

FIGURES

CLIENT: NANISIVIK MINE, A DIVISION
OF CANZINCO LTD.

LEGEND

ROAD

GROUND CONTOUR
(50 m INTERVAL)

CREEKS, DRAINAGE,
STREAMS, SHORELINE

EXTENT OF
UNDERGROUND
WORKINGS

AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL
REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR
CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION
OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR
REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.

REV.	DATE	REVISION NOTES	DRAWN	CHECKED	APPROVED

SCALE AS SHOWN

DATE: JAN 2004

DRAWN: CJT

DESIGNED: GKC

CHECKED: JWC

APPROVED: JWC



PROJECT
ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS

TITLE
SITE LOCATION PLAN

PROJECT No. 0255-008-06

DWG No. 1

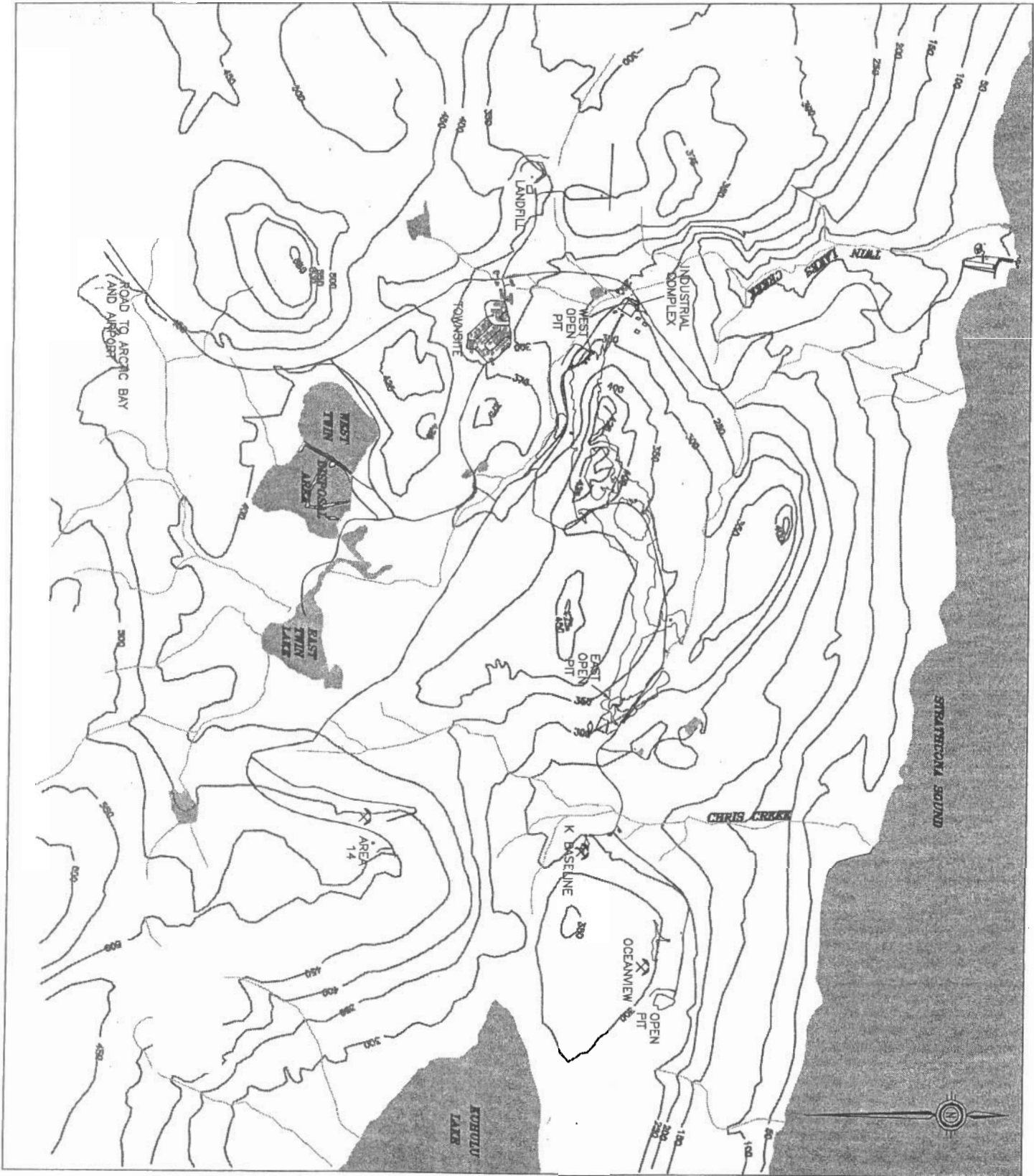
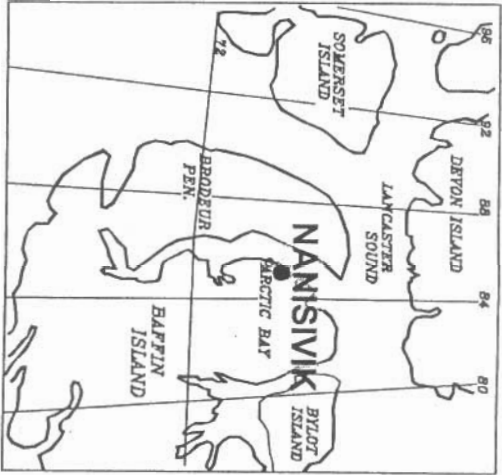
REV. 0

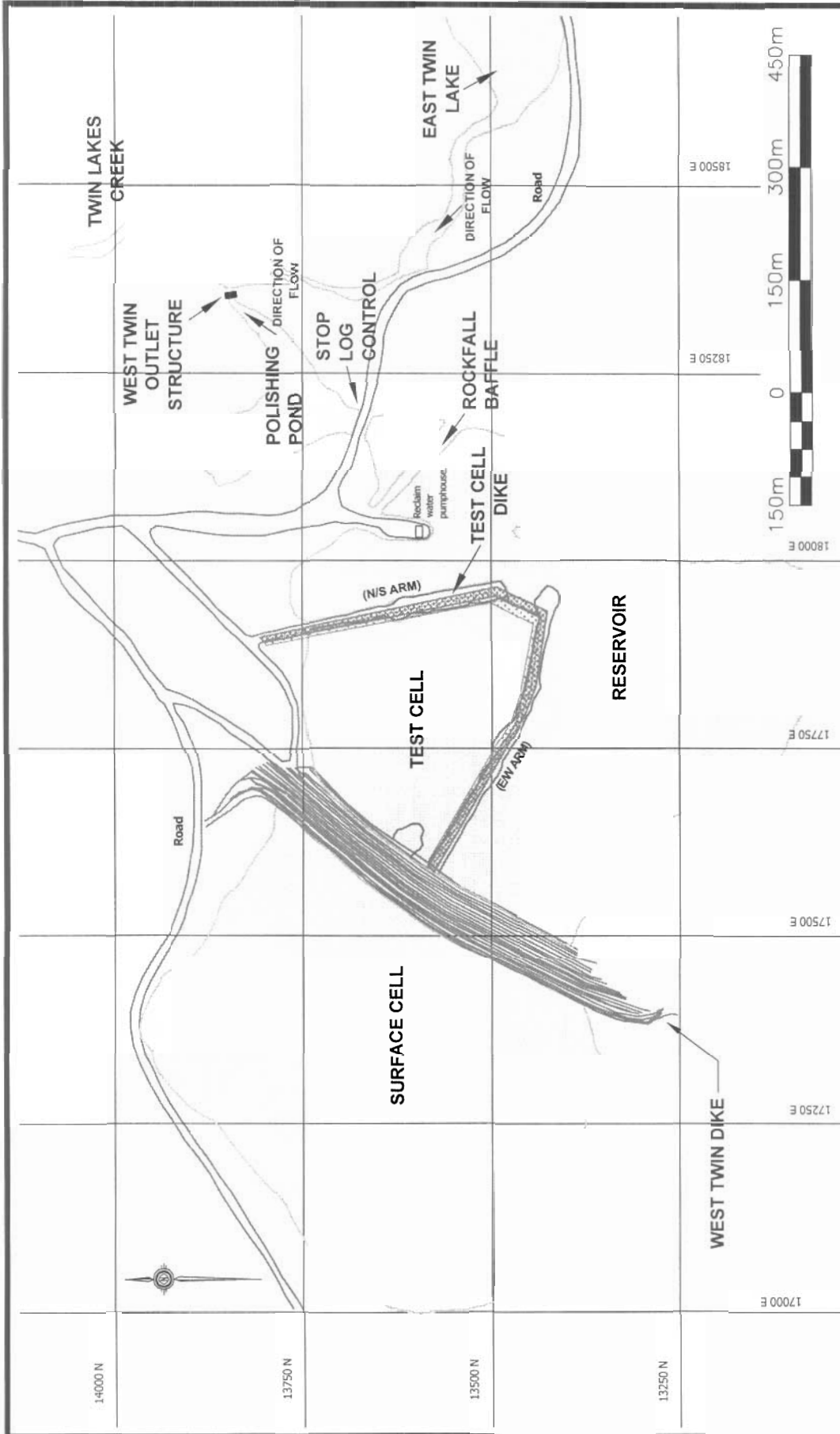
BGC

BGC ENGINEERING INC.

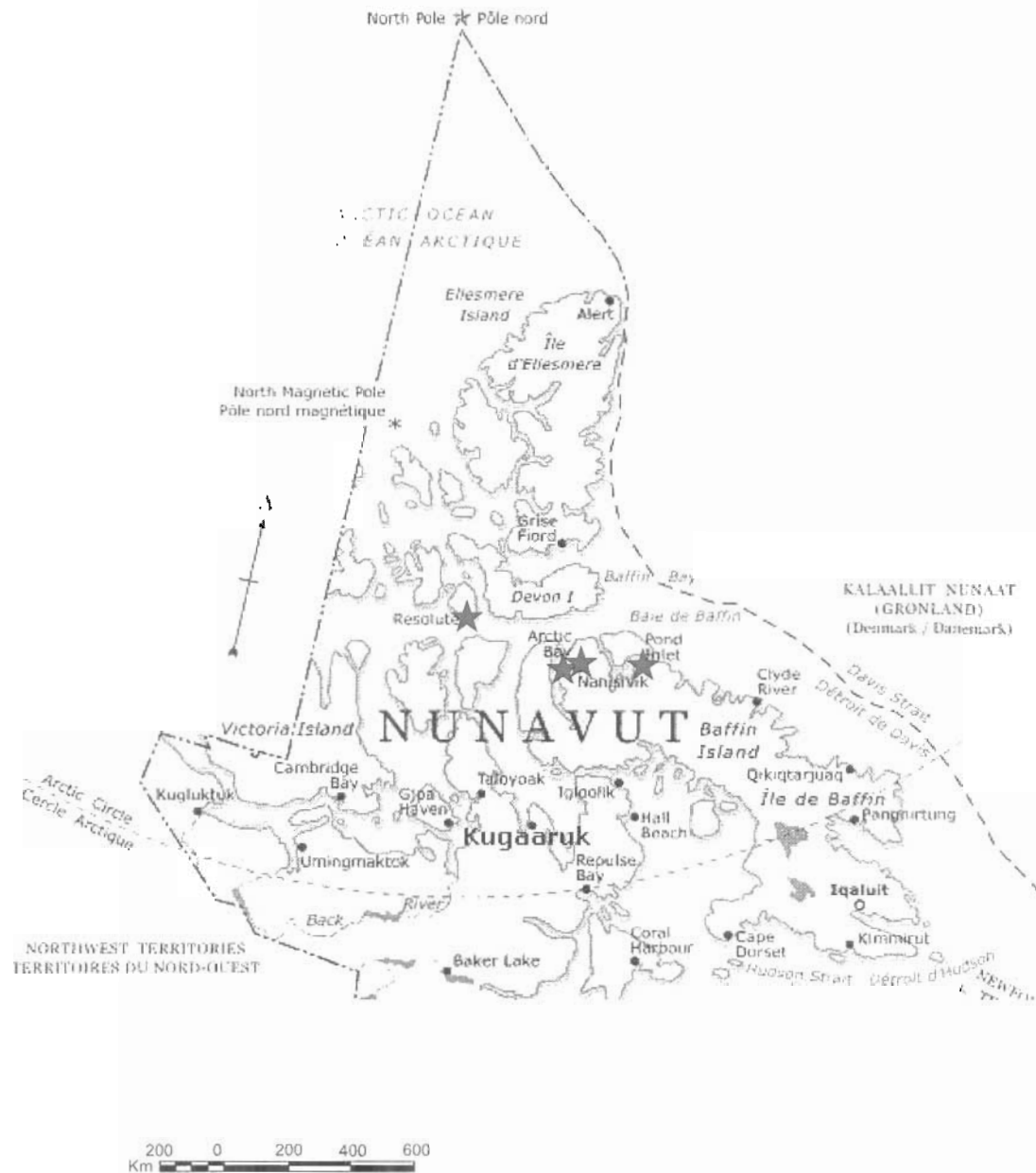
AN APPLIED EARTH SCIENCES COMPANY

Calgary, AB Phone: (403) 250 5185





SCALE: AS SHOWN	DATE: JAN 2004	DRAWN: C.J.T.	DESIGNED: G.K.C.	CHECKED: J.W.C.	APPROVED: J.W.C.
BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, AB Phone: (403) 250 5185 CLIENT: NANISIVIK MINE, A DIVISION OF CANZINCO LTD.					
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.					
PROJECT: ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS			TITLE: WEST TWIN DISPOSAL AREA SITE PLAN		
PROJECT No. 0255-008-06			DWG No. 2		REV. 0



★ Location of noted AES Weather Stations

Source: <http://atlas.gc.ca/site/engiling/maps/reference/provincesterritories/nunavut> (2004)

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SCALE:	As Shown	DESIGNED:	MJM
DATE:	JAN 2004	CHECKED:	MJM
DRAWN:	SLF	APPROVED:	JWC

CLIENT: NANISIVIK MINE, A DIVISION OF CANZINCO LTD.

PROJECT: ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS

TITLE: LOCATIONS OF WEATHER STATIONS PROXIMAL TO NANISIVIK

BGC

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AN APPLIED EARTH SCIENCES COMPANY

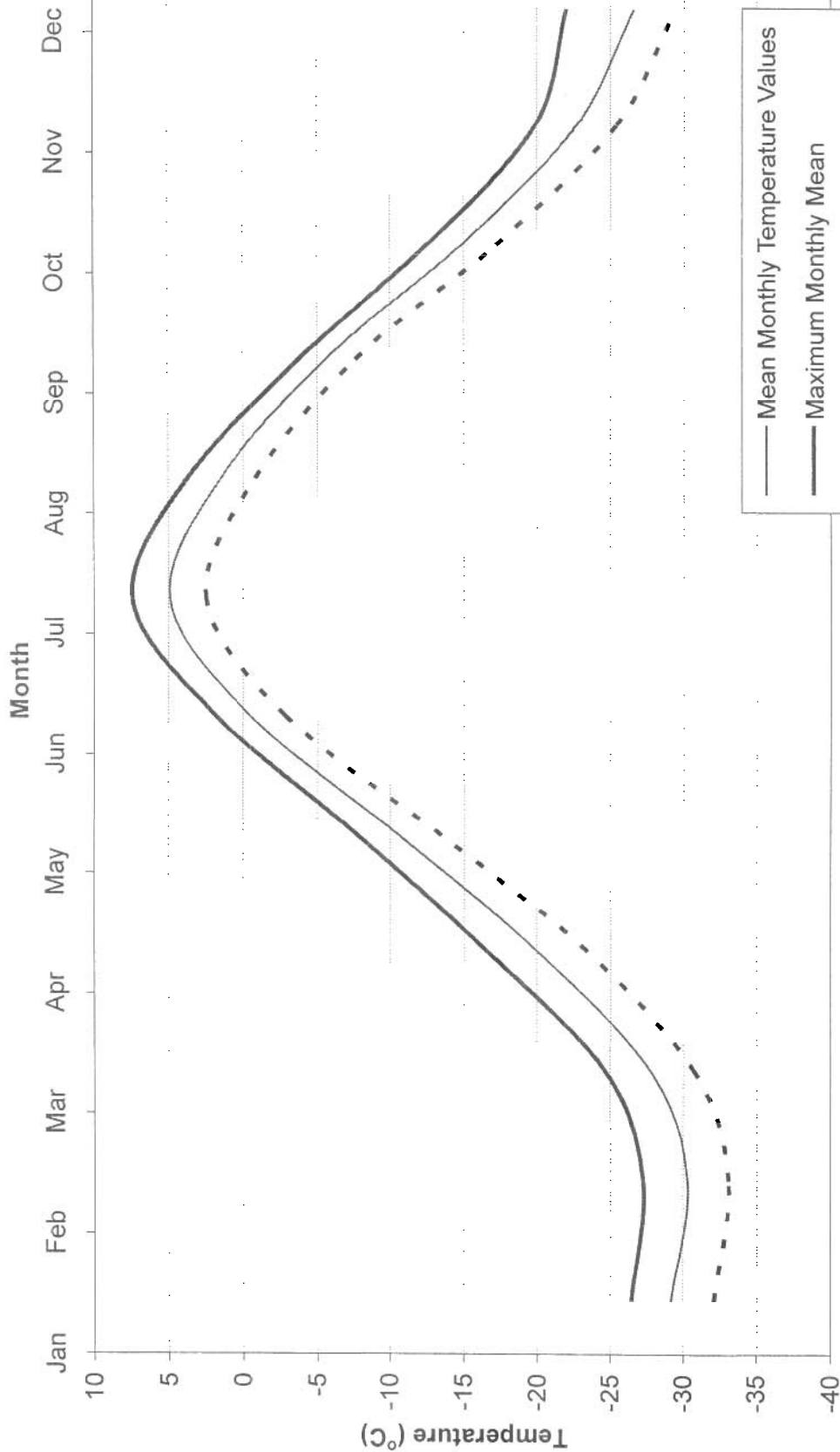
Calgary, Alberta.

Phone: (403) 250-5185

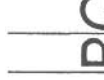
PROJECT No. 0255-008-06

DWG. No. 3

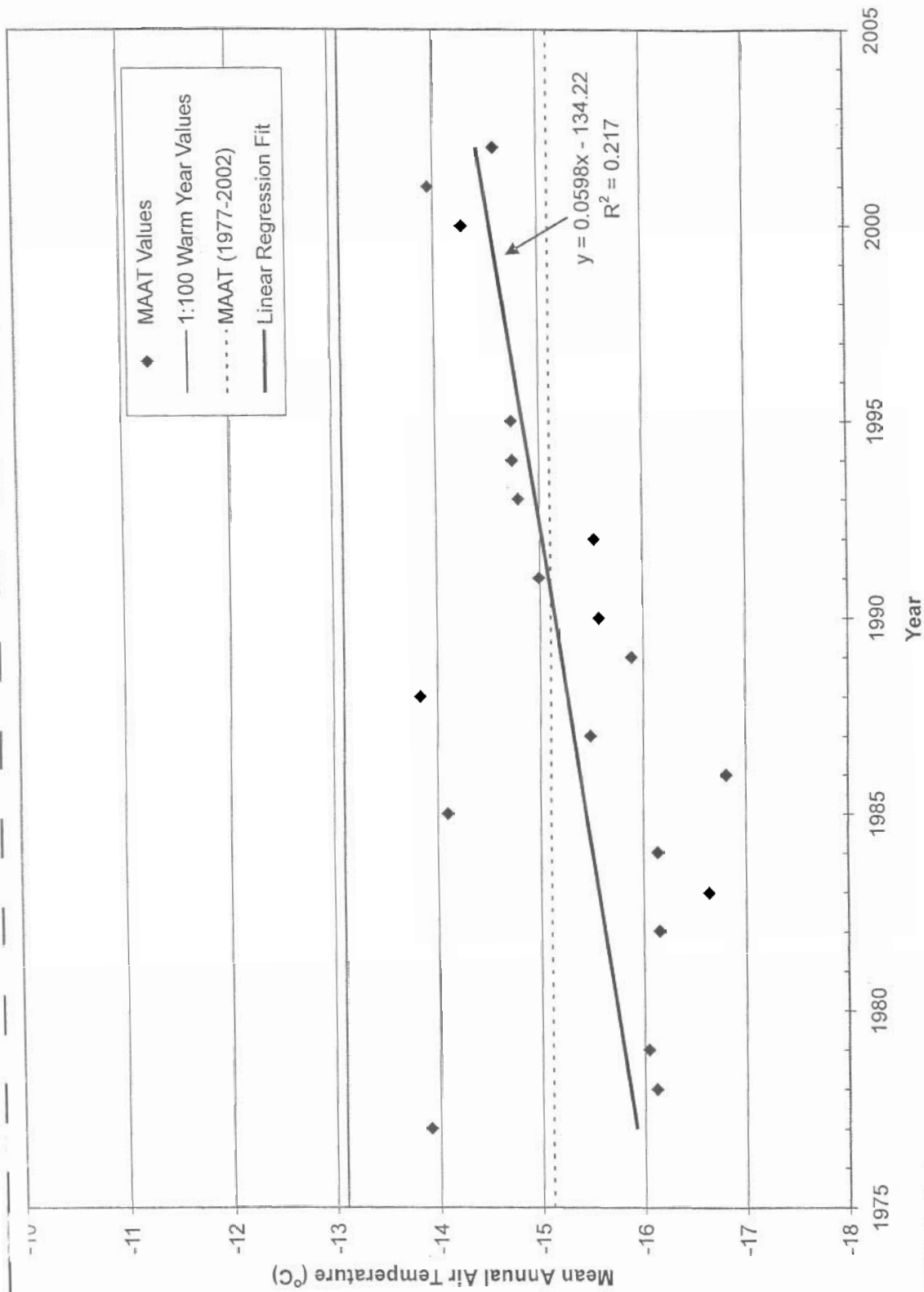
REV. 0



Note: Period of Record is 1977-2000

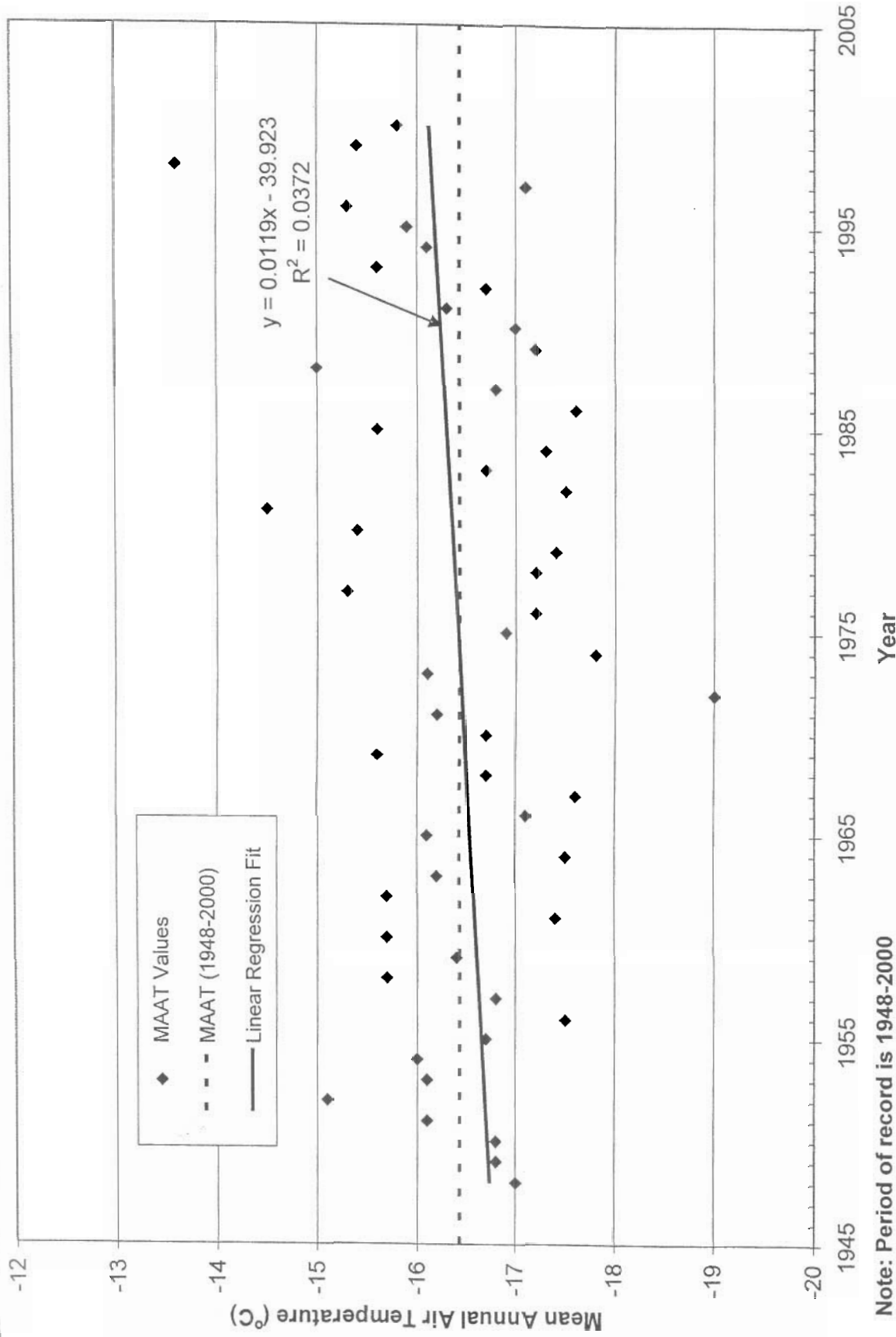
DATE: JAN 2004		DRAWN	SLF
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.			
		BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185	
CLIENT		NANISIVIK MINE, A DIVISION OF CANZINCO LTD.	
PROJECT		ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
TITLE		NANISIVIK MINE MONTHLY TEMPERATURES	
PROJECT No.		0255-008-06	
DWG. No.		4	
REV.		0	

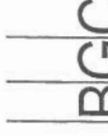
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.



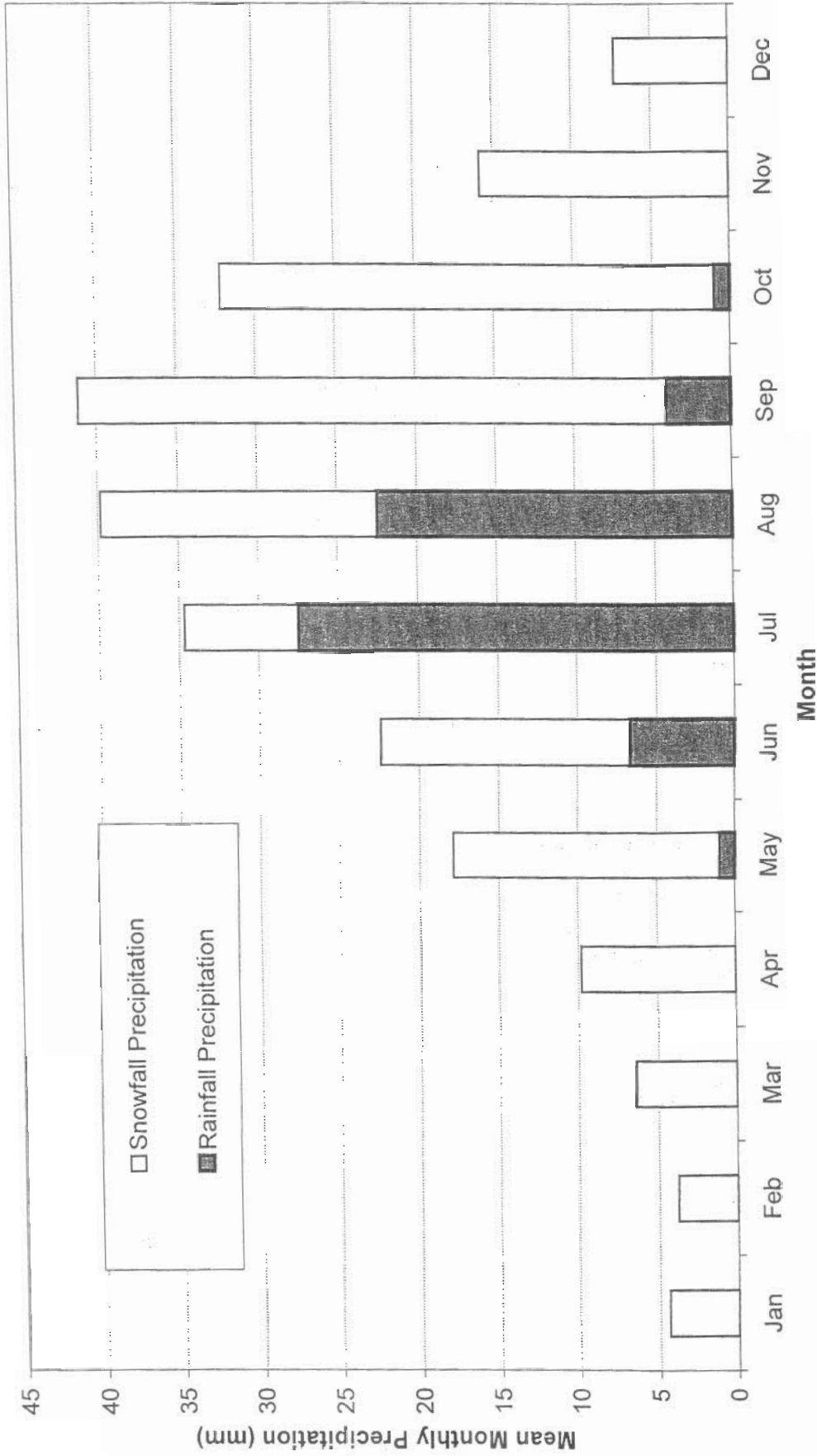
Note: 1) Period of record is 1977-2002
 2) Six years of data missing from period of record

DATE: JAN 2004		DRAWN	SLF
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.			
		BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185	
CLIENT		NANISIVIK MINE, A DIVISION OF CANZINCO LTD.	
PROJECT		ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
TITLE		NANISIVIK MEAN ANNUAL AIR TEMPERATURES VS. TIME	
PROJECT No.		0255-008-06	
DWG. No.		5	
REV.		0	



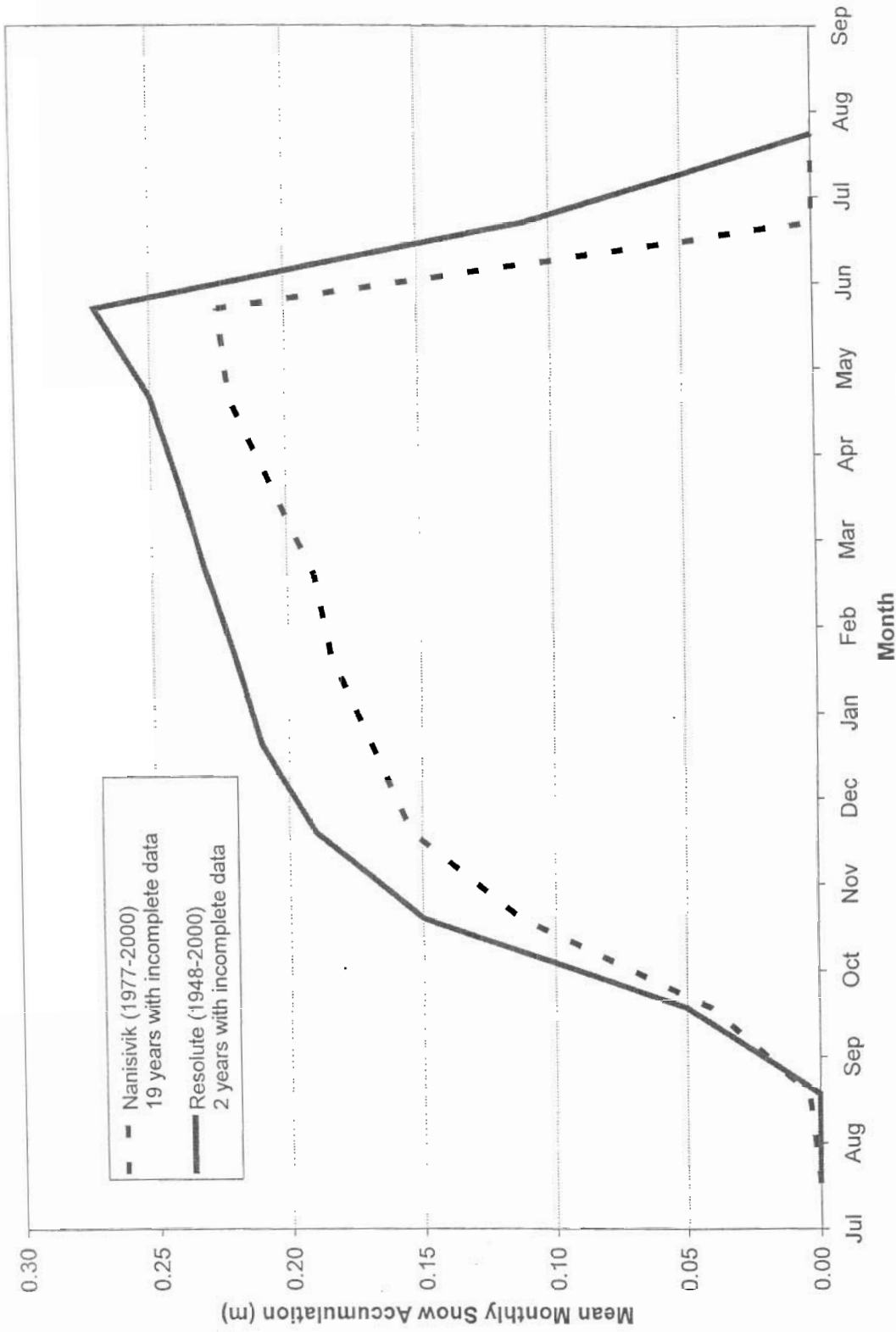
DATE: JAN 2004		DRAWN	SLF
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.			
		BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185	
CLIENT NANISIVIK MINE, A DIVISION OF CANZINCO LTD.		PROJECT No. 0255-008-06	DWG. No. 6
			REV. 0
		PROJECT ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
		TITLE RESOLUTE MEAN ANNUAL AIR TEMPERATURES VS. TIME	

AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.



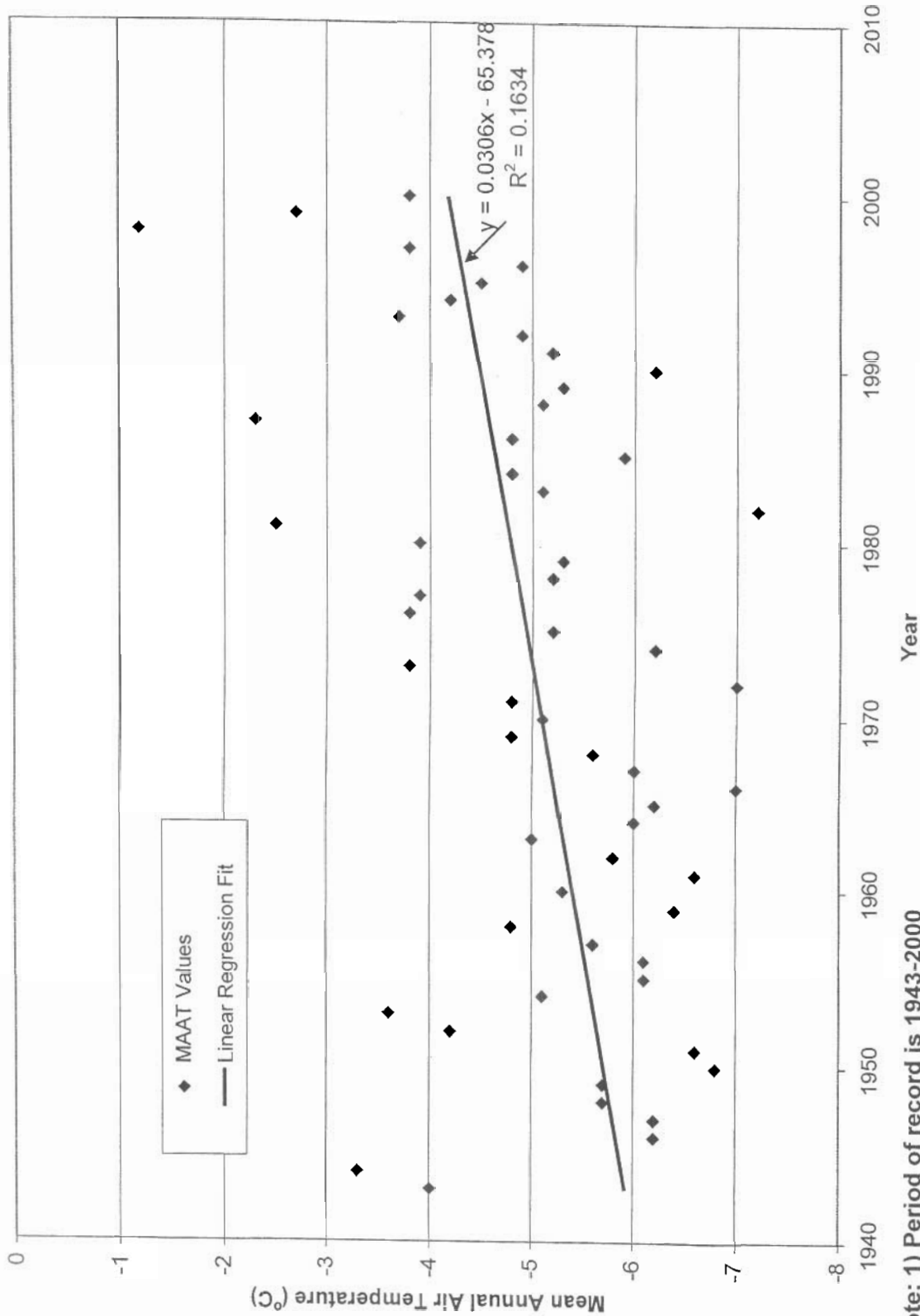
Note: 1) Period of record is 1977 - 2000.
2) 19 years of data are incomplete.

DATE: JAN 2004		DRAWN	SLF
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.			
 BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185		PROJECT ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
CLIENT NANISIVIK MINE, A DIVISION OF CANZINCO LTD.		TITLE NANISIVIK MEAN MONTHLY PRECIPITATION VALUES	PROJECT No. 0255-008-06
		DWG. No. 7	REV. 0



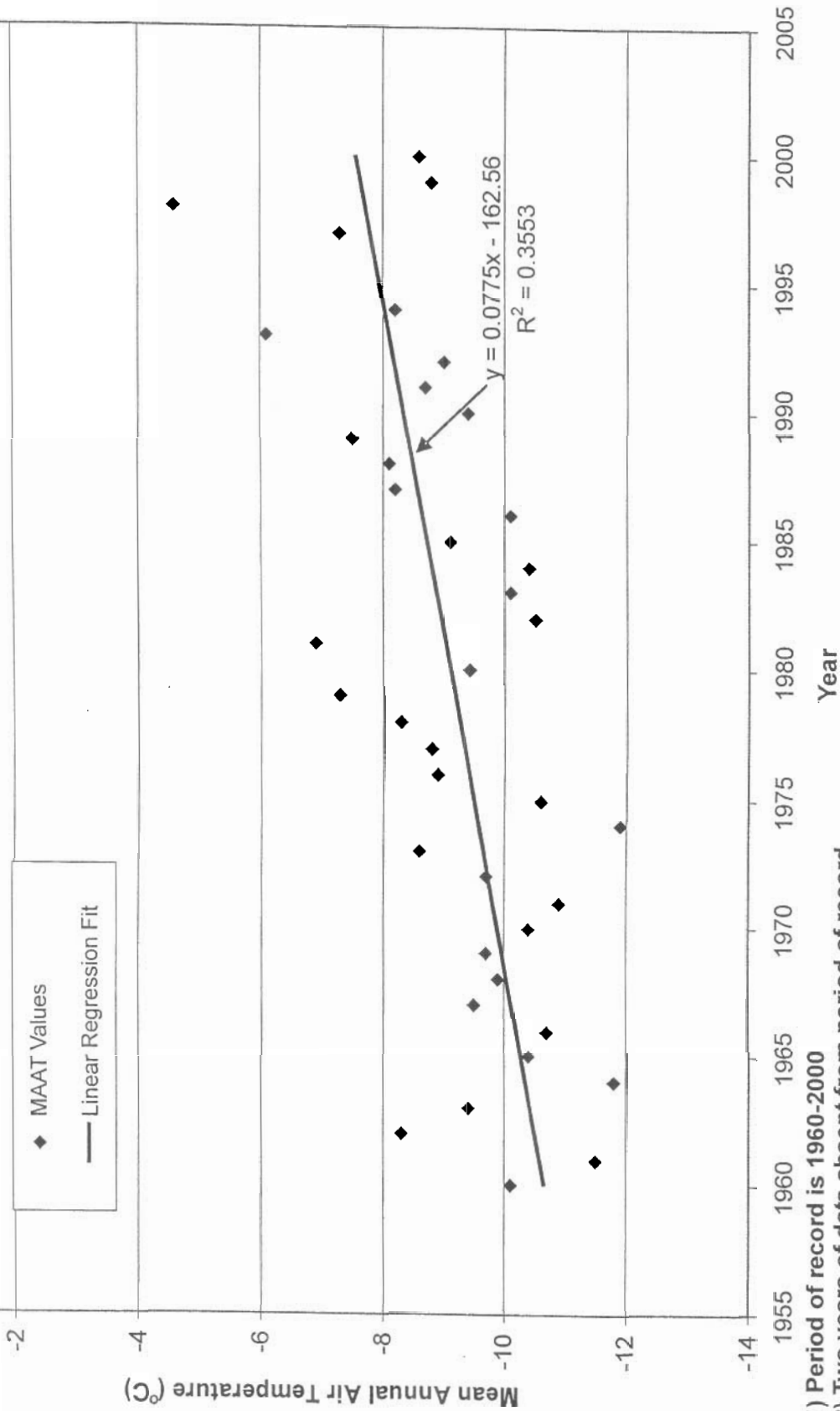
DATE: JAN 2004		DRAWN	SLF
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.			
		BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185	
CLIENT		NANISIVIK MINE, A DIVISION OF CANZINCO LTD.	
PROJECT		ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
TITLE		NANISIVIK AND RESOLUTE SNOWFALL ACCUMULATIONS	
PROJECT No.		0255-008-06	
DWG. No.		8	
REV.		0	

AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.



Note: 1) Period of record is 1943-2000
 2) One year of data is absent from period of record

DATE: JAN 2004		DRAWN	SLF
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.			
 BGC		BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185	
CLIENT		NANISIVIK MINE, A DIVISION OF CANZINCO LTD.	
PROJECT		ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
TITLE		YELLOWKNIFE MEAN ANNUAL AIR TEMPERATURES VS. TIME	
PROJECT No.		0255-008-06	
DWG. No.		9	
REV.		0	



Note: 1) Period of record is 1960-2000
 2) Two years of data absent from period of record

DATE: JAN 2004		DRAWN	SLF
AS A MUTUAL PROTECTION TO OUR CLIENT, THE PUBLIC AND OURSELVES, ALL REPORTS AND DRAWINGS ARE SUBMITTED FOR THE CONFIDENTIAL INFORMATION OF OUR CLIENT FOR A SPECIFIC PROJECT AND AUTHORIZATION FOR USE AND/OR PUBLICATION OF DATA, STATEMENTS, CONCLUSIONS OR ABSTRACTS FROM OR REGARDING OUR REPORTS AND DRAWINGS IS RESERVED PENDING OUR WRITTEN APPROVAL.			
		BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185	
CLIENT		NANISIVIK MINE, A DIVISION OF CANZINCO LTD.	
PROJECT		ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
TITLE		INUVIK MEAN ANNUAL AIR TEMPERATURES VS. TIME	
PROJECT No.		0255-008-06	
DWG. No.		10	
REV.		0	

CLIENT: NANISIVIK MINE, A DIVISION
OF CANZINCO LTD.

LEGEND

- 1 Mt. Fuji Quarry
- 2 West Twin Quarry
- 3 East Twin Quarry
- 4 Shale Hill Quarry
- 5 Landfill Quarry
- 6 Twin Lakes Sand and Gravel Deposit
- 7 Area 14 Quarry
- 8 Road Quarry

Note: All quarry locations are approximate

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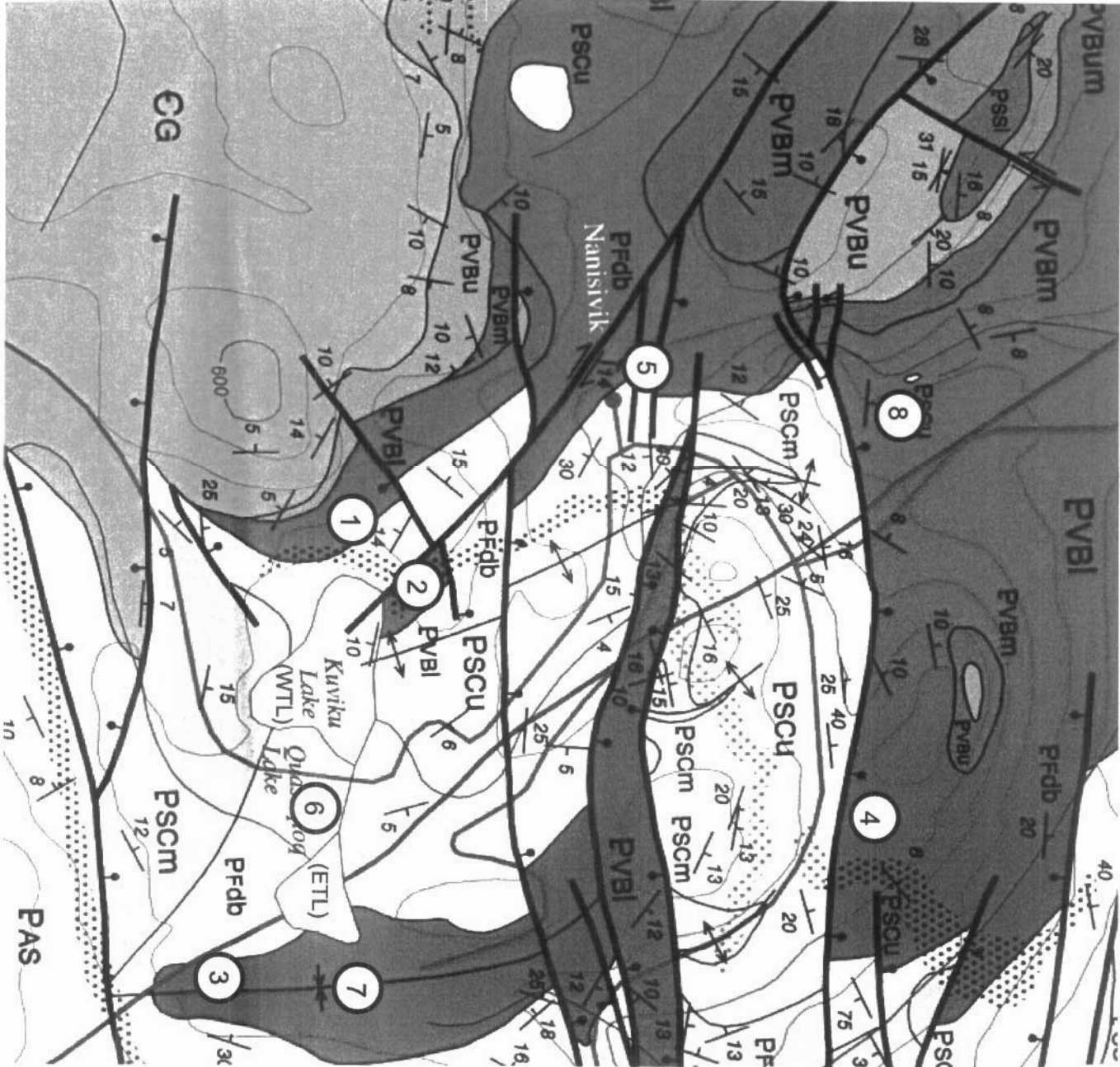
REV.	DATE	REVISION NOTES	DRAWN	CHECKED	APPROVED

SCALE:	AS SHOWN
DATE:	JAN 2004
DRAWN:	SLF
DESIGNED:	GKC
CHECKED:	GKC
APPROVED:	JWC

PROJECT	ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS		
TITLE	NANISIVIK AREA BEDROCK GEOLOGY MAP		
PROJECT No.	DWG. No.	REV.	
0255-008-06	11	0	

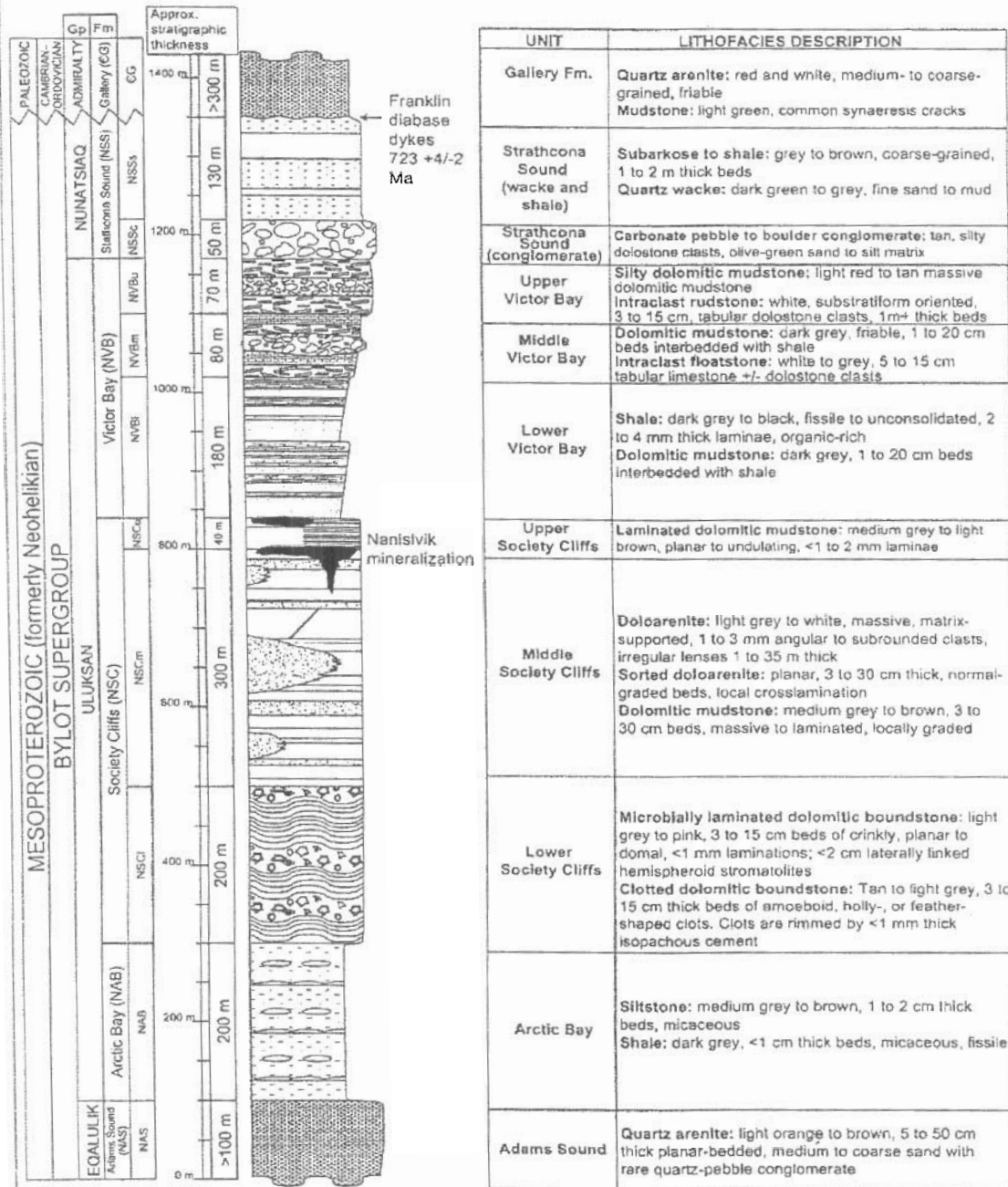
LEGEND

- CENOZOIC
 - QUATERNARY
 - Q Undifferentiated surficial deposits
- PALEOZOIC
 - CAMBRIAN
 - Cg Gallery Formation
- PROTEROZOIC
 - NEOPROTEROZOIC
 - Pfddb Franklin diabase dykes
- MESOPROTEROZOIC
 - Strathcona Sound Formation - undivided
 - Pss
 - Pssu upper
 - Pssl lower
 - Victor Bay Formation - undivided
 - PVB
 - PVBU upper
 - PVBUM upper and middle
 - PVBm middle
 - PVBI lower
 - Society Cliffs Formation - undivided
 - PSC
 - PSCu upper
 - PSCm middle
 - PSCI lower
 - Arctic Bay Formation
 - PAB
 - Adams Sound Formation
 - PAS
- Fault
 - 30° Bedding (Strike, Dip)



From Patterson et al. (2003)

GENERALIZED STRATIGRAPHIC SECTION – NANISIVIK AREA



From: Patterson and Powis (2002)

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SCALE:	As Shown	DESIGNED:	MJM
DATE:	JAN 2004	CHECKED:	MJM
DRAWN:	SLF	APPROVED:	JWC

CLIENT:

NANISIVIK MINE, A DIVISION
OF CANZINCO LTD.

BGC

BGC Engineering Inc.

AN APPLIED EARTH SCIENCES COMPANY

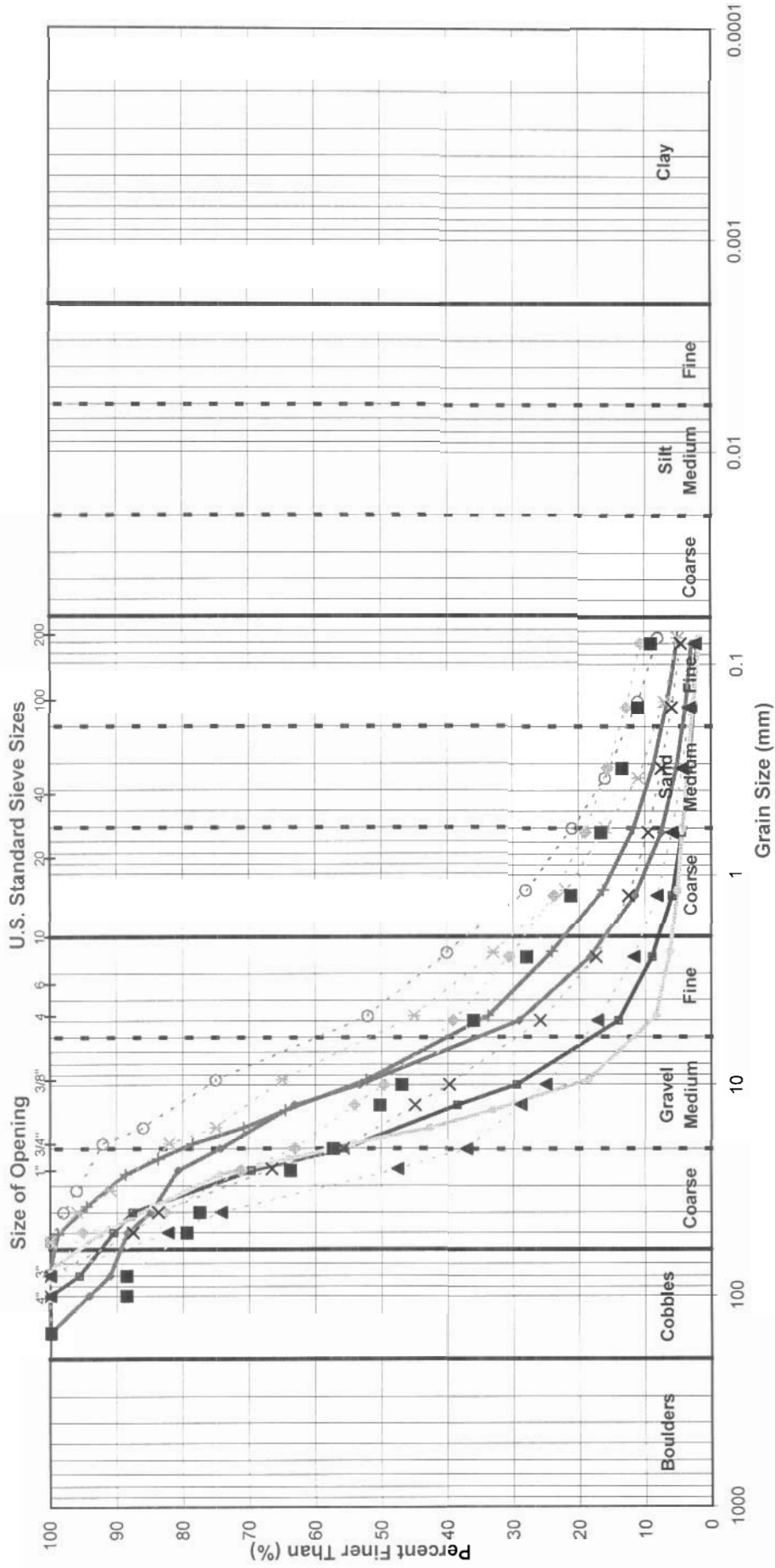
Calgary, Alberta.

Phone: (403) 250-5185

PROJECT ENGINEERING DESIGN OF SURFACE
RECLAMATION COVERS

TITLE NANISIVIK AREA
STRATIGRAPHIC COLUMN

PROJECT No.	0255-008-06	DWG. No.	12	REV.	0
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Legend:

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PROJECT:

ENGINEERING DESIGN OF SURFACE RECLAMATION
COVERS

TITLE:

SHALE GRAIN SIZE DISTRIBUTION ANALYSES

CLIENT

BGC **BGC ENGINEERING INC.**
AN APPLIED EARTH SCIENCES COMPANY

NANISIVIK MINE, A DIVISION OF CANZINCO LTD.

PROJECT NO.

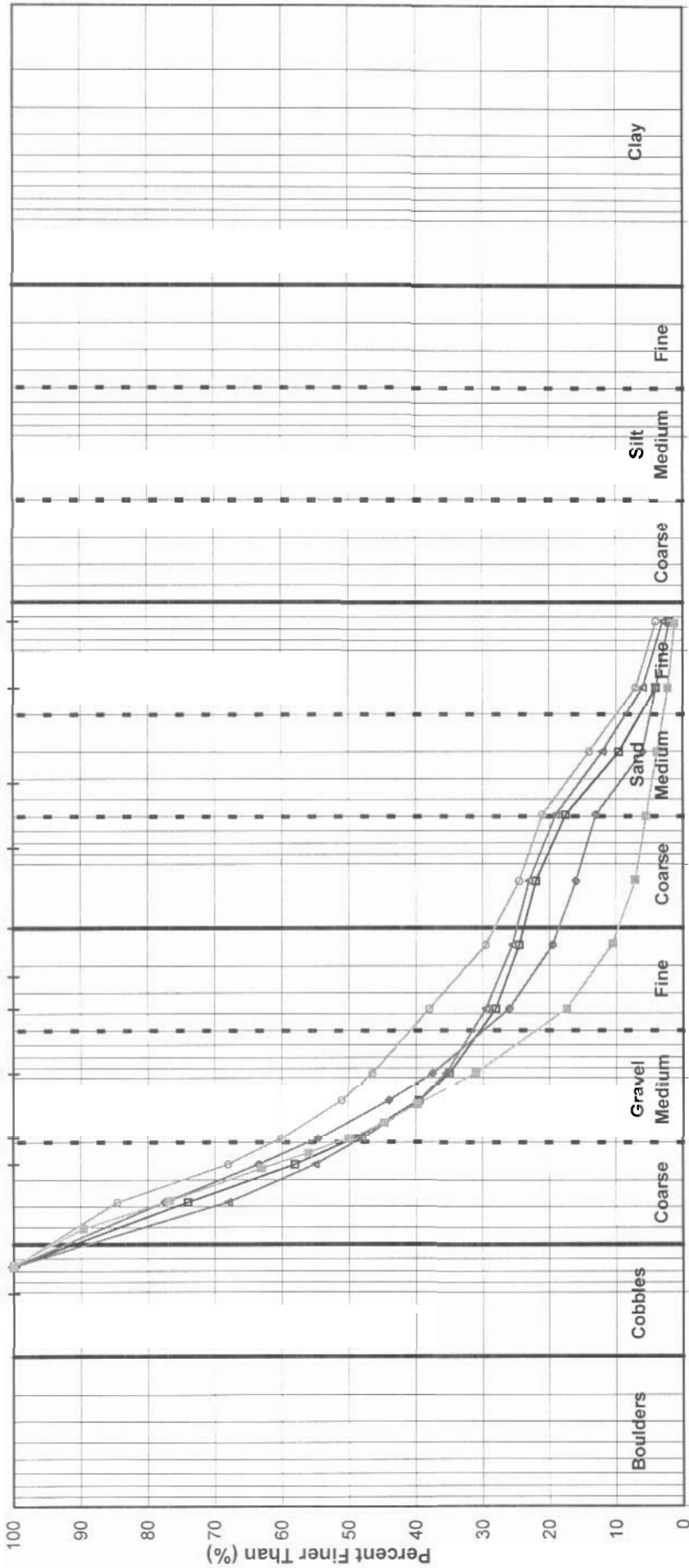
0255-008-06

DWG NO.

13

U.S. Standard Sieve Sizes

Size of Opening



Legend:

- Test Pit (Terratech 1978) 0.5 to 2.0 ft
- Test Pit (Terratech 1978) 0.0 to 4.0 ft
- Test Pit (Terratech 1978) 0.4 to 2.0 ft
- Test Pit (Terratech 1978) 0.0 to 3.4 ft
- Golder 98 Surficial

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PROJECT: ENGINEERING DESIGN OF SURFACE RECLAMATION
COVERS

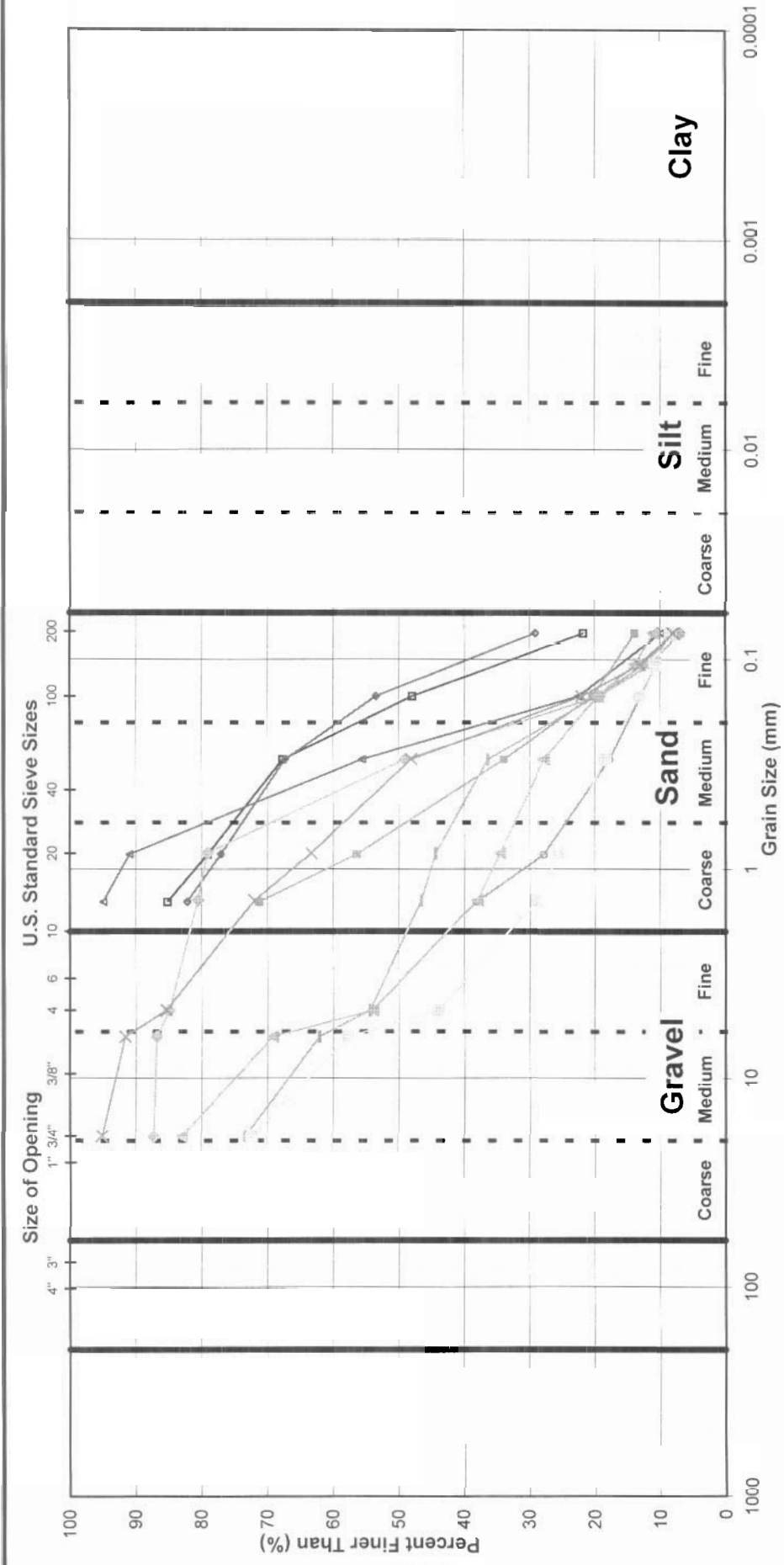
TITLE
TWIN LAKES SAND AND GRAVEL
GRAIN SIZE DISTRIBUTION ANALYSES

PROJECT NO 0255-008-06

DWG NO 14

BGC ENGINEERING INC.
AN APPLIED EARTH SCIENCES COMPANY

CLIENT
NANISIVIK MINE, A DIVISION OF CANZINCO LTD.



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- Note:**
1. 10 samples tested.
 2. Grain size results do not include large size particles such as cobbles and boulders.
 3. D₅₀ ranges between 0.15 and 5.5 mm.

BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY	PROJECT: ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
	TITLE: GRAIN SIZE DISTRIBUTION OF TILL SAMPLES FROM PROPOSED SPILLWAY ALIGNMENT	
	PROJECT NO. 0255-008-06	DWG NO. 16

CLIENT: **NANISIVIK MINE, A DIVISION OF CANZINCO LTD.**