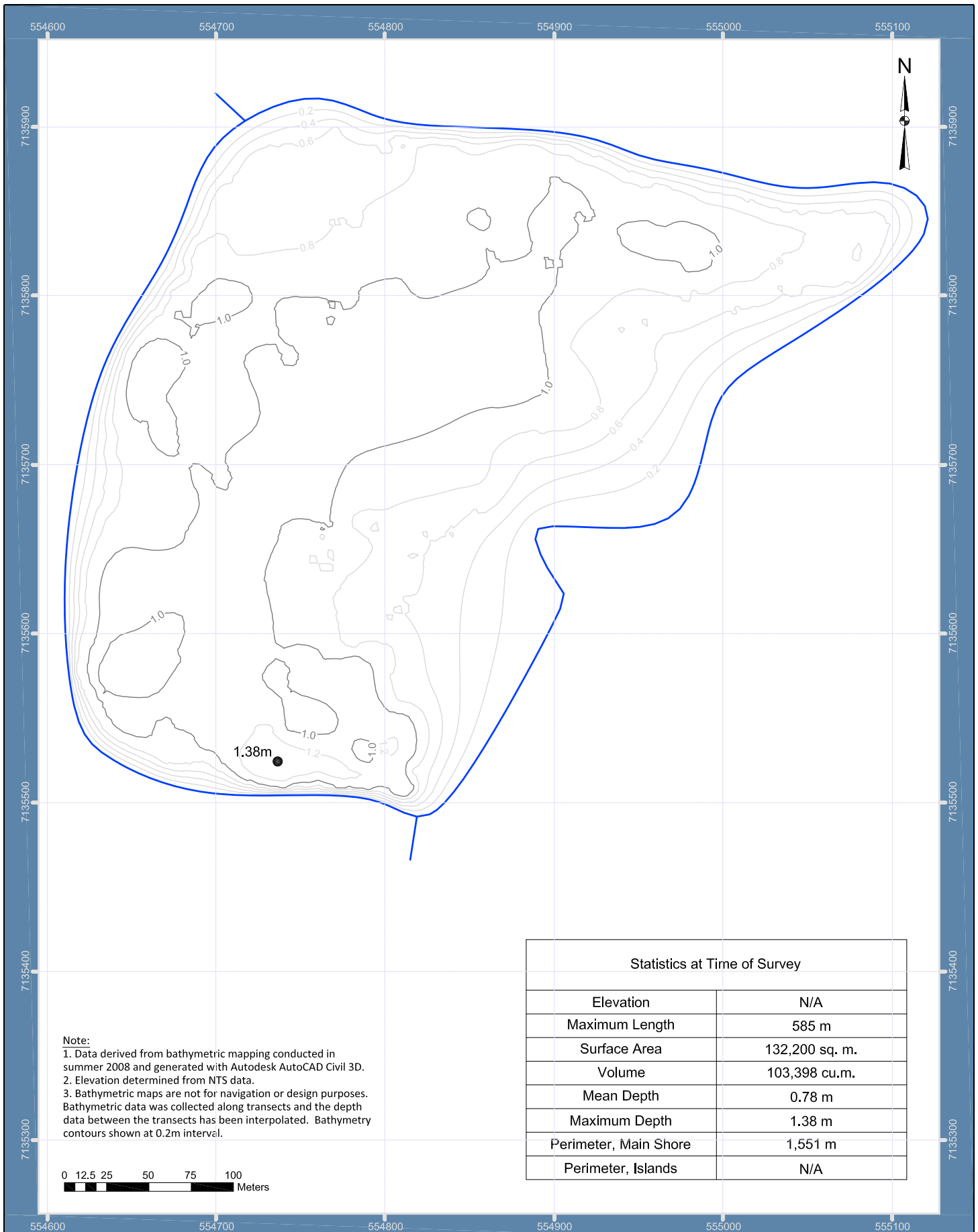
Projection: NAD 1983 UTM Zone 14N
 Creator: TAH
 Date: 03/02/11
 File: K108C351
 Data Sources:

Scale: 1:750

FIGURE X.IV-20
 BATHYMETRY MAP
 POND 8

KIGGAIVIK PROJECT - EIS





Projection: NAD 1983 UTM Zone 14N

Creator: AKG

Date: 03/02/11

File: KI08C268

Data Sources: NTS Mapsheet 66A05

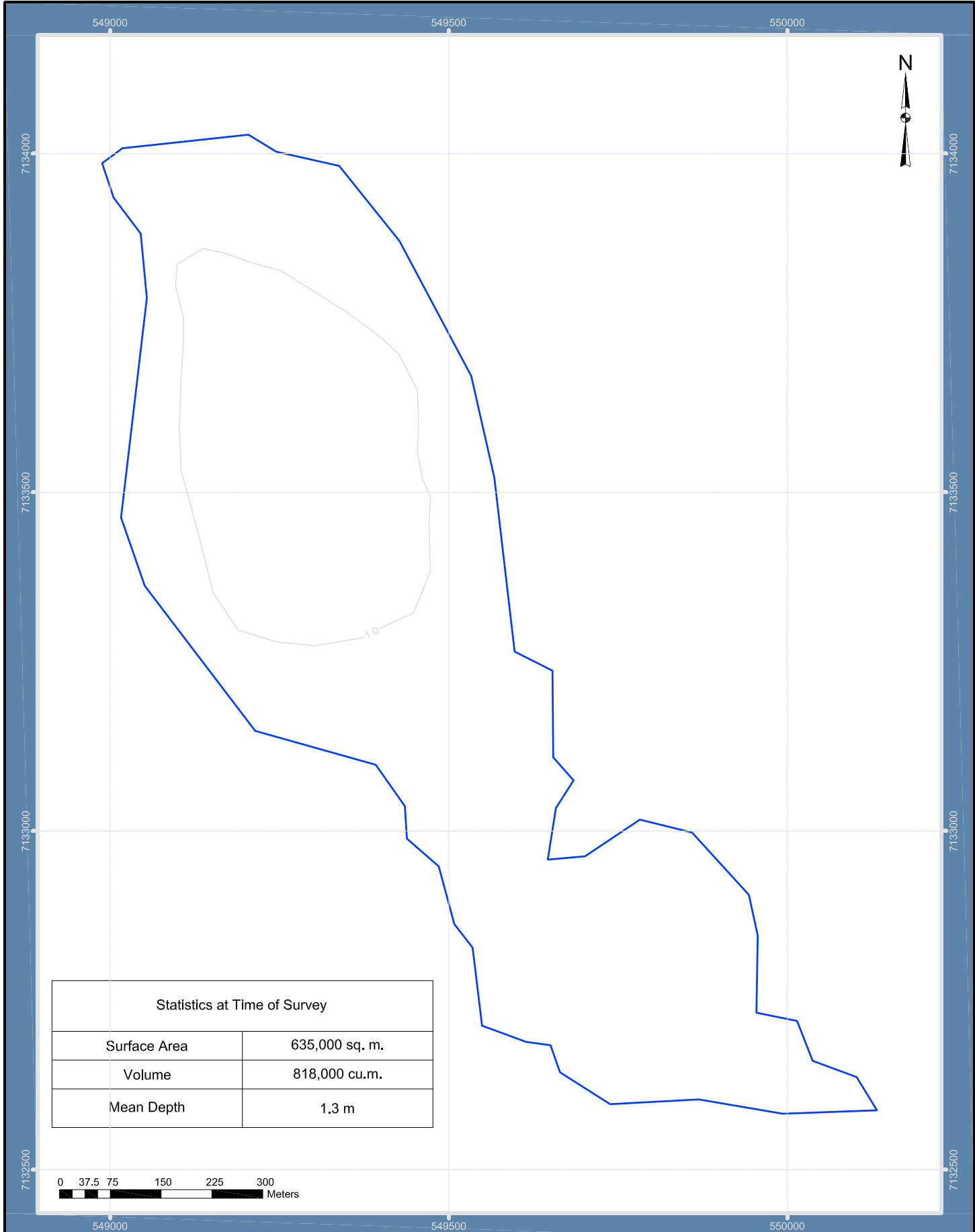
Scale: 1:3000

FIGURE X.IV-21

BATHYMETRY MAP
END GRID LAKE

KIGGAVERK PROJECT - EIS





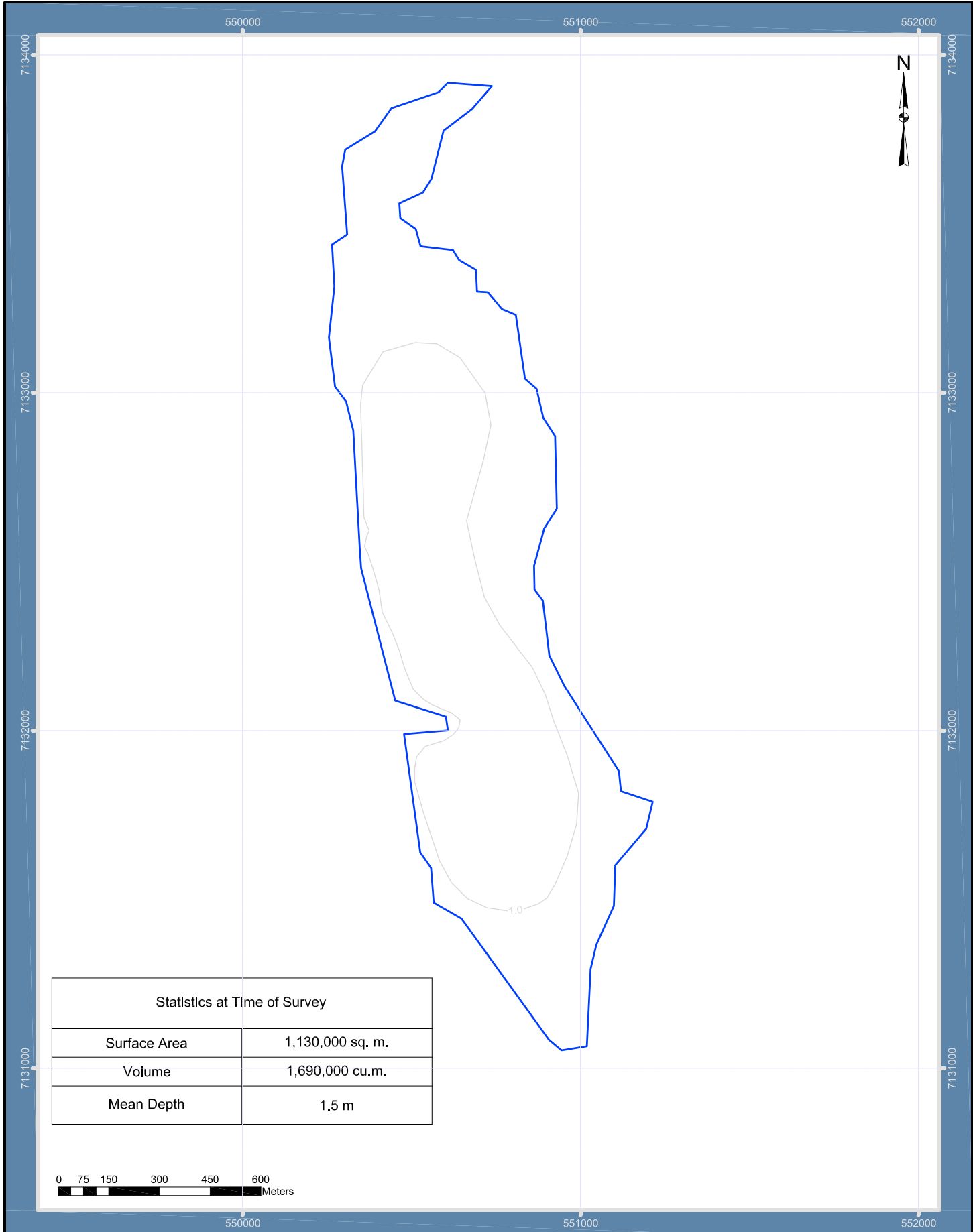
Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K108C278
Data Sources: BEAK 1992a, AREVA 2006

Scale: 1:7500

FIGURE X.IV-22
BATHYMETRY MAP
SMOKE LAKE

KIGGAVIK PROJECT - EIS





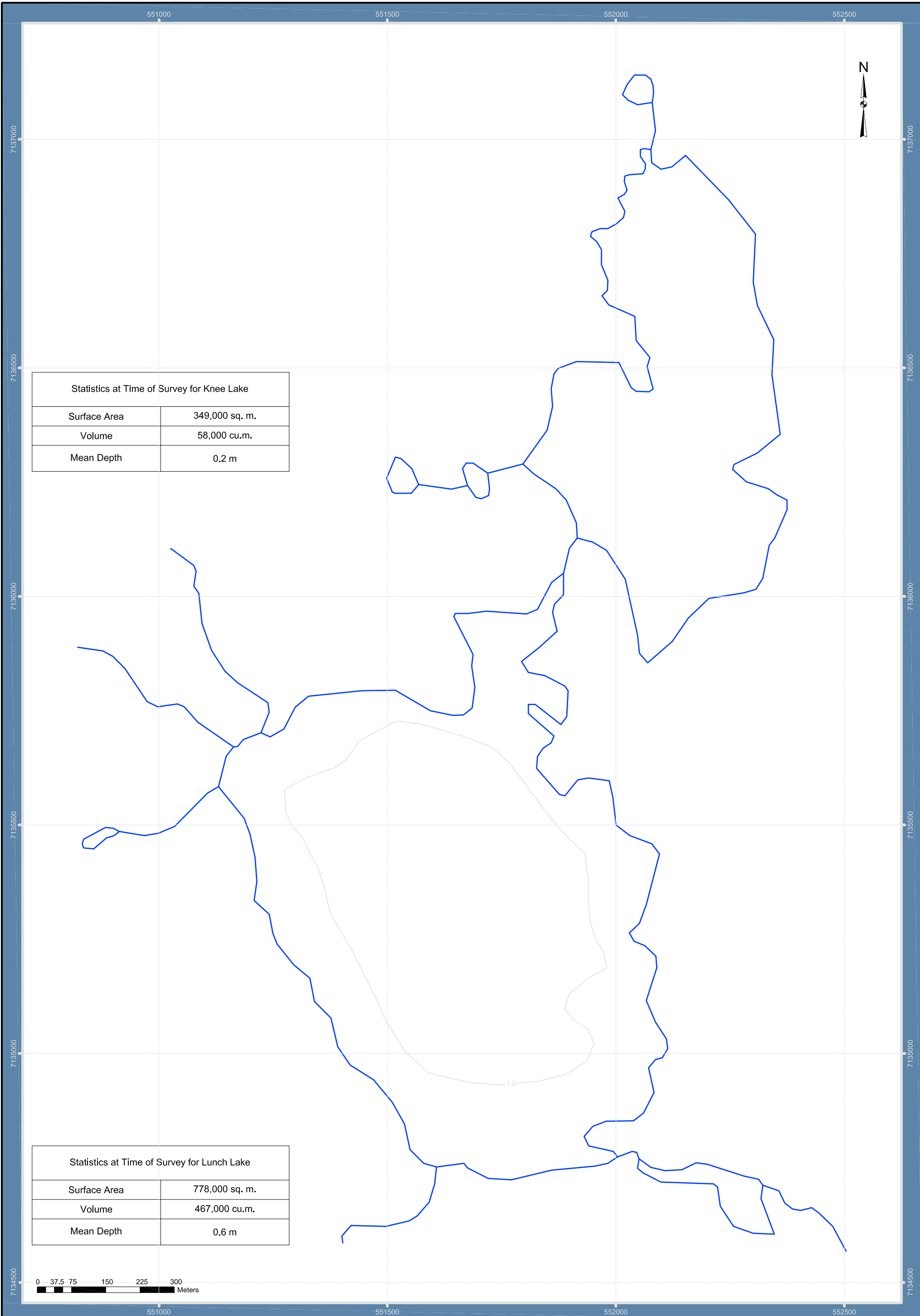
Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: KI08C279
Data Sources: BEAK 1992a, AREVA 2006

Scale: 1:15000

FIGURE X.IV-23
BATHYMETRY MAP
CIGAR LAKE

KIGGAVERK PROJECT - EIS



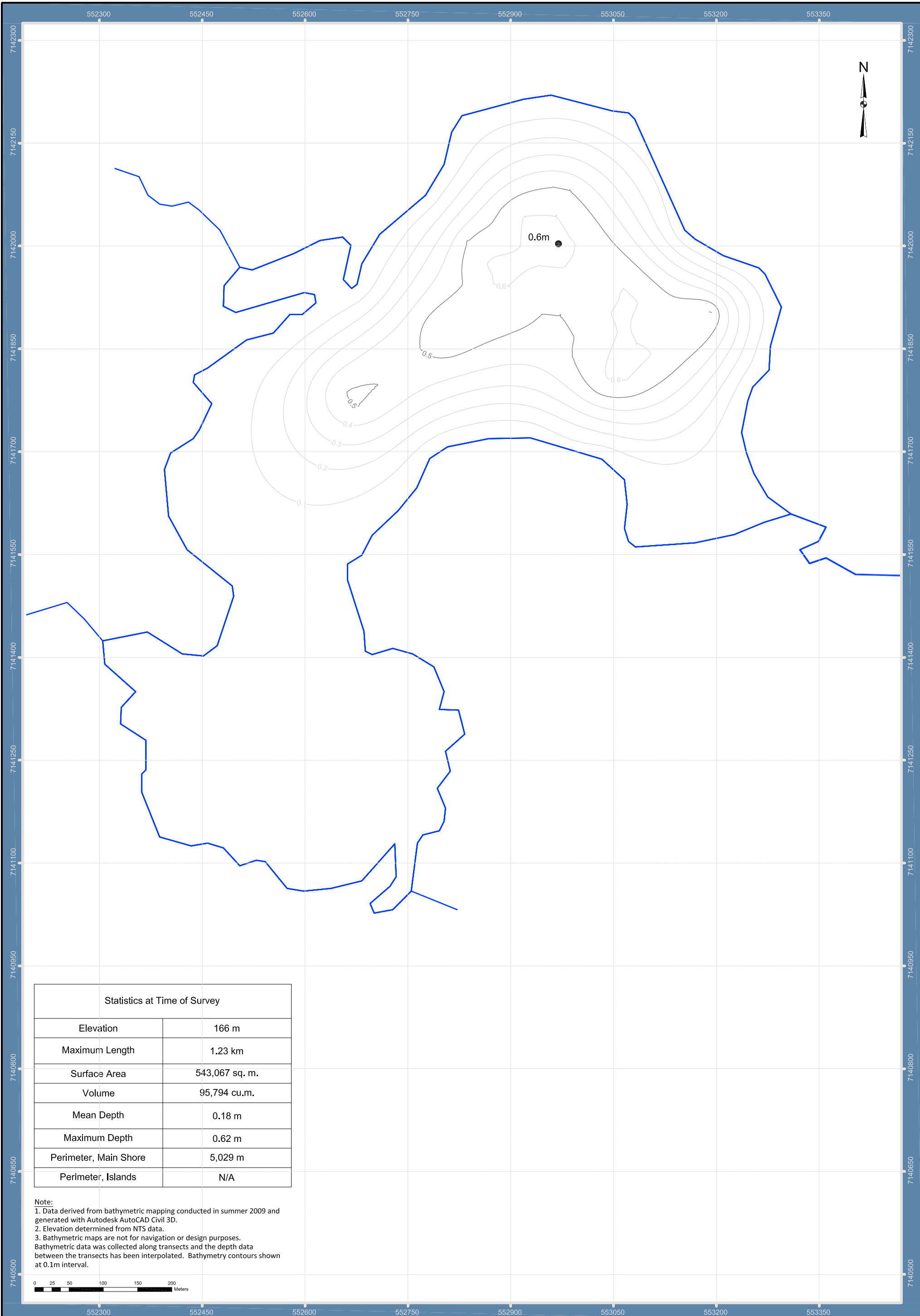


Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: KI08C280
Data Sources: BEAK 1992a, AREVA 2006

FIGURE X.VI-24
BATHYMETRY MAPS
KNEE LAKE AND LUNCH LAKE

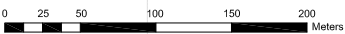
KIGGAVIK PROJECT - EIS





Statistics at Time of Survey		
Elevation		166 m
Maximum Length		1.23 km
Surface Area		543,067 sq. m.
Volume		95,794 cu.m.
Mean Depth		0.18 m
Maximum Depth		0.62 m
Perimeter, Main Shore		5,029 m
Perimeter, Islands		N/A

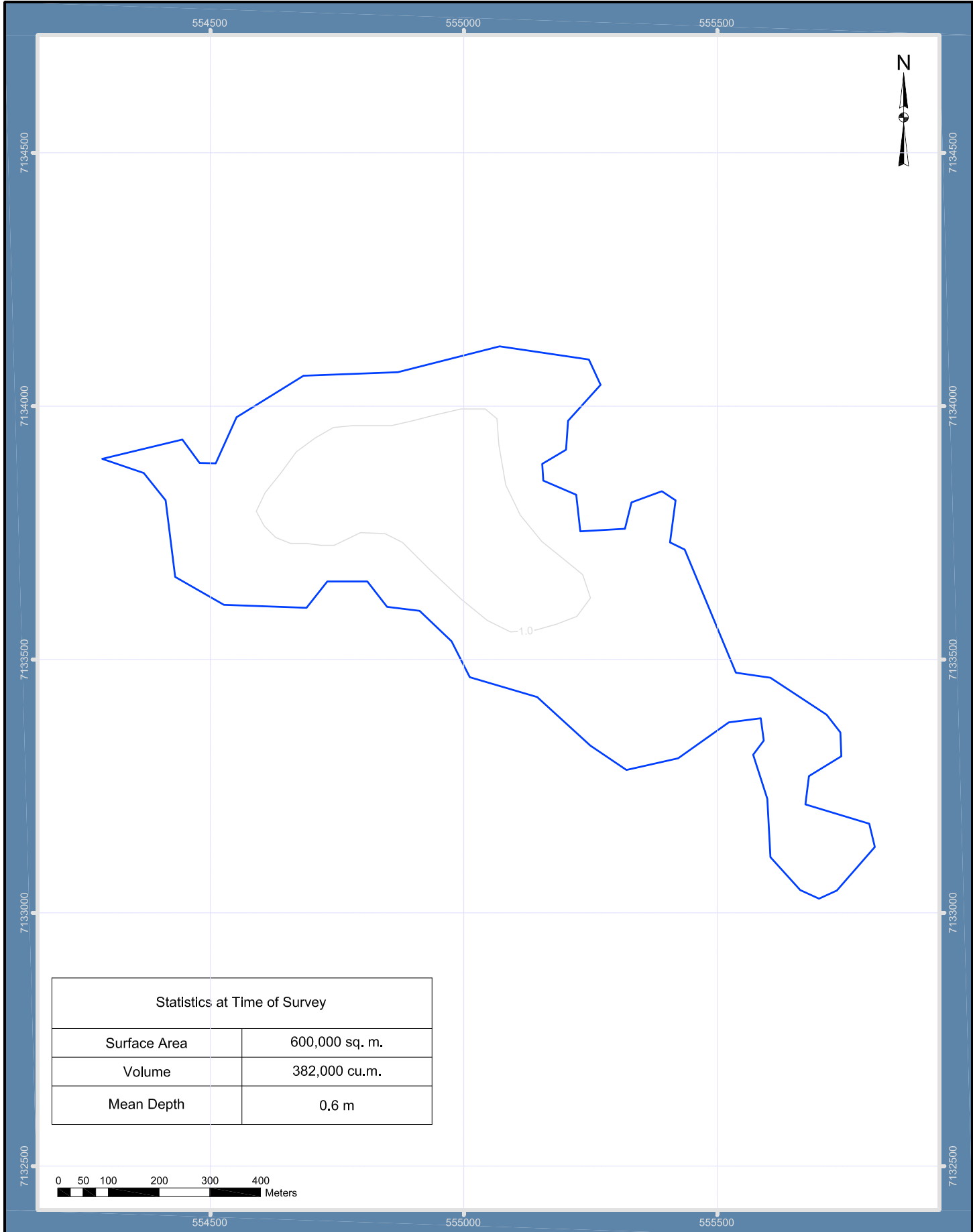
Note:
1. Data derived from bathymetric mapping conducted in summer 2009 and generated with Autodesk AutoCAD Civil 3D.
2. Elevation determined from NTS data.
3. Bathymetric maps are not for navigation or design purposes.
Bathymetric data was collected along transects and the depth data between the transects has been interpolated. Bathymetry contours shown at 0.1m interval.



Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: KI08C261
Data Sources: NTS MapSheet 66A05

FIGURE X.IV-25
BATHYMETRY MAP
ANDREW LAKE

KIGGAVIK PROJECT - EIS



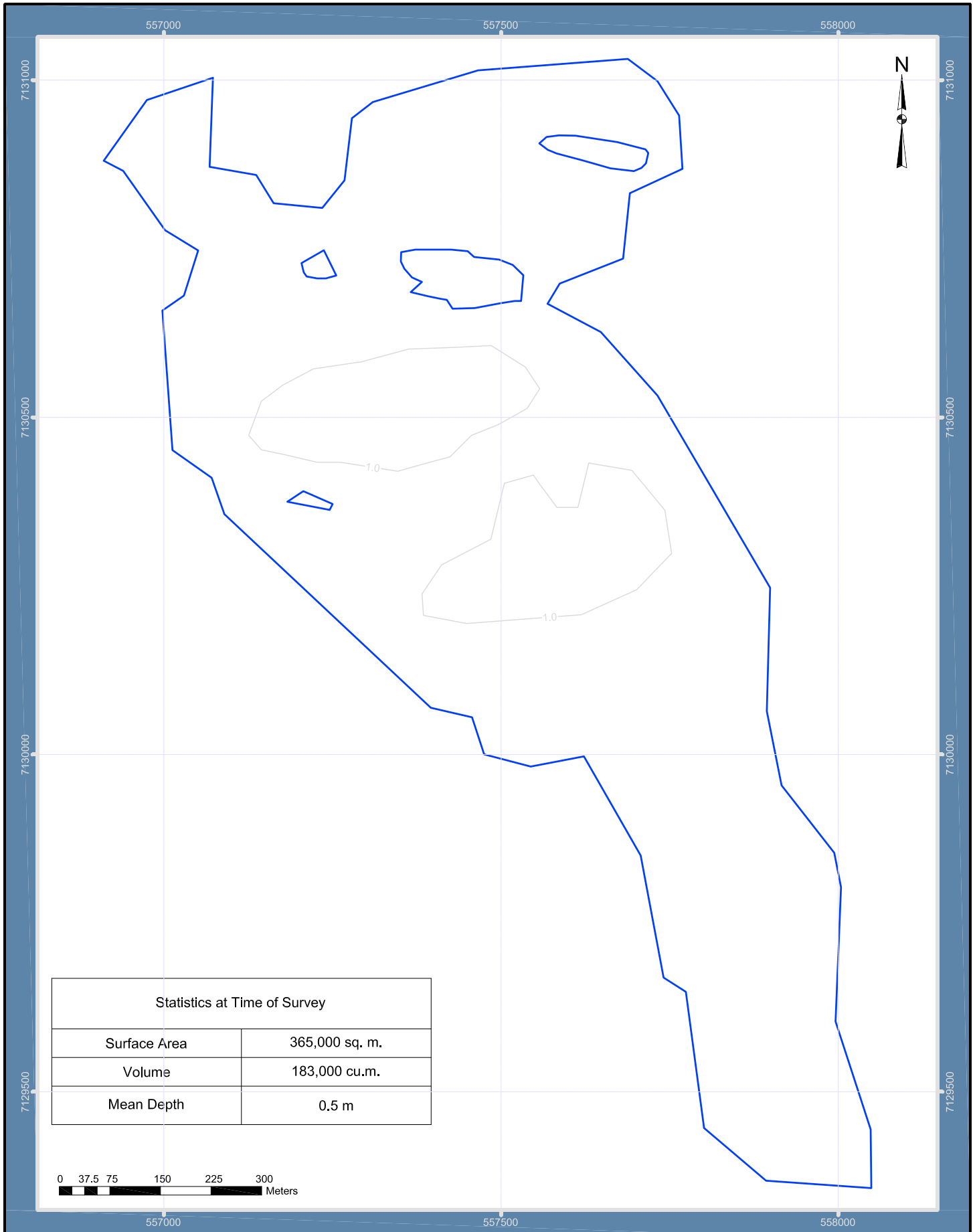
Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K108C281
Data Sources: BEAK 1992a, AREVA 2006

Scale: 1:10000

FIGURE X.IV-26
BATHYMETRY MAP
SHACK LAKE

KIGGAVIK PROJECT - EIS





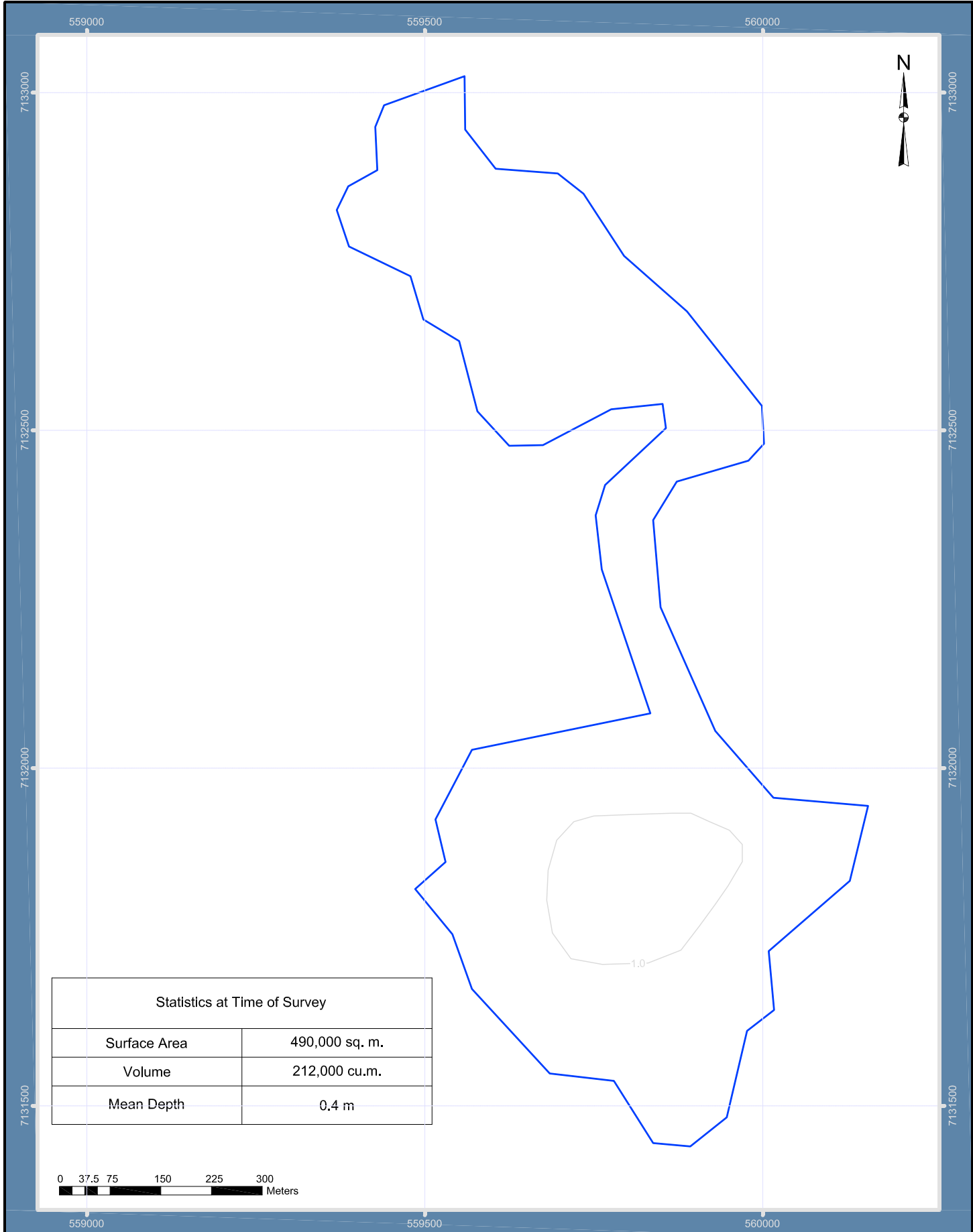
Projection: NAD 1983 UTM Zone 14N
 Creator: AKG
 Date: 03/02/11
 File: K108C282
 Data Sources: BEAK 1992a, AREVA 2006

Scale: 1:7500

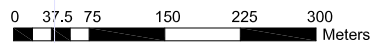
FIGURE X.IV-27
 BATHYMETRY MAP
 BEAR ISLAND LAKE

KIGGAVIK PROJECT - EIS





Statistics at Time of Survey	
Surface Area	490,000 sq. m.
Volume	212,000 cu.m.
Mean Depth	0.4 m

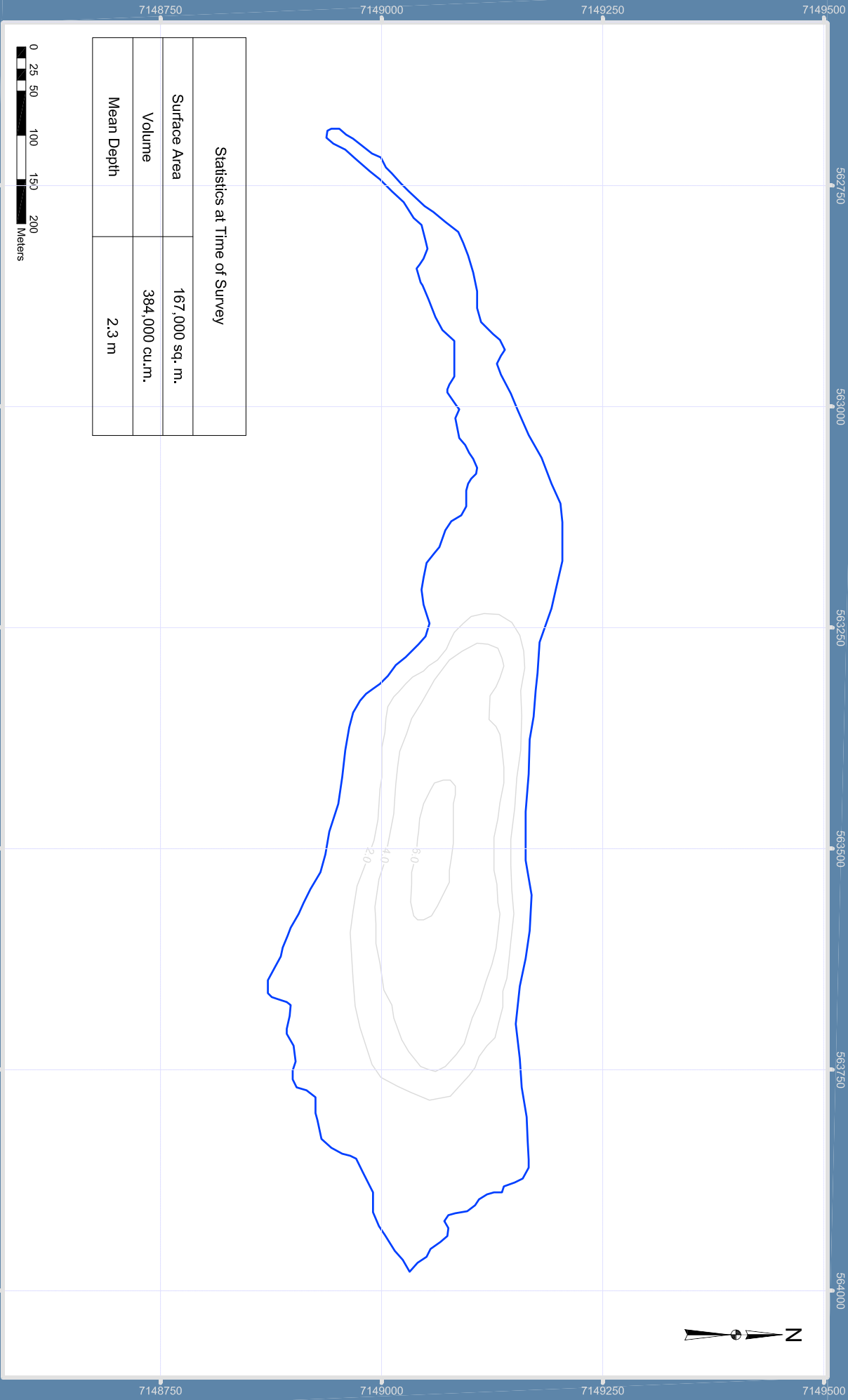


Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K108C283
Data Sources: BEAK 1992a, AREVA 2006

FIGURE X.IV-28
BATHYMETRY MAP
LOWER LAKE

KIGGAVIK PROJECT - EIS





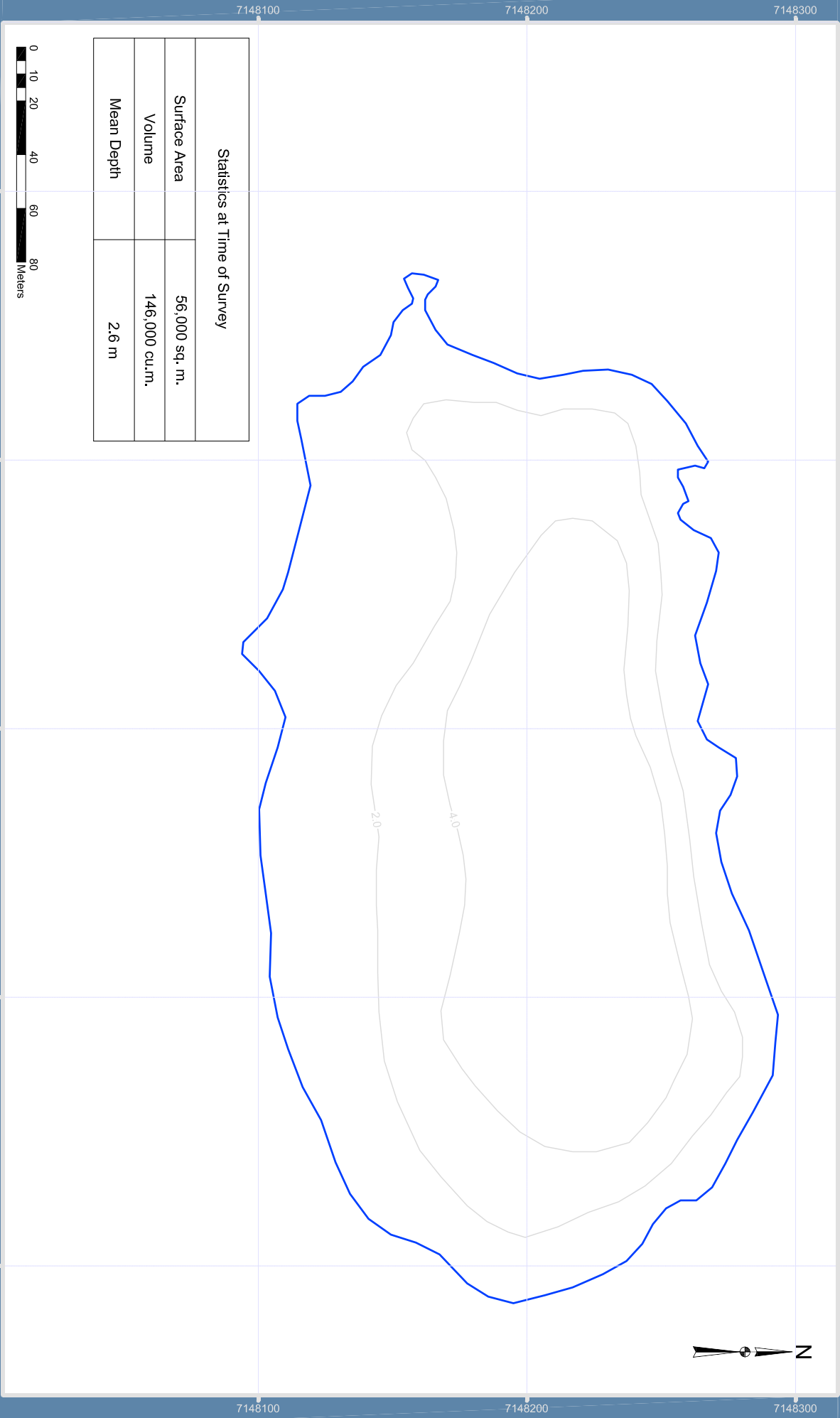
Statistics at Time of Survey	
Surface Area	167,000 sq. m.
Volume	384,000 cu.m.
Mean Depth	2.3 m

Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K08C284
Data Sources: BEAC 1990, AREVA 2006

FIGURE X.IV-29
BATHYMETRY MAP
RIDGE LAKE

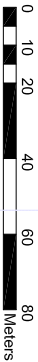
KIGGAVIK PROJECT - EIS





Statistics at Time of Survey

Surface Area	56,000 sq. m.
Volume	146,000 cu.m.
Mean Depth	2.6 m



Projection: NAD 1983 UTM Zone 14N

Creator: AKG

Date: 03/02/11

File: K08C285

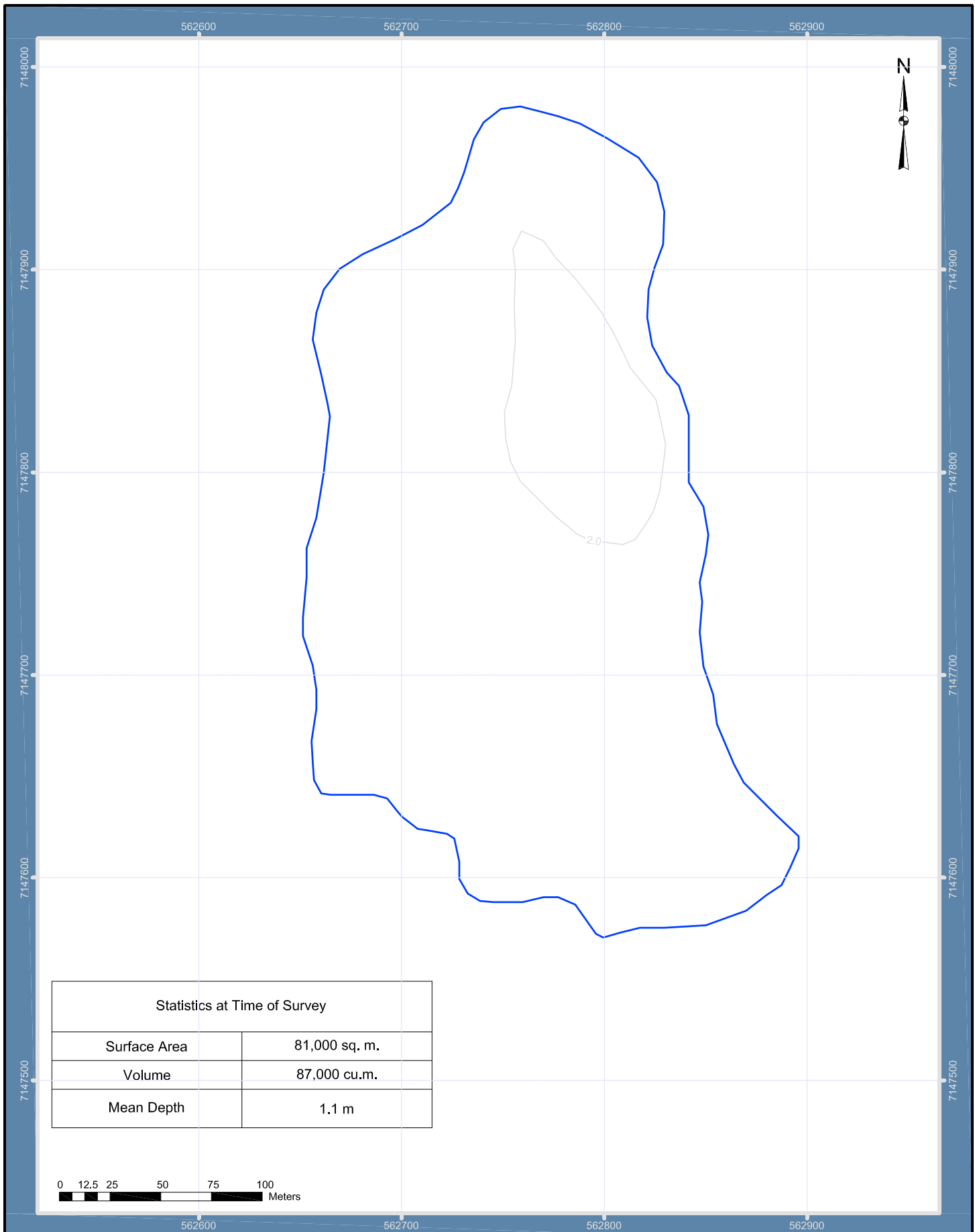
Data Sources: BEAK 1990, AREVA 2006

Scale: 1:2000

FIGURE X.IV-30

BATHYMETRY MAP
CIRQUE LAKE

KIGGAVIK PROJECT - EIS



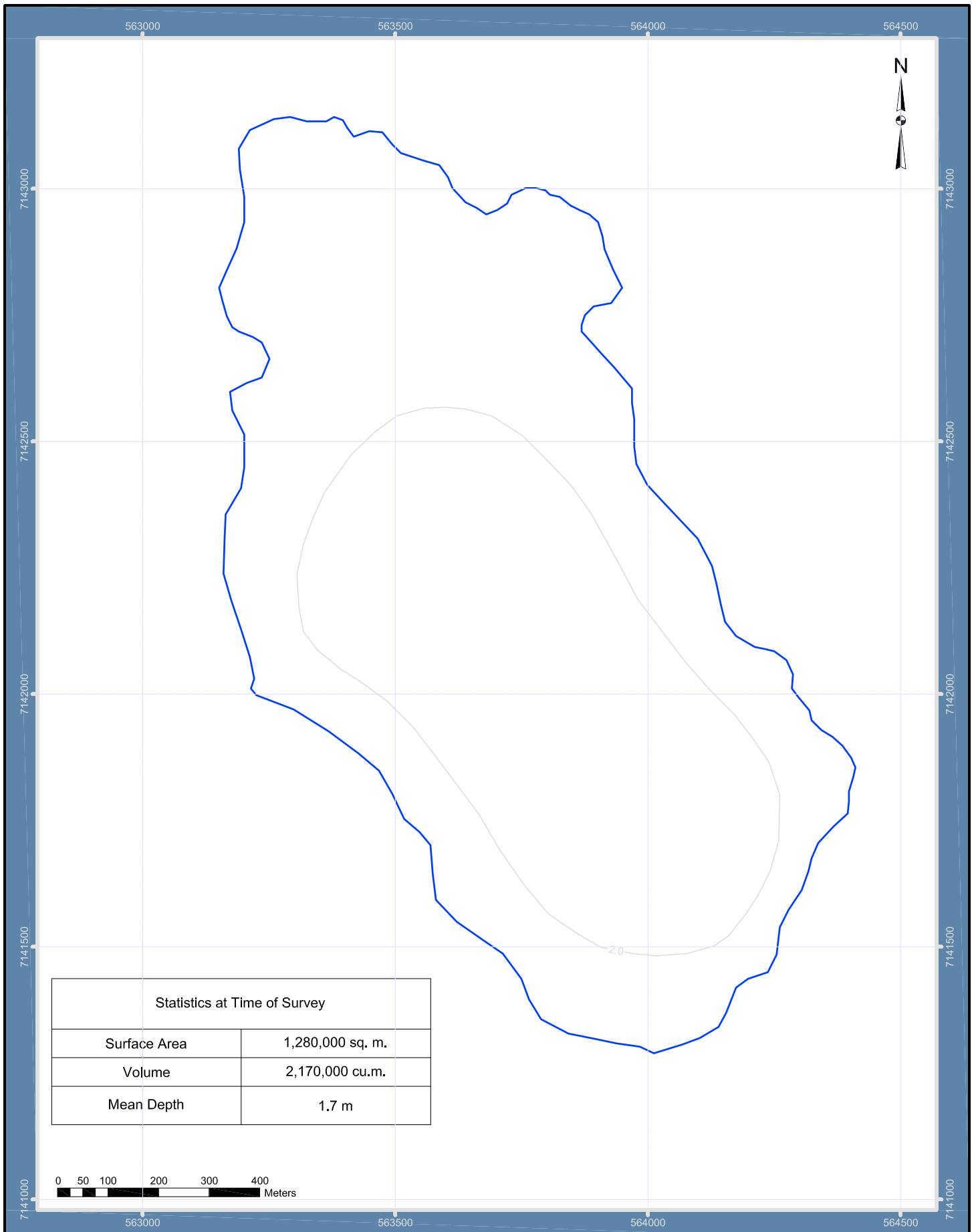
Projection: NAD 1983 UTM Zone 14N
 Creator: AKG
 Date: 03/02/11
 File: K108C286
 Data Sources: BEAK 1990, AREVA 2006

Scale: 1:2500

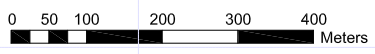
FIGURE X.IV-31
 BATHYMETRY MAP
 CRASH LAKE

KIGGAVIK PROJECT - EIS





Statistics at Time of Survey	
Surface Area	1,280,000 sq. m.
Volume	2,170,000 cu.m.
Mean Depth	1.7 m



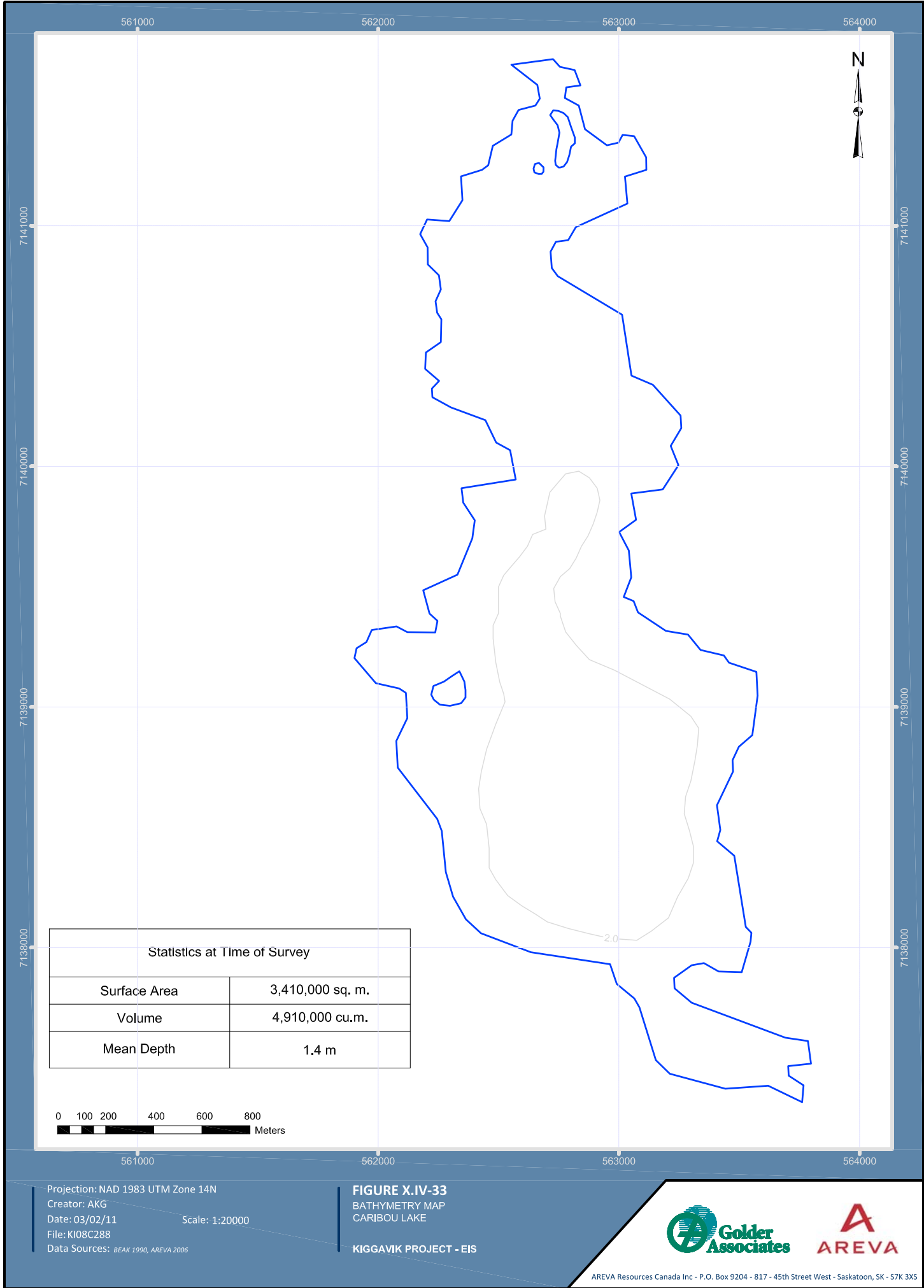
Projection: NAD 1983 UTM Zone 14N
 Creator: AKG
 Date: 03/02/11
 File: K108C287
 Data Sources: BEAK 1990, AREVA 2006

Scale: 1:10000

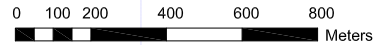
FIGURE X.IV-32
 BATHYMETRY MAP
 FOX LAKE

KIGGAVIK PROJECT - EIS





Statistics at Time of Survey	
Surface Area	3,410,000 sq. m.
Volume	4,910,000 cu.m.
Mean Depth	1.4 m

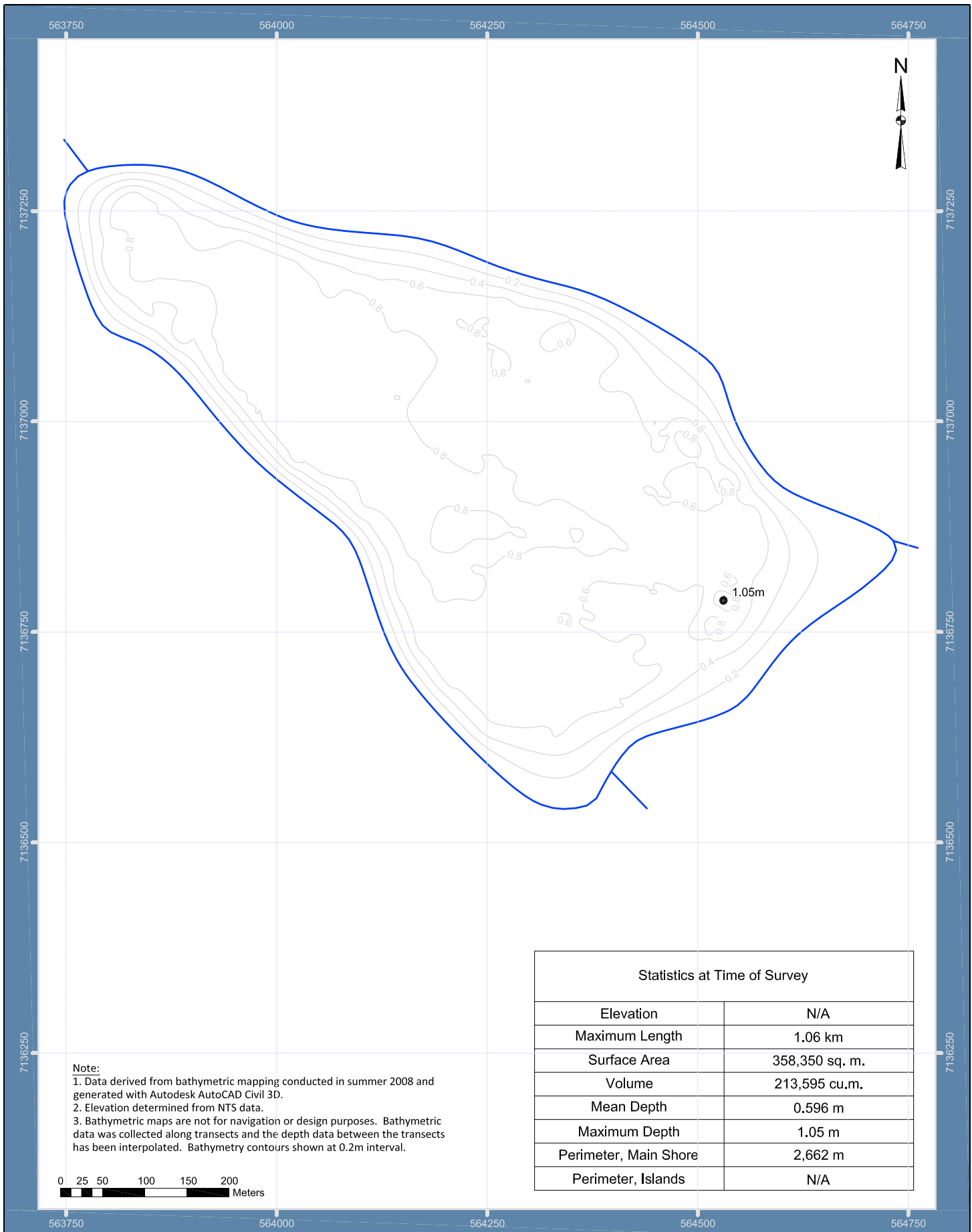


Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K108C288
Data Sources: BEAK 1990, AREVA 2006

FIGURE X.IV-33
BATHYMETRY MAP
CARIBOU LAKE

KIGGAVIK PROJECT - EIS



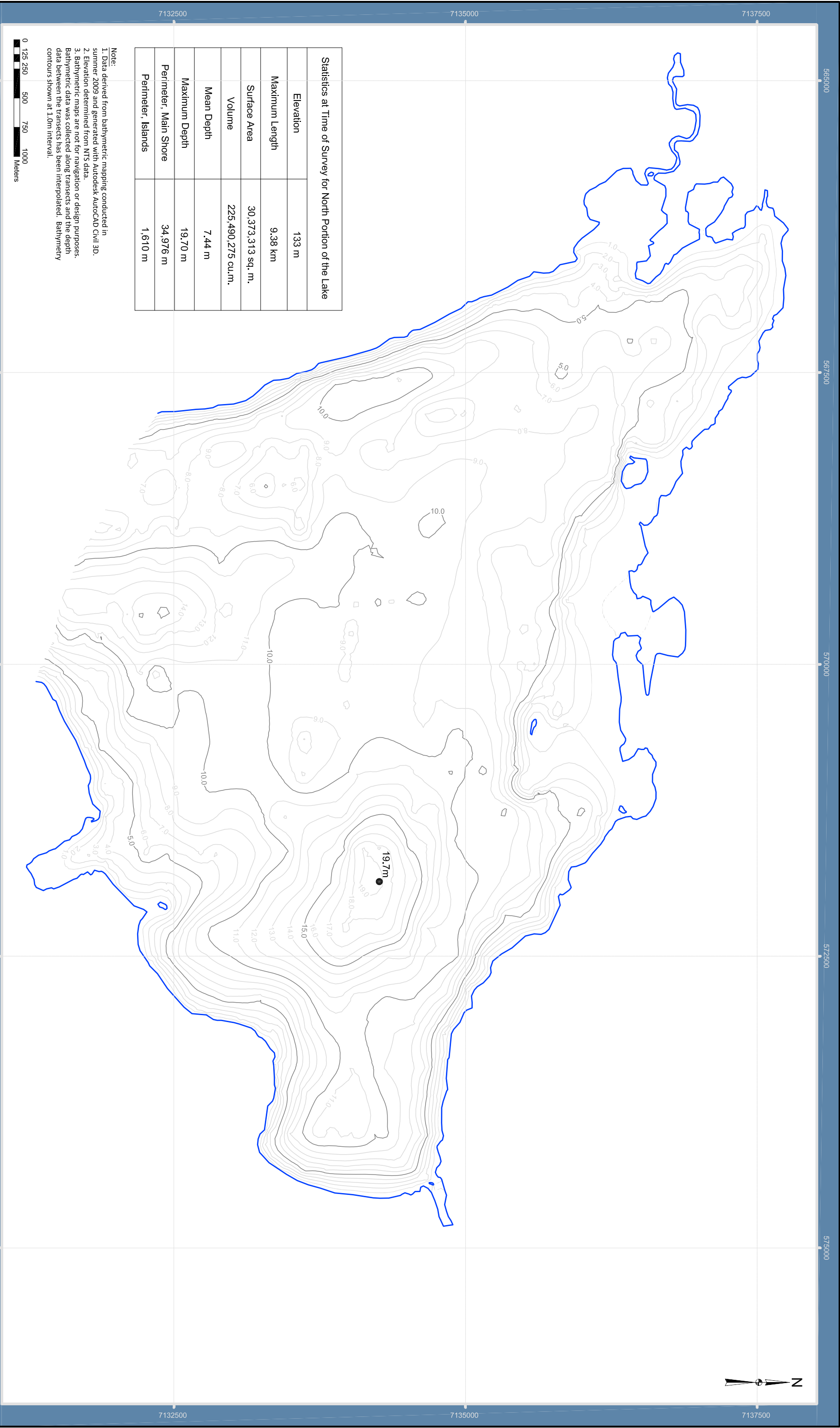


Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K108C269
Data Sources: NTS Mapsheet 66A05

FIGURE X.IV-34
BATHYMETRY MAP
CALF LAKE

KIGGAVERK PROJECT - EIS



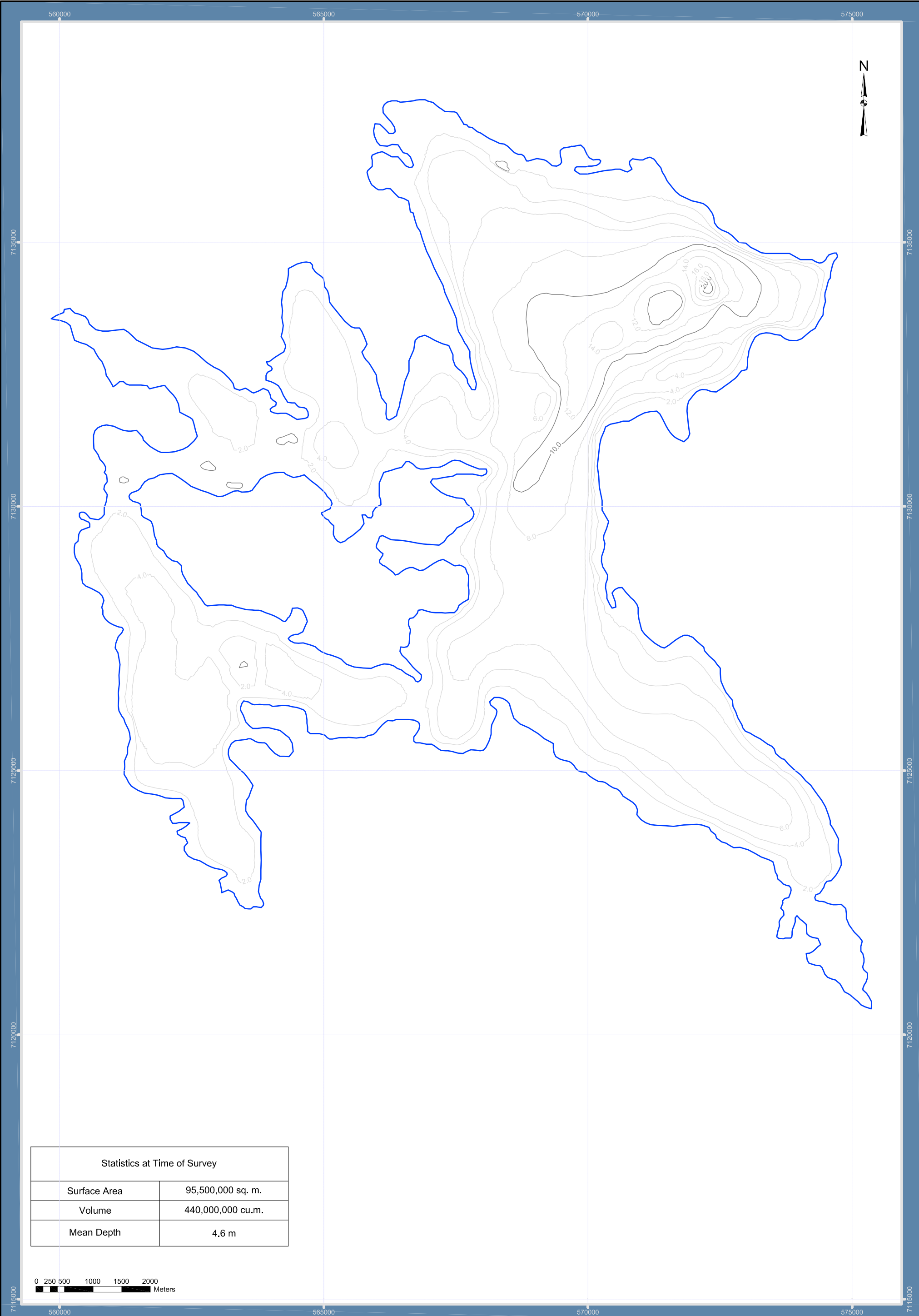


Statistics at Time of Survey for North Portion of the Lake	
Elevation	133 m
Maximum Length	9.38 km
Surface Area	30,373,313 sq. m.
Volume	225,490,275 cu.m.
Mean Depth	7.44 m
Maximum Depth	19.70 m
Perimeter, Main Shore	34,976 m
Perimeter, Islands	1,610 m

Note:
1. Data derived from bathymetric mapping conducted in summer 2009 and generated with Autodesk AutoCAD Civil 3D.
2. Elevation determined from NTS data.
3. Bathymetric maps are not for navigation or design purposes. Bathymetric data was collected along transects and the depth data between the transects has been interpolated. Bathymetry contours shown at 1.0m interval.

Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K08C263
Data Sources: KTS MapSheet 66405

FIGURE X.IV-35
BATHYMETRY MAP
NORTH PORTION OF
JUDGE SISSONS LAKE
KIGGAVIK PROJECT - EIS



Statistics at Time of Survey	
Surface Area	95,500,000 sq. m.
Volume	440,000,000 cu.m.
Mean Depth	4.6 m

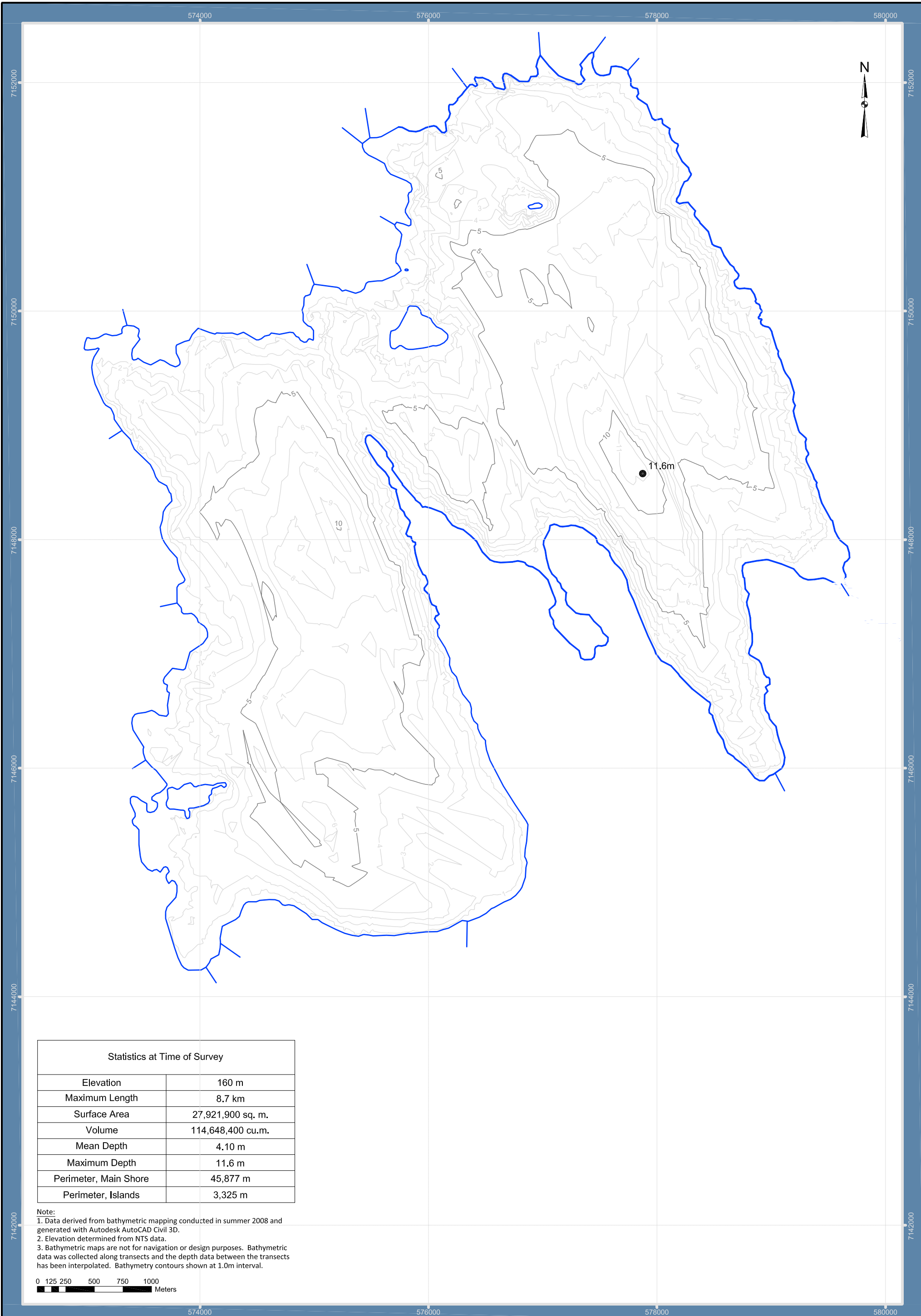
0 250 500 1000 1500 2000
Meters

Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: KI08C289
Data Sources: BEAK 1990, AREVA 2006

FIGURE X.IV-36
BATHYMETRY MAP
JUDGE SISSONS LAKE

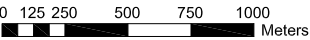
KIGGAVIK PROJECT - EIS





Statistics at Time of Survey	
Elevation	160 m
Maximum Length	8.7 km
Surface Area	27,921,900 sq. m.
Volume	114,648,400 cu.m.
Mean Depth	4.10 m
Maximum Depth	11.6 m
Perimeter, Main Shore	45,877 m
Perimeter, Islands	3,325 m

Note:
1. Data derived from bathymetric mapping conducted in summer 2008 and generated with Autodesk AutoCAD Civil 3D.
2. Elevation determined from NTS data.
3. Bathymetric maps are not for navigation or design purposes. Bathymetric data was collected along transects and the depth data between the transects has been interpolated. Bathymetry contours shown at 1.0m interval.

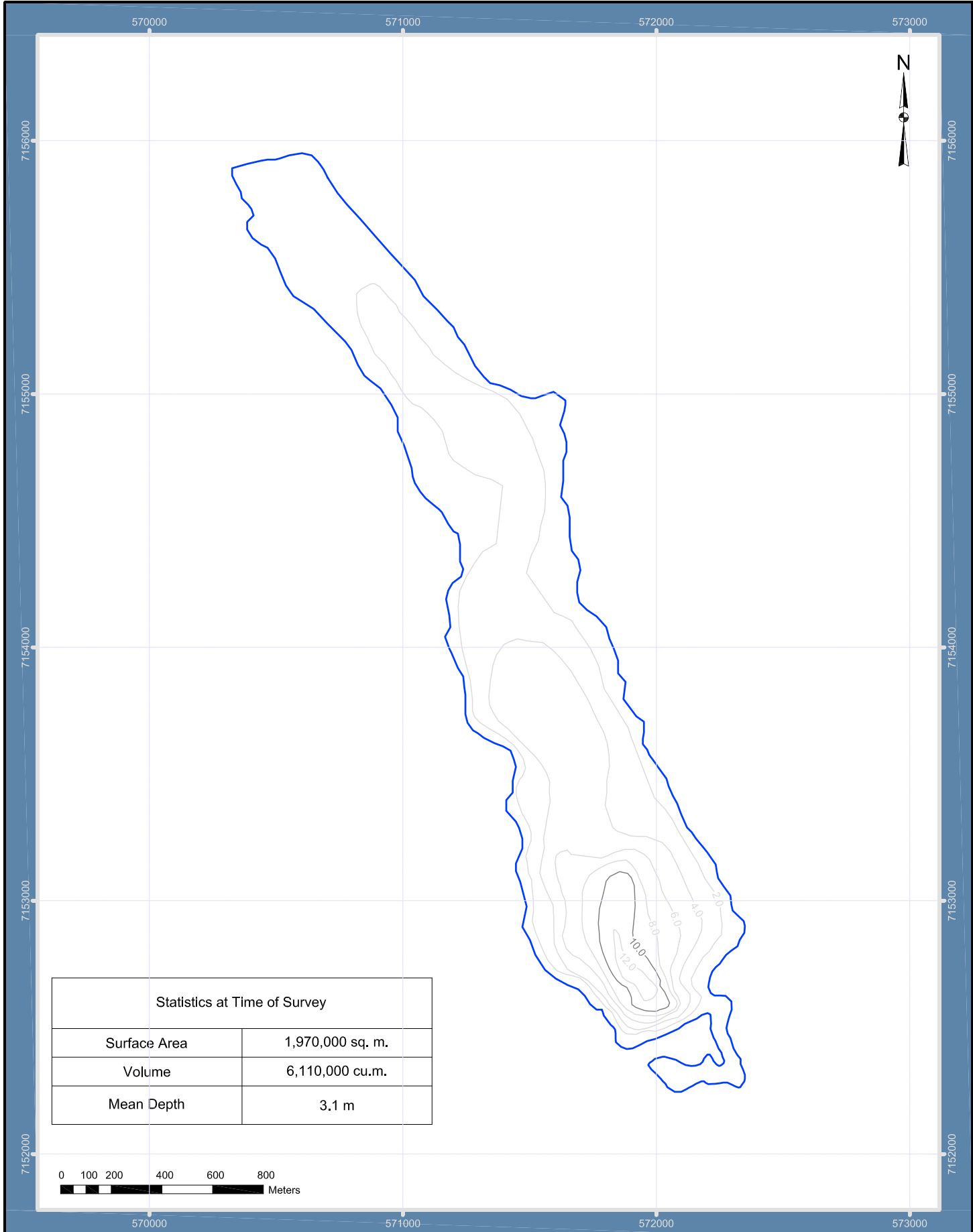


Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: KI08C270
Data Sources: NTS MapSheet 66A05

FIGURE X.IV-37
BATHYMETRY MAP
SIAMESE LAKE

KIGGAVIK PROJECT - EIS





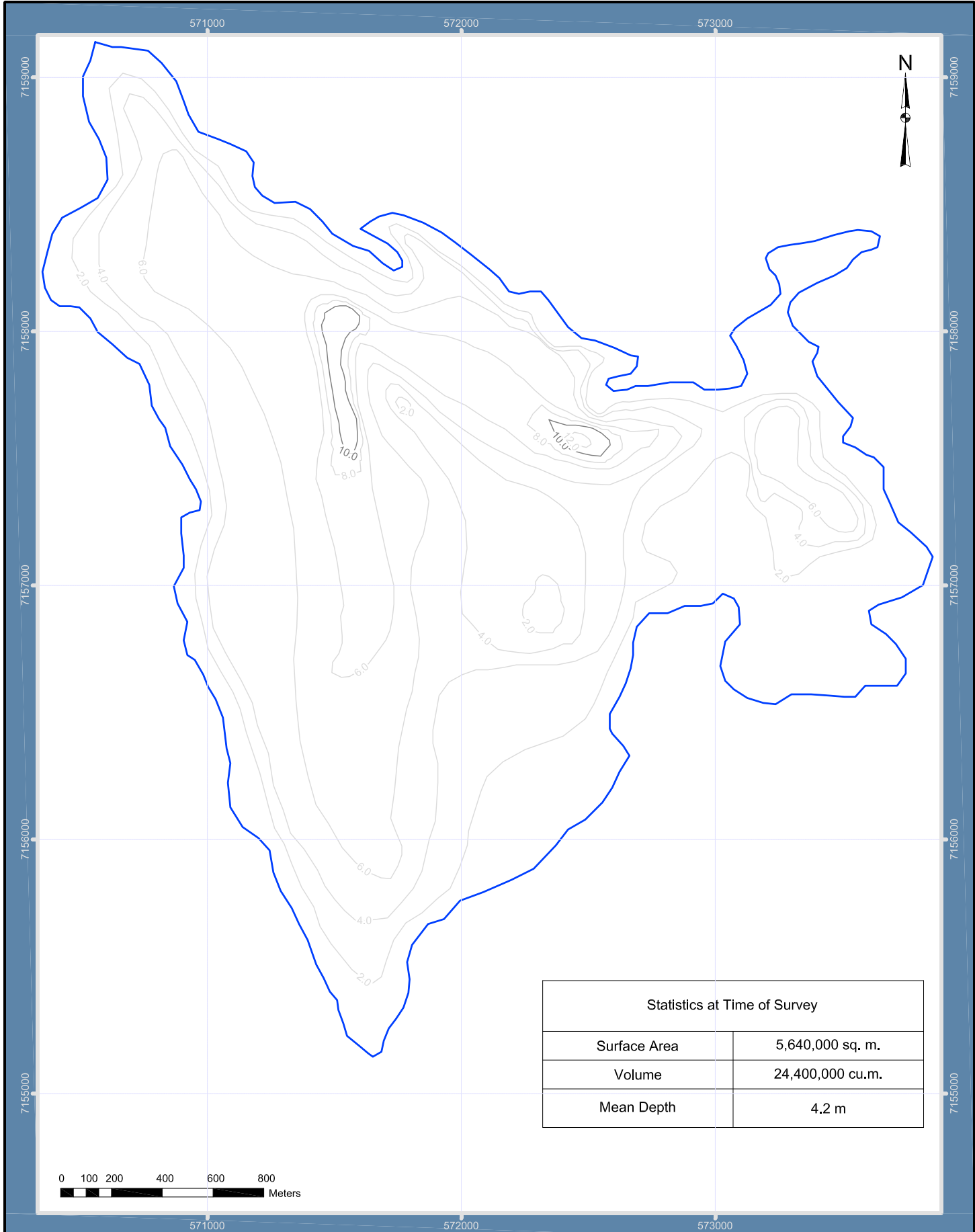
Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K108C290
Data Sources: BEAK 1990, AREVA 2006

Scale: 1:20000

FIGURE X.IV-38
BATHYMETRY MAP
SKINNY LAKE

KIGGAVERK PROJECT - EIS





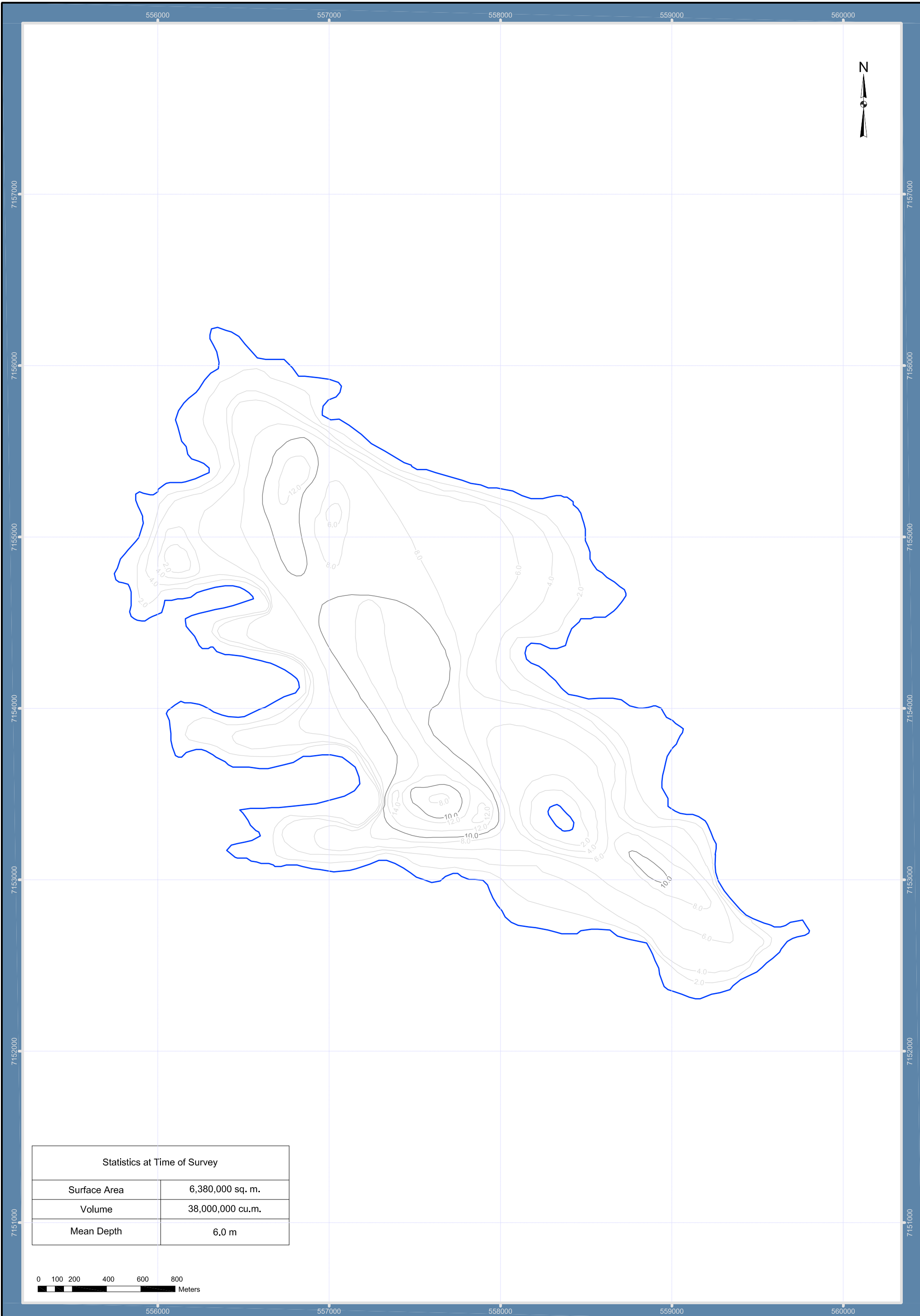
Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: K108C291
Data Sources: BEAK 1990, AREVA 2006

Scale: 1:20000

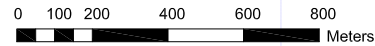
FIGURE X.IV-39
BATHYMETRY MAP
KAVISILIK LAKE

KIGGAVIK PROJECT - EIS





Statistics at Time of Survey	
Surface Area	6,380,000 sq. m.
Volume	38,000,000 cu.m.
Mean Depth	6.0 m



Projection: NAD 1983 UTM Zone 14N
Creator: AKG
Date: 03/02/11
File: KI08C292
Data Sources: BEAK 1990, AREVA 2006

FIGURE X.IV-40
BATHYMETRY MAP
SQUIGGLY LAKE

KIGGAVIK PROJECT - EIS



