

Table 3-1 Location of Stations sampled for Bathymetry and Habitat Mapping, Baker Lake, Winter 2011

Site	Waypoint	Position (NAD 83, Zone 15)		Snow Depth (m)	Ice Depth (m)	Bathymetric Depth in metres (lake bed to ice surface)	Aquatic Vegetation	Substrate	Unconsolidated Sediment Present	Wave Action Ripple Present	Comments	Aqua-Vu Camera		Estimated Lake Bottom Slope	Pentax Camera (Photo ID Number and Comments)
		Easting	Northing									Video ID Number	Photo ID Number		
1	49	357929	7133706	-	-	-	-	-	-	-	waypoint at AREVA proposed Site 1.	-	-	-	-
	50	357885	7133678	0.50	1.70	3.20	SM	Sa	no	no	limnology profile taken, abundant submergent vegetation.	V66	P67, P68	flat	P480 & P481: Timothy Evviuk and Roger Owingayak drilling hole.
	51	357846	7133651	0.20	1.75	12.45	no	Sa/Co	yes	no	about 3 cobbles observed.	V69 (dark)	P70 lighten	flat	-
	52	357804	7133622	0	2.00	18.60	-	-	-	-	too deep, no video or photos.	-	-	-	-
	53	357762	7133595	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	54	357902	7133631	0.15	1.60	7.60	no	Sa	yes	no	-	V77 (dark)	P78 lighten	steep 49%	-
	55	357881	7133617	0.10	1.85	12.25	no	Sa/Si/Bo/Co	yes	no	about 1 boulder and 1 cobble observed.	V73	P74 lighten	moderate 17%	-
	56	357838	7133587	0.10	1.90	18.90	-	-	-	-	too deep, no video or photos.	-	-	-	P482 to P484: looking north east, looking north, and looking east.
	57	357798	7133556	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	58	357924	7133587	0.20	1.65	5.50	no	Sa/Co/Bo	no	no	about 4 cobbles and two boulders observed.	V81	P82 lighten	flat	-
	59	357883	7133559	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	60	357842	7133536	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	61	357854	7133717	0.20	1.60	4.80	SM	Sa/Bo	no	no	moderate submergent vegetation, about 1 boulder observed.	V85	P86	moderate 28%	-
	62	357835	7133701	0.02	1.95	8.10	SM	Sa/Si	no	no	moderate submergent vegetation.	V75	P76	moderate 22%	-
	63	357792	7133669	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	64	357755	7133639	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	65	357825	7133758	0.15	1.90	5.20	SM	Sa/Si	no	no	abundant submergent vegetation.	V89	P90	flat	-
	66	357792	7133720	0.05	2.00	10.90	no	Sa/Si/Co	yes	no	about 4 cobbles were observed.	V93	P94	flat	-
	67	357751	7133690	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	68	357867	7133662	0.15	1.80	8.90	no	Sa/Si/Co	no	no	silt covered cobbles	V71 (dark)	P72 lighten	moderate	-

										observed.			15%	
69	357891	7133621	0.05	1.90	10.30	no	Sa/Si	-	-	-	V79 (dark)	P80 lighten	moderate 12%	-
70	357905	7133574	0.05	2.00	15.50	-	-	-	-	too deep, no video or photos.	-	-	-	-
71	357915	7133578	0.15	1.70	12.50	no	Sa/Co/Bo/Gr	no	no	a lady said there is a sandy beach near shore.	V83 (dark)	P84 lighten	flat	-
72	357844	7133707	0.15	1.65	6.00	SM	Sa/Si	no	no	moderate submergent vegetation.	V87	P88 lighten	flat	-
73	357810	7133740	0	1.85	7.70	SM	Sa/Si	no	no	moderate submergent vegetation.	V91	P92	moderate 15%	-
105	357929	7133596	0.75	1.45	1.55	no	Sa/Co/Bo	no	no	only 4 cobbles and 2 boulders observed.	V189 (not visible)	P188 lighten, P190 lighten, P191 lighten	flat	P501 & P502: 0.75 m of snow.
106	357909	7133635	0.65	1.50	3.00	SM	Sa/Si/Co	yes	no	about 5 cobbles in shallow area.	-	P192 to P195	moderate 18%	-
107	357897	7133687	-	-	-	-	-	-	-	near shore, not sampled because waypoint 50 was already shallow.	-	-	-	-
108	357877	7133670	0.15	1.65	7.55	SM	Si/Bo	yes	no	about 1 boulder observed.	-	P196 (D), P197 (D)	flat	-
109	357864	7133726	0.40	1.55	2.00	no	Bo/Sa	no	no	abundant boulders observed.	-	P198, P199	flat	-
110	357831	7133766	0.50	1.65	2.00	SM	Bo	no	no	abundant boulders observed.	-	P200, P201, P202 (D)	flat	-
111	357829	7133762	-	-	-	-	-	-	-	waypoint added between waypoints 65 and 110, but not sampled since already had 4 values available.	-	-	-	-
112	357829	7133762	-	-	-	-	-	-	-	waypoint added between waypoints 65 and 110, but not sampled since already had 4 values available.	-	-	-	-
BL1	357930	7133706	-	-	-	-	-	-	-	uploaded to GPS.	-	-	-	P472 to P479: looking at lake then in a clockwise movement (wrong sequence for P473: looking north west, P474: looking west, P475: looking north then right sequence).
2	74	361462	7132413	-	-	-	-	-	-	waypoint at AREVA proposed Site 2.	-	-	-	-

	75	361439	7132371	0.25	1.75	2.25	SM	Sa/Co/Bo/Si	yes	no	abundant submergent vegetation, about 5 cobbles and 2 boulder observed.	V95	P96	flat	-
	76	361482	7132345	0.20	1.80	2.40	SM	Sa/Co/Bo	yes	no	sparse submergent vegetation, about 2 boulders and 3 cobbles observed.	V130	P131	flat	-
	77	361525	7132320	0.05	2.05	2.45	no	Sa/Gr/Bo/Co	yes	yes	about 10 boulders and 6 cobbles observed.	V99 (not visible), V100	P101, P102	flat	-
2	78	361392	7132397	-	-	-	-	-	-	-	near shore, not sampled: expected to be similar to waypoints 75 or 79.	-	-	-	-
	79	361352	7132418	0.60	1.30	1.50	no	Bo/Co	no	no	ice touching tip of boulders.	V114 (corrupted), V115	P116	flat	-
	80	361428	7132349	0.05	1.90	3.20	no	Sa/Gr/Co/Bo	yes	yes	about 4 cobbles and 1 boulder observed.	V97	P98	flat	-
	81	361407	7132305	0.20	1.85	8.50	SM	Sa/Si	yes	no	sparse submergent vegetation.	-	P105, P106	moderate 15%	-
	82	361380	7132261	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	83	361506	7132273	0.15	1.80	7.10	SM	Sa/Si	yes	no	moderate submergent vegetation.	V107, V108, V110	P109	moderate 11%	-
	84	361489	7132232	0.10	1.90	11.25	no	Sa/Si/Co	yes	no	only 1 cobble observed.	V111	P112, P113	moderate 17%	-
	85	361305	7132330	0.10	2.00	10.70	no	Sa/Si/Co	yes	no	only 1 cobble observed.	V117	P118	moderate 15%	-
	86	361330	7132370	0.05	1.95	3.80	no	Sa/Gr/Co	yes	yes	only 1 cobble observed.	V119	P120	moderate 11%	-
	87	361387	7132372	0.10	2.05	3.20	SM	Sa/Gr/Co/Bo	yes	yes	sparse submergent vegetation, about 5 cobbles and 3 boulders observed.	V128	P127, P129	flat	-
	88	361368	7132353	0.10	2.00	4.50	no	Sa/Gr/Co	yes	yes	only 1 cobble observed.	V124 (corrupted), V126	P125	moderate 19%	-
	89	361338	7132314	0.10	2.05	10.75	no	Sa/Si/Co	yes	no	only 1 cobble observed.	V121 (dark), V122 (dark)	P123 lighten	moderate 11%	-
	90	361461	7132299	0.10	1.95	7.10	SM	Sa	yes	no	sparse submergent vegetation.	V133 (dark)	P132 lighten	flat	-
	91	361437	7132256	0.05	2.00	11.60	no	Sa/Si/Co	yes	no	only 3 cobbles observed.	V135	P134, P136	flat	-
	100	361518	7132301	0.10	1.85	2.90	no	Sa/Co	yes	yes	only 4 cobbles observed.	V175 (not visible)	P176, P177	-	-
	101	361469	7132327	0	2.00	3.05	no	Sa/Co/Bo	yes	yes	only 2 cobbles and 1 boulder observed.	-	P178, P179	flat	-

	102	361421	7132325	0.10	1.95	6.20	SM	Sa	yes	no	abundant submergent vegetation on flat, bare on down end of slope.	V180	P181, P182	flat, down end of slope	-
	103	361356	7132343	0	2.00	7.60	SM	Sa/Si/Co	yes	no	sparse submergent vegetation, only 1 cobble observed.	-	P183, P184	flat	-
	104	361319	7132354	0	1.95	8.00	SM	Sa/Si	yes	no	sparse submergent vegetation.	-	P185, P186, P187	moderate 12%	-
	BL2	361461	7132413	-	-	-	-	-	-	-	uploaded to GPS.	-	-	-	P485 to P492: looking at lake then in a clockwise movement.
3	25	362267	7131871	-	-	-	-	-	-	-	waypoint at AREVA proposed Site 3.	-	-	-	-
	26	362270	7131821	0.50	0.85	0.85	-	-	-	-	frozen to bottom.	-	-	-	P469: Roger Owingayak taking snow off. P470: Timothy Evviuk and Roger Owingayak drilling hole.
	27	362274	7131772	0.10	1.90	3.00	no	Sa/Gr/Bo	yes	yes	about 2 boulders observed.	V46, V47	P48	flat	-
	28	362275	7131721	0.05	1.95	10.65	no	Sa/Si/Co/Bo	yes	yes	about 5 cobbles and 1 boulder observed.	V49	P50, P51	moderate 14%	-
	29	362274	7131671	0.05	1.85	14.30	no	Sa/Si/Co/Bo	yes	no	about 3 cobbles and 1 boulder observed.	V52 (D on/off)	P53, P54, P55 (D)	flat	-
	30	362315	7131800	-	-	-	-	-	-	-	near shore, not sampled: expected to be similar to waypoints 26, 35, or 44.	-	-	-	-
	31	362320	7131776	0.20	1.60	3.00	no	Sa/Gr/Co/Bo	yes	yes	about 6 cobbles and 1 boulder observed.	V137, V139	P138, P140	flat	-
	32	362324	7131725	0	2.00	4.60	no	Sa	yes	yes	-	V63, V65	P64	moderate 29%	-
	33	362327	7131676	0.03	1.95	11.70	no	Sa/Si	yes	no	-	V61 (D)	P62	flat	-
	34	362328	7131626	0.10	1.85	14.70	no	Sa/Si/Co	yes	no	-	V56 (D), V60	P57 (D), P58 (D), P59	-	-
	35	362358	7131775	0.25	1.90	2.50	SM	Bo/Co/Sa/Gr	no	no	-	V141 (not visible)	P142, P143, P144	flat	-
	36	362366	7131726	0.15	1.75	3.00	no	Sa	yes	yes	-	V145 (not visible)	P146	moderate 8%	-
	37	362380	7131678	0.05	2.00	9.60	no	Sa/Si/Co	yes	no	only 3 cobbles observed.	V147	P148	moderate 6%	-
	38	362392	7131629	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	39	362221	7131833	-	-	-	-	-	-	-	near shore, not sampled: expected to be similar to waypoints 26, 35, or 44.	-	-	-	-

3	40	362221	7131809	0.05	1.95	2.95	no	Sa/Co/Bo	yes	yes	about 10 cobble and 2 boulders observed.	V159	P160, P161	moderate 11%	-
	41	362219	7131758	0.05	1.90	9.35	no	Sa	yes	yes	-	V170	P169	steep 54%	-
	42	362219	7131708	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	43	362221	7131658	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	44	362172	7131840	0.10	1.95	2.60	no	Sa/Co/Bo	yes	yes	about 5 cobbles and 2 boulders observed.	V153 (not visible)	P154, P155	flat	-
	45	362177	7131791	0.05	2.00	3.15	no	Sa	yes	yes	-	V162	P163	start moderate 28%	-
	46	362182	7131742	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
	47	362185	7131693	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	P471: looking towards waypoint 26 (snowmobile) at hills behind Site 3.
	48	362271	7131798	0.15	1.70	2.25	no	Sa/Co/Bo	yes	no	about 3 cobbles and 2 boulders observed.	V43	P44 lighten, P45 lighten	flat	-
	92	362331	7131706	0	2.00	9.55	no	Sa/Si/Co	yes	yes	only 5 cobbles observed.	V151	P152	moderate 11%	-
	93	362371	7131703	0.05	2.00	7.30	no	Sa/Co	yes	yes	only 2 cobbles observed.	V149	P150	steep 56%, seems flat further down	-
	94	362271	7131754	0.05	2.00	3.65	no	Sa/Co	yes	yes	only 1 cobble observed.	V156 (not visible)	P157, P158	flat	-
	95	362219	7131737	-	-	-	-	-	-	-	too deep, not checked.	-	-	-	-
4	96	362177	7131766	0.05	1.95	10.40	no	Sa/Co	yes	yes	only 1 cobble observed.	V164	P165	moderate 11%	-
	97	362175	7131781	0.05	2.00	8.75	no	Sa/Si	yes	no	-	V166	P167, P168	steep 64%, seems flat further down	-
	98	362216	7131785	0.10	1.90	3.00	no	Sa	yes	yes	-	V171 (not visible)	P172	flat	-
	99	362217	7131773	0.10	1.95	3.60	no	Sa	yes	yes	-	V174 (not visible)	P173	flat	-
	BL3	362269	7131872	-	-	-	-	-	-	-	uploaded to GPS.	-	-	-	P493 to P500: looking at lake then in a clockwise movement.
	1	363822	7131403	-	-	-	-	-	-	-	waypoint at AREVA proposed Site 4.	-	-	-	-

2	363807	7131359	0.05	1.80	1.80	no	Sa	-	-	-	-	-	-	P465: sand in ice. P462 & P463: Timothy Evviuk and Roger Owingayak drilling hole. P464: looking north from waypoint 2 @ hill, shrubs & grass, then snow.
3	363816	7131303	0.03	2.00	2.70	no	Sa	yes	yes	sand solid.	V6	-	flat	-
4	363817	7131254	0.02	1.95	7.65	SM, algae	Sa/Si	yes	no	moderate submergent vegetation, small silt layer above sand.	V7	-	flat	-
5	363818	7131204	0.05	1.95	9.50	no	Sa/Bo/Co/Si	yes	yes	small silt layer above sand.	V8	P9	-	P466: looking north from waypoint 5.
6	363857	7131353	-	-	-	-	-	-	-	near shore, not sampled: expected to be similar to waypoints 2 or 20.	-	-	-	-
7	363861	7131328	0.02	1.80	1.80	no	Sa	-	-	-	-	-	-	P467: sand.
8	363874	7131279	0.03	2.00	6.50	SM	Sa/Si	yes	no	abundant submergent vegetation, small silt layer above sand.	V15 (tail of lake trout), V16, V18 (up-looking for fish)	P17	upper slope visible, flat	-
9	363883	7131231	0.03	2.00	9.50	no	Sa/Si/Co	yes	no	-	V12, V13	P14	flat	-
10	363888	7131179	0.05	1.95	11.80	SM, algae	Sa/Si/Co/Bo	yes	no	only sparse submergent vegetation, about 4 cobbles and 1 boulder observed.	V10	P11	flat	-
11	363906	7131342	-	-	-	-	-	-	-	near shore, not sampled: expected to be similar to waypoints 2 or 20.	-	-	-	-
12	363902	7131292	0.04	2.00	2.60	no	Sa	yes	yes	-	V19	P20	flat	-
13	363898	7131244	0.05	1.90	7.40	SM	Sa/Si	yes	no	moderate submergent vegetation.	V21	P22	flat	-
14	363898	7131186	0.05	2.00	11.40	no	Sa/Si/Co	yes	no	limnology profile taken, about 5 cobbles observed.	V23, V25	P24, P26	flat	-
15	363757	7131368	-	-	-	-	-	-	-	near shore, not sampled: expected to be similar to waypoints 2 or 20.	-	-	-	-
16	363760	7131342	0.05	2.00	2.50	no	Sa/Gr/Bo	yes	yes	only 1 boulder observed.	V41	P42	flat	-
17	363764	7131295	0.05	2.00	3.65	no	Sa/Gr	yes	yes	limnology profile taken.	V27	P28	flat	-
18	363769	7131244	0.05	2.00	7.75	no	Sa/Gr/Co	yes	yes	about 9 cobbles observed.	V29	P30	flat	-

	19	363773	7131194	0.05	1.95	10.25	no	Sa/Si/Co/Bo	yes	yes	about 6 cobbles and 2 boulders observed.	V31, V32	P33, P34	moderate 15%	-
	20	363709	7131351	0.10	1.15	1.15	-	-	-	-	frozen to bottom.	-	-	-	-
	21	363713	7131303	0.05	2.00	3.30	no	Sa/Gr	yes	yes	-	V39	P40	flat	-
	22	363731	7131252	0.02	1.85	6.95	no	Sa/Gr	yes	yes	-	V37	P38	moderate 14%	-
	23	363723	7131199	0.10	1.90	9.80	no	Sa/Gr/Co	yes	yes	only a few cobbles observed.	V35 (lake trout)	P36	moderate 6%	-
	24	363904	7131320	0.02	1.60	1.60	no	Sa	-	-	sand in snow observed on spoon when removing snow from hole.	-	-	-	P468: sand.
	BL4	363822	7131401	-	-	-	-	-	-	-	uploaded to GPS.	-	-	-	-

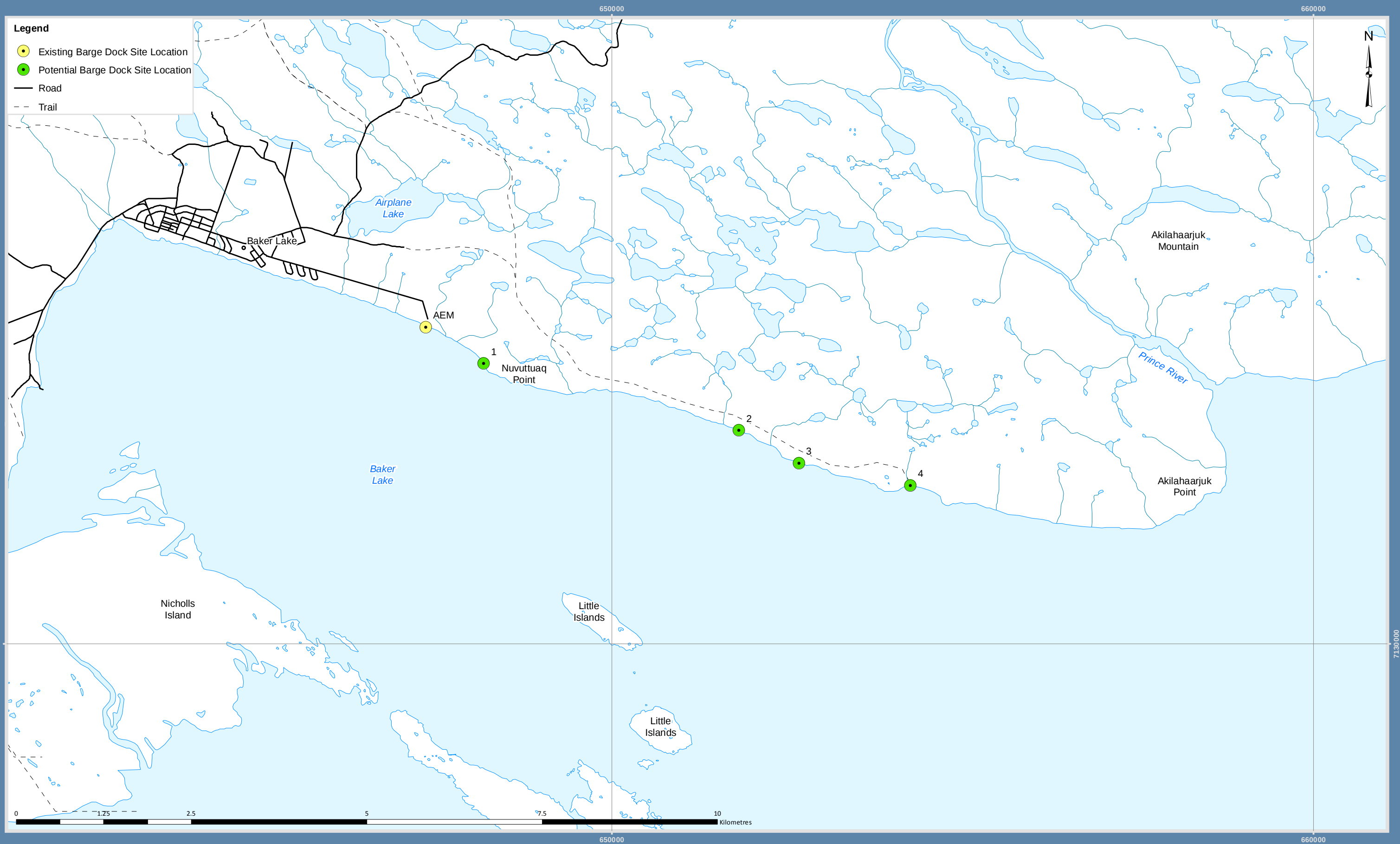
m = metre; - = not applicable; SM = submergent vegetation; Si = silt; Sa = sand; Gr = gravel; Co = cobble; Bo = boulder; D = dimmer lights used for photo or video; BL = barge landing; V = video; P = photo

Table 3-2: Limnology Profile Measured in Baker Lake, Winter 2011

Site	Waypoint	Date	Station Type	Ice Depth (m)	Maximum Depth (m)	Profile Depth (m)	Temperature (°C)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Comments
1	50	28-Apr-11	shallow	1.70	3.20	2.5	0.58	33	13.87	-
4	14	27-Apr-11	deep	2.00	11.40	3.0	0.33	33	13.95	-
						4.0	0.28	33	13.87	-
						5.0	0.33	34	13.83	-
						6.0	0.37	34	13.85	-
						7.0	0.44	34	13.83	-
						8.0	0.25	137	13.55	area disturbed with underwater camera.
						9.0	0.22	306	13.65	area disturbed with underwater camera.
						10.0	0.21	323	13.82	area disturbed with underwater camera.
						10.5	0.15	336	13.84	area disturbed with underwater camera.
4	17	27-Apr-11	shallow	2.00	3.65	3.0	0.39	33	13.92	-

m = metre; - = not applicable; °C = degree Celsius; µS/cm = microSiemens per centimetre; mg/L = milligram per litre; Apr = April.

Date: day-month-year.



Projection: NAD 1983 UTM Zone 14N
 Creator: MK
 Date: 05/18/2011 Scale: 1:50,000
 File: K108C327
 Data Sources: NTS Mapsheet 66A 02
 AREVA Resources Canada Inc.

FIGURE 3-1
 FOUR POTENTIAL BARGE DOCK SITE LOCATIONS
 ON BAKER LAKE, NUNAVUT
 KIGGAVIK PROJECT - EIS

Legend

Si

Sa

Gr

Co

Bo

Shallow Slope (0-5%)

Intermediate Slope (6-30%)

Steep Slope (31-70%)

Data Summary
(waypoint/depth in metres/submergent vegetation/substrate)

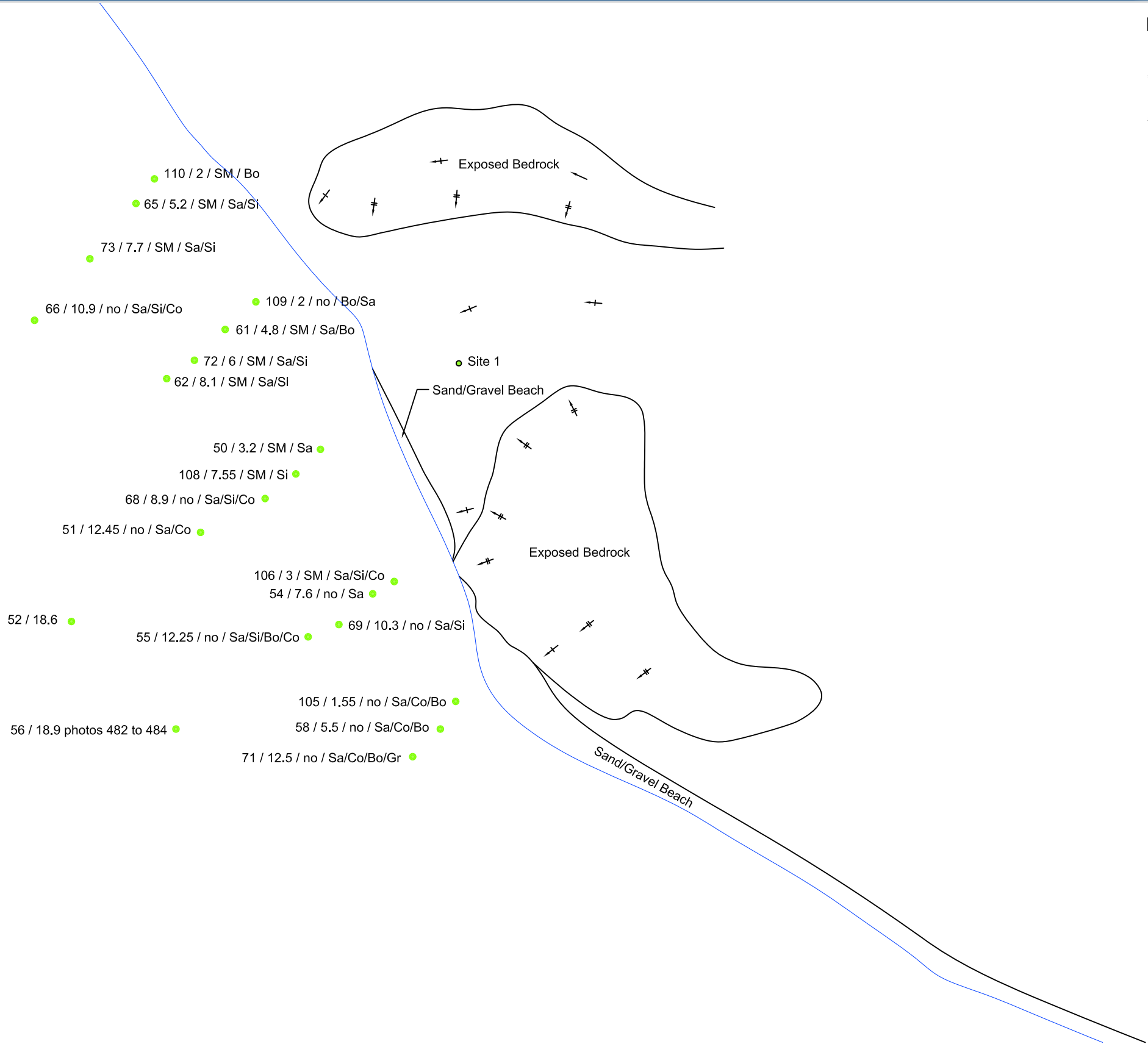
Silt

Sand

Gravel

Cobble

Boulder



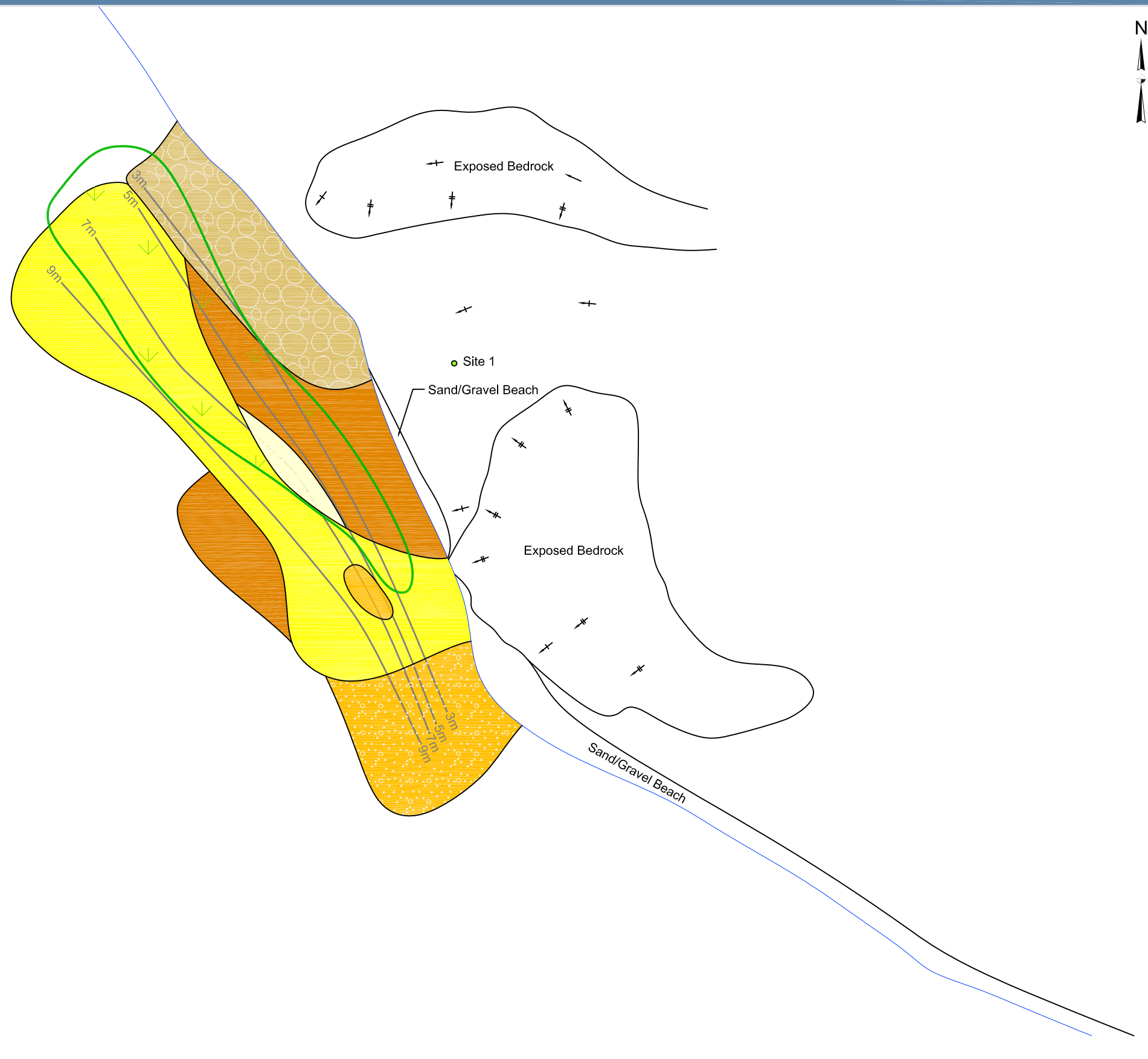
Projection: NAD 1983 UTM Zone 15N
Creator: AJL
Date: 09/05/11
File: KI08C317
Data Sources: 0.5m Ortho Imagery

FIGURE 3-2
FIELD DATA SUMMARY
FOR POTENTIAL BARGE DOCK SITE 1

KIGGAVIK PROJECT - EIS



- Legend**
- Bathymetry Contour Line (2 metre Interval)
 - Submergent Vegetation
 - Silt (Occasional Boulder)
 - Sand/Silt (Occasional Cobble or Boulder)
 - Sand
 - Sand/Gravel (Occasional Cobble or Boulder)
 - Sand/Cobble/Boulder (Occasional Gravel)
 - Sand (Occasional Cobble or Boulder)
 - Boulder/Cobble
 - Boulder (Occasional Sand)
 - Shallow Slope (0-5%)
 - Intermediate Slope (6-30%)
 - Steep Slope (31-70%)



Projection: NAD 1983 UTM Zone 15N
 Creator: AJL
 Date: 09/05/11
 File: K108C318
 Data Sources: 0.5m Ortho Imagery

FIGURE 3-3
 BATHYMETRY AND AQUATIC HABITAT
 FOR POTENTIAL BARGE DOCK SITE 1
 KIGGAVIK PROJECT - EIS

Legend

Data Summary
(waypoint/depth in metres/submergent vegetation/substrate)

Si

Silt

Sa

Sand

Gr

Gravel

Co

Cobble

Bo

Boulder

—

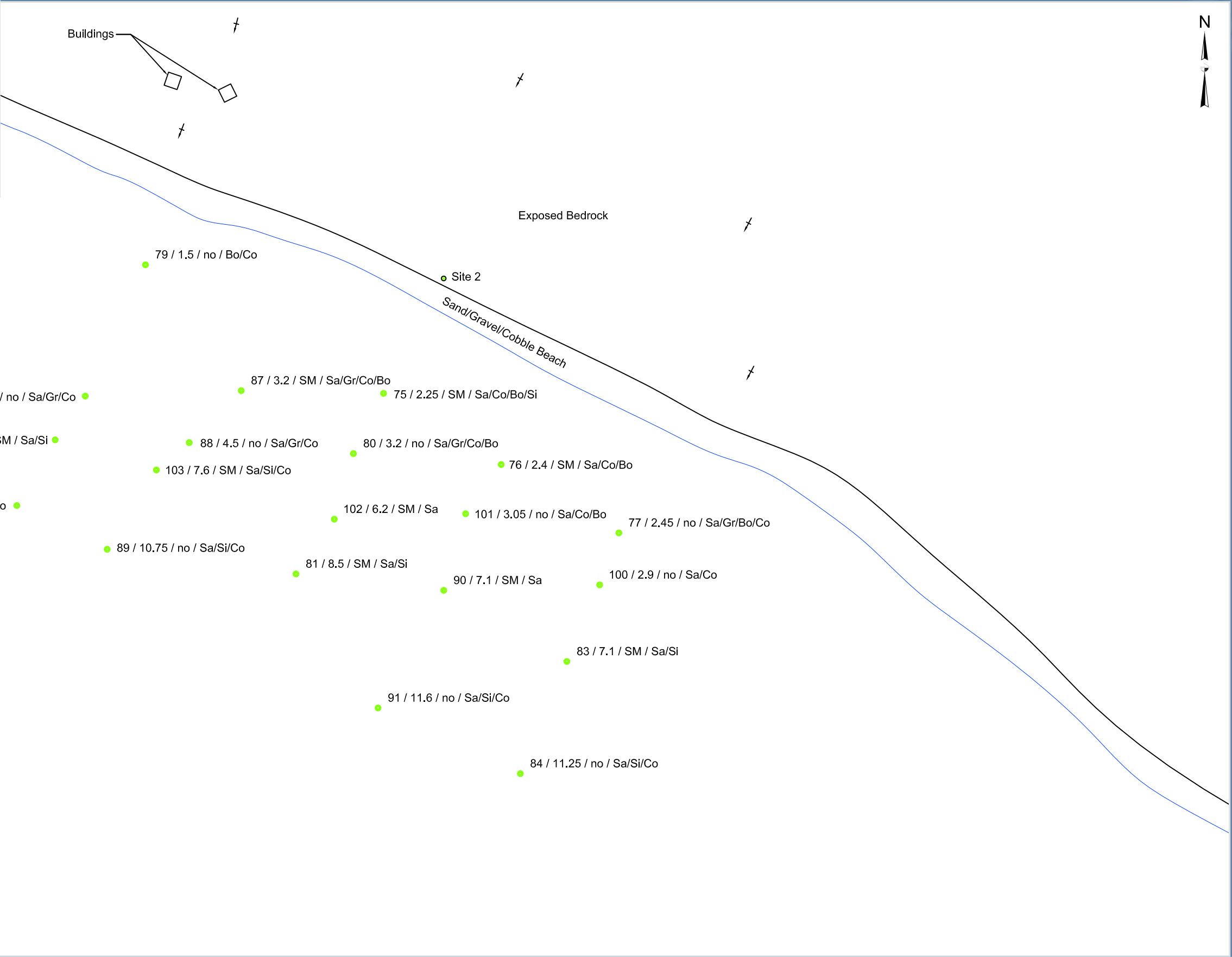
Shallow Slope (0-5%)

+—

Intermediate Slope (6-30%)

+—

Steep Slope (31-70%)



Projection: NAD 1983 UTM Zone 15N
Creator: AJL
Date: 09/05/11
File: KI08C319
Data Sources: 0.5m Ortho Imagery

FIGURE 3-4
FIELD DATA SUMMARY
FOR POTENTIAL BARGE DOCK SITE 2

KIGGAVIK PROJECT - EIS



Legend

-  Bathymetry Contour Line (2 metre Interval)
-  Submergent Vegetation
-  Silt (Occasional Boulder)
-  Sand/Silt (Occasional Cobble or Boulder)
-  Sand
-  Sand/Gravel (Occasional Cobble or Boulder)
-  Sand/Cobble/Boulder (Occasional Gravel)
-  Sand (Occasional Cobble or Boulder)
-  Boulder/Cobble
-  Boulder (Occasional Sand)
-  Shallow Slope (0-5%)
-  Intermediate Slope (6-30%)
-  Steep Slope (31-70%)



0 7.5 15 30 45 60 Meters

Projection: NAD 1983 UTM Zone 15N
 Creator: AJL
 Date: 09/05/11
 File: K108C320
 Data Sources: 0.5m Ortho Imagery

FIGURE 3-5
 BATHYMETRY AND AQUATIC HABITAT
 FOR POTENTIAL BARGE DOCK SITE 2
 KIGGAVIK PROJECT - EIS



Legend

● Data Summary
(waypoint/depth in metres/submergent vegetation/substrate)

Si Silt

Sa Sand

Gr Gravel

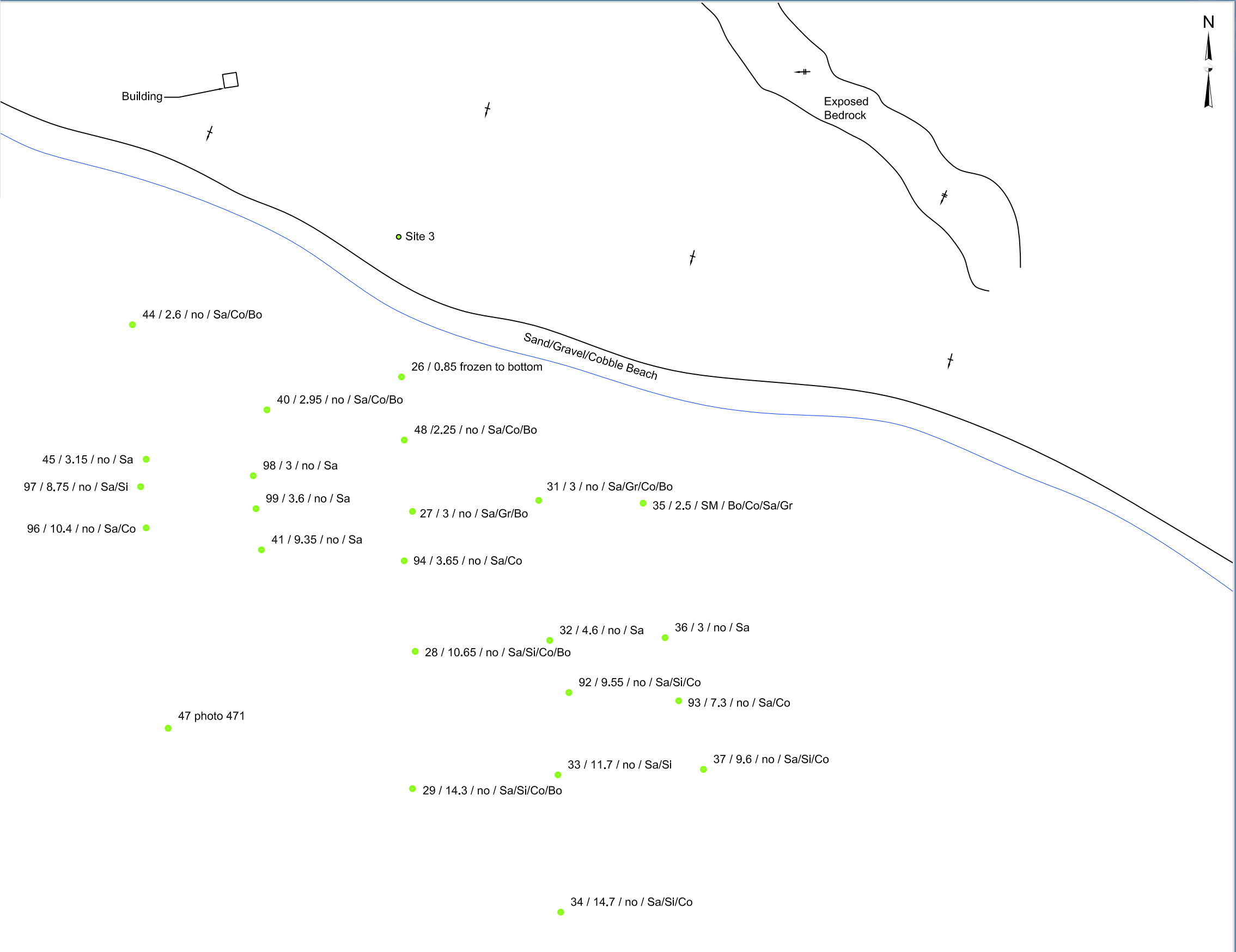
Co Cobble

Bo Boulder

→ Shallow Slope (0-5%)

+ Intermediate Slope (6-30%)

+ Steep Slope (31-70%)

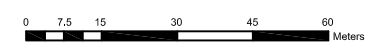
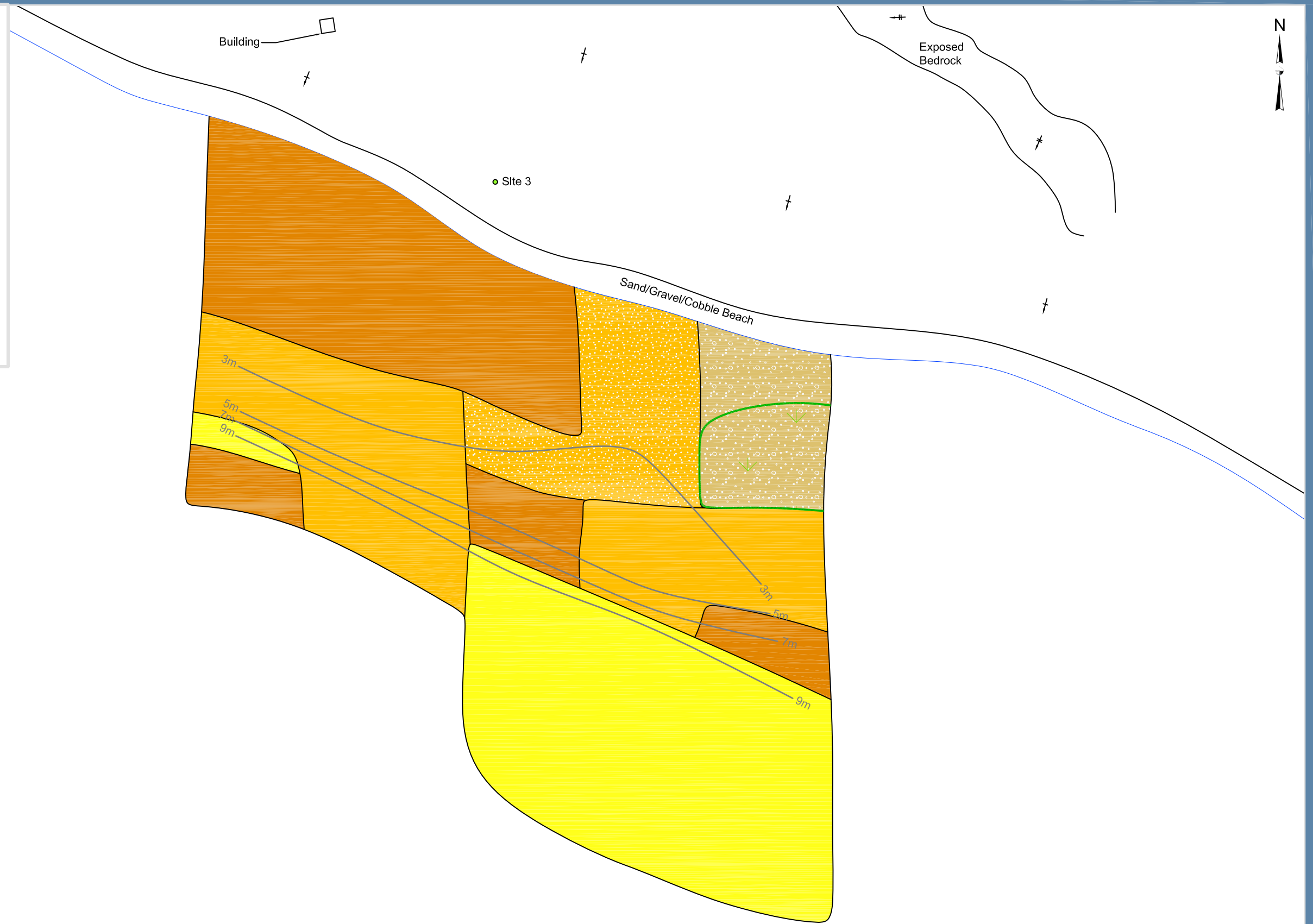


Projection: NAD 1983 UTM Zone 15N
Creator: AJL
Date: 09/05/11
File: K108C321
Data Sources: 0.5m Ortho Imagery

FIGURE 3-6
FIELD DATA SUMMARY
FOR POTENTIAL BARGE DOCK SITE 3

KIGGAVIK PROJECT - EIS

- Legend
- Bathymetry Contour Line (2 metre Interval)
 - Submergent Vegetation
 - Silt (Occasional Boulder)
 - Sand/Silt (Occasional Cobble or Boulder)
 - Sand
 - Sand/Gravel (Occasional Cobble or Boulder)
 - Sand/Cobble/Boulder (Occasional Gravel)
 - Sand (Occasional Cobble or Boulder)
 - Boulder/Cobble
 - Boulder (Occasional Sand)
 - Shallow Slope (0-5%)
 - Intermediate Slope (6-30%)
 - Steep Slope (31-70%)



Projection: NAD 1983 UTM Zone 15N
Creator: AJL
Date: 09/05/11
File: KI08C322
Data Sources: 0.5m Ortho Imagery

FIGURE 3-7
BATHYMETRY AND AQUATIC HABITAT
FOR POTENTIAL BARGE DOCK SITE 3

KIGGAVIK PROJECT - EIS

Legend

● Data Summary
(waypoint/depth in metres/submergent vegetation/substrate)

Si Silt

Sa Sand

Gr Gravel

Co Cobble

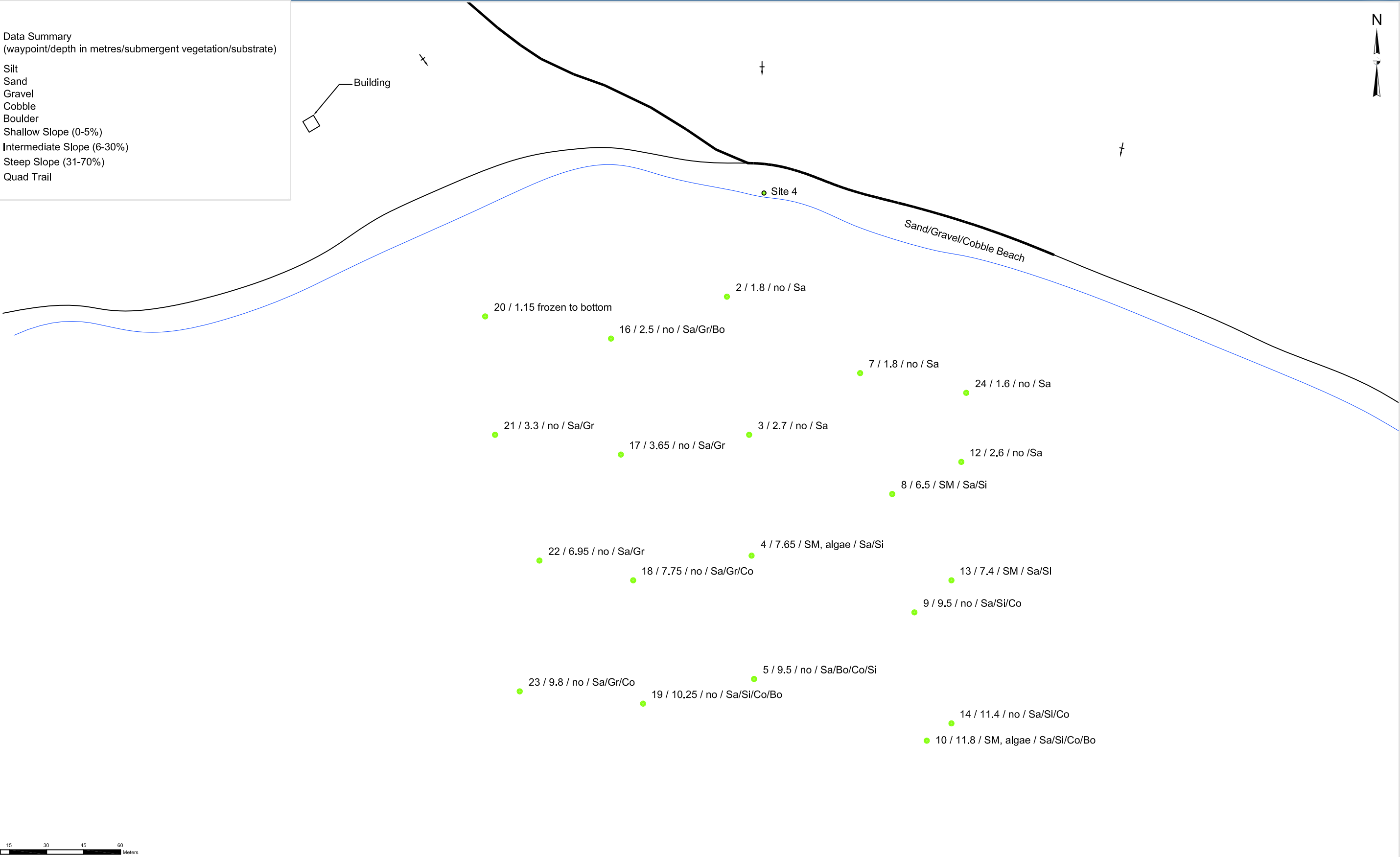
Bo Boulder

→ Shallow Slope (0-5%)

+ Intermediate Slope (6-30%)

+ Steep Slope (31-70%)

— Quad Trail



Projection: NAD 1983 UTM Zone 15N
Creator: AJL
Date: 09/05/11
File: KI08C323
Data Sources: 0.5m Ortho Imagery

FIGURE 3-8
FIELD DATA SUMMARY
FOR POTENTIAL BARGE DOCK SITE 4

KIGGAVIK PROJECT - EIS

- Legend
- Bathymetry Contour Line (2 metre Interval)
 - Submergent Vegetation
 - Silt (Occasional Boulder)
 - Sand/Silt (Occasional Cobble or Boulder)
 - Sand
 - Sand/Gravel (Occasional Cobble or Boulder)
 - Sand/Cobble/Boulder (Occasional Gravel)
 - Sand (Occasional Cobble or Boulder)
 - Boulder/Cobble
 - Boulder (Occasional Sand)
 - Shallow Slope (0-5%)
 - Intermediate Slope (6-30%)
 - Steep Slope (31-70%)



Projection: NAD 1983 UTM Zone 15N
Creator: AJL
Date: 09/05/11
File: K108C324
Data Sources: 0.5m Ortho Imagery

FIGURE 3-9
BATHYMETRY AND AQUATIC HABITAT
FOR POTENTIAL BARGE DOCK SITE 4

KIGGAVIK PROJECT - EIS



4 References

4.1 Potential Water Source Lakes-Mushroom and Siamese

Allaby, M. 1992. Oxford concise dictionary of botany. Oxford University Press. 442 p.

AREVA Resources Canada Inc. (AREVA). 2008. The Kiggavik Project, project proposal Revision 1. 10 sections + 8 appendices.

AREVA. 2009 (draft). AREVA Kiggavik Project, Climate Baseline. 8 sections + 8 attachments.

Canadian Council of Ministers of the Environment (CCME). 1999. Canadian water quality guidelines for the protection of aquatic life: Dissolved oxygen (freshwater). In: Canadian environmental quality guidelines, 1999, Canadian Council of Ministers of the Environment, Winnipeg.

CCME. 2000. Canadian water quality guidelines for the protection of aquatic life: Ammonia. In: Canadian environmental quality guidelines, 2000, Canadian Council of Ministers of the Environment, Winnipeg.

Claramunt, R.M., Fitzsimons, J.D., and J.E. Marsden. 2005. Influences of spawning habitat characteristics and interstitial predators on lake trout egg deposition and mortality. Transactions of the American Fisheries Society 134:1048-1057.

Corbett, B.W. and L. Parsons. 2008. Identification and assessment of lake trout spawning habitat through underwater surveys using volunteer scuba divers. In Proceedings of the second lake trout symposium 2005, Yellowknife, Northwest Territories, 2008, Mills, K.H., M. Dyck, and L.A. Harwood. Canadian Technical Report of Fisheries and Aquatic Sciences 2778.

Dodds, W.K. 2001. Freshwater ecology, concepts and environmental applications. Academic Press. 569 p.

Fitzsimons, J.D. 1994. An evaluation of lake trout spawning habitat characteristics and methods for their detection. Canadian Technical Report of Fisheries and Aquatic Sciences No. 1962. 26 p.

Ford, B.S., Higgins, P.S., Lewis, A.F., Cooper, K.L., Watson, T.A., Gee, C.M., Ennis, G.L. and R.L. Sweeting. 1995. Literature reviews of the life history, habitat requirements and mitigation/compensation strategies for thirteen sport fish species in the Peace, Liard and Columbia

River drainages of British Columbia. Canadian Manuscript Report of Fisheries and Aquatic Sciences No. 2321: xxiv + 342 p.

Golder Associates Ltd. (Golder). 2010. Potential Water Source Lakes (Mushroom and Siamese Lakes). Draft Technical Memorandum prepared for AREVA Resources Canada Inc. (AREVA).

Golder Associates Ltd (Golder). 2010 (in preparation). Technical Memo on water supply and effluent release.

Marcus M.D., Hubert, W.A. and S.H. Anderson. 1984. Habitat suitability index models: lake trout (exclusive of the Great Lakes). U.S. Fish and Wildlife Service. FWS/OBS-82/10.84. 12 p.

McPhail, J.D. 2007. The freshwater fishes of British Columbia. The University of Alberta Press. 620 p.

4.2 Winter Access Road Water Withdrawal

EBA Engineering Consultants Ltd. (EBA). 2010. Kiggavik Project: Winter Road Report.

Fisheries and Oceans Canada (DFO). 2005. DFO Protocol for Winter Water Withdrawal in the Northwest Territories.

Fitzsimons, J.D. 1994. An Evaluation of Lake Trout Spawning Habitat Characteristics and Methods for their Detection. Canadian Technical Report of Fisheries and Aquatic Sciences No. 1962. 26 p.

Ford, B.S., Higgins, P.S., Lewis, A.F., Cooper, K.L., Watson, T.A., Gee, C.M., Ennis, G.L. and R.L. Sweeting. 1995. Literature Reviews of the Life History, Habitat Requirements and Mitigation/Compensation Strategies for Thirteen Sport Fish Species in the Peace, Liard and Columbia River Drainages of British Columbia. Canadian Manuscript Report of Fisheries and Aquatic Sciences No. 2321: xxiv + 342 p.

Golder Associates Ltd. (Golder). 2011. Kiggavik Project: Environmental Impact Statement Aquatic Baseline.

Golder Associates Ltd. (Golder). 2010. Potential Water Source Lakes (Mushroom and Siamese Lakes). Draft Technical Memorandum prepared for AREVA Resources Canada Inc. (AREVA).

Golder Associates Ltd. (Golder). 2011. Winter Access Road Water Withdrawal Draft Technical Memorandum prepared for AREVA Resources Canada Inc. (AREVA).

4.3 Baker Lake Potential Barge Dock Site Bathymetry and Fish Habitat Survey

Golder Associates Ltd. (Golder). 2011. Baker Lake Potential barge Dock Site Bathymetry and Fish Habitat Survey Technical Memorandum prepared for AREVA Resources Canada Inc. (AREVA).