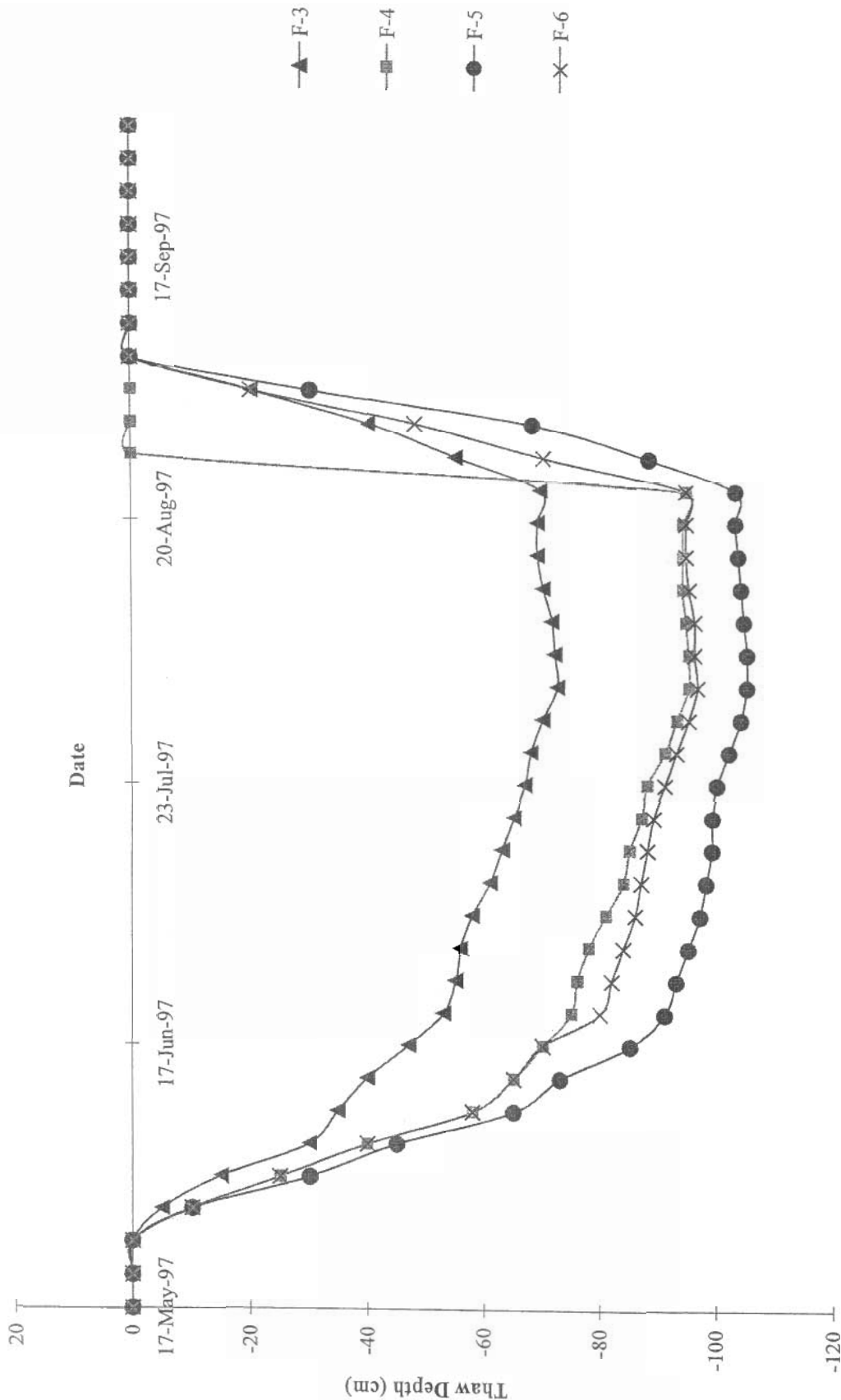


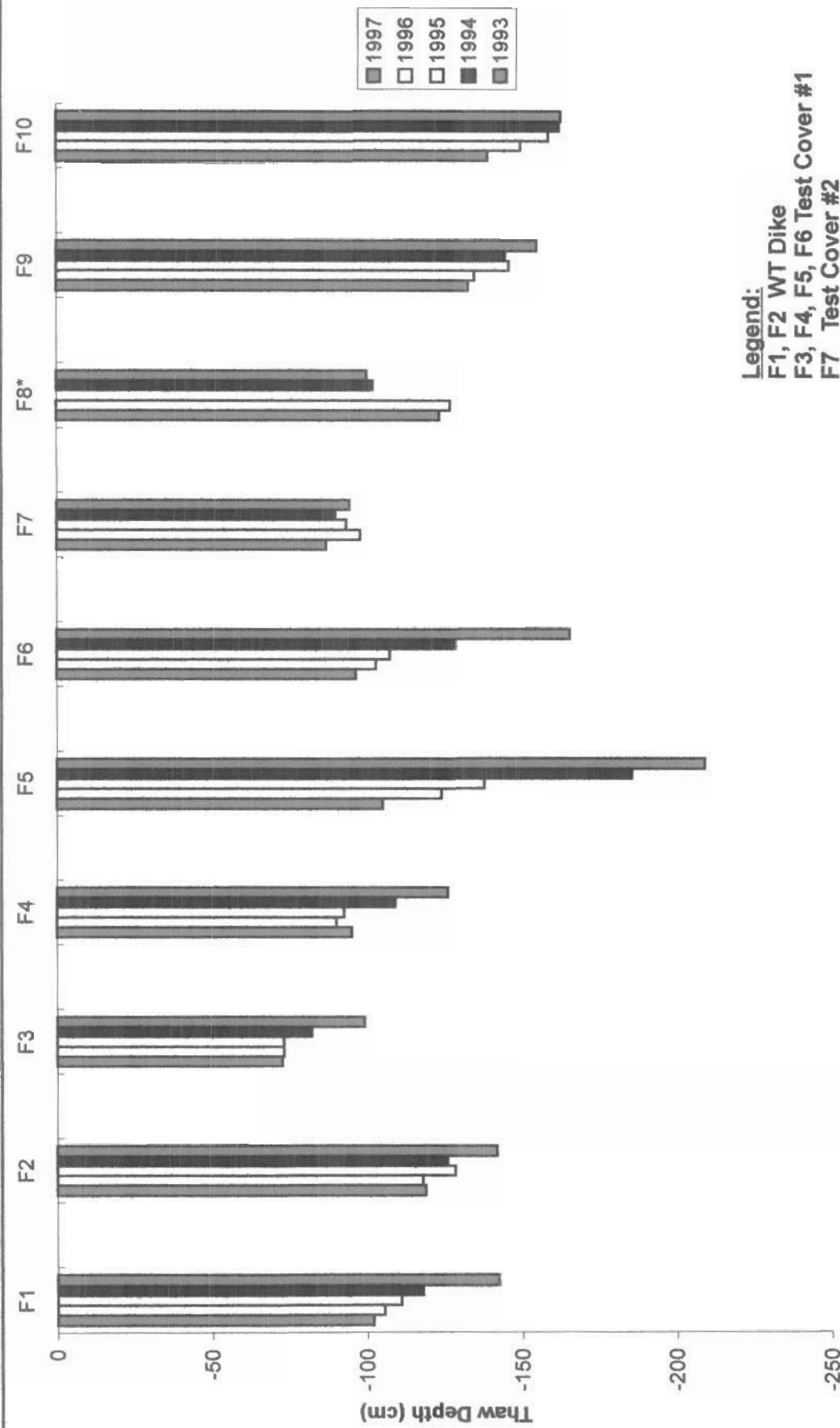


Note free water in bottom of test pit and granular nature of shale.
Photo taken in August 2003.

DATE: JAN 2004		DRAWN	SLF	 BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185				PROJECT	ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS			
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.				TITLE		TEST PIT TEST CELL TEST COVER #1			PROJECT No.		DWG. No.	REV.
				CLIENT		NANISIVIK MINE, A DIVISION OF CANZINCO LTD.			0255-008-06		18	



DATE: JAN 2004	DRAWN	SLF	BGC BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Calgary, Alberta Phone: (403) 250-5185			PROJECT	ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	REV.	
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.			TITLE		TEST CELL TEST COVER #1	DWG. No.		19	0
			PROJECT No.		0255-008-06				
			CLIENT		NANISIVIK MINE, A DIVISION OF CANZINCO LTD.				

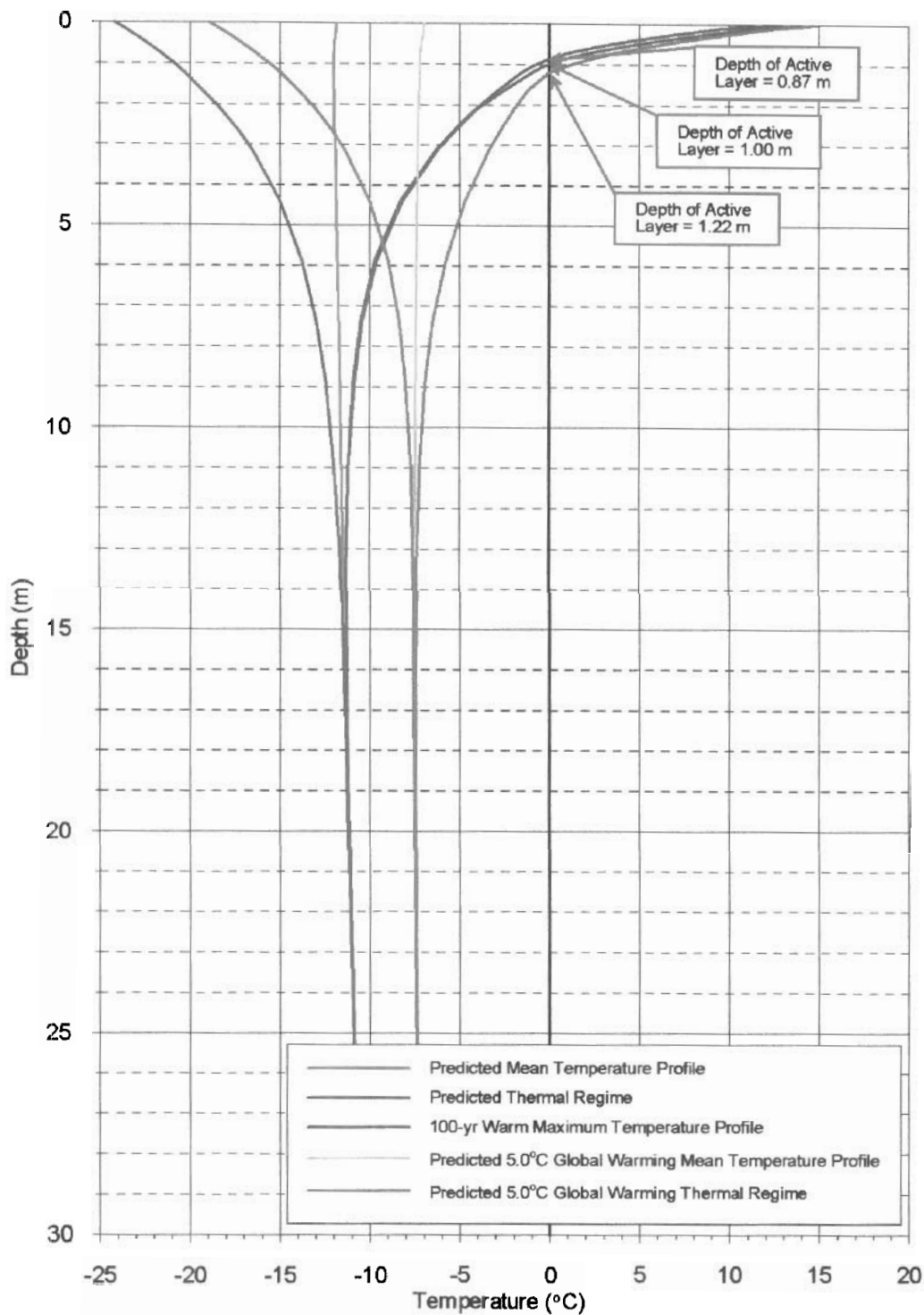


Legend:
 F1, F2 WT Dike
 F3, F4, F5, F6 Test Cover #1
 F7 Test Cover #2
 F8 Test Cover #3
 F9 Test Cover #4
 F10 Test Cover #5

Note: Additional cover material added to Test Cover #3 in 1995.

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		PROJECT ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
CLIENT NANISIVIK MINE, A DIVISION OF CANZINCO LTD.		TITLE TEST CELL TEST COVER STUDY FROST GAUGE MONITORING RESULTS	REV. 0
		PROJECT No. 0255-008-06	DWG. No. 20

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.



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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 Engineering Inc.
AN APPLIED EARTH SCIENCES COMPANY

Calgary, Alberta.

Phone: (403) 250-5185

PROJECT: ENGINEERING DESIGN OF SURFACE
RECLAMATION COVERS

TITLE: GEOTHERMAL MODELLING OF SURFACE
CELL COVER - RESULTS

PROJECT No.	DWG No.	REV.
0255-008-06	21	0

CLIENT:

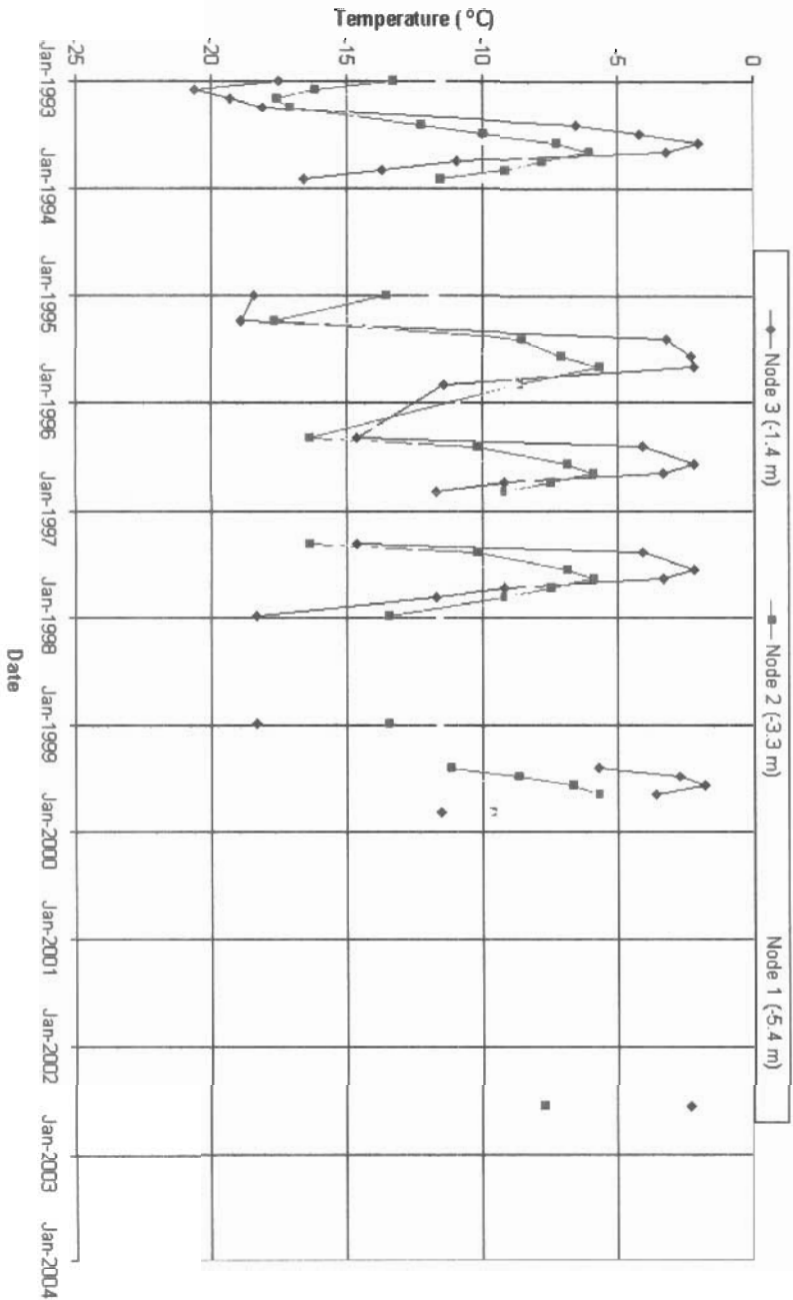
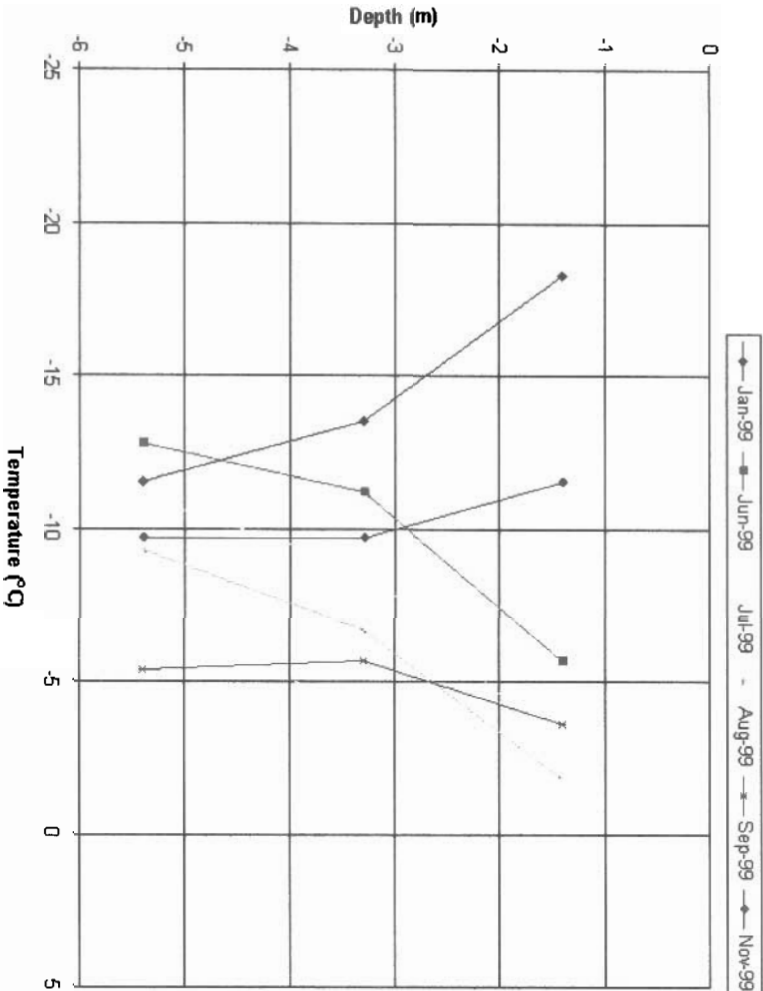
NANISIVIK MINE, A DIVISION
OF CANZINCO LTD.

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REV.	DATE	REVISION NOTES	DRAWN CHECKED APPROVED

SCALE:	N/A
DATE:	JAN 2004
DRAWN:	SLF
DESIGNED:	GKC
CHECKED:	GKC
APPROVED:	JWC

PROJECT	ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
TITLE		
GEOTHERMAL MONITORING RESULTS T/C #7		
PROJECT No.	DWG. No.	REV.
0255-008-06.	22	0



CLIENT:

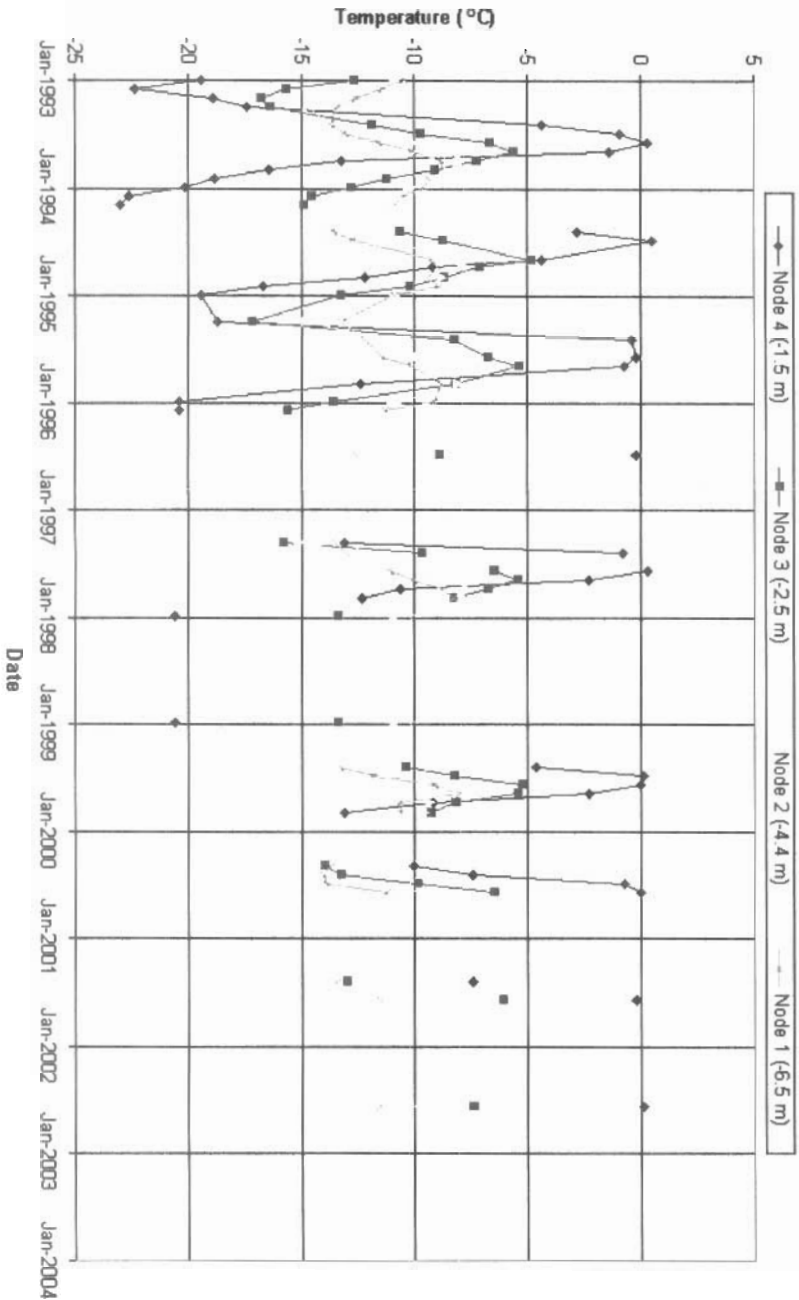
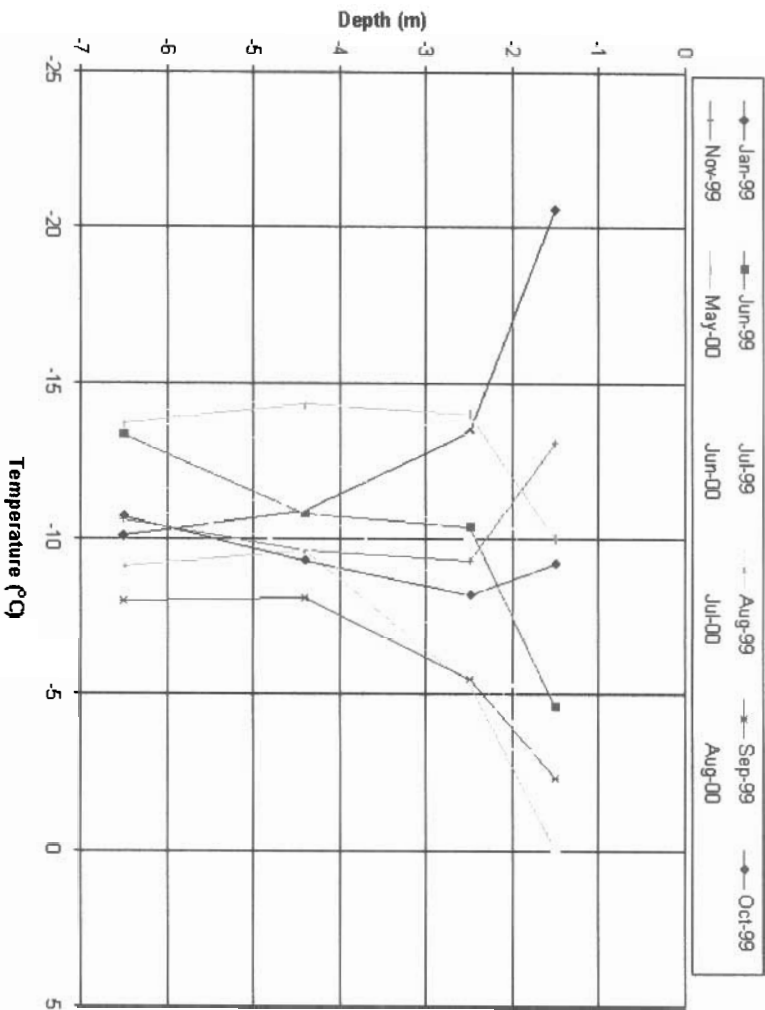
NANISIVIK MINE, A DIVISION
OF CANZINCO LTD.

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REV.	DATE	REVISION NOTES	DRAWN	CHECKED
APPROVED				

SCALE:	N/A
DATE:	JAN 2004
DRAWN:	SLF
DESIGNED:	GKC
CHECKED:	GKC
APPROVED:	JWC

PROJECT	ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
TITLE		
GEOTHERMAL MONITORING RESULTS T/C #8		
PROJECT No.	DWG. No.	REV.
0255-008-06	23	0



CLIENT: NANISIVIK MINE,
A DIVISION OF CANZINCO LTD.

NOTES:

- 1. CONTOURS DEVELOPED USING SURFACE CELL TOPOGRAPHY AS SURVEYED BY S.A.S. SEPTEMBER, 2003.
- 2. CONTOURS ALSO ASSUME GRADING OF TOP 0.5m OF TAILINGS FROM TOPOGRAPHIC HIGHS INTO TOPOGRAPHIC LOWS.



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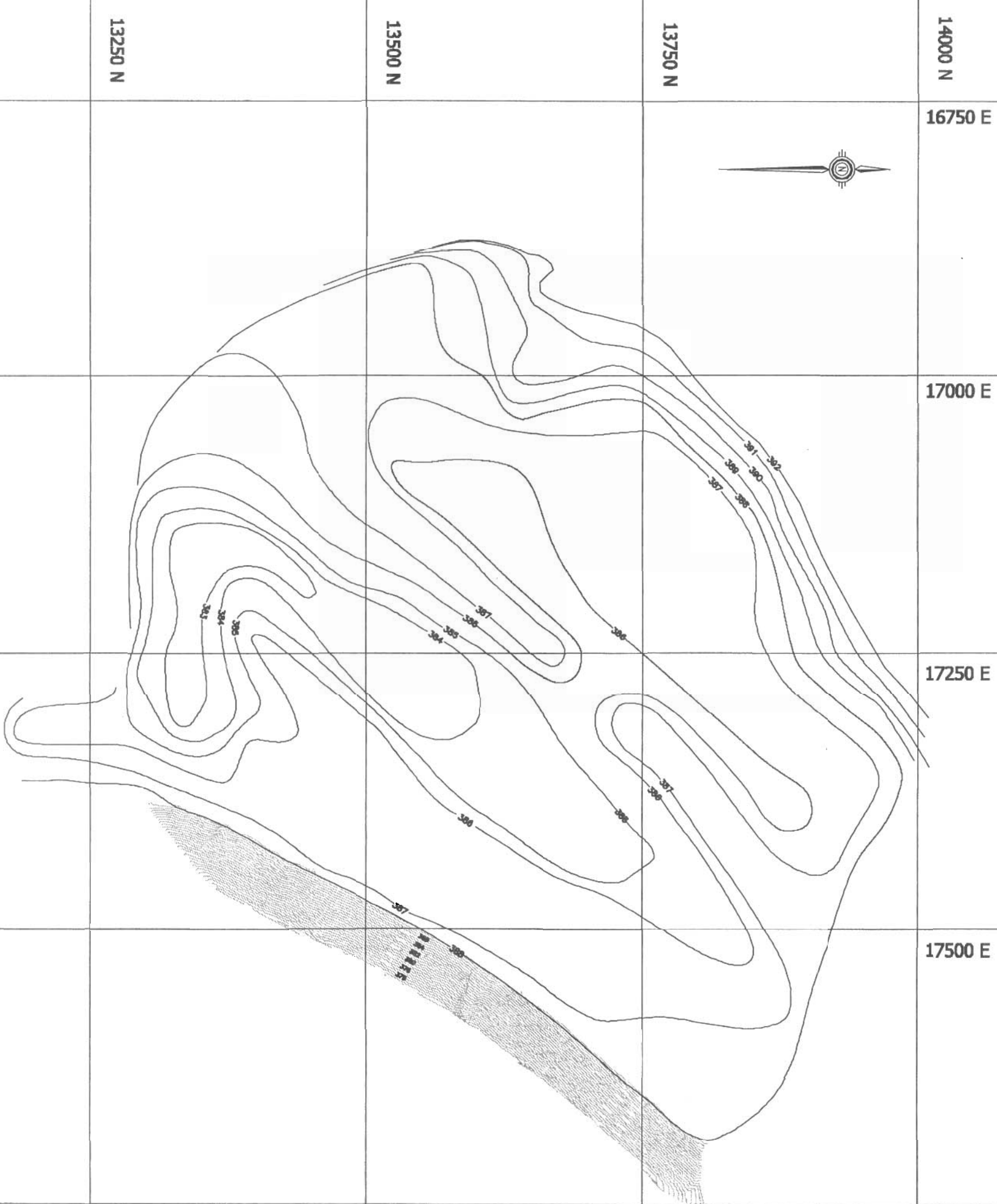
REV.	DATE	REVISION NOTES	DRAWN	CHECKED	APPROVED

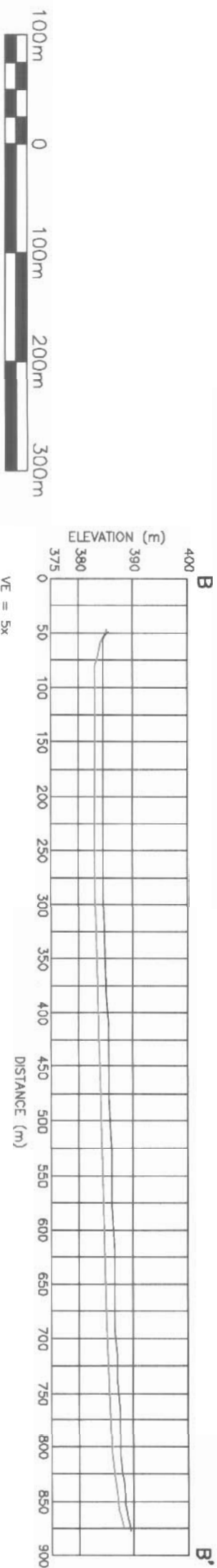
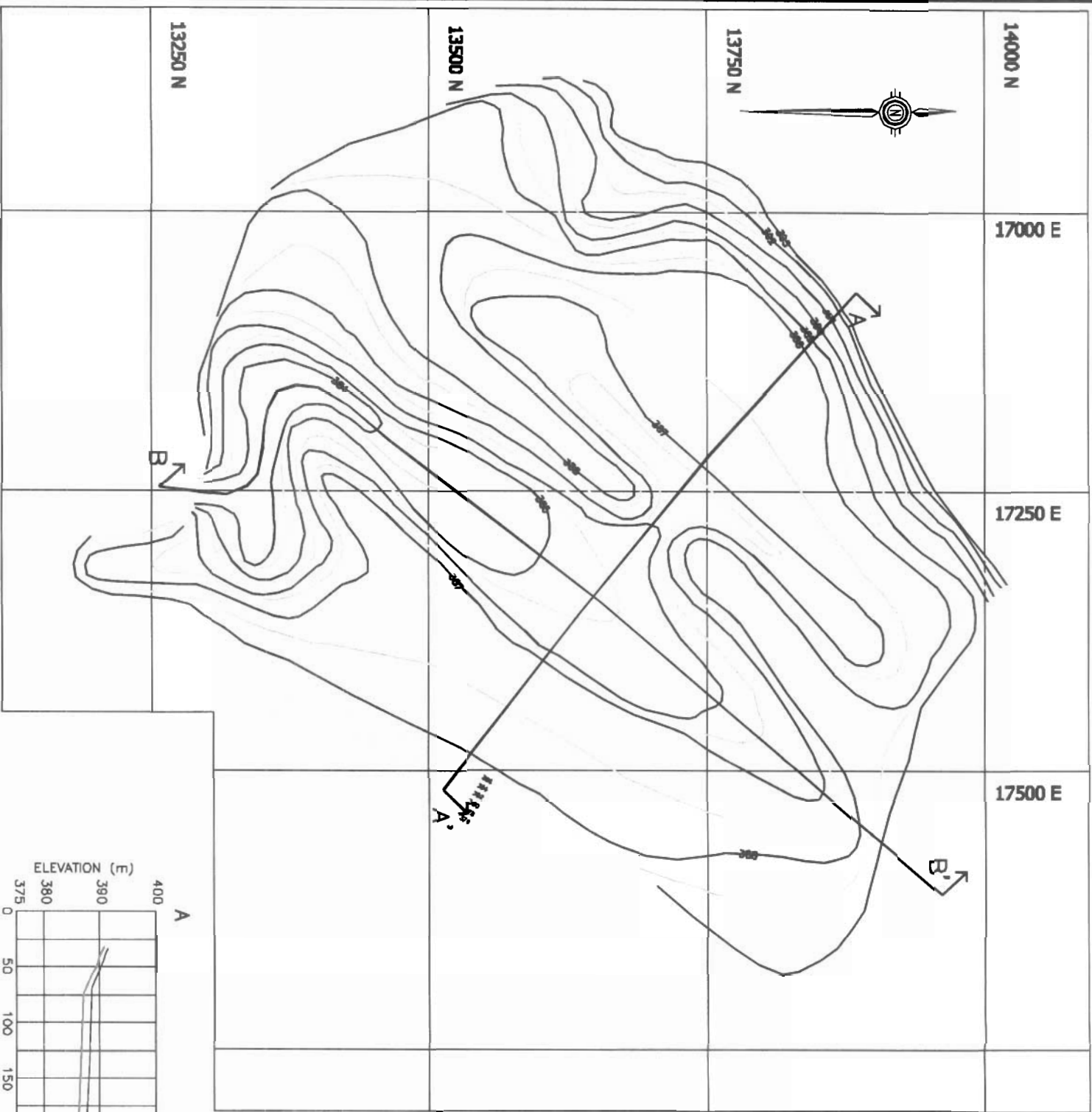
SCALE: AS SHOWN	
DATE:	JAN 2004
DRAWN:	CJT
DESIGNED:	GKC
CHECKED:	JWC
APPROVED:	JWC

PROJECT	ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS		
TITLE	PROPOSED TAILINGS GRADING PLAN FOR SURFACE CELL		
PROJECT No.	DWG No.	REV.	
0255-008-06	24	0	

BGC ENGINEERING INC.
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Calgary, AB Phone: (403) 250 5185





CIENT: NANISIVIK MINE,
A DIVISION OF CANZINCO LTD.

LEGEND

- GRADED TAILINGS SURFACE
- PROPOSED TOPOGRAPHY
- OF RECLAMATION COVER

NOTE:

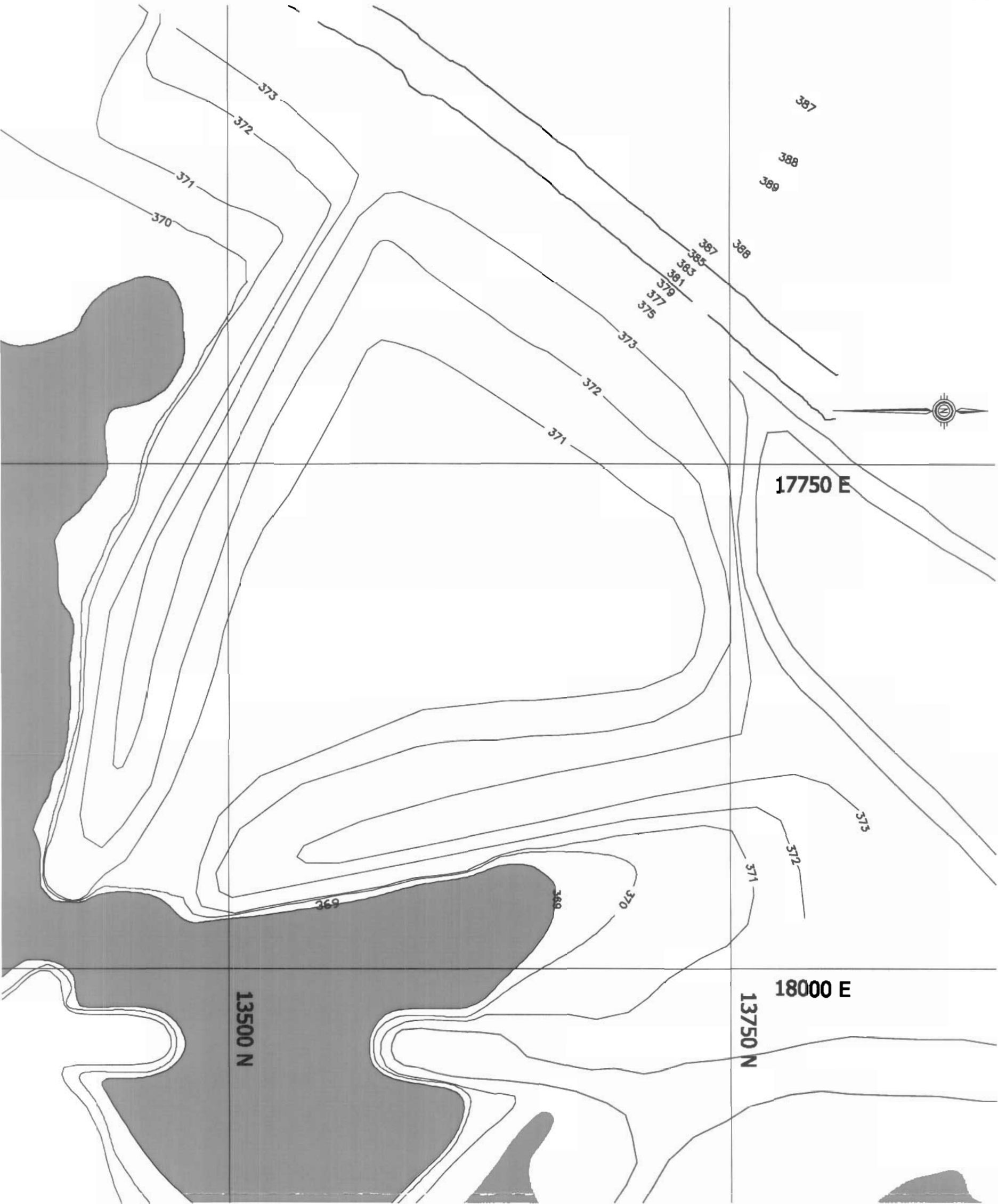
- 2003 SURFACE CELL TOPOGRAPHY/BATHYMETRY SURVEYED BY S.A.S. SEPTEMBER, 2003
- GRADED TAILINGS SURFACE DERIVED FROM FIGURE 24.

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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	PROPOSED SHALE COVER GRADING PLAN FOR SURFACE CELL				
PROJECT No.	0255-008-06	DWG No.	25	REV.	0



CLIENT: NANISIVIK MINE,
A DIVISION OF CANZINCO LTD.

- NOTES:
1. CURRENT BATHYMETRY OF RESERVOIR AND TEST CELL FROM DRAWING New Final Bath V14.dwg SUPPLIED BY NANISIVIK MINE.
 2. TOP LAYER OF TEST CELL DIKE TO BE RELOCATED WITHIN THE TEST CELL DURING RECLAMATION ACTIVITIES.
 3. RESERVOIR LEVEL TO BE LOWERED TO APPROXIMATELY 369 m IN POST CLOSURE.



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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	PROPOSED TAILINGS GRADING PLAN FOR TEST CELL		
PROJECT No.	DWG No.	REV.	
0255-008-06	26	0	

CLIENT: NANISIVIK MINE
A DIVISION OF CANZINCO LTD.

LEGEND

- CURRENT TOPOGRAPHY
- PROPOSED TOPOGRAPHY OF RECLAMATION COVER

NOTES:

- CURRENT BATHYMETRY OF RESERVOIR FROM DRAWING New Final Both V14.dwg SUPPLIED BY NANISIVIK MINE.
- DETAILS REGARDING RECLAMATION OF RESERVOIR SHORELINE DISCUSSED IN WEST TWIN DISPOSAL AREA CLOSURE PLAN (G.15)

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REV.	DATE	REVISION NOTES	DRAWN	CHECKED	APPROVED

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

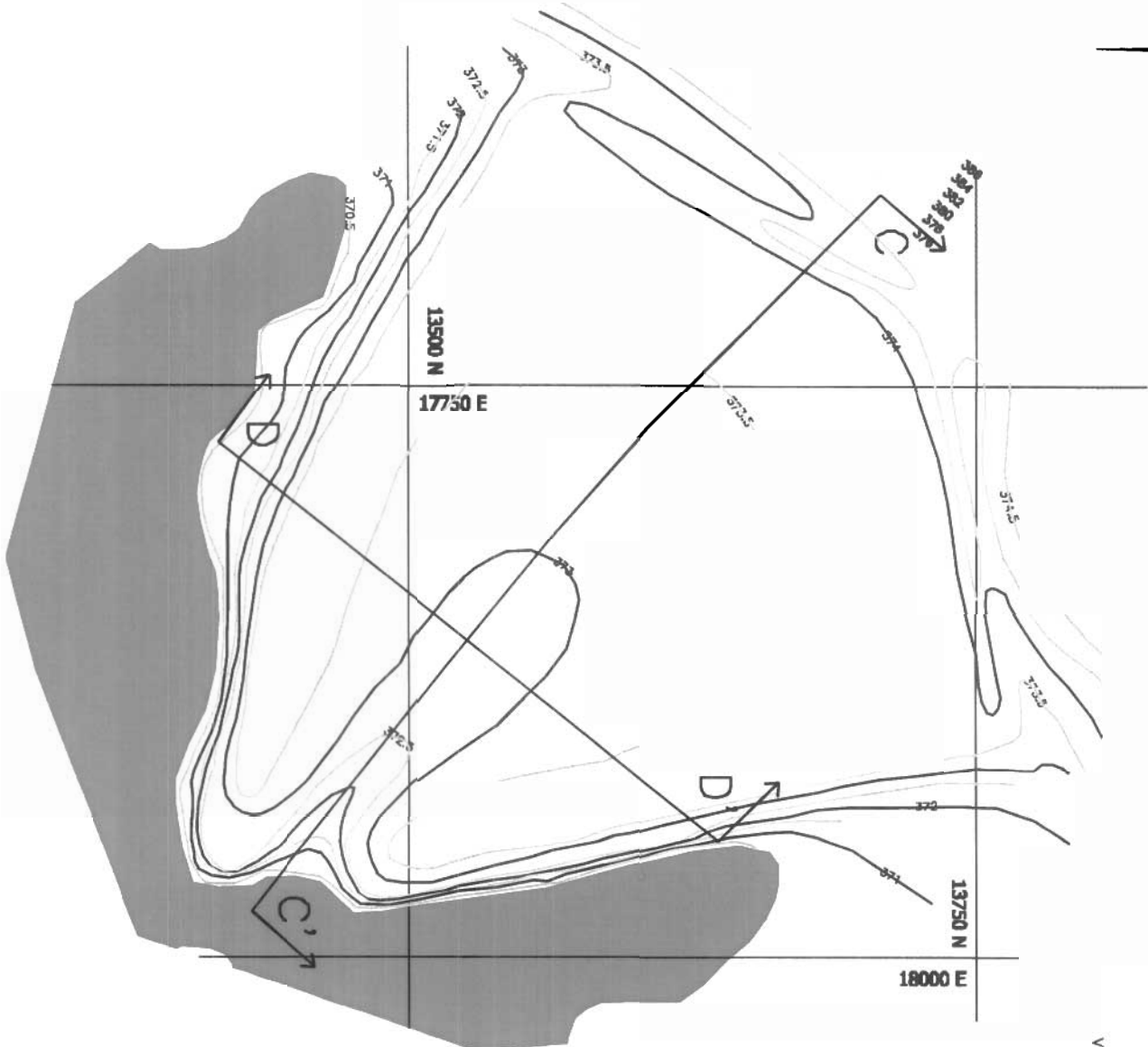
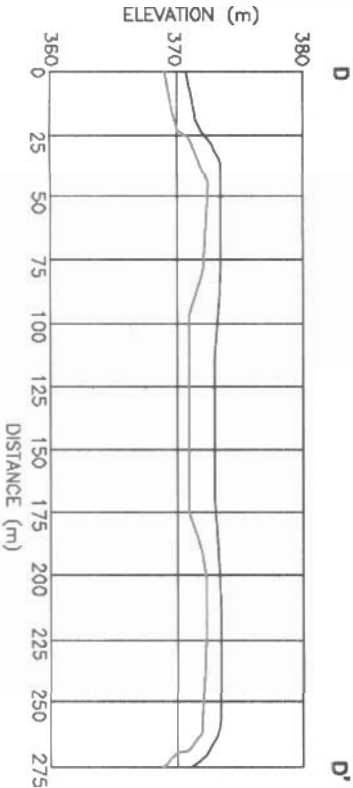
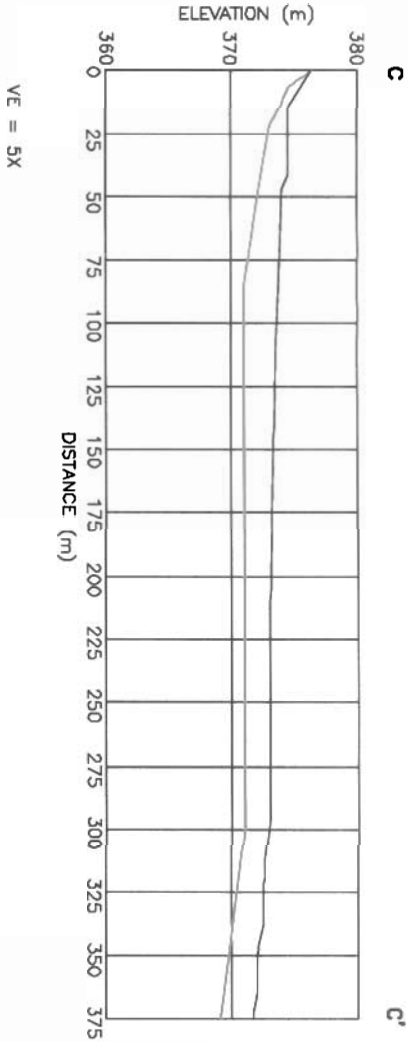
PROJECT	ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS		
TITLE	PROPOSED SHALE COVER GRADING PLAN FOR TEST CELL		
PROJECT No.	DWG No.	REV.	
0255-008-06	27	0	

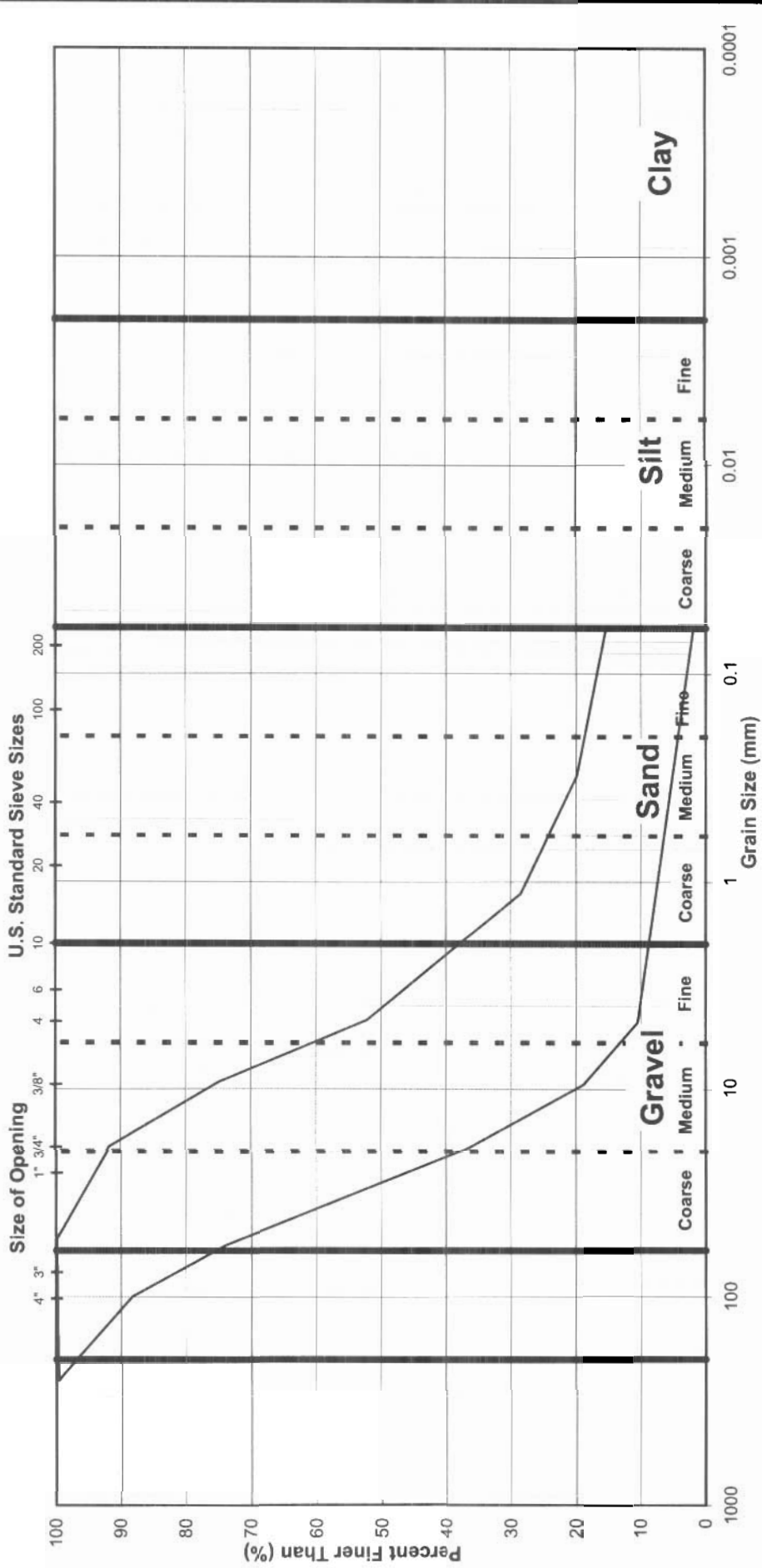
BGC

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BGC ENGINEERING INC.

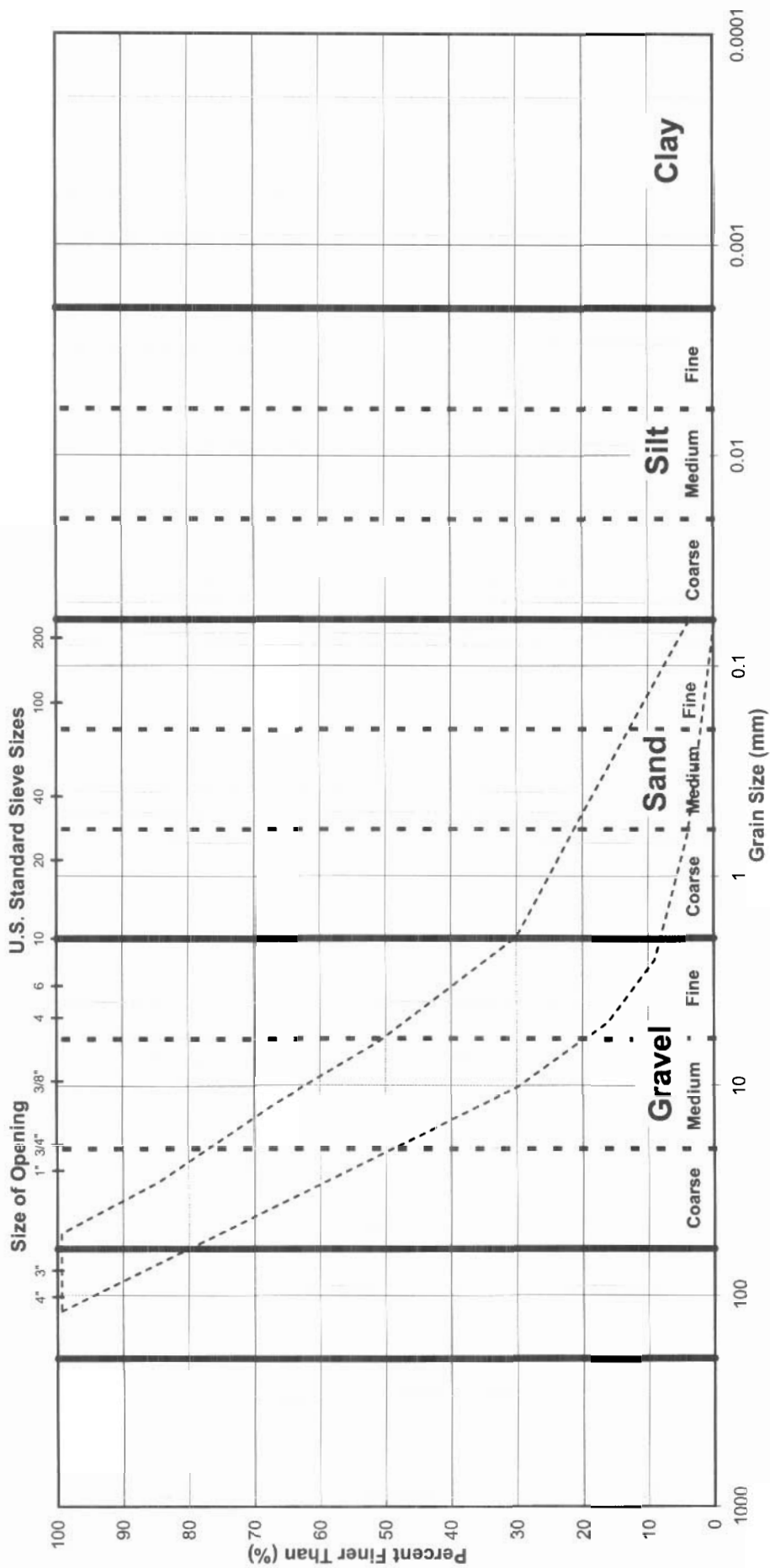
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BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY		PROJECT: ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS	
CLIENT: NANISIVIK MINE, A DIVISION OF CANZINCO LTD.		TITLE: MATERIAL SPECIFICATIONS - GRADATION OF SHALE	
PROJECT NO: 0255-008-06		DWG. NO: 28	



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PROJECT:

ENGINEERING DESIGN OF SURFACE RECLAMATION COVERS

BGC ENGINEERING INC.
AN APPLIED EARTH SCIENCES COMPANY

MATERIAL SPECIFICATIONS - GRADATION OF TWIN LAKES SAND AND GRAVEL

CLIENT:

NANISIVIK MINE, A DIVISION OF CANZINCO LTD.

PROJECT NO.

0255-008-06

DWG. NO.

29

APPENDIX I BOREHOLE LOGS

2003 Borehole Logs – East Twin Quarry

2003 Borehole Logs – West Twin Quarry

DRILL HOLE # BGC03-25

Page 1 of 1

Date Drilled: May 25, 2003

Contractor & Rig: Mine's Diamond Drill

Drill Method: BQ Chilled Brine Coring

Hammer Type: N/A

Location: East Twin Quarry

Elevation: 417.9 m

Co-ord: 8104059.2N, 583150.0E (UTM-NAD83)

Logged by: G. Ferris

Project No. 0255-008-03

Reviewed by: J. Cassie

Notes: No Installation

Depth (m)	SOIL DESCRIPTION	Core Run	Recovery	Moisture Content %				Installation / Backfill		Depth (m)
				Wp	X	WI				
0	Ground Surface 417.9									0
0	TILL 0.0									0
1	Gravel, sandy, some cobbles, some silt, light grey, clasts of various geological origins, subrounded. 416.8	1								1
1	SHALE 1.1									1
2	Dark grey, rubble, angular.	2								2
2	@ 2.3 m: Light grey return water.	3								2
3	@ 2.4 m: Light grey, gravel to sand sized, slightly weathered.	4								3
3		5								3
4	BEDROCK 414.3	6								4
4	DOLOSTONE. 414.1	7								4
4	3.8	8								4
4	End of Borehole									4
5	@ 3.8 m: Due to core barrel wear, drill could not advance beyond this depth.									5
6										6
7										7
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

PROJECT: Geotechnical Investigation

Final Depth: 3.8 m