COPPER NORTH
MINING CORP.

2013 ANNUAL QUARTZ MINING LICENCE REPORT

Submitted to Yukon Government, Energy Mines and Resources

Yukon Quartz Mining Licence QML-0007

March 2014

2013 ANNUAL QUARTZ MINING LICENCE REPORT

Submitted to Yukon Government Energy Mines and Resources

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Carmacks Copper Project, Yukon Territory

Submitted by:

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EXECUTIVE SUMMARY

Activities at the mine site during the period 1 January 2013 to 31 December 2013 have been limited. Site activities consisted of contractor activity to repair the Merrice Creek bridge crossing and the Williams Creek culvert crossing, the Annual Engineer's Inspection, and two tours for potential investors. A copy of the Annual Engineer's Inspection Report is appended to this report. No development activities were undertaken in 2013.

Closure and reclamation security in the amount of $80,300 has been posted with Yukon against the liability incurred to date as a result of exploration activities.

This report has been formatted to respond to the specific requirements in the QML even though there may be no corresponding project undertakings.

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Appendix A Annual Engineer's Inspection Report, October 2013

1.0 INTRODUCTION

This Annual Report has been prepared by Copper North Mining Corp. and covers the period from January 1, 2013 to December 31, 2013 as required by Clauses 16.5 and 16.6 of Quartz Mining Licence (QML) QML-0007. As of January 19, 2012 the assignment of QML-007 was authorized from Carmacks Copper Limited to Carmacks Mining Corp, a wholly-owned subsidiary of Copper North Mining Corp.

This report provides a summary of activities at the Carmacks Copper Property for the reporting year, including: but not limited to physical stability inspection.

Few site activities occurred that would normally form a part of this report in future years, once major project permitting is completed. Additional sections and information will be added to the annual reports as necessary to accommodate expanded reporting requirements from future mine development and related plans.

The preliminary mine layout (not yet constructed) is illustrated in Figure 1.

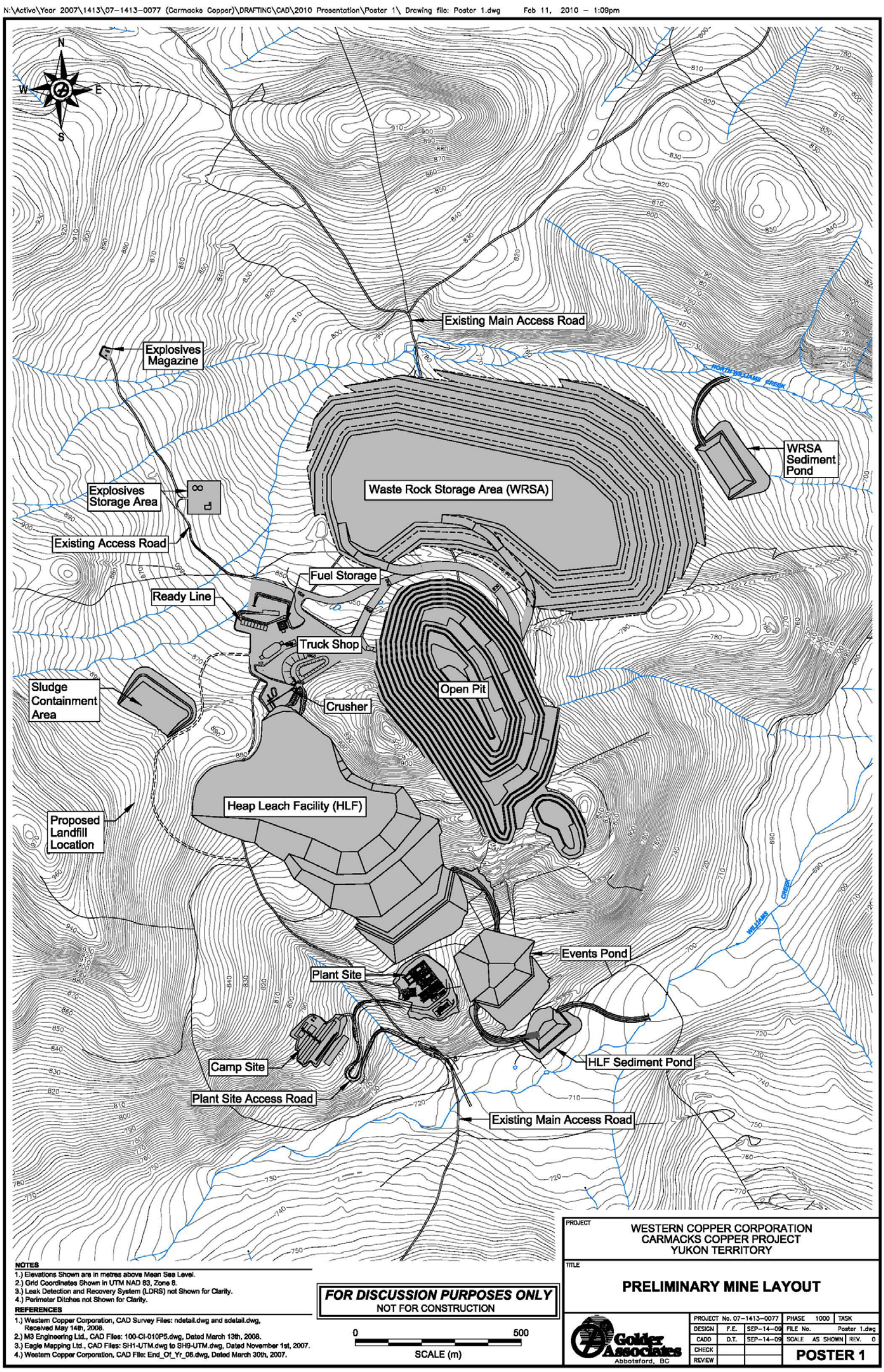


Figure 1. Preliminary Mine Layout

2.0 SITE ACTIVITIES

2.1 EXPLORATION

No exploration activities occurred on the property in 2013.

2.2 CONSTRUCTION AND DEVELOPMENT

2.2.1 Overview of Activities by Quarter

No construction or development activities occurred on the property in 2013.

2.2.2 As-built Drawings

No “as-built” drawings were produced in 2013.

2.3 MINING ACTIVITIES

2.3.1 Overview of Activities by Quarter

No mining activities took place in 2013.

2.3.2 Production Schedule – Ore and Waste Removal

Not applicable for this reporting period; no mining activities took place in 2013.

2.3.3 Average Head Grades

Not applicable for this reporting period; no mining activities took place in 2013.

2.3.4 Open Pit Stability

Not applicable for this reporting period; no mining activities took place in 2013.

2.3.5 Heap Leach Cells – Status of Leaching (including layout drawing)

Not applicable for this reporting period; no mining activities took place in 2013.

2.3.6 Copper Production

Not applicable for this reporting period; no mining activities took place in 2013.

2.3.7 Spills

No spills occurred during the reporting period.

2.3.8 On-going Reclamation

No reclamation activities were undertaken in 2013.

2.3.9 Actions Undertaken in Response to Annual Engineer's Inspection

The 2012 Annual Engineer's Inspection recommended resetting of the Merrice Creek bridge span. This work was completed on 10 July 2013 and was inspected as part of the Annual Engineer's Inspection on July 16, 2012 (see Appendix A). The re-clearing of vegetation from the planned alignment for the HLF confining embankment also recommended in the 2012 inspection report was not conducted. This work has been postponed since it was not related to stability or integrity of existing works or structures.

In addition to re-setting the Merrice Creek bridge span, the culvert crossing at Williams Creek also was repaired while the crew and equipment were on site. The culvert inlet had heaved sometime between summer 2012 and June 2013 and become angled upward, and no longer was functioning to pass water. As a result the road bed was eroding and impassable to vehicles. The culvert was removed the road bed re-contoured to form a ford crossing, which better passes the creek flow and provides for vehicle crossings.

Maintenance activities recommended in the 2013 Inspection Report that are related to environmental protection or the stability/integrity of existing works or structures will be completed in summer 2014 prior to the 2014 Annual Inspection.

2.3.10 Access Road

The access road to the site has not been constructed.

2.4 RESOURCES AND RESERVES

The resource and reserve estimates for the property are shown in Tables 1 and 2 respectively. The reserves remain as stated in the "Feasibility Study" prepared in 2007, while the resource was updated later that year.

Table 1. Updated Resource Estimate for Zones 1, 4 and 7 at 0.25% Total Copper Cut-Off

	Category	Tonnes	Copper (%)		Gold	Silver	Contained Metal		
		(000)'s	Total	Oxide	(g/t)	(g/t)	Copper (000)'s lb.	Gold oz.	Silver oz.
Oxide	Measured	4,031	1.10	0.90	0.59	5.7	98,130	76,000	734,000
	Indicated	7,949	1.04	0.84	0.39	4.0	182,448	100,000	1,032,000
	M+I	**11,980**	**1.06**	**0.86**	**0.46**	**4.6**	**280,577**	**176,000**	**1,766,000**
	Inferred	90	0.73	0.53	0.13	1.8	1,452	370	5,000
Sulphide	Measured	695	0.80	0.02	0.26	2.5	12,192	6,000	57,000
	Indicated	3,645	0.74	0.03	0.20	2.3	59,195	24,000	269,000
	M+I	**4,340**	**0.75**	**0.03**	**0.21**	**2.3**	**71,387**	**30,000**	**326,000**
	Inferred	4,031	0.71	0.01	0.18	1.9	63,383	23,000	246,000

Table 2. Mineral Reserve

Reserve Class	Ore t (000)	Total Cu (%)	Cu Oxide (%)	Cu Non-Oxide (%)	Au (g/t)	Ag (g/t)
Proven Mineral Reserve	3,190	1.227	1.028	0.199	0.659	6.20
Probable Mineral Reserve						
Open Pit Ore	6,462	1.099	0.938	0.162	0.466	4.49
Estimated Dilution	960	0.065	0.043	0.021	0.018	0.20
Total Probable Mineral Reserve	7,422	0.965	0.822	0.144	0.408	3.93
Proven and Probable Mineral Reserve	10,611	1.044	0.884	0.160	0.483	4.62

2.5 CARE AND MAINTENANCE

No activities to report.

2.6 PROPOSED DEVELOPMENT AND PRODUCTION FOR UPCOMING YEAR

There are presently no development or production plans for the 2014 year.

3.0 MONITORING PROGRAMS AND STUDIES

The QML contains a number of requirements for studies and monitoring programs. The following sections outline work done with respect to these studies and programs. Copies of the actual reports relating to these are appended.

3.1 ON-GOING METALLURGICAL STUDIES

3.1.1 Field Tests

No metallurgical field tests were in progress as of 2013.

3.1.2 Laboratory Tests

No metallurgical laboratory tests were conducted in 2013.

3.2 HEAP LEACH PAD LINER PERFORMANCE MONITORING

No liner has been placed and no performance monitoring is in progress.

3.3 WATER QUALITY SURVEILLANCE PROGRAM

No water quality surveillance was conducted in 2013.

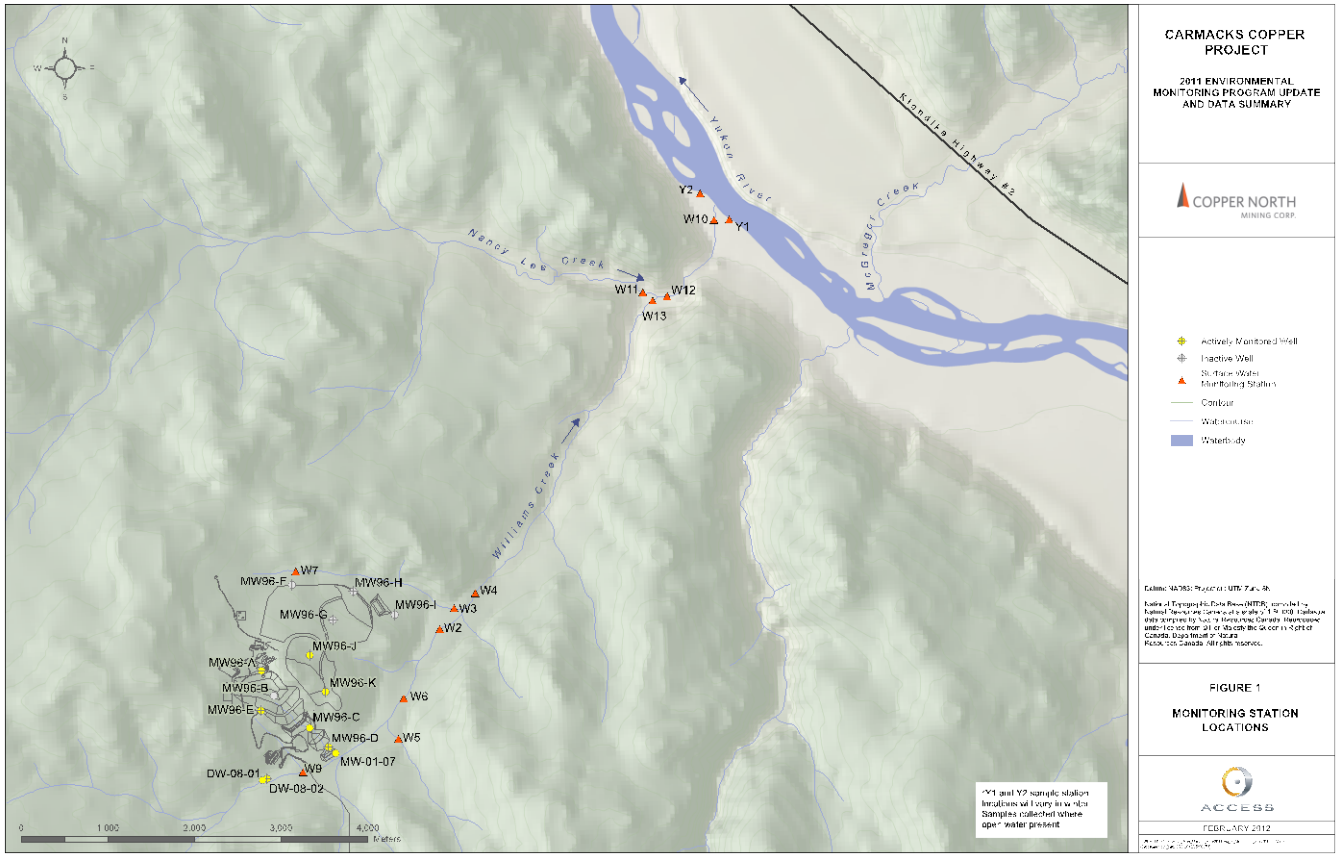
Table 3 lists the locations (shown on Figure 2) that have been established to date for the monitoring of surface water quality to date. Further locations will be added as the mine is brought into production.

Table 3. Water Quality Surveillance Program Site Descriptions and Locations

Station	Description	Northing	Easting
W2	Williams Creek Upstream of North Williams Creek Confluence	6914145	413499
W3	Lower North Williams Creek Upstream of Confluence with Williams Creek	6914379	413640
W4	Williams Creek Downstream of Confluence with North Williams Creek	6914653	413888
W5	South East Tributary to Williams Creek	6912947	412978
W6	Williams Creek Downstream of South East Tributary	6913373	413042
W7	Upper North Williams Creek Tributary Upstream of Road Crossing	6914810	411778
W9	Williams Creek Upstream of Access Road Crossing	6912511	411907
W10	Williams Creek Upstream of Yukon River	6919033	416606
W11	Nancy Lee Creek (Tributary of Williams Creek)	6918096	415803
W12	Williams Creek Downstream of Confluence with Nancy Lee Creek	6918000	416102
W13	Williams Creek Upstream of Confluence with Nancy Lee Creek	6917984	415912
Y1	Yukon River Upstream of Williams Creek	6918974	416752
Y2	Yukon River Downstream of Williams Creek	6919308	416249

Notes: Coordinates are UTM Zone 8 NAD83

Figure 2. Monitoring Station Locations



3.3.1 Surface Water Quality

No surface water quality sampling was required or conducted in 2013.

3.3.2 Groundwater Quality

No groundwater monitoring was required or conducted in 2013.

3.4 HYDROGEOLOGY STUDIES

No hydrogeologic studies were required or conducted in 2013.

3.5 WATER TREATMENT AND MANAGEMENT

No water treatment studies or water management studies were required or conducted in 2013.

3.6 CLIMATE DATA AND SNOW SURVEY MONITORING PROGRAM

Copper North did not conduct any meteorological monitoring on site in 2013.

3.7 GEOCHEMICAL STUDIES AND ACID-BASE ACCOUNTING

No Geochemical studies were conducted in 2013.

3.8 PHYSICAL MONITORING PROGRAM

Physical monitoring of structures and facilities in 2013 was limited to the Annual Engineer's Inspection (Appendix A).

3.9 ENGINEER'S ANNUAL PHYSICAL INSPECTION REPORTS

Copper North Mining Corp. engaged Golder Associates Ltd. to perform the Annual Physical Inspection of the site required under Sections 16.1 and 16.2 of the QML. The inspection was carried out on July 16, 2013 (QML Section 16.1). The complete report is contained in Appendix A and a copy of this report was previously submitted to Government of Yukon, Department of Energy, Mines and Resources, Mineral Resources Branch.

The report focused on inspection of existing site conditions and of the limited infrastructure on site, since no development has yet taken place on site. Areas observed on July 16, 2013 to require maintenance will be addressed in summer 2014 prior to the Annual Physical inspection.

3.10 RECLAMATION AND REVEGETATION STUDIES

In 2007 a test patch of seeding was completed on an approximately 500 m x 12 m area located adjacent to the west side the access road and south of the Williams Creek crossing and the helicopter pad area. The seeding and resulting vegetation was intended to help stabilize sediments in this area and has been observed in the past six years to be performing well.

3.11 SUBMISSION AND APPROVAL OF PLANS

No plans were submitted during 2013.

4.0 OUTSTANDING FINANCIAL LIABILITY

4.1 HEAP LEACH

There has been no update to the assessment of the liability associated with the Heap Leach Facility, which was presented in the May 2009 revision of the Preliminary Detailed Closure and Reclamation Plan.

4.2 WASTE ROCK STORAGE

There has also been no update to the assessment of the liability associated with the Waste Rock Storage Facility, which was presented in the May 2009 revision of the Preliminary Detailed Closure and Reclamation Plan.

4.3 OVERALL LIABILITY

The estimated maximum overall liability associated with the development and operation of the mine remains as set out in the May 2009 revision of the Preliminary Detailed Closure and Reclamation Plan

Facility or Area Description	Cost	
OPEN PIT	$	23,000
HEAP LEACH FACILITY	$	17,295,000
HLF EVENTS AND SEDIMENT PONDS	$	296,000
WASTE ROCK STORAGE AREA	$	740,000
PLANT AND ANCILLARY FACILITIES	$	467,000
CAMP	$	103,000
TRUCK SHOP SERVICE COMPLEX	$	70,000
MISCELLANEOUS FACILITIES	$	95,000
ACCESS AND HAUL ROADS	$	248,000
SITE MANAGEMENT	$	1,103,000
TOTAL	$	20,440,000

An additional $2.675 million is estimated to cover costs associated with rinsing and neutralization of the heap leach facility, should it extend to a 9 year period as opposed to the initially estimated 4.5 year period.

To date security in the amount of $80,300 has been posted with Yukon Government. This represents the liability incurred to date due to exploration activities on the site.

4.4 ENGINEERING CONTINGENCIES

In accordance with Section 11.0 of the QML, Copper North Mining Corp. prepared a Contingency Plan on the basis of a workshop held in October 2009. The plan was submitted to the Chief of Mining Land Use in January

2010. The main purpose of the Contingency Plan was to identify possible alternative approaches to decommissioning the Heap Leach Facility, however, other facilities were also examined. The plan identified a number of possible failure modes and contingency measures for each of the facilities and recommended further work that should be undertaken. The report was issued in draft format pending comments from government. No comment from government has been received to date. No further work has been undertaken at this time to develop any of the contingency plans identified.

COPPER NORTH MINING CORP.
(On behalf of CARMACKS COPPER LTD.)

Doug Ramsey
Vice-President, Sustainability and Environmental Affairs

Appendix A. Annual Engineer's Inspection Report

October 9, 2012 Reference No. 1314270077-222-L-Rev0-1000

Sally Eyre
President & CEO
Copper North Mining Corp.
2060 - 1111 West Georgia Street
Vancouver, BC
V6E 4M3

ANNUAL INSPECTION, JULY 16, 2013
CARMACKS COPPER PROJECT, CARMACKS, YUKON

Dear Dr. Eyre

Golder Associates Ltd. (Golder) completed an inspection of the Carmacks Copper project site for Copper North Mining Corp. (CNMC), on July 16, 2013. The inspection of the proposed future site of the Carmacks Copper mine was completed as part of the requirement of the Quartz Mining License (QML – 0007) for an annual inspection. The inspection was to evaluate the condition and stability of the existing facilities in the area of the proposed new mine and the proposed facilities which will include a Heap Leach Facility and Events Pond, an open pit mine area, a Waste Rock Storage Area, a processing plant and related facilities, ore preparation facilities, ore stockpiles, water diversion structures and/or other related operations or facilities. The inspection was limited in that there are no structures on site at present with the exception of the mine exploration camp and there are no current activities currently at the site. An inspection was however, completed of the entire project area.

1.0 INSPECTION

The inspection was completed by Ben Wickland of Golder with Mr. Scott Casselman – a representative of CNMC. CNMC staff Dr. Sally Eyre and Doug Ramsey were also present. The inspection focused on the existing site conditions and the limited site infrastructure. Photographs of the site at the time of the inspection are presented in Attachment 1. Data from thermistors collected during the site visit are presented in Attachment 2.

The project is in the advanced exploration stage and final permitting for the proposed future mine. As noted the only infrastructure on site, at present, are the exploration camp and a series of access roads to the proposed open pit mine area and other areas of the property. The access roads were developed to provide access for exploration activities.

The inspection of the camp area indicated there is no erosion of sediments from the pad area into the surrounding natural area. The slope behind the camp is stable and is not impacting or causing any safety issues with the camp structures or operations. There is minor slumping and ravelling of small sections of the slope, but these are not impacting camp safety nor would they represent an issue to workers on the project. Some re-growth of vegetation was observed in the camp area. In addition, there was some cracking observed along the south edge of the pad (lower limit of pad), some 3 to 4 m from the pad edge.

In addition to the camp, the inspection included the area proposed for the Heap Leach Facility, Events Pond, Heap Leach Facility Sediment Pond, and Process Plant. None of these structures have been developed and site preparation in these areas has been limited to the clearing of trees and organic soils (completed in 1997-1998), development of a series of access roads and drilling platforms for the exploration programs. Since the initial clearing, vegetation re-growth has been occurring. Erosion and sediment control measures in this area were initially put into place in September 2008 and further maintained in September 2009 and August 2010. These include a series of ditches and berms to divert water into sediment catch basins, silt fences, and vegetated areas to break up flow to reduce the potential for erosion. The inspection indicated that there has been some erosion of sediments along the access roads and that the sediment basins are trapping and containing the sediment adequately. Additional capacity remains within these catch basins, with the exception of one catch basin on the road to the east of the existing exploration camp, north of Williams Creek.

Erosion on roads due to run-off continues, developing gullies of approximately 30 cm depth in the roads to the east and west of the existing camp, and on the access roads in the areas of the Heap Leach Facility and the Waste Rock Storage Area. Larger eroded areas or wash-outs to approximately 60 cm depth were observed on access roads near the area of the Heap Leach Facility, near North Williams Creek, and near Williams Creek.

It is recommended that vegetation in the lower footprint area of the Heap Leach Facility and Confining Embankment be re-cleared of vegetation in 2013 or 2014 to promote thaw of permafrost ground prior to development of the area. Vegetation may allow re-establishment of permafrost and ground ice and should therefore the vegetation should be cleared to allow the ground to thaw over the warmer months.

Further down slope of the proposed Heap Leach Facility Sediment Pond, and within the floodplain of Williams Creek, a series of silt fences have been installed and the area seeded where sediment from previous site erosion has accumulated. At the time of the inspection, it was observed that the silt fencing surrounding these areas is working effectively and there is no evidence of recent sediment movement. Grass seed was used in 2009 to promote the re-establishment of vegetation and further stabilize the sediment. The approach was noted to be generally effective in 2011 and 2012, but with limited re-growth attributed to periodic pooling of water. The area was re-vegetated with woody plants (willow cuttings), and plants appear to be tolerating saturated soil conditions. Conditions in 2013 were similar to 2012, with limited growth of the willow cuttings. No movement of sediment beyond the existing silt fences was observed, nor does it appear that sediment has entered Williams Creek. These erosion control measures are of a temporary nature that should be inspected annually and ongoing minor maintenance activities should be anticipated.

The area where the open pit is to be developed was inspected. The excavation slopes of the trenches developed as part of the effort to obtain bulk samples during exploration activities were observed to be in reasonable condition and there was no observed slumping or failures of these slopes. The leached ore pile from the off-site test pad adjacent the trench was observed to be stable and there was no erosion or slope movement of the material. Several of the closed drill pads were inspected and there did not appear to be any erosion noted from these areas that require attention.

The area of the proposed Waste Rock Storage Area and the present access road crossing at North Williams Creek was inspected. The Waste Rock Storage Area is still tree covered and the drill pads and access roads in the area are re-vegetating by volunteer species. The small sediment catch basins at the drill pads still have capacity to manage more sediment, if required.

Local erosion on the main access road to the north of the Waste Rock Storage Area continues. The shoulders of the road at the culvert on North Williams Creek have eroded, reducing the road crest width at the culvert location. The road is washed out approximately 30 m past the culvert. A ponded area adjacent the road is anticipated to have temporarily flowed over and eroded the road fill due to reduced flow in the culvert near this location. The inlet of the culvert was observed to be bent. It is recommended that the culvert mouth be reshaped or opened to allow flow at capacity. The eroded area on the road should be filled with gravel to level the grade and re-establish the road.

The proposed camp site was inspected and it is still tree covered. The site adjacent to the camp with two water wells was also inspected and there is no apparent movement of sediment beyond the work pads around the wells.

The general site development has not started yet. Therefore, there are no stability concerns associated with the undeveloped facilities and no maintenance required. No permanent water diversion structures are in place. There are however, temporary water management diversion structures (*i.e.*, ditches and sediment catch basins) in place that are appropriate for the exploration stage of the property. It is recommended that they continue to be inspected annually and that ongoing maintenance be conducted, as deemed necessary.

The culvert in the site access road which allowed Williams Creek to flow by the road was recently removed. The crossing is now a 'ford' with the road bed depressed over a length of 10 m to a maximum depth of 0.8 m below the adjacent road grade or crest elevation. Ponded water was observed on the upstream side of the road, with flow across the road. Scott Casselman reported that the culvert as angled upwards with the inlet in the air, and the culvert was therefore removed and the depression regarded as observed on July 10, 2013.

Some erosion noted during the 2012 inspection, indicated that flow had previously appeared to pass over an additional segment of the road near the Williams Creek crossing, eroding the road bed some 18 m south of the culvert location. It is anticipated that this was a temporary condition, which likely occurred at the beginning of the freshet, potentially when the culvert was still frozen/blocked by snow and ice. This southern eroded area was observed to have been repaired. Scott Casselman reported that the eroded area was repaired on July 10, 2013.

Without further erosion protection, it is anticipated that the general fill of the roadbed at Williams Creek will erode at the crossing location during high flow events. The culvert should therefore be replaced and armoured or the 'ford' should be upgraded to operate through next spring.

The access road crossing at Merrice Creek includes a single span bridge set on grade. No steelwork or abutment foundations were observed. In July 2012 the creek banks were being eroded and under cut at the crossing location. Scott Casselman reported that the bridge span was re-set on July 10, 2013, following recommendations in the July 2012 inspection memorandum. The abutment on the Village of Carmacks side of the bridge was reportedly leveled, or cut down, and then the span dragged back and re-set. During the July 2013 inspection the length of span seated on the Village side abutment was 0.5 to 0.75. The slope of the ground at the abutment immediately under the span at this location was observed to be over-steepened, approximately 1 horizontal to 2 vertical. The measures to stabilize the span therefore appear temporary and it is anticipated that the bridge will have to be re-set again in 2014 or in 2015.

2.0 THERMISTOR DATA

Ground temperatures derived from thermistor data collected during the site visit are presented in Attachment 2. The thermistor plots indicate cooling of ground at the following locations:

- Heap Leach Facility area in BH-17-07 at 25 m depth;
- Southwest of the Heap Leach Facility Area in BH-01-07 between depths of 5 and 15 m and in BH-03-07 between depths of 5 and 17 m;
- Events Pond embankment toe area in BH-06-07 between depths of 10 and 35 m; and
- Waste Rock Storage Area in BH-18-07 between depths of 7 and 37 m, and in BH-29-07 between depths of 15 and 20 m.

It is recommended that vegetation in the lower footprint area of the Heap Leach Facility and Confining Embankment be re-cleared of vegetation in 2013 or 2014 to promote thaw of permafrost ground prior to development of the area. Vegetation may allow the re-establishment of permafrost and ground ice and the vegetation should therefore be cleared to allow the ground to thaw over the warmer months.

3.0 RECOMMENDED ACTIONS

The inspection of the Carmacks Copper project site was completed on July 16, 2013 and indicated that as the site development has not been started yet; there is limited infrastructure and limited requirements for maintenance or further investigations. Recommended actions are summarized as follows:

- Clearing of vegetation in the footprint of the area of the lower Heap Leach Facility area and Confining Embankment to promote thaw of permafrost ground.
- Re-installation of the culvert on the site access road crossing of Williams Creek. The road embankment should be armored against erosion at the culvert location.
- Maintenance of the culvert on the main access road immediately north of the proposed Waste Rock Storage Facility.
- Filling and grading of the washouts on access roads in the Heap Leach Facility and Waste Rock Storage Facility areas.
- Clearing of the sediment trap on the access road to the lower re-vegetated area near Williams Creek east of the exploration camp, near the proposed Heap Leach Facility Sediment Pond location.

We trust that this letter satisfies your requirements. If you require additional information, please do not hesitate to contact us.

Yours very truly,

GOLDER ASSOCIATES LTD.

Ben Wickland, Ph.D., P.Eng. (BC)
Senior Geotechnical Engineer

John Hull, P.Eng. (BC, NWT, NU, YK)
Principal

BEW/JAH/md

Attachments: Attachment 1 – Photographs
Attachment 2 – Thermistor Data

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ATTACHMENT 1
Photographs

Photographs 1 - 5: *Carmacks exploration camp – views looking east to camp (top), looking west to camp (middle), slope immediately north of camp looking west (bottom left) and east (bottom right)*

Date Taken: *July 16, 2013*

Photographs 6 - 7: *Silt fences located between the area of the proposed Heap Leach Facility Sediment Pond and Williams Creek and re-vegetated area. Re-establishment of grass vegetation in this area appears to be hampered by the periodic pooling of water. Willow cuttings planted in 2011 had taken hold with limited new growth visible in 2013.*

Date Taken: *July 16, 2013*

Photograph 8: *View of proposed Heap Leach Facility and open pit areas (far slope) from site access road, looking north.*

Date Taken: *July 16, 2013*

Photograph 9: *View of proposed Heap Leach Facility (foreground) looking south west.*

Date Taken: *July 16, 2013*

Photograph 10: *Re-vegetation on drill access road in the Events Pond area.*

Date Taken: *July 16, 2013*

Photograph 11: *Re-vegetation at BH17-07 drill pad in the Heap Leach Facility area.*

Date Taken: *July 16, 2013*

Photograph 12: *Re-vegetation on BH-26-07 drill pad in the Heap Leach Facility area.*

Date Taken: *July 16, 2013*

Photograph 13: *Re-vegetation at DH95-H drill pad in the Heap Leach Facility area.*

Date Taken: *July 16, 2013*

Photograph 14: *Drill pad sediment basin trap near the proposed Events Pond.*

Date Taken: *July 16, 2013*

Photograph 16: *Bulk sample excavation site.*

Date Taken: *July 16,, 2013*

Photograph 17: *Water supply well and pad near proposed camp site.*

Date Taken: *July 16, 2013*

Photographs 18 and 19: *Inlet (left) and outlet (right) of culvert on main access road crossing of North Williams Creek located north of the Waste Rock Storage Area.*

Date Taken: *July 16, 2013*

Photograph 20: *Erosion on road near North Williams Creek crossing.*

Date Taken: *July 16, 2013*

Photographs 21 - 22: *View of access road crossing of Williams Creek looking north (top) and south (bottom).*

Date Taken: *July 16, 2013*

Photograph 23: *View of access road repair just south of Williams Creek, looking south.*

Date Taken: *July 16, 2013*

Photograph 24: *Site access road crossing of Merrice Creek, view of bridge abutment nearest to the Village of Carmacks.*

Date Taken: *July 16, 2013*

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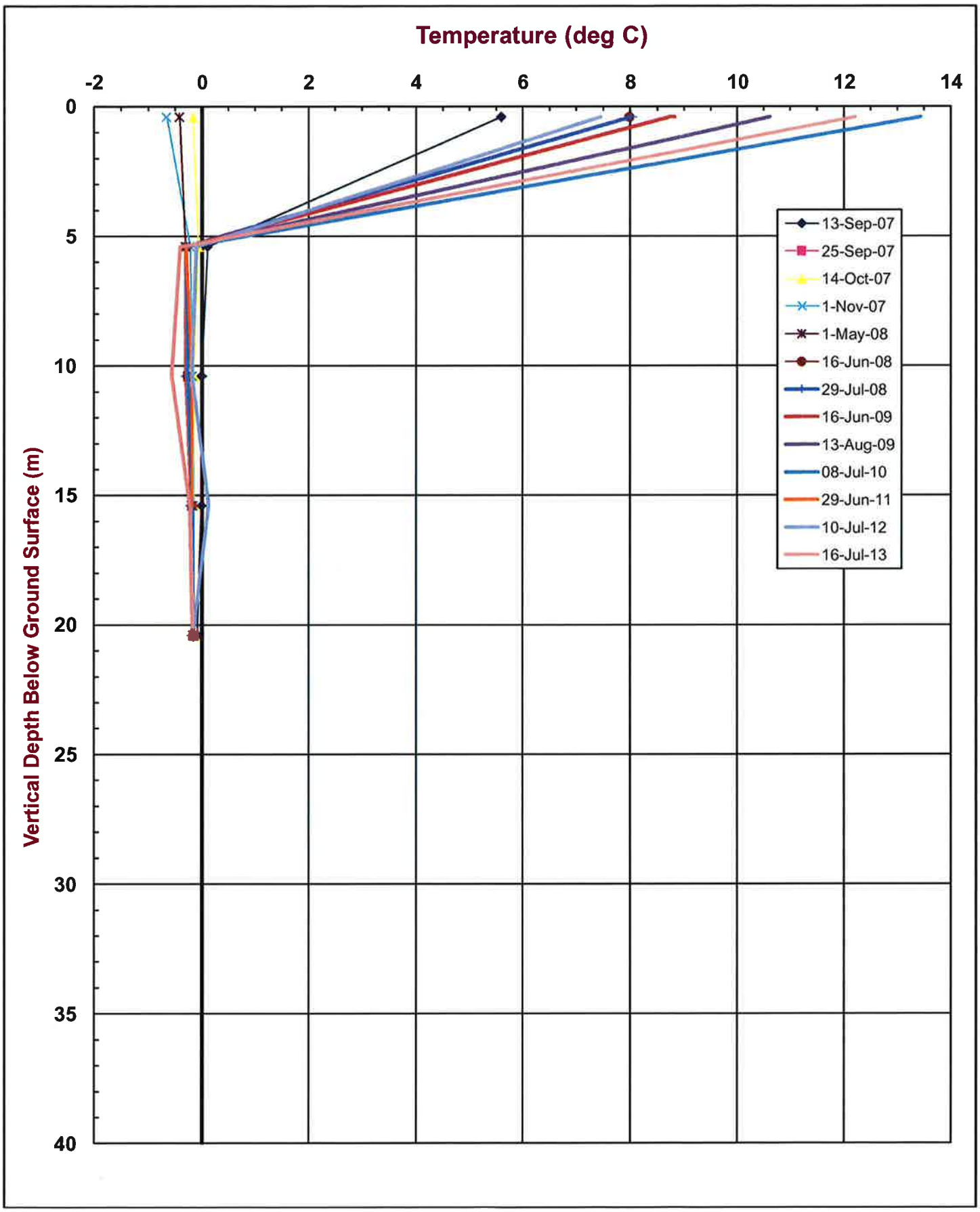
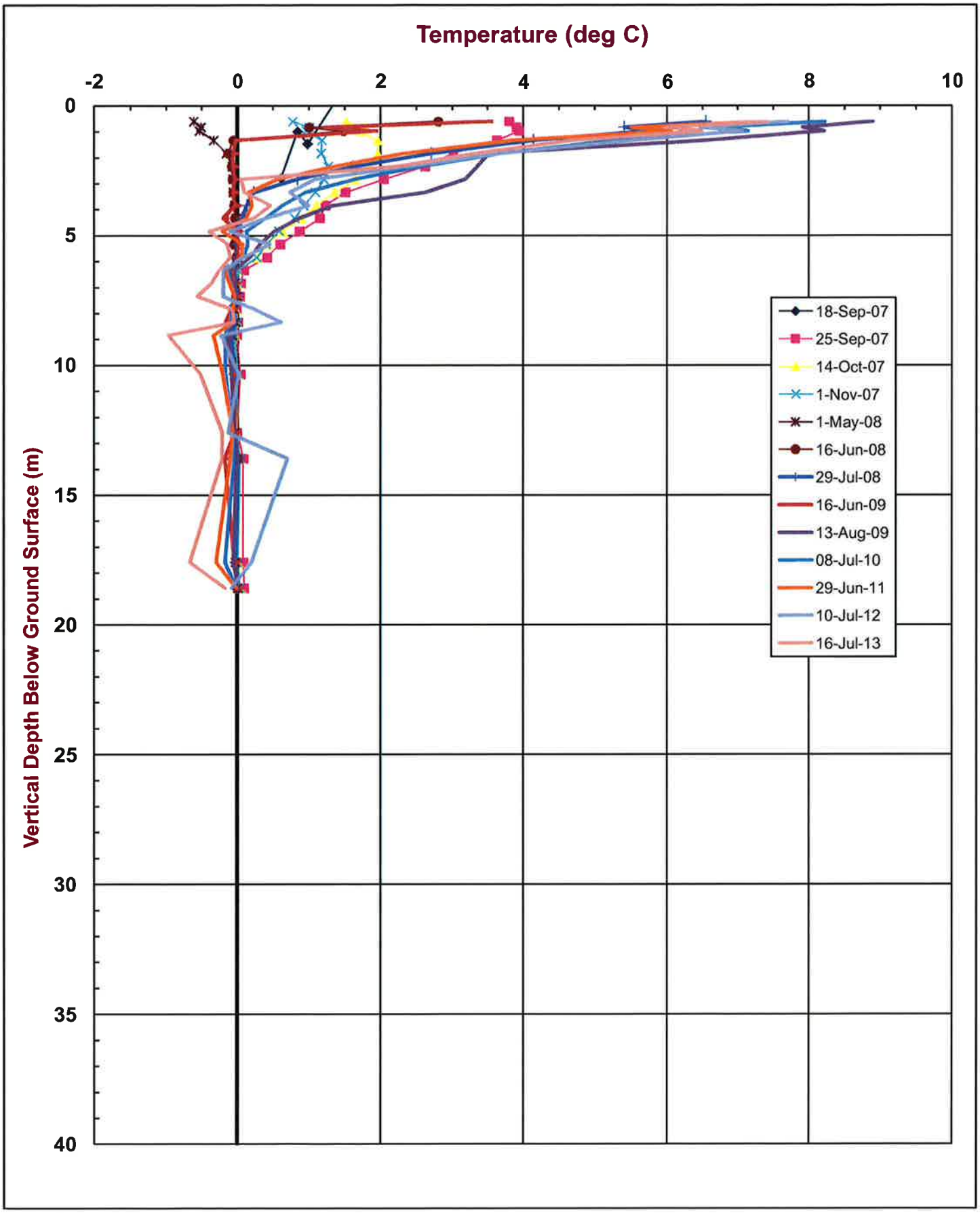
ATTACHMENT 2
Thermistor Data


Temperature (deg C)
-2
0
2
4
6
8
10
12
14
Vertical Depth Below Ground Surface (m)
0
5
10
15
20
25
30
35
40
13-Sep-07
25-Sep-07
14-Oct-07
1-Nov-07
1-May-08
16-Jun-08
29-Jul-08
16-Jun-09
13-Aug-09
08-Jul-10
29-Jun-11
10-Jul-12
16-Jul-13


Temperature (deg C)
-2
0
2
4
6
8
10
Vertical Depth Below Ground Surface (m)
0
5
10
15
20
25
30
35
40
18-Sep-07
25-Sep-07
14-Oct-07
1-Nov-07
1-May-08
16-Jun-08
29-Jul-08
16-Jun-09
13-Aug-09
08-Jul-10
29-Jun-11
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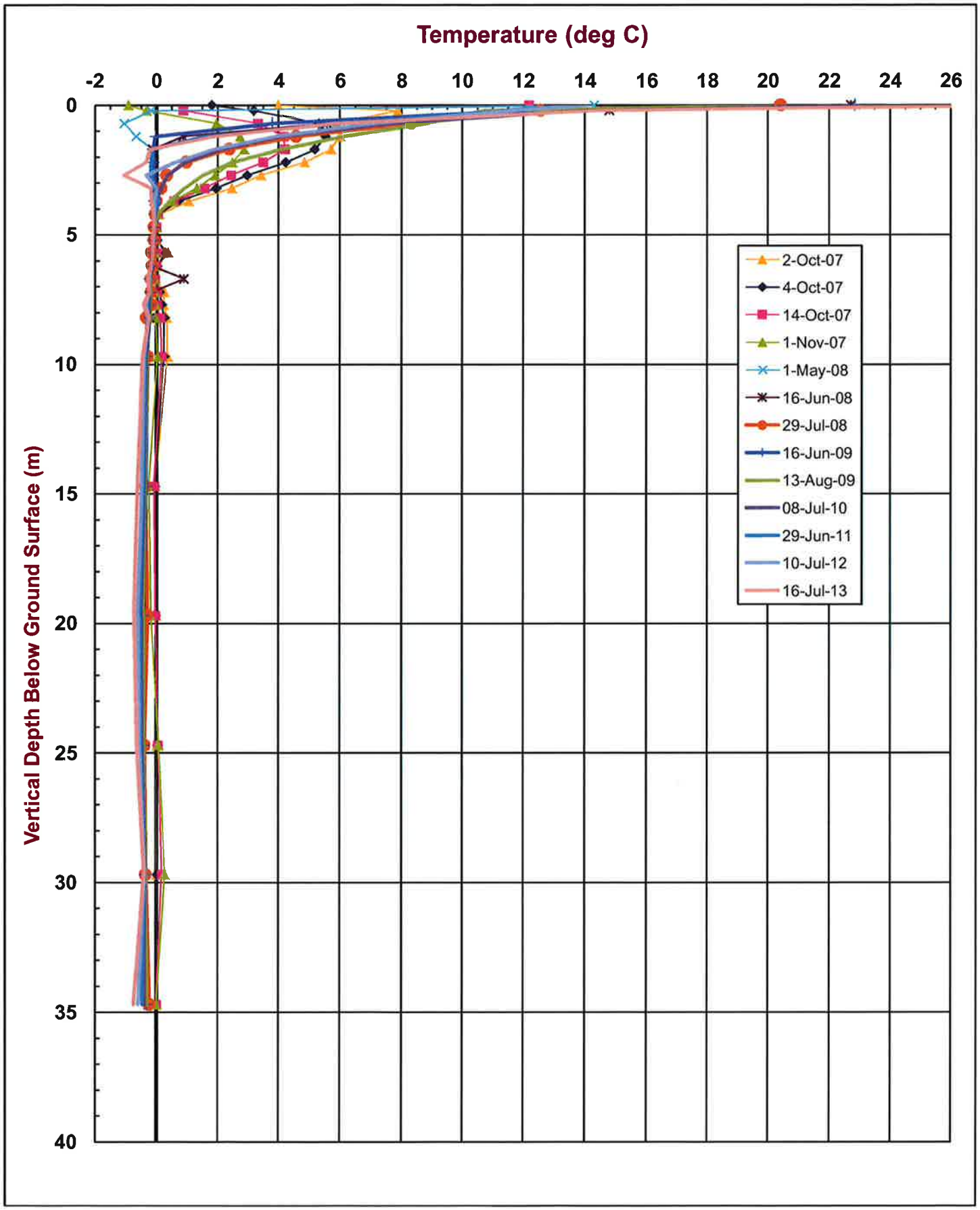
16-Jul-13


Temperature (deg C)
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0
2
4
6
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10
12
14
16
18
20
22
24
26
Vertical Depth Below Ground Surface (m)
0
5
10
15
20
25
30
35
40
2-Oct-07
4-Oct-07
14-Oct-07
1-Nov-07
1-May-08
16-Jun-08
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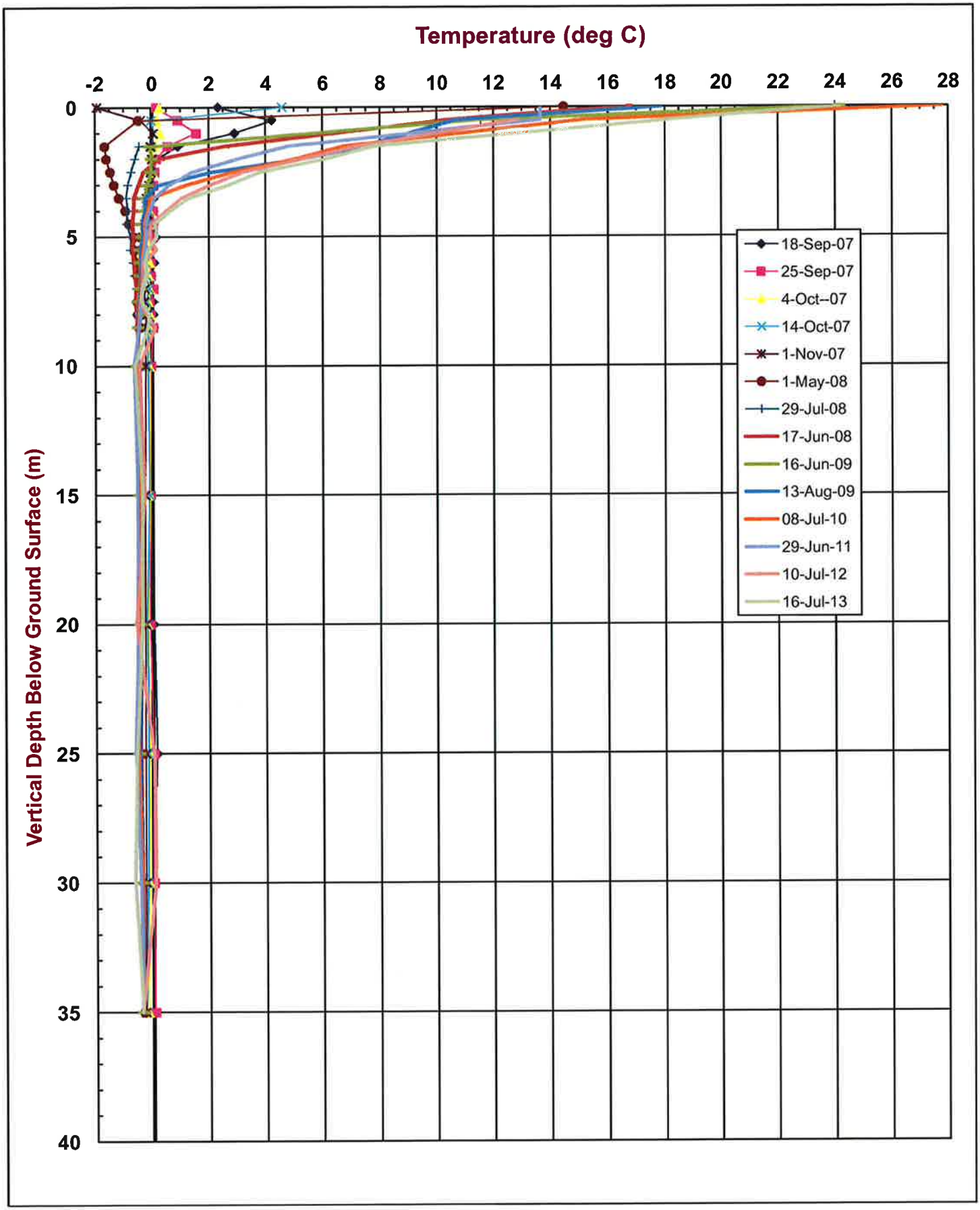
08-Jul-10
29-Jun-11
10-Jul-12
16-Jul-13



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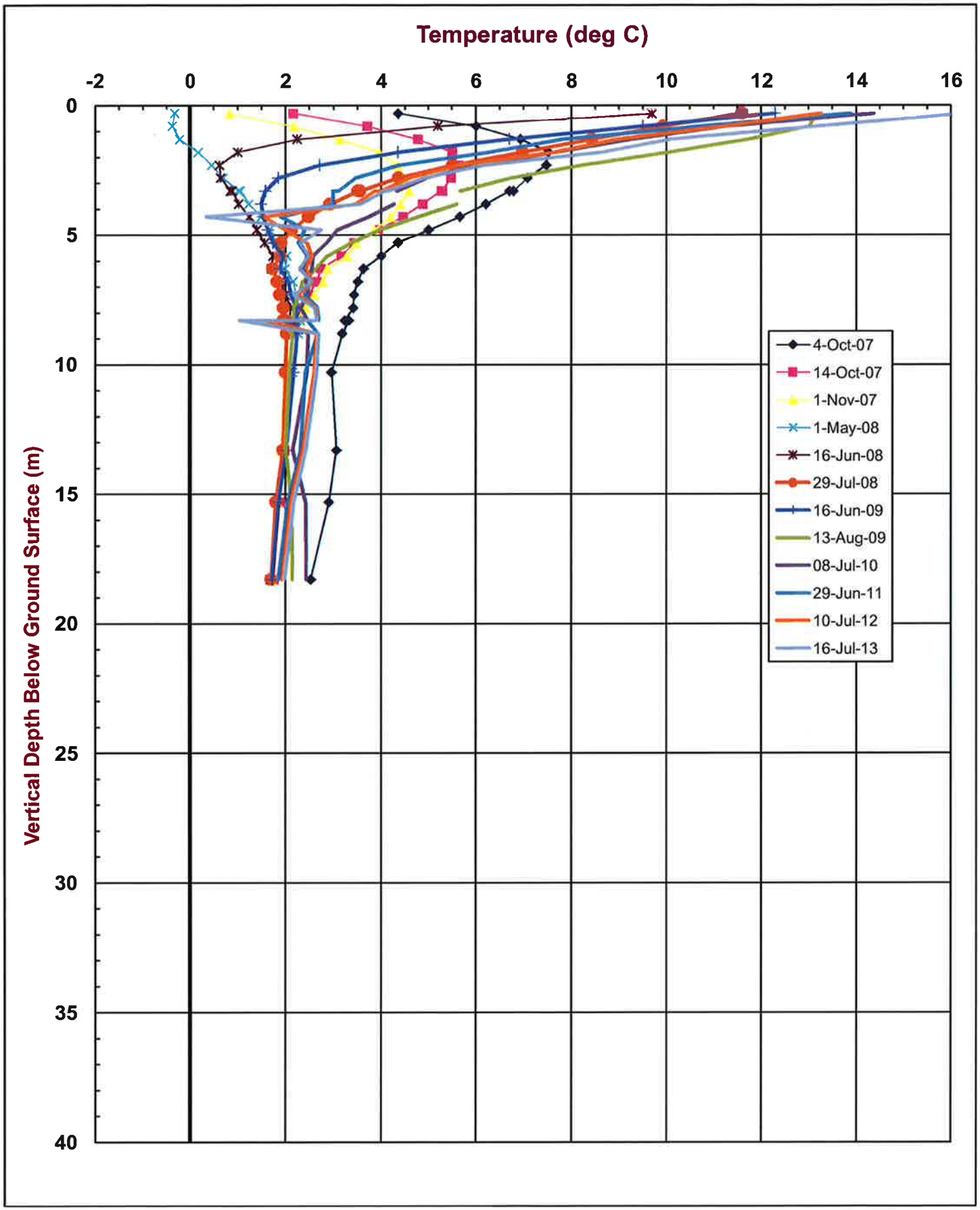
Temperature (deg C)
-2
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4
6
8
10
12
14
16
Vertical Depth Below Ground Surface (m)
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25
30
35
40
4-Oct-07
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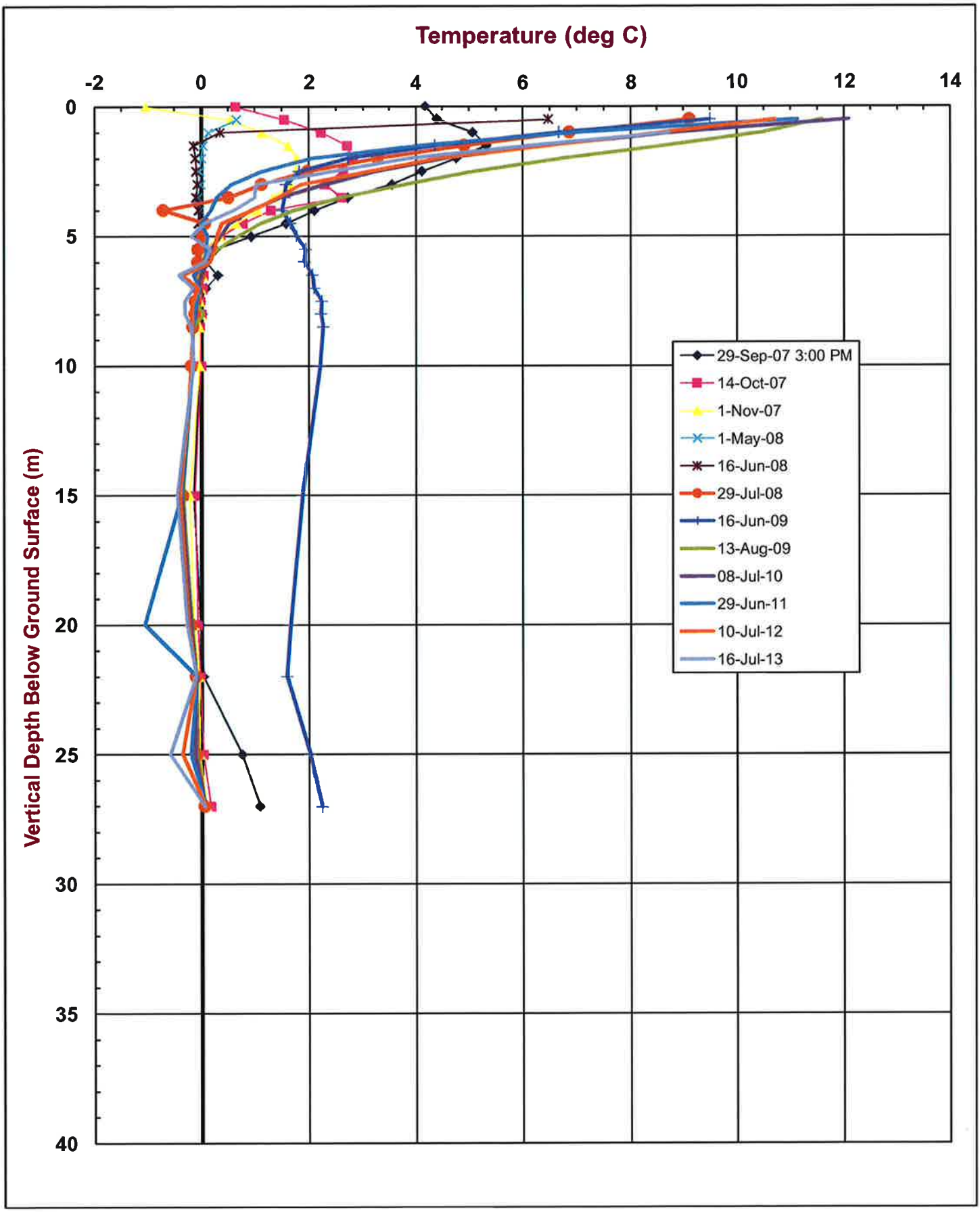
1-Nov-07
1-May-08
16-Jun-08
29-Jul-08
16-Jun-09
13-Aug-09
08-Jul-10
29-Jun-11
10-Jul-12
16-Jul-13


Temperature (deg C)
-2
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4
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10
12
14
Vertical Depth Below Ground Surface (m)
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29-Sep-07 3:00 PM
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1-Nov-07
1-May-08
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29-Jul-08
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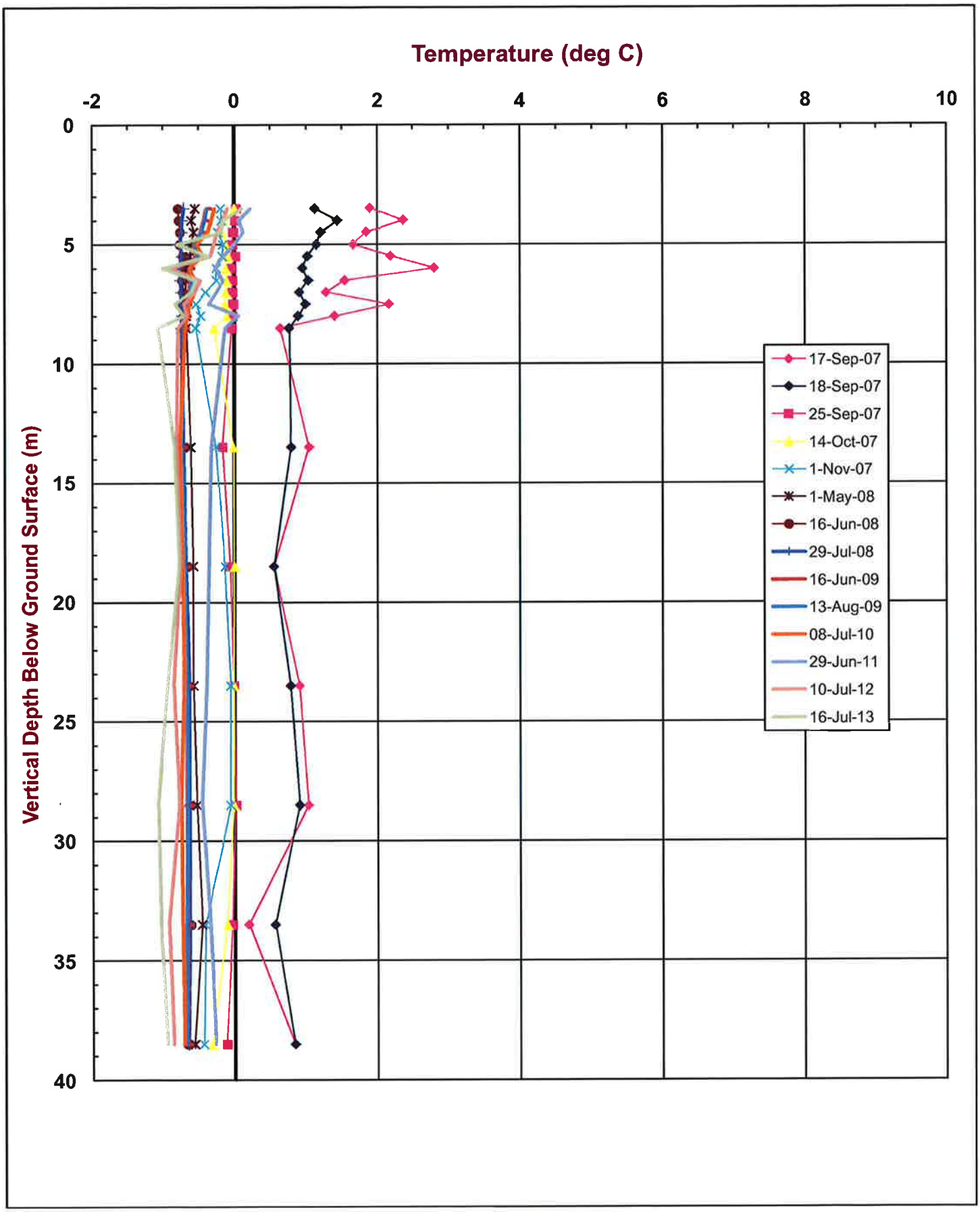
08-Jul-10
29-Jun-11
10-Jul-12
16-Jul-13


Temperature (deg C)
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Vertical Depth Below Ground Surface (m)
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17-Sep-07
18-Sep-07
25-Sep-07
14-Oct-07
1-Nov-07
1-May-08
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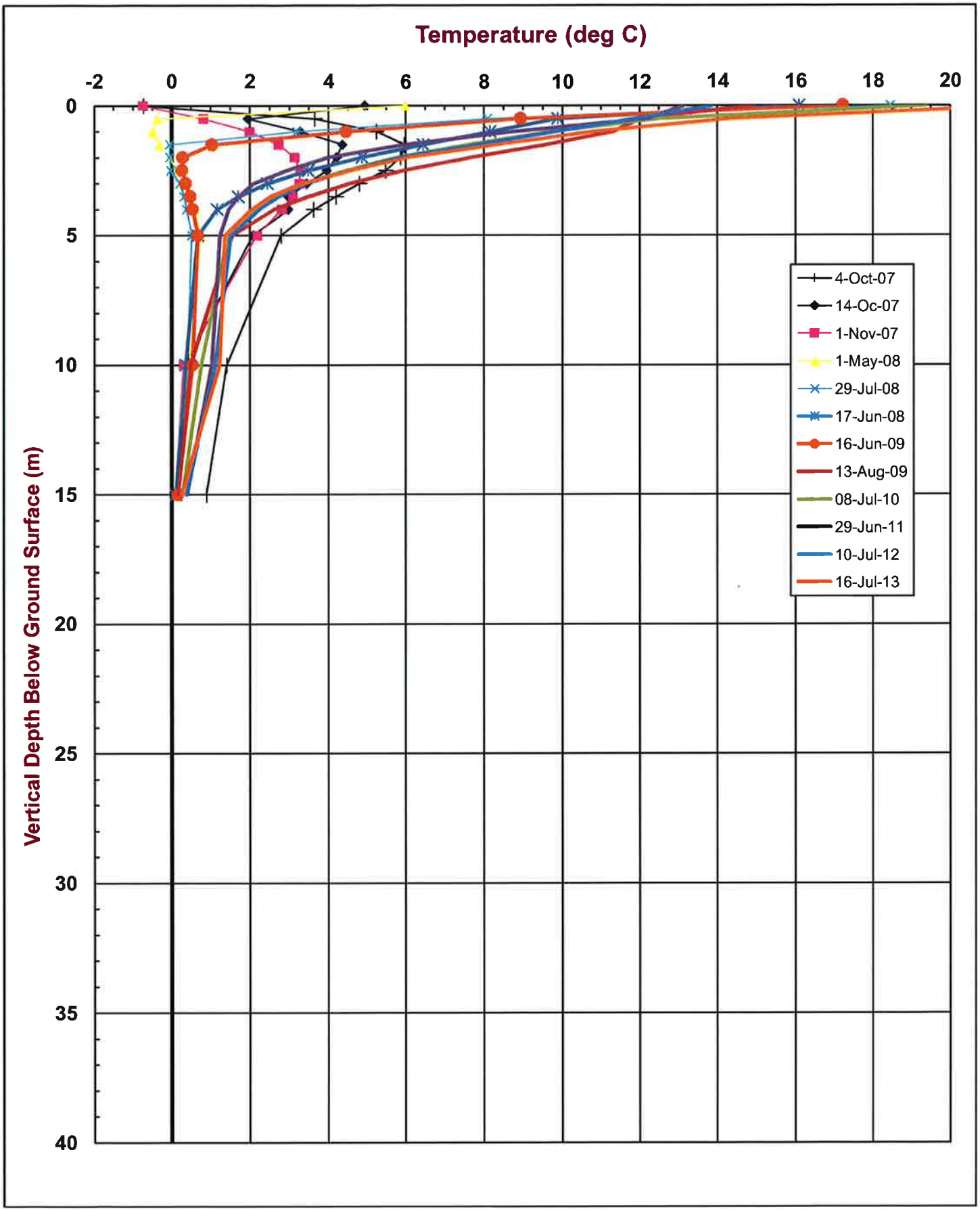
29-Jun-11
10-Jul-12
16-Jul-13


Temperature (deg C)
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4
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Vertical Depth Below Ground Surface (m)
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29-Jul-08
17-Jun-08
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08-Jul-10
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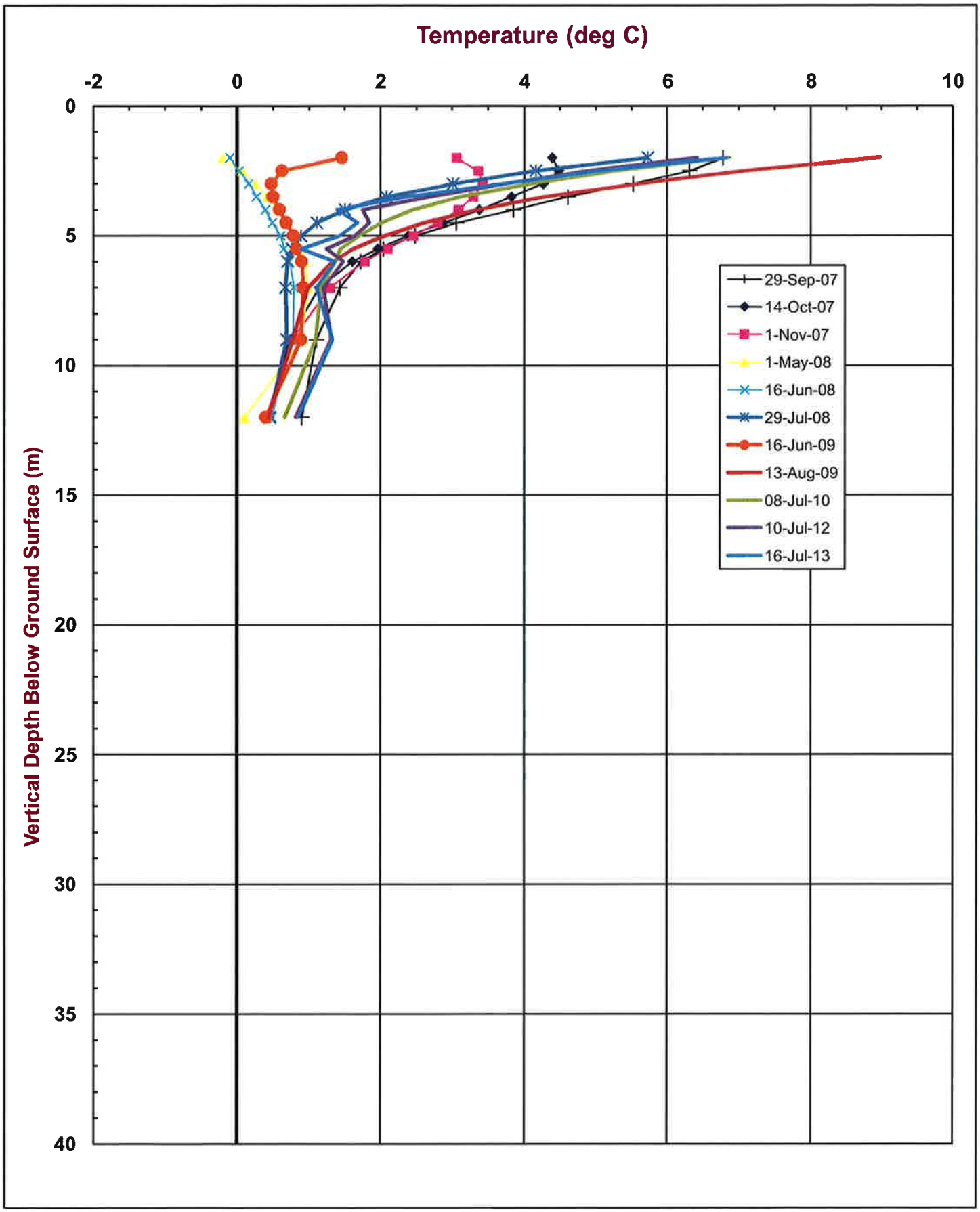
16-Jul-13


Temperature (deg C)
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8
10
Vertical Depth Below Ground Surface (m)
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29-Sep-07
14-Oct-07
1-Nov-07
1-May-08
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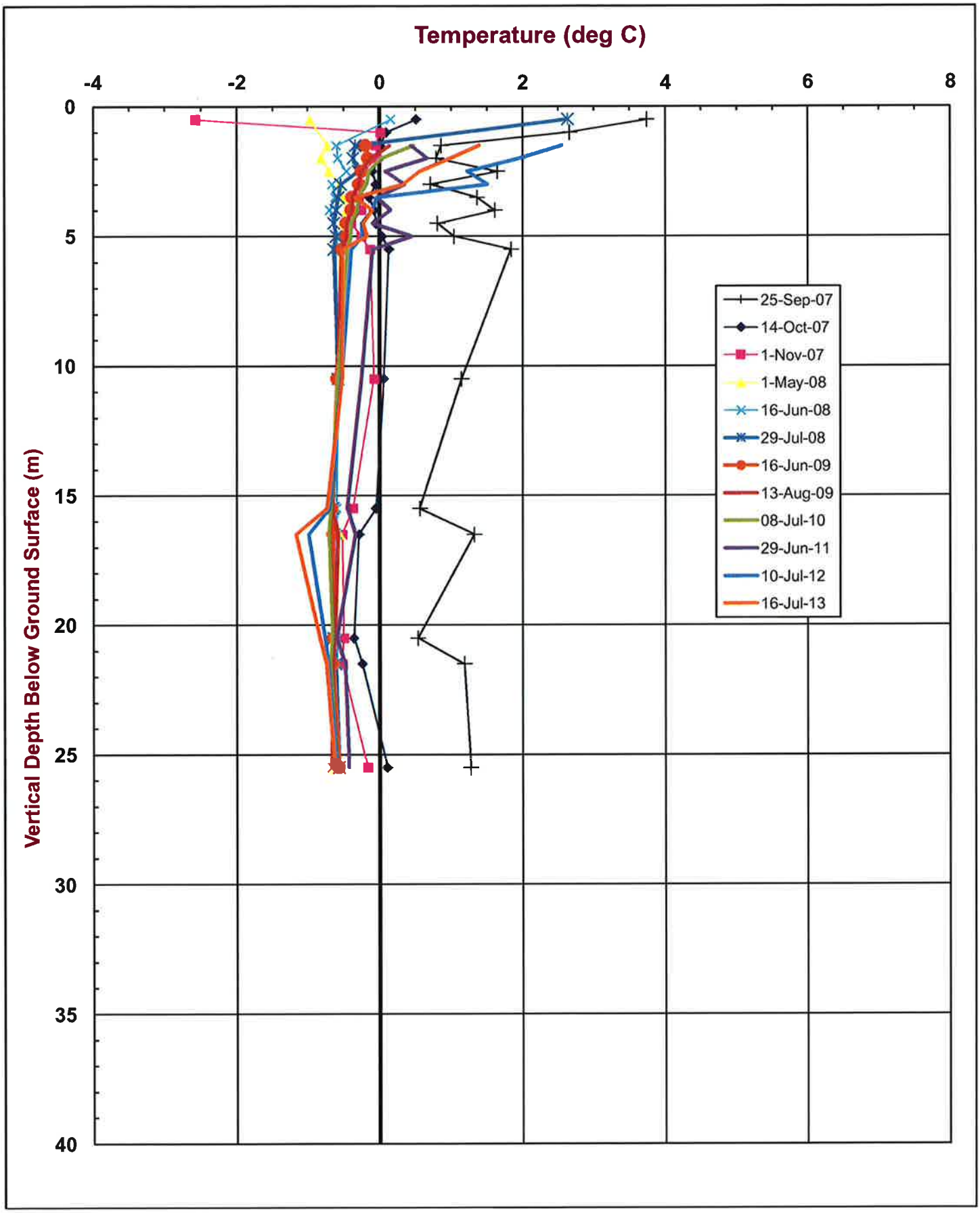
16-Jul-13


Temperature (deg C)
-4
-2
0
2
4
6
8
0
5
10
15
20
25
30
35
40
Vertical Depth Below Ground Surface (m)
25-Sep-07
14-Oct-07
1-Nov-07
1-May-08
16-Jun-08
29-Jul-08
16-Jun-09
13-Aug-09
08-Jul-10
29-Jun-11
10-Jul-12
16-Jul-13