

TEST PIT# TP02-04

Date Excavated: July 25, 2002
 Contractor: Nanisivik Mine
 Excavator: John Deere 892E LC

Location: Proposed Spillway Area
 Elevation: 385 m (approximately)
 Co-ord: 13138N / 17440E (Mine Grid)
 Logged by: Jim Cassie

Project No. 0255-006-03

Reviewed by: J. Cassie

Notes: Elevation and Co-ordinates approximated

Depth (m)	SOIL DESCRIPTION	Sample Number	Sample Type	Recovery	USC	SPT 'N'	Moisture Content %		Pocket Penetrometer		Installation / Backfill	Depth (m)
							Wp -----X----- Wl		kPa			
0	Ground Surface	385.0							100	300		0
0.0	TILL Gravel and Sand, Cobbly, trace Silt, angular boulders/cobbles on surface, damp to wet, red brown, oxidized, gravel is subangular, fragments are Dolostone and Sandstone. S-4 @ 1.1m grades to: SAND and GRAVEL, some Silt, trace Clay, low plastic, wet, some visible ice crystals but hard to estimate amount. 46.0% Gravel 43.0% Sand 11.0% Silt and Clay											0
1	Backhoe refusal at 1.1 m due to permafrost. Water flowing into pit bottom.	383.9	4				x					1
1.1	Bottom of Test Pit											1
2												2
3												3
4												4
5												5

**BGC ENGINEERING INC.**

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZinco Ltd.

PROJECT: Proposed Spillway Alignment Investigation

Final Depth: 1.1 m

TEST PIT# TP02-05

Date Excavated: July 25, 2002
 Contractor: Nanisivik Mine
 Excavator: John Deere 892E LC

Location: Proposed Spillway Area
 Elevation: 386 m (approximately)
 Co-ord: 13177N / 17374E (Mine Grid)
 Logged by: Jim Cassie

Project No. 0255-006-03

Reviewed by: J. Cassie

Notes: Elevation and Co-ordinates approximated

Depth (m)	SOIL DESCRIPTION	Sample Number	Sample Type	Recovery	USC	SPT 'N'	Moisture Content %		Pocket Penetrometer		Installation / Backfill	Depth (m)
							Wp -----X----- Wl		100 kPa	300		
							10 20 30 40		100	300		
									SPT (N)			
									Blows/ft			
									10 20 30 40			
0	Ground Surface	386.0										0
0	TILL	0.0										0
	Gravel and Sand, some Silt and some Cobbles, trace Clay. Boulders throughout, red brown, oxidized, damp to wet, some pockets are low plastic, Dolostone and Sandstone rock fragments are subangular.											
	S-5 @ 1.4 m grades to:											
	SAND, with Gravel, trace Silt and Clay, wet, red brown, oxidized.											
1	14.7% Gravel											1
	77.4% Sand											
	8.0% Silt and Clay											
	Backhoe refusal @ 1.4 m on permafrost.	384.6	5				x					
	No water in test pit bottom.	1.4										
	Bottom of Test Pit											
2												2
3												3
4												4
5												5

Test pit backfilled using excavated material.

**BGC ENGINEERING INC.**

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nansivik Mine, a Division of CanZinco Ltd.

PROJECT: Proposed Spillway Alignment Investigation

Final Depth: 1.4 m

TEST PIT# TP02-06

Project No. 0255-006-03

Reviewed by: J. Cassie

Notes: Elevation and Co-ordinates approximated

Date Excavated: July 25, 2002

Contractor: Nanisivik Mine

Excavator: John Deere 892E LC

Location: Proposed Spillway Area

Elevation: 390 m (approximately)

Co-ord: 13156N / 17302E (Mine Grid)

Logged by: Jim Cassie

Depth (m)	SOIL DESCRIPTION	Sample Number	Sample Type	Recovery	USC	SPT 'N'	Moisture Content %		Pocket Penetrometer		Installation / Backfill	Depth (m)
							Wp	WI	kPa	SPT (N)		
							10 20 30 40		100 300	Blows/ft		
0	Ground Surface	390.0										0
0	TILL Sand and Gravel, Cobbly, some Silt, surficial boulder layer and throughout, wet, gravel is angular to subangular, dolostone and shale fragments, red brown, oxidized.	0.0										0
1	Hoe refusal @ 1.4 m on permafrost, frozen, S-6 @ 1.4 m grades to: Nbn, Sand and Silt, Gravelly, some Cobbles, frozen	388.6										1
	No water in testpit bottom.	1.4					x					
	Bottom of Test Pit											
2												2
3												3
4												4
5												5

**BGC ENGINEERING INC.**

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZinco Ltd.

PROJECT: Proposed Spillway Alignment Investigation

Final Depth: 1.4 m

TEST PIT# TP02-07

Page 1 of 1

Date Excavated: July 25, 2002
 Contractor: Nanisivik Mine
 Excavator: John Deere 892E LC

Location: Proposed Spillway Area
 Elevation: 387 m (approximately)
 Co-ord: 13177N / 17319E (Mine Grid)
 Logged by: Jim Cassie

Project No. 0255-006-03
 Reviewed by: J. Cassie
 Notes: Elevation and Co-ordinates approximated

Depth (m)	SOIL DESCRIPTION	Sample Number	Sample Type	Recovery	USC	SPT 'N'	Moisture Content %		Pocket Penetrometer		Installation / Backfill	Depth (m)
							Wp	WI	kPa	SPT (N)		
0	Ground Surface	387.0										0
0.0	TILL Gravel and Sand, Cobbly, some Silt, Boulders throughout, damp to wet, red brown, oxidized, Gravel is angular to subrounded.											
0.5	FSBR (DOLOSTONE) Till inclusions in joints, angular dolostone fragments, intimate jointing noted - Iron, red staining noted.											
1	Backhoe refusal @ 1.3 m on frozen, intact bedrock. Dolostone, medium grey.											1
1.3	No water in bottom of pit.											
	Bottom of Test Pit											
2												2
3												3
4												4
5												5



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZico Ltd.
 PROJECT: Proposed Spillway Alignment Investigation
 Final Depth: 1.3 m

TEST PIT# TP02-08

Page 1 of 1

Date Excavated: July 25, 2002
Contractor: Nanisivik Mine
Excavator: John Deere 892E LC

Location: Proposed Spillway Area
Elevation: 390 m (approximately)
Co-ord: 13215N / 17256E (Mine Grid)
Logged by: Jim Cassie

Project No. 0255-006-03
Reviewed by: J. Cassie
Notes: Elevation and Co-ordinates approximated

Depth (m)	SOIL DESCRIPTION	Sample Number	Sample Type	Recovery	USC	SPT 'N'	Moisture Content %		Pocket Penetrometer		Installation / Backfill		Depth (m)
							Wp	WI	kPa	SPT (N)			
0	Ground Surface	390.0											0
0	TILL Sand and Gravel, some Cobbles and trace Silt, surficial layer of boulders and cobbles (angular), boulders noted throughout, wet, red brown, oxidized, Gravel is angular to subrounded Dolostone. Hoe refusal @ 1.1 m on frozen bedrock, appears massive and intact.	0.0											
1	No sample and no water upon excavation.	388.9											1
	Bottom of Test Pit	1.1											
2													2
3													3
4													4
5													5



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZinco Ltd.
PROJECT: Proposed Spillway Alignment Investigation
Final Depth: 1.1 m

DRILL HOLE # BGC03-04

Page 1 of 1

Date Drilled: May 7, 2003

Contractor & Rig: Mine's Diamond Drill

Drill Method: BQ Chilled Brine Coring

Hammer Type: N/A

Location: Proposed Spillway Location

Elevation: 387.0 m

Co-ord: 13175.2N, 17350.3E (Mine Grid)

Logged by: G. Ferris

Project No. 0255-008-03

Reviewed by: J. Cassie

Notes: Thermocouple Installed

Depth (m)	SOIL DESCRIPTION	Core Run	Recovery	Moisture Content % Wp -----X----- Wl 10 20 30 40	Installation / Backfill		Depth (m)
0	Ground Surface 387.0						0
	SHALE (Fill) 0.0						
	Angular, sand and gravel						
	TILL						
1	Frozen, bonded, 15% visible ice as lenses (1-2 mm thick), cobbles and sand, some gravel, some silt, red.	1	x			Metal surface protector	0
						T/C node @ 0.44 m	
						25 mm solid PVC pipe.	1
						Stick up of 0.25 m	
2		2					2
	BEDROCK 385.2						
	1.8						
	Frozen, slightly weathered, strong, vuggy, frost shattered DOLOSTONE to 6.3 m depth.	3				T/C node @ 2.44 m	
	Red sand and silt on joints.						
	Run 3 - RQD = 50%, J/R = 8	4				Backfilled with crushed reject.	3
	@ 2.6 m:						
	Sample GWF 22: UCS = 172.6 MPa						
4		5					4
	@ 3.05 m: 0.05 rubble zone.						
	Run 4 - RQD = 15%						
	@ 3.8 m:						
	Sample GWF 23: UCS = 67.5 MPa					T/C node @ 4.44 m	
5		6					5
	Run 5 - RQD = 16%						
	Run 6 - RQD = 50%						
6		7					6
	Run 7 - RQD = 72%						
7		8					7
	Run 8 - RQD = 86%, J/R = 7					T/C node @ 6.94 m	
8		9					8
	Run 9 - RQD = 100%, J/R = 3						
9						T/C node @ 8.68 m	9
	378.1						
	8.9						
	End of Borehole						
10							10



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZinco Ltd.

PROJECT: Geotechnical Investigation

Final Depth: 8.9 m

DRILL HOLE # BGC03-05

Page 1 of 1

Date Drilled: May 8, 2003

Contractor & Rig: Mine's Diamond Drill

Drill Method: BQ Chilled Brine Coring

Hammer Type: N/A

Location: Proposed Spillway Location

Elevation: 383.4 m

Co-ord: 13132.5N, 17497.6E (Mine Grid)

Logged by: G. Ferris

Project No. 0255-008-03

Reviewed by: J. Cassie

Notes: Thermocouple Installed

Depth (m)	SOIL DESCRIPTION	Core Run	Recovery	Moisture Content % Wp -----X----- Wl 10 20 30 40	Installation / Backfill		Depth (m)
0	Ground Surface 383.4						0
0.0	TILL						
	Frozen, visible ice as lenses surrounding large clasts, sand, some silt, red.	1	x	x		Stick-up of 0.32 m	
1	@ 0.35 m: Grades to cobbles, and sand, some gravel trace silt.	2				T/C node @ 0.83 m Metal surface protector.	1
	@ 1.52 m: Gravel, and sand, some cobbles, trace silt.		x			25 mm solid PVC pipe	
2	@ 1.83 m: 0.15 m thick boulder encountered.	3	x				2
	@ 1.98 m: 15 mm thick ice lenses.						
380.7							
2.7	BEDROCK						
3	Frozen, 5% visible ice in joints, bonded, highly fractured with red sand and silt infill in joints, red sand and silt matrix makes up 40% of recovered core. Bedrock consists of strong, vuggy, slightly weathered, DOLOSTONE.	4				T/C node @ 2.83 m Backfilled with crushed reject.	3
4							4
5	@ 3.96 m: No joint infill, slightly weathered, bonded, no visible ice.	5				T/C node @ 4.83 m	5
		6	x				
6	@ 5.8 m: Fresh. Run 8 - RQD = 38%, J/R = 4	7					6
		8					
7	Run 9 - RQD = 77%, J/R = 11	9				T/C node @ 7.33 m	7
	@ 7.5 m: Sample GWF 32: UCS=186.2 MPa						
8	Run 10 - RQD = 92%, J/R = 9	10					8
374.4						T/C node @ 8.83 m	9
9.0	End of Borehole						9
10							10



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZinco Ltd.

PROJECT: Geotechnical Investigation

Final Depth: 9.0 m

DRILL HOLE # BGC03-06

Page 1 of 1

Date Drilled: May 8, 2003

Contractor & Rig: Mine's Diamond Drill

Drill Method: BQ Chilled Brine Coring

Hammer Type: N/A

Location: Proposed Spillway Location

Elevation: 372.9 m

Co-ord: 13199.1N, 17624.9E (Mine Grid)

Logged by: G. Ferris

Project No. 0255-008-03

Reviewed by: J. Cassie

Notes: Thermocouple Installed

Depth (m)	SOIL DESCRIPTION	Core Run	Recovery	Moisture Content %		Installation / Backfill		Depth (m)
				Wp	Wl			
0	Ground Surface 372.9							0
0.0	TILL							
0.46	Frozen, rootlets to 0.46 m, bonded, no visible ice, gravel, cobbly, and sand, trace silt, red.	1	x				Stick-up of 0.53 m Metal surface protector.	
1		2					T/C node @ 0.89 m	1
		3					25 mm solid PVC pipe.	
2	@ 1.8 m: Cobbles and gravel, some sand, trace silt.	4						2
370.3								
2.6	ICE							
3	Estimated 2% soil.	5					T/C node @ 2.89 m	3
4		6						
5	@ 5.2 m: 0.11 m thick layer of red sand and silt.	7					Backfilled with crushed reject.	4
367.1		8					T/C node @ 4.89 m	5
5.8	BEDROCK	9						
6	Fresh, strong, vuggy, DOLOSTONE, minor veining.	10						
7	Run 6 - RQD = 19%, J/R = 0 Run 7 - RQD = 96% Run 8 - RQD = 92%, J/R = 3 Run 9 - RQD = 59%, J/R = 6 Run 10 - RQD = 70%, J/R = 6						T/C node @ 7.39 m	7
8								
364.0								
8.9	End of Borehole						T/C node @ 8.89 m	9
10								10



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZinco Ltd.

PROJECT: Geotechnical Investigation

Final Depth: 8.8 m

DRILL HOLE # BGC03-16

Page 1 of 1

Date Drilled: May 18, 2003

Contractor & Rig: Mine's Diamond Drill

Drill Method: BQ Chilled Brine Coring

Hammer Type: N/A

Location: Proposed Spillway Location

Elevation: 372.4 m

Co-ord: 13220.3N, 17624.4E (Mine Grid)

Logged by: G. Ferris

Project No. 0255-008-03

Reviewed by: J. Cassie

Notes: Thermocouple Installed

Depth (m)	SOIL DESCRIPTION	Core Run	Recovery	Moisture Content % Wp -----X----- Wl 10 20 30 40	Installation / Backfill		Depth (m)
0	Ground Surface 0.0						0
0	TILL 0.0						0
	Cobbles, gravelly, some sand, red, frozen.	1				Metal surface protector.	
1		2				T/C node @ 0.74 m	1
	@ 1.4 m: Creamy red surface water return.	3				Stick-up 0.6 m	
2		4				T/C node @ 2.26 m	2
3		5				25 mm solid PVC pipe	3
	BEDROCK -3.4 3.4	6					
4	Light grey, medium strong, slightly weathered, vuggy, DOLOSTONE.	7				T/C node @ 3.78 m	4
	@ 3.5 m: RQD=0, J/R=5	8					
	@ 3.65 m: Fresh	9				Backfilled with slough.	
5	@ 4.0 - 4.3 m: Frost shattered, rubble.	10				T/C node @ 5.31 m	5
	@ 4.6 m: Run 12 - RQD= 67%	11					
	@ 5.0 m: 125 mm thick rubble zone.	12					
	@ 5.6 m: Run 13 - RQD=45%	13					
6	@ 6.1 m: Run 14 - RQD=0						6
	@ 6.4 m: Rubble.						
7	-7.0 7.0					T/C node @ 7.0 m	7
	End of Borehole						
8							8
9							9
10							10



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZinco Ltd.

PROJECT: Geotechnical Investigation

Final Depth: 7.0 m

DRILL HOLE # BGC03-17

Page 1 of 1

Date Drilled: May 19, 2003

Contractor & Rig: Mine's Diamond Drill

Drill Method: BQ Chilled Brine Coring

Hammer Type: N/A

Location: Proposed Spillway Location

Elevation: 373.0 m

Co-ord: 13176.0N, 17630.9E (Mine Grid)

Logged by: G. Ferris

Project No. 0255-008-03

Reviewed by: J. Cassie

Notes: Thermocouple Installed

Depth (m)	SOIL DESCRIPTION	Core Run	Recovery	Moisture Content % Wp -----X----- Wl 10 20 30 40	Installation / Backfill		Depth (m)
0	Ground Surface 373.0						0
0.0	TILL						
1	Cobble, gravelly, some sand, some silt, red, frozen, fines washed out of matrix, creamy red water return.	1				T/C node @ 0.32 m	
	@ 0.9 m: Boulders, cobbly.	2				Metal surface protector.	
	@ 1.5 m: Gravel, sandy, some cobbles, some silt, bonded, no visible ice.	3				Stick-up 0.7 m	
2		4				T/C node @ 1.84 m	
3		5				25 mm solid PVC pipe.	
3.5		6				T/C node @ 3.36 m	
4	ICE					Backfilled with slough.	
5	@ 4.85 - 5.0 m: 60% soil	7				T/C node @ 4.88 m	
6		8					
7	@ 7.1 m: 10 mm dolostone boulder.	9				T/C node @ 6.42 m	
7.0	TILL						
7.3	SAND, and gravel, bonded, red, no visible ice.						
7.6	BEDROCK						
8	Yellowish tinge light grey, medium strong, slightly weathered, frost shattered, DOLOSTONE.						
9	5% visible ice as lenses in fractures.						
	End of Borehole						
10							10



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

CLIENT: Nanisivik Mine, a Division of CanZinco Ltd.

PROJECT: Geotechnical Investigation

Final Depth: 7.6 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-01 Elevation: 372.63 m
 Project: Spillway Alignment Investigation Co-ords: 13189.4N / 17624.7E (Mine Grid) Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point:
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill/ BQ Coring Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					ROD (%)	Fract. per 0.3m	Angle wrt Core Axis		Strength Index	Weathering Index	Point Load Index	
372.6	0.0							Top of Surface				
	1.0							<u>TILL</u> GRAVEL, with Sand and Cobbles, trace Silt. 0-.75 m - Mostly quartz sandstone with bits of red sandstone and hematite. .75 - 2.70 m - Predominantly pebbles of sandstone, quartz sandstone, dolostone and shale. @ 2.70 m - Ice observed				
369.9	2.0							@ 2.75 m grades to: SAND and SILT, Gravelly, trace Cobbles, red brown, oxidized, visible ice. 2.75 - 3.66 m - Fragments of quartz sandstone and dolostone. 3.66 - 5.8 m - Predominantly red sandstone (Sand), shale and fragments of quartz sandstone. @ 4.60 m - Ice observed				
366.8	3.0											
366.5	4.0							<u>FSBR (DOLOSTONE)</u> 15 cm of intact dolostone and then small fractured bits of dolostone in red clay, sand and the grey dolomud. <u>INTACT BR (DOLOSTONE)</u> Dark grey to black dolostone with tiny white clasts of dolorudite. @ 6.70 m - Ice observed				
	5.0											
	6.0											
	7.0											
	8.0											
	9.0											
362.6	10.0											



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

Project No.: 0255-006-03

Borehole No.: BH-01

Final Depth: 10 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-02 Elevation: 379.36 m
 Project: Spillway Alignment Investigation Co-ords: 13157.9N/ 17532.2E (Mine Grid) Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point: _____
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill, BQ Core Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					RQD (%)	Fract. per 0.3m	Angle wrt Core Axis		Strength Index	Weathering Index	Point Load Index	
379.6	0.0							Top of Surface				
	1.0							<u>TILL</u> GRAVEL, Sandy, with Cobbles, trace Silt. Composition of material consists of : quartz sandstone, red sandstone, hematite, dolostone, and minor shale.				
376.9	3.0							<u>FSBR (DOLOSTONE)</u> Light coloured recrystallized dolostone with moderate dark stringers. Moderate solution pitting, vugs lined with small dolostone crystals. 3.35-3.8 m - red sandstone and clay with fragments of quartz sandstone and hematite 4.72-4.88 m - core is fractured and there is some red sandstone/mudstone				
374.8	5.0							<u>INTACT BR (DOLOSTONE)</u> Grey dolostone varying between finely laminated and slightly mottled. Moderate solution pitting.	R4	SW		
	6.0											
	7.0											
	8.0											
	9.0											
369.6	10.0											



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

Project No.: 0255-006-03

Borehole No.: BH-02

Final Depth: 10 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-03 Elevation: 384.05 m
 Project: Spillway Alignment Investigation Co-ords: 13127.1N / 17477.9E (Mine Grid) Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point:
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill/ BQ Core Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					Fract. per 0.3m	Angle wrt Core Axis	DEPTH, TYPE, ORIENTATION, ROUGHNESS, PLANARITY, INFILLING MATERIAL AND THICKNESS, SURFACE STAINING, AND TIGHTNESS		Strength Index	Weathering Index	Point Load Index	
384.1	0.0							Top of Surface				
	1.0							<u>TILL</u> GRAVEL, Sandy, with Cobbles, trace Silt. Composition of materials consists of: quartz sandstone, red sandstone, hematite, dolostone and minor shale - 0-.61m - predominantly quartz sandstone -.61-2.74m - crumbled red sandstone - 2.74-5.5m - chunks of hematite, quartz sandstone and dolostone with red sand/clay and grey dolomud				
378.6	6.0							<u>FSBR (DOLOSTONE)</u> Brecciated clasts (up to 1.5") of quartz and dolostone in red clay and grey dolomud 6.86-7.32m - 6" of dolostone, 7" of red hematite, then dolostone with gravel to 7.32m				
376.1	8.0							<u>INTACT BR (DOLOSTONE)</u> Light grey recrystallized, mottled dolostone with dark stringers. 7.32-10.0m - perfect recovery Fractures with red staining at 7.62m	SW			
374.1	10.0											



BGC ENGINEERING INC.
 AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

Project No.: 0255-006-03
 Borehole No.: BH-03
 Final Depth: 10 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-04 Elevation: 386.73 m
 Project: Spillway Alignment Investigation Co-ords: 13166.7N / 17398.0E (Mine Grid) Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point: _____
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill/ BQ Core Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					RQD (%)	Fract. per 0.3m	Angle wrt Core Axis		Strength Index	Weathering Index	Point Load Index	
386.7	0.0							Top of Surface				
385.5	1.0							<u>TILL</u> SAND and GRAVEL, Cobbley, trace Silt, brown with red oxidation staining. Composition of materials consist of: Red sandstone, dolostone and quartz sandstone.				
384.3	2.0							<u>FSBR (DOLOSTONE)</u> Fractured dolostone with iron staining and minor dolomud on fracture surfaces.				
	3.0							<u>INTACT BR (DOLOSTONE)</u> Light grey dolostone and partially recrystallized dolostone. Minor solution pitting.				
	4.0											
	5.0											
	6.0											
	7.0											
	8.0											
	9.0											
376.7	10.0											



BGC ENGINEERING INC.
 AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

Project No.: 0255-006-03

Borehole No.: BH-04

Final Depth: 10 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-05 Elevation: 385.91 m
 Project: Spillway Alignment Investigation Co-ords: 13206.7N / 17332.6E (Mine Grid) Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point:
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill/ BQ Core Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					RQD (%)	Fract. per 0.3m	Angle wrt Core Axis		Strength Index	Weathering Index	Point Load Index	
385.9	0.0					2	6	30				
	1.0											
	2.0											
383.2	3.0											
	4.0											
381.0	5.0											
	6.0											
	7.0											
	8.0											
	9.0											
375.9	10.0											



BGC ENGINEERING INC.
 AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

Project No.: 0255-006-03
 Borehole No.: BH-05
 Final Depth: 10 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-06 Elevation: 388.71 m
 Project: Spillway Alignment Investigation Co-ords: 13152.1N / 17327.2E (Mine Grid) Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point: _____
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill / BQ Core Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					RQD (%)	Fract. per 0.3m	Angle wrt Core Axis		Strength Index	Weathering Index	Point Load Index	
388.7	0.0							Top of Surface				
	1.0							<u>TILL</u> SAND and GRAVEL, Silty, with Cobbles, red brown, appeared very wet possibly indicating excess ice content. Composition of materials consists of: Dolostone, quartz sandstone and hematite in red sandstone and sand.				
386.9	2.0							<u>FSBR (DOLOSTONE)</u> Red-brown sand on joint surfaces. No major till inclusions observed.				
385.4	3.0							<u>INTACT BR (DOLOSTONE)</u> Light grey, recrystallized and partially recrystallized dolostone only moderately mottled, minor dark stringers.	R4	SW		
	4.0											
	5.0											
	6.0											
	7.0											
	8.0											
	9.0											
378.7	10.0											



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

Project No.: 0255-006-03

Borehole No.: BH-06

Final Depth: 10 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-07 Elevation: 392.01 m
 Project: Spillway Alignment Investigation Co-ords: 13207.9N / 17277.9E (Mine Grid) Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point:
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill / BQ Coring Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					RQD (%)	Fract. per 0.3m	Angle wrt Core Axis		Strength Index	Weathering Index	Point Load Index	
392.0	0.0							Top of Surface				
391.4	0.6							<u>TILL</u> Fractured dolostone with red oxidation staining and clay.				
	1.0							<u>FSBR (DOLOSTONE)</u> Coarse sand on fracture surfaces.				
	2.0											
	3.0											
388.3	3.7							<u>INTACT BR (DOLOSTONE)</u> Light grey, recrystallized and partially recrystallized dolostone with mottled dark stringers and zones of laminations which are at 80 degrees TCA.				
	4.0											
	5.0											
	6.0											
	7.0											
	8.0											
	9.0											
382.0	10.0											



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

Project No.: 0255-006-03

Borehole No.: BH-07

Final Depth: 10 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-08 Elevation: 386.27 m
 Project: Spillway Alignment Investigation Co-ords: 13279.2N / 17283.7E (Mine Grid) Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point:
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill / BQ Coring Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					RQD (%)	Fract. per 0.3m	Angle wrt Core Axis		Strength Index	Weathering Index	Point Load Index	
386.3	0.0				2	6	30	Top of Surface				
385.7	1.0							<u>TILL</u> Shale gravel in first 30 cm, Dolostone fragments to 60 cm.				
384.4	2.0							<u>FSBR (DOLOSTONE)</u> Red sand on fracture surfaces.				
	3.0							<u>INTACT BR (DOLOSTONE)</u> Light grey, recrystallized dolostone with grey stringers and localized brecciation.	SW			
	4.0											
	5.0											
	6.0											
	7.0											
	8.0											
	9.0											
376.3	10.0											



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5165

Project No.: 0255-006-03

Borehole No.: BH-08

Final Depth: 10 m

ROCK CORE LOG

Sheet: 1 of 1

Project Number: 0255-006-03 Boring Number: BH-09 Elevation: N/A
 Project: Spillway Alignment Investigation Co-ords: N/A Datum: N/A
 Date: May, 2002/ July, 2002 Drilling Contractor: Nanisivik Mine Reference Point:
 Logged By: Neil B. (NML)/ J. Cassie (BGC) Drilling Method Diamond Drill / BQ Core Inclination: Vertical
 Water Level: N/A and Equipment: Chilled Brine Start/Finish: N/A

ELEVATION (m)	DEPTH (m)	CORE RUN	T.C.R. (%)	S.C.R. (%)	DISCONTINUITIES			LITHOLOGY	STRENGTH DATA			COMMENTS
					ROD (%)	Fract. per 0.3m	Angle wrt Core Axis		Strength Index	Weathering Index	Point Load Index	
	0.0					2	6	30				
	1.0											
	2.0											
	3.0											
	4.0											
	5.0											
	6.0											
	7.0											
	8.0											
	9.0											
	10.0											



BGC ENGINEERING INC.

AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB

Phone (403) 250-5185

Project No.: 0255-006-03

Borehole No.: BH-09

Final Depth: 10 m