

TECHNICAL MEMO

EBA, A Tetra Tech Company
Calcite Business Centre, Unit 6, 151 Industrial Road
Whitehorse, YT Y1A 2V3 CANADA
p. 867.668.3068 f. 867.668.4349

ISSUED FOR USE

TO: Katherine Penney
C: Vanessa Benwood
FROM: Justin Pigage, EIT
DATE: February 16, 2012
MEMO NO.: 008
EBA FILE: W14101696

SUBJECT: DSTF Instrumentation and Construction Monitoring
Keno Hill District Mill Site

1.0 INTRODUCTION

Alexco Resource Corp (Alexco) retained EBA, A Tetra Tech Company (EBA) to observe construction and operation activities associated with the Dry Stacked Tailings Facility (DSTF) at the Keno Hill District Mill Site. Activities related to the DSTF are to be carried out in accordance with the following documents:

- Operation, Maintenance, and Surveillance Manual, Dry Stack Tailings Facility, Keno Hill District Mill, YT
- Quarter 1 Tailings Placement Provisions, Keno Hill District Mill Site, Yukon
- Runoff Diversion Structure Specs, Dry Stacked Tailings Facility, Keno Hill District Mill, YT
- Detailed Design, Dry Stacked Tailings Facility, Keno Hill District Mill Site, Yukon

This memo summarizes the on-going monitoring of the DSTF completed by EBA on February 7, 2012.

2.0 WORK COMPLETED

EBA conducted 12 compaction tests on the DSTF during the February, 2012 visit. The compaction results including the UTM coordinates and elevations (NAD83 datum) of each test are attached to this memo. Test locations were recorded with a handheld GPS receiver accurate to within 5 m horizontally, and unknown accuracy vertically.

EBA has been collecting ground temperature cable (GTC) readings since November 2009 and slope indicator (SI) readings since September 2010 at the DSTF. During the site visit, EBA collected GTC readings from boreholes BH15, BH17, BH18, BH23, BH31, and BH32 and SI readings from boreholes BH28, BH30, and BH36. Current GTC and slope indicator readings are attached to this memo.

Only a partial set of SI readings were collected from BH28 during the site visit because water had entered the installation and the SI pipe was frozen / closed at a depth of approximately 11 m. The source of the water is unknown at this time. During a future site inspection, when weather conditions are more favourable, the installation should be steamed out and monitored for water accumulation on a daily basis. If water continues to accumulate in the installation, a brine solution that will remain unfrozen below 0°C may be required within the SI pipe to allow for data collection.

3.0 DISCUSSION

Four compaction tests (059 through 062) conducted in the region of the DSTF shown in the attached Photo 1 did not initially meet the compaction specification of 95% of maximum dry density. Compaction testing was completed before the loader began hauling tailings from the mill to the DSTF. After the loader was finished for the day, the deficient areas were retested and the specified compaction was achieved. It is believed that the loader traffic provided enough compactive effort in the deficient areas to obtain the required compaction. Loader traffic, although sufficient in this case, is not a suitable substitute for proper compactive effort with the appropriate compaction equipment. The majority of the remaining compaction tests met or exceeded the specified requirements. EBA understands it is difficult to achieve proper compaction, especially during the winter months in freezing temperatures, but adequate compaction is necessary to maintain the stability of the DSTF.

Ongoing GTC and slope indicator readings provide a baseline for the site and monitor any changes during DSTF construction and operation. To date, no readings requiring additional review have been recorded.

4.0 CLOSURE

The next site visit is scheduled for the middle of March; dates will be confirmed with Alexco site personnel.

We trust this memo meets your present requirements. Should you have any questions or comments, please contact us.

COMPACTION DENSITY TEST SUMMARY REPORT

ASTM Designation D2922 & D3017

Project: Dry Stacked Tailings Facility **Test Apparatus:** Nuclear **Troxler No:** 63325
Keno Hill District Mill Site **Specified Compaction:** 95 % Std. Proctor Max. Dry Density
Project No.: W14101696 **Specified Moisture (MC):** _____
Client: Alexco Resource Corp **Temperature** **Air:** -5 °C **Soil:** _____ °C
Attention: Katherine Penney **Date Tested:** See Below **By:** JTP
Contractor: Alexco Resource Corp **Construction Period:** _____

Soil Description: Tailings (2080@ 13%)

Material Usage/Zone: _____

Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/02/07	59 150	N 7086943 E 483946	911	1670	16.0	2080	13	80.3
	60 150	N 7086953 E 483945	911	1750	16.0	2080	13	84.1
	61 150	N 7086955 E 483951	911	1735	16.0	2080	13	83.4
	62 150	N 7086964 E 483954	911	1725	16.0	2080	13	82.9
	63 150	RETEST 59	911	1992	16.0	2080	13	95.8
	64 150	RETEST 60	911	1983	16.0	2080	13	95.3
	65 150	RETEST 61	911	1887	16.0	2080	13	90.7
	66 150	RETEST 62	911	1971	16.0	2080	13	94.8
	67 150	N 7086970 E 483954	912	2041	16.0	2080	13	98.1
	68 150	N 7086953 E 483975	920	1917	16.0	2080	13	92.2
	69 150	N 7086949 E 483983	920	1952	16.0	2080	13	93.8
	70 150	N 7086947 E 483991	920	1900	16.0	2080	13	91.3

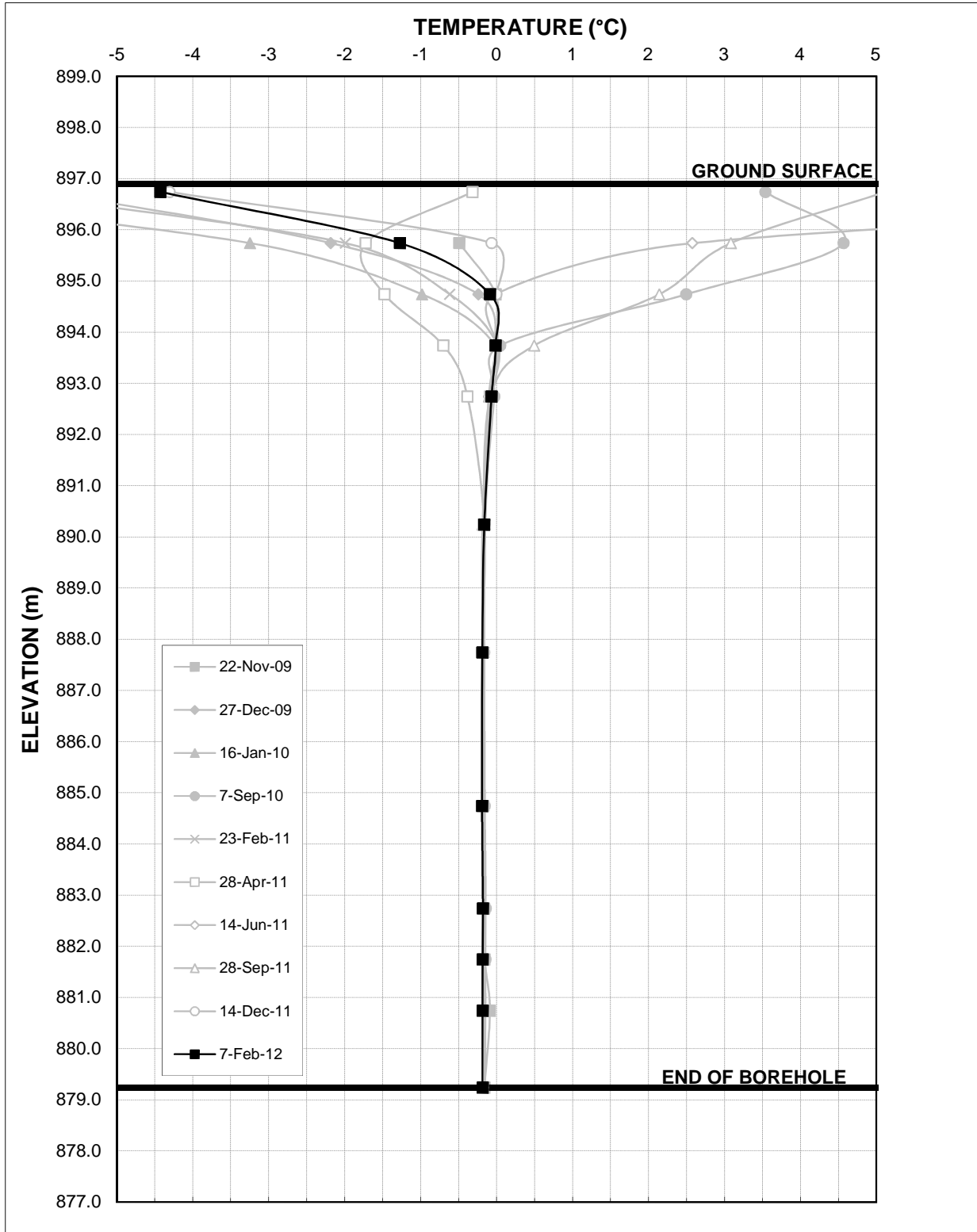
Remarks: Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

Reviewed By: _____

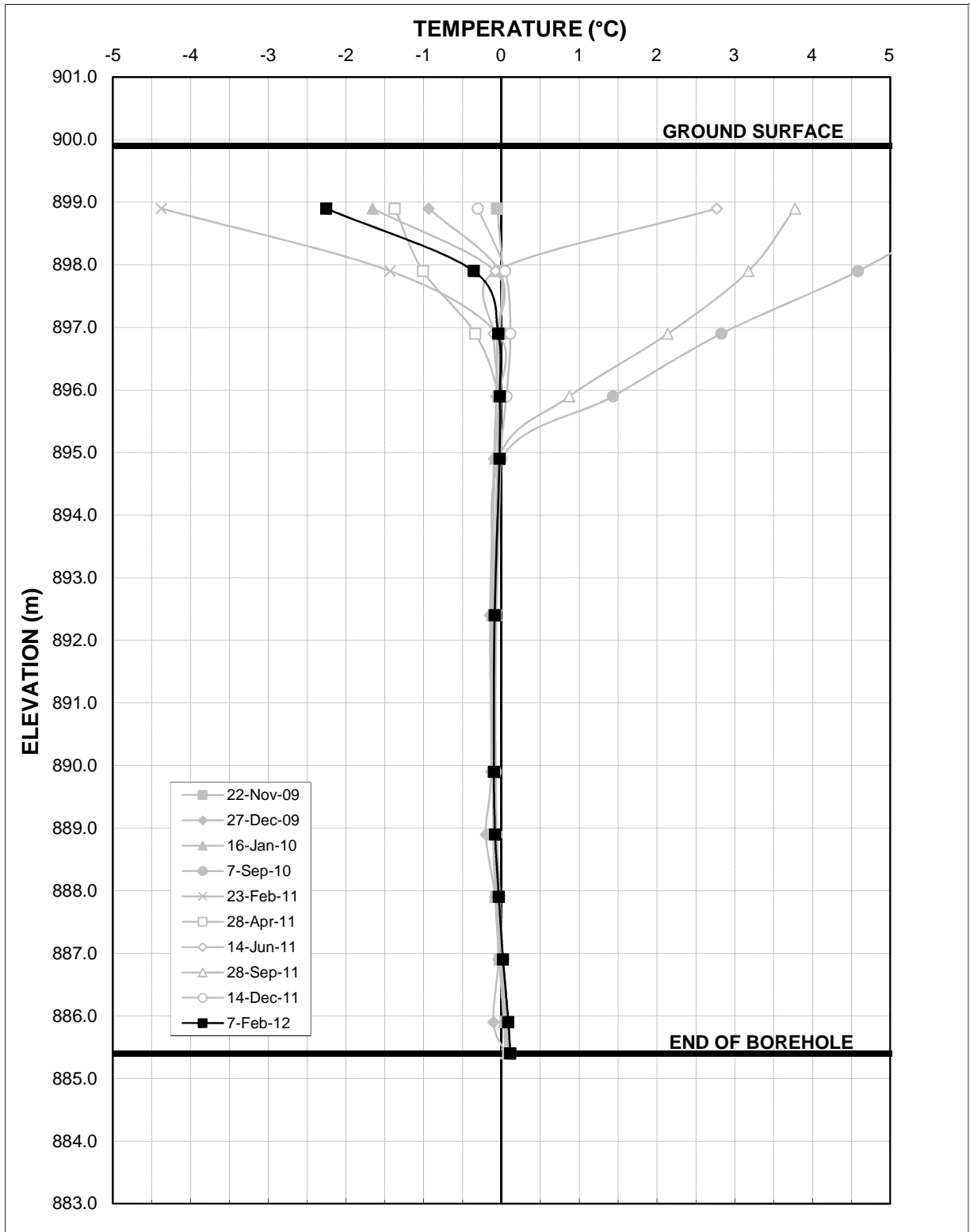
Data presented hereon is for the sole use of the stipulated client. EBA is not responsible, nor can be held liable, for use made of this report by any other party, with or without the knowledge of EBA. The testing services reported herein have been performed by an EBA technician to recognized industry standards, unless otherwise noted. No other warranty is made. These data do not include or represent any interpretation or opinion of specification compliance or material suitability. Should engineering interpretation be required, EBA will provide it upon written request.





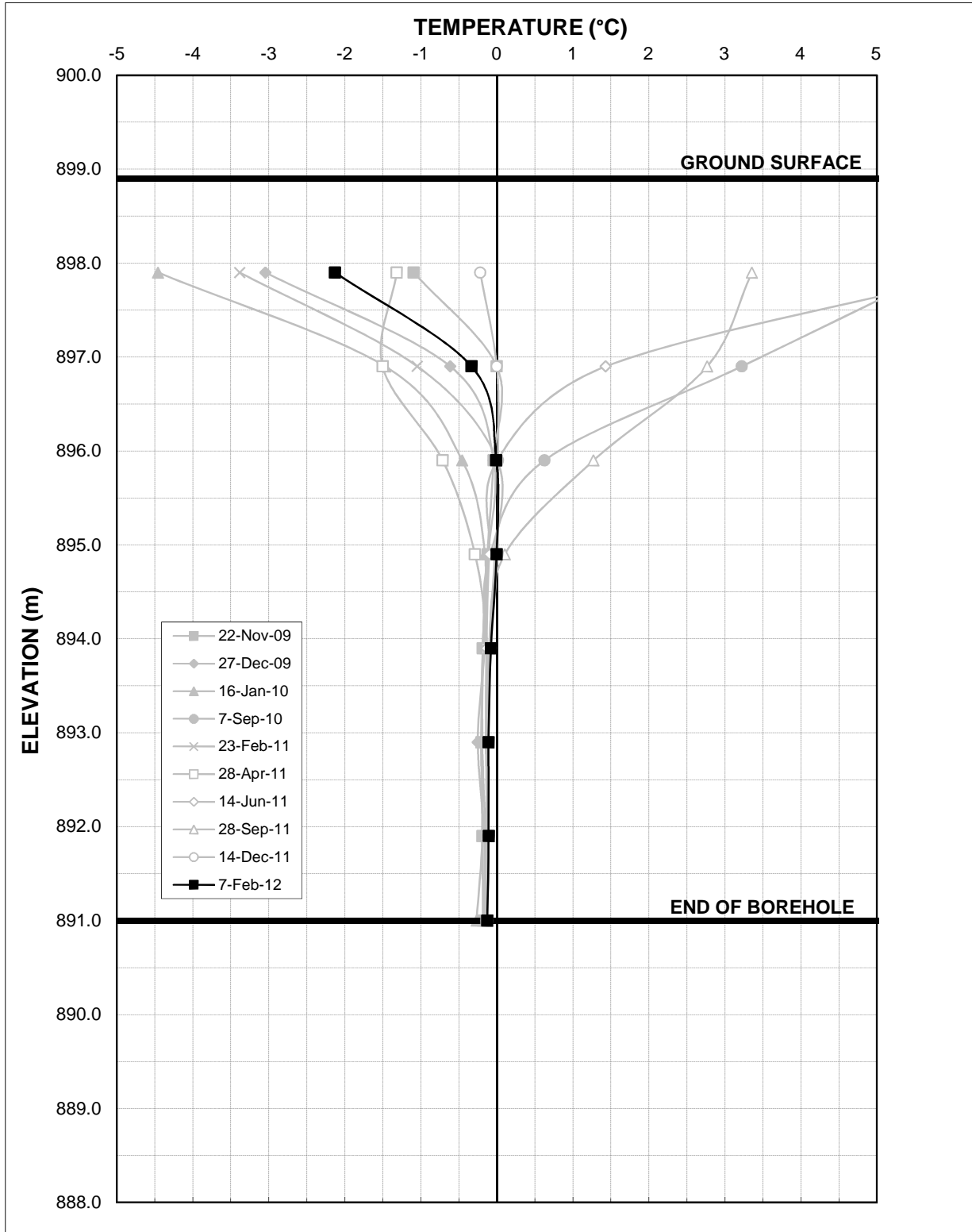
Install Date August 30, 2009
 Last Updated February 8, 2012
 Cable No: 2207

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH15
Figure T1



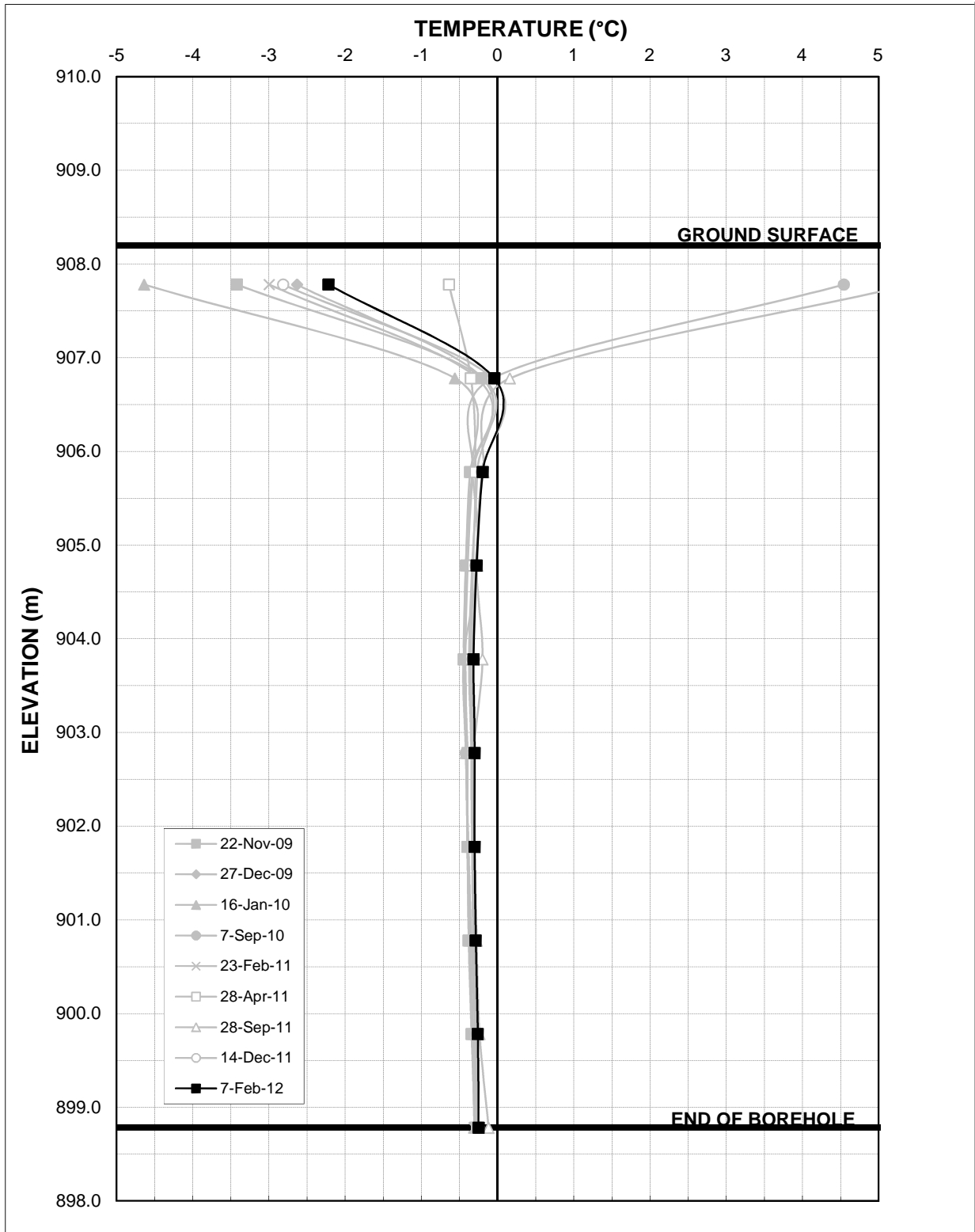
Install Date August 30, 2009
 Last Updated February 7, 2012
 Cable No: 2208

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH17
Figure T2



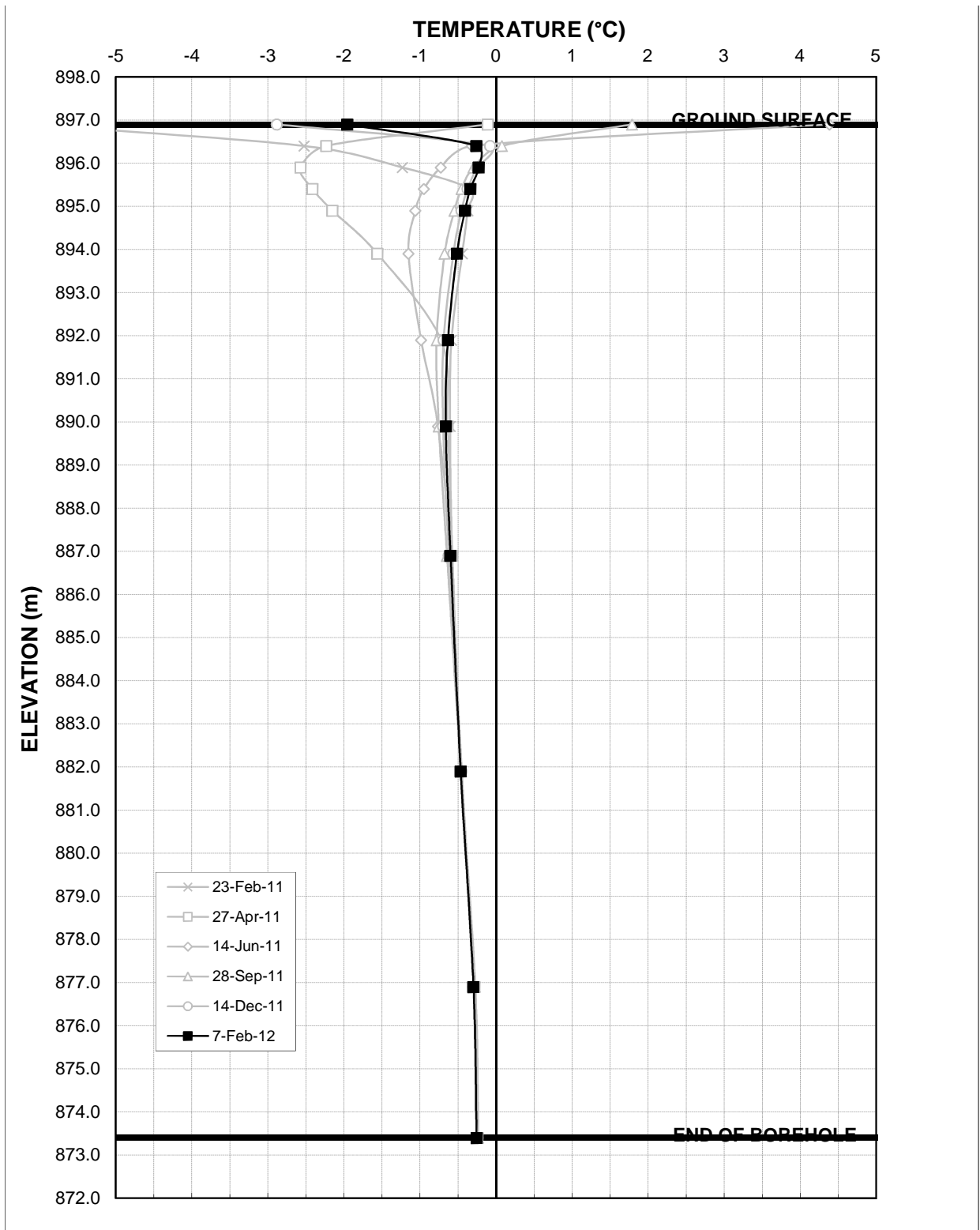
Install Date September 2, 2009
 Last Updated February 8, 2013
 Cable No: 2209

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH18
Figure T3



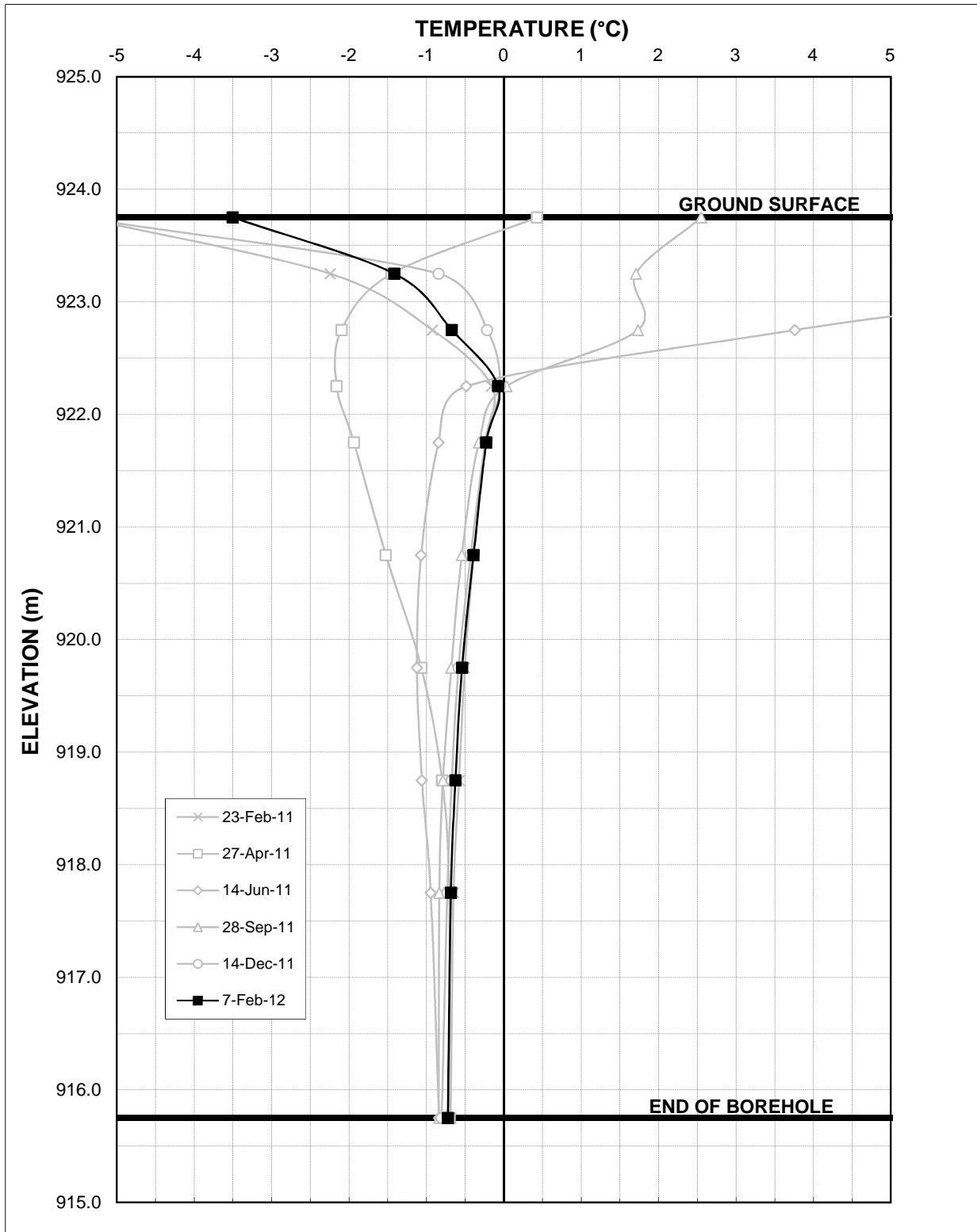
Install Date September 29, 2009
 Last Updated February 8, 2013
 Cable No: 2210

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH23
Figure T4



Install Date February 22, 2011
 Last Updated February 8, 2013
 Cable No: 2263

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH31
Figure T5

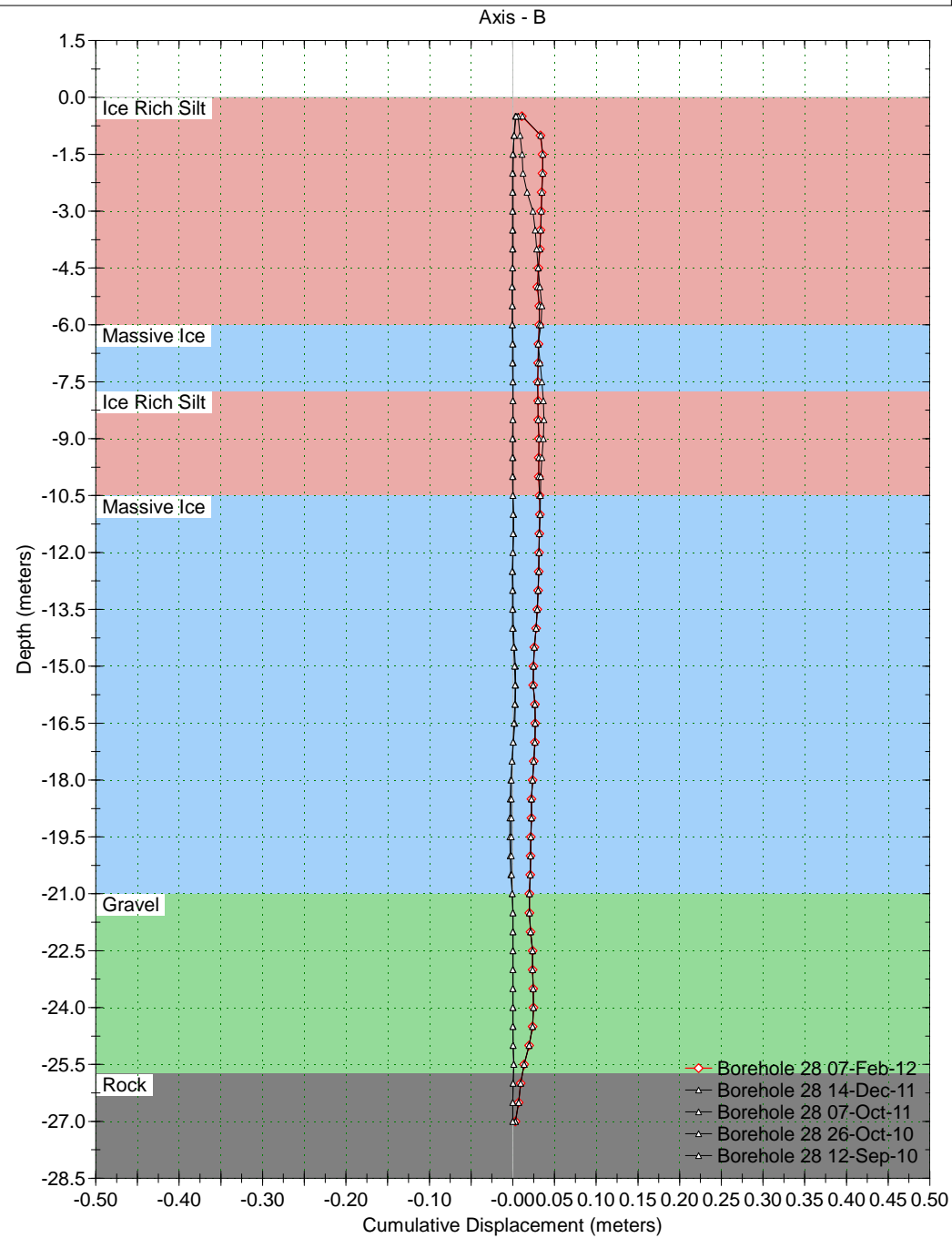
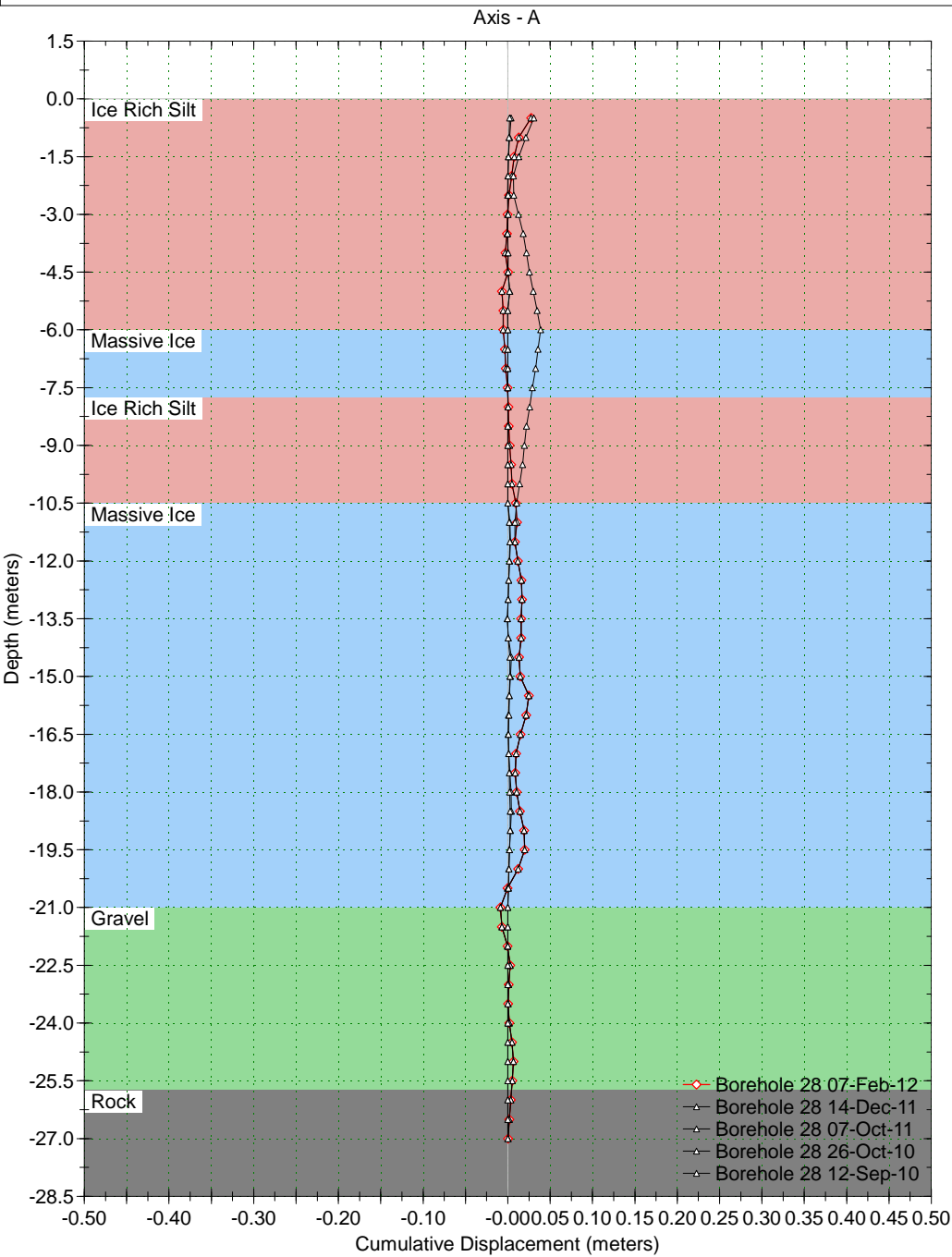


Install Date February 22, 2011
 Last Updated February 8, 2013
 Cable No: 2264

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH32
Figure T6

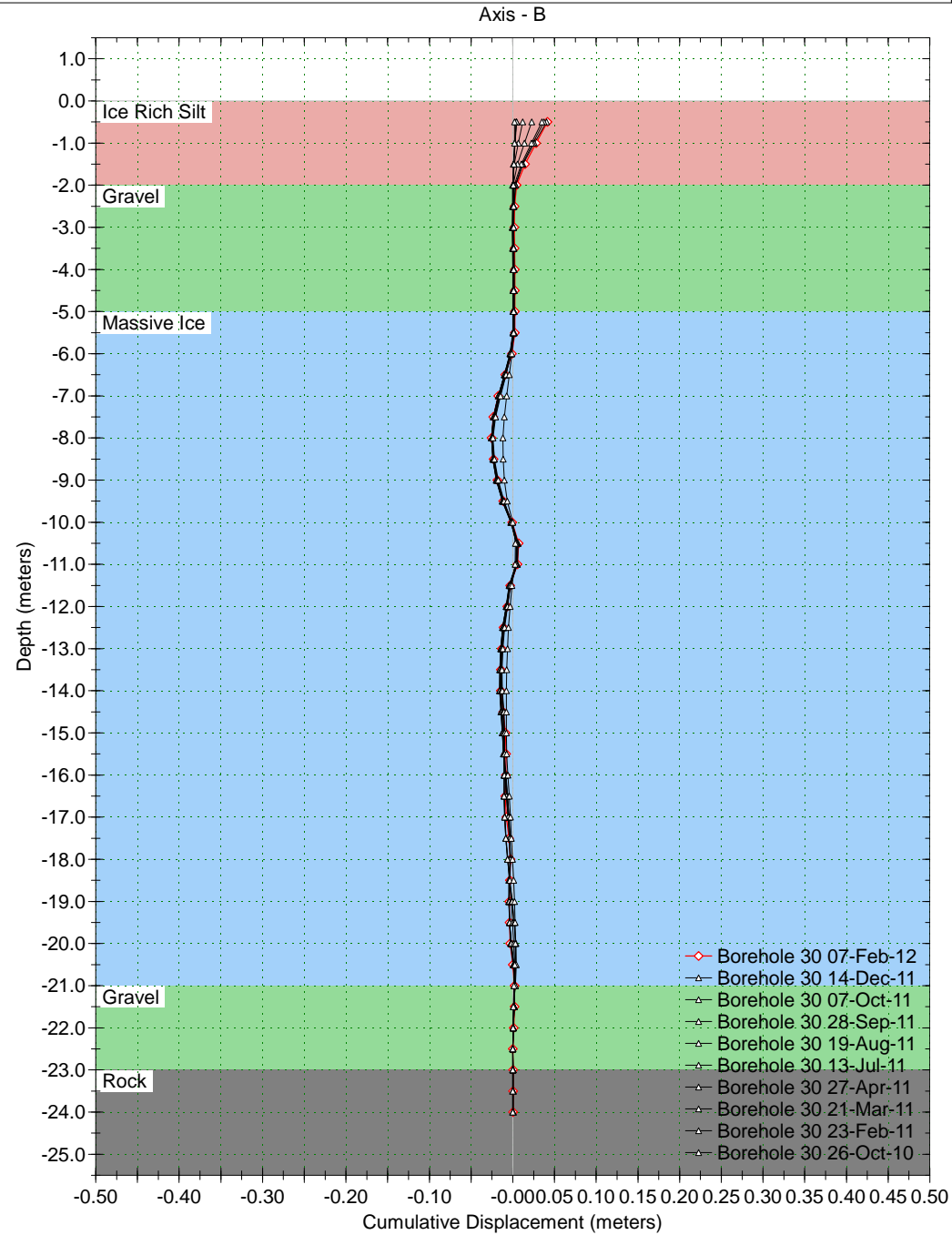
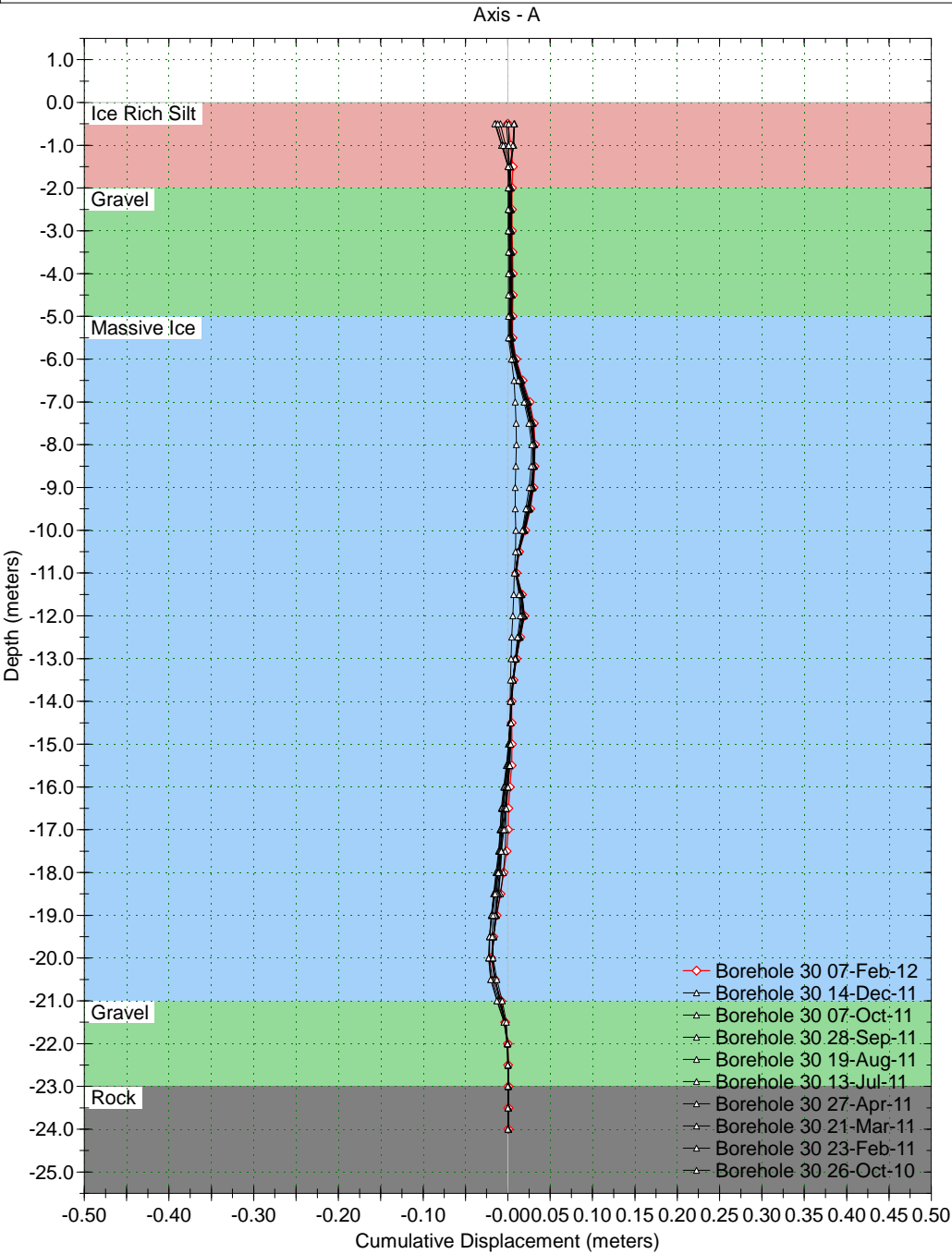
Borehole : Borehole 28
 Project : Keno Hill District Mill
 Location : DSTF
 Northing : 7086985
 Easting : 484026
 Collar :

Spiral Correction : N/A
 Collar Elevation : 0.0 meters
 Borehole Total Depth : 27.0 meters
 A+ Groove Azimuth :
 Base Reading : 2010 Aug 22 08:23
 Applied Azimuth : 0.0 degrees



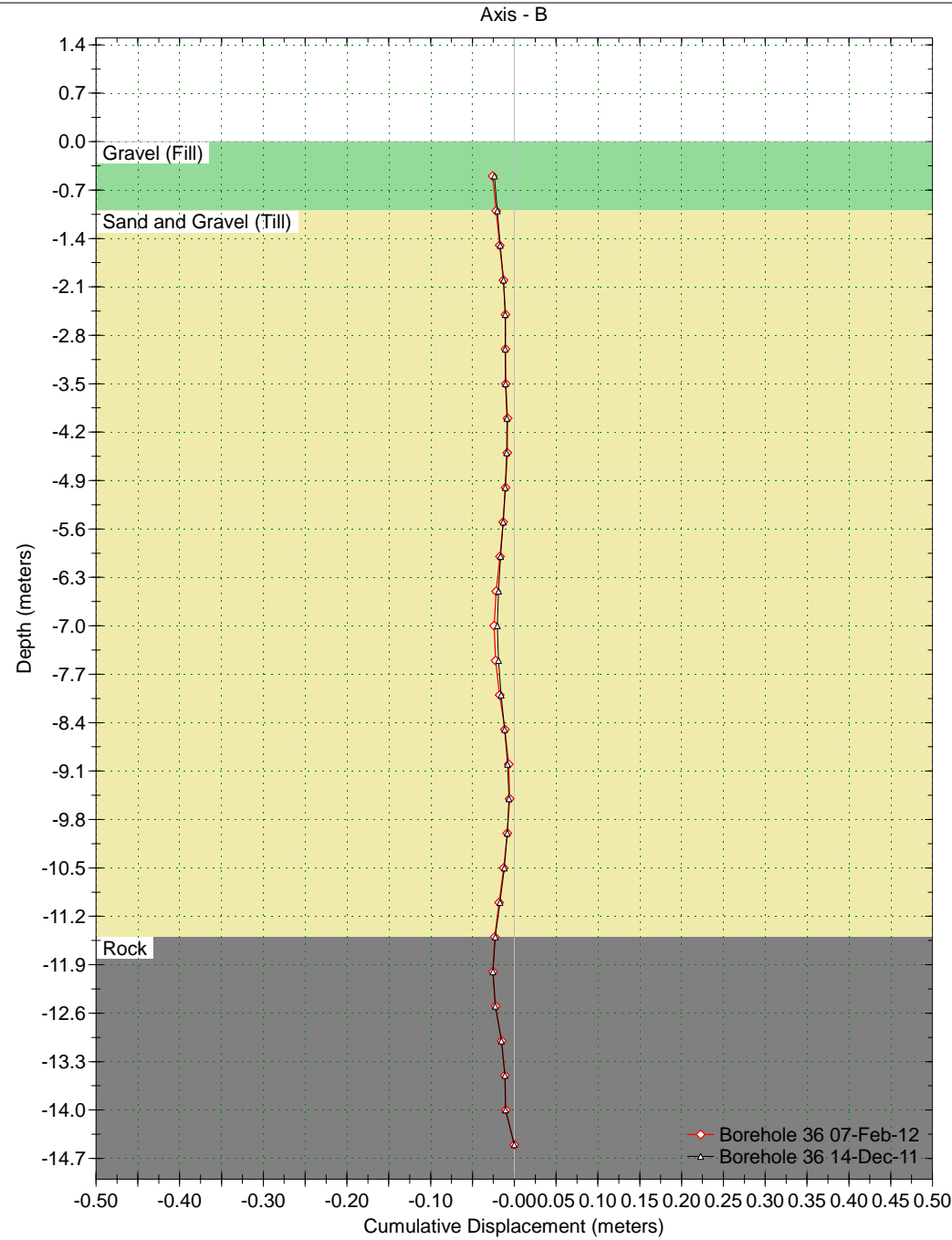
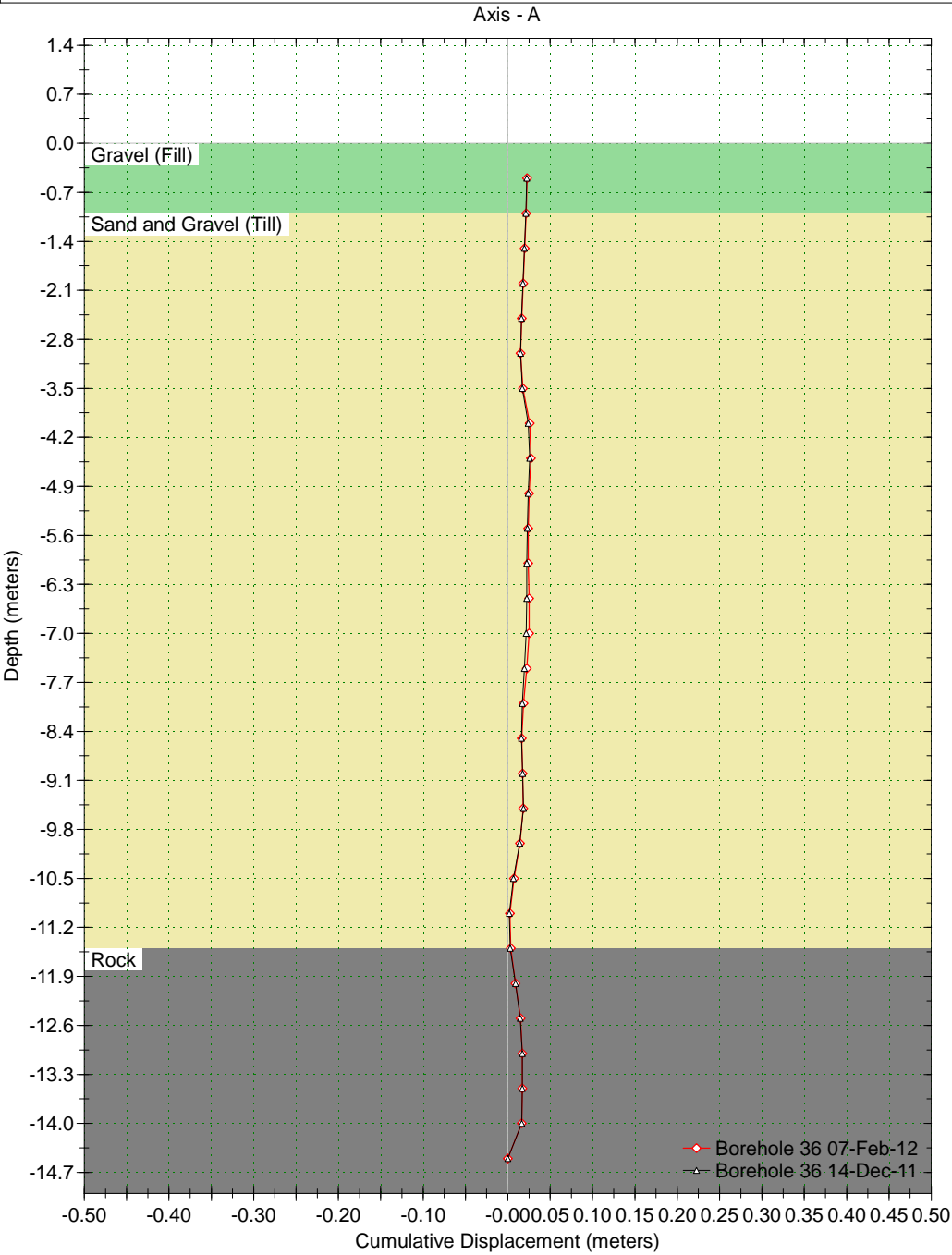
Borehole : Borehole 30
Project : Keno Hill District Mill
Location : DSTF
Northing : 7087032
Easting : 483969
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 24.0 meters
A+ Groove Azimuth :
Base Reading : 2010 Sep 12 08:57
Applied Azimuth : 0.0 degrees



Borehole : Borehole 36
Project : Keno Hill District Mill
Location :
Northing :
Easting :
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 14.0 meters
A+ Groove Azimuth :
Base Reading : 2011 Oct 07 14:04
Applied Azimuth : 0.0 degrees



TECHNICAL MEMO

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ISSUED FOR USE

TO: Katherine Penney
C: Vanessa Benwood
FROM: Justin Pigage, EIT
DATE: April 13, 2012
MEMO NO.: 009
EBA FILE: W14101696

SUBJECT: DSTF Instrumentation and Construction Monitoring
Keno Hill District Mill Site

1.0 INTRODUCTION

Alexco Resource Corp (Alexco) retained EBA, A Tetra Tech Company (EBA) to observe construction and operation activities associated with the Dry Stacked Tailings Facility (DSTF) at the Keno Hill District Mill Site. Activities related to the DSTF are to be carried out in accordance with the following documents:

- Operation, Maintenance, and Surveillance Manual, Dry Stack Tailings Facility, Keno Hill District Mill, YT
- Quarter 1 Tailings Placement Provisions, Keno Hill District Mill Site, Yukon
- Runoff Diversion Structure Specs, Dry Stacked Tailings Facility, Keno Hill District Mill, YT
- Detailed Design, Dry Stacked Tailings Facility, Keno Hill District Mill Site, Yukon

This memo summarizes the on-going monitoring of the DSTF completed by EBA on April 3, 2012.

2.0 WORK COMPLETED

EBA conducted 10 compaction tests on the DSTF during the April, 2012 visit. The compaction results including the UTM coordinates and elevations (NAD83 datum) of each test are attached to this memo. Test locations were recorded with a handheld GPS receiver accurate to within 5 m horizontally, and unknown accuracy vertically.

EBA has been collecting ground temperature cable (GTC) readings since November 2009 and slope indicator (SI) readings since September 2010 at the DSTF. During the site visit, EBA collected GTC readings from boreholes BH15, BH17, BH18, BH23, BH31, and BH32 and SI readings from boreholes BH28, BH30, and BH36. Current GTC and slope indicator readings are attached to this memo.

Only a partial set of SI readings were collected from BH28 during the site visit. Ice continues to block the SI pipe at a depth of 11 m. When weather conditions are more favourable, the installation should be steamed out and monitored for water accumulation on a daily basis. If water continues to accumulate in the installation, a brine solution that will remain unfrozen below 0°C may be required within the SI pipe to allow for data collection.

3.0 DISCUSSION

The majority of the April compaction tests met or exceeded the specified requirements.

Ongoing GTC and slope indicator readings provide a baseline for the site and monitor any changes during DSTF construction and operation. To date, no readings requiring additional review have been recorded.

As discussed in the February 2012 report, repair of the SI installation in BH28 is not yet complete. The condition of the installation will be re-assessed when the weather on site improves allowing for further investigation.

4.0 CLOSURE

The next site visit is scheduled for the middle of May; dates will be confirmed with Alexco site personnel.

We trust this memo meets your present requirements. Should you have any questions or comments, please contact us.

COMPACTION DENSITY TEST SUMMARY REPORT

ASTM Designation D2922 & D3017

Project: Dry Stacked Tailings Facility **Test Apparatus:** Nuclear **Troxler No:** 63325/63324
Keno Hill District Mill Site **Specified Compaction:** 95 % Std. Proctor Max. Dry Density
Project No.: W14101696 **Specified Moisture (MC):** _____
Client: Alexco Resource Corp **Temperature** **Air:** -5 °C **Soil:** _____ °C
Attention: Katherine Penney **Date Tested:** See Below **By:** IM/JTP
Contractor: Alexco Resource Corp **Construction Period:** _____

Soil Description: Tailings (2080@ 13%)

Material Usage/Zone: _____

Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/04/03	71 200	N 7086941 E 483969	930	2073	16.0	2080	13	99.7
	72 200	N 7086946 E 483976	930	2167	16.0	2080	13	104.2
	73 200	N 7086946 E 483985	929	2224	16.0	2080	13	>105
	74 200	N 7086940 E 483984	928	2178	16.0	2080	13	104.7
	75 200	N 7086942 E 484008	928	1907	16.0	2080	13	91.7
	76 200	N 7086934 E 484004	928	2154	16.0	2080	13	103.6
	77 200	N 7086926 E 484001	929	2042	16.0	2080	13	98.2
	78 200	N 7086921 E 483997	929	2009	16.0	2080	13	96.6
	79 200	N 7086914 E 484004	930	2141	16.0	2080	13	102.9
	80 200	N 7086909 E 483995	929	2195	16.0	2080	13	>105
2012/05/30	81 300	N 7086910 E 483990	930	2030	16.0	2080	13	97.6
	82 300	N 7086915 E 483981	930	2169	16.0	2080	13	104.3

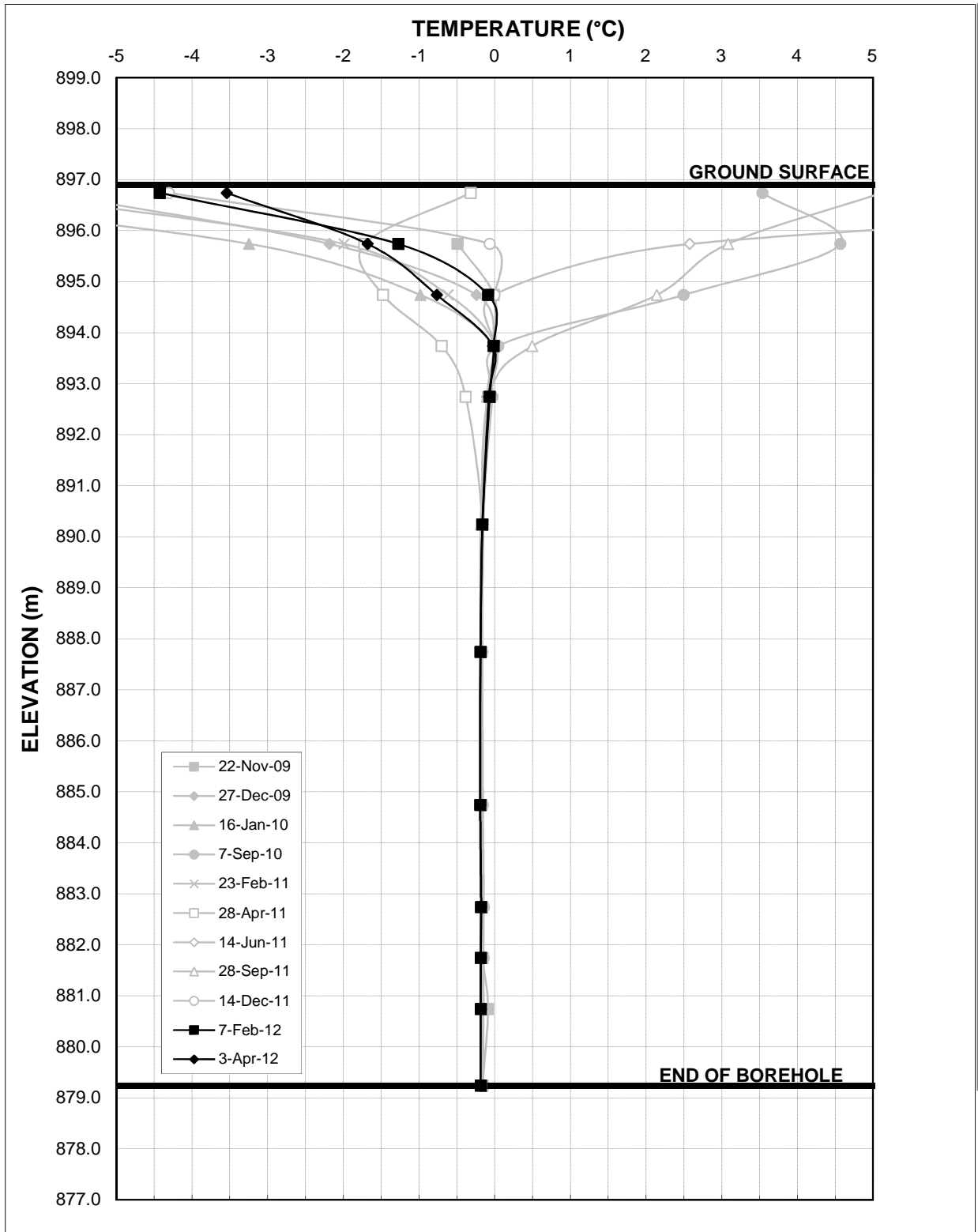
Remarks: Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

Reviewed By: _____

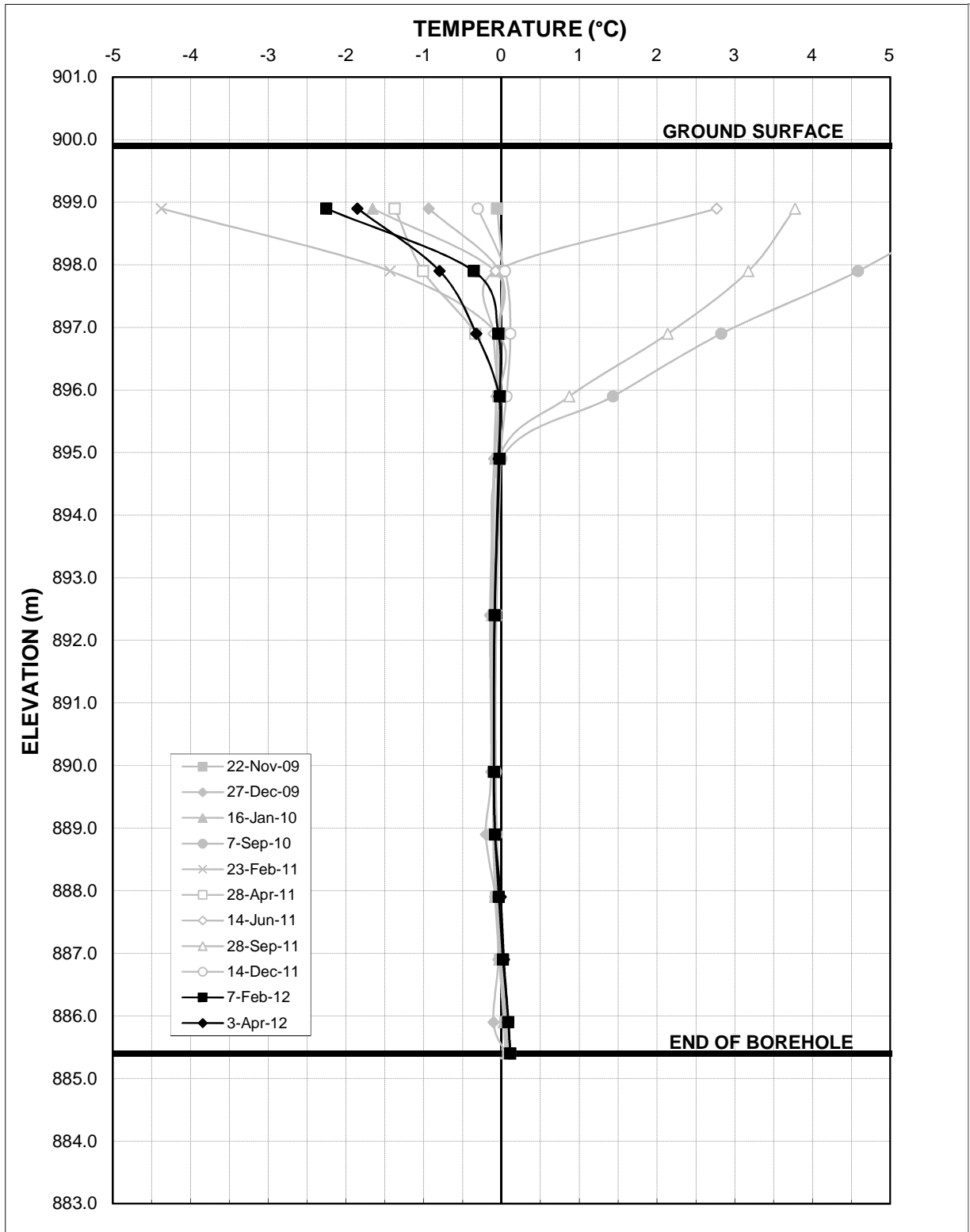
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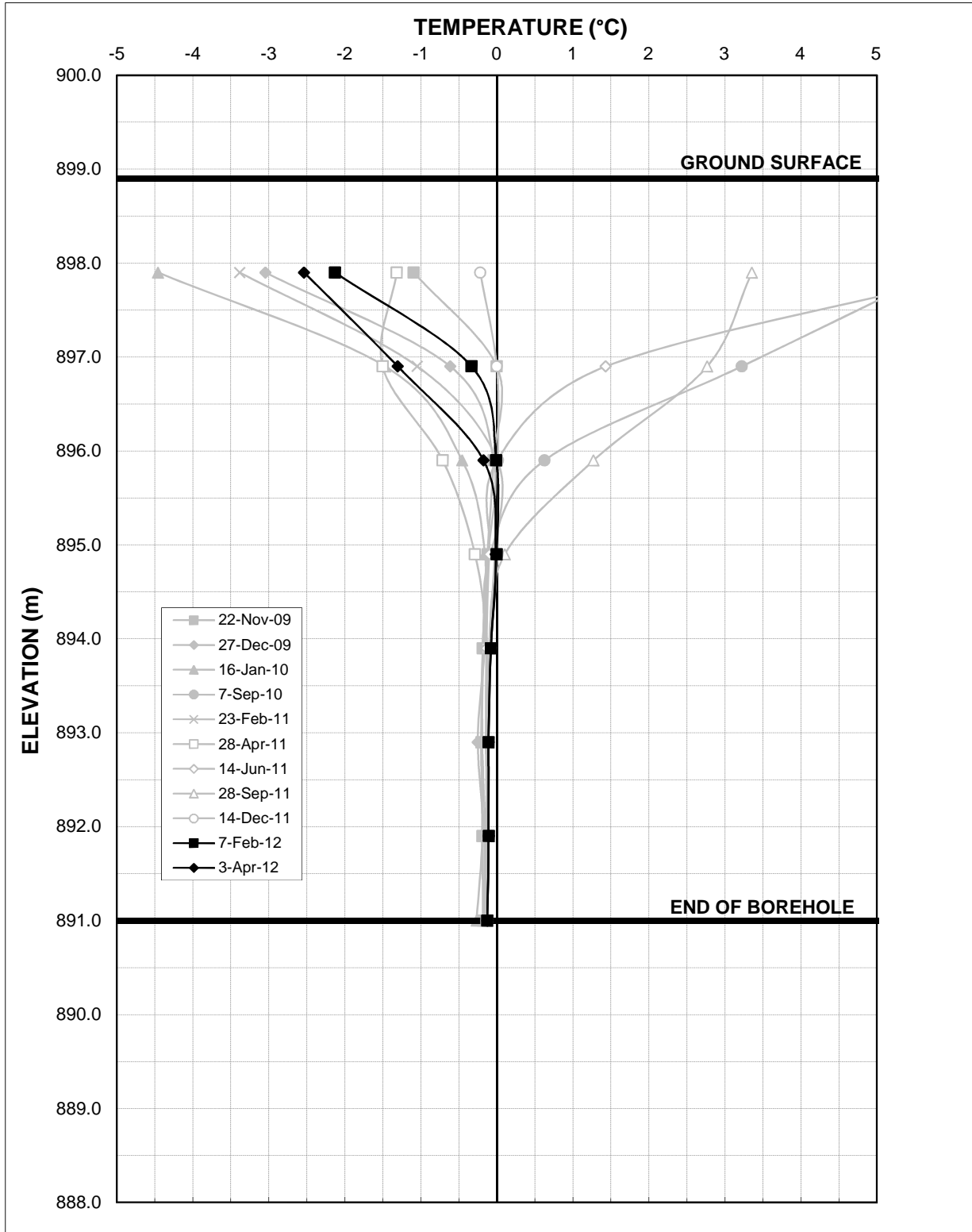
Install Date August 30, 2009
 Last Updated April 3, 2012
 Cable No: 2207

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH15
Figure T1



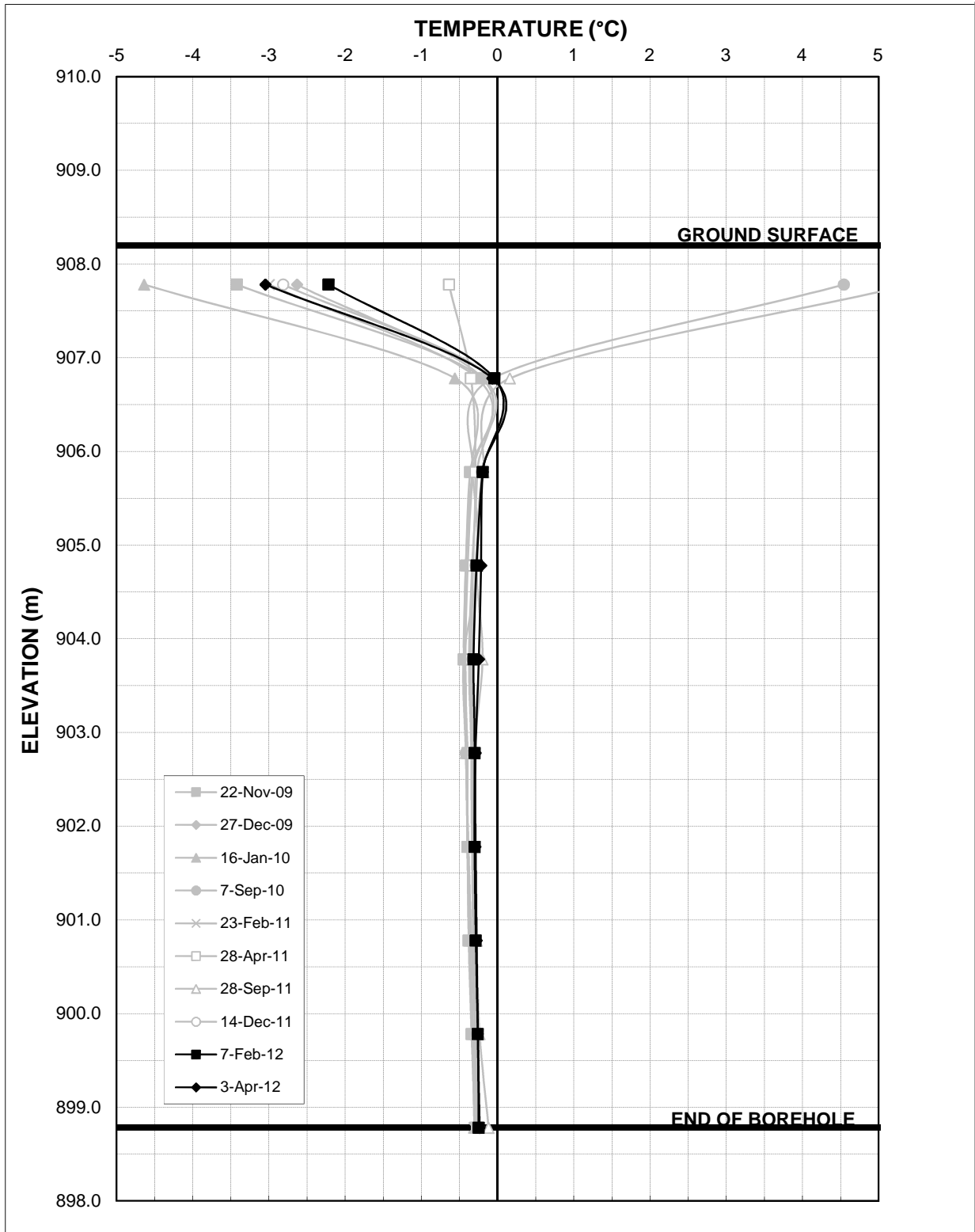
Install Date August 30, 2009
 Last Updated April 3, 2012
 Cable No: 2208

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH17
Figure T2



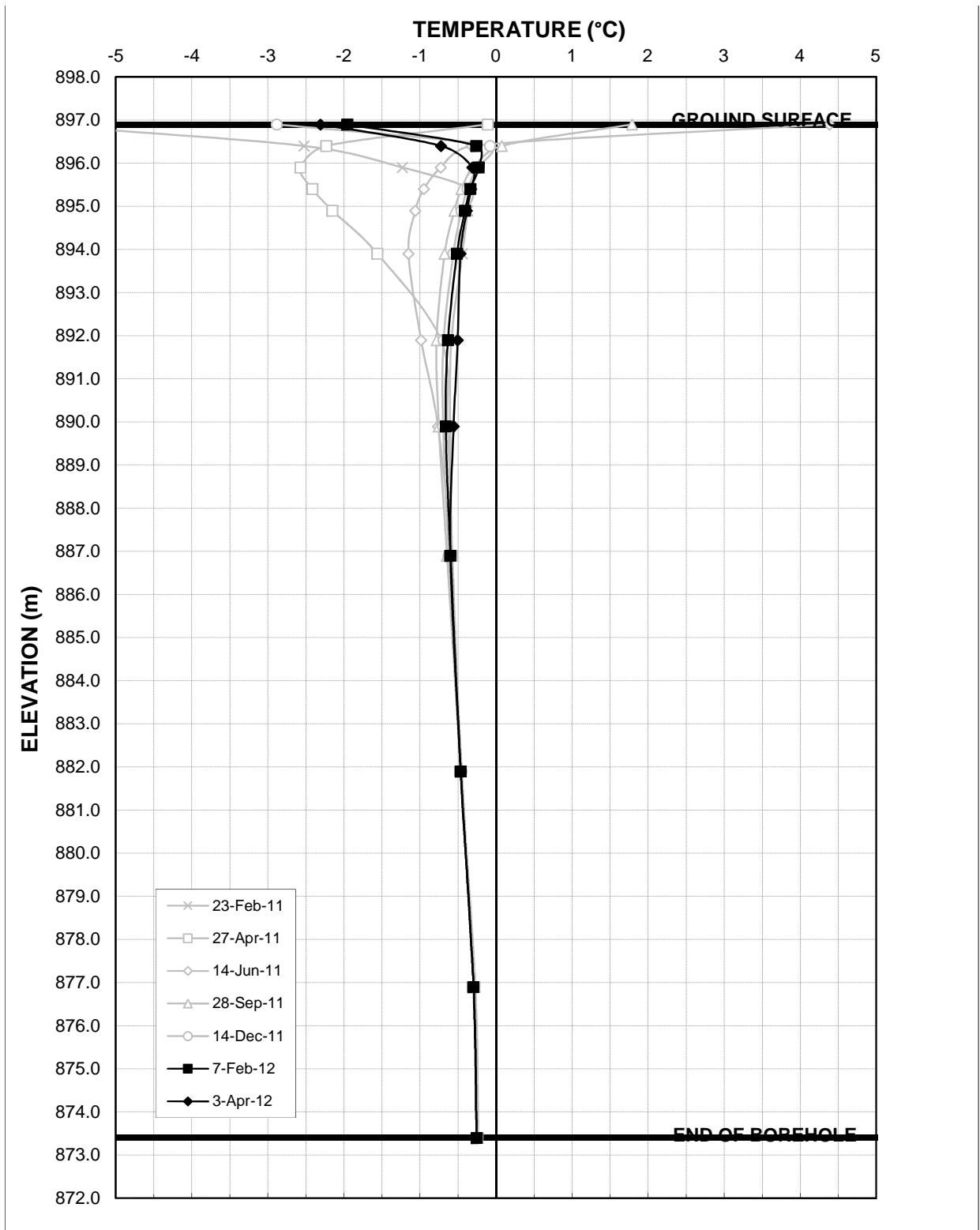
Install Date September 2, 2009
 Last Updated April 3, 2012
 Cable No: 2209

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH18
Figure T3



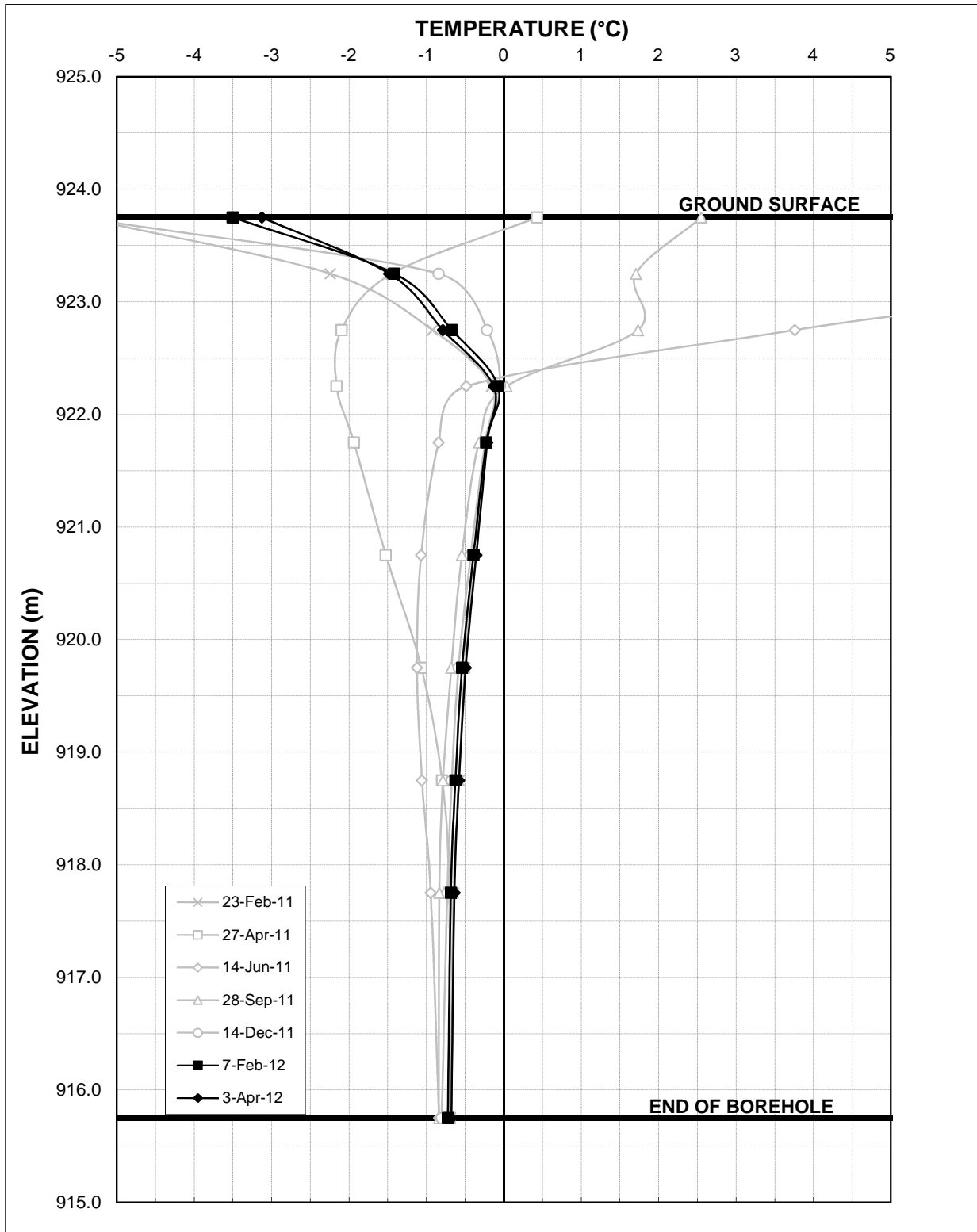
Install Date September 29, 2009
 Last Updated April 3, 2012
 Cable No: 2210

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH23
Figure T4



Install Date February 22, 2011
 Last Updated April 3, 2012
 Cable No: 2263

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH31
Figure T5

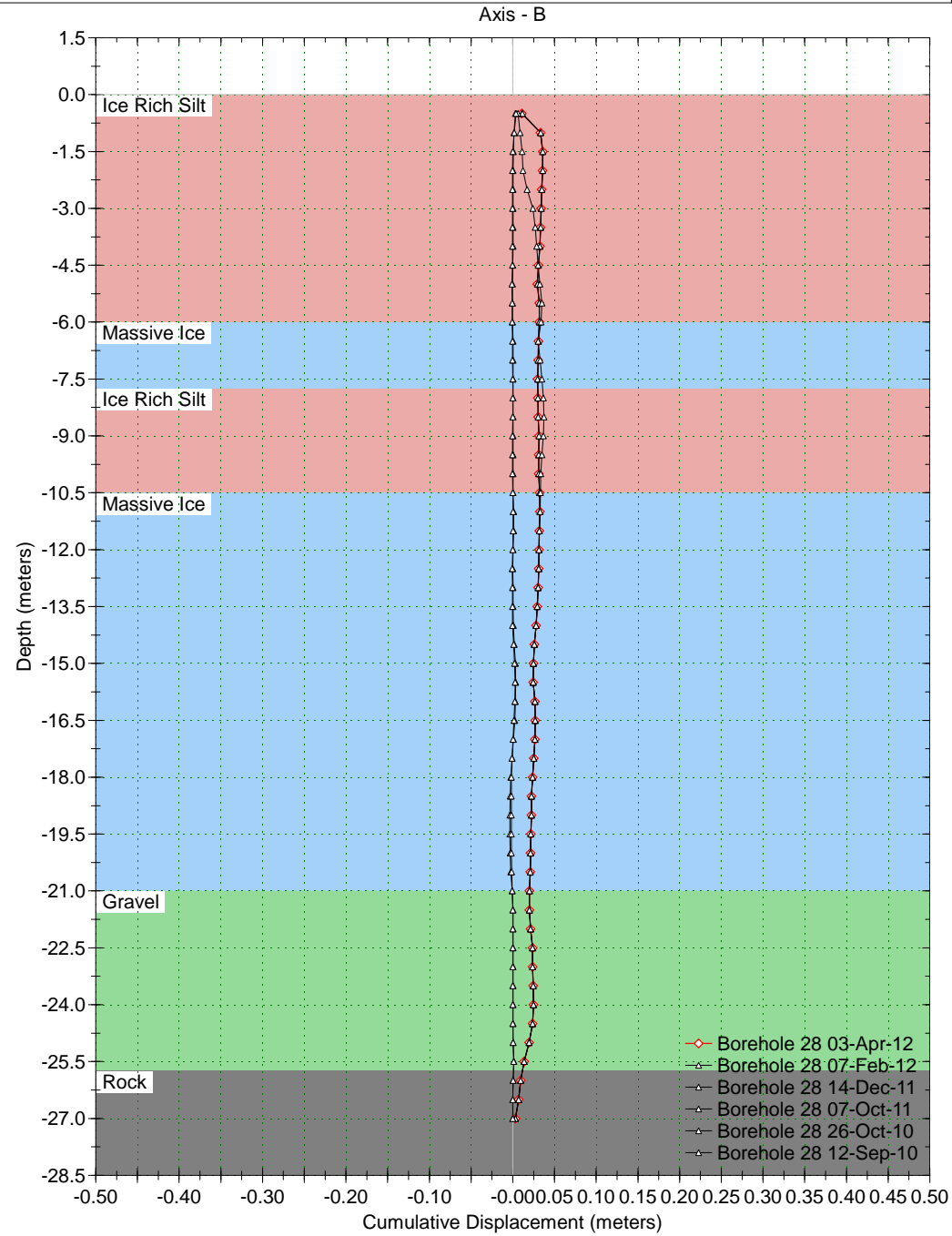
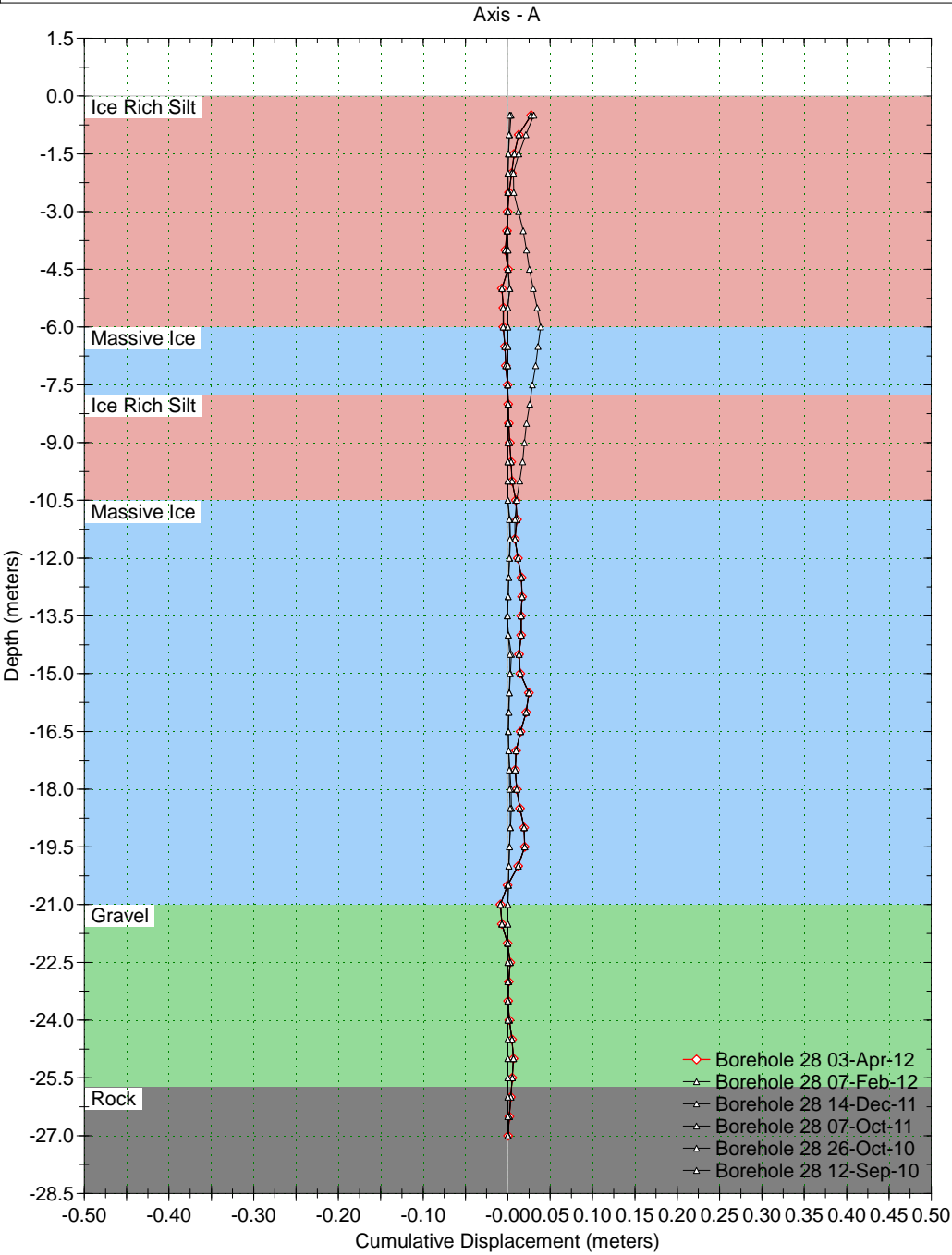


Install Date February 22, 2011
 Last Updated April 3, 2012
 Cable No: 2264

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH32
Figure T6

Borehole : Borehole 28
Project : Keno Hill District Mill
Location : DSTF
Northing : 7086985
Easting : 484026
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 27.0 meters
A+ Groove Azimuth :
Base Reading : 2010 Aug 22 08:23
Applied Azimuth : 0.0 degrees

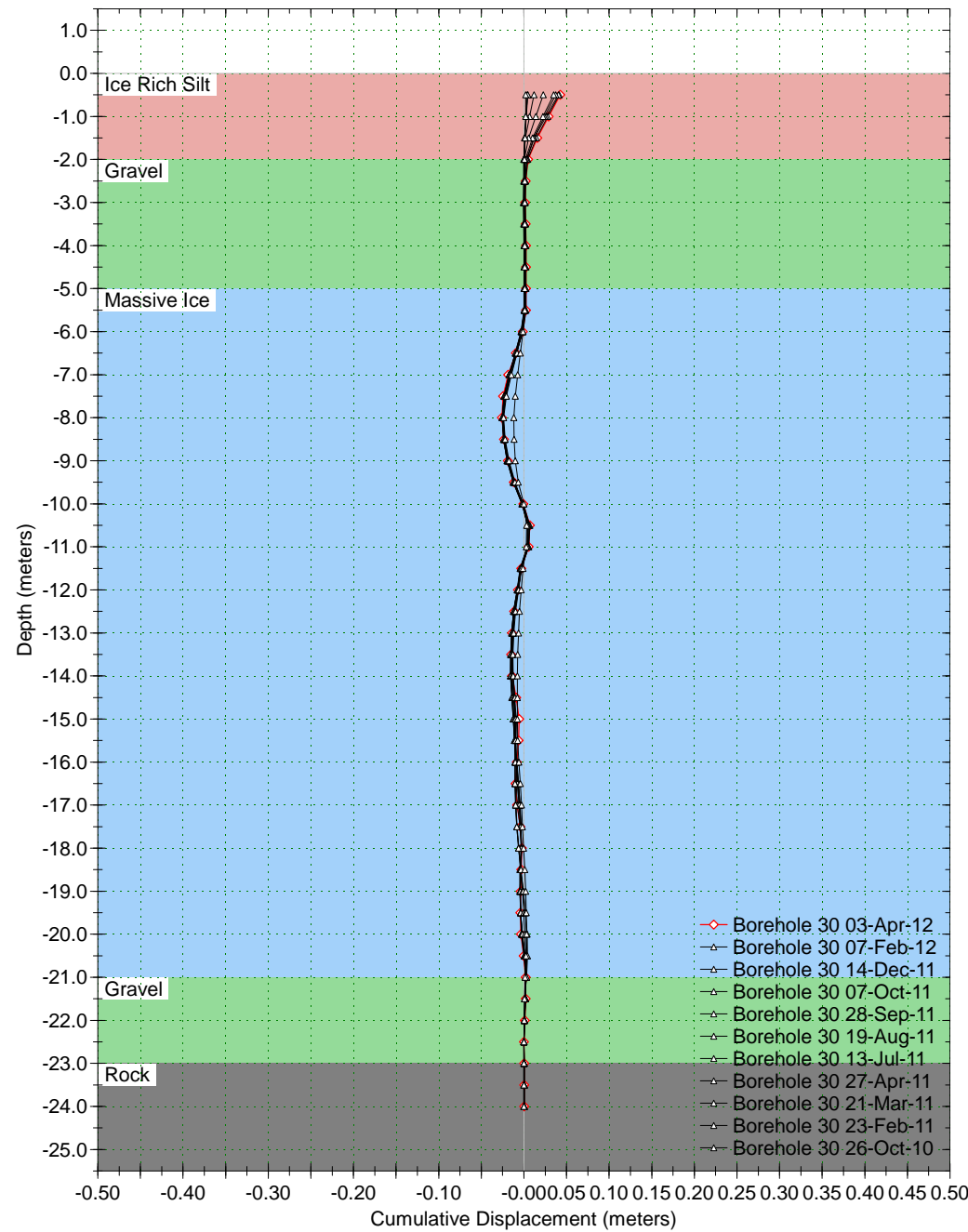
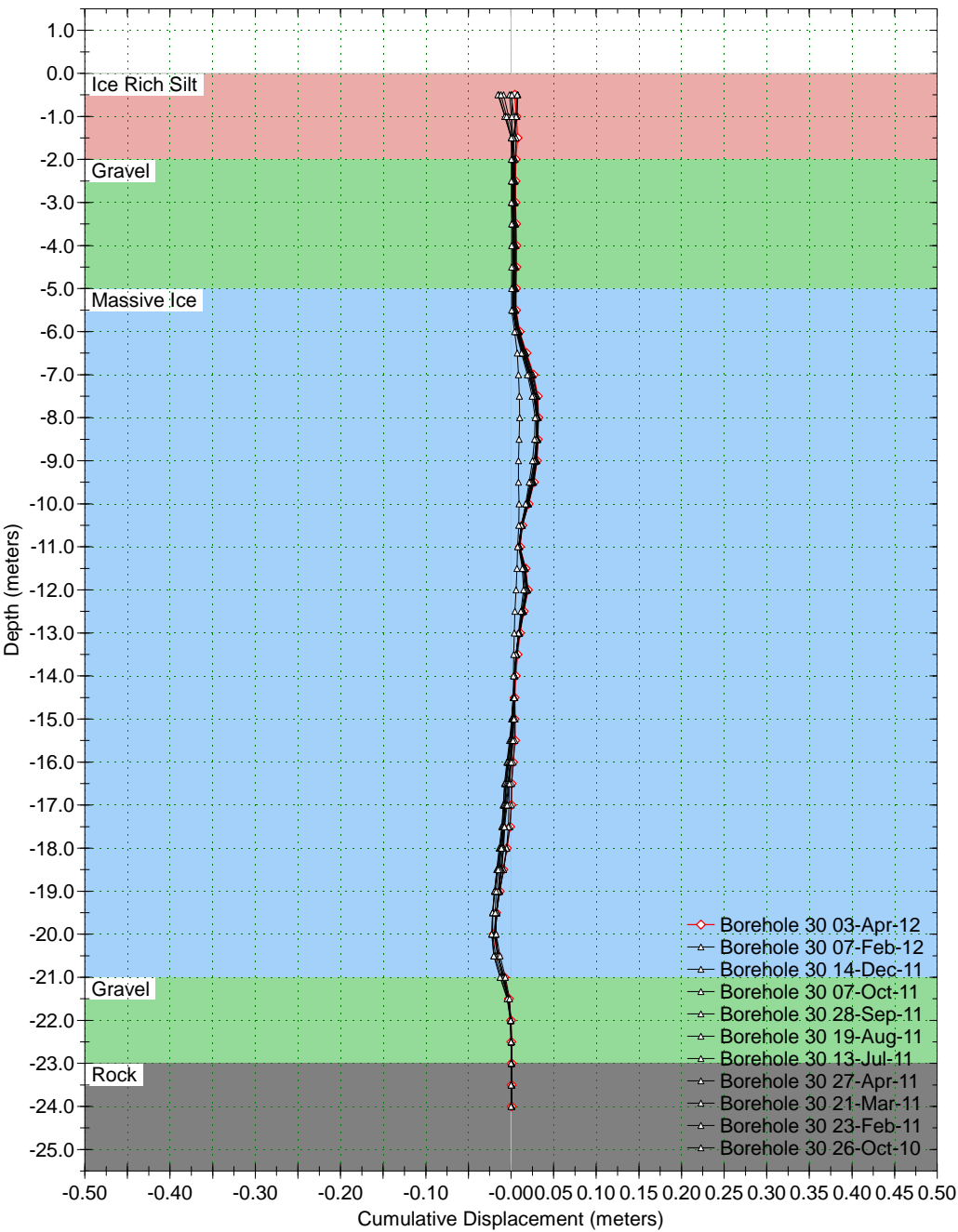


Borehole : Borehole 30
 Project : Keno Hill District Mill
 Location : DSTF
 Northing : 7087032
 Easting : 483969
 Collar :

Spiral Correction : N/A
 Collar Elevation : 0.0 meters
 Borehole Total Depth : 24.0 meters
 A+ Groove Azimuth :
 Base Reading : 2010 Sep 12 08:57
 Applied Azimuth : 0.0 degrees

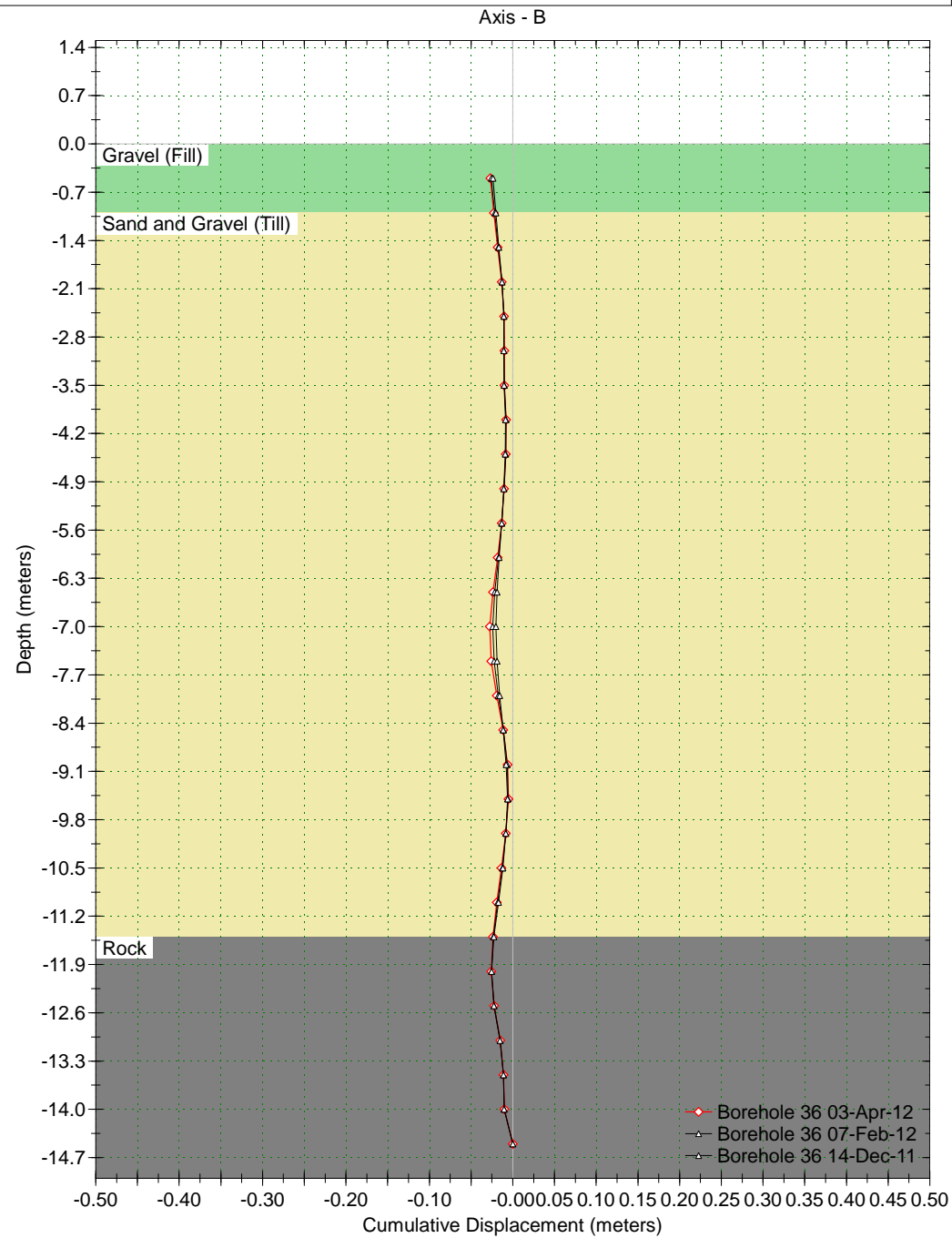
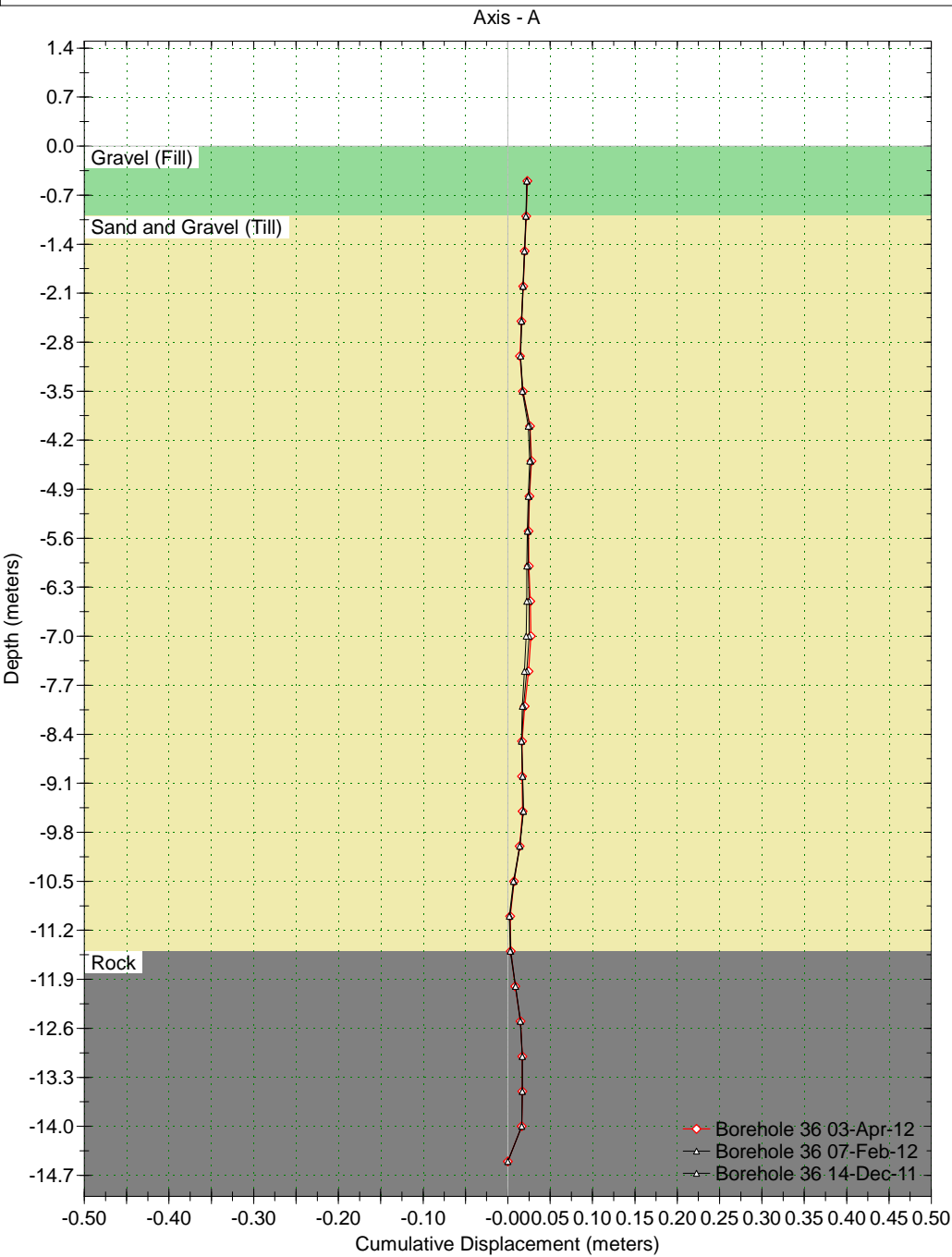
Axis - A

Axis - B



Borehole : Borehole 36
Project : Keno Hill District Mill
Location :
Northing :
Easting :
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 14.0 meters
A+ Groove Azimuth :
Base Reading : 2011 Oct 07 14:04
Applied Azimuth : 0.0 degrees



TECHNICAL MEMO

EBA, A Tetra Tech Company
Calcite Business Centre, Unit 6, 151 Industrial Road
Whitehorse, YT Y1A 2V3 CANADA
p. 867.668.3068 f. 867.668.4349

ISSUED FOR USE

TO:	Katherine Penney	DATE:	June 19, 2012
C:	Vanessa Benwood	MEMO NO.:	010
FROM:	Justin Pigage, EIT	EBA FILE:	W14101696

SUBJECT: DSTF Instrumentation and Construction Monitoring
Keno Hill District Mill Site

1.0 INTRODUCTION

Alexco Resource Corp (Alexco) retained EBA, A Tetra Tech Company (EBA) to observe construction and operation activities associated with the Dry Stacked Tailings Facility (DSTF) at the Keno Hill District Mill Site. Activities related to the DSTF are to be carried out in accordance with the following documents:

- Operation, Maintenance, and Surveillance Manual, Dry Stack Tailings Facility, Keno Hill District Mill, YT
- Quarter 1 Tailings Placement Provisions, Keno Hill District Mill Site, Yukon
- Runoff Diversion Structure Specs, Dry Stacked Tailings Facility, Keno Hill District Mill, YT
- Detailed Design, Dry Stacked Tailings Facility, Keno Hill District Mill Site, Yukon

This memo summarizes the on-going monitoring of the DSTF completed by EBA on May 30, 2012.

2.0 WORK COMPLETED

EBA conducted 21 compaction tests on the lower bench of the DSTF during the May, 2012 visit. The compaction results including the UTM coordinates and elevations (NAD83 datum) of each test are attached to this memo. Test locations were recorded with a handheld GPS receiver accurate to within 5 m horizontally, and unknown accuracy vertically.

EBA has been collecting ground temperature cable (GTC) readings since November 2009 and slope indicator (SI) readings since September 2010 at the DSTF. During the site visit, EBA collected GTC readings from boreholes BH15, BH17, BH18, BH23, BH31, and BH32 and SI readings from boreholes BH28, BH30, and BH36. Current GTC and slope indicator readings are attached to this memo.

Only a partial set of SI readings were collected from BH28 during the site visit. Ice continues to block the SI pipe at a depth of 11 m.

While on site, EBA personnel completed repairs to the SI pipe at surface and the protective casing of BH28. The damaged casing was removed and replaced. The repaired surface installation is shown in the attached Photo 1.

3.0 DISCUSSION

The majority of the May compaction tests on the DSTF met or exceeded the specified requirements.

Ongoing GTC and slope indicator readings provide a baseline for the site and monitor any changes during DSTF construction and operation. To date, no readings requiring additional review have been recorded.

Although the surface section of BH28 is repaired, EBA recommends the installation be steamed, cleared of water, and monitored for further accumulation. If water continues to accumulate in the installation, a brine solution that will remain unfrozen below 0°C may be required within the SI pipe to allow for proper data collection.

Accumulation of surface water around the BH28 was observed and may be contributing to the ice blockage within the installation. EBA recommends the surrounding area be backfilled to discourage surface water accumulation.

4.0 CLOSURE

The next site visit is scheduled for the middle of July; dates will be confirmed with Alexco site personnel.

We trust this memo meets your present requirements. Should you have any questions or comments, please contact us.



Photo 1: Repaired SI Installation – BH28.
May 30, 2012.

COMPACTION DENSITY TEST SUMMARY REPORT

ASTM Designation D2922 & D3017

Project: Dry Stacked Tailings Facility **Test Apparatus:** Nuclear **Troxler No:** 63325/63324
Keno Hill District Mill Site **Specified Compaction:** 95 % Std. Proctor Max. Dry Density
Project No.: W14101696 **Specified Moisture (MC):** _____
Client: Alexco Resource Corp **Temperature** **Air:** -5 °C **Soil:** _____ °C
Attention: Katherine Penney **Date Tested:** See Below **By:** IM/JTP
Contractor: Alexco Resource Corp **Construction Period:** _____

Soil Description: Tailings (2080@ 13%)

Material Usage/Zone: _____

Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/04/03	71 200	N 7086941 E 483969	930	2073	16.0	2080	13	99.7
	72 200	N 7086946 E 483976	930	2167	16.0	2080	13	104.2
	73 200	N 7086946 E 483985	929	2224	16.0	2080	13	>105
	74 200	N 7086940 E 483984	928	2178	16.0	2080	13	104.7
	75 200	N 7086942 E 484008	928	1907	16.0	2080	13	91.7
	76 200	N 7086934 E 484004	928	2154	16.0	2080	13	103.6
	77 200	N 7086926 E 484001	929	2042	16.0	2080	13	98.2
	78 200	N 7086921 E 483997	929	2009	16.0	2080	13	96.6
	79 200	N 7086914 E 484004	930	2141	16.0	2080	13	102.9
	80 200	N 7086909 E 483995	929	2195	16.0	2080	13	>105
2012/05/30	81 300	N 7086910 E 483990	930	2030	16.0	2080	13	97.6
	82 300	N 7086915 E 483981	930	2169	16.0	2080	13	104.3

Remarks: Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

Reviewed By: _____

Data presented hereon is for the sole use of the stipulated client. EBA is not responsible, nor can be held liable, for use made of this report by any other party, with or without the knowledge of EBA. The testing services reported herein have been performed by an EBA technician to recognized industry standards, unless otherwise noted. No other warranty is made. These data do not include or represent any interpretation or opinion of specification compliance or material suitability. Should engineering interpretation be required, EBA will provide it upon written request.



COMPACTION DENSITY TEST SUMMARY REPORT

ASTM Designation D2922 & D3017

Project: Dry Stacked Tailings Facility **Test Apparatus:** Nuclear **Troxler No:** 63325/63324
Keno Hill District Mill Site **Specified Compaction:** 95 % Std. Proctor Max. Dry Density
Project No.: W14101696 **Specified Moisture (MC):** _____
Client: Alexco Resource Corp **Temperature** **Air:** -5 °C **Soil:** _____ °C
Attention: Katherine Penney **Date Tested:** See Below **By:** IM/JTP
Contractor: Alexco Resource Corp **Construction Period:** _____

Soil Description: Tailings (2080@ 13%)

Material Usage/Zone: _____

Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/05/30	83 300	N 7086914 E 483972	930	2104	16.0	2080	13	101.2
	84 300	N 7086919 E 483964	930	2119	16.0	2080	13	101.9
	85 300	N 7086929 E 483959	930	1950	16.0	2080	13	93.8
	86 300	N 7086929 E 483968	930	1974	16.0	2080	13	94.9
	87 300	N 7086923 E 483977	930	2230	16.0	2080	13	>105
	88 300	N 7086923 E 483989	930	2071	16.0	2080	13	99.6
	89 300	N 7086930 E 483997	930	2310	16.0	2080	13	>105
	90 300	N 7086935 E 483986	930	2246	16.0	2080	13	>105
	91 300	N 7086940 E 483975	930	2210	16.0	2080	13	>105
	92 300	N 7086942 E 483963	930	2055	16.0	2080	13	98.8
	93 300	N 7086950 E 483968	930	2101	16.0	2080	13	101.0
	94 300	N 7086948 E 483980	930	2009	16.0	2080	13	96.6

Remarks: Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

Reviewed By: _____

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COMPACTION DENSITY TEST SUMMARY REPORT

ASTM Designation D2922 & D3017

Project: Dry Stacked Tailings Facility **Test Apparatus:** Nuclear **Troxler No:** 63325/63324
Keno Hill District Mill Site **Specified Compaction:** 95 % Std. Proctor Max. Dry Density
Project No.: W14101696 **Specified Moisture (MC):** _____
Client: Alexco Resource Corp **Temperature** **Air:** _____ °C **Soil:** _____ °C
Attention: Katherine Penney **Date Tested:** See Below **By:** IM/JTP
Contractor: Alexco Resource Corp **Construction Period:** _____

Soil Description: Tailings (2080@ 13%)

Material Usage/Zone: _____

Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/05/30	95 300	N 7086940 E 483990	930	2290	16.0	2080	13	>105
	96 300	N 7086952 E 483953	925	2010	16.0	2080	13	96.6
	97 300	N 7086939 E 483952	925	2093	16.0	2080	13	100.6
	98 300	N 7086924 E 483948	925	2082	16.0	2080	13	100.1
	99 300	N 7086932 E 483939	924	2131	16.0	2080	13	102.5
	100 300	N 7086945 E 483944	924	2082	16.0	2080	13	100.1
	101 300	N 7086965 E 483955	924	2114	16.0	2080	13	101.6
2012/07/13	102 300	N 7086930 E 483982	920	2210	16.0	2080	13	>105
	103 300	N 7086935 E 483966	920	2103	16.0	2080	13	101.1
	104 300	N 7086936 E 483985	920	2186	16.0	2080	13	>105
	105 300	N 7086951 E 483989	920	2226	16.0	2080	13	>105
	106 300	N 7086946 E 483973	920	2200	16.0	2080	13	>105

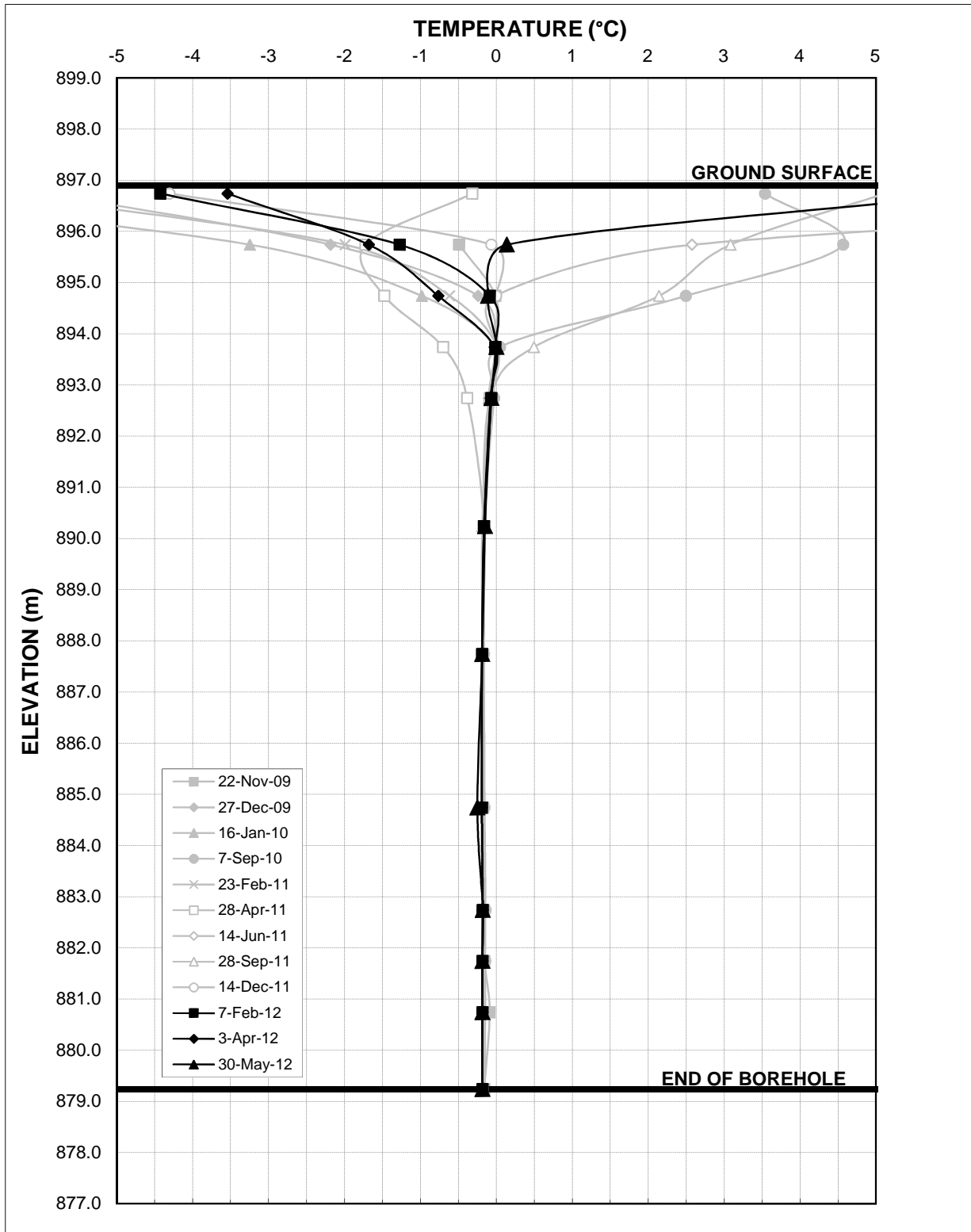
Remarks: Elevations according to Alexco Drawing "DSTF as Built" July 2/12. Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

Reviewed By: _____

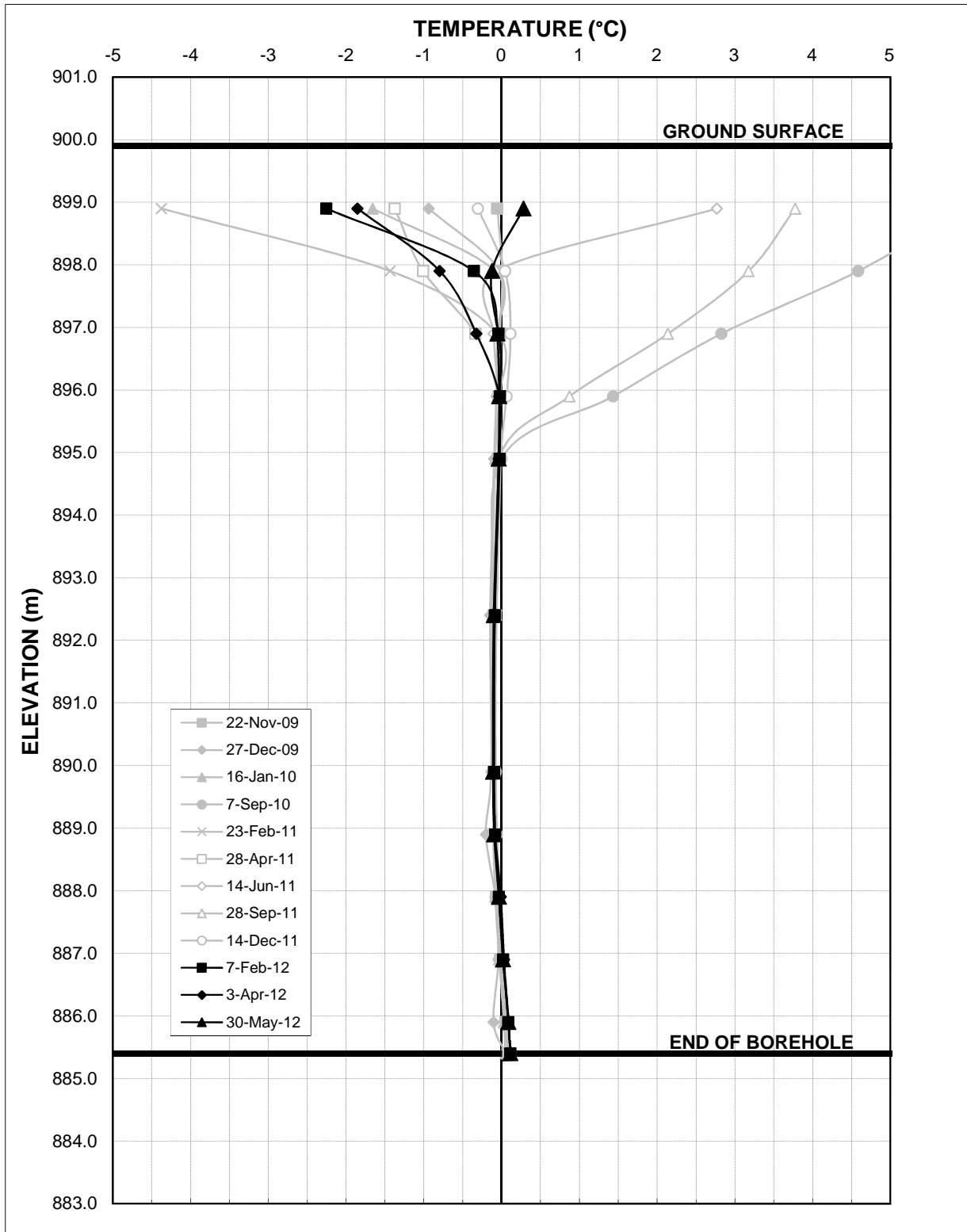
Data presented hereon is for the sole use of the stipulated client. EBA is not responsible, nor can be held liable, for use made of this report by any other party, with or without the knowledge of EBA. The testing services reported herein have been performed by an EBA technician to recognized industry standards, unless otherwise noted. No other warranty is made. These data do not include or represent any interpretation or opinion of specification compliance or material suitability. Should engineering interpretation be required, EBA will provide it upon written request.





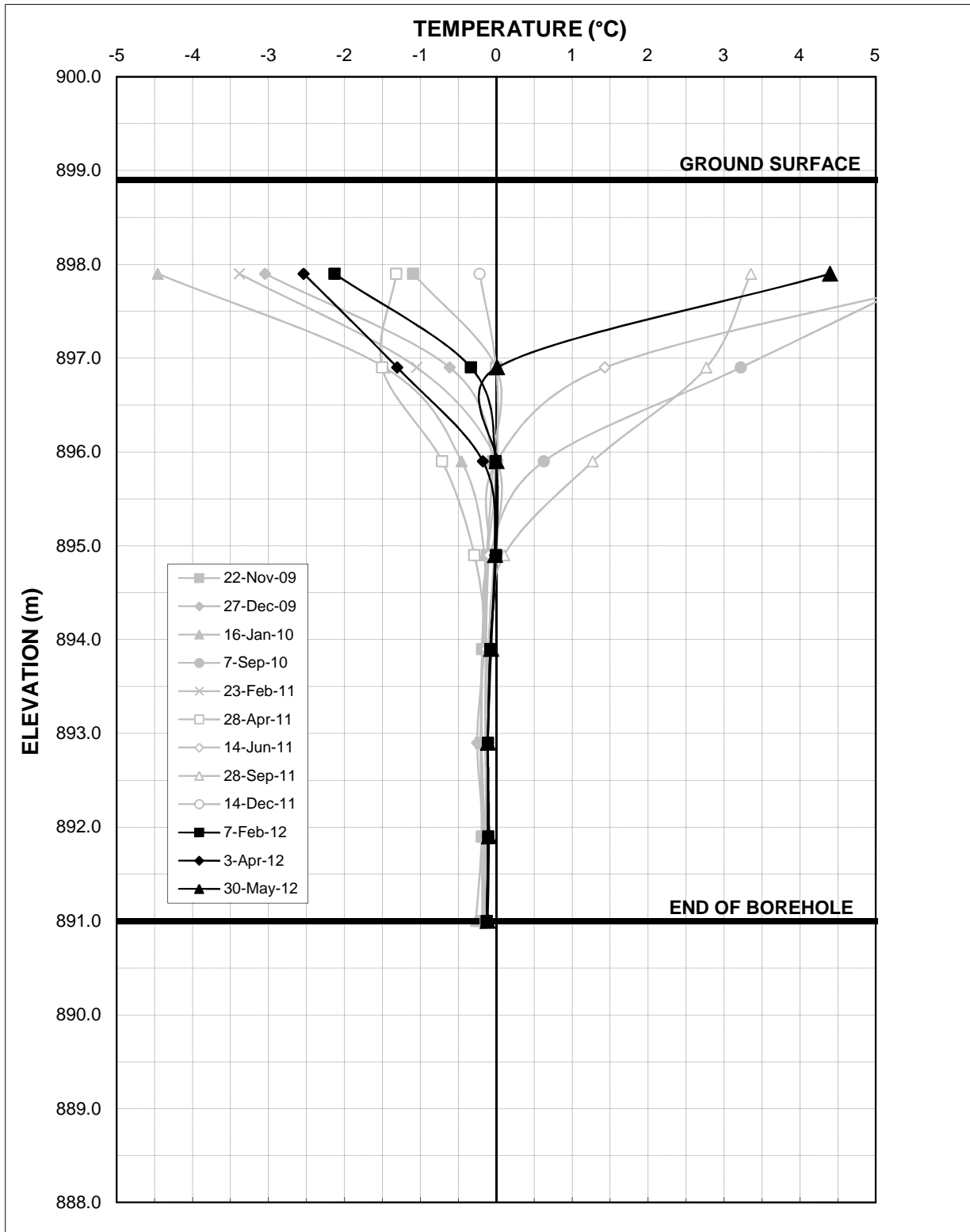
Install Date August 30, 2009
 Last Updated May 30, 2012
 Cable No: 2207

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH15
Figure T1



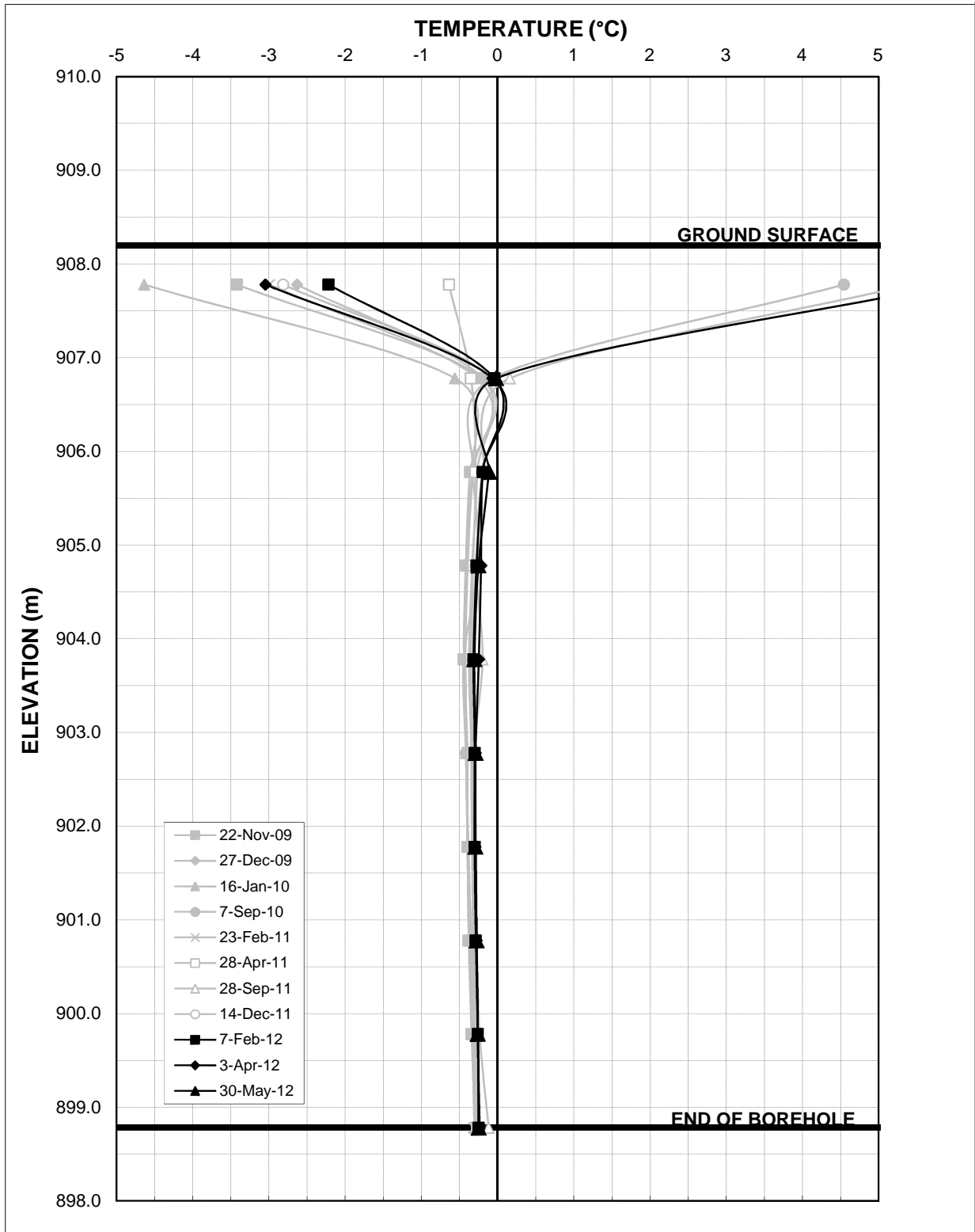
Install Date August 30, 2009
 Last Updated May 30, 2012
 Cable No: 2208

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH17
Figure T2



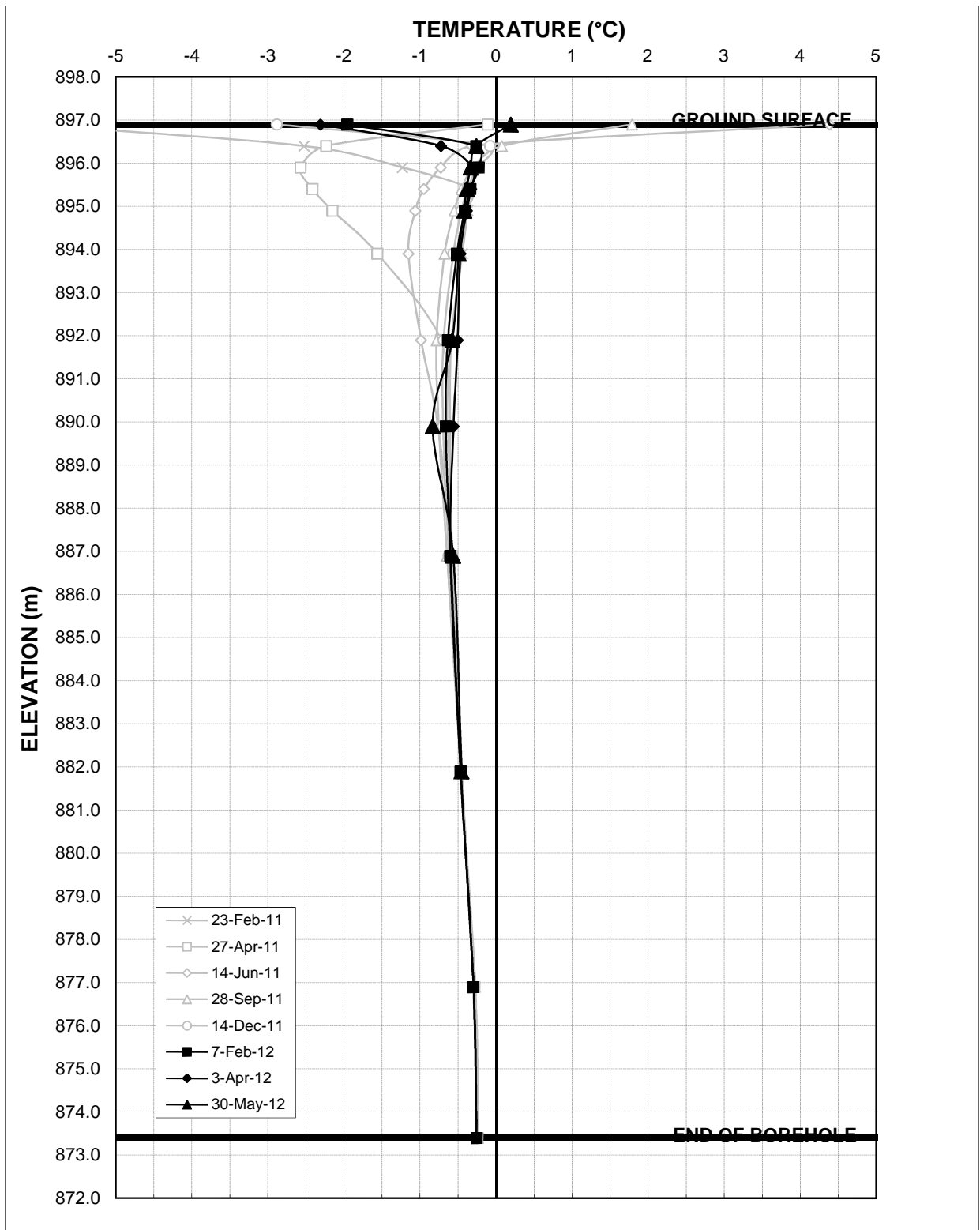
Install Date September 2, 2009
 Last Updated May 30, 2012
 Cable No: 2209

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH18
Figure T3



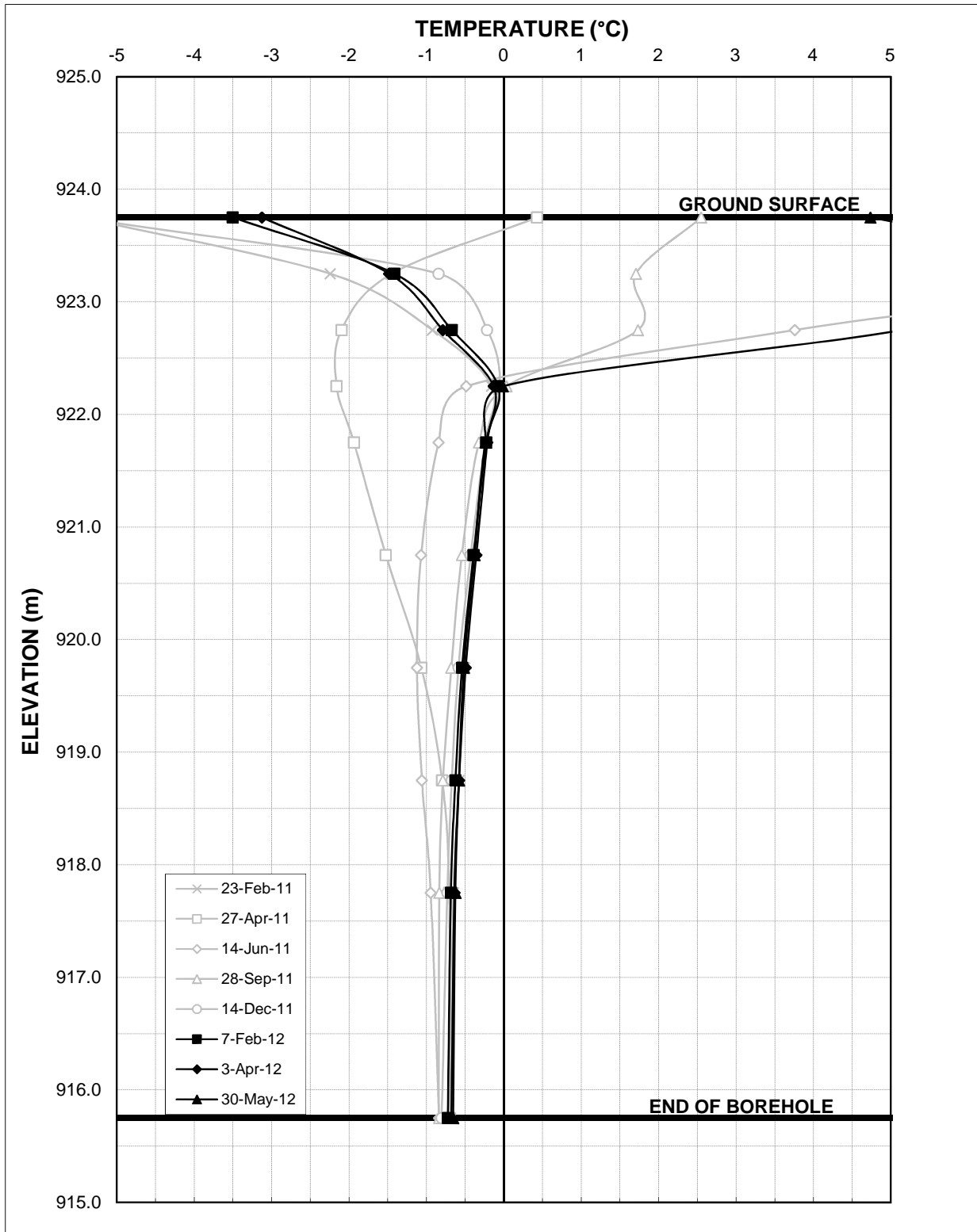
Install Date September 29, 2009
 Last Updated May 30, 2012
 Cable No: 2210

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH23
Figure T4



Install Date February 22, 2011
 Last Updated May 30, 2012
 Cable No: 2263

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH31
Figure T5

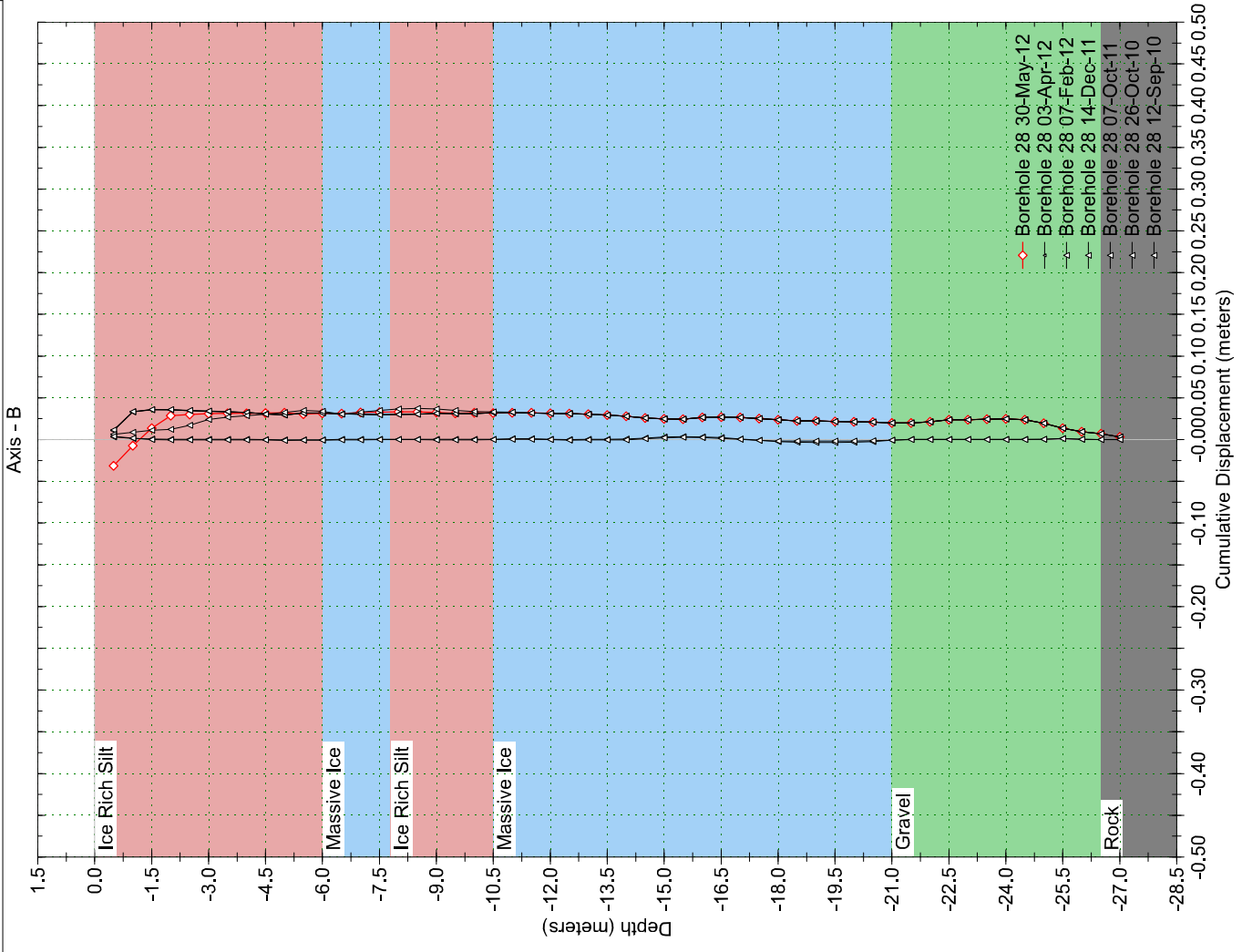
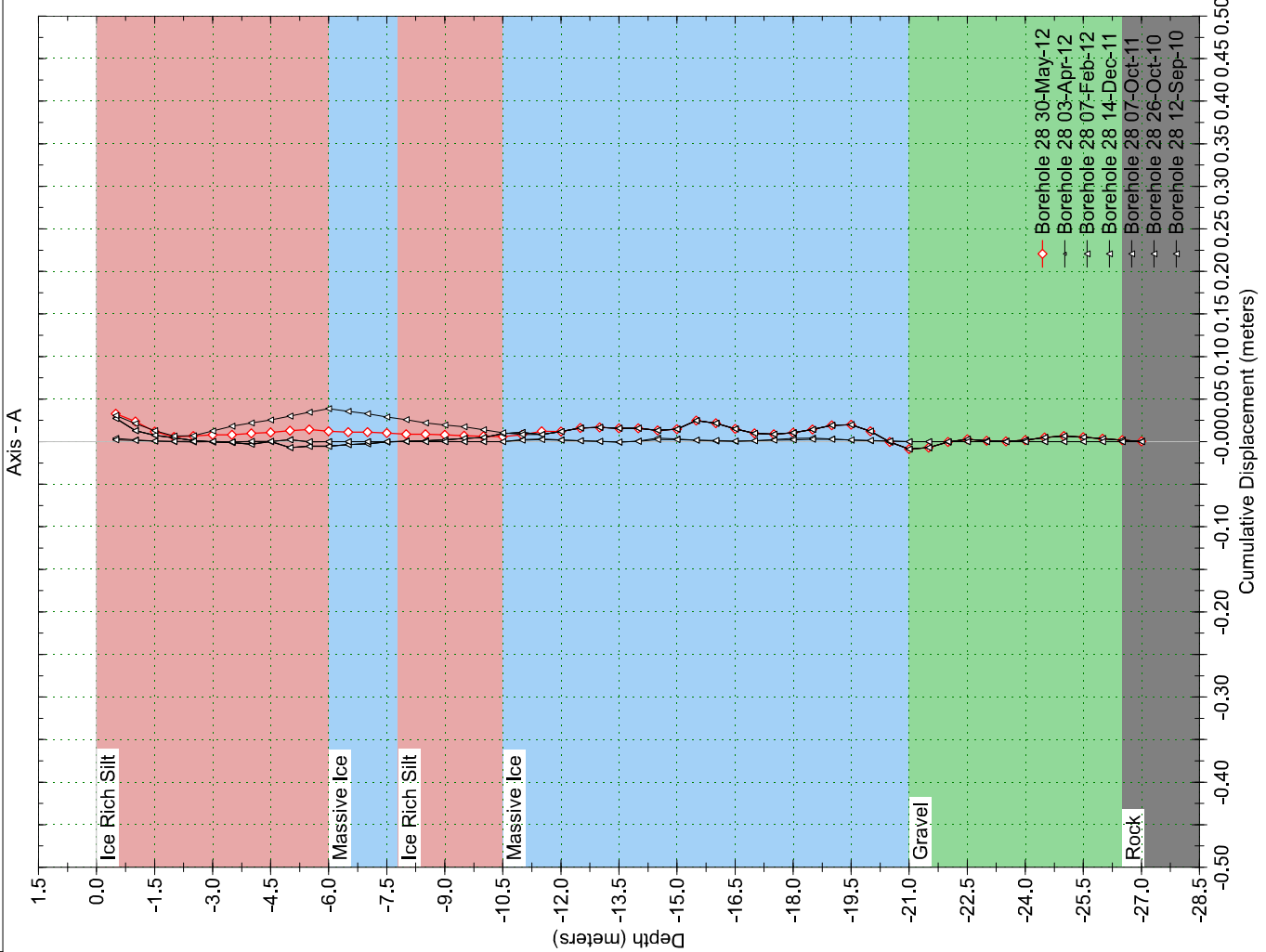


Install Date February 22, 2011
 Last Updated May 30, 2012
 Cable No: 2264

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH32
Figure T6

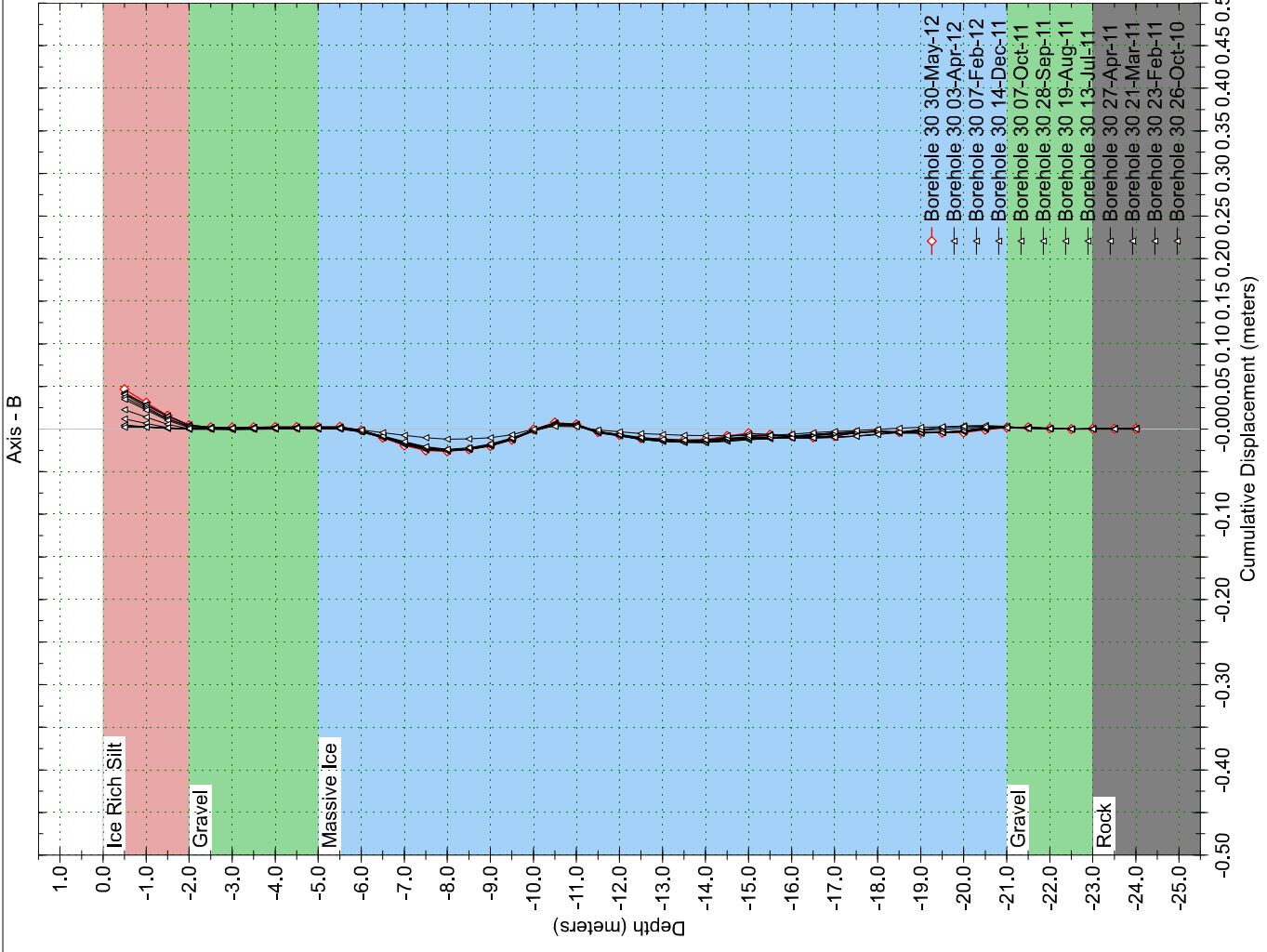
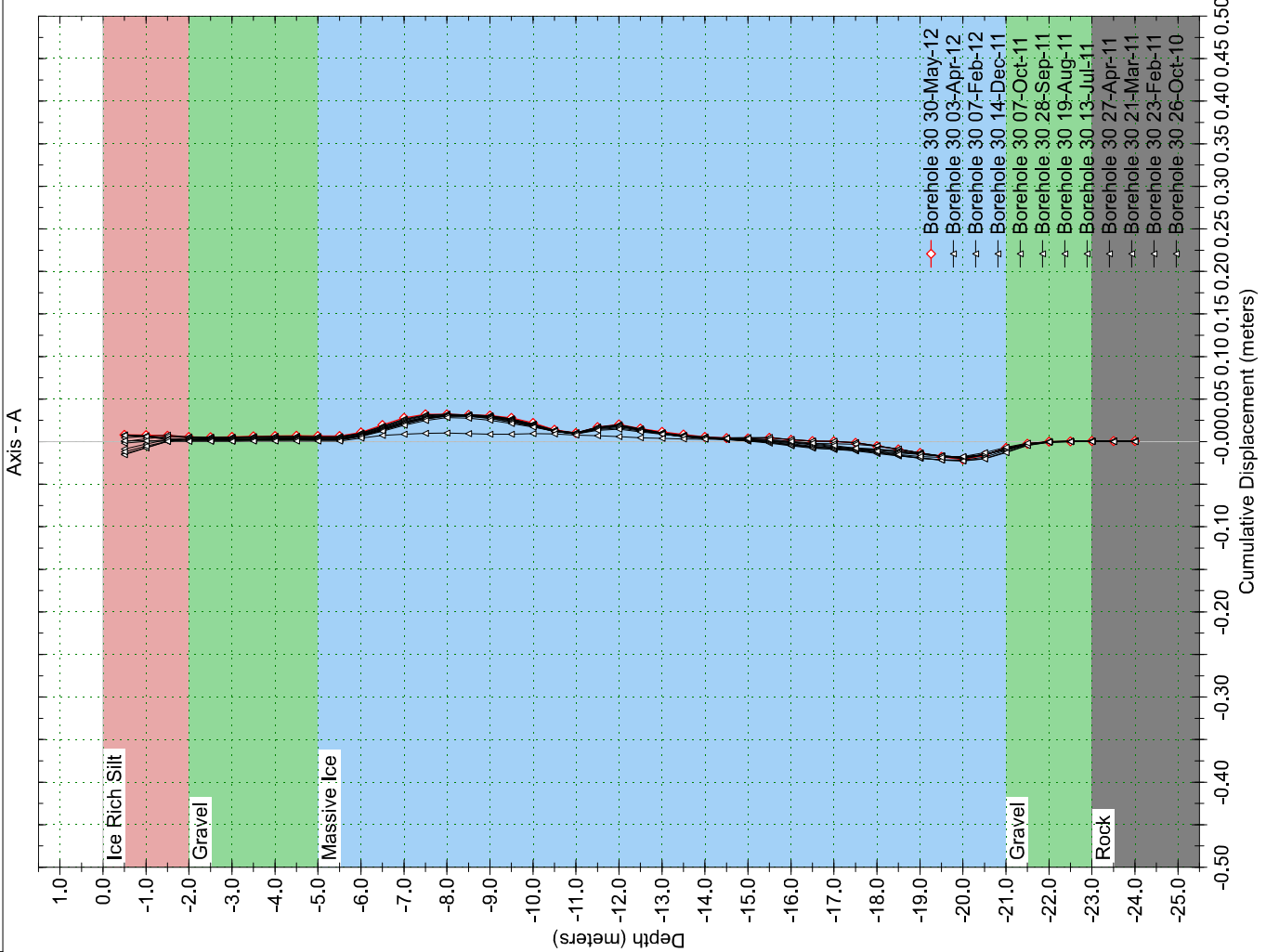
Borehole : Borehole 28
Project : Keno Hill District Mill
Location : DSTF
Northing : 7086985
Easting : 484026
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 27.0 meters
A+ Groove Azimuth :
Base Reading : 2010 Aug 22 08:23
Applied Azimuth : 0.0 degrees



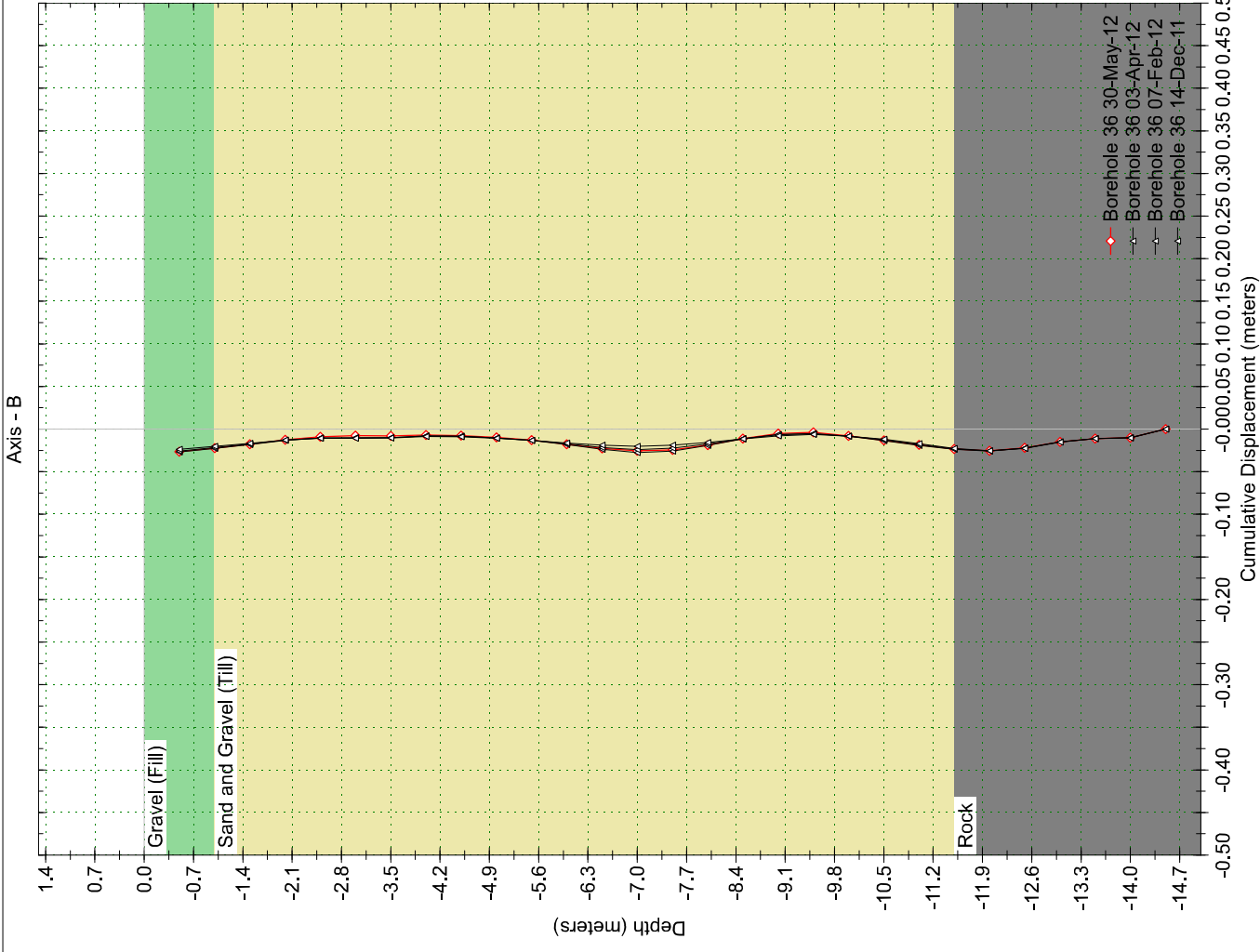
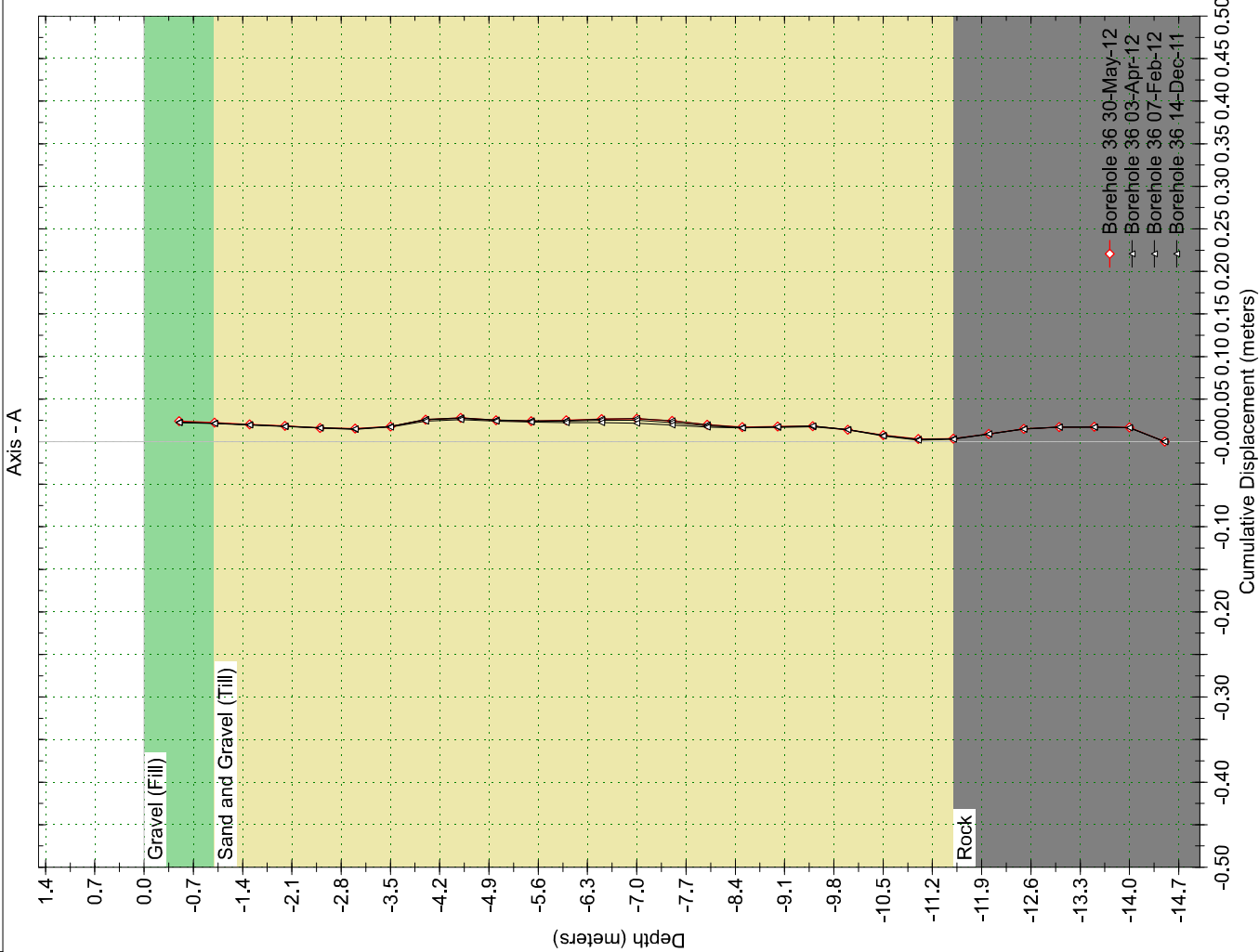
Borehole : Borehole 30
Project : Keno Hill District Mill
Location : DSTF
Northing : 7087032
Easting : 483969
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 24.0 meters
A+ Groove Azimuth :
Base Reading : 2010 Sep 12 08:57
Applied Azimuth : 0.0 degrees



Borehole : Borehole 36
Project : Keno Hill District Mill
Location :
Northing :
Easting :
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 14.0 meters
A+ Groove Azimuth :
Base Reading : 2011 Oct 07 14:04
Applied Azimuth : 0.0 degrees



TECHNICAL MEMO

EBA, A Tetra Tech Company
Calcite Business Centre, Unit 6, 151 Industrial Road
Whitehorse, YT Y1A 2V3 CANADA
p. 867.668.3068 f. 867.668.4349

ISSUED FOR USE

TO:	Katherine Penney	DATE:	August 27, 2012
C:	Vanessa Benwood	MEMO NO.:	011
FROM:	Justin Pigage, P.Eng.	EBA FILE:	W14101696
<hr/>			
SUBJECT:	DSTF Instrumentation and Construction Monitoring Keno Hill District Mill Site		

1.0 INTRODUCTION

Alexco Resource Corp (Alexco) retained EBA, A Tetra Tech Company (EBA) to observe construction and operation activities associated with the Dry Stacked Tailings Facility (DSTF) at the Keno Hill District Mill Site. Activities related to the DSTF are to be carried out in accordance with the following documents:

- Operation, Maintenance, and Surveillance Manual, Dry Stack Tailings Facility, Keno Hill District Mill, YT
- Quarter 1 Tailings Placement Provisions, Keno Hill District Mill Site, Yukon
- Runoff Diversion Structure Specs, Dry Stacked Tailings Facility, Keno Hill District Mill, YT
- Detailed Design, Dry Stacked Tailings Facility, Keno Hill District Mill Site, Yukon

This memo summarizes the on-going monitoring of the DSTF completed by EBA on July 12 - 13, 2012.

2.0 WORK COMPLETED

EBA conducted 11 compaction tests on the lower bench of the DSTF during the July ,2012 visit. Only the west half of the bench was suitable for testing due to the significant recent rainfall in the area and subsequent high moistures and ponded water on the DSTF. The compaction results including the UTM coordinates and elevations (NAD83 datum) of each test are attached to this memo. Test locations were recorded with a handheld GPS receiver accurate to within 5 m horizontally and elevations determined with record survey data of the DSTF completed July 2, 2012 and supplied by Alexco Resources Corp. At the time EBA was leaving site, several drainage trenches had been excavated into the surface of the DSTF and the ponded water was draining quickly.

EBA has been collecting ground temperature cable (GTC) readings since November 2009 and slope indicator (SI) readings since September 2010 at the DSTF. During the site visit, EBA collected GTC readings from boreholes BH15, BH17, BH18, BH23, BH31, and BH32 and SI readings from boreholes BH28, BH30, and BH36. Current GTC and slope indicator readings are attached to this memo.

Only a partial set of SI readings were collected from BH28 during the site visit. The ice that had previously blocked the pipe at a depth of 11 m has been removed, and the surrounding area backfilled to mitigate water accumulation as previously recommended by EBA. However, the pipe appears to be damaged and it

was not possible to attain accurate readings beyond 11 m in depth. Therefore, only SI readings above 11 m are included in the attached displacement plots.

3.0 DISCUSSION

The July compaction tests on the DSTF met or exceeded the specified requirements with the exception of tests 109, 111 and 112. The tests conducted on the side slopes of the DSTF were unsuccessful due to the disturbance of the tailings surface during slope shaping. The western slope of the DSTF is close to its final design. Its 3:1 slope has been confirmed by an Alexco as built, and 0.25 m to 0.5 m of cover material is now being placed.

Ongoing GTC and slope indicator readings provide a baseline for the site and monitor any changes during DSTF construction and operation. To date, no readings requiring additional review have been recorded.

While the steaming process at BH28 was successful in removing the ice blockage, the pipe appears to be badly damaged, and reliable data cannot be collected at the present time. Possible methods to remedy this problem without having to install a new borehole are currently being considered. Lowering a camera or scope into the pipe will give EBA a better idea of the nature of the damage and potential solutions.

4.0 CLOSURE

The next site visit is scheduled for approximately six weeks from this visit, at the end of August; dates will be confirmed with Alexco site personnel.

We trust this memo meets your present requirements. Should you have any questions or comments, please contact us.

COMPACTION DENSITY TEST SUMMARY REPORT

ASTM Designation D2922 & D3017

Project: Dry Stacked Tailings Facility **Test Apparatus:** Nuclear **Troxler No:** 63325/63324
Keno Hill District Mill Site **Specified Compaction:** 95 % Std. Proctor Max. Dry Density
Project No.: W14101696 **Specified Moisture (MC):** _____
Client: Alexco Resource Corp **Temperature** **Air:** _____ °C **Soil:** _____ °C
Attention: Katherine Penney **Date Tested:** See Below **By:** IM/JTP
Contractor: Alexco Resource Corp **Construction Period:** _____

Soil Description: Tailings (2080@ 13%)

Material Usage/Zone: _____

Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/05/30	95 300	N 7086940 E 483990	930	2290	16.0	2080	13	>105
	96 300	N 7086952 E 483953	925	2010	16.0	2080	13	96.6
	97 300	N 7086939 E 483952	925	2093	16.0	2080	13	100.6
	98 300	N 7086924 E 483948	925	2082	16.0	2080	13	100.1
	99 300	N 7086932 E 483939	924	2131	16.0	2080	13	102.5
	100 300	N 7086945 E 483944	924	2082	16.0	2080	13	100.1
	101 300	N 7086965 E 483955	924	2114	16.0	2080	13	101.6
2012/07/13	102 300	N 7086930 E 483982	920	2210	16.0	2080	13	>105
	103 300	N 7086935 E 483966	920	2103	16.0	2080	13	101.1
	104 300	N 7086936 E 483985	920	2186	16.0	2080	13	>105
	105 300	N 7086951 E 483989	920	2226	16.0	2080	13	>105
	106 300	N 7086946 E 483973	920	2200	16.0	2080	13	>105

Remarks: Elevations according to Alexco Drawing "DSTF as Built" July 2/12. Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

Reviewed By: _____

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COMPACTION DENSITY TEST SUMMARY REPORT

ASTM Designation D2922 & D3017

Project: Dry Stacked Tailings Facility **Test Apparatus:** Nuclear **Troxler No:** 63325/63324
Keno Hill District Mill Site **Specified Compaction:** 95 % Std. Proctor Max. Dry Density
Project No.: W14101696 **Specified Moisture (MC):** _____
Client: Alexco Resource Corp **Temperature** **Air:** _____ °C **Soil:** _____ °C
Attention: Katherine Penney **Date Tested:** See Below **By:** IM/JTP/RC
Contractor: Alexco Resource Corp **Construction Period:** _____

Soil Description: Tailings (2080@ 13%) (Sand Size)

Material Usage/Zone: _____

Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/07/13	107 300	N 7086961 E 483979	920	2268	16.0	2080	13	>105
	108 300	N 7086965 E 483959	916	1981	16.0	2080	13	95.2
	109 300	N 7086972 E 483948	913	1957	16.0	2080	13	94.1
	110 300	N 7086955 E 483940, East 3:1 Slope	915	2039	16.0	2080	13	98.0
	111 300	N 7086937 E 483935, East 3:1 Slope	913	1920	16.0	2080	13	92.3
	112 300	N 7086944 E 483952, East 3:1 Slope	917	1905	16.0	2080	13	91.6
2012/09/12	113 250	N 7086924 E 484039	946	2181	16.0	2080	13	104.9
	114 250	N 7086926 E 484030	945	2225	16.0	2080	13	>105
	115 250	N 6086908 E 484029	947	2141	16.0	2080	13	102.9
	116 250	N 7086906 E 484048	948	2147	16.0	2080	13	103.2
	117 250	N 7086917 E 484056	950	2137	16.0	2080	13	102.7
	118 250	N 7086895 E 484034	947	2030	16.0	2080	13	97.6

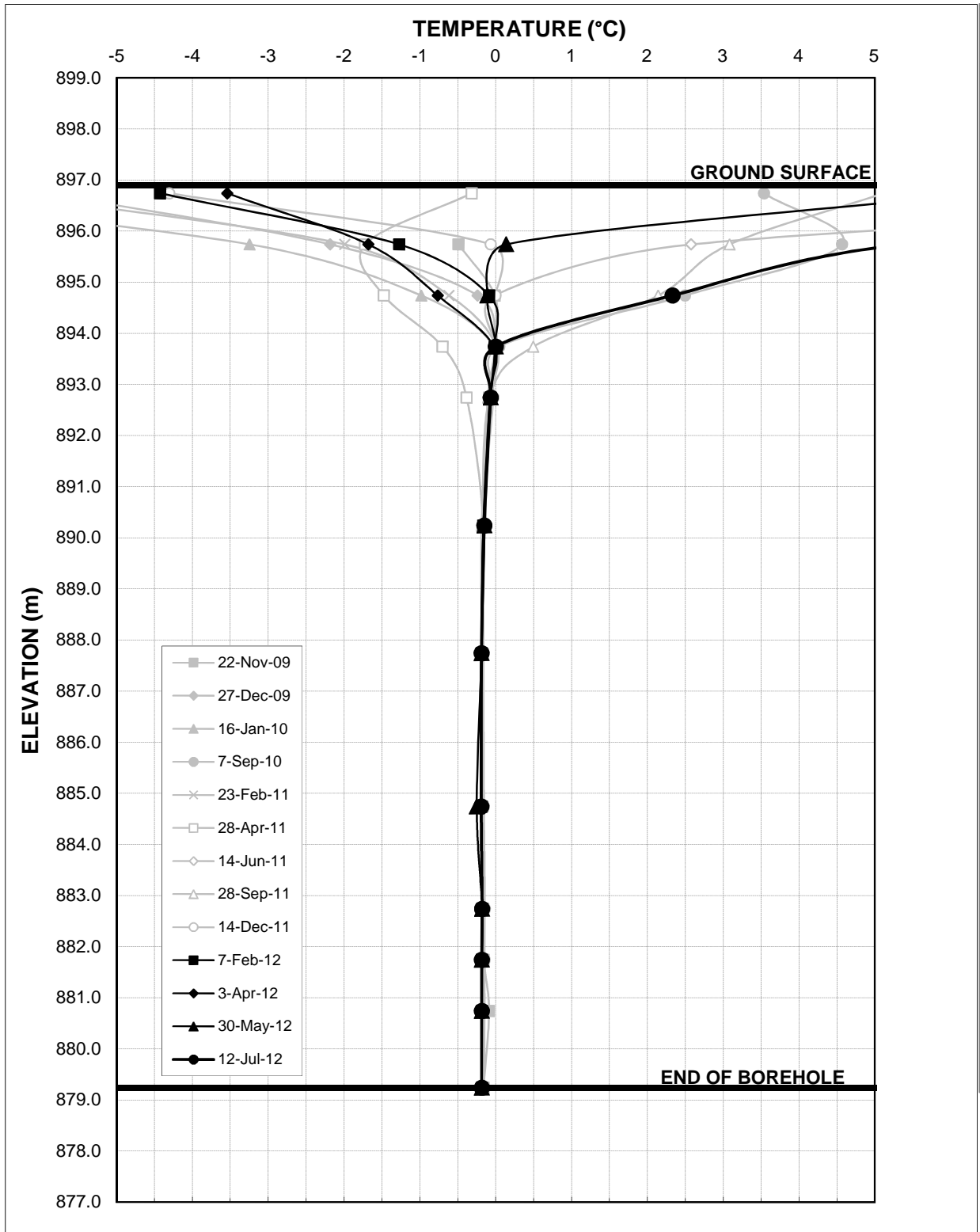
Remarks: Elevations according to Alexco Drawing "DSTF as Built" dated July 2/12. Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

Reviewed By: _____

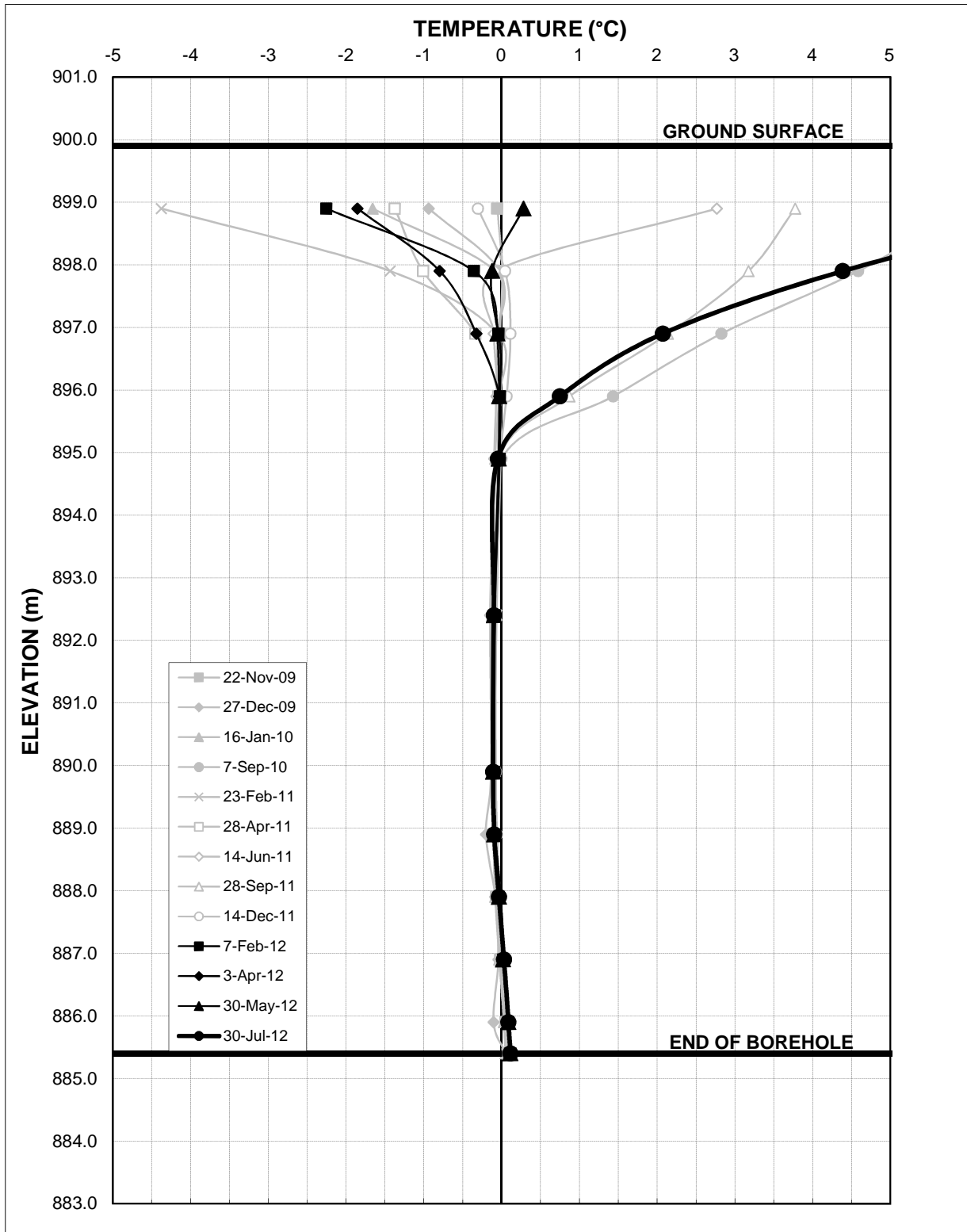
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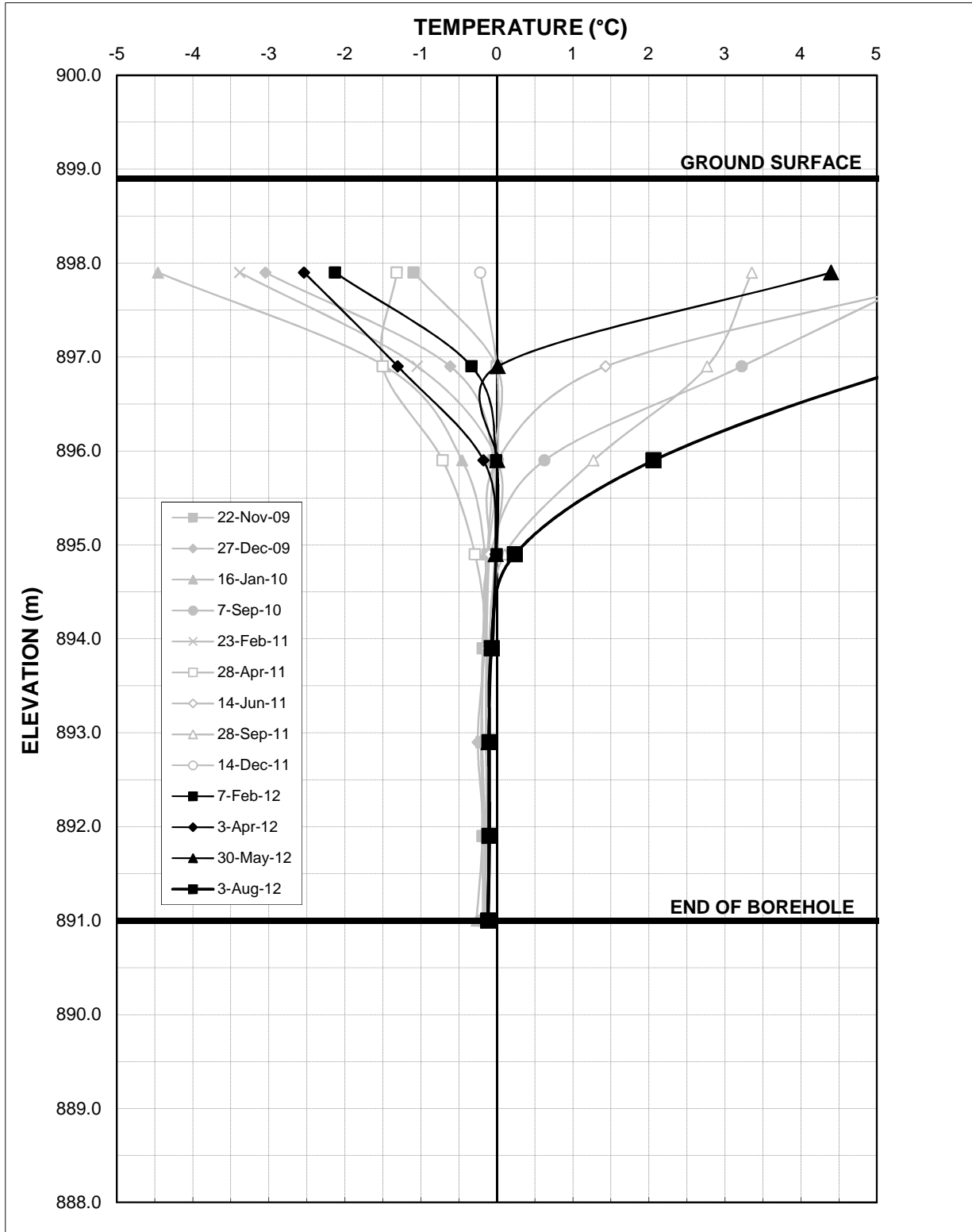
Install Date August 30, 2009
 Last Updated July 30, 2012
 Cable No: 2207

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH15
Figure T1



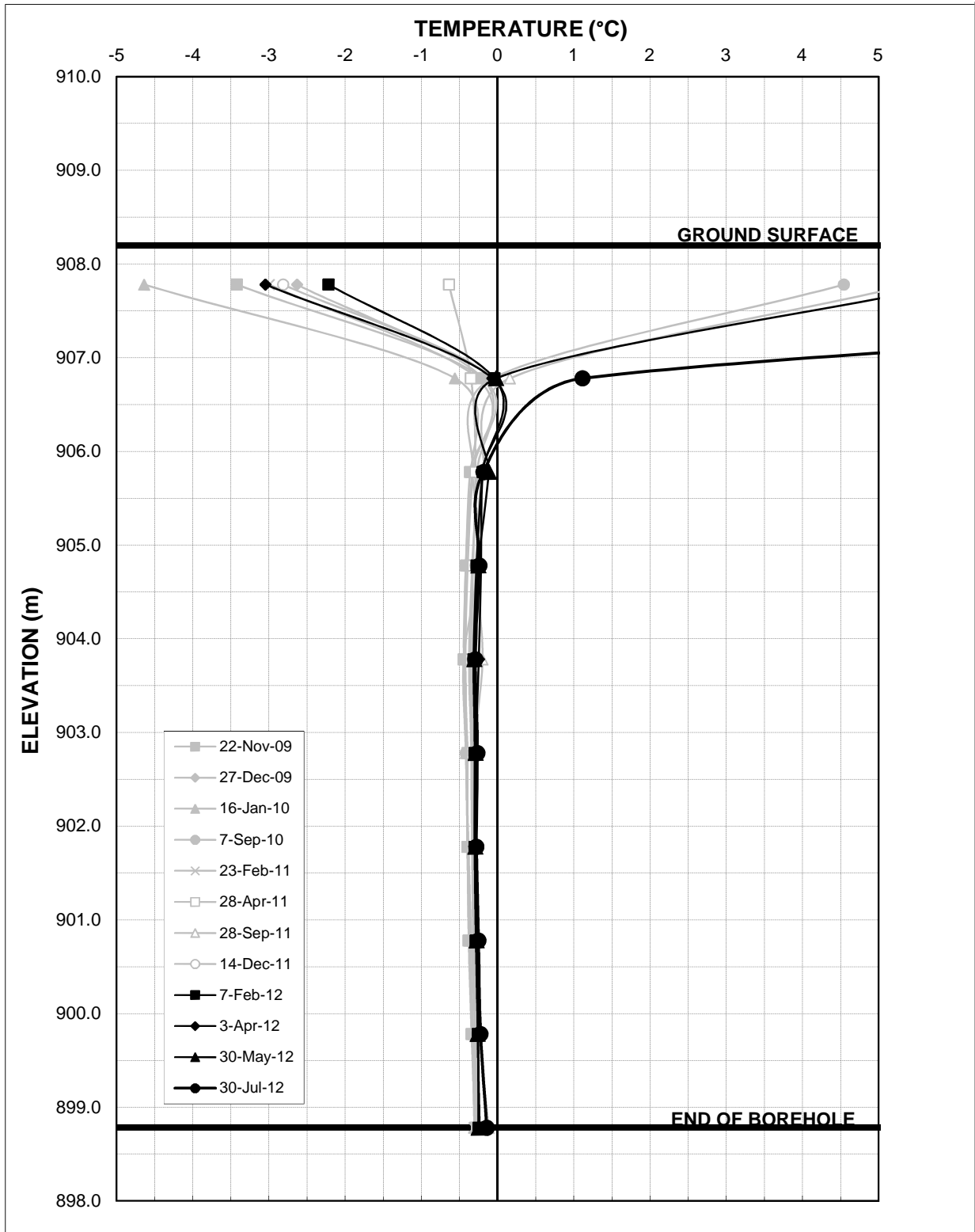
Install Date August 30, 2009
 Last Updated July 30, 2012
 Cable No: 2208

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH17
Figure T2



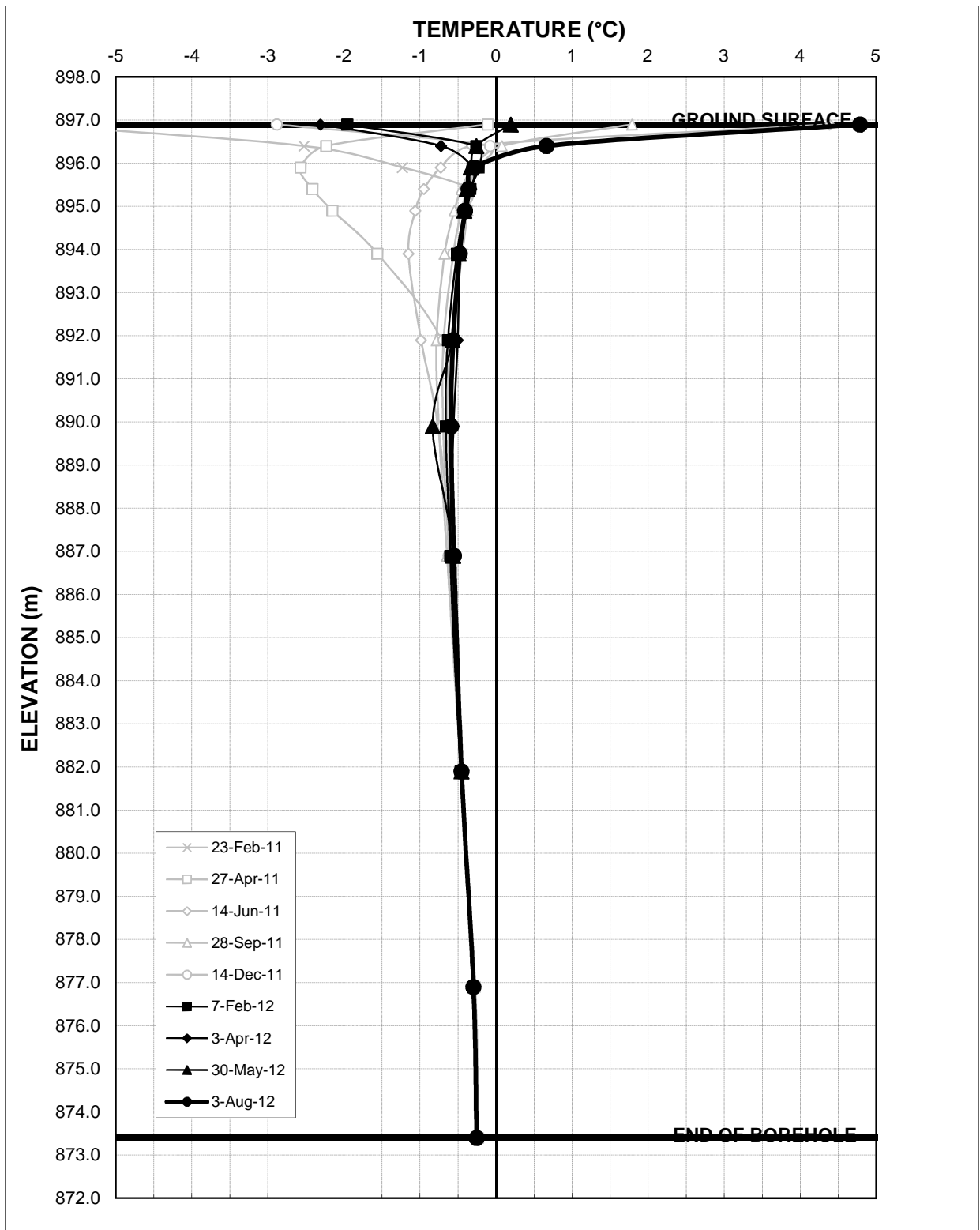
Install Date September 2, 2009
 Last Updated August 3, 2012
 Cable No: 2209

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH18
Figure T3



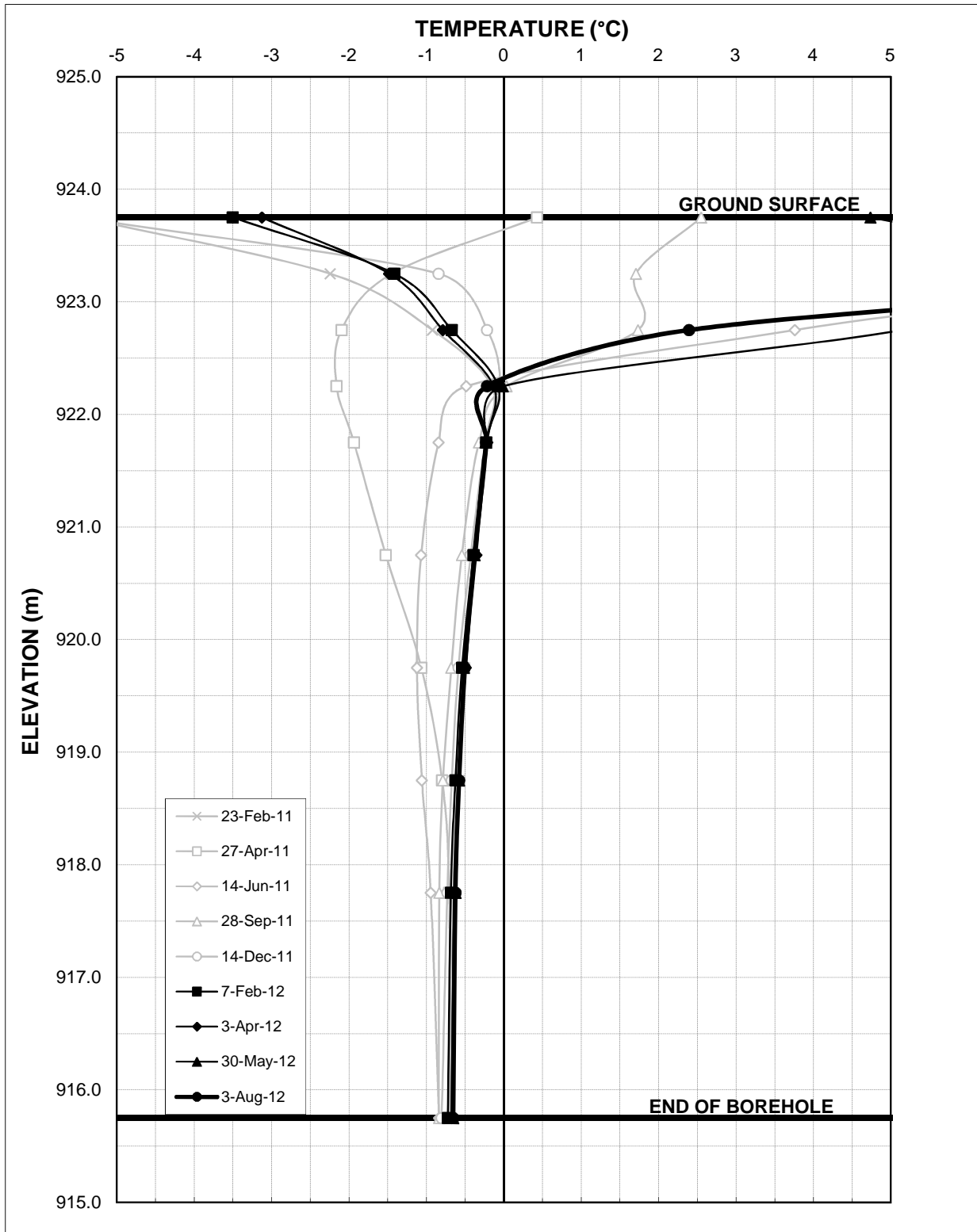
Install Date September 29, 2009
 Last Updated July 30, 2012
 Cable No: 2210

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH23
Figure T4



Install Date February 22, 2011
 Last Updated August 3, 2012
 Cable No: 2263

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH31
Figure T5

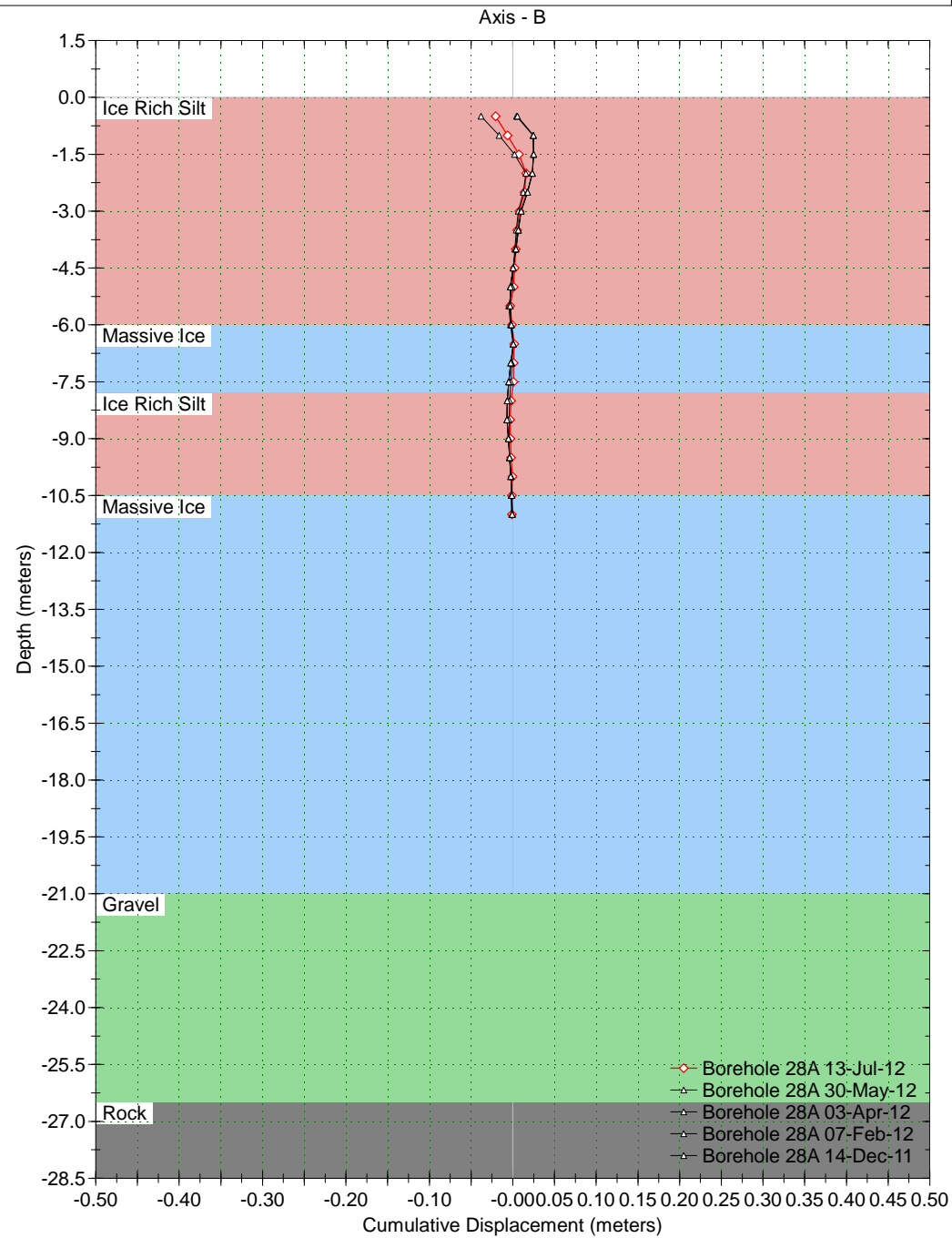
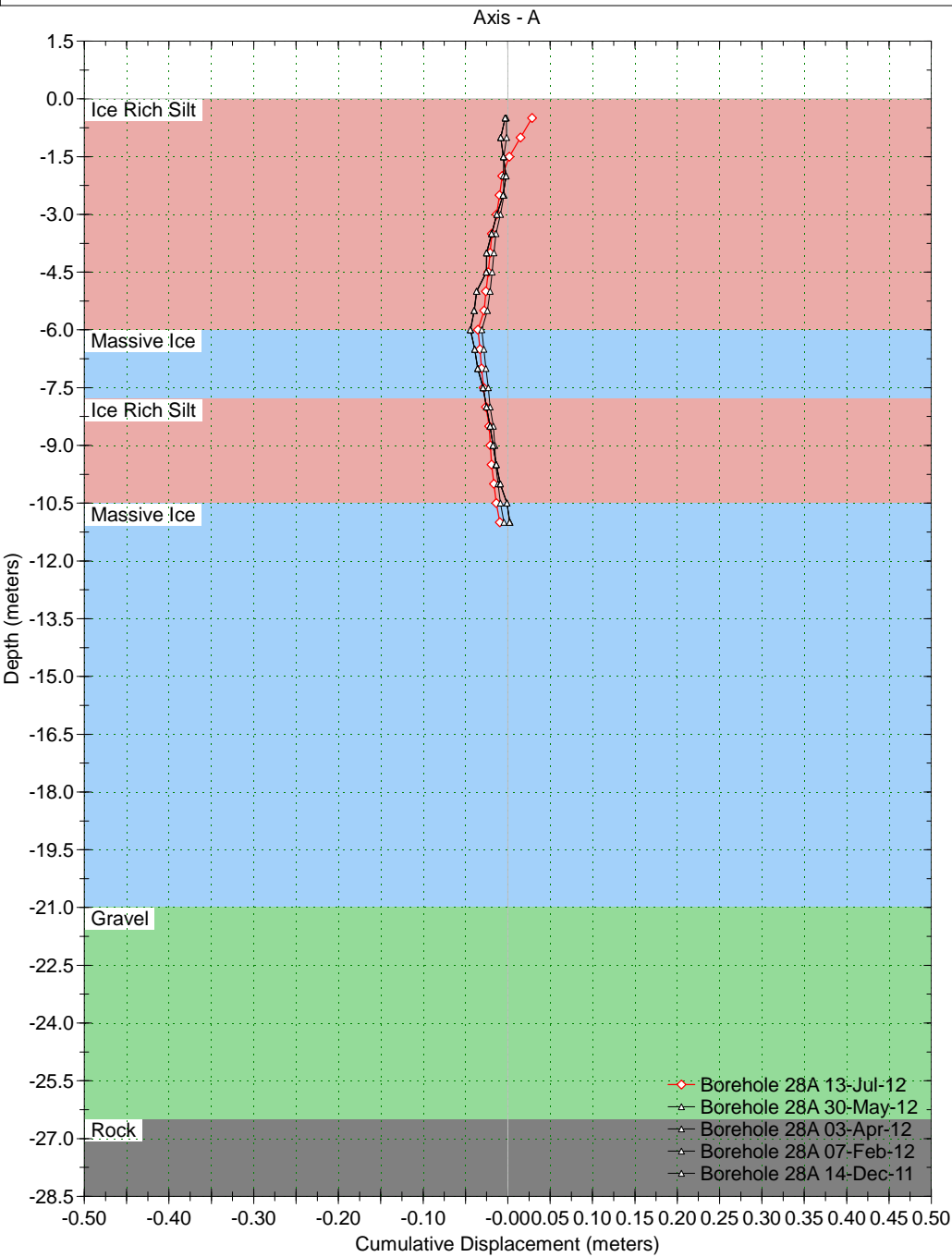


Install Date February 22, 2011
 Last Updated August 3, 2012
 Cable No: 2264

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH32
Figure T6

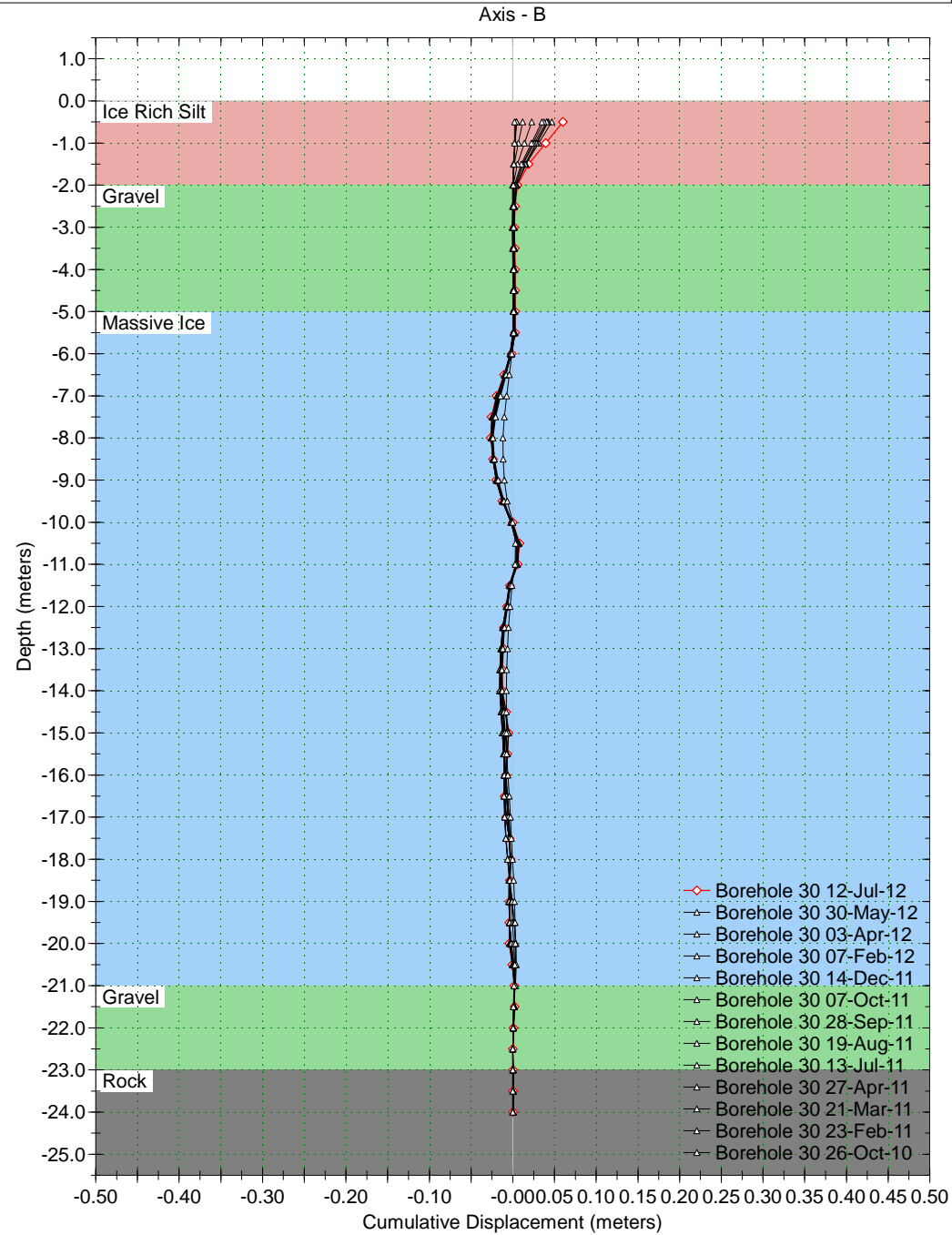
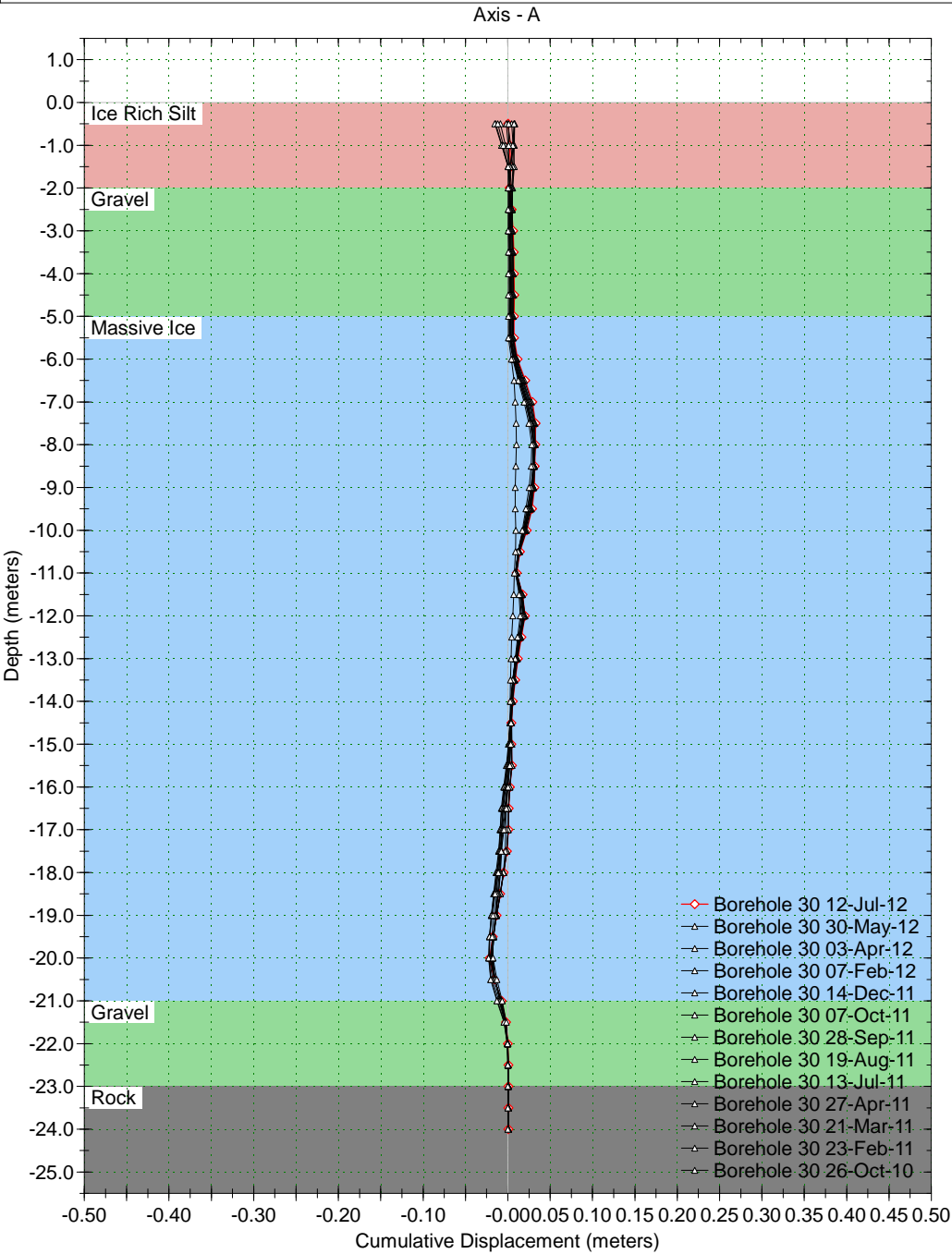
Borehole : Borehole 28A
Project : Keno Hill District Mill
Location :
Northing :
Easting :
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 11.0 meters
A+ Groove Azimuth :
Base Reading : 2011 Oct 07 14:56
Applied Azimuth : 0.0 degrees



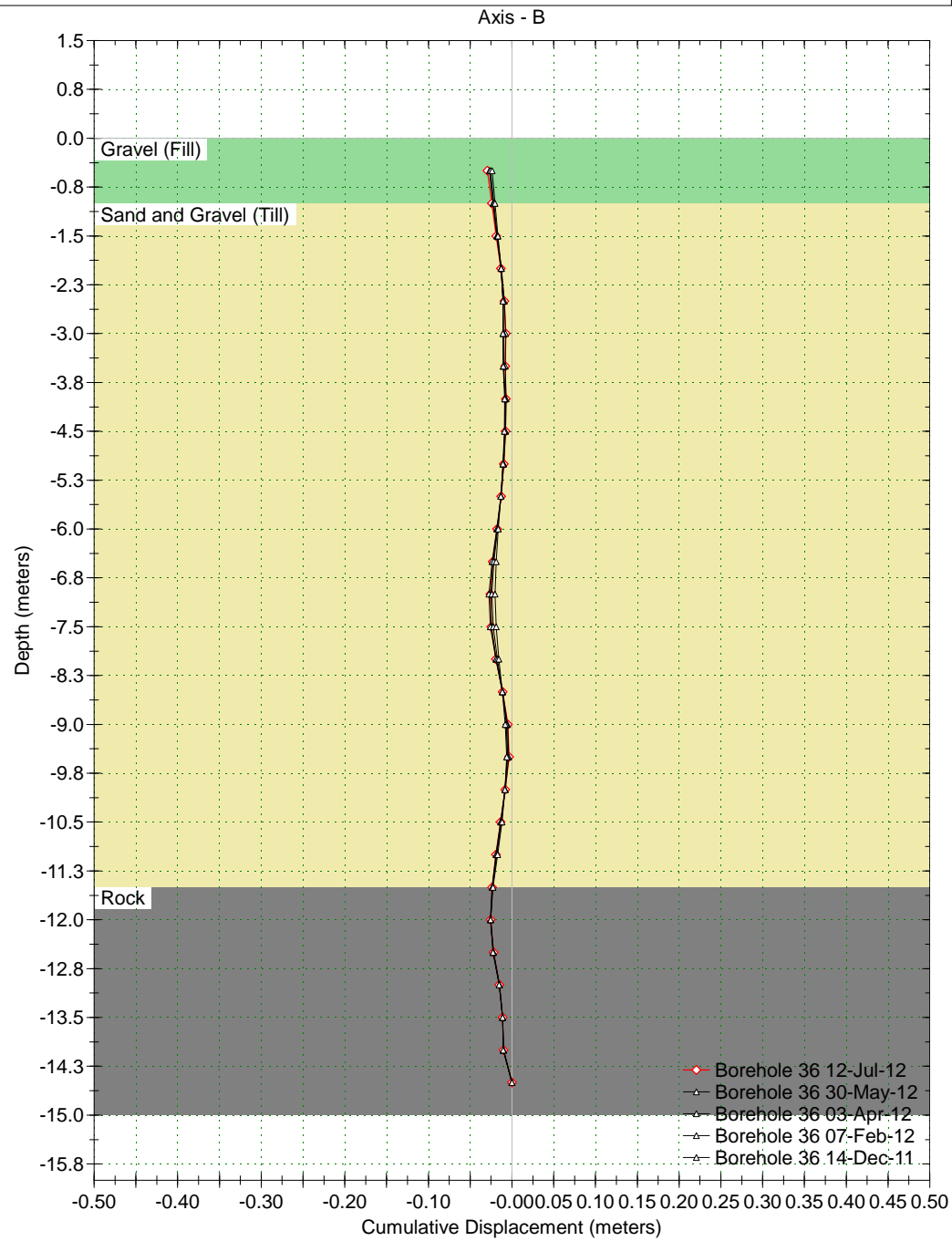
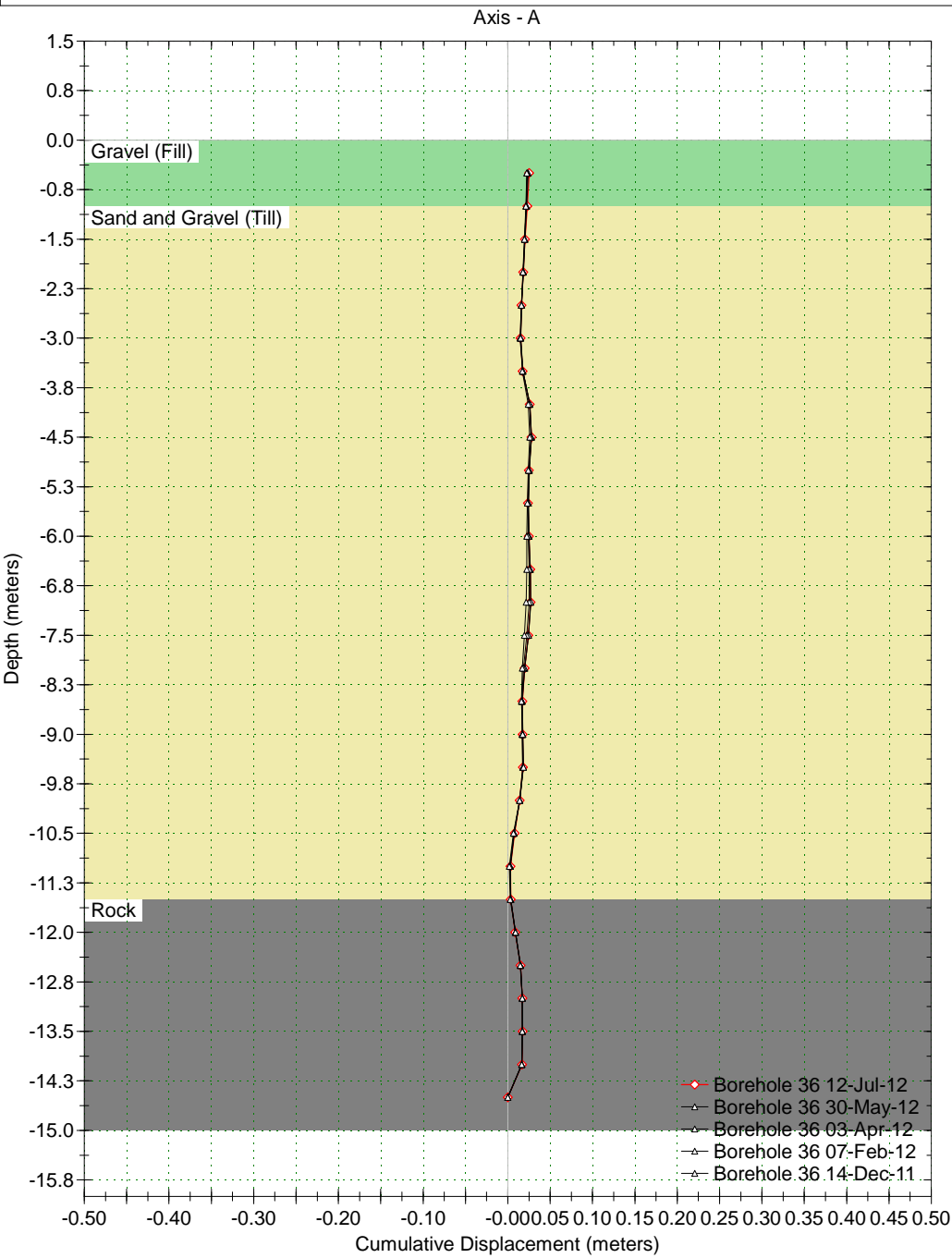
Borehole : Borehole 30
Project : Keno Hill District Mill
Location : DSTF
Northing : 7087032
Easting : 483969
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 24.0 meters
A+ Groove Azimuth :
Base Reading : 2010 Sep 12 08:57
Applied Azimuth : 0.0 degrees



Borehole : Borehole 36
Project : Keno Hill District Mill
Location :
Northing :
Easting :
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 14.0 meters
A+ Groove Azimuth :
Base Reading : 2011 Oct 07 14:04
Applied Azimuth : 0.0 degrees



TECHNICAL MEMO

EBA, A Tetra Tech Company
Calcite Business Centre, Unit 6, 151 Industrial Road
Whitehorse, YT Y1A 2V3 CANADA
p. 867.668.3068 f. 867.668.4349

ISSUED FOR USE

TO: Katherine Penney
C: Vanessa Benwood
FROM: Kathleen Jarvis, EIT
DATE: September 20, 2012
MEMO NO.: 012
EBA FILE: W14101696

SUBJECT: DSTF Instrumentation and Construction Monitoring
Keno Hill District Mill Site

1.0 INTRODUCTION

Alexco Resource Corp (Alexco) retained EBA, A Tetra Tech Company (EBA) to observe construction and operation activities associated with the Dry Stacked Tailings Facility (DSTF) at the Keno Hill District Mill Site. Activities related to the DSTF are to be carried out in accordance with the following documents:

- Operation, Maintenance, and Surveillance Manual, Dry Stack Tailings Facility, Keno Hill District Mill, YT
- Quarter 1 Tailings Placement Provisions, Keno Hill District Mill Site, Yukon
- Runoff Diversion Structure Specs, Dry Stacked Tailings Facility, Keno Hill District Mill, YT
- Detailed Design, Dry Stacked Tailings Facility, Keno Hill District Mill Site, Yukon

This memo summarizes the on-going monitoring of the DSTF completed by EBA on September 12 and 13, 2012.

2.0 WORK COMPLETED

EBA conducted 14 compaction tests on the lower bench of the DSTF during the September, 2012 visit. The compaction results including the UTM coordinates and elevations (NAD83 datum) of each test are attached to this memo. Test locations were recorded with a handheld GPS receiver accurate to within 5 m horizontally, and unknown accuracy vertically.

EBA has been collecting ground temperature cable (GTC) readings since November 2009 and slope indicator (SI) readings since September 2010 at the DSTF. During the site visit, EBA was unable to collect GTC readings from the boreholes due to faulty equipment. SI readings from boreholes BH28, BH30, and BH36 were collected. Current slope indicator readings are attached to this memo.

Only a partial set of SI readings were collected from BH28 during the site visit. Ice or some other obstruction continues to affect the SI pipe at a depth of 11 m and the SI readings below 11 m are not considered reliable. Therefore, only SI readings above 11 m are included in the attached displacement plots.

3.0 DISCUSSION

The September compaction tests on the DSTF consistently met or exceeded the specified requirements.

Ongoing GTC and slope indicator readings provide a baseline for the site and monitor any changes during DSTF construction and operation. To date, no readings requiring additional review have been recorded.

4.0 CLOSURE

The next site visit is scheduled for the middle of November; dates will be confirmed with Alexco site personnel.

We trust this memo meets your present requirements. Should you have any questions or comments, please contact us.

COMPACTION DENSITY TEST SUMMARY REPORT

ASTM Designation D2922 & D3017

Project: Dry Stacked Tailings Facility **Test Apparatus:** Nuclear **Troxler No:** 63325/63324
Keno Hill District Mill Site **Specified Compaction:** 95 % Std. Proctor Max. Dry Density
Project No.: W14101696 **Specified Moisture (MC):** _____
Client: Alexco Resource Corp **Temperature** **Air:** _____ °C **Soil:** _____ °C
Attention: Katherine Penney **Date Tested:** See Below **By:** IM/JTP/RC
Contractor: Alexco Resource Corp **Construction Period:** _____

Soil Description: Tailings (2080@ 13%) (Sand Size)

Material Usage/Zone: _____

Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/07/13	107 300	N 7086961 E 483979	920	2268	16.0	2080	13	>105
	108 300	N 7086965 E 483959	916	1981	16.0	2080	13	95.2
	109 300	N 7086972 E 483948	913	1957	16.0	2080	13	94.1
	110 300	N 7086955 E 483940, East 3:1 Slope	915	2039	16.0	2080	13	98.0
	111 300	N 7086937 E 483935, East 3:1 Slope	913	1920	16.0	2080	13	92.3
	112 300	N 7086944 E 483952, East 3:1 Slope	917	1905	16.0	2080	13	91.6
2012/09/12	113 250	N 7086924 E 484039	946	2181	16.0	2080	13	104.9
	114 250	N 7086926 E 484030	945	2225	16.0	2080	13	>105
	115 250	N 6086908 E 484029	947	2141	16.0	2080	13	102.9
	116 250	N 7086906 E 484048	948	2147	16.0	2080	13	103.2
	117 250	N 7086917 E 484056	950	2137	16.0	2080	13	102.7
	118 250	N 7086895 E 484034	947	2030	16.0	2080	13	97.6

Remarks: Elevations according to Alexco Drawing "DSTF as Built" dated July 2/12. Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

Reviewed By: _____

Data presented hereon is for the sole use of the stipulated client. EBA is not responsible, nor can be held liable, for use made of this report by any other party, with or without the knowledge of EBA. The testing services reported herein have been performed by an EBA technician to recognized industry standards, unless otherwise noted. No other warranty is made. These data do not include or represent any interpretation or opinion of specification compliance or material suitability. Should engineering interpretation be required, EBA will provide it upon written request.



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Date yyyy/mm/dd	Test No. Probe (mm)	Location:	Elevation (m)	Dry Density (kg/m ³)	MC %	Max. Dry Density	Opt. MC %	Comp % SPD
2012/09/13	119 250	N 7086942 E 484007	945	2267	16.0	2080	13	>105
	120 250	N 7086941 E 484007	945	2251	16.0	2080	13	>105
	121 250	N 7086940 E 484008	945	2263	16.0	2080	13	>105
	122 250	N7086940 E 484007	945	2196	16.0	2080	13	>105
	123 250	N 7086946 E 483989	945	2209	16.0	2080	13	>105
	124 250	N 7086946 E 483990	945	2242	16.0	2080	13	>105
	125 250	N 7086946 E 483988	945	2211	16.0	2080	13	>105
	126 250	N 7086945 E 483988	945	2223	16.0	2080	13	>105

Remarks: Test on top elevation of finished DSTF surface. Moisture contents corrected to 16% according to 2012 DSTF Drilling Program and 2013 sand cone testing moisture contents.

Copies: _____

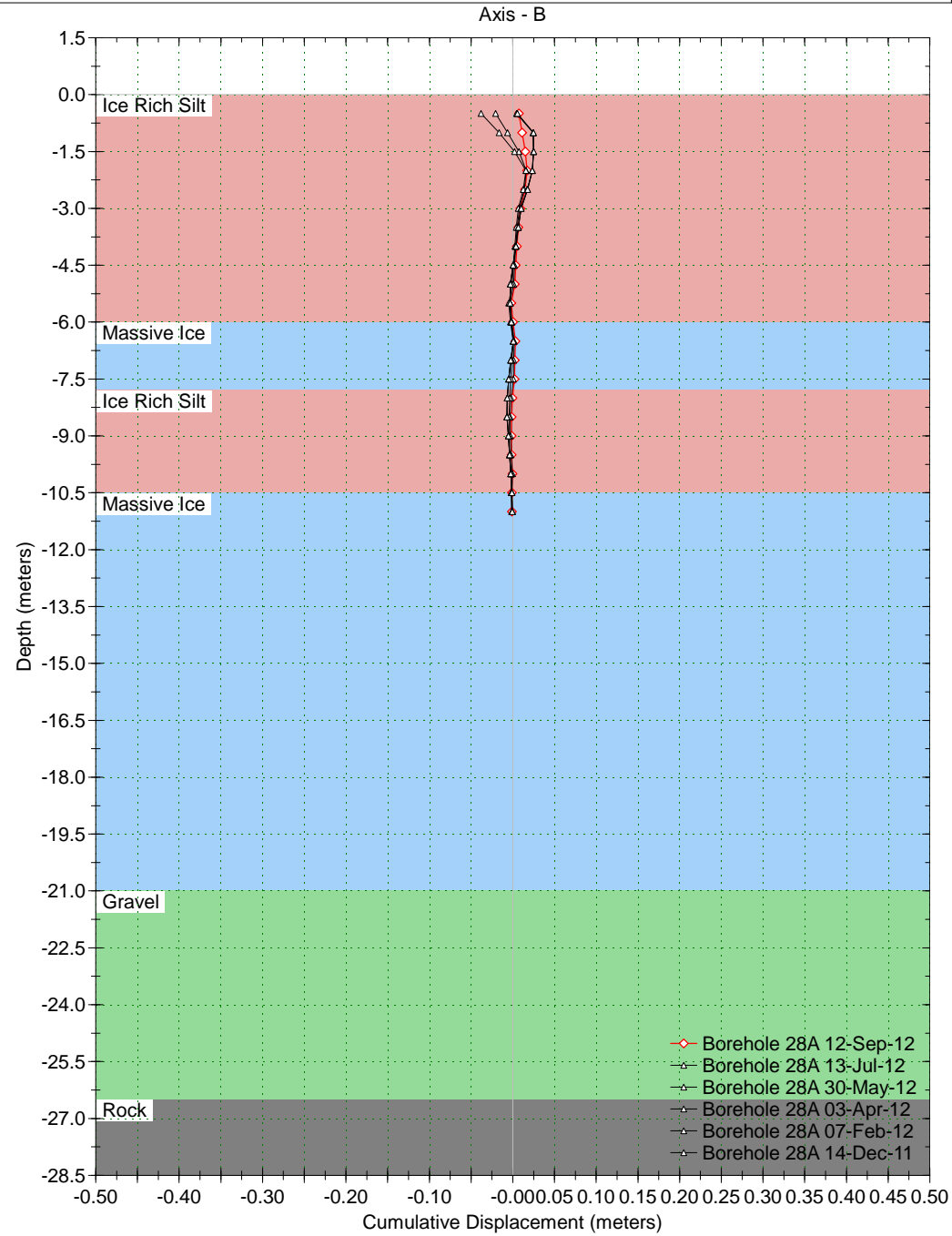
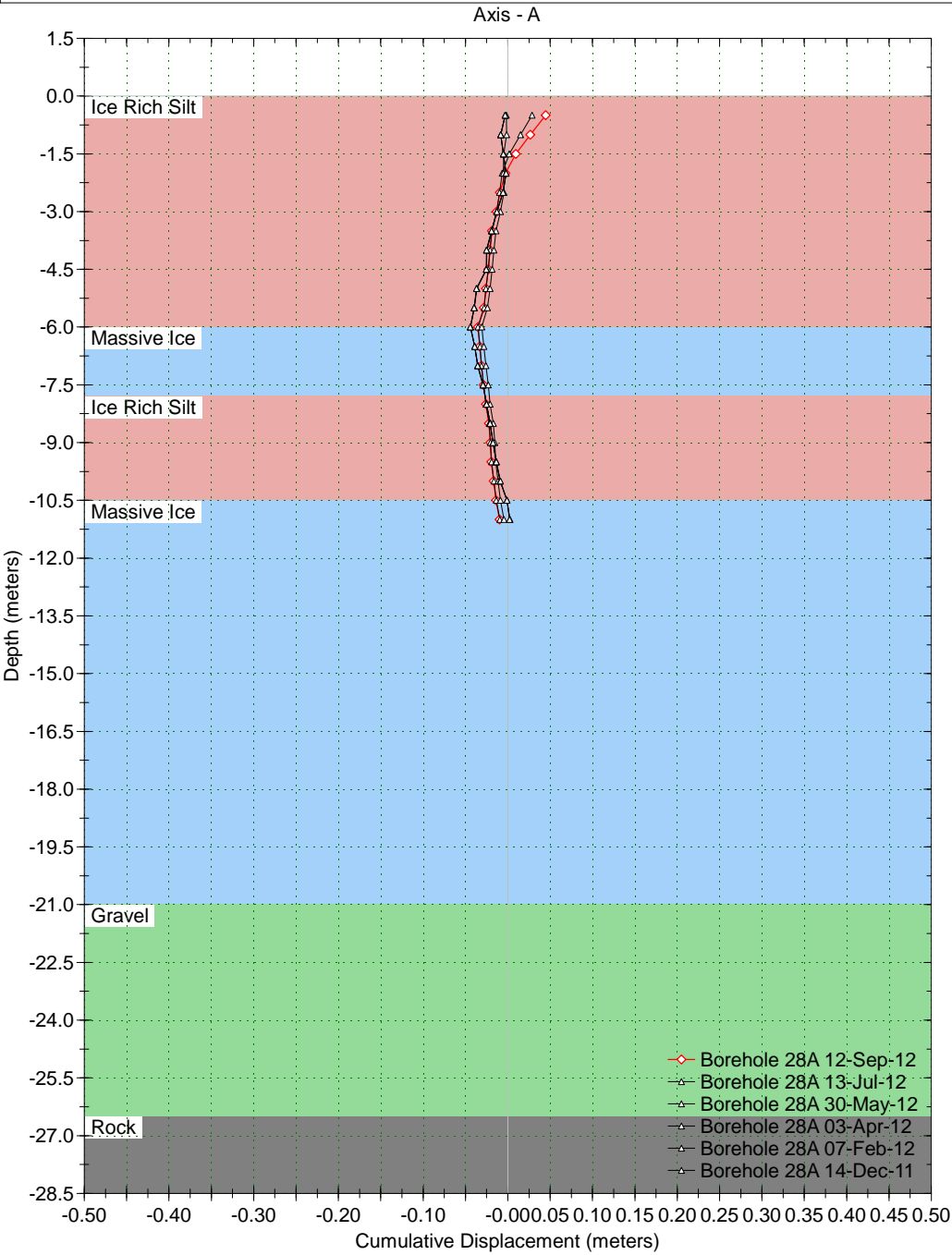
Reviewed By: _____

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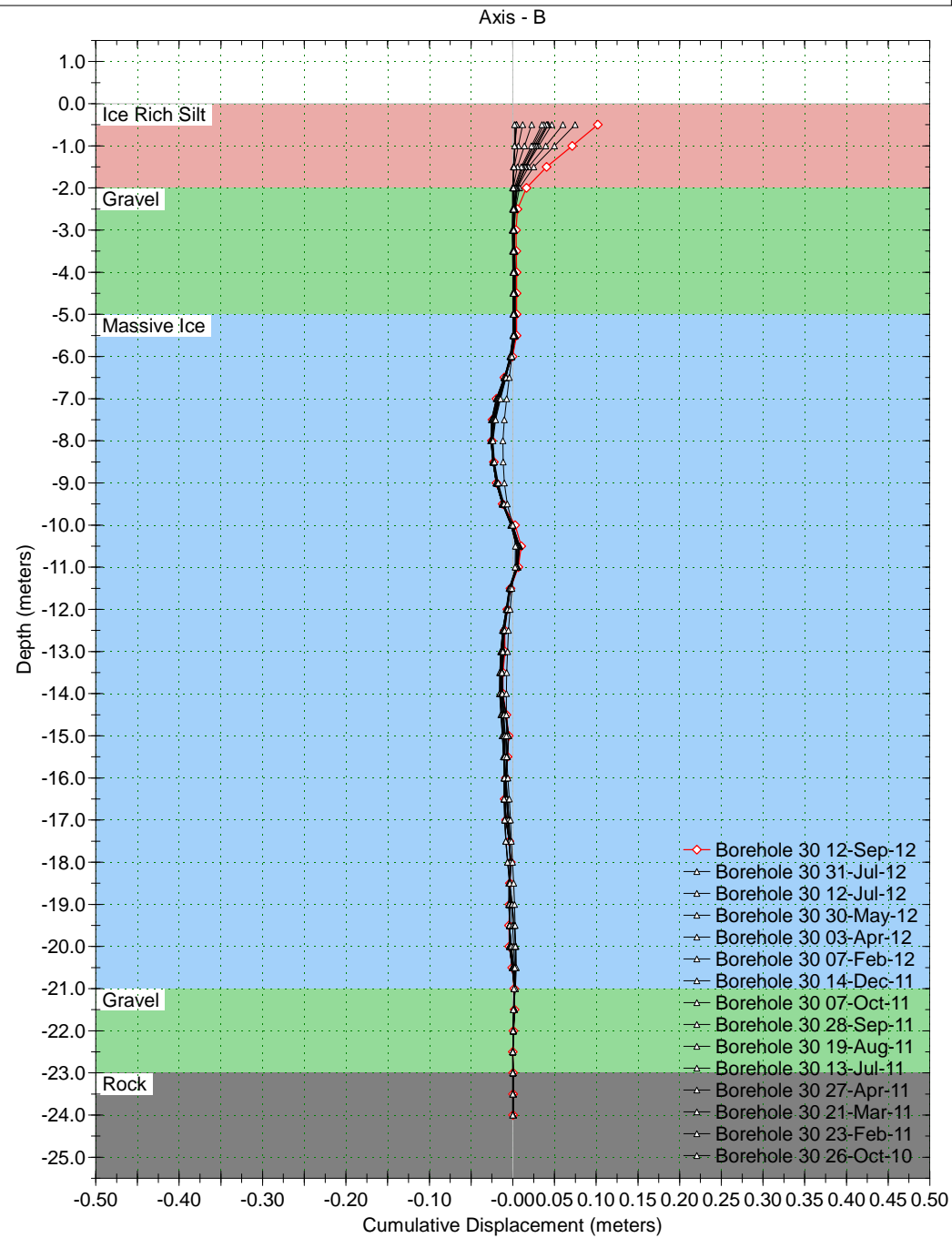
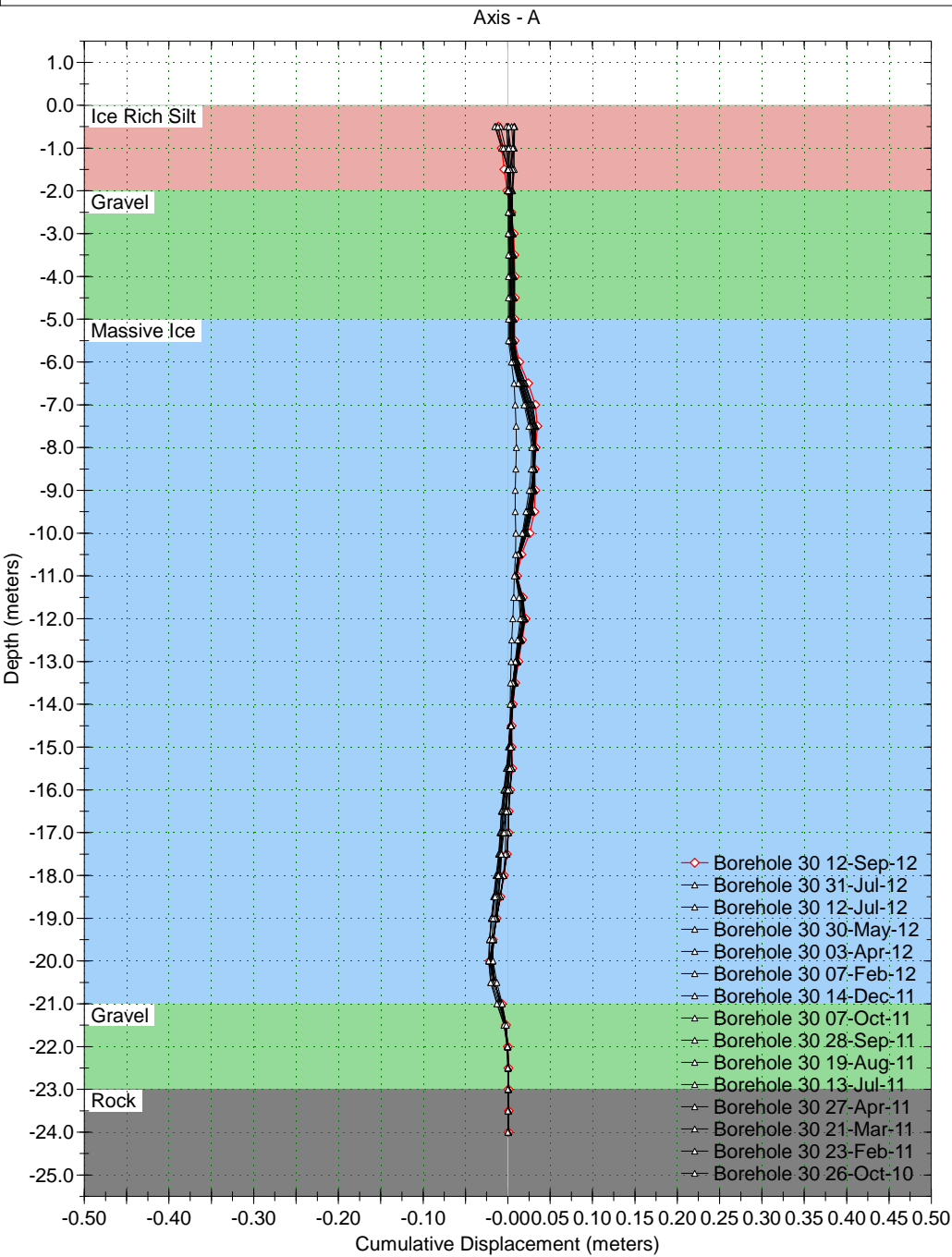
Borehole : Borehole 28A
Project : Keno Hill District Mill
Location :
Northing :
Easting :
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 11.0 meters
A+ Groove Azimuth :
Base Reading : 2011 Oct 07 14:56
Applied Azimuth : 0.0 degrees



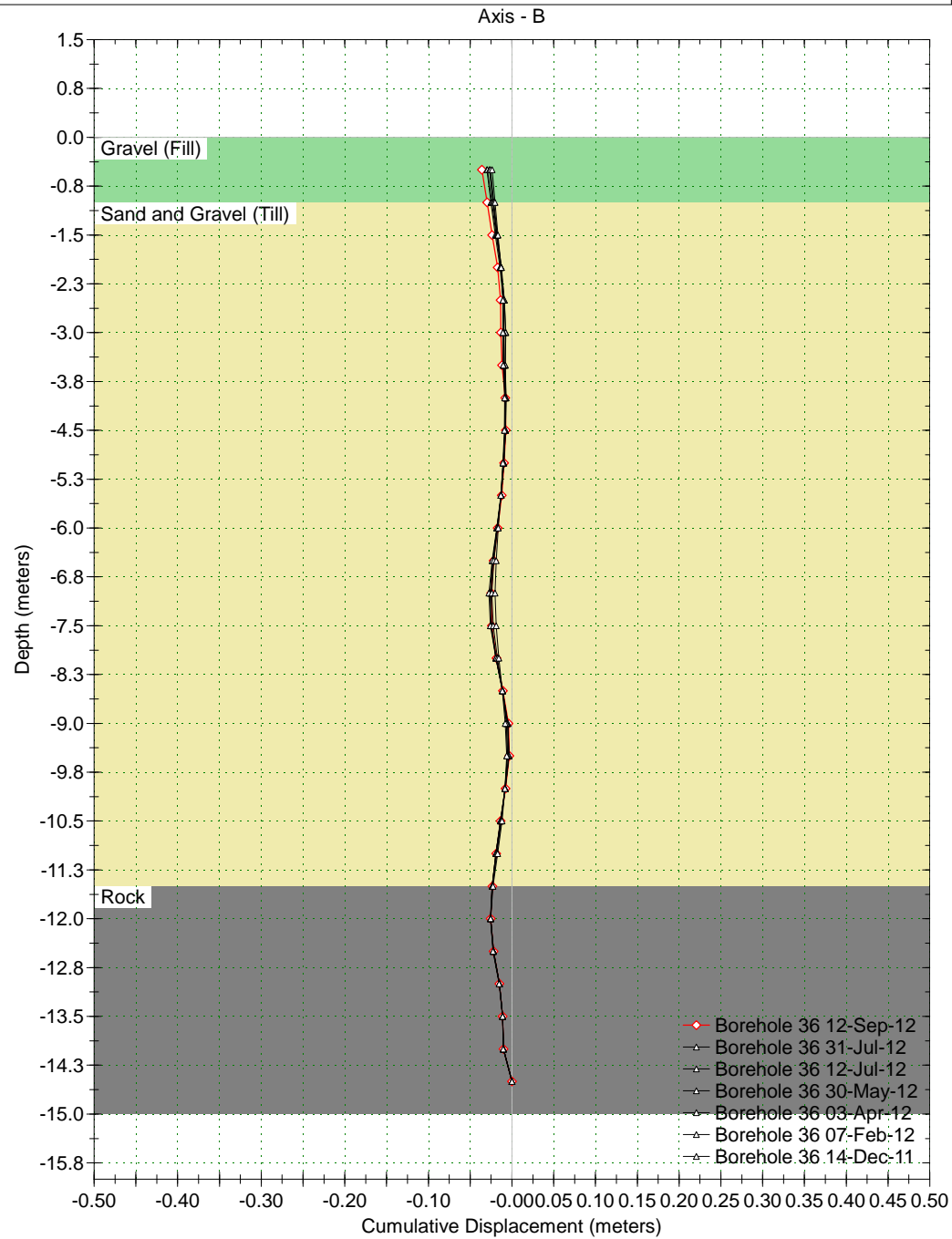
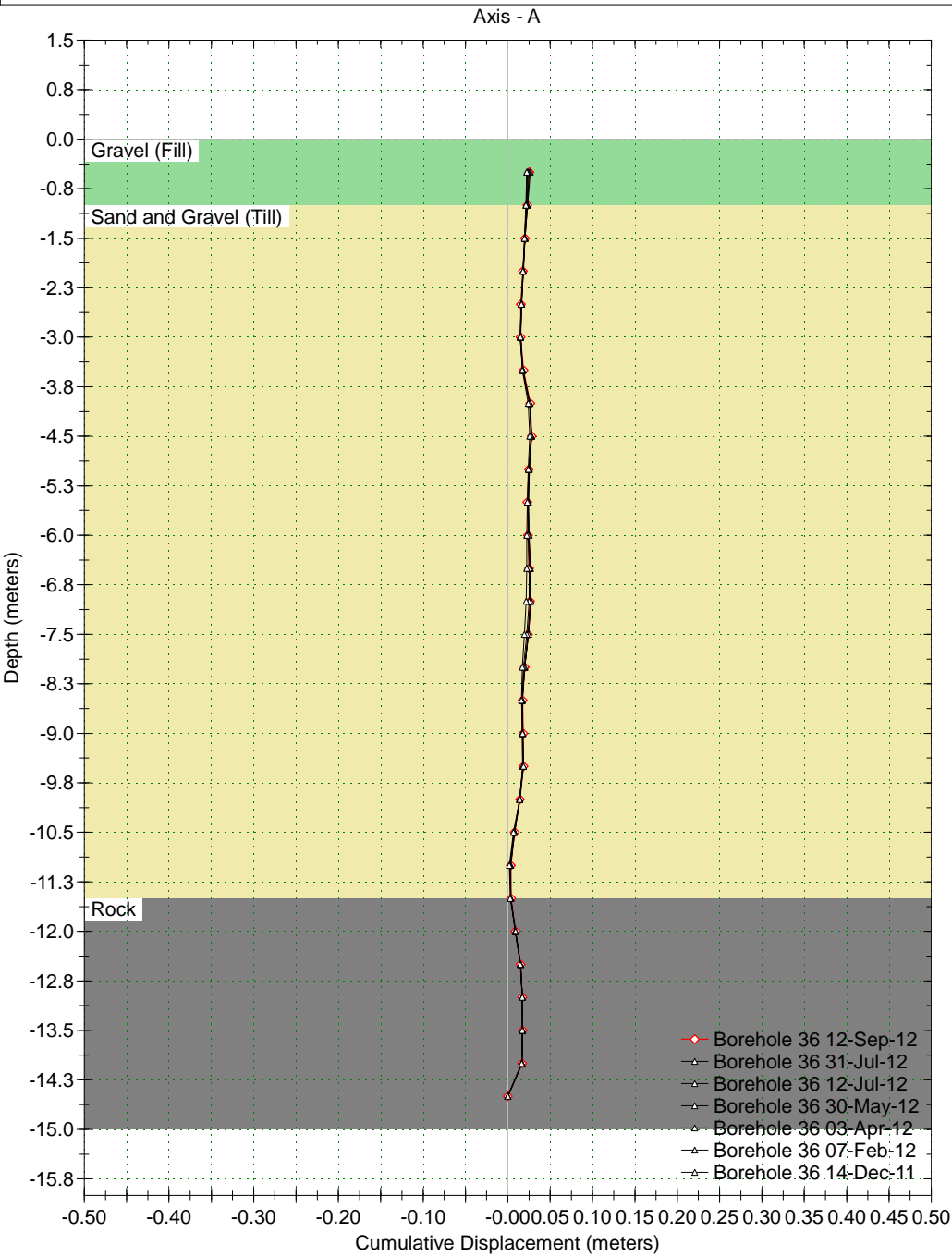
Borehole : Borehole 30
 Project : Keno Hill District Mill
 Location : DSTF
 Northing : 7087032
 Easting : 483969
 Collar :

Spiral Correction : N/A
 Collar Elevation : 0.0 meters
 Borehole Total Depth : 24.0 meters
 A+ Groove Azimuth :
 Base Reading : 2010 Sep 12 08:57
 Applied Azimuth : 0.0 degrees



Borehole : Borehole 36
 Project : Keno Hill District Mill
 Location :
 Northing :
 Easting :
 Collar :

Spiral Correction : N/A
 Collar Elevation : 0.0 meters
 Borehole Total Depth : 14.0 meters
 A+ Groove Azimuth :
 Base Reading : 2011 Oct 07 14:04
 Applied Azimuth : 0.0 degrees



TECHNICAL MEMO

ISSUED FOR USE

TO:	Katherine Penney	DATE:	December 6, 2012
C:	Vanessa Benwood	MEMO NO.:	013
FROM:	Kathleen Jarvis, EIT	EBA FILE:	W14101696

SUBJECT: DSTF Instrumentation and Construction Monitoring
Keno Hill District Mill Site

1.0 INTRODUCTION

Alexco Resource Corp (Alexco) retained EBA, A Tetra Tech Company (EBA) to observe construction and operation activities associated with the Dry Stacked Tailings Facility (DSTF) at the Keno Hill District Mill Site. Activities related to the DSTF are to be carried out in accordance with the following documents:

- Operation, Maintenance, and Surveillance Manual, Dry Stack Tailings Facility, Keno Hill District Mill, YT
- Quarter 1 Tailings Placement Provisions, Keno Hill District Mill Site, Yukon
- Runoff Diversion Structure Specs, Dry Stacked Tailings Facility, Keno Hill District Mill, YT
- Detailed Design, Dry Stacked Tailings Facility, Keno Hill District Mill Site, Yukon

This memo summarizes the on-going monitoring of the DSTF completed by EBA on November 28 and 29, 2012.

2.0 WORK COMPLETED

EBA has been collecting ground temperature cable (GTC) readings since November 2009 and slope indicator (SI) readings since September 2010 at the DSTF. During the site visit, EBA collected GTC readings from boreholes BH15, BH18, BH32, and BH40 and SI readings from boreholes BH28, BH30, and BH36. EBA was not able to collect GTC readings from boreholes BH17, BH23, and BH31 because the caps on the cables were frozen and could not be opened. Current GTC and slope indicator readings are attached to this memo.

Only a partial set of SI readings were collected from BH28 during the site visit. BH28 seems to be damaged at a depth of about 11 m and the SI readings below 11 m are not considered reliable. Therefore, only SI readings above 11 m are included in the attached displacement plots.

EBA did not conduct any compaction tests during this site visit because there were no fresh tailings placed that were unfrozen.

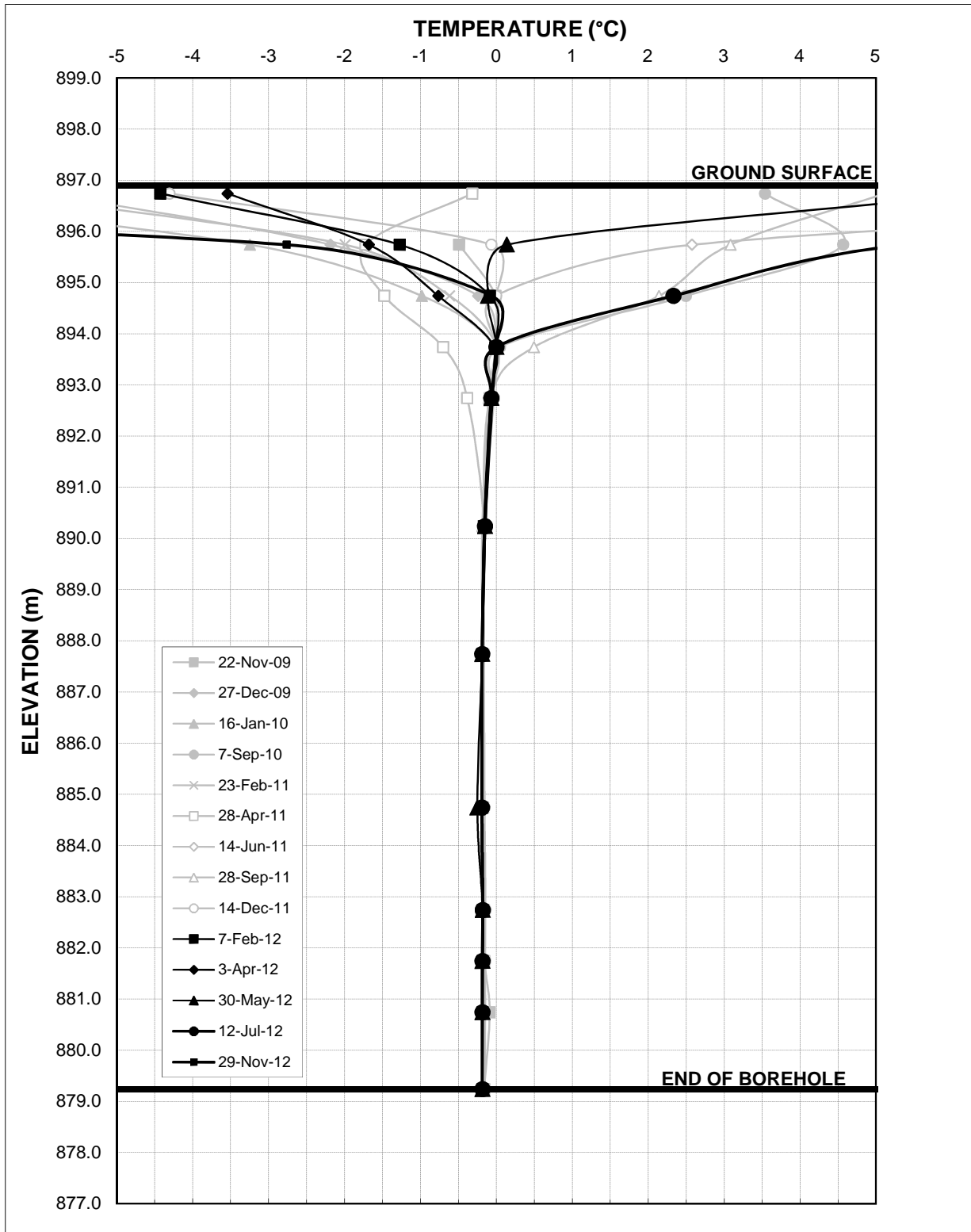
3.0 DISCUSSION

Ongoing GTC and slope indicator readings provide a baseline for the site and monitor any changes during DSTF construction and operation. To date, no readings requiring additional review have been recorded.

4.0 CLOSURE

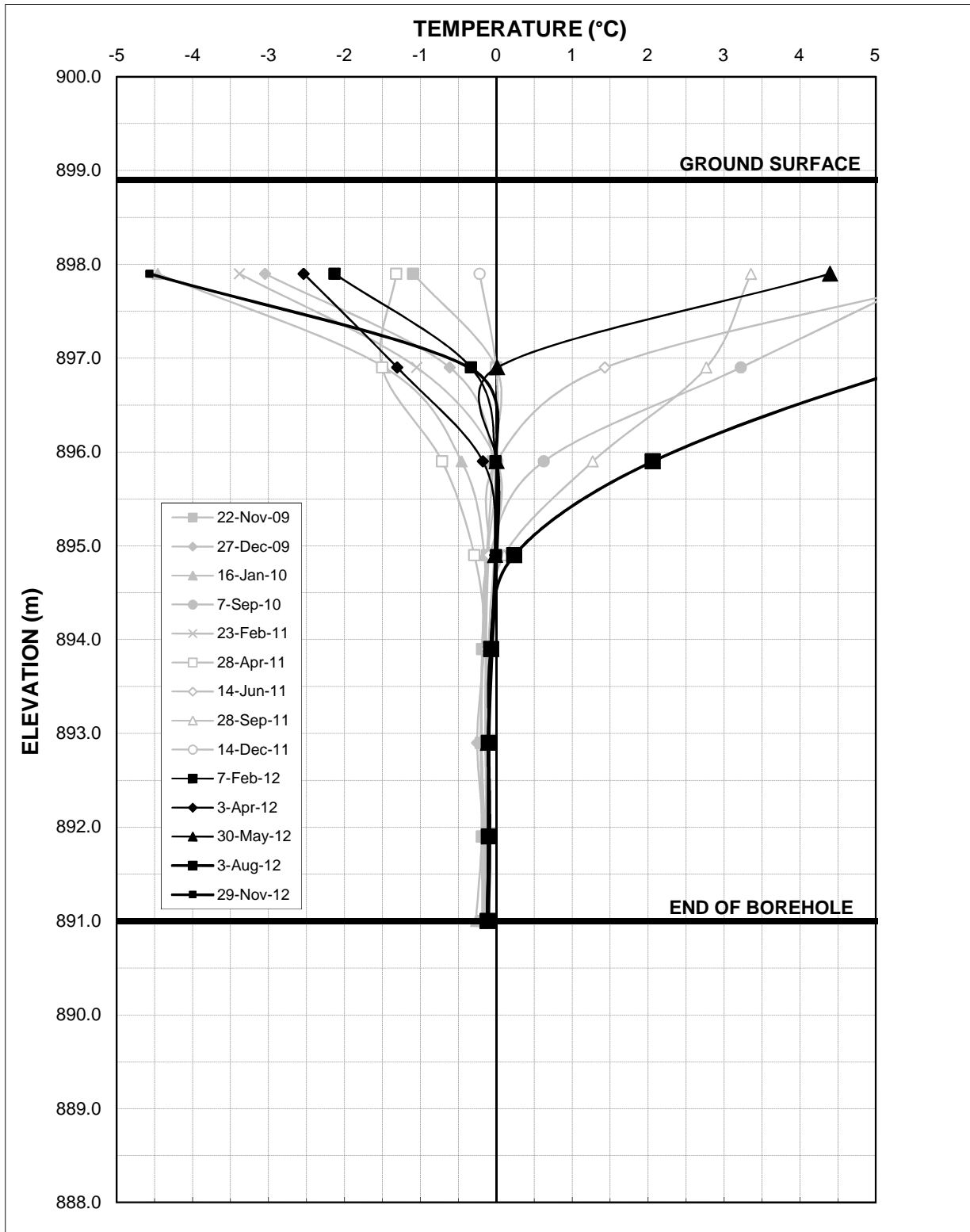
The next site visit is scheduled for the middle of January, 2013; dates will be confirmed with Alexco site personnel.

We trust this memo meets your present requirements. Should you have any questions or comments, please contact us.



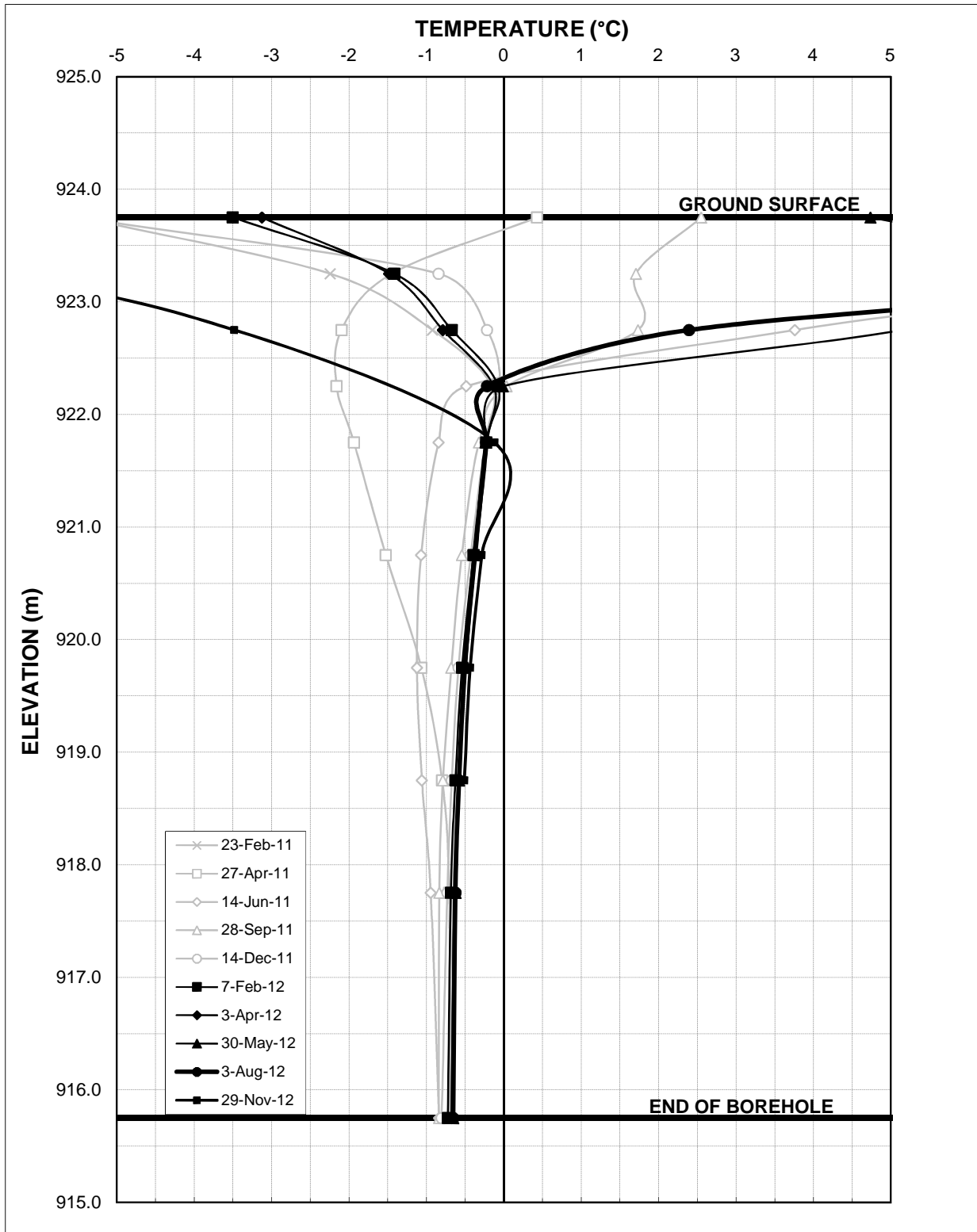
Install Date August 30, 2009
 Last Updated November 29, 2012
 Cable No: 2207

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH15
Figure T1



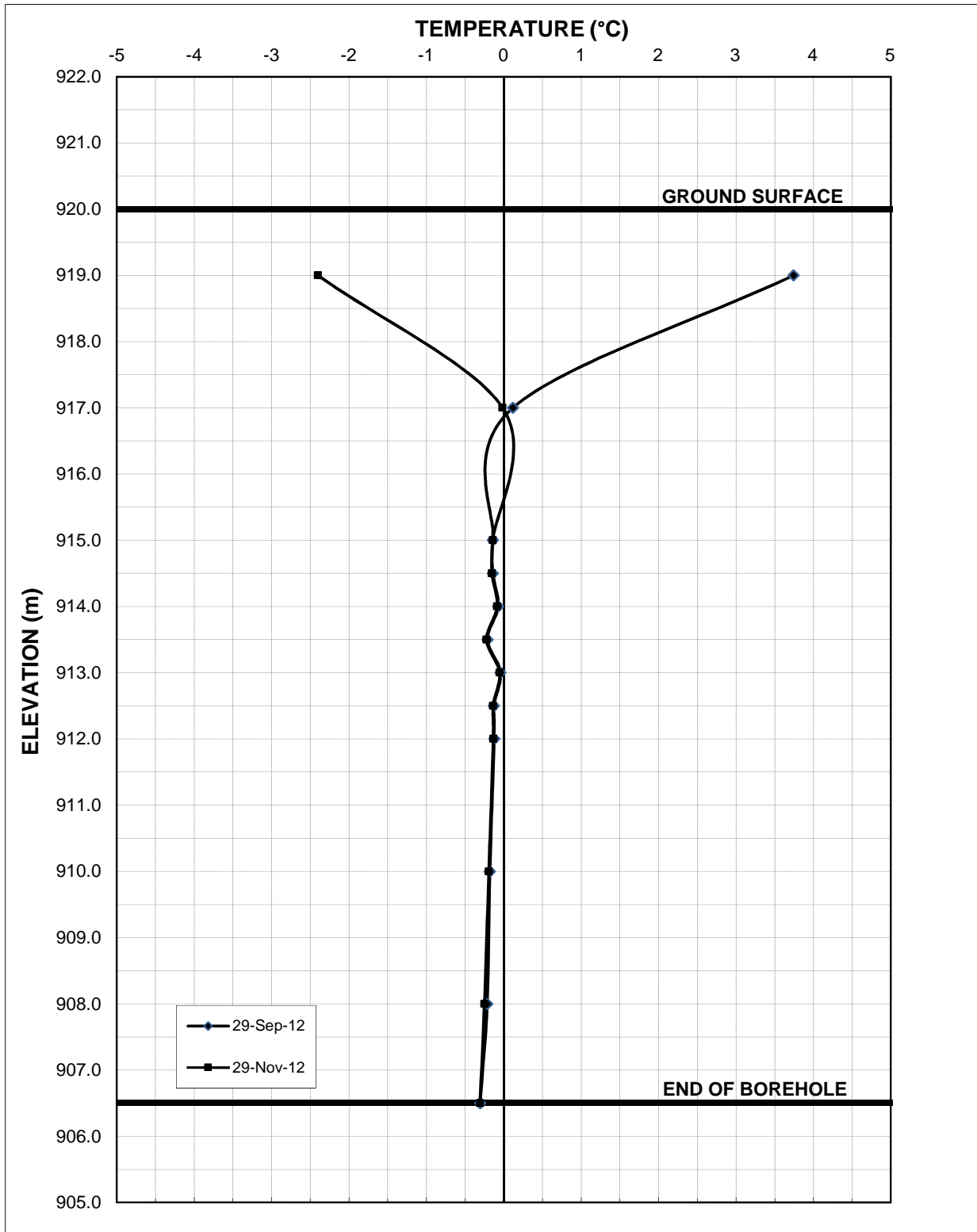
Install Date September 2, 2009
 Last Updated November 29, 2012
 Cable No: 2209

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH18
Figure T3



Install Date February 22, 2011
 Last Updated November 29, 2012
 Cable No: 2264

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH32
Figure T6

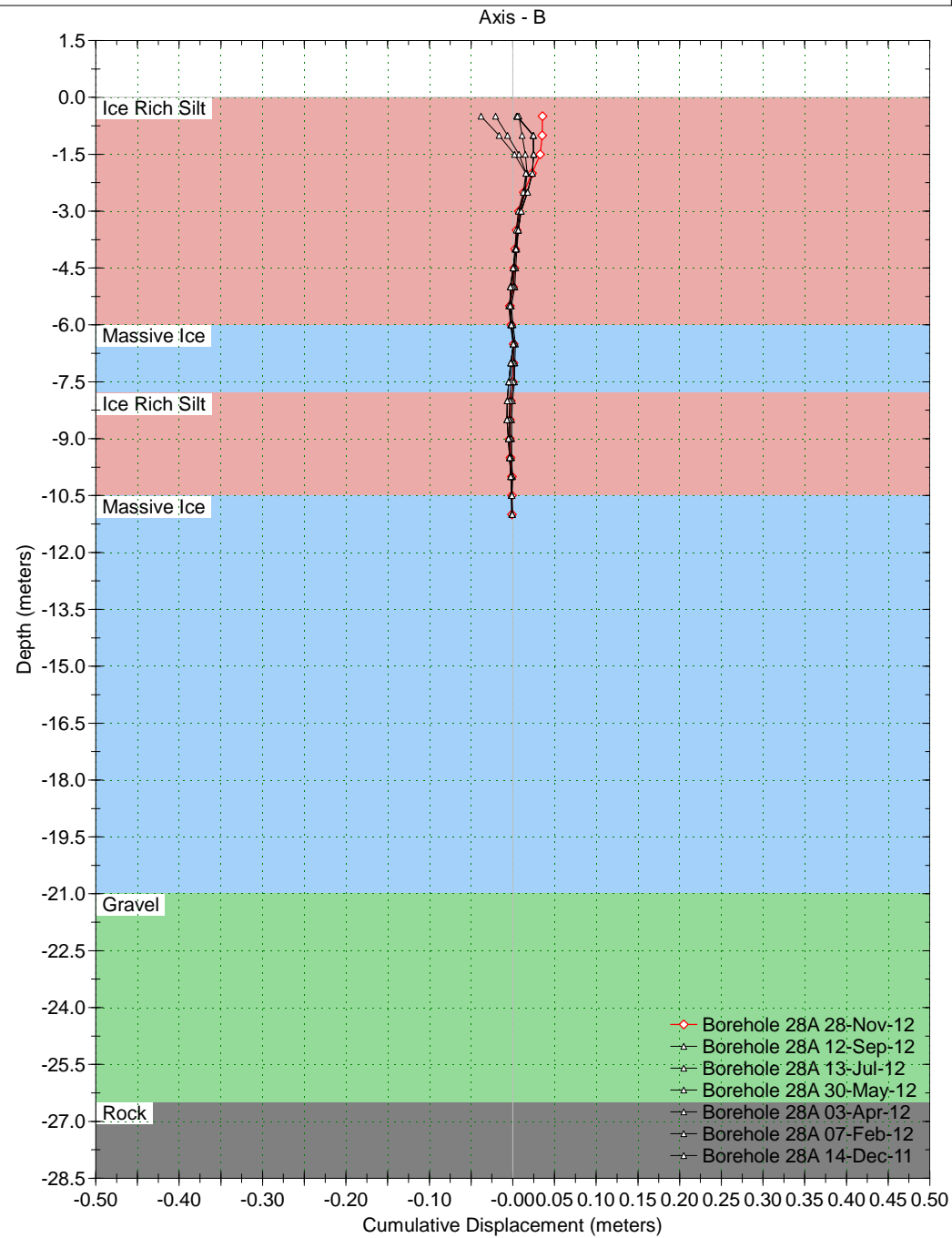
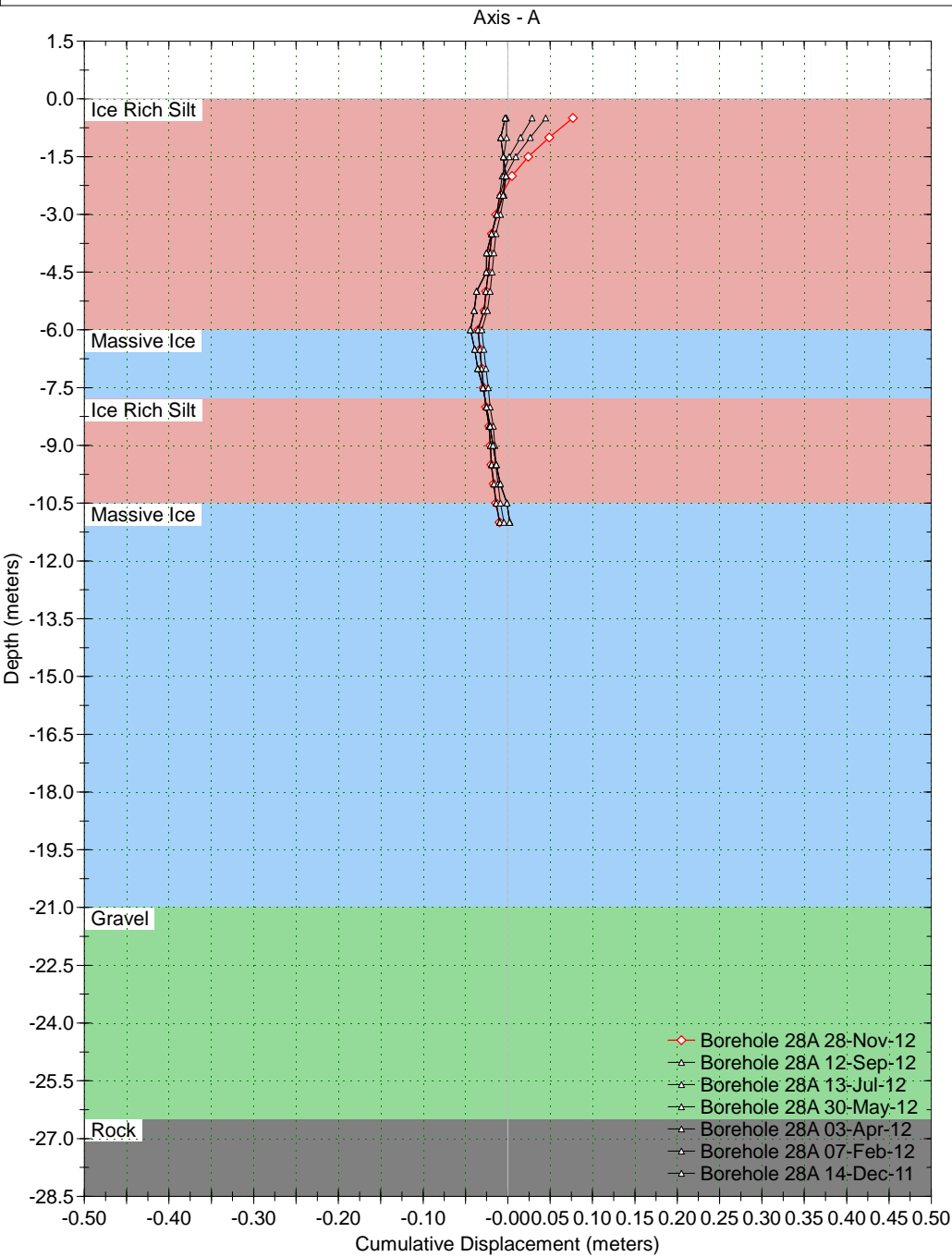


Install Date August 2, 2012
 Last Updated November 29, 2012
 Cable No:

Ground Temperature Profile
Keno Hill District Mill Site Borehole BH40
Figure T7

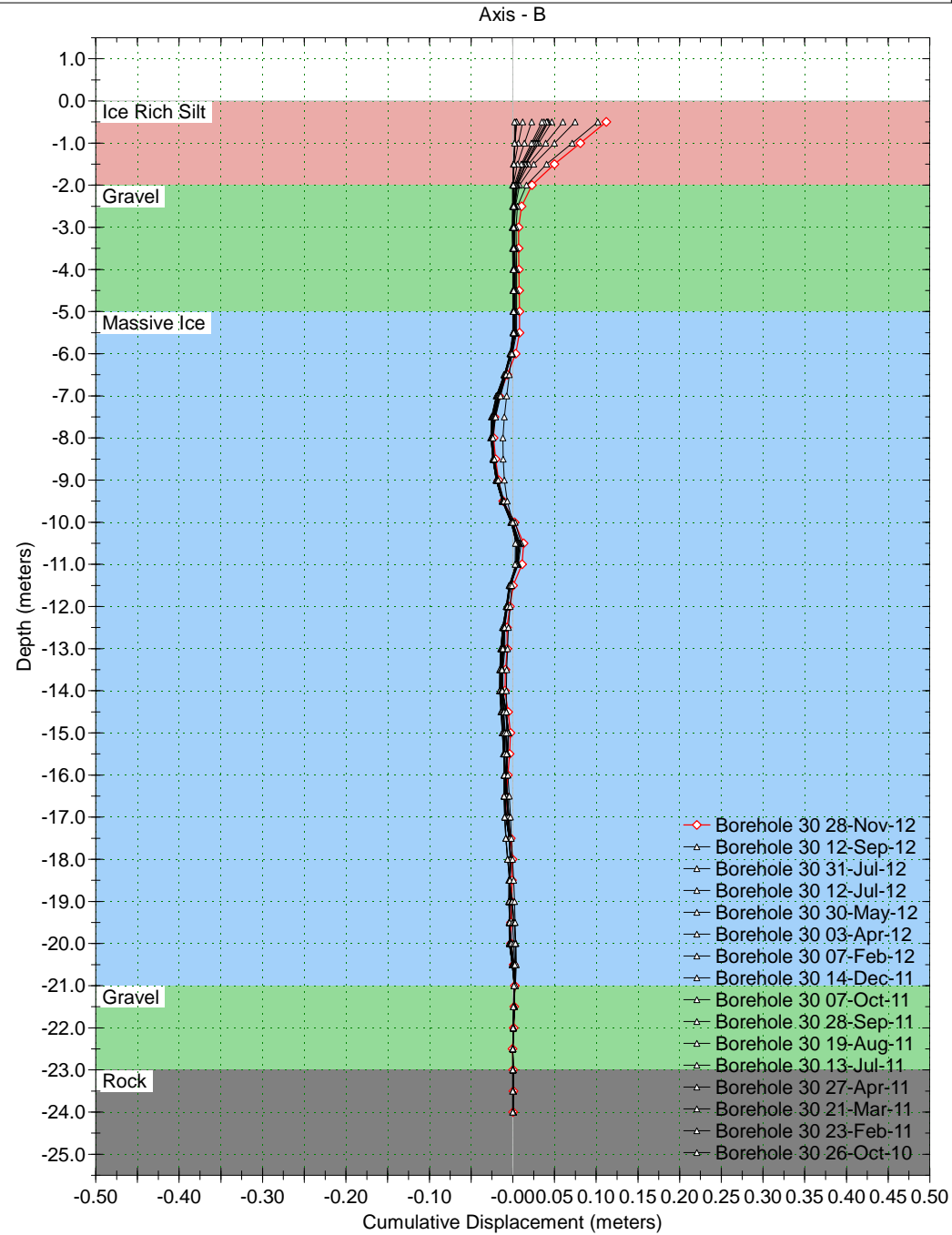
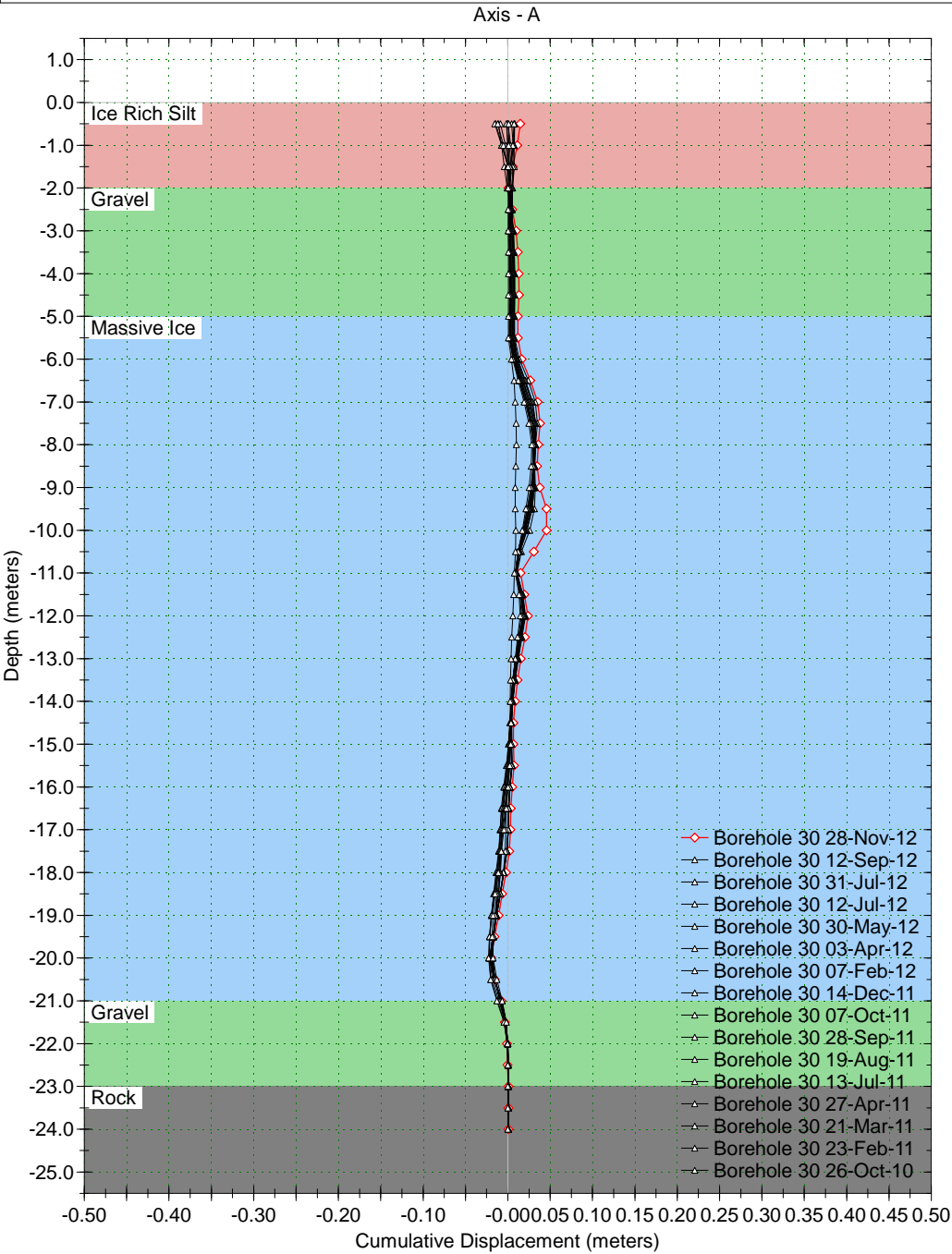
Borehole : Borehole 28A
 Project : Keno Hill District Mill
 Location :
 Northing :
 Easting :
 Collar :

Spiral Correction : N/A
 Collar Elevation : 0.0 meters
 Borehole Total Depth : 11.0 meters
 A+ Groove Azimuth :
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Project : Keno Hill District Mill
Location : DSTF
Northing : 7087032
Easting : 483969
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 meters
Borehole Total Depth : 24.0 meters
A+ Groove Azimuth :
Base Reading : 2010 Sep 12 08:57
Applied Azimuth : 0.0 degrees



Borehole : Borehole 36
 Project : Keno Hill District Mill
 Location :
 Northing :
 Easting :
 Collar :

Spiral Correction : N/A
 Collar Elevation : 0.0 meters
 Borehole Total Depth : 14.0 meters
 A+ Groove Azimuth :
 Base Reading : 2011 Oct 07 14:04
 Applied Azimuth : 0.0 degrees

