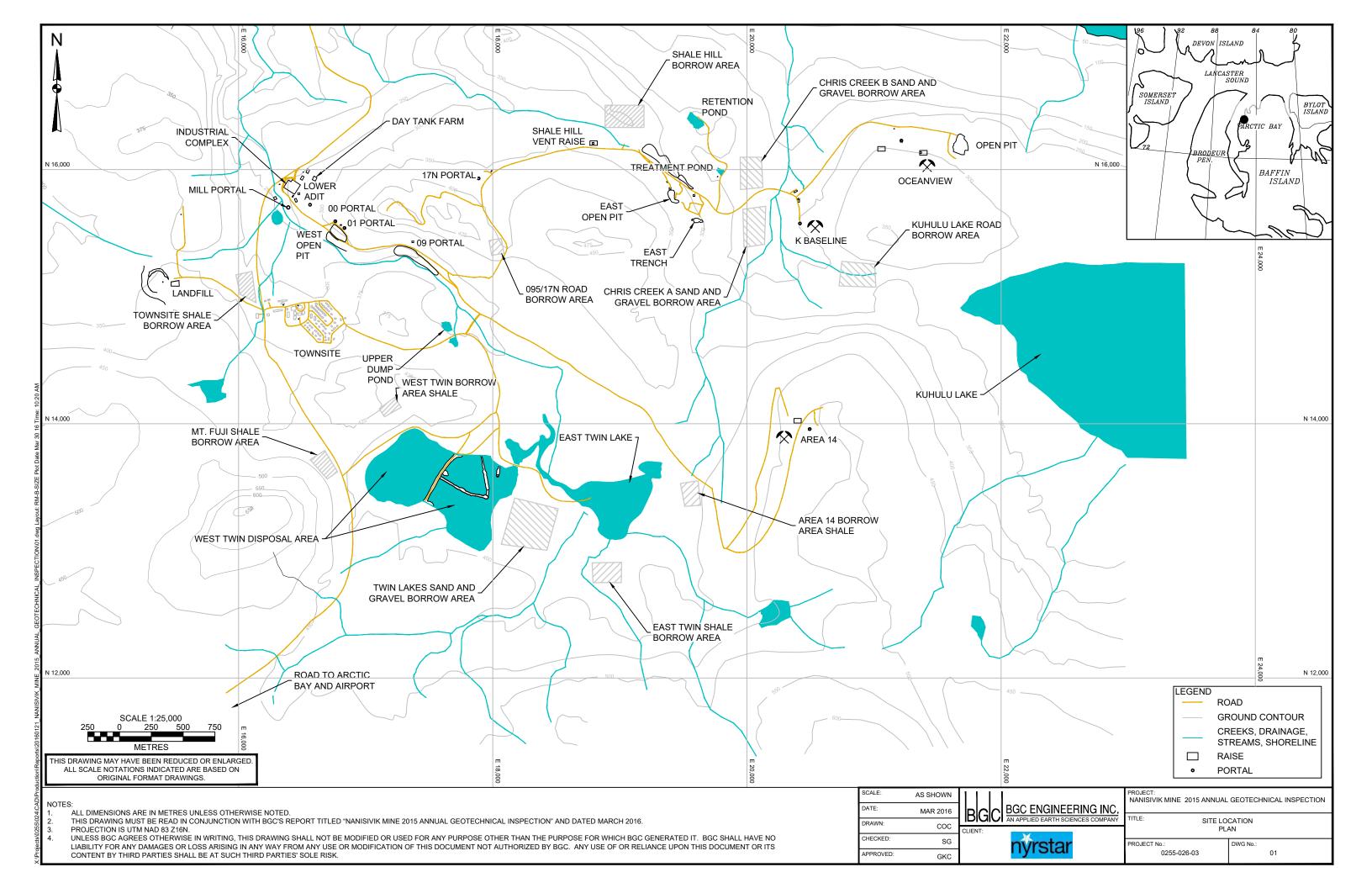
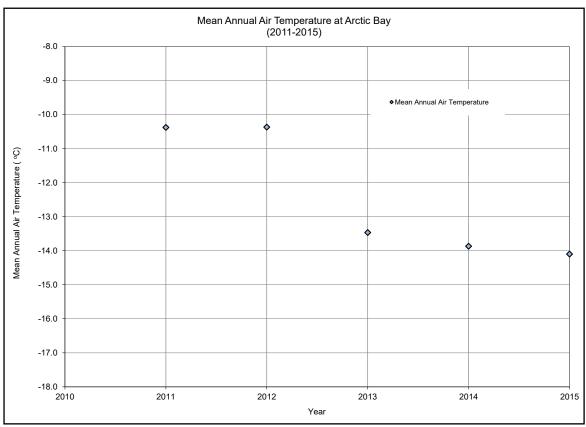
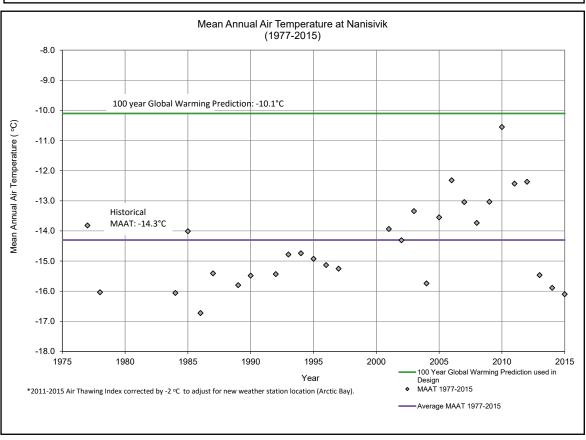
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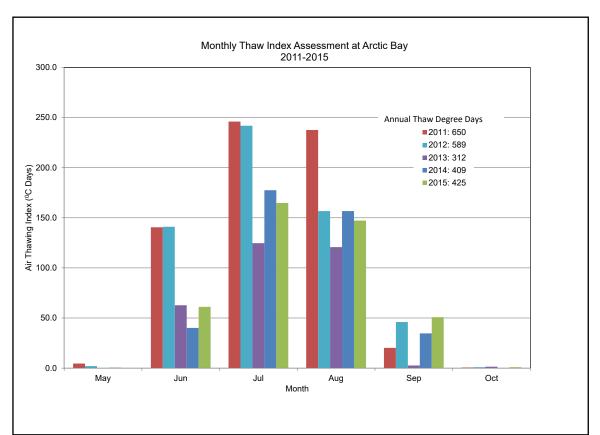
March 30, 2016

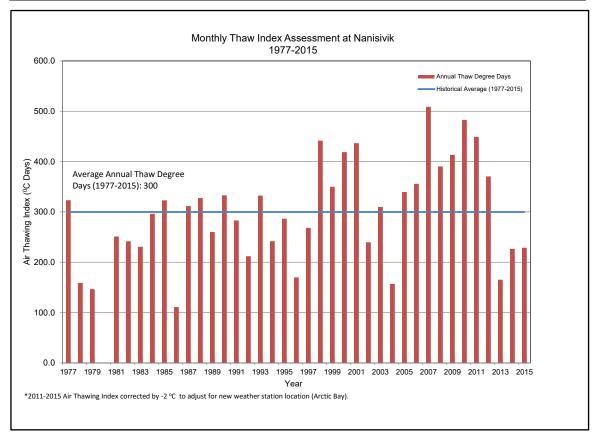
Project No.: 0255-026











SCALE: N/A
DATE: MAR 2016
DESIGNED: GKC
DRAWN: SG
CHECKED: GKC
APPROVED: GKC

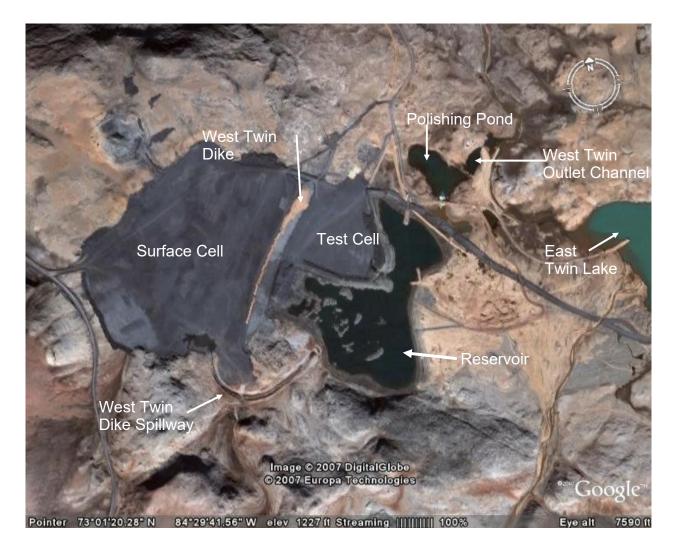
BGC ENGINEERING INC.
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nyrstai

PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION
TITLE:

CLIMATE DATA

DWG No.: PROJ No.: 2 0255-026-03



Approximate Scale 1:12,500

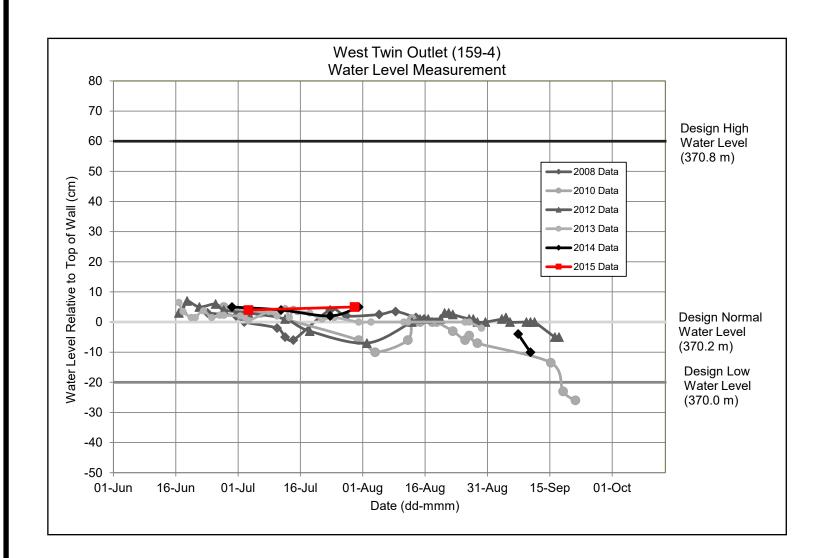
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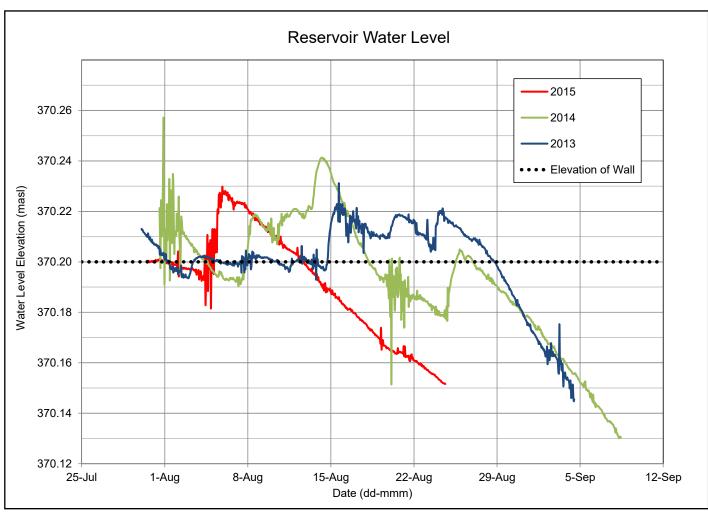
- 1. Photo derived from Google Earth January 10, 2008
- 2. Approximate date of photo is July 2005.

DWG TO BE READ WITH BGC REPORT TITLED: "NANISVIK MINE 2015 GEOTECHNICAL INSPECTION", MAR 2016

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| all        | SCALE:    | AS SHOWN |       |     |   |                                   | PROJECT: |               | NANISIVIK MINE     |        |
|------------|-----------|----------|-------|-----|---|-----------------------------------|----------|---------------|--------------------|--------|
| or-<br>ise | DATE:     | MAR 2016 |       |     |   |                                   |          | 2015 ANNUAL   | GEOTECHNICAL INSPI | ECTION |
| gs,<br>out | DESIGNED: | GKC      | R     | C   | C |                                   | TITLE:   | COMPONENTS OF | WEST TWIN DISPOSAL | ۸۵Ε۸   |
| l in       | DRAWN:    | SG       |       | u   | U | AN APPLIED EARTH SCIENCES COMPANY |          | COMPONENTS OF | WEST TWIN DISPOSAL | AINLA  |
| nic        | CHECKED:  | JWC      | CLIEN | IT: |   | A                                 | DWG No.: |               | PROJ No.:          | REV:   |
| ned        | APPROVED: | GKC      |       |     |   | nyrstar                           |          | 3             | 0255-026-03        |        |





| all<br>or-        | SCALE:    | N/A      |
|-------------------|-----------|----------|
| or-<br>ise<br>lu- | DATE:     | MAR 2016 |
| gs,<br>out        | DESIGNED: | GKC      |
| ed<br>an          | DRAWN:    | SG       |
| nat<br>nic        | CHECKED:  | GKC      |
| ed                | APPROVED: | GKC      |



PROJECT:

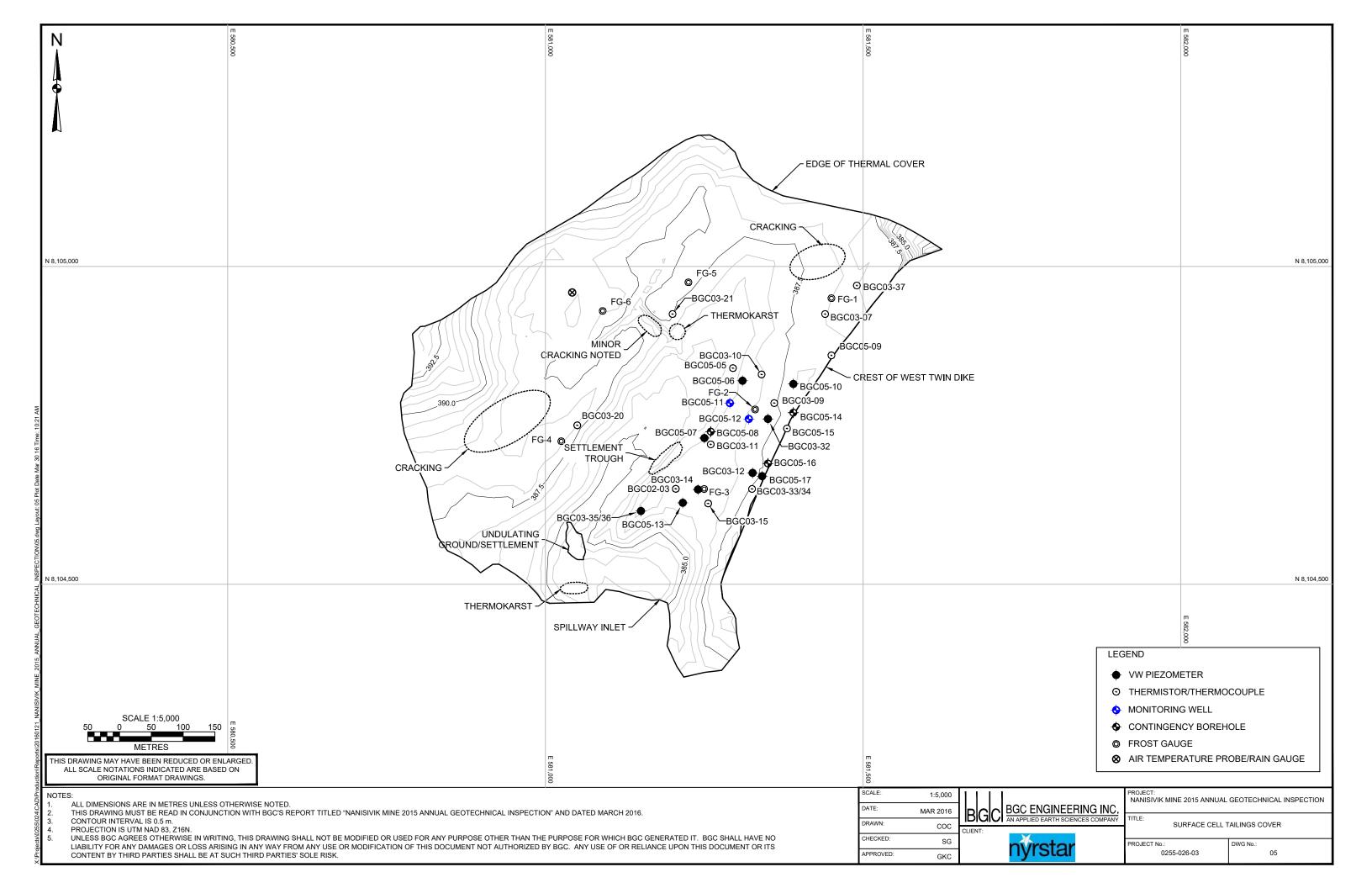
NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

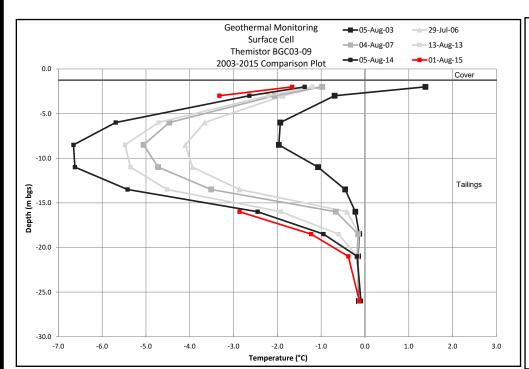
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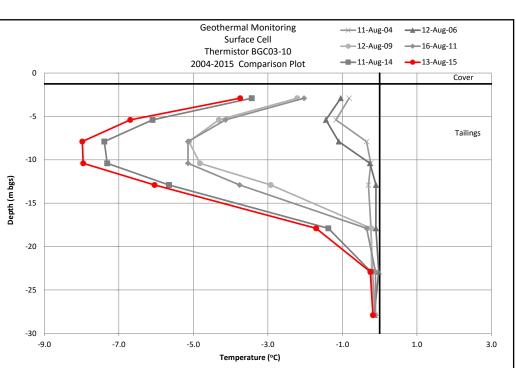
WATER LEVELS IN RESERVOIR AND AT
WEST TWIN OUTLET WALL

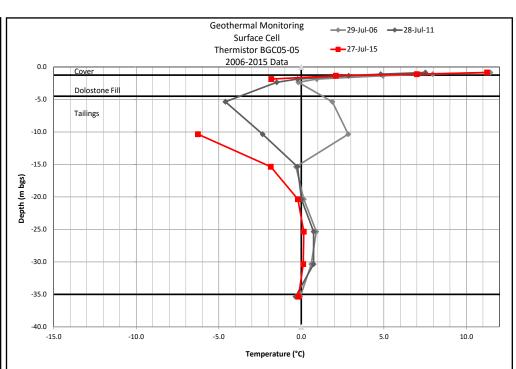
REV:

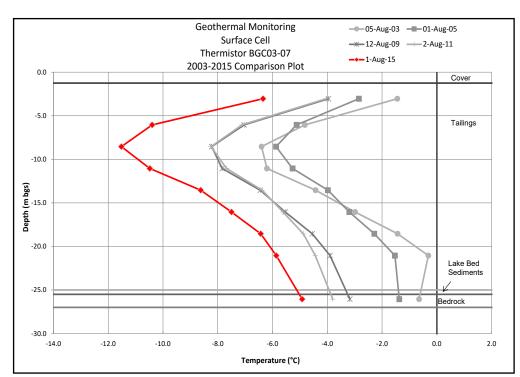
DWG No.: PROJ No.: 4 0255-026-03

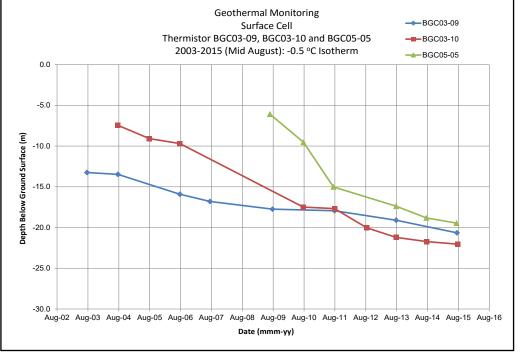


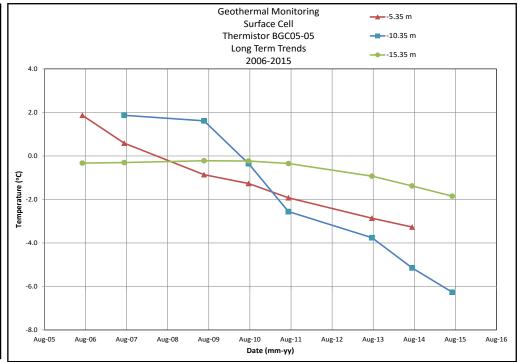












SCALE: N/A
DATE: MAR 2016
DESIGNED: GKC
DRAWN: SG
CHECKED: GKC
APPROVED: GKC

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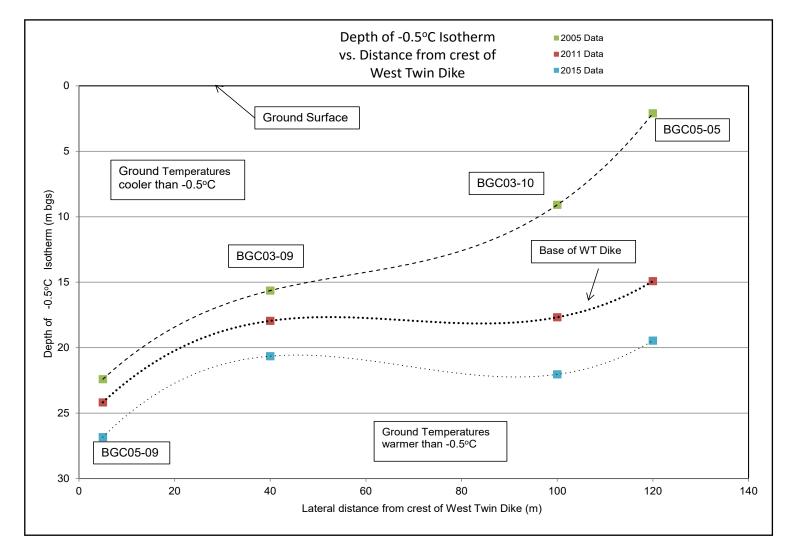
PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION
TITLE: SUBFACE CELL TAILINGS COVER

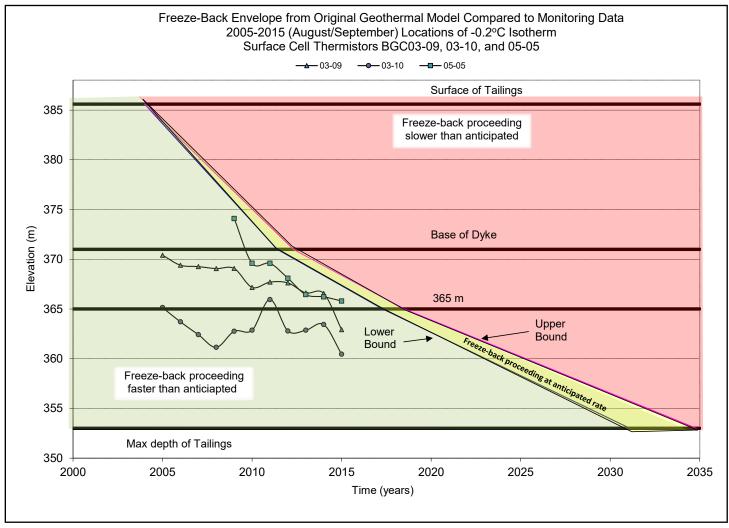
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SURFACE CELL TAILINGS COVER GEOTECHNICAL MONITORING DATA 1

DWG No.:

PROJ No.: 0255-026-03





| II       | SCALE:    | N/A      |   |
|----------|-----------|----------|---|
| e<br>I-  | DATE:     | MAR 2016 |   |
| s,<br>it | DESIGNED: | GKC      |   |
| d<br>n   | DRAWN:    | SG       |   |
| c        | CHECKED:  | GKC      | ( |
| d        | APPROVED: | GKC      |   |



nyrstar

PROJECT:

NANISIVIK MINE

2015 ANNUAL GEOTECHNICAL INSPECTION

TITLE:

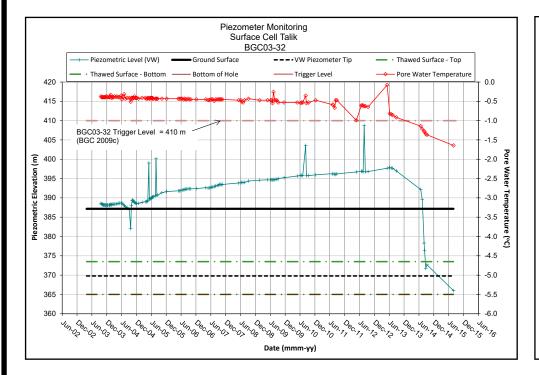
SURFACE CELL TAILINGS COVER

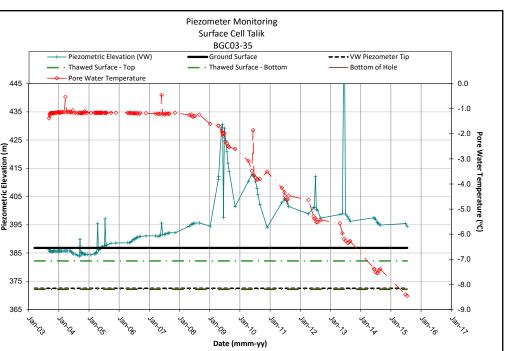
GEOTECHNICAL MONITORING DATA 2

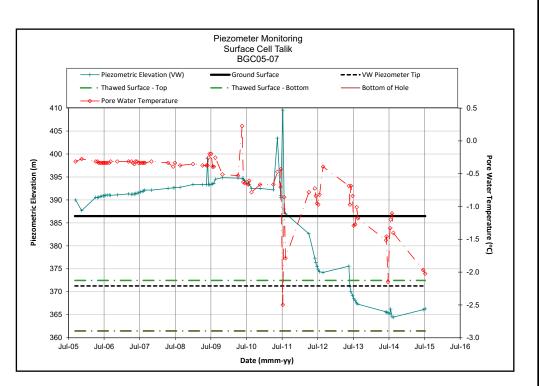
DWG No.: PROJ No.: R

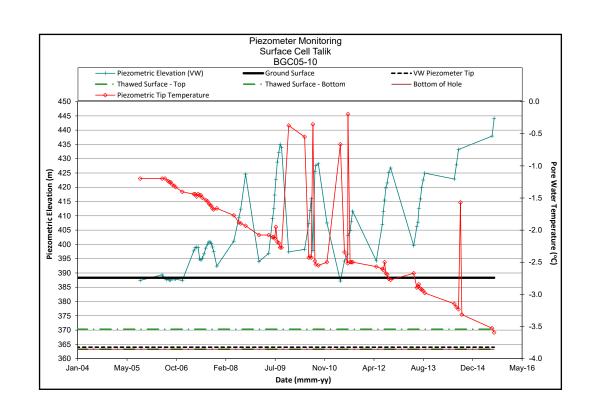
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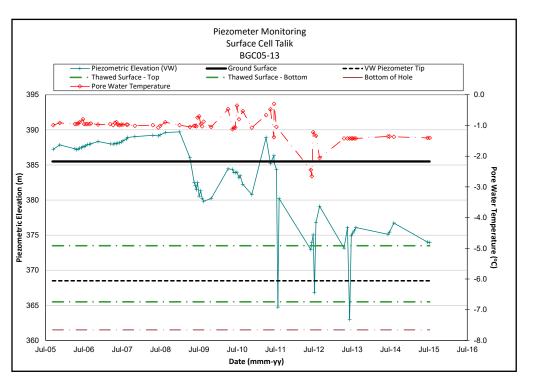
0255-026-03











N/A MAR 2016 DESIGNED: GKC DRAWN: SG CHECKED: GKC APPROVED: GKC

CLIENT:

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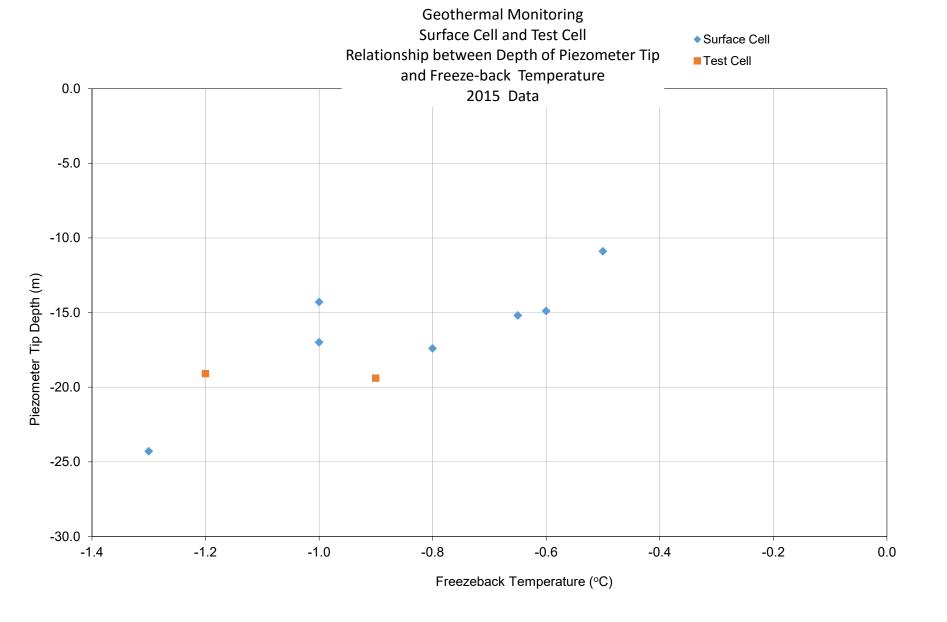
PROJECT: NANISIVIK MINE 2015 ANNUAL GEOTECHNICAL INSPECTION TITLE:

SURFACE CELL TAILINGS COVER **GEOTECHNICAL MONITORING DATA 3** 

DWG No.: 8

PROJ No.:

0255-026-03



DWG TO BE READ WITH BGC REPORT TITLED: "NANISVIK MINE 2015 GEOTECHNICAL INSPECTION", MAR 2016

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| SCALE:    | AS SHOWN |        |    |
|-----------|----------|--------|----|
| DATE:     | MAR 2016 |        |    |
| DESIGNED: | GKC      | R      | ſ  |
| DRAWN:    | SG       |        | U  |
| CHECKED:  | JWC      | CLIENT | Γ: |
| APPROVED: | GKC      |        |    |

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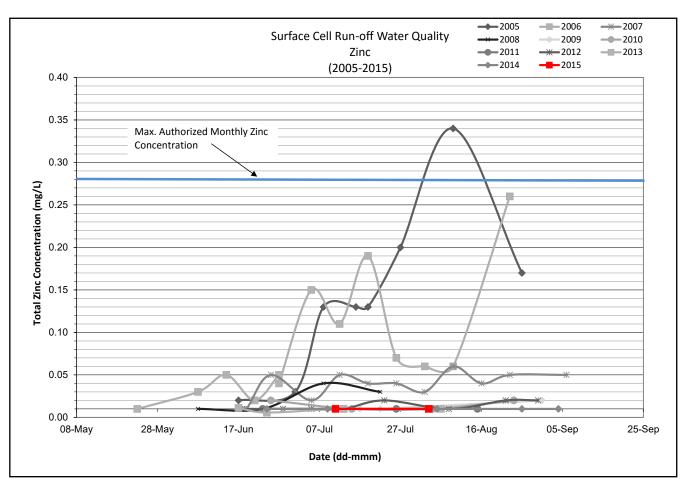
PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

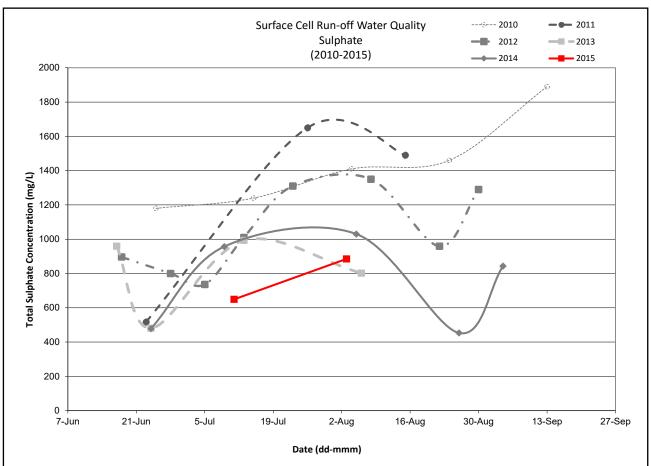
SURFACE CELL TAILINGS COVER GEOTECHNICAL MONITORING DATA 4

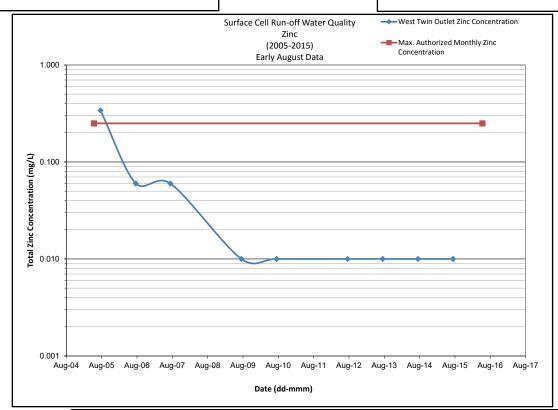
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DWG No.:

PROJ No.: 0255-026-03







N/A MAR 2016 DESIGNED: GKC DRAWN: SG CHECKED: GKC CLIENT: APPROVED: GKC

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PROJECT: NANISIVIK MINE 2015 ANNUAL GEOTECHNICAL INSPECTION TITLE:

SURFACE CELL TAILINGS COVER **GEOTECHNICAL MONITORING DATA 5** 

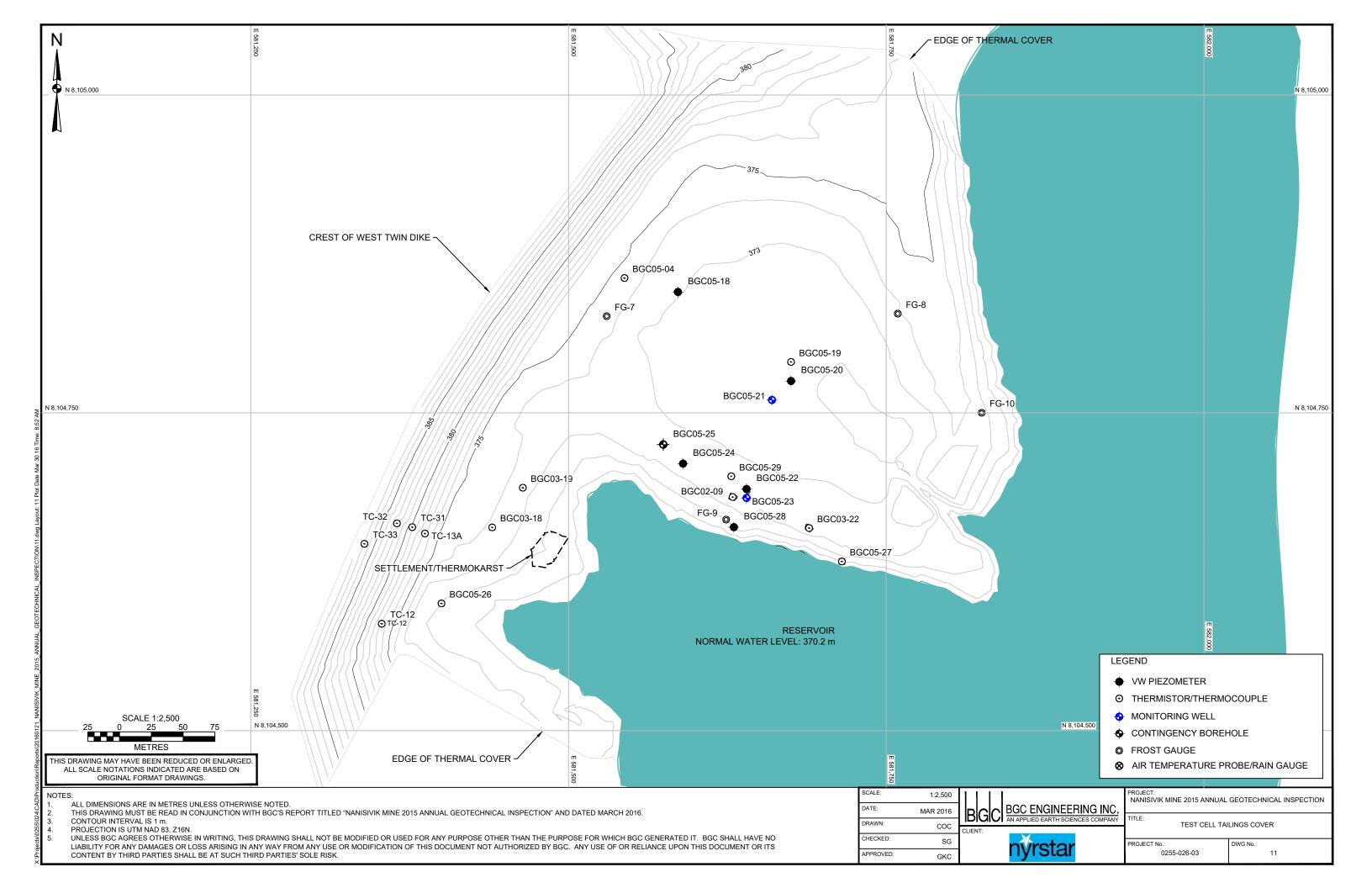
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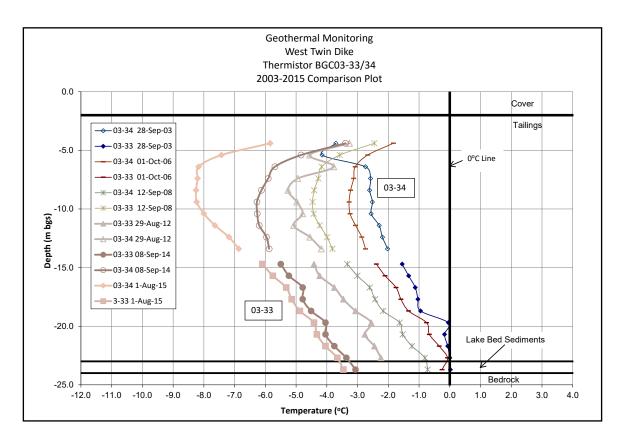
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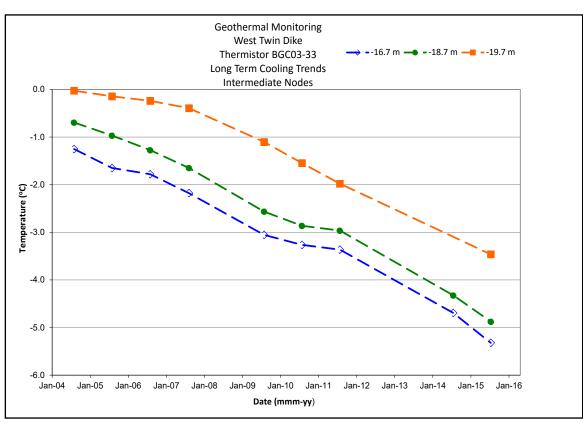
DWG TO BE READ WITH BGC REPORT TITLED: "NANISVIK MINE 2015 GEOTECHNICAL INSPECTION", MAR 2016

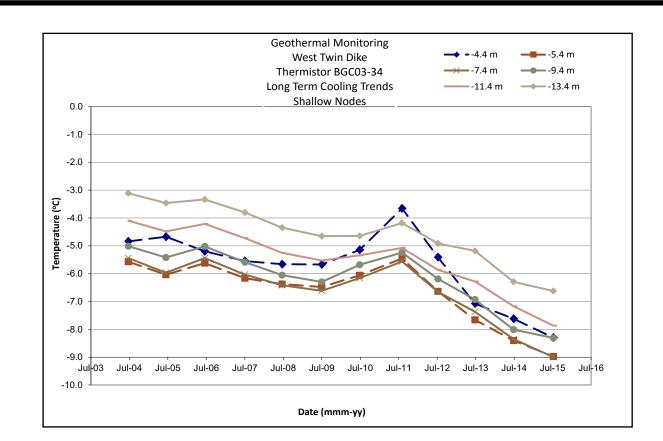
nyrstai

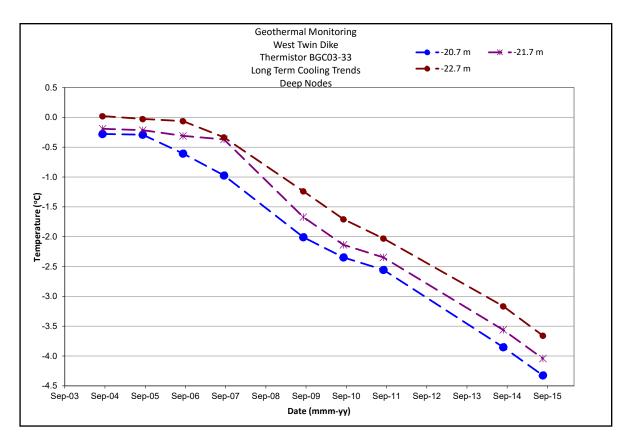
DWG No.: PROJ No.: 10











SCALE: N/A
DATE: MAR 2016
DESIGNED: GKC
DRAWN: SG
CHECKED: GKC
APPROVED: GKC

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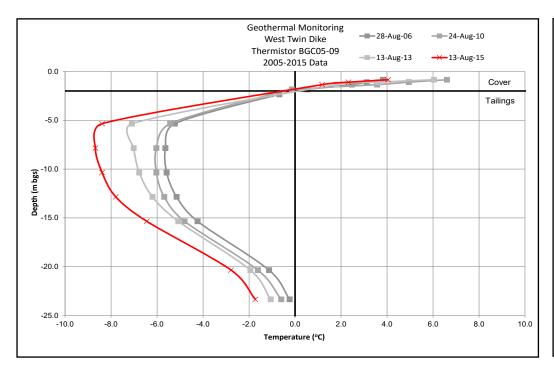
PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION
TITLE: WEST TWIN DIKE

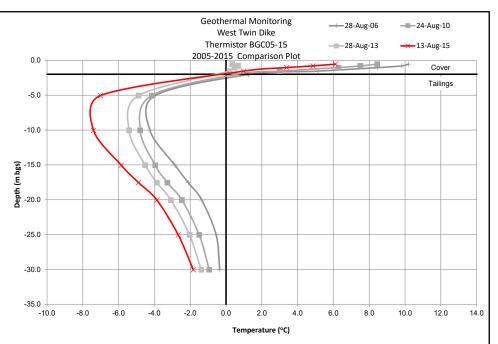
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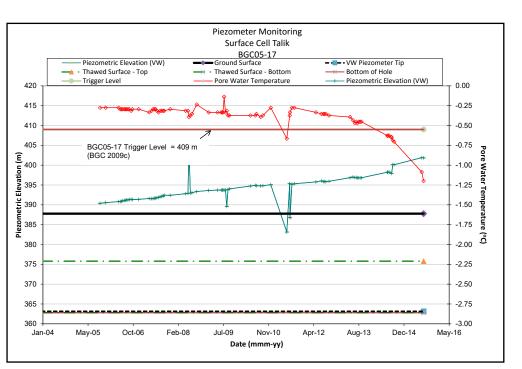
WEST TWIN DIKE GEOTECHNICAL MONITORING DATA 1

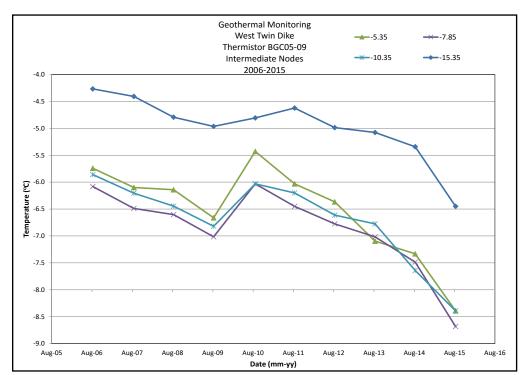
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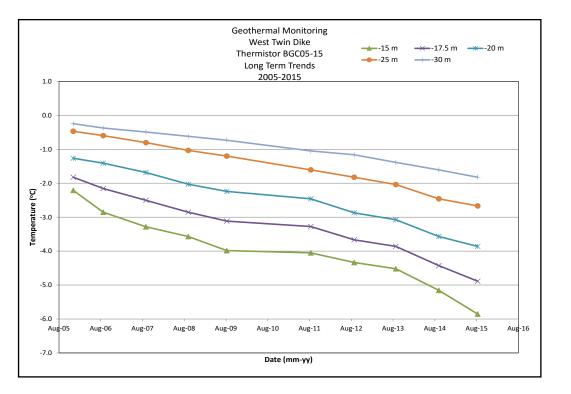
PROJ No.: 0255-026-03











N/A MAR 2016 GKC SG GKC APPROVED: GKC

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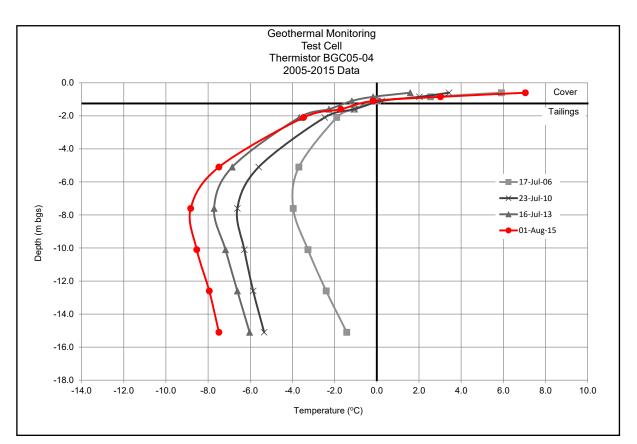
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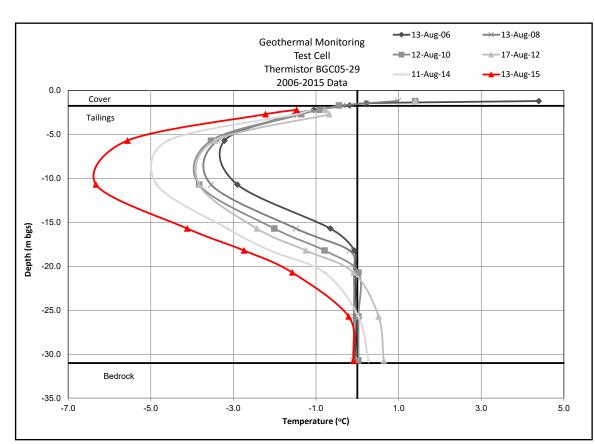
PROJECT: NANISIVIK MINE 2015 ANNUAL GEOTECHNICAL INSPECTION TITLE:

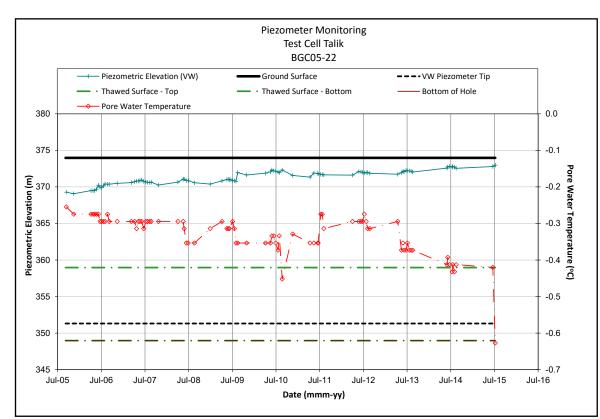
WEST TWIN DIKE GEOTECHNICAL MONITORING DATA 2

0255-026-03

DWG No.: REV: PROJ No.: 13







SCALE: N/A

DATE: MAR 2016

DESIGNED: GKC

DRAWN: SG

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APPROVED: GKC

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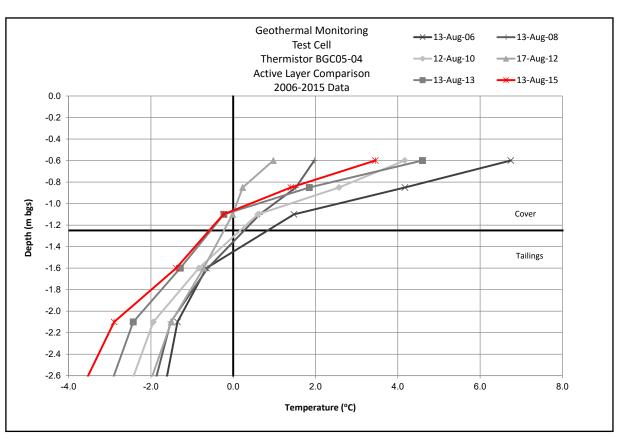
PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

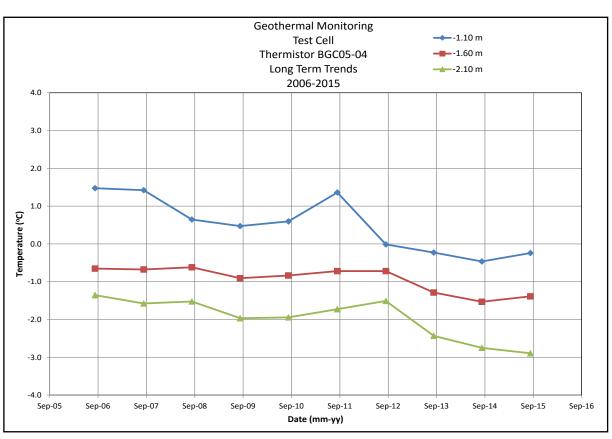
TITLE: TEST CELL TAILINGS COVER

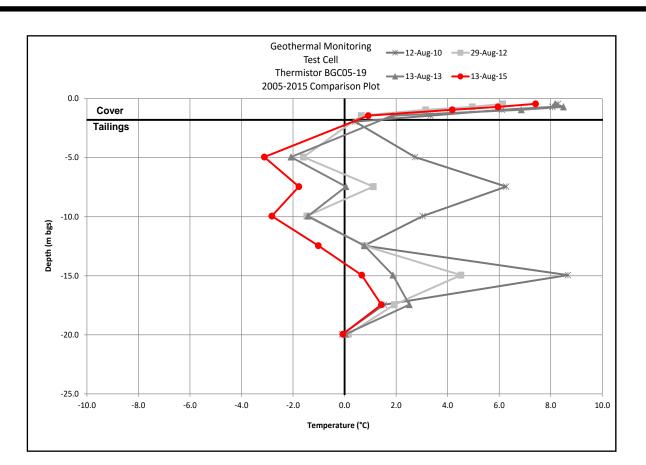
TEST CELL TAILINGS COVER GEOTECHNICAL MONITORING DATA 1

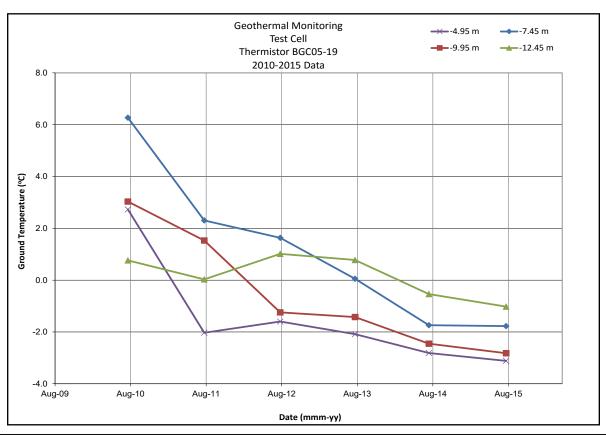
REV:

DWG No.: PROJ No.: 0255-026-03









SCALE: N/A

DATE: MAR 2016

DESIGNED: GKC

DRAWN: SG

CHECKED: GKC

APPROVED: GKC

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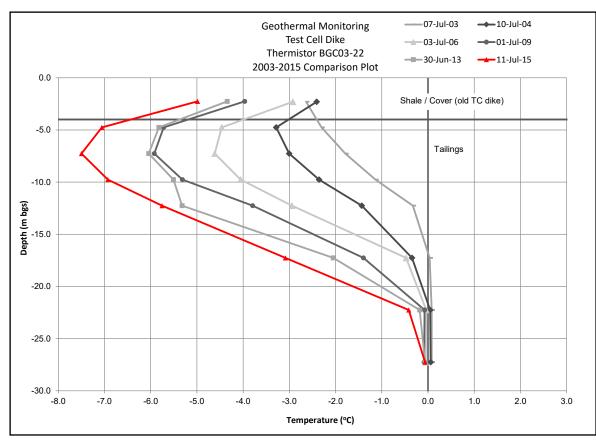
PROJECT: NANISIVIK MINE

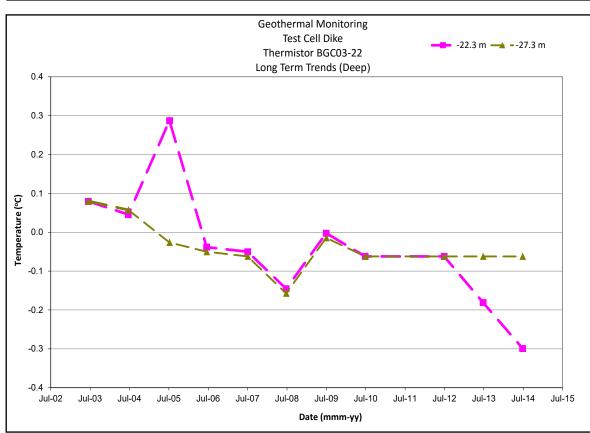
2015 ANNUAL GEOTECHNICAL INSPECTION

TITLE: TEST CELL TAILINGS COVER

TEST CELL TAILINGS COVER GEOTECHNICAL MONITORING DATA 2

DWG No.: PROJ No.: REV: 0255-026-03





| SCALE:    | N/A      |    |      |
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| DATE:     | MAR 2016 |    |      |
| DESIGNED: | GKC      |    | R    |
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| APPROVED: | GKC      |    |      |

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PROJECT: NANISIVIK MINE 2015 ANNUAL GEOTECHNICAL INSPECTION

TEST CELL DIKE

0.0

-0.5

-1.0

-1.5

-2.0

-2.5 Å

-3.0 Ĉ

-3.5

-4.0

0.0

-1.0

-2.0

-3.0

-4.0

-5.0

-6.0

-7.0

450

440

430

€ 420

€ 410

400

390

380

370

Piezometric Elevation (VW)

→ Pore Water Temperature

• Thawed Surface - Top

DWG TO BE READ WITH BGC REPORT TITLED: "NANISVIK MINE 2015 GEOTECHNICAL INSPECTION", MAR 2016

TITLE: GEOTECHNICAL MONITORING DATA DWG No.: PROJ No.: REV: nyrsta 16 0255-026-03

**Geothermal Monitoring** 

Test Cell Dike

Thermistor BGC03-22

Long Term Trends (Shallow)

Jul-02 Jul-03 Jul-04 Jul-05 Jul-06 Jul-07 Jul-08 Jul-09 Jul-10 Jul-11 Jul-12 Jul-13 Jul-14 Jul-15

Date (mmm-yy)

Piezometer Monitoring

Test Cell Talik

BGC05-24

Date (August 2015)

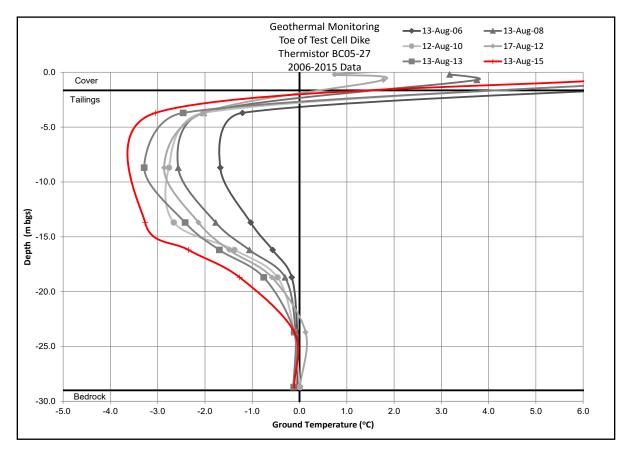
• Thawed Surface - Bottom

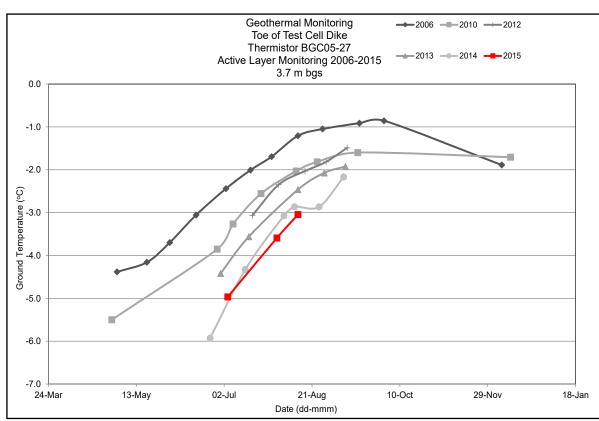
Ground Surface

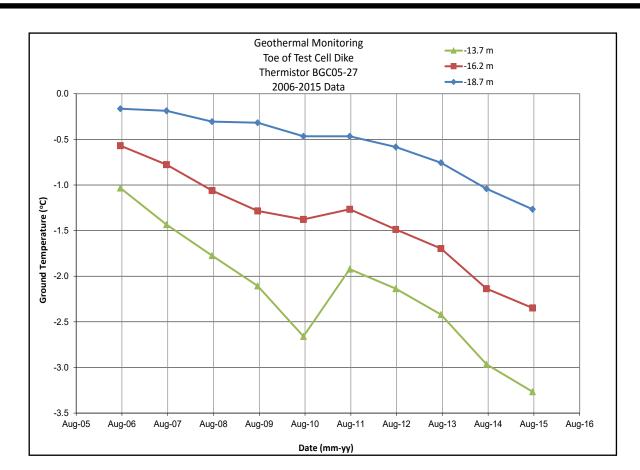
→ --12.3 m → --17.3 m

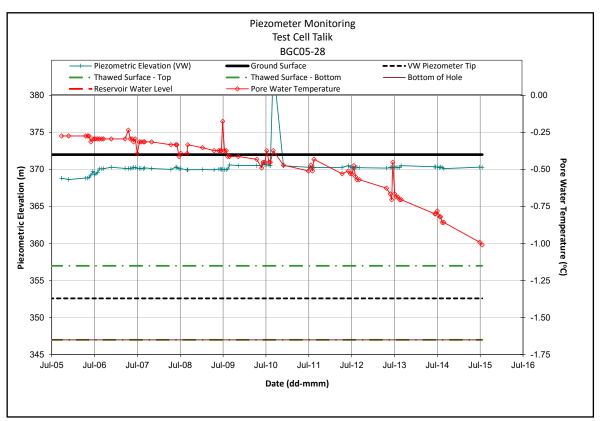
----VW Piezometer Tip

----- Bottom of Hole









| all<br>or- | SCALE:    | N/A      |        |
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| se<br>u-   | DATE:     | MAR 2016 |        |
| js,<br>out | DESIGNED: | GKC      | R      |
| ed<br>an   | DRAWN:    | SG       |        |
| at<br>nic  | CHECKED:  | GKC      | CLIENT |
| ed         | APPROVED: | GKC      |        |

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PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

TITLE: TOE OF TEST CELL DIKE TAILINGS COVER

TOE OF TEST CELL DIKE TAILINGS COVER GEOTECHNICAL MONITORING DATA

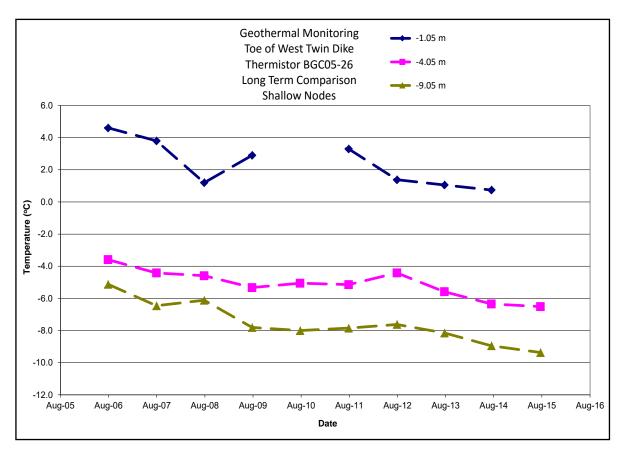
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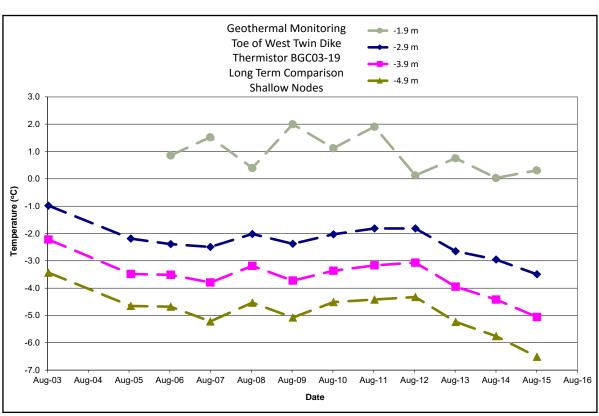
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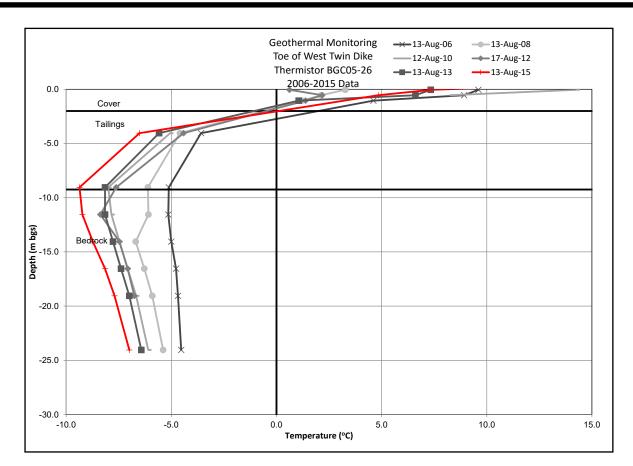
PROJ No.:

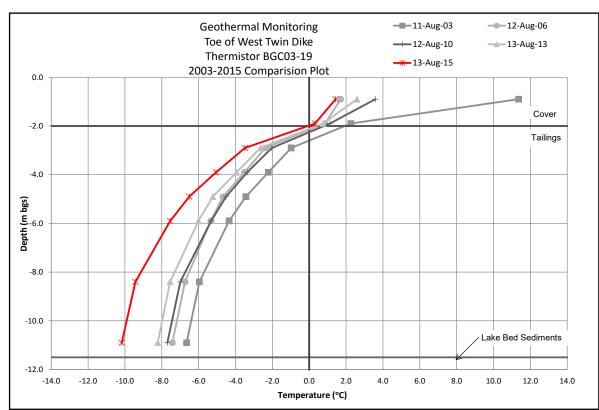
DWG No.:

DWG TO BE READ WITH BGC REPORT TITLED: "NANISVIK MINE 2015 GEOTECHNICAL INSPECTION", MAR 2016









SCALE: N/A
DATE: MAR 2016
DESIGNED: GKC
DRAWN: SG
CHECKED: GKC
APPROVED: GKC

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PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

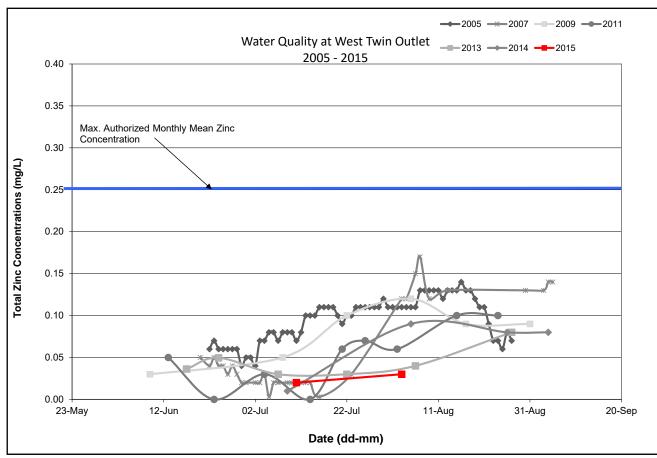
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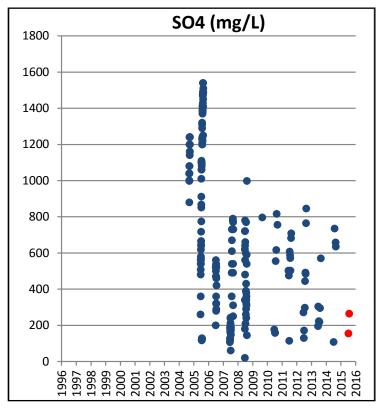
TOE OF WEST TWIN DIKE TAILINGS COVER GEOTECHNICAL MONITORING DATA

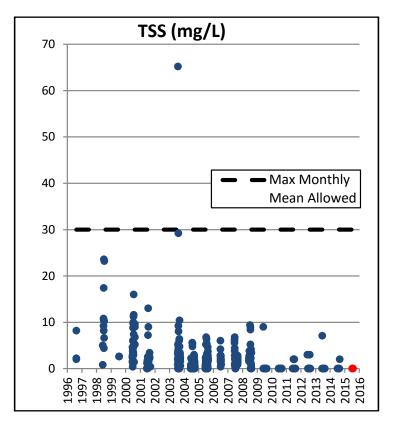
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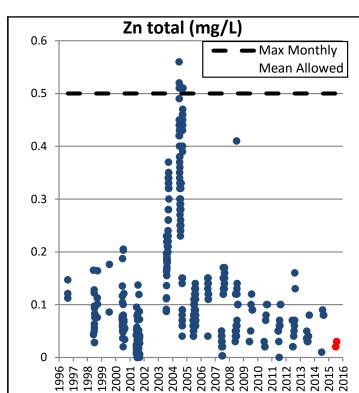
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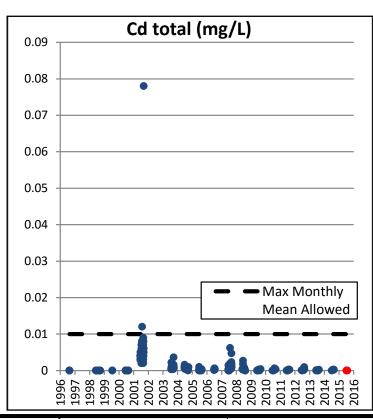
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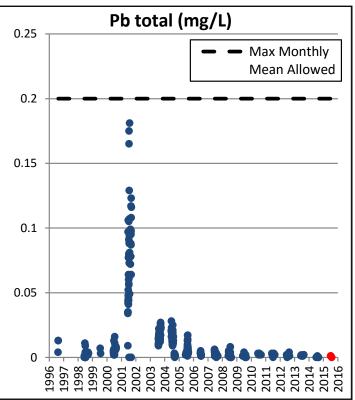












\*Water Quality data supplied by Stantec by email to BGC on November 26, 2015. \*Data points represent individual water samples, and may not be representative of the

true annual maximum concentrations.

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N/A DATE: MAR 2016 DESIGNED: GKC SG CHECKED: GKC APPROVED: GKC

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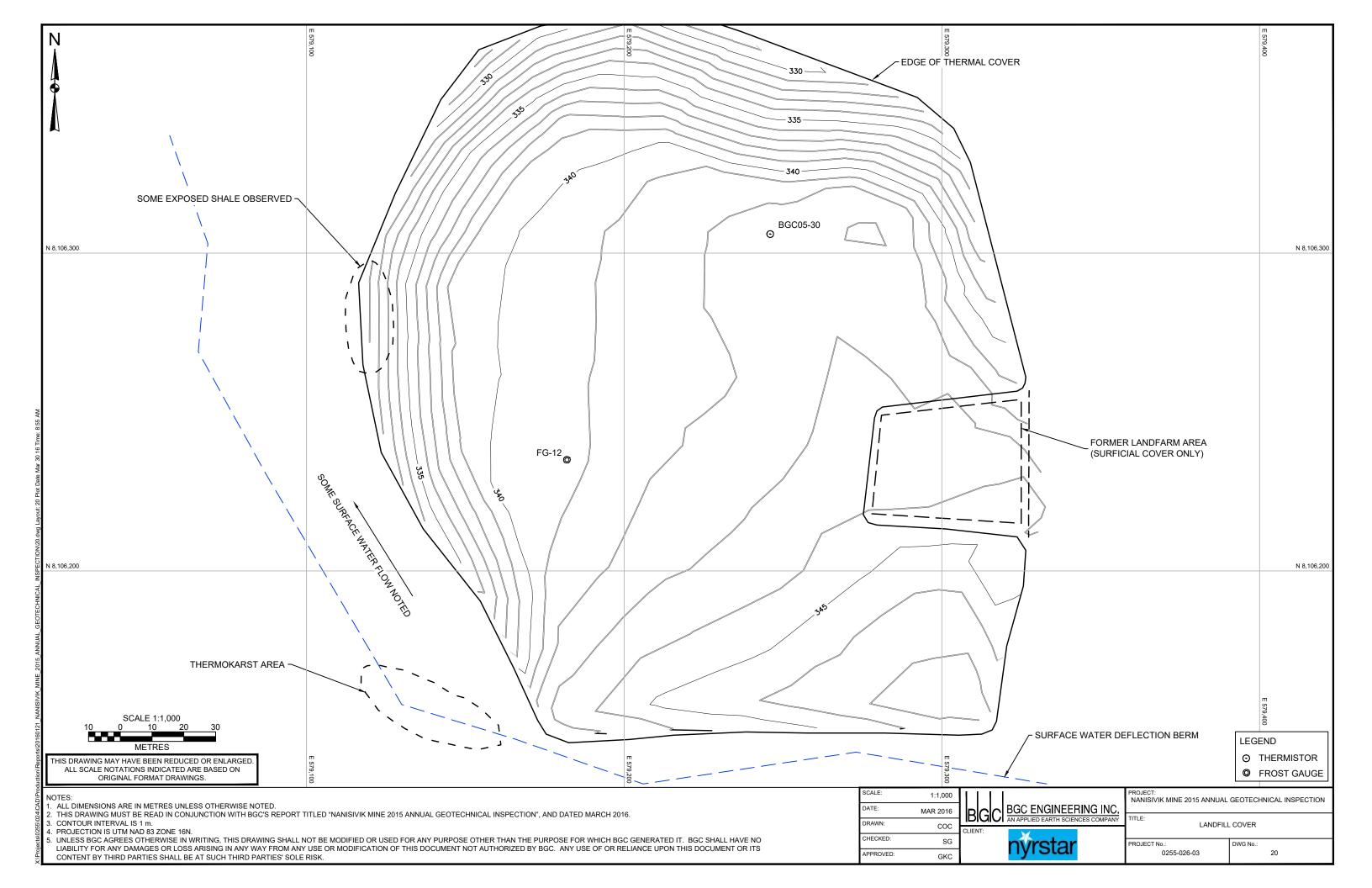
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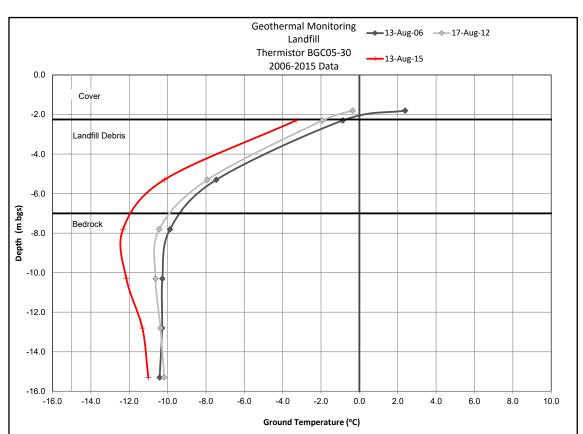
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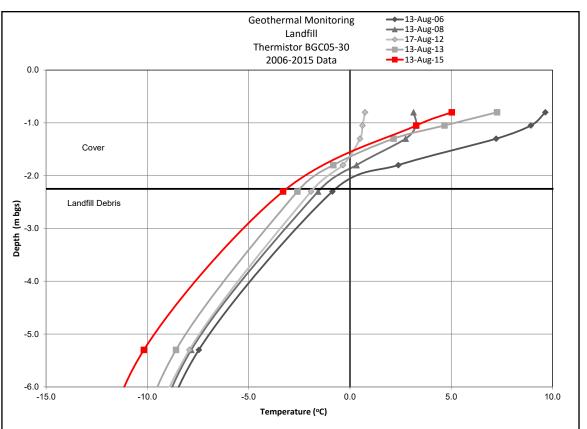
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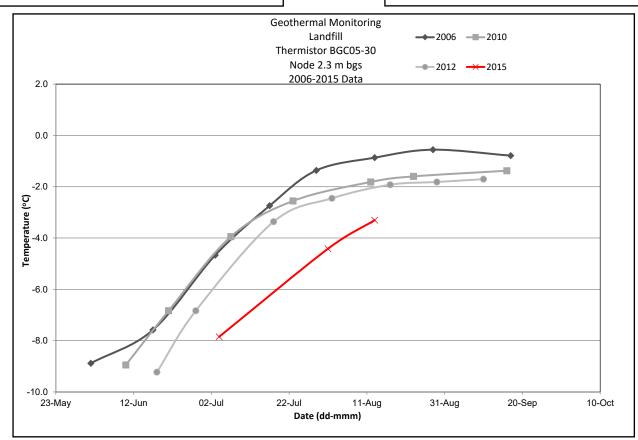
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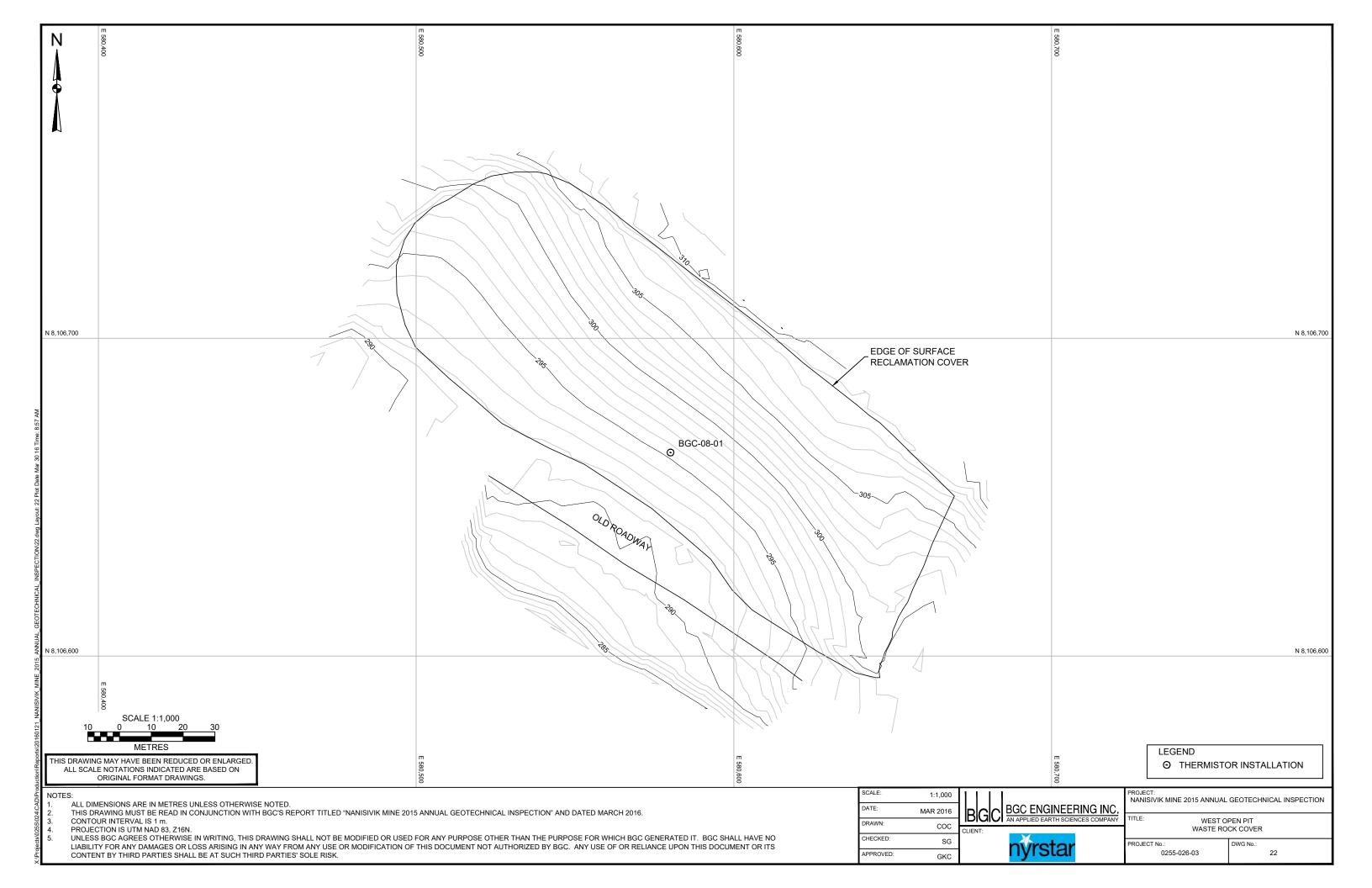
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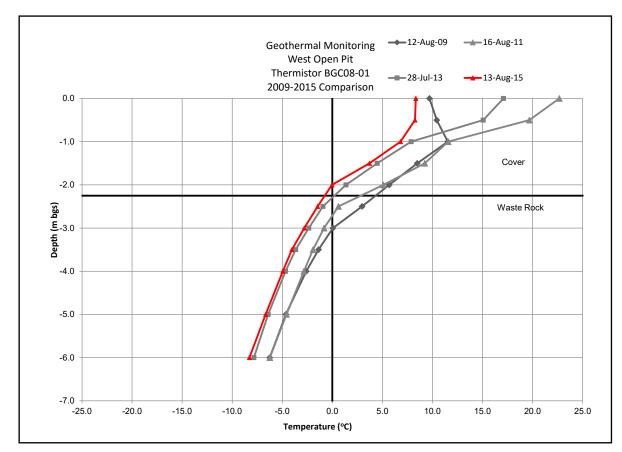
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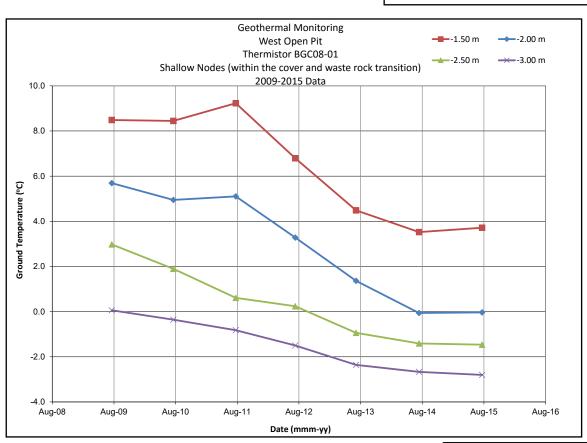
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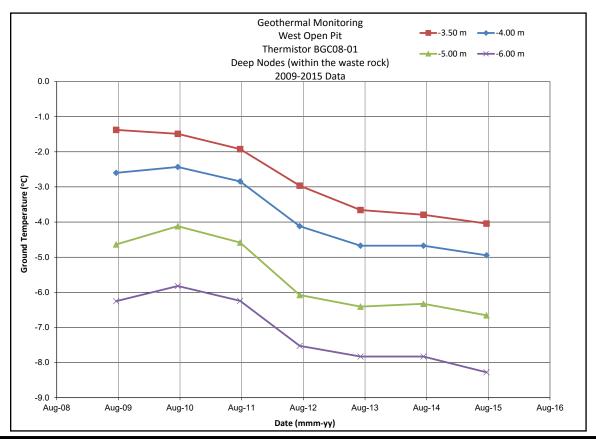
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SCALE: N/A
DATE: MAR 2016
DESIGNED: GKC
DRAWN: SG
CHECKED: GKC
APPROVED: GKC

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PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

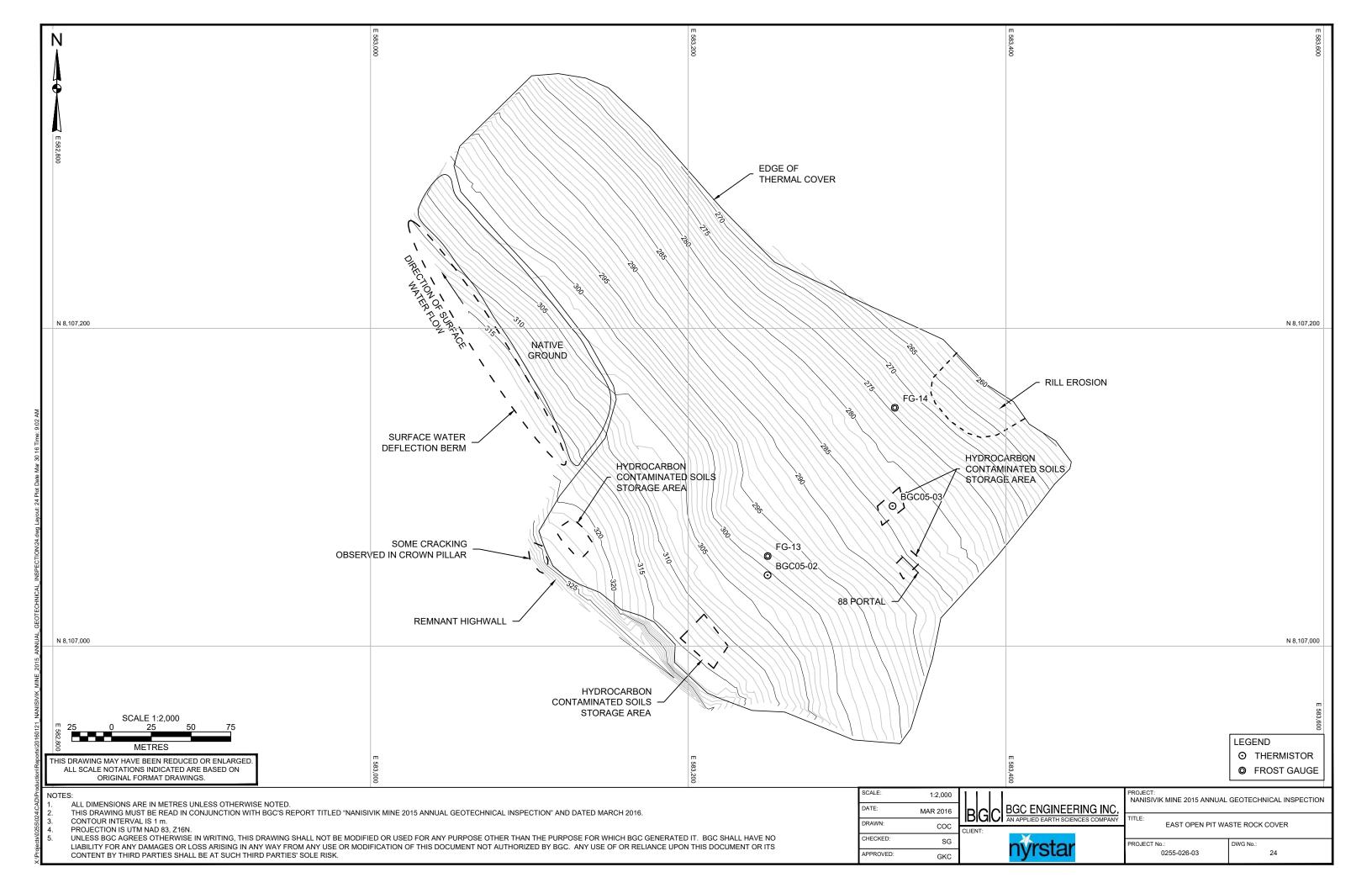
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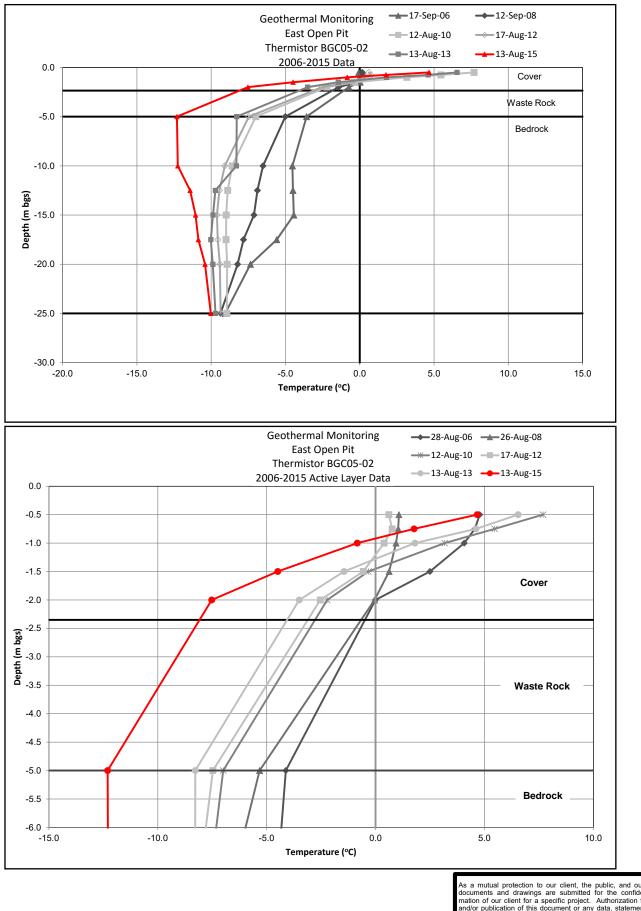
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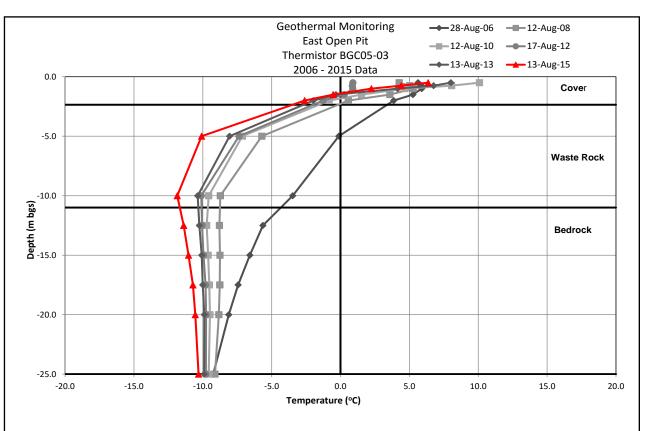
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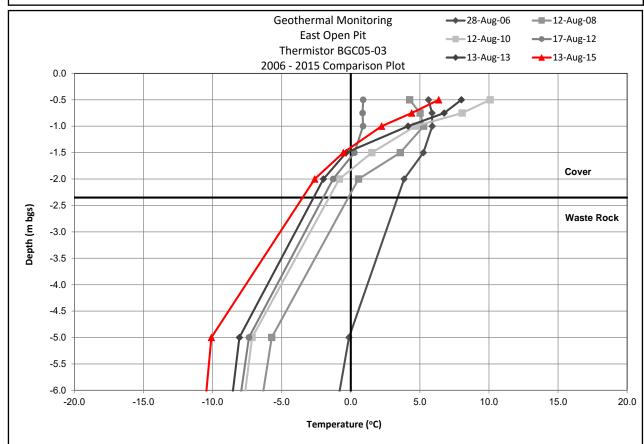
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SCALE: N/A
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PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

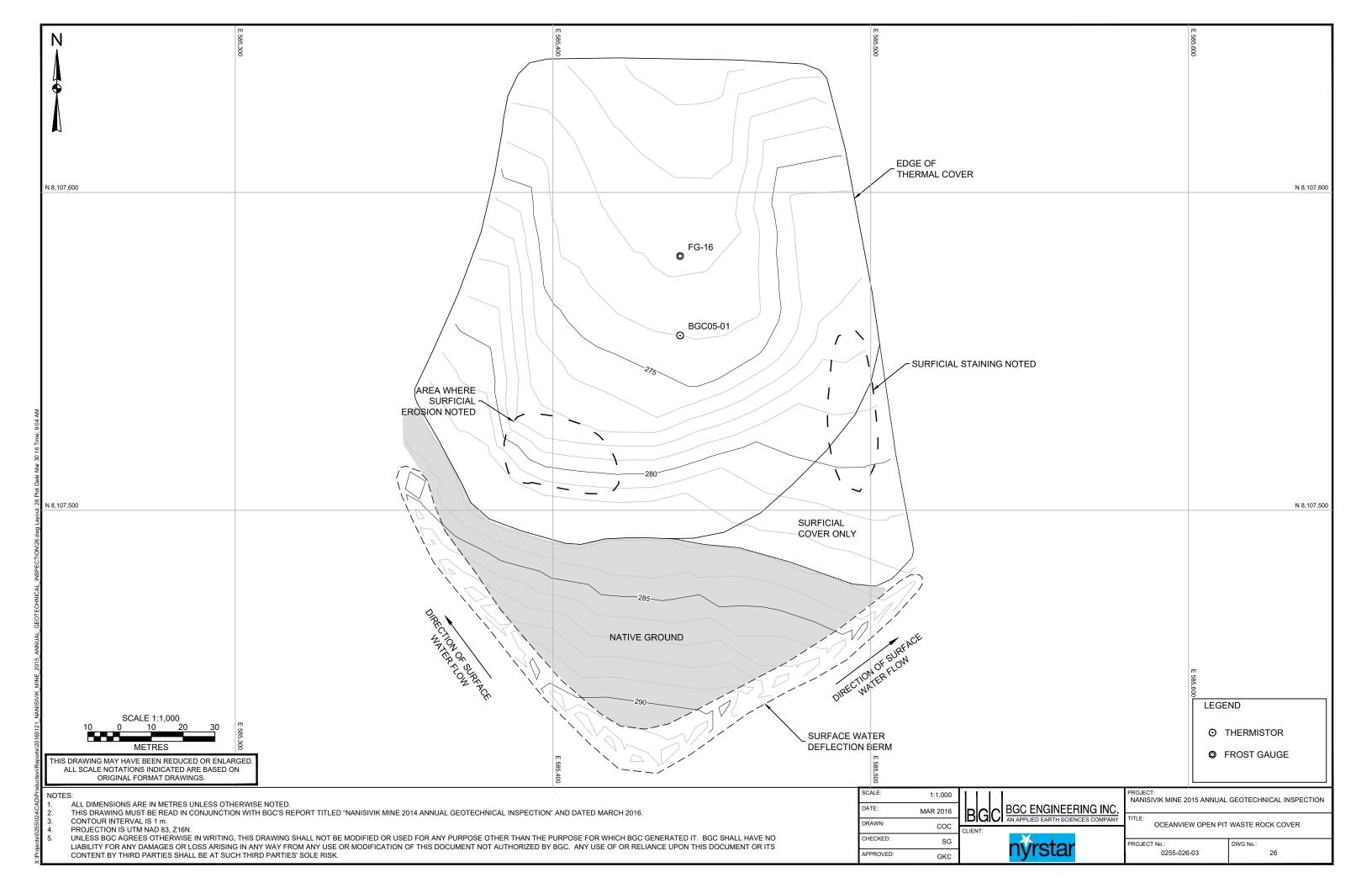
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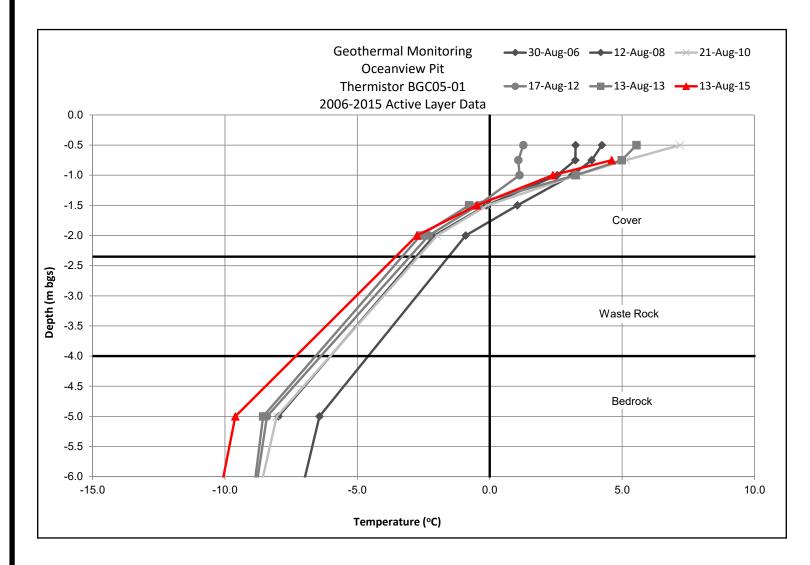
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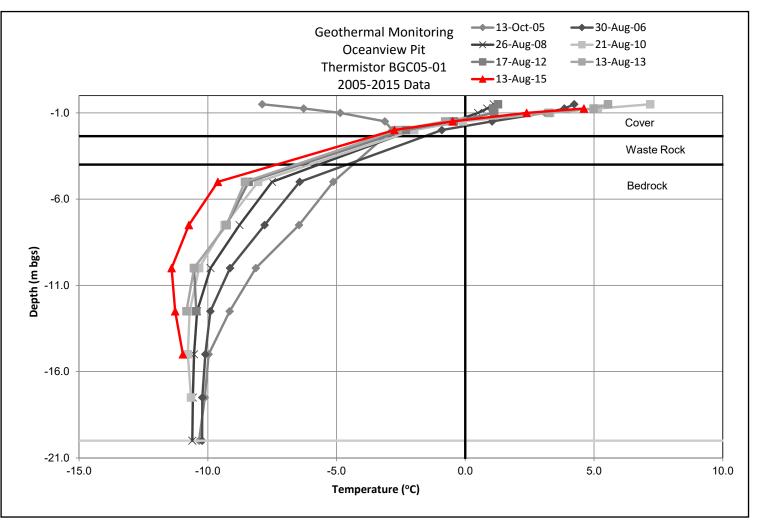
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| DATE:     | MAR 2016 |
| DESIGNED: | GKC      |
| DRAWN:    | SG       |
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PROJECT:
NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

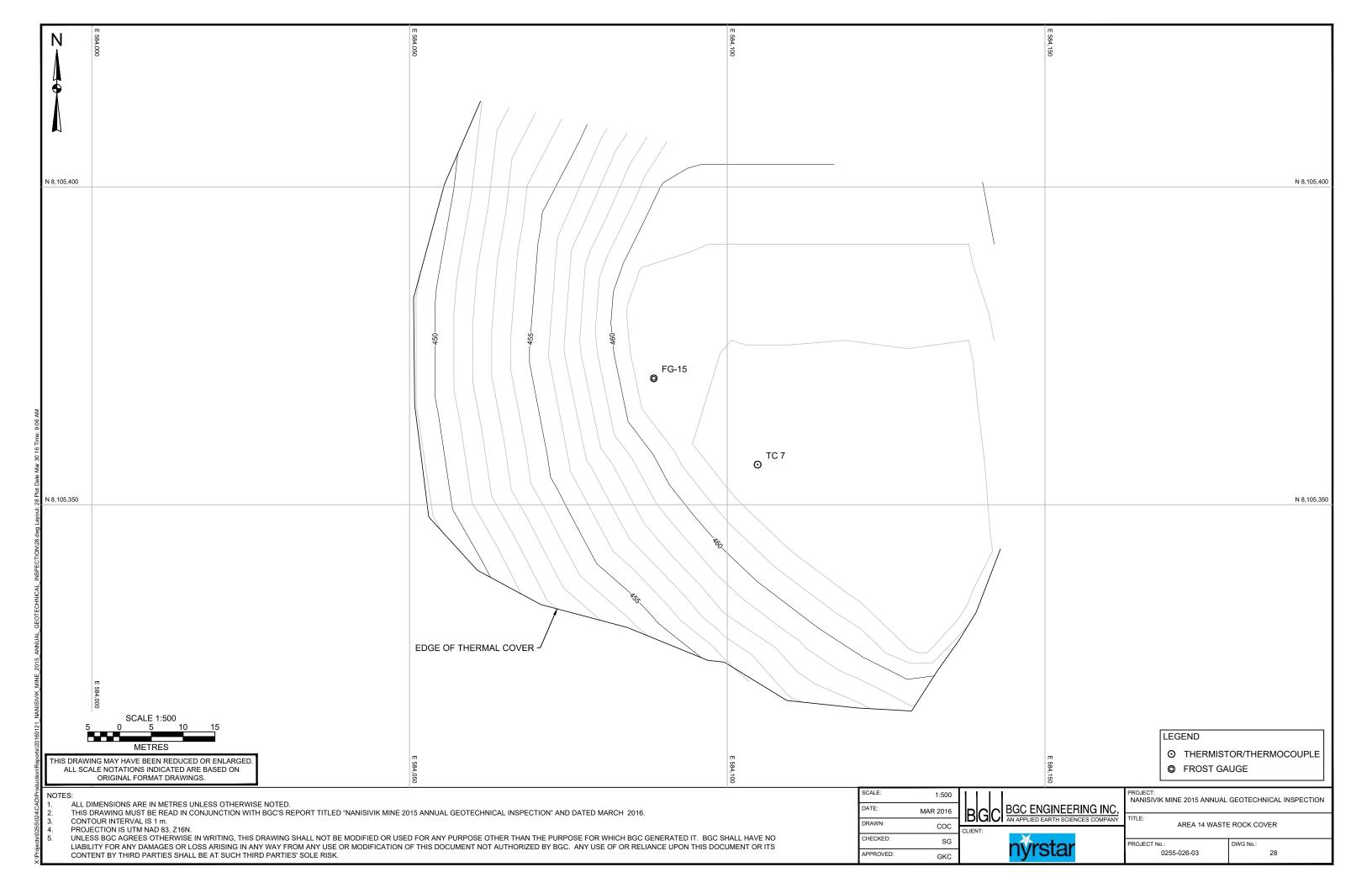
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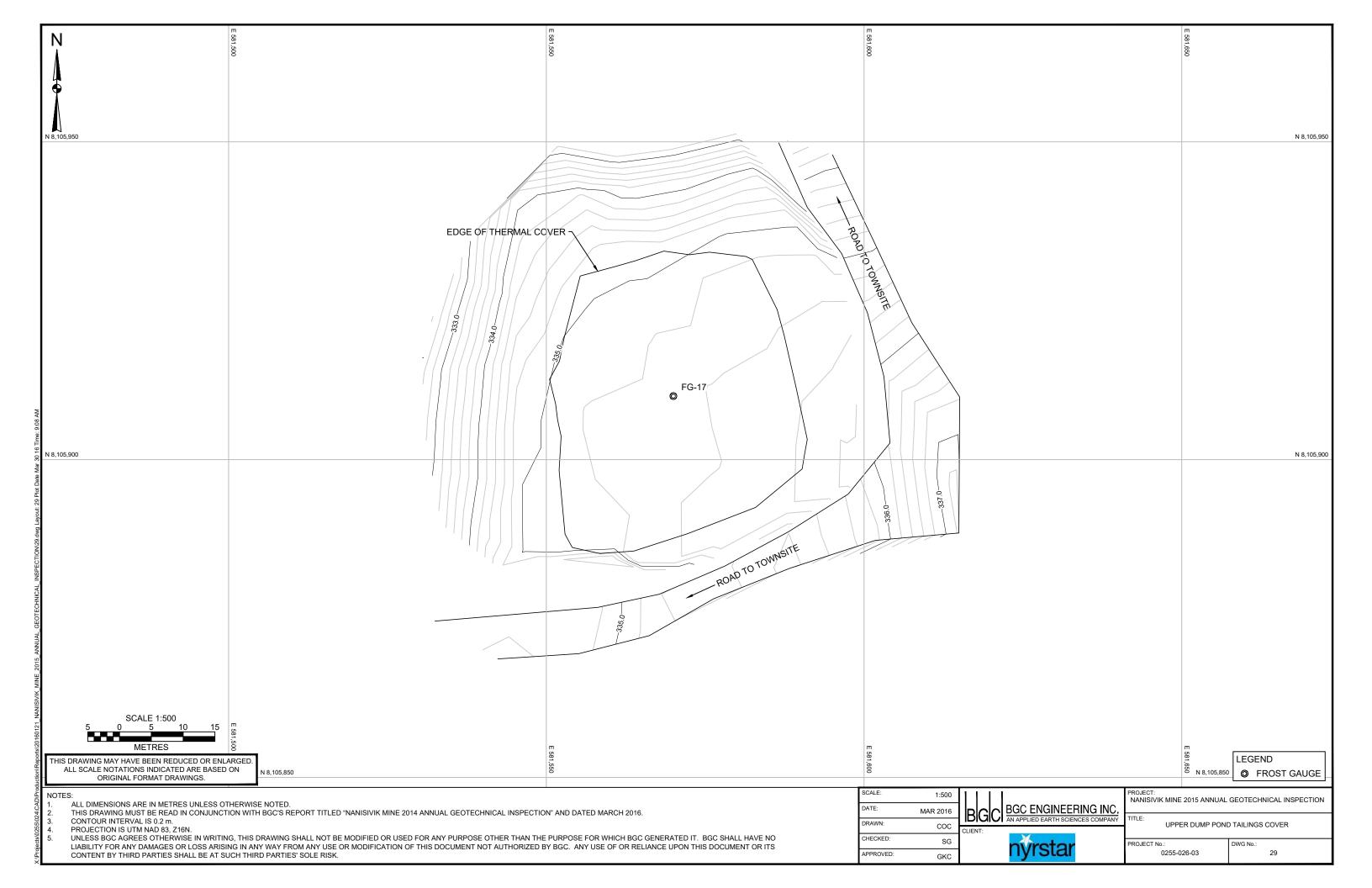
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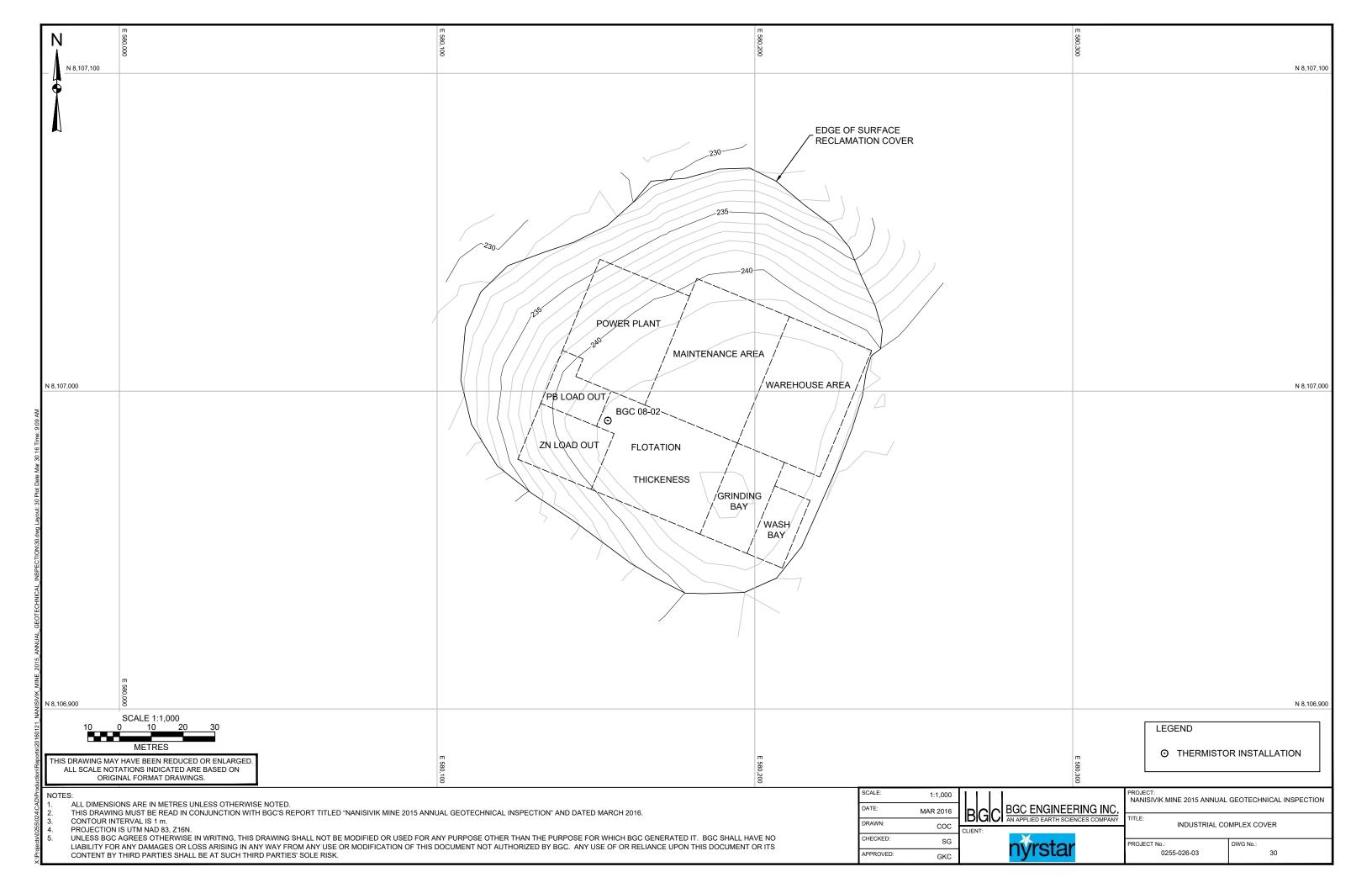
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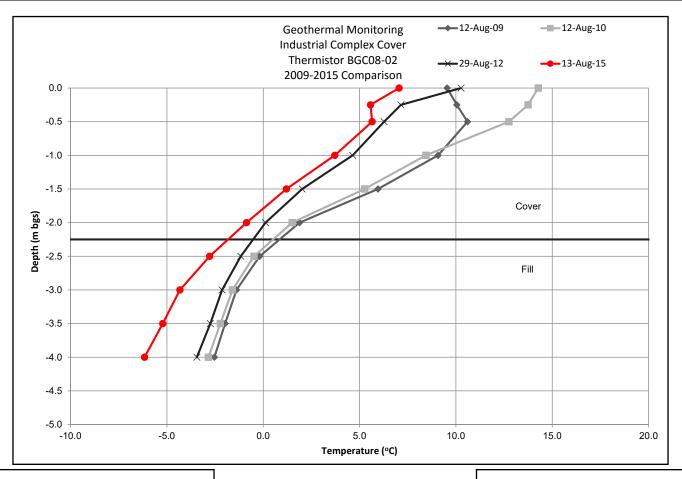
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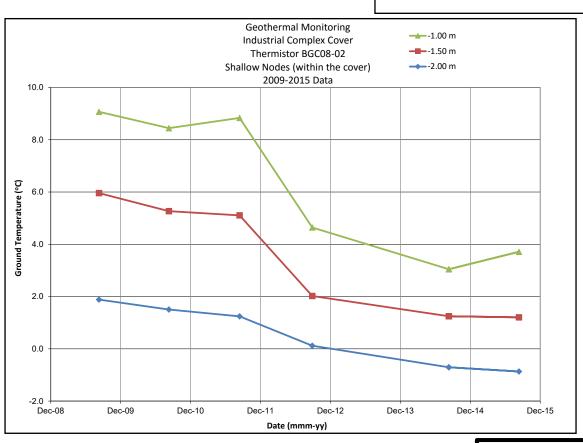
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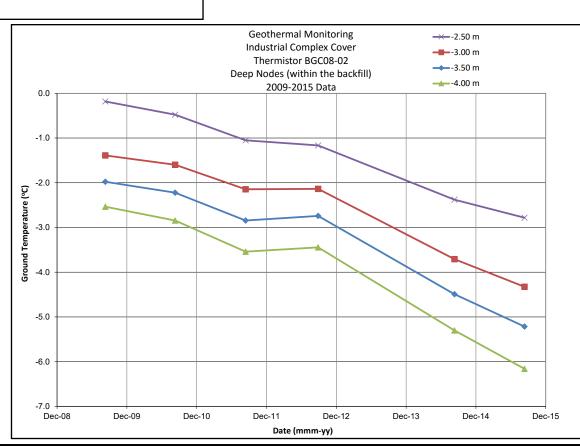












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DRAWN: SG
CHECKED: GKC
APPROVED: GKC

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PROJECT: NANISIVIK MINE
2015 ANNUAL GEOTECHNICAL INSPECTION

TITLE: INDUSTRIAL COMPLEX COVER

INDUSTRIAL COMPLEX COVER GEOTECHNICAL MONITORING DATA

0255-026-03

REV:

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DWG No.: PROJ No.:

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DWG TO BE READ WITH BGC REPORT TITLED: "NANISVIK MINE 2015 GEOTECHNICAL INSPECTION", MAR 2016