MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

REPORT ON
1999 ANNUAL INSPECTION
(REF. NO. 11162/13-9)

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SECTION 1.0 - INTRODUCTION

1.1 PROJECT DESCRIPTION

The Mount Polley gold and copper mine is owned and operated by Mount Polley Mining Corporation (MPMC). It is located in central British Columbia, 56 kilometres northeast of Williams Lake, as shown on Figure 1.1. The Mount Polley mine has been in production since June 13, 1997. Ore is crushed and processed by selective flotation to produce a copper-gold concentrate. The current mill throughput rate is approximately 20,000 tonnes per day (7.3 million tonnes per year). An overall site plan of the Mount Polley Mine is shown on Drawing 11162-10-100 in Appendix A.

Mill tailings are discharged as a slurry into the Tailings Storage Facility which has been designed to provide environmentally secure storage of the solid waste. As the solids settle out of the slurry, process fluids are collected and recycled back to the mill for re-use in the milling process. There is no surface discharge of any process solution from the Tailings Storage Facility.

Knight Piésold Ltd. were originally engaged by Imperial Metals Corporation to provide engineering services for the design of the Open Pit, Waste Dumps and Tailings Storage Facility in 1989. In the period since, Knight Piésold Ltd. has provided the following services:

- Detailed design of all stages of the Tailings Storage Facility and Ancillary Works completed to date.

- Prepare contract documents and technical specifications for all stages of the Tailings Storage Facility construction to date.

- Construction supervision and quality assurance/quality control (QA/QC) for all stages of the Tailings Storage Facility completed to date.

- Conduction and evaluation of investigations for engineering design and construction materials suitability.

- Consulting services provided to the mine on all aspects of the operation and monitoring of the Tailings Storage Facility.

The tailings embankments were raised to Stage 2C (El. 941 m). Work started in August 1999 and finished in February 2000. Knight Piésold Ltd. provided design, construction supervision and quality assurance/quality control (QA/QC) services for the embankment raise. Cyclone sand trials were also conducted in 1999, including upstream berms in the Main and Perimeter embankments and a downstream berm in the Perimeter Embankment. Knight Piésold Ltd. also conducted on-going reviews of all instrumentation and monitoring records for 1999 and completed an annual inspection of the Tailings Storage Facility

1.2 TAILINGS STORAGE FACILITY

The Tailings Storage Facility is comprised of the following:

- A pipeline system that conveys the tailings slurry via gravity from the Millsite to the Tailings Storage Facility. The system includes a movable discharge section with spigot offtakes to distribute the tailings along the embankment crest. Cyclones are operated as required in the Spring, Summer and Fall, and separate the coarse fraction of the tailings stream for use in embankment construction.

- A make-up water supply system to provide extra water to the Tailings Storage Facility. The system comprises an intake and pump at Polley Lake

and a pipeline to convey the water to the Tailings Storage Facility. The water is discharged into the Tailings Storage Facility near the west abutment of the Perimeter Embankment.

- The Millsite Sump and Southeast Sediment Pond that provide additional make-up water to the system. Millsite runoff is directed from the Millsite Sump into the tailings line near the mill. Flows from the Southeast Sediment Pond enter the system at the reclaim booster pump station or at the T2 Tailings Drop Box.

- Earthfill embankments that retain the tailings solids within the Tailings Storage Facility. The Main Embankment has a vertical chimney drain, with a collector (longitudinal) drain and three outlet drains.

- A low permeability basin liner (natural and constructed), which provides containment of process fluids within the facility and minimizes the potential for seepage through the tailings basin soils.

- A foundation drain and pressure relief well system located downstream of the Stage 1B Main Embankment to prevent the build-up of pressure in foundation materials and to collect seepage from the base of the Tailings Storage Facility. An engineered rockfill haul road located downstream of the embankment covers the foundation drains and the trenches that connect to pressure relief wells to the foundation drains.

- Seepage collection ponds located downstream of the Main and Perimeter Embankments. The seepage collection ponds are excavated in low permeability soils and store water collected from embankment drains and local runoff. Water is pumped back into the Tailings Storage Facility.

- Instrumentation in the tailings and embankment foundations, fill and drains (including vibrating wire piezometers, survey monuments and the measurement of drain flows) used to monitor the performance of the Tailings Storage Facility.

- A reclaim water system comprised of a barge mounted pump station in an excavated channel, a booster pump station and a pipeline that provides process water to the mill.

- A system of monitoring wells installed around the Tailings Storage Facility for groundwater quality monitoring.

All of the components were evaluated as part of the 1999 Annual Inspection.

1.3 SCOPE OF REPORT

This report presents the results of the 1999 Annual Inspection, including an evaluation of all pertinent operating data and instrumentation and monitoring results collected over the past year and from start-up to date. Summaries and recommendations are provided.

Details and results of the 1999 cycloned sand trial programs are presented in "Report on Cycloned Sand Construction of Stage 3 and On-going Stages of the Tailings Storage Facility" (Ref. No. 11162/12-2, December 13, 1999).

Construction and QA/QC activities conducted in 1999 as part of the Stage 2C embankment raise are described in "Report on 1999 Construction" (Ref. No. 11162/13-5, August 30, 2000).

SECTION 2.0 – 1999 ANNUAL INSPECTION

2.1 GENERAL

An annual inspection of the Tailings Storage Facility and Ancillary Works was conducted to meet the guidelines of the Ministry of Energy, Mines and Northern Development. The inspection was conducted by Mr. Jeremy Kinch, E.I.T., on April 26, 2000, and covers 1999 operations. Comments on each component that was inspected are included in the following sub-sections. Selected photographs from the Annual Inspection are included in Appendix B.

2.2 EMBANKMENT CONSTRUCTION

Stage 2C construction was complete at the time of the inspection. The design crest was El. 941m.

2.3 INSPECTION OF FACILITY

The tailings pond was at El. 936.5 m at the time of inspection. Tailings were being discharged at the northwest corner of the impoundment and cycloning was in progress in the Borrow Area No. 4 stockpile. The tailings header extended along the Perimeter Embankment to CH 33+00, and terminated at a single discharge point.

Tailings beaches were exposed at the west abutment of the Perimeter Embankment (CH 37+20 to 44+80) and near the centre of the Perimeter Embankment (CH 32+00 to 33+50) at the location of the point discharge header. The upstream cycloned sand berm was exposed along the Main Embankment.

Other observations made at the Tailings Storage Facility:

- No cracks were observed on the crest at the time of inspection. The fill slopes for the Main and Perimeter Embankments did not exhibit any signs of instability, although a layer of saturated waste material had accumulated on the downstream slopes during Stage 2C construction. This material could

potentially slough and should be removed before the next phase of construction commences.

- The Seepage Collection Pond recycle pipelines at both the Main and Perimeter Embankments were discharging well upstream of the embankment fill. No erosion was observed.

- The make-up water line from Polley Lake is buried in embankment fill near the left abutment of the Perimeter Embankment. The pipeline must be removed, and fill properly replaced, before the next phase of construction.

- Localized areas at the west abutment of the Perimeter Embankment were covered with Zone T material for access. This material will have to be removed during the next phase of construction.

- Ruts along the embankment crests will have to be repaired during the next phase of construction.

- The downstream areas of the Main and Perimeter Embankments are unchanged since the last inspection. Topsoil and sub-excavated materials from the Stage 2A foundations at the Main Embankment have been pushed past the Stage 2A toe and must be removed during Stage 3 construction.

- No unexpected or uncontrolled seepage was observed in the downstream areas of the embankments, including the fill slopes and foundations.

- The Seepage Collection Ponds (SCPs) for the Main and Perimeter Embankments are in good condition. Minor erosion was observed on the north slope of the Main Embankment SCP. No other damage was observed. The Seepage Recycle pipelines were in place and water was being discharged into the facility from the Perimeter Embankment at the time of the inspection. It was reported that the maximum pond levels did not encroach on the overflow culverts and there have been no uncontrolled discharges from the Seepage Collection Ponds.

- The outlets for the Main Embankment Foundation Drains FD-1 to FD-4 and Upstream Toe Drains were submerged at the time of inspection because of the high water levels in the Seepage Collection Pond. The drain flows could not be measured as a result. The outlet for Foundation Drain FD-5 was above the pond level and flow was estimated to be 5 l/min. The pond should be lowered and flow monitoring must be resumed.

- Seepage from the Main Embankment Outlet Drains was observed. Flows were measured during the inspection and were about 1 litre/min in OD-1 (the most westerly outlet drain) and about 0.5 litre/min in OD-2 and OD-3. The CPT pipe in OD-3 is crushed and partially blocked at the outlet. The drain gravel surrounding the pipe handles all of the flow from OD-3. The flows must be regularly measured by MPMC. The Perimeter Embankment Outlet Drains have been installed but do not yet require monitoring.

- The Zone T Haul Road was in very good condition. The surface has been coated with some fines and may require scarification before it is covered by other materials in future construction programs.

- The exposed basin liner was inspected and was found to be in good condition, with no significant damage from erosion observed. No springs were observed. A ditch cut into the basin liner to facilitate drainage of the upstream toe drain ditch was backfilled with glacial till during Stage 2C construction. The basin liner will be expanded in 2000. The areas that require basin liner are currently being evaluated.

- All ditches were unobstructed and were flowing with clear runoff.

All Stage 2C work items for the Tailings Storage Facility were complete and the Tailings Storage Facility is in good condition. Selected photos of the Tailings Storage Facility are included in Appendix B.

SECTION 3.0 - EMBANKMENT PERFORMANCE

3.1 PIEZOMETER DATA

3.1.1 General

A total of 52 vibrating wire piezometers have been installed at the Tailings Storage Facility at the time of inspection, including replacement piezometers. Piezometer locations are shown on Drawings 11162-10-150, 151, 152 and 153. The 44 functional piezometers provided sufficient information for assessing the performance of the Tailings Storage Facility. The piezometers are grouped into tailings piezometers, embankment foundation piezometers, embankment fill piezometers and drain piezometers for monitoring the embankment performance. Results are discussed below.

3.1.2 Tailings Piezometers

A total of 9 piezometers have been installed in the tailings to date. Seven remain in operation, and three of these are located in mechanically placed Zone CS fill. The pore pressures in the tailings adjacent to the Main Embankment increased 0.8 to 1.8 m during the placement of the upstream cycloned sand trial berm. The pressures dissipated following the suspension of cycloning at the Main Embankment (September 9, 1999), and returned to previously observed levels in approximately 6 weeks. Pressures at the time of the inspection reflected the level of the water in the impoundment. A summary of the tailings piezometer monitoring data is presented on Table 3.1. Individual plots of the tailings piezometers are included in Appendix C1.

3.1.3 Embankment Foundation Piezometers

A total of 16 piezometers had been installed in the embankment foundations at the time of the inspection. Twelve remained in operation. No unexpected high pore pressure increases were observed during the monitoring period. The highest water level indicated by the foundation piezometers was an artesian level of 3.7 m, recorded in A2-PE2-01. Piezometers A2-PE2-02,

A2-PE2-06, A2-PE2-07 and B2-PE2-02 indicated artesian pressures of approximately 3.0 m. Although these levels were high, none had reached the foundation piezometer trigger levels of 6.0 m artesian pressure (relative to original ground). The trigger levels are based on embankment stability analyses. These values, if exceeded, will require investigations and contingency or remedial actions to be taken.

It has been noted that artesian pressures have typically developed in the deeper piezometers, at elevations below El. 910m. This corresponds roughly to the top of the glaciolacustrine/glaciofluvial material and these artesian pressures are therefore not unexpected (Planes A, B and C). It should also be noted that no artesian conditions have been encountered at Plane E, where coarser glaciofluvial material is present.

A summary of the embankment foundation piezometer monitoring data is presented on Table 3.2. Individual plots of the embankment foundation piezometers are included in Appendix C2.

3.1.4 Embankment Fill Piezometers

A total of 16 piezometers had been installed in the embankment fill materials at the time of the inspection. These include 12 in Zone S or B glacial till and 4 in Zone T. Of the 16 piezometers installed, 14 remain in operation (11 in Zone S or B and 3 in Zone T). No unexpected high pore pressure increases were observed during the monitoring period. The largest increase of 1.4 m was recorded by pre-existing piezometer B2-PE2-03. The three piezometers installed in glacial till fill during Stage 2C construction registered pore pressures ranging from 1.7 m to 2.4 m. Pressures dissipated slightly in the weeks following construction.

The plots presented in Appendix C also indicate that some of the embankment fill piezometers registered a pore pressure increase during August and September, 2000. This pore pressure response was anticipated, as it is associated with the Stage 3 fill placement.

No pore pressure increases were observed in fill piezometers located downstream of the chimney drain. The functioning Zone T embankment fill piezometers were showing slightly negative pore pressures, indicating that the fill was drained.

A summary of the embankment fill piezometer monitoring data is presented on Table 3.3. Individual plots for the embankment fill piezometers are included in Appendix C3.

3.1.5 Drain Piezometers

A total of 11 piezometers had been installed in components of the embankment drains at the time of the inspection including foundation drains, chimney drain and outlet drains. All 11 were functioning. No unexpected pore pressure fluctuations were observed for this monitoring period. All drain piezometers showed near-zero or slightly negative pore pressures, indicating that the drains were functioning as intended. A summary of the drain piezometer monitoring data is presented on Table 3.4. Individual plots for each drain piezometer are included in Appendix C4.

3.1.6 Repairs to Piezometers

Repairs were made to several non-functioning piezometers during Stage 3 construction, and monitoring resumed. Three new piezometers were installed as well. Monitoring results will be discussed in the 2000 Annual Inspection Report, when sufficient data has been collected.

3.2 DRAIN FLOW DATA

Flows from the 5 Foundation Drains and 2 Upstream Toe Drain outlets at the Main Embankment are to be monitored on a weekly basis. High water levels in the Seepage Collection Pond had prevented flow measurement since late December 1998. The Seepage Collection Pond was lowered since the time of the inspection and monitoring of drain flows has resumed. Results are shown on Table 3.5.

Samples are collected from the Foundation Drains by MPMC for water quality testing. The results are available from MPMC.

Seepage flows from the three Outlet Drains for the Main Embankment Chimney Drain were exiting from the Stage 1B embankment. MPMC has sealed off the area below the drains and installed some plastic sheeting that enables the seepage flows to be monitored. Flows were measured during the inspection and were about 1 litre/min in OD-1 and about 0.5 litre/min in OD-2 and OD-3. The Perimeter Embankment Outlet Drains have been installed but do not yet require monitoring because the Chimney Drain has not been installed.

3.3 SURVEY MONUMENT DATA

Four (4) survey monuments were installed on the Stage 2C embankment crest on April 26, 2000. The monuments were destroyed shortly after installation, and no data was collected. The embankment crests should be surveyed prior to Stage 3 fill placement in order to evaluate settlement.

3.4 STABILITY

The stability of the Stage 3 embankment was evaluated. The stability analyses showed that the Factors of Safety for the short-term cases (during operations) were greater than the minimum required value of 1.3. The stability analyses are described in more detail in "Report on Cycloned Sand Construction of Stage 3 and On-going Stages of the Tailings Storage Facility" (Ref. No. 11162/12-2).

3.5 SEEPAGE

No unexpected seepage was observed during the inspection carried out April 26, 2000. The foundation drains collect foundation seepage and groundwater at the Main Embankment. The flow rates are discussed above.

No uncontrolled seepage through the embankments was observed. A trace amount of seepage (total estimated at less than 2 litre/min for three outlet drains) was observed from Main Embankment Outlet Drains. The Longitudinal Drain is set in foundation

soils above El. 919 m along the left abutment and therefore acts as a foundation drain in this area. The flow rates from the Outlet Drains are expected to increase slightly as the water level rises and a steady state phreatic surface develops in the embankment.

Initial seepage modelling conducted during design and permitting of the Tailings Storage Facility identified that up to 1.8 litres/second of seepage may escape from the tailings basin during operations. Seepage from the tailings basin can be assessed by monitoring water quality from the groundwater wells and the foundation drains.

SECTION 4.0 - MANAGEMENT OF FACILITY

4.1 TAILINGS DEPOSITION

Tailings have been discharged from the M1 dump valves, by end spilling at flanged connections and by cycloning inside the impoundment in 1999. Future beach development will have to be coordinated with cycloned sand stockpiling in order to maintain an adequate beach at the Main and Perimeter Embankments.

4.2 FILLING SCHEDULE AND TAILINGS DENSITY

The updated filling schedule and staged construction sequence are shown on Figure 4.1. Reclaim water volumes have been updated based on information provided by MPMC, who continually track and update the project water balance, as described below.

The tailings surface (above and below the pond at El. 938.00 m) was surveyed by MPMC on July 11, 2000. At the time of the survey, a total of 18,815,000 dry tonnes of tailings had been deposited into the facility. The tailings volume was estimated to be 12,887,000 cubic metres, indicating that the in-situ tailings dry density was 1.46 tonnes/cubic metre. This dry density has been incorporated into the updated water balance. A conservative dry density of 1.36 tonnes/cubic metre has been assumed for tailings deposited after July 2000. The tailings dry density is higher than the conservative values used in the design of the facility (1.1 tonnes/cubic metre for Year 1 and 1.2 tonnes/cubic metre for year 2), indicating that the tailings are settling at a higher density than originally projected. The amount of free water in the facility (above the tailings) was calculated to be 2,428,000 cubic metres at the time of the survey. The average throughput for 1999 is reported to be approximately 19,000 tonnes/day. The projected throughput for 2000 is estimated at 20,000 tonnes/day.

The updated filling schedule for the Tailings Storage Facility indicates that a Stage 3 crest elevation of 942.5 m is sufficient to meet storage and freeboard requirements through September 2001. This includes approximately 1.7 million cubic metres of reclaim water, the 24-hour Probable Maximum Precipitation event (679,000 m^3) plus 1 metre for wave run-up.

4.3 WATER BALANCE

The original water balance developed for the site has been modified by Mount Polley Mining Corporation to include additional site-specific information. The water balance is continually updated with temperature, precipitation, evaporation, snowpack, ice cover and other relevant data as it becomes available. MPMC conduct soundings of the tailings surface (above and below the supernatant pond) to confirm the tailings dry density. All of this information is used to predict the amount of water that will be available for recycle and the amount of water required from the Polley Lake Pumping System. Knight Piésold Ltd. provides input and review of the water balance on an annual basis, or as required by MPMC. A copy of the water balance is not included in this report. Details are presented in annual Water Management Plan reports submitted to the appropriate agencies (Ministry of Environment, Lands and Parks and Ministry of Energy, Mines and Northern Development).

The updated water balance is in close agreement with the original. The data has been incorporated in the revised filling schedule and staged construction curve shown on Figure 4.1. To date, the Tailings Storage Facility has generally been operated in accordance with the objectives of the water balance. This includes maintaining a maximum of 2 to 2.5 million cubic metres of water in the impoundment for reclaim, including any water from the Polley Lake Pumping System.

4.4 FREEBOARD

The design of the Tailings Storage Facility includes a provision for live storage of the 24-hour PMP (probable maximum precipitation) volume of 679,000 cubic metres. The 24-hour PMP freeboard allowance is in addition to regular inflows due to precipitation runoff, including the Spring freshet. The Tailings Storage Facility design also incorporates an allowance of 1 metre of freeboard as an extra contingency for wave run-up.

The Tailings Storage Facility has thus far been operated in accordance with the requirements for freeboard as described above. The projected tailings and supernatant pond levels shown on Figure 4.1 are based on the design throughput rate of 20,000 tonnes/day. The Tailings Storage Facility will be closely monitored and

the next embankment raise will be scheduled so that adequate freeboard is always maintained. Adjustments to the embankment construction schedule will be made as required (if MPMC produces tailings at a rate which is significantly different than 20,000 tonnes/day or if the climatological data varies significantly from that used in the water balance).

4.5 PROCESS WATER RECOVERY AND QUALITY

Process water is recovered from the tailings as the solids settle out and the supernatant pond is developed. Water is pumped back to the mill from the reclaim barge. Water recovery has been monitored by MPMC and the data is included in the project water management plans. To date, water recovery volumes have been able to meet the process demands. This has been accomplished by careful management of the water balance.

Reclaim water quality remains similar to what has previously been reported. The pH is slightly basic, in the range of 7.2 to 8.3. The water is turbid, with greater than 230 ppm total suspended solids (TSS). To date, process water quality has met the requirements of the milling operations.

4.6 WATER QUALITY MONITORING

Water quality monitoring is regularly conducted by MPMC staff. Monitoring includes surface water quality from ditches, streams, creeks and lakes, as well as groundwater quality from monitoring wells. In addition, the water quality of the supernatant water in the Tailings Storage Facility is regularly checked. The results of the monitoring have been reported by Mount Polley in the report "1999 Annual Environmental Report, Effluent Permit 11678". This report has been submitted to the appropriate agencies (Ministry of Environment, Lands and Parks and Ministry of Energy, Mines and Northern Development).

SECTION 5.0 - ANCILLARY WORKS

5.1 GENERAL

Other items that were inspected and are termed "Ancillary Works" include the tailings and reclaim pipeline systems, Southeast Sediment Pond, Polley Lake Pumping System, Millsite Sump and South Bootjack Dam. These items are discussed separately in the following sections.

5.2 TAILINGS AND RECLAIM PIPELINE SYSTEMS

5.2.1 General

The tailings and reclaim pipelines are the main components of the Tailings Storage Facility pipeworks. The tailings pipeline system conveys tailings slurry via gravity from the Millsite to the Tailings Storage Facility. The reclaim pipeline system pumps water from the Tailings Storage Facility to the mill for re-use in processing the ore.

The tailings and reclaim pipelines are located in a pipe containment channel adjacent to the tailings access road. This channel provides extra spill containment by directing flows into the Tailings Storage Facility.

The pipe containment channel was generally intact, without significant blockages, and seemed to function well. The first pipeline crossing near the Millsite Sump was blocked and was ponding water. This area should be drained and runoff should be diverted into the channel downstream of the crossing. The same observation was made during the 1998 inspection.

MPMC was in the process of modifying the tailings pipeline near the T2 Drop Box. Pressure relief was enhanced by a 4 m vertical standpipe, located approximately 20 m upstream of the drop box. The pipe containment channel captured a small amount of tailings that exited the standpipe when cycloning started in March 2000. The standpipe has since been removed.

The channel section from the T2 Drop Box to the Tailings Storage Facility was in good condition. Groundwater flows were entering the channel along this section, and were subsequently conveyed to the Tailings Storage Facility.

The pipelines are sleeved in 900-mm corrugated steel pipe (CSP) culverts within the pipeline containment channel at the Bootjack Creek Crossing. The sleeves provide backup spill containment over this area. An inspection of the pipelines and sleeves at the Bootjack Creek Crossing indicated that tailings had previously reached the sleeves, as a small amount of tailings is present in the upstream side of the culverts. This was caused by tailings backing up at the T2 Drop Box, flowing into the T2 Overflow Pond and then travelling down the pipeline containment channel. No solids escaped from the pipe containment channel. In the event that tailings reach the Bootjack Creek Crossing in the future, the CSP sleeves must be flushed to ensure that there is a clear pathway for tailings to get past the crossing, without spilling into Bootjack Creek.

The fill slopes at the Bootjack Creek Crossing appeared to be stable, with no signs of cracking or slumping. The water flowing in Bootjack Creek was clear at the time of the inspection. The ditch on the north side of the road approaching Bootjack Creek was lined with rock to minimize erosion. The pipe arch culvert appeared to be in good condition, with no significant deflections or obstructions observed.

It is recommended that glacial till berms be constructed on the edges of the road fill over Bootjack Creek, as indicated in the previous annual site inspection report. The berms will provide an additional contingency measure, to ensure that tailings from an overflow at the pressure relief line or from a pipeline rupture do not flow into Bootjack Creek. The berms will need to span a length greater than the CSP culverts. If tailings block off the CSP sleeves, the berms will direct tailings down the road to the Tailings Storage Facility and away from Bootjack Creek.

Selected photos of the pipeline containment channel at the Bootjack Creek Crossing are included in Appendix B.

5.2.2 Tailings Pipeline System

The tailings pipeline system is comprised of a single 7 kilometre long HDPE pipe that extends from the Millsite to the Perimeter Embankment. A concrete drop box (T2) allows water from the Southeast Sediment Pond and overflow from the reclaim booster pump station to be added to the system.

The T2 Drop Box was modified by MPMC in 1997 to resolve problems with tailings backing up into the drop box, as mentioned above. The tailings pipeline now bypasses the drop box, but the drop box provides pressure relief and surge protection for the pipeline through a bifurcation located downstream. T2 still provides overflow control and inlets for surface runoff from the Southeast Sediment Pond. The vent on the tailings line was replaced by a larger pipe and was extended higher to minimize the potential for surging out of the vent.

The water level in the T2 Drop Box was low and tailings were not backing up in the pipeline at the time of inspection. Tailings were entering the drop box due to a small leak immediately upstream in the tailings line. A small fraction of the flow from the Southeast Sediment Pond is routed through the drop box to prevent sand from building up. Repairs to the tailings line were planned.

All pipe connections around the T2 Drop Box appeared to be in good condition. At the time of inspection, the T2 Overflow Pond was full of water and it was apparent that no tailings had entered the pond in some time. The spillway was in good condition. The T2 Overflow Pond should be kept free of tailings at all times and must be cleaned out immediately after any tailings overflow events.

Tailings were being discharged at the northwest corner of the Tailings Storage Facility and cycloning was in progress in the Borrow Area No. 4 stockpile at the time of the inspection. The main header extended along the crest of the Perimeter Embankment to a single discharge point at CH 33+00. Knife-gate valves at the M1 dump valve location allowed tailings to be routed through a second header to the cyclones. Tailings were discharged through 4

- 20" cyclones, each connected to the header by its own off-take. Tailings overflow was discharged into a ditch and directed into the Tailings Storage Facility, while underflow sand was stockpiled within Borrow Area No. 4. Bulk tailings that bypass the cyclone offtakes were discharged into a separate ditch and routed into the TSF.

A substantial beach had developed at the northwest corner of the impoundment, as tailings were discharged from the M1 dump valve throughout Stage 2C construction following suspension of trial cycloning operations in October 1999. The supernatant pond was in contact with the upstream cycloned sand trial berms along the embankments from CH 16+00 to 37+20.

Other comments on the tailings pipeline system are summarized below.

- MPMC staff conduct daily inspections of the tailings pipeline system.
- Partial sanding of the tailings pipeline did not hinder tailings discharge during the last year of operations, with one exception at the start of cycloning operations in March 2000.
- MPMC inspect the tailings line for wear when symptoms (i.e. leaks) are observed.
- Holes previously drilled in the tailings pipeline between the Main and Perimeter Embankments (to check for sanding and for pipeline cleaning) have been sealed by capping and banding. The seals should occasionally be inspected.

Selected photos of the tailings pipeline system are included in Appendix B.

5.2.3 Reclaim Pipeline System

The reclaim pipeline system is comprised of a single 5.4 kilometre long HDPE pipe that extends from the Reclaim Pump Barge to the Millsite. The pipeline

has two sections with varying pressure ratings. The first section extends from the Pump Barge to the Booster Pump Station and includes steel pipe connected to the barge. The remainder consists of HDPE pipe that decreases in thickness (pressure rating) as the Booster Pump Station is approached. The second section extends from the Booster Pump Station to the Millsite. It is similar to the first section, but does not have any steel pipe sections. Nominal 24 inch (610 mm) HDPE pipe with varying pressure ratings was installed to provide the required water transfer capacity.

MPMC staff conduct daily inspections of the reclaim pipeline system. The reclaim pipeline system is working well and there have been no problems with the system to date. The overall configuration was modified in 1997 by MPMC and now includes a 35-degree bend at the barge. Only one length of steel pipe is used. Barge moves are completed by MPMC on an as-needed basis. The barge was moved approximately 40 m upstream in 1999.

Other comments on the reclaim pipeline system are summarized below.

- Pipeline connections at the barge and the Reclaim Booster Pump Station appeared to be in good condition.

- The reclaim barge access road was in good condition, with no signs of instability. The road was expanded in 1999 to facilitate barge relocation.

Selected photos of the reclaim pipeline system are included in Appendix B.

5.3 SOUTHEAST SEDIMENT POND

The Southeast Sediment Pond (SESP) collects runoff from the Southeast Waste Dump. Runoff flows in a ditch along the base of the dump to the pond, where it is decanted through a manhole with five valved inlet pipes that are used to control the water level in the pond. The normal maximum operating level is El. 1054.5 m. The water level must be maintained below this so that storage capacity for the design storm event is available in the pond. A 10-inch (250-mm) DR21 HDPE discharge

pipeline runs from the manhole to the Reclaim Booster Sump or into the T2 Drop Box.

The water level was just above the lowest inlet at the time of the inspection. Runoff was being directed to the Reclaim Booster Pump Station. Reports from MPMC indicated that the water level was higher during the peak of Spring melt. Total flow directed through the Southeast Sediment Pond for spring 2000 is estimated to be approximately 189,000 cubic metres.

The seeps observed in 1997 and 1998 at the northwest corner of the pond fill were again present. Additional seeps were observed further east and in an area where the waste material and topsoil pile has failed. MPMC is regularly monitoring the slopes of the SESP. All seepage was clear, indicating that no erosion of fill materials from above was occurring. The seeps are likely attributed to the groundwater table, which is temporarily higher during freshet. It should be noted that the failure of the waste material and topsoil pile has not affected the embankment fill slopes.

Other observations made at the SESP and Southeast Waste Dump runoff ditch:

- Water flowing in the ditch was clear. The ditch was mostly unobstructed, except for some brush near the end of the clearing for the waste dump. This brush should be removed when equipment is in the area.

- The overflow culvert for the pond was clear of obstructions.

- Pipeline connections to the Reclaim Booster Sump and T2 Drop Box appeared to be in good condition.

- The embankment fill slopes (inside and outside) looked very good, with no signs of instability. No cracks were observed on the crest. No seepage or slumping of the slopes was observed.

- Re-vegetated areas are growing well.

- The area beyond the toe of the embankment fill is unchanged since the last inspection. Tension cracks were observed in a section of the waste material, as described above.

- MPMC staff conduct monthly inspections of the Southeast Sediment Pond. Observations are recorded on an inspection sheet. The pond is inspected weekly during the spring freshet or after heavy rainfall.

Selected photos of the Southeast Waste Dump Ditch and Southeast Sediment Pond are included in Appendix B.

5.4 POLLEY LAKE PUMPING SYSTEM

The Mine is permitted to extract water from Polley Lake during high runoff periods (the Spring freshet and in late Fall) using the Polley Lake Pumping System. The system includes a submerged intake connected to an on-shore diesel pump. Water is pumped to the Tailings Storage Facility through an HDPE pipeline, which has varying pressure (DR) ratings. The maximum pumping capacity of the system is approximately 5,500 US gpm. The pipeline is laid on grade on the access road. Water exits the pipeline through an open-end discharge onto natural ground in the Tailings Storage Facility.

The pipeline was buried in embankment fill at the time of the inspection, to allow access from the left abutment of the Perimeter Embankment. This configuration is not acceptable and the pipeline must be removed as soon as possible. Embankment fill must be replaced according to the Specifications.

The pumping system was in operation at the time of the inspection. A flow meter on the pipe was reading approximately 4,200 gpm. No oil or fuel leaks were observed from the pump or the lined oil/fuel containment area. A small spill was observed beneath a fuel truck parked nearby.

Two small leaks were observed in the pipeline. Both were located at holes (currently plugged) that allow the pipe to be drained during freezing conditions. All culvert crossings were flowing with clear runoff, including the pipe arch culvert over

Bootjack Creek. The pipe arch culvert appeared to be in good shape, with no significant deflections observed.

A total of 845,000 cubic metres of water were pumped from Polley Lake in 1999. Approximately 400,000 cubic metres had been pumped in 2000 at the time of the inspection. MPMC staff conduct daily inspections of the Polley Lake Pumping System while the system is operating.

Selected photos of the Polley Lake Pumping System are included in Appendix B.

5.5 MILLSITE SUMP

The Millsite area is graded so that all runoff is directed to the Millsite Sump. The normal maximum operating level of the Millsite Sump is the invert of the bottom inlet at the manhole, El. 1102.7 m. The pond is kept at this low level so that storage capacity for the design storm event is available in the sump. A manhole with a series of inlet pipes was installed to allow water to be conveyed to the tailings line by gravity in an 8 inch (200 mm) HDPE pipeline. This pipeline has not been installed and water is currently being pumped into the 30-inch tailings line adjacent to the Millsite Sump. MPMC may install the 8 inch (200 mm) HDPE pipeline in the future.

At the time of inspection, the water was at the normal operating level and no water was being pumped to the tailings pipeline. Total flow directed through the Millsite Sump in 1999 was estimated to be approximately 37,000 cubic metres.

Other observations made at the Millsite Sump:

- The ditch at the southwest corner of the sump was partially blocked and should be cleaned out. The fence has been damaged, but is still standing.
- No cracks were observed on the crest of the fills.
- No seepage or slumping of the embankment fill slopes was observed.

- The overflow culvert for the pond was clear of obstructions. If power was lost, the Millsite Sump could fill up. The sump would first drain into the tailings pipeline by gravity through the high level HDPE pipe which conveys the pumped water. It would then drain through the overflow culvert.

- Re-vegetated areas appeared to be growing well.

- Flows into the sump appeared to be unobstructed (local runoff from a series of small pipes).

- MPMC had not made any modifications to the Millsite Sump since the last inspection.

Selected photos of the Millsite Sump are included in Appendix B.

5.6 SOUTH BOOTJACK DAM

The South Bootjack Dam was constructed downstream of the original Bootjack Lake earthfill dam in late 1996. An inspection of the dam was conducted on August 1, 2000. The dam was in good condition at the time of the inspection. Observations included:

- The water level was low.

- Both upstream and downstream fill slopes were in good condition, with no evidence of seepage or slumping.

- No cracks were observed on the dam crest.

- The spillway contained some vegetation, but was generally unobstructed.

Selected photos of the South Bootjack Dam are included in Appendix B.

SECTION 6.0 - CONCLUSIONS AND RECOMMENDATIONS

6.1 GENERAL

The annual inspection was completed to meet the guidelines of the Ministry of Energy, Mines and Northern Development. Observations were made during an April 26, 2000 site visit by Mr. Jeremy Kinch, E.I.T.

6.2 TAILINGS STORAGE FACILITY

Significant conclusions are summarized below:

- Construction of the Stage 2C tailings embankments was successfully completed in early March 2000. The embankments were raised from El. 937 m to El. 941 m.

- The Tailings Storage Facility embankments were generally in good condition. No unexpected seepage or slumping was observed. Saturated loose material on downstream slopes should be removed prior to the next phase of construction.

- The Seepage Collection Ponds were operating normally. The Main Embankment Seepage Collection Pond was lowered, and flow monitoring of the Foundation Drain and Upstream Toe Drain can be resumed.

- The Main Embankment Outlet Drains continued to seep slightly.

- Piezometer data indicated that the embankments are performing as designed.

- The embankment stability has been confirmed using updated geometry and material parameters.

- The site water balance has been updated by MPMC and is capable of accurately predicting the tailings and reclaim water volumes using an in-situ tailings dry density of 1.46 tonnes/cubic metre.

- The facility is operating in accordance with the design requirements and the specified freeboard for the design storm and wave run-up has been maintained.

Recommendations for on-going operations of the Tailings Storage Facility are summarized below:

- Continue to closely monitor the filling rate and water balance.

- Continue regular weekly monitoring of the vibrating wire piezometers and drain flows (Foundation Drains, Outlet Drains and Upstream Toe Drains).

- Continue regular monitoring of water quality and levels for groundwater wells. Include water quality monitoring for the Foundation Drains.

- Remove the make-up water line from Perimeter Embankment fill as soon as possible.

MPMC staff are currently implementing the above recommendations.

6.3 ANCILLARY WORKS

6.3.1 General

Significant conclusions and recommendations for the Ancillary Works presented in this annual report are summarized below.

6.3.2 Pipe Containment Channel

- The pipe containment channel was in good condition and was clear of major obstructions.

- Tailings from the T2 Overflow Pond have previously reached the Bootjack Creek Crossing where it settled out in the culvert sleeves. The area of the Bootjack Creek Crossing must be closely monitored.

- Berms should be constructed along the edges of the road at the Bootjack Creek Crossing to direct flows past Bootjack Creek and towards the Tailings Storage Facility.

6.3.3 Tailings Pipeline System

- After initial problems with the tailings pipeline system, the T2 Drop Box was revised and now acts as a pressure relief point for the pipeline. A vertical pipe had been installed upstream of the Drop Box as an additional pressure relief measure but was subsequently removed. The system has been functioning satisfactorily.

- A tailings beach was present over isolated sections of the Main and Perimeter Embankments. All efforts should be made to establish an exposed tailings beach over the entire length of both the Main and Perimeter Embankments.

- The partial sanding in the tailings pipeline is no longer problematic, due to modifications at the T2 Drop Box. The tailings pipeline continues to sand up (50 to 125 mm thick observed at disconnected flanges), but tailings discharge has not been severely affected. End spilling at flanged connections has helped to flush out the pipeline.

- MPMC is planning to cyclone tailings in Fall 2000. The tailings pipeline system should be reviewed after the cycloning system is operational.

6.3.4 Reclaim Pipeline System

- The reclaim pipeline system has functioned satisfactorily.
- The steel section of the reclaim pipeline has been removed and only one section is used at the barge.
- The Reclaim Barge was moved approximately 40 metres up the channel.

6.3.5 Southeast Sediment Pond

- The pond level was at the normal operating level at the time of the inspection.
- The seeps observed during previous inspections were again present. All seepage was clear, indicating that no erosion of fill materials from above was occurring.
- The pond fill slopes were in good condition, with no signs of instability.
- A section of the waste material and topsoil pile in the area beyond the toe of the embankment fill has failed. This failure has not endangered the embankment fill slopes.
- Some brush that has been pushed into the runoff collection ditch near the end of the clearing for the waste dump should be removed when equipment is in the area.

6.3.6 Polley Lake Pumping System

- The system performed well in 1999, and 845,000 cubic metres of water were pumped.

- The system has performed well thus far in 2000. Approximately 400,000 cubic metres were pumped during the 2000 freshet.

6.3.7 Millsite Sump

- The pond level was low, at the normal operating level.

- The pond is still being lowered by pumping. A higher level gravity discharge to the tailings pipeline controls the pond level in the event of a power failure.

- Fill slopes were in good condition, including the south slope.

6.3.8 South Bootjack Dam

- The dam is in good condition and the spillway is clear of any obstructions.

- The pond level was low.

The above recommendations are currently being implemented by MPMC staff.

SECTION 7.0 - REFERENCES

A complete listing of all Knight Piésold Ltd. reports prepared for the Mount Polley Mine Project is shown below. These reports are available for review.

1) Imperial Metals Corp. Mt. Polley Project, Report on Geotechnical Investigations and Design of Open Pit, Waste Dumps and Tailings Storage Facility, Ref. No. 1621/1, February 19, 1990.

2) Imperial Metals Corp. Mt. Polley Project, Report on Project Water Management, Ref. No. 1624/1, February 6, 1995.

3) Imperial Metals Corp. Mt. Polley Project, Report on 1995 Geotechnical Investigations for Mill Site and Tailings Storage Facility, Ref. No. 1623/1, March 14, 1995.

4) Imperial Metals Corp. Mt. Polley Project, Tailings Storage Facility and Ancillary Works, Part 10 - Technical Specifications, Ref. No. 1625/3, March 25, 1995.

5) Imperial Metals Corp. Mt. Polley Project, Tailings Access Road and Tailings/ Reclaim Pipelines, Part 6 - Technical Specifications, Ref. No. 1625/4, May 17, 1995.

6) Imperial Metals Corp. Mt. Polley Project, Manual on Sampling and Handling Guidelines for Determination of Groundwater Quality, Ref. No. 1625/5, May 19, 1995.

7) Imperial Metals Corp. Mt. Polley Project, Tailings Storage Facility, Design Report, Ref. No. 1625/1, May 26, 1995.

8) Imperial Metals Corp. Mt. Polley Project, Tailings Storage Facility, Site Inspection Manual, Ref. No. 1625/2, May 26, 1995.

9) Imperial Metals Corp. Mt. Polley Project, Response to Review Comments on Tailings Embankment Design, Ref. No. 1625/6, January 25, 1996.

10) Imperial Metals Corp. Mt. Polley Project, Groundwater Monitoring Program, Ref. No. 1624/2, June 3, 1996.

11) Imperial Metals Corp. Mt. Polley Project, Report on Geotechnical Investigations and Design of Open Pits and Waste Dumps, Ref. No. 1628/1, July 5, 1996.

12) Imperial Metals Corp. Mt. Polley Project, Response to Review Comments on Groundwater Monitoring Program, Ref. No. 1625/7, September 12, 1996.

13) Imperial Metals Corp. Mt. Polley Project, Requirements and Specifications for the 1996 Groundwater Monitoring Program, Ref. No. 1625/8, September 12, 1996.

14) Imperial Metals Corp. Mt. Polley Project, Specification for Drilling, Monitoring Well Installations and Related Services, Ref. No. 1628/3, September 18, 1996.

15) Mount Polley Mining Corporation, Mount Polley Project, 1996 Groundwater Monitoring Well Installation Program, Ref. No. 1628/4, February 17, 1997.

16) Mount Polley Mining Corporation, Mount Polley Project, Polley Lake Pumping System, Ref. No. 1628/5, February 19, 1997.

17) Mount Polley Mining Corporation, Mount Polley Project, Tailings Storage Facility, Operation, Maintenance and Surveillance Manual for Stage Ia Embankment (El. 927 m), Ref. No. 1627/1, March 11, 1997.

18) Mount Polley Mining Corporation, Mount Polley Project, Tailings Storage Facility and Ancillary Features, May 1, 1997 Site Inspection, Ref. No. 1627/4, June 3, 1997.

19) Mount Polley Mining Corporation, Mount Polley Project, Tailings Storage Facility, Updated Design Report, Ref. No. 1627/2, June 4, 1997.

20) Mount Polley Mining Corporation, Mount Polley Project, Tailings Storage Facility, Operation, Maintenance and Surveillance Manual for Stage Ib Embankment (El. 934 m), Ref. No. 10162/7-3, June 18, 1997.

21) Mount Polley Mining Corporation, Mount Polley Mine, Tailings Storage Facility and Ancillary Features, May 1, 1997 Site Inspection, Ref. No. 10162/7-4, June 3, 1997.

22) Mount Polley Mining Corporation, Mount Polley Mine, Report on Stage Ia/Ib Construction, Ref. No. 10162/7-5, August 14, 1997.

23) Mount Polley Mining Corporation, Mount Polley Mine, Tender Documents for Stage 2A Tailings Facility Construction, Ref. No. 10162/9-1, October 9, 1997.

24) Mount Polley Mining Corporation, Mount Polley Mine, Stage 2A Tailings Facility Construction, Selected Excerpts from Reference Information, Ref. No. 10162/9-2, November 11, 1997.

25) Mount Polley Mining Corporation, Mount Polley Mine, Report on On-going Construction Requirements, Ref. No. 10162/9-3, January 29, 1998.

26) Mount Polley Mining Corporation, Mount Polley Mine, Contract Documents for Stage 2A Tailings Facility Construction, Ref. No. 10162/9-4, June 26, 1998.

27) Mount Polley Mining Corporation, Mount Polley Mine, 1998 Annual Inspection Report, Ref. No. 10162/9-5, June 26, 1998.

28) Mount Polley Mining Corporation, Mount Polley Mine, 1998 Construction and Annual Inspection, Ref. No. 11162/10-1, June 16, 1999.

29) Mount Polley Mining Corporation, Mount Polley Mine, Report on Cycloned Sand Construction of Stage 3 and On-going Stages of the Tailings Storage Facility, Ref. No. 11162/12-2, December 13, 1999.

30) Mount Polley Mining Corporation, Mount Polley Mine, Report on 1999 Construction, Ref. No. 11162/13-5, August 30, 2000.

SECTION 8.0 - CERTIFICATION

This report was prepared and approved by the undersigned.

Prepared by:

Jeremy R. Kinch, E.I.T.
Project Manager

Approved by:

Ken J. Brouwer, P.Eng.
President

Knight Piésold
CONSULTING

TABLE 3.1

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
TAILINGS PIEZOMETERS - MONITORING DATA

M:\11162\13\Report\9\[PIEZOTABLES.xls]Tailings Piezos Comp 11-Oct-00

PIEZOMETER NO.	LOCATION	TIP EL. (m)	PRESSURE (m H_2O)					COMMENTS
			Initial Reading		31-May-00 Reading		Change (m)	
			El. (m)	Head (m)	El. (m)	Head (m)		
A0-PE1-01	Plane A	938.54	937.86	-0.68	937.85	-0.69	-0.01	Installed in upstream cycloned sand fill.
A0-PE2-01	Plane A	928.03	928.87	0.84	937.21	9.18	8.34	Readings reflect rising pond level.
A0-PE2-02	Plane A	927.87	928.80	0.93	936.80	8.93	8.00	Readings reflect rising pond level.
B0-PE1-01	Plane B	939.40	938.46	-0.94	938.40	-1.00	-0.06	Installed in upstream cycloned sand fill.
B0-PE2-01	Plane B	927.30	928.08	0.78	937.90	10.60	9.82	Readings reflect rising pond level.
B0-PE2-02	Plane B	927.18	928.29	1.11	936.48	9.30	8.19	Readings reflect rising pond level.
C0-PE1-01	Plane C	938.00	937.40	-0.60	937.63	-0.37	0.23	Installed in upstream cycloned sand fill.
C0-PE2-01	Plane C	927.80	928.44	0.64	-	-	-	No longer functioning
C0-PE2-02	Plane C	927.48	928.64	1.16	-	-	-	No longer functioning

Date Revised: 07-Jul-00
Revision 0

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TABLE 3.2

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
EMBANKMENT FOUNDATION PIEZOMETERS - MONITORING DATA

M:\1162\13\Report\9\[PIEZOTABLES.xls]Emb fdn Piezos comp 11-Oct-00

PIEZOMETER NO.	LOCATION	TIP EL. (m)	GROUND EL. (m)	PRESSURE (m H_2O)						COMMENTS
				Initial Reading		31-May-00 Reading		Change (m)	Artesian (m)	
				El. (m)	Head (m)	El. (m)	Head (m)			
A2-PE2-01	Plane A	903.68	912.67	913.19	9.51	916.31	12.63	3.12	3.64	Artesian since installation, gradually increasing.
A2-PE2-02	Plane A	909.77	912.67	911.72	1.95	912.01	2.24	0.29	-	Not artesian, minor fluctuations.
A2-PE2-06	Plane A	898.01	912.91	915.22	17.21	915.83	17.82	0.61	2.92	Artesian, minor fluctuations
A2-PE2-07	Plane A	902.81	912.91	915.14	12.33	916.01	13.20	0.87	3.10	Artesian, minor fluctuations
A2-PE2-08	Plane A	907.56	913.36	913.27	5.71	913.78	6.22	0.51	0.42	Near Artesian since installation, minor fluctuations.
B2-PE2-01	Plane B	901.98	916.98	913.47	11.49	918.22	16.24	4.75	1.24	Artesian, not artesian at start, gradually increasing.
B2-PE2-02	Plane B	909.51	916.98	914.48	4.97	920.56	11.05	6.08	3.58	Artesian, not artesian at start, gradually increasing.
B2-PE2-06	Plane B	914.59	916.89	915.99	1.40	915.78	1.19	-0.21	-	Not artesian, minor fluctuations.
C2-PE2-01	Plane C	907.48	915.71	918.07	10.59	-	-	-	-	No longer functioning
C2-PE2-02	Plane C	910.53	915.71	916.09	5.56	917.15	6.62	1.06	1.44	Artesian since installation, fluctuating slightly.
C2-PE2-06	Plane C	906.84	915.99	916.66	9.82	916.79	9.95	0.13	0.80	Artesian since start, slight fluctuations.
C2-PE2-07	Plane C	912.29	915.99	915.14	2.85	915.11	2.82	-0.03	-	Not artesian, slight fluctuations.
C2-PE2-08	Plane C	914.03	915.99	913.45	-0.58	914.45	0.42	1.00	-	Not artesian, slight fluctuations.
D2-PE2-02	Plane D	*927.32*	*930.92*	*928.68*	1.36	-	-	-	-	No longer functioning
E2-PE2-01	Plane E	914.21	918.81	917.50	3.29	917.45	3.24	-0.05	-	Not artesian, minor fluctuations.
E2-PE2-02	Plane E	909.66	918.81	917.57	7.91	917.69	7.90	0.12	-	Not artesian, minor fluctuations.

Date Revised: 07-Jul-00
Revision 0

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TABLE 3.3

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
EMBANKMENT FILL PIEZOMETERS - MONITORING DATA

M:\11162\13\Report\9\[PIEZOTABLES.xls]Emb fill Piezos comp 11-Oct-00

PIEZOMETER NO.	LOCATION	TIP EL. (m)	PRESSURE (m H_2O)					COMMENTS
			Initial Reading		31-May-00 Reading		Change (m)	
			El. (m)	Head (m)	El. (m)	Head (m)		
A2-PE1-01	Plane A, Zone T	912.90	911.96	-0.94	911.81	-1.09	-0.15	Negative (no pressure).
A2-PE1-02	Plane A, Glacial Till	938.47	938.90	0.43	939.46	0.99	0.56	Increase during initial fill placement.
A2-PE2-03	Plane A, Glacial Till	919.43	919.66	0.23	927.53	8.10	7.87	Currently dissipating after response to Stage 2C fill.
A2-PE2-04	Plane A, Glacial Till	926.07	925.67	-0.40	-	-	-	No longer functioning
A2-PE2-05	Plane A, Glacial Till	921.87	921.17	-0.70	921.43	-0.44	0.26	Relatively constant reading.
B2-PE1-01	Plane B, Zone T	916.27	915.28	-0.99	-	-	-	No longer functioning
B2-PE1-02	Plane B, Glacial Till	939.40	940.84	1.44	941.13	1.73	0.29	Increase during initial fill placement.
B2-PE2-03	Plane B, Glacial Till	921.00	920.41	-0.59	942.75	21.75	22.34	Currently dissipating after response to Stage 2C fill.
B2-PE2-04	Plane B, Glacial Till	921.00	920.45	-0.55	928.07	7.07	7.62	Relatively constant reading.
B2-PE2-05	Plane B, Glacial Till	921.66	922.78	1.12	921.36	-0.30	-1.42	Relatively constant reading.
C2-PE1-01	Plane C, Zone T	915.02	914.08	-0.94	-	-	-	No longer functioning
C2-PE1-02	Plane C, Glacial Till	938.00	937.38	-0.62	939.82	1.82	2.44	
C2-PE2-03	Plane C, Glacial Till	921.00	925.50	4.50	922.01	1.01	-3.49	Relatively constant reading.
C2-PE2-05	Plane C, Glacial Till	924.80	921.69	-3.11	933.78	8.98	12.09	Increased during Stage 2C construction
D2-PE1-01	Plane D, Zone T	930.42	929.46	-0.96	-	-	-	No longer functioning (Cable destroyed)
D2-PE2-01	Plane D, Glacial Till	931.00	931.00	0.00	932.48	1.48	1.48	No excess pore pressures, minor fluctuations.

Date Revised: 07-Jul-00
Revision 0

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TABLE 3.4

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
DRAIN PIEZOMETERS - MONITORING DATA

M:\11162\13\Report\9\[PIEZOTABLES.xls]Drain Piezos comp

11-Oct-00

PIEZOMETER NO.	LOCATION	TIP EL. (m)	PRESSURE (m H_2O)					COMMENTS
			Initial Reading		31-May-00 Reading		Change (m)	
			El. (m)	Head (m)	El. (m)	Head (m)		
A1-PE1-01	Foundation Drain FD-3.	913.00	912.22	-0.78	912.48	-0.52	0.26	Negative (no pressure), minor fluctuations.
A1-PE1-02	Foundation Drain FD-4.	912.10	911.42	-0.68	911.56	-0.54	0.14	Negative (no pressure), minor fluctuations.
A1-PE1-03	Chimney Drain.	917.20	916.65	-0.55	916.68	-0.52	0.03	Negative (no pressure), minor fluctuations.
B1-PE1-01	Foundation Drain FD-1.	917.30	917.00	-0.30	916.71	-0.59	-0.29	Negative (no pressure), minor fluctuations.
B1-PE1-02	Foundation Drain FD-2.	915.95	915.14	-0.81	915.28	-0.67	0.14	Negative (no pressure), minor fluctuations.
B1-PE1-03	Chimney Drain.	918.70	918.09	-0.61	917.93	-0.77	-0.16	Negative (no pressure), minor fluctuations.
C1-PE1-01	Foundation Drain FD-1.	914.70	914.45	-0.25	914.20	-0.50	-0.25	Negative (no pressure), minor fluctuations.
C1-PE1-02	Chimney Drain.	916.60	916.02	-0.58	916.05	-0.55	0.03	Negative (no pressure), minor fluctuations.
C1-PE1-04	Foundation Drain FD-5.	914.30	914.13	-0.17	914.03	-0.27	-0.10	Negative (no pressure).
D1-PE1-02	Outlet Drain OD-4.	928.76	928.24	-0.52	928.13	-	-	No longer functioning

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Revision 0

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TABLE 3.5

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
TAILINGS STORAGE FACILITY

MAIN EMBANKMENT SEEPAGE COLLECTION POND - SUMMARY OF DRAIN FLOW DATA

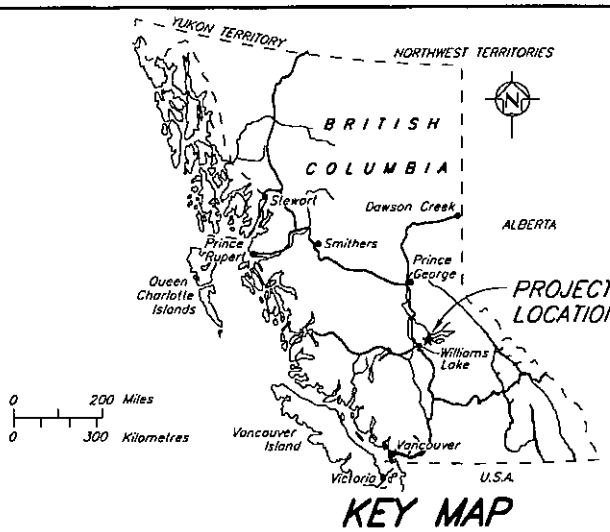
M:\1162\13\Report\9\[FD-mon OD-mon.xls]FD-Mon

Date Printed: 29-Sep-00

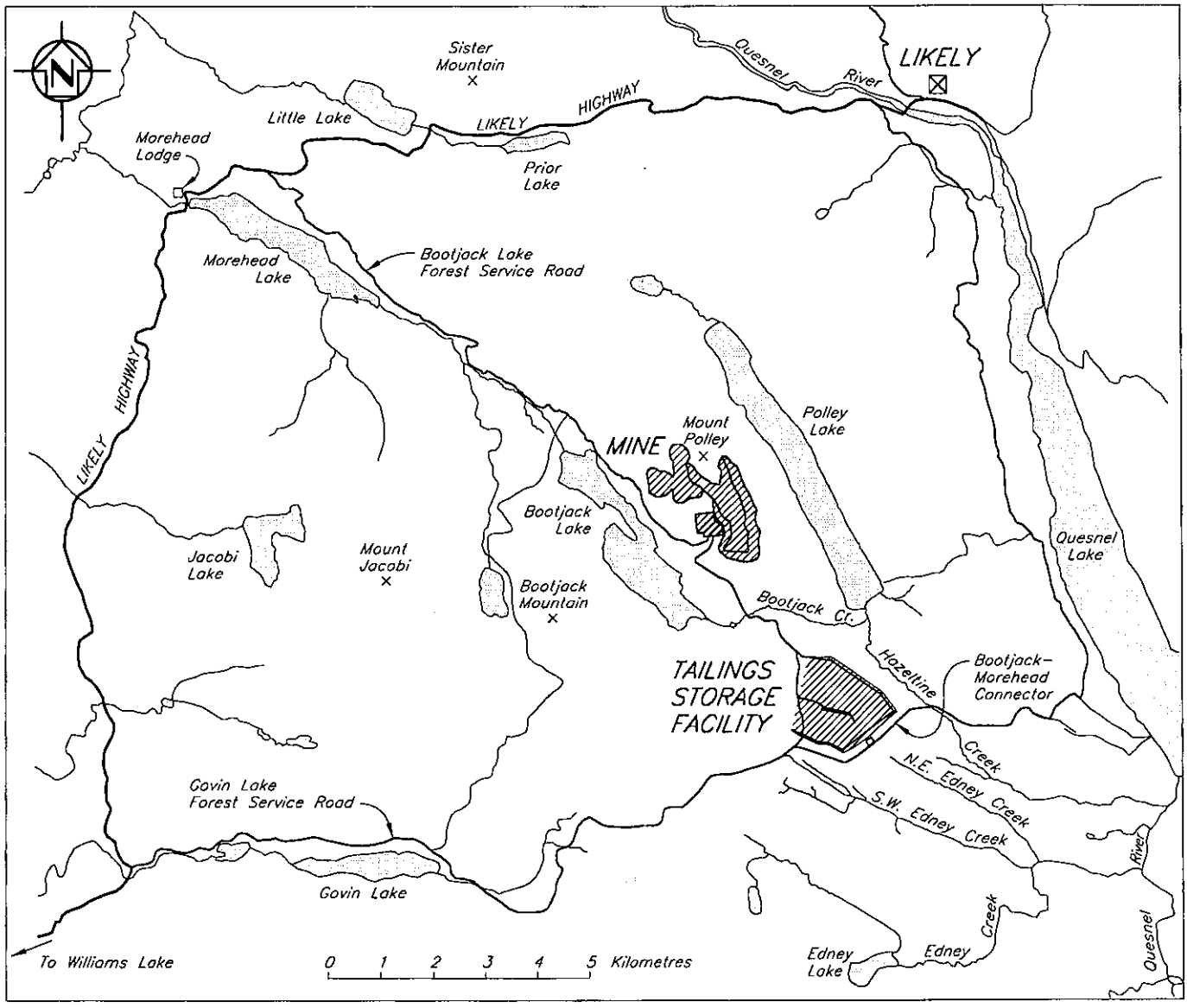
SAMPLING DATE	FD-1			FD-2			FD-3			FD-4			FD-5			Total Flow Rate			Pond El (m)	GW96-9 (GW Well) Elev. Above Top of Casing of well 9 (m)
	Flow Rate			Flow Rate			Flow Rate			Flow Rate			Flow Rate							
Date	FD1(l/min)	(l/sec)	Comments	FD2(l/min)	(l/sec)	Comments	FD3(l/min)	(l/sec)	Comments	FD4(l/min)	(l/sec)	Comments	FD5(l/min)	(l/sec)	Comments	Tot(l/min)	(l/sec)	Comments	Pond Elev.	
02-Jan-98	3.81	0.06	Clear	0.74	0.01	Clear	16.30	0.27	Clear	1.73	0.03	Clear	-	-	-	22.58	0.38	pig out, pumped down	928.10	Frozen
14-Jan-98	3.85	0.06	Clear	0.80	0.01	Clear	16.57	0.28	Clear	1.77	0.03	Clear	-	-	-	22.99	0.38	pig out, needs pumping	928.25	Frozen
21-Jan-98	3.57	0.06	Clear	0.74	0.01	Clear	16.42	0.27	Clear	1.82	0.03	Clear	-	-	-	22.55	0.38	pig out, needs pumping	928.30	Frozen
08-Apr-98	3.84	0.06	Clear	0.67	0.01	Clear	15.54	0.26	Clear	1.52	0.03	Clear	-	-	-	21.57	0.36	pig out, pond pumped down	929.70	-
17-Apr-98	3.82	0.06	Clear	0.69	0.01	Clear	15.58	0.26	Clear	1.37	0.02	Clear	6.33	0.11	Clear	27.79	0.46	pig out, pond pumped down	929.85	-
25-May-98	3.82	0.06	Clear	0.69	0.01	Clear	15.58	0.26	Clear	1.37	0.02	Clear	6.33	0.11	Clear	27.79	0.46	pig out, pond pumped down	930.10	-
02-Jun-98	3.52	0.06	Clear	0.78	0.01	Clear	15.58	0.26	Clear	1.42	0.02	Clear	6.80	0.11	Clear	28.10	0.47	pig out, pond pumped down	930.36	-
10-Jun-98	3.83	0.06	Clear	0.79	0.01	Clear	14.60	0.24	Clear	1.44	0.02	Clear	7.51	0.13	Clear	28.17	0.47	pig out, pond pumped down	930.39	-
16-Jun-98	3.77	0.06	Clear	0.78	0.01	Clear	16.35	0.27	Clear	1.41	0.02	Clear	7.93	0.13	Clear	30.24	0.50	pig out, pond pumped down	930.42	-
03-Jul-98	3.89	0.06	Clear	0.76	0.01	Clear	16.14	0.27	Clear	2.37	0.04	Clear	12.53	0.21	Clear	35.69	0.59	FD-5 is spilling onto FD-4 providing higher values than normal	930.45	
07-Jul-98	3.71	0.06	Clear	0.72	0.01	Clear	16.03	0.27	Clear	2.22	0.04	Clear	9.66	0.16	Clear	32.34	0.54	negative value is below top of casing	930.50	-0.135
24-Jul-98	3.53	0.06	Clear	0.72	0.01	Clear	15.75	0.26	Clear	1.96	0.03	Clear	8.70	0.15	Clear	30.66	0.51	-	930.58	0.28
12-Aug-98	3.46	0.06	Clear	0.62	0.01	Clear	15.96	0.27	Clear	1.90	0.03	Clear	7.30	0.12	Clear	29.24	0.49	-	930.61	0.33
19-Aug-98	3.17	0.05	Clear	0.56	0.01	Clear	15.83	0.26	Clear	2.26	0.04	Clear	8.08	0.13	Clear	29.90	0.50	-	930.64	-
10-Sep-98	3.60	0.06	Clear	0.57	0.01	Clear	16.35	0.27	Clear	2.03	0.03	Clear	8.02	0.13	Clear	30.57	0.51	-	930.70	-
17-Sep-98	3.53	0.06	Clear	0.63	0.01	Clear	16.42	0.27	Clear	2.20	0.04	Clear	8.52	0.14	Clear	31.30	0.52	-	930.73	-
24-Sep-98	3.62	0.06	Clear	0.64	0.01	Clear	15.64	0.26	Clear	2.06	0.03	Clear	7.77	0.13	Clear	29.73	0.50	-	930.77	-
07-Oct-98	3.72	0.06	Clear	1.05	0.02	Clear	14.22	0.24	Clear	2.36	0.04	Clear	13.39	0.22	Clear	34.74	0.58	positive value is above top of casing	930.81	0.18
15-Oct-98	3.82	0.06	Clear	1.10	0.02	Clear	14.53	0.24	Clear	2.56	0.04	Clear	15.83	0.26	Clear	37.84	0.63	-	930.87	
21-Oct-98	3.94	0.07	Clear	1.12	0.02	Clear	15.35	0.26	Clear	2.95	0.05	Clear	18.46	0.31	Clear	41.82	0.70	-	930.95	
17-Nov-98	#N/A	#N/A		#N/A	#N/A		#N/A	#N/A		#N/A	#N/A		#N/A	#N/A		#N/A	#N/A	Sump flooded,needs to be pumped		0.11
27-Nov-98	4.21	0.07	Clear	1.01	0.02	Clear	14.28	0.24	Clear	2.35	0.04	Clear	11.76	0.20	Clear	33.62	0.56		931.35	-0.03
02-Dec-98	4.35	0.07	Clear	0.92	0.02	Clear	14.16	0.24	Clear	2.37	0.04	Clear	11.46	0.19	Clear	33.26	0.55		931.97	-0.03
09-Dec-98	4.34	0.07	Clear	0.79	0.01	Clear	16.56	0.28	Clear	2.01	0.03	Clear	9.78	0.16	Clear	33.49	0.56		931.97	Frozen
16-Dec-98	4.33	0.07	Clear	0.97	0.02	Clear	13.92	0.23	Clear	2.83	0.05	Clear	19.32	0.32	Clear	41.37	0.69		931.97	Frozen
22-Dec-98	-	-		-	-		-	-		-	-		-	-		-	-		931.99	Frozen
01-May-00	-	-		-	-		-	-		-	-		-	-		-	-			
11-May-00	-	-		-	-		-	-		-	-		-	-		-	-		937.40	
18-Jul-00	3.60	0.06	Clear	0.60	0.01	Clear	16.80	0.28	Clear	1.20	0.02	Clear	24.00	0.40	Cloudy	46.20	0.77	FD-5 intercepting surface runoff	938.08	-0.05
25-Jul-00	4.20	0.07	Clear	1.44	0.02	Clear	16.80	0.28	Clear	1.50	0.03	Clear	39.00	0.65	Clear	62.94	1.05	Significant increase from FD-5	938.10	

Note: The elevation for the top of the casing for Ground Water Well GW96-9 is approximately 916.78 m. The ground elevation is 916.18 m.

Revised on: July 25, 2000
Revision 0



KEY MAP



LOCATION MAP

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PROJECT LOCATION AND ACCESS PLAN

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
11162/13	9	0

FIGURE 1.1

REV.	ISSUED FOR
0	INSPECTION REPORT

VANCOUVER B.C. CAD FILE: M:\11162\13\ACAD\FIGS\A10.dwg PLOT 1=125000 OCT. 16, 2000 By WAL REV'D OCT. 16, 2000

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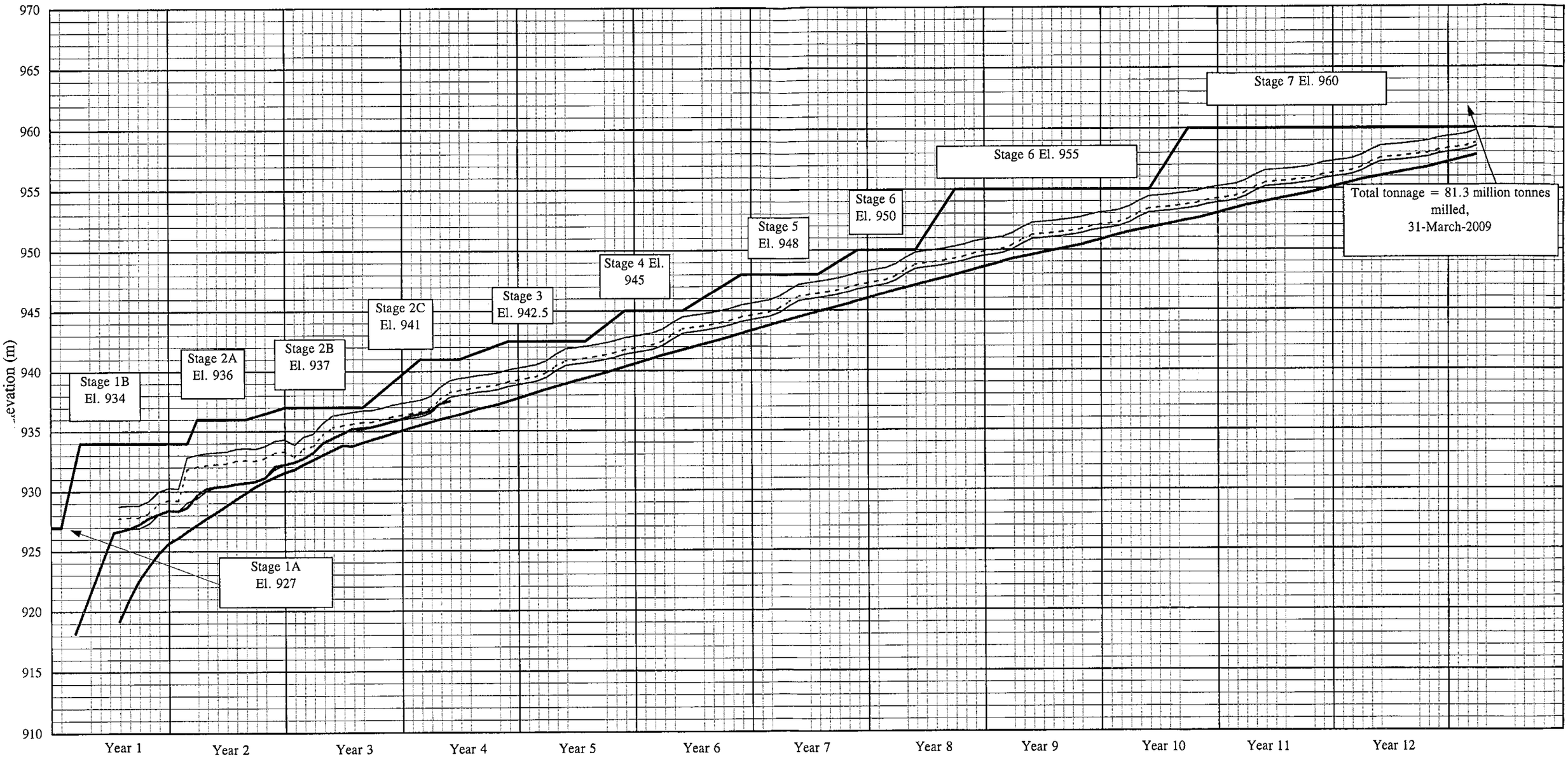


- Embankment Crest
- 1 m Freeboard
- 24 Hr. PMP (679,000 m3)
- Reclaim Water
- Measured Pond El.
- Tailings Only

Notes:
1. Maximum Tailings Elevation is based on a total ore reserve of 81.3 million tonnes.
2. Production rate is 20,000 tpd.
3. Projected bulk tailings dry density is 1.36 t/m^3 for tailings reporting to the TSF after August 2000.
4. Cyclone underflow stored outside of impoundment assumed to be 340,000 t/y.
5. Supernatant pond volumes from updated MPMC water balance (August 2000 - base case).

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
FILLING SCHEDULE AND STAGED CONSTRUCTION

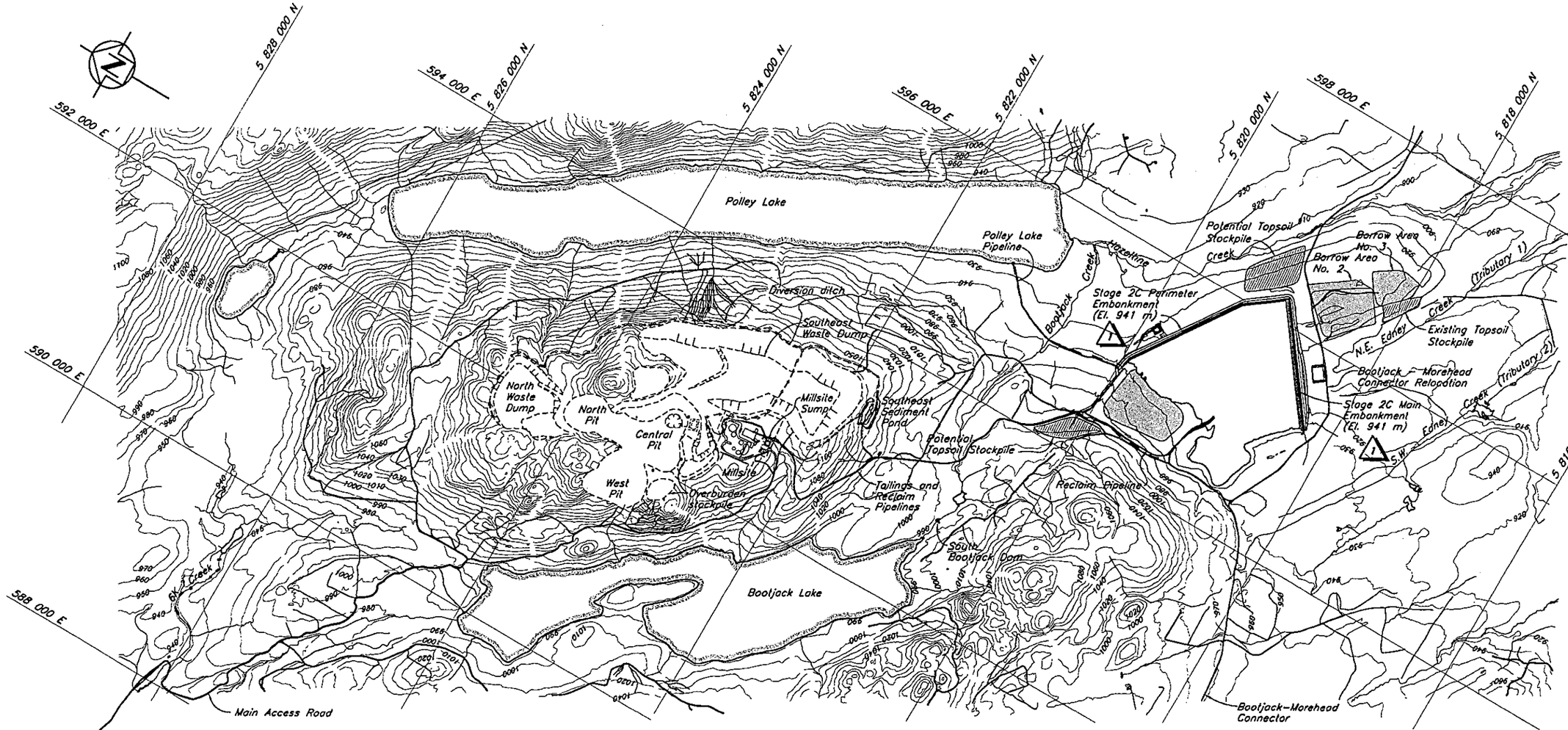
Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV
11162/13	9	0

FIGURE 4.1

APPENDIX A

DRAWINGS



NOTES

1. Open Pits and Waste Dumps are shown in their final configurations.
2. Topography at TSF generated from points and break lines from MPMC in July 1999. The topography outside the TSF area is from 1997 flyover.

Scale 1000 500 0 1000 2000 m

DRG. NO.	DESCRIPTION
REFERENCE DRAWINGS	

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
REVISIONS						

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	17AUG'00	STAGE 2C AS-BUILT	JRK	TAN	KJB	KJB
0	26AUG99	ISSUED FOR CONSTRUCTION	JMTW	DSR	KJB	KJB
REVISIONS						

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — K. J. DROUWER

MOUNT POLLEY MINING CORPORTATION

MOUNT POLLEY MINE

OVERALL SITE PLAN
SHOWING STAGE 2C TAILINGS EMBANKMENT

DESIGNED	CHECKED
JMTW	KJB
DRAWN	APPROVED
DSR	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN — REVISION 1

DRAWING NO. 11162-10-100

XREF FILE : 10/10PA

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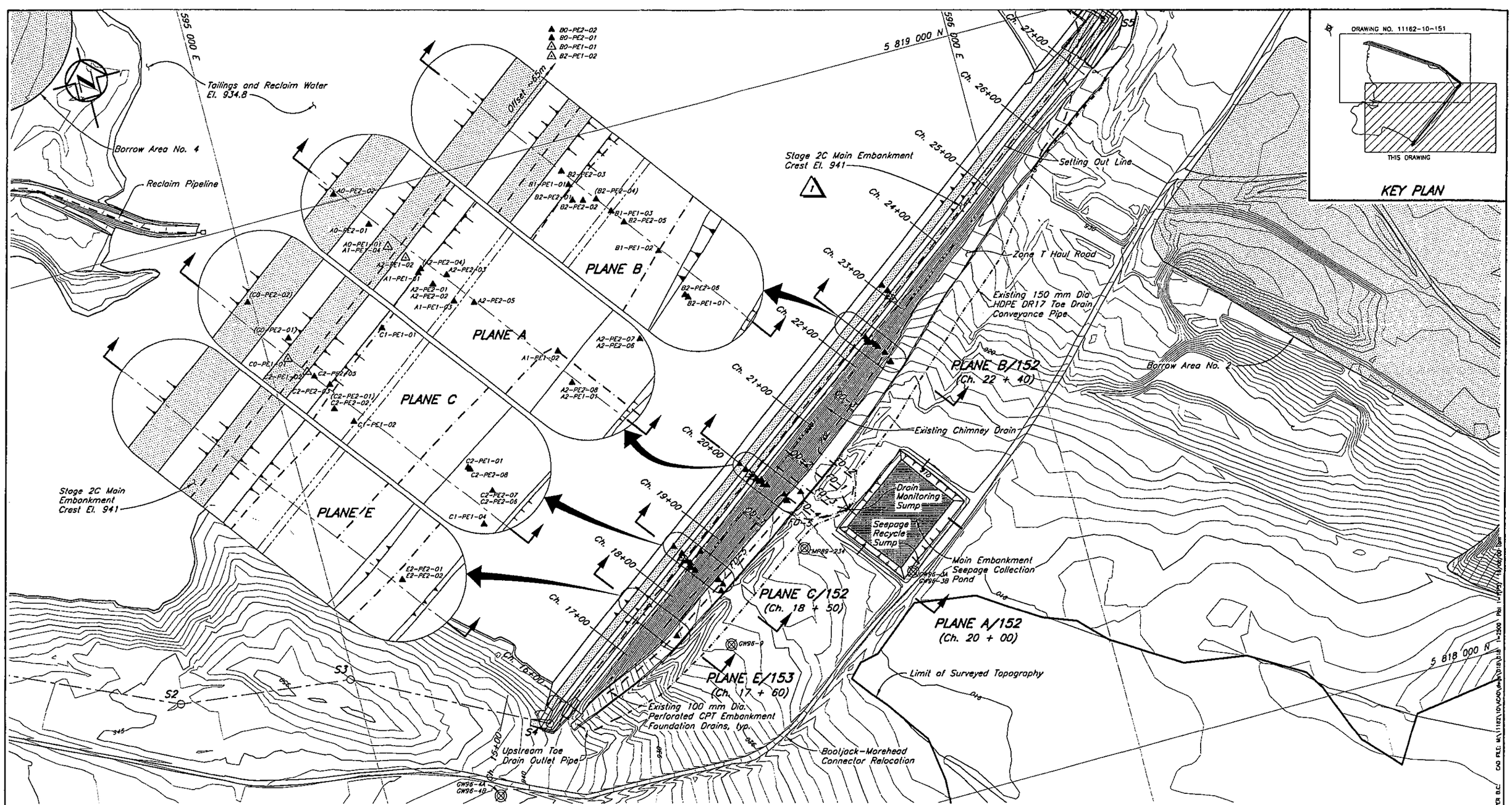
VANCOUVER B.C.



LEGEND

- Groundwater Monitoring Well
- A1-PE1-01 Previously installed Piezometer
- A2-PE2-06 New Stage 2C Piezometer
- A2-SM-01 New Embankment Survey Monument

NOTES

1. Chainage defined by Setting Out Point S1 at Ch. 5+00.
2. Topography generated from points and break lines sent from MPMC on July 20, 1999.
3. Stage 2 survey monuments destroyed immediately after installation.
4. See Drg. No. 11162-10-152 for Summary of Instrumentation Installations.

Scale 50 0 50 100 150 200 250 m

REFERENCE DRAWINGS	
DRG. NO.	DESCRIPTION
153	TSF - STAGE 2C EXPANSION - INSTRUMENTATION SECTIONS - SHEET 2 OF 2
152	TSF - STAGE 2C EXPANSION - INSTRUMENTATION SECTIONS - SHEET 1 OF 2

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	17AUG'00	STAGE 2C AS-BUILT	JRK	TAM	KJB	KJB
0	31AUG99	ISSUED FOR CONSTRUCTION	JMTW	DSR	KJB	KJB

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — K. J. BROUWER

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 2C EXPANSION
MAIN EMBANKMENT INSTRUMENTATION PLAN

DESIGNED	CHECKED
JMTW	KJB
DRAWN	APPROVED
DSR	KJB

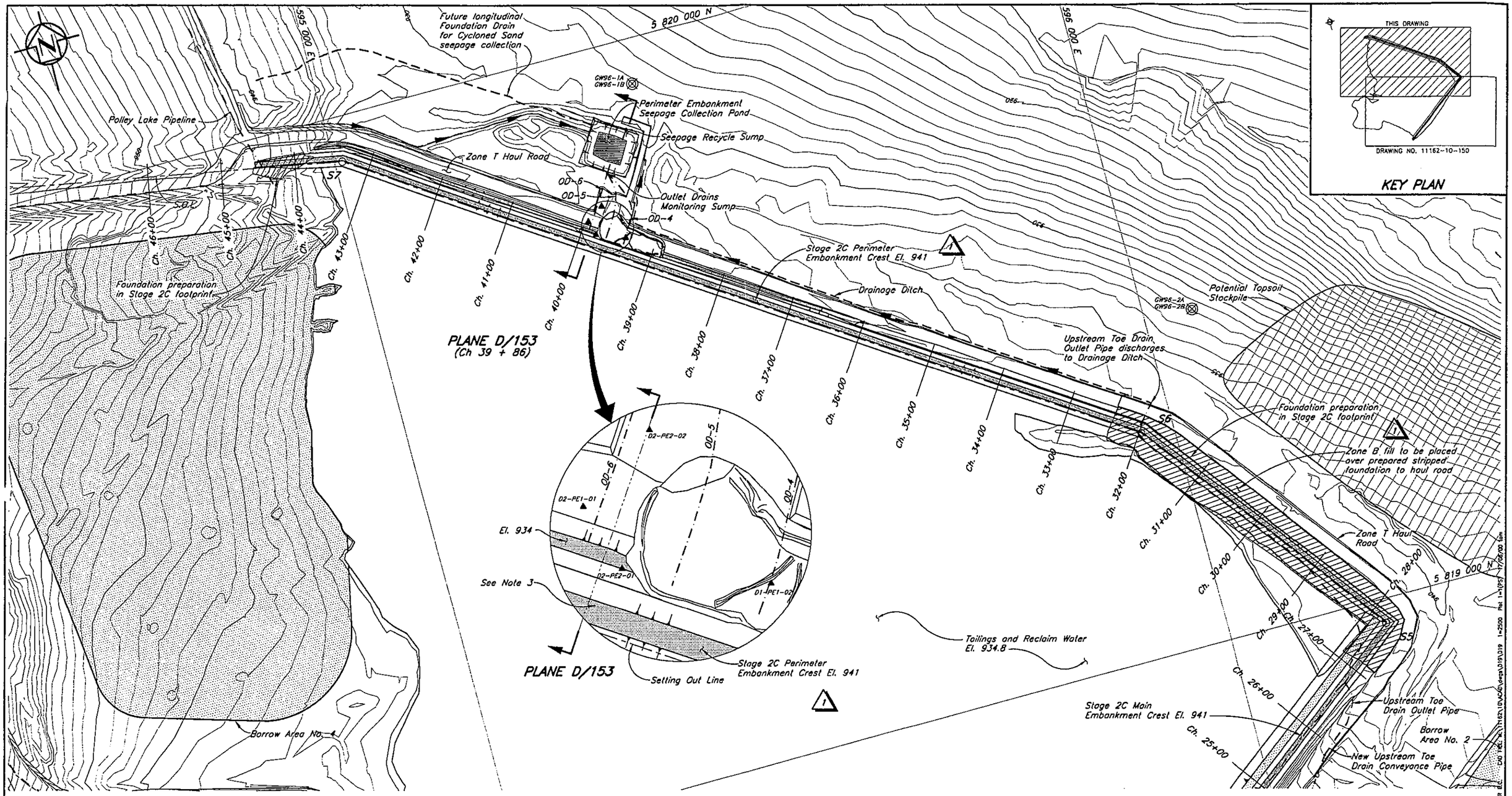
Knight Piésold CONSULTING

SCALE AS SHOWN — REVISION 1

DRAWING NO. 11162-10-150

XREF FILE : TOPO99.STOCK

CAD FILE: MX\11162\10\DWG\dwg\11162-10-150.dwg 1:2500 Plot: 14 APR 00 10:00:00 Dan VANCOUVER B.C.



LEGEND

- Groundwater Monitoring Well
- A1-PE1-01 Previously installed Piezometer
- A2-PE2-06 New Stage 2C Piezometer
- A2-SM-01 New Embankment Survey Monument

NOTES

1. Chainage defined by Setting Out Point S1 at Ch. 5+00.
2. Topography generated from points and break lines provided by MPMC on July 20, 1999.
3. Stage 2 survey monuments destroyed immediately after installation.
4. See Drg. No. 11162-10-152 for Summary of Instrumentation Installations.

Scale 50 0 50 100 150 200 250 m

ORG. NO.	DESCRIPTION
153	TSF - STAGE 2C EXPANSION - INSTRUMENTATION SECTIONS - SHEET 2 OF 2
152	TSF - STAGE 2C EXPANSION - INSTRUMENTATION SECTIONS - SHEET 1 OF 2

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	14AUG'00	STAGE 2C AS-BUILT	JRK	TAM	JMTW	KJB
0	31AUG99	ISSUED FOR CONSTRUCTION	JMTW	DSR	KJB	KJB

REVISIONS

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — K. BROUWER

MOUNT POLLEY MINING CORPORATIOON

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 2C EXPANSION
PERIMETER EMBANKMENT INSTRUMENTATION PLAN

DESIGNED	CHECKED
JMTW	KJB
DRAWN	APPROVED
DSR	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN — REVISION 1

DRAWING NO. 11162-10-151

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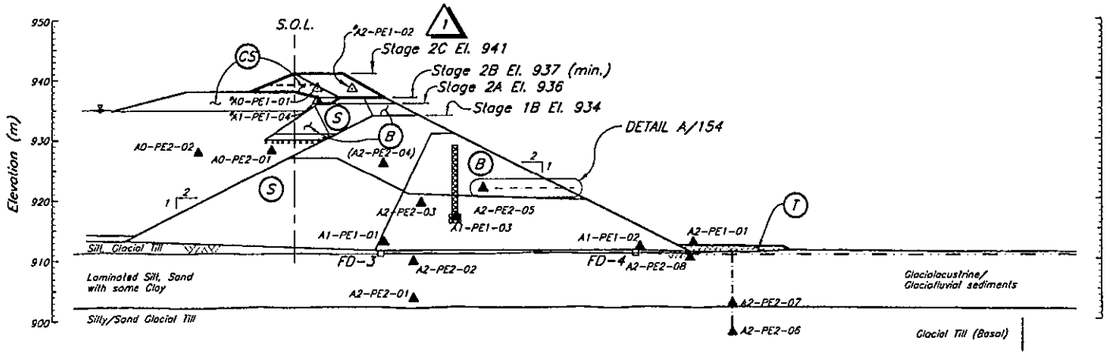
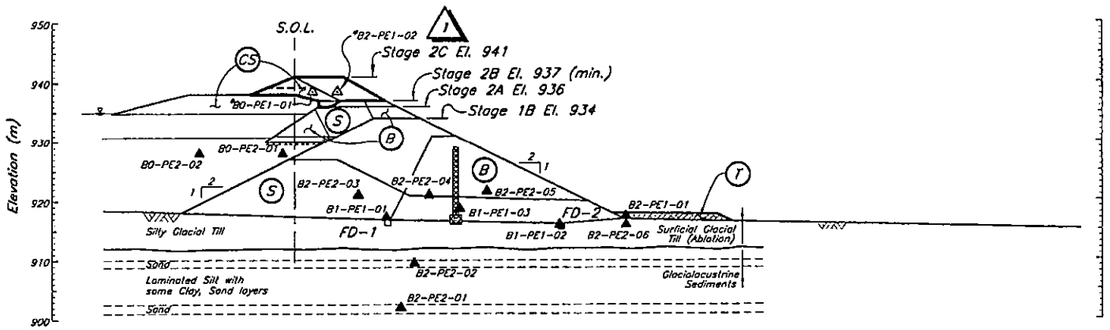
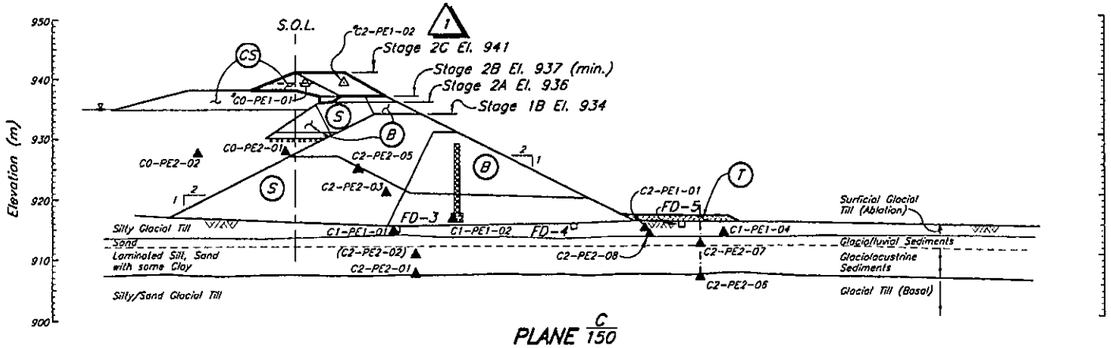


PLANE A/150
CH. 20+00



PLANE B/150
CH. 22+40



PLANE C/150
CH. 18+50

SUMMARY OF INSTRUMENTATION INSTALLATIONS

PIEZOMETER ID	NORTHING	EASTING	ELEV.	DATE INSTALLED
*A0-PE1-01	5 818 495.773	595 588.746	938.542	
A0-PE2-01	5 818 502.850	595 585.398	928.03	10/03/98
A0-PE2-02	5 818 513.092	595 578.418	927.87	10/03/98
A1-PE1-01	5 818 486.650	595 595.060	912.99	27/08/96
A1-PE1-02	5 818 456.420	595 626.250	912.14	27/08/96
A1-PE1-03	5 818 476.822	595 602.380	917.17	22/10/96
*A1-PE1-04			936.5	
A2-PE1-01	5 818 446.550	595 628.010	912.89	26/08/98
*A2-PE1-02	5 818 491.574	595 592.678	938.474	
A2-PE2-01	5 818 482.710	595 598.140	903.7	25/07/96
A2-PE2-02	5 818 482.710	595 598.140	909.8	25/07/96
A2-PE2-03	5 818 484.196	595 602.354	919.43	12/02/97
(A2-PE2-04)	5 818 487.510	595 595.995	926.07	22/02/97
A2-PE2-05	5 818 475.061	595 607.560	921.87	22/02/97
A2-PE2-06	5 818 453.926	595 648.458	898.03	21/06/98
A2-PE2-07	5 818 453.926	595 648.458	902.83	21/06/98
A2-PE2-08	5 818 447.045	595 627.758	907.57	23/06/98
*B0-PE1-01			938.5	
B0-PE2-01	5 818 688.130	595 833.040	927.30	06/03/98
B0-PE2-02	5 818 697.980	595 326.160	927.18	06/03/98
B1-PE1-01	5 818 632.550	595 787.910	917.27	10/09/96
B1-PE1-02	5 818 609.040	595 806.770	915.95	10/09/96
B1-PE1-03	5 818 622.780	595 797.260	918.69	22/10/96
B2-PE1-01	5 818 594.940	595 811.260	916.272	26/08/98
*B2-PE1-02			938.5	
B2-PE2-01	5 818 628.270	595 787.880	902.00	25/07/96
B2-PE2-02	5 818 627.470	595 790.660	909.50	25/07/96
B2-PE2-03	5 818 636.530	595 786.970	921.00	22/10/96
(B2-PE2-04)	5 818 626.940	595 794.190	921.00	22/10/96
B2-PE2-05	5 818 619.014	595 799.804	921.70	14/03/97
B2-PE2-06	5 818 595.767	595 810.605	914.59	23/06/98
*C0-PE1-01	5 818 408.969	595 469.750	939.267	
(C0-PE2-01)	5 818 414.319	595 471.099	927.80	10/03/98
(C0-PE2-02)	5 818 426.495	595 463.101	927.48	10/03/98
C1-PE1-01	5 818 410.500	595 496.070	914.70	28/09/96
C1-PE1-02	5 818 387.690	595 482.400	916.60	22/10/96
C1-PE1-04	5 818 351.420	595 509.060	914.31	02/04/98
C2-PE1-01	5 818 367.670	595 508.900	915.016	26/08/98
*C2-PE1-02	5 818 404.117	595 473.754	939.260	
(C2-PE2-01)	5 818 392.410	595 478.240	907.50	25/07/96
C2-PE2-02	5 818 392.410	595 478.240	910.50	25/07/96
C2-PE2-03	5 818 399.106	595 478.824	920.97	12/02/97
C2-PE2-05	5 818 402.343	595 475.326	924.84	12/02/97
C2-PE2-06	5 818 359.734	595 513.663	906.84	18/06/98
C2-PE2-07	5 818 359.734	595 513.663	912.28	18/06/98
C2-PE2-08	5 818 367.087	595 509.351	914.03	19/06/98
–			–	
D1-PE1-02	5 819 742.03	595 353.980	928.76	30/01/98
–			–	
D2-PE1-01	5 819 775.449	595 310.522	930.423	26/08/98
–			–	
D2-PE2-01	5 819 756.360	595 316.210	931.00	15/12/96
D2-PE2-02	5 819 791.103	595 333.275	922	22/06/98
E2-PE2-01	5 818 307.454	595 435.983	914.19	17/06/98
E2-PE2-02	5 818 307.454	595 435.983	909.67	17/06/98

( ) Piezometer no longer functioning.
* Installed during Stage 2C construction.

NOTES

1. Piezometers are vibrating wire type, SINCA Model 52611030 and RST Model 45005-0100 with a pressure rating of 100 psi or equivalent, connected to a readout panel via standard non-vented direct burial cable.
2. Piezometer leads extended as directed by the Engineer.

LEGEND

AO-PE1-01
- Plane I.D. (A, B etc.)
- Area (0-Tailings, 1-Drain, 2-Embankment)
- Number I.D.
- Pressure Rating (1-Low, 2-High)
- Type of Instrumentation (PE-Piezometer electric, SM-Survey Monument)

A1-PE1-01▲ Previously installed Piezometer

A2-PE2-06△ New Stage 2C Piezometer

A2-SM-01◇ New Embankment Survey Monument

(B) Zone B

(C) Zone C

(S) Zone S

(T) Zone T

(CS) Cycloned Sand

Scale 10 0 10 20 30 40 50 m

CAD FILE: W:\11162\10\ACAD\dwg\1203\1203 1=500 Plot 1=0.5 17/06/00 tom
VANCOUVER B.C.

REFERENCE DRAWINGS	
DRG. NO.	DESCRIPTION
154	TSF - STAGE 2C EXPANSION - INSTRUMENTATION - DETAILS
153	TSF - STAGE 2C EXPANSION - INSTRUMENTATION SECTIONS - SHEET 2 OF 2
151	TSF - STAGE 2C EXPANSION - PERIMETER EMBANKMENT INSTRUMENTATION - PLAN
150	TSF - STAGE 2C EXPANSION - MAIN EMBANKMENT INSTRUMENTATION - PLAN

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	14AUG'00	STAGE 2C AS BUILT	JRK	TAM	KJB	KJB
0	31AUG99	ISSUED FOR CONSTRUCTION	JMTW	DSR	KJB	KJB

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — K.J. BROUWER

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 2C EXPANSION
INSTRUMENTATION SECTIONS
SHEET 1 OF 2

DESIGNED	CHECKED
JMTW	KJB
DRAWN	APPROVED
DSR	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN — REVISION 1
DRAWING NO. 11162-10-152

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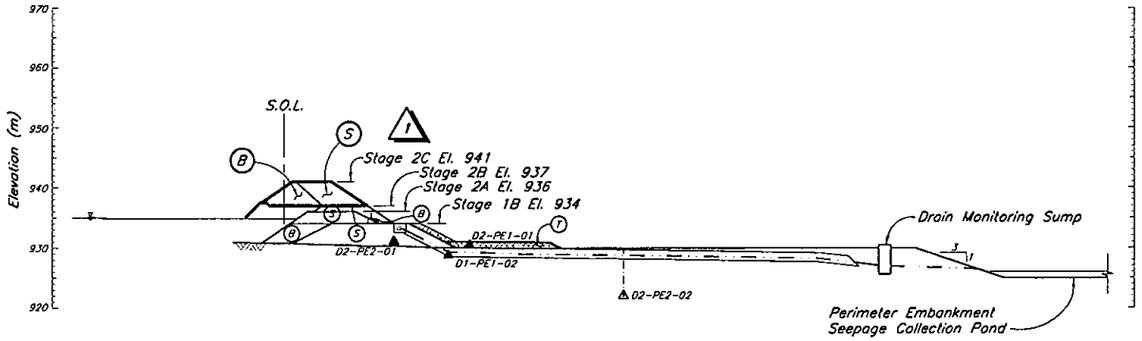
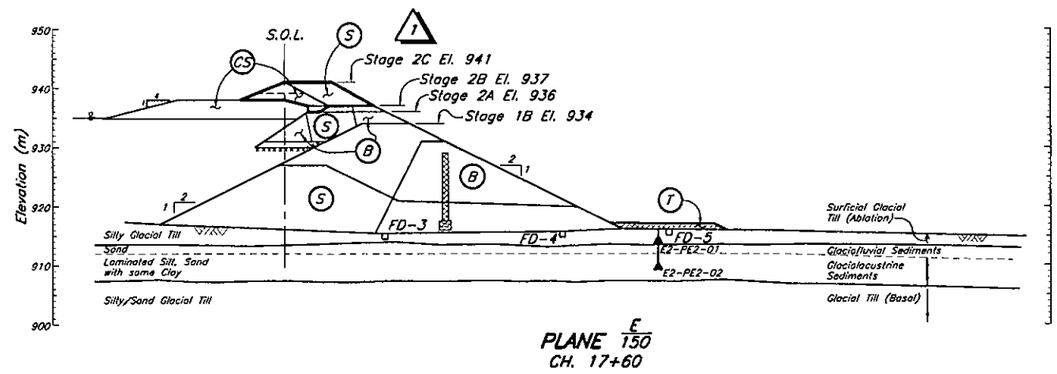


PLANE D/151
CH. 39+86



PLANE E/150
CH. 17+60

NOTES

1. Piezometers are vibrating wire type, SINCA Model 52611030 and RST Model 45005-0100 with a pressure rating of 100 psi or equivalent, connected to a readout panel via standard non-vented Model 50613524 direct burial cable.
2. Piezometer leads extended as directed by the Engineer.
3. See Drg. No. 11162-10-152 for Summary of Instrumentation Installations.

LEGEND

D0-PE1-01
- Plane I.D. (A, B etc.)
- Area (0-Tailings, 1-Drain, 2-Embankment)
- Number I.D.
- Pressure Rating (1-Low, 2-High)
- Type of Instrumentation (PE-Piezometer electric, SM-Survey Monument)

D1-PE1-01 ▲ Previously installed Piezometer

D2-PE2-02 △ New Stage 2C Piezometer

D2-SM-07 ◇ New Embankment Survey Monument

(B) Zone B

(C) Zone C

(S) Zone S

(T) Zone T

(CS) Cycloned Sand

Scale 10 0 10 20 30 40 50 m

CAD FILE: M:\11162\10\ACAD\dwgs\D21\D211 1=500 Plot 1=0.5 17/08/00 bm

VANCOUVER B.C.

REFERENCE DRAWINGS	
DRG. NO.	DESCRIPTION
152	TSF - STAGE 2C EXPANSION - INSTRUMENTATION SECTIONS - SHEET 1 OF 2
151	TSF - STAGE 2C EXPANSION - PERIMETER EMBANKMENT INSTRUMENTATION - PLAN
150	TSF - STAGE 2C EXPANSION - MAIN EMBANKMENT INSTRUMENTATION - PLAN

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	14AUG'00	STAGE 2C AS BUILT	JRK	TAM	KJB	KJB
0	31AUG99	ISSUED FOR CONSTRUCTION	JMTW	DSR	KJB	KJB

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA BROUWER

DESIGNED JMTW | CHECKED KJB | DRAWN DSR | APPROVED KJB

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY STAGE 2C EXPANSION INSTRUMENTATION SECTIONS SHEET 2 OF 2

Knight Piésold CONSULTING

SCALE AS SHOWN | REVISION 1

DRAWING NO. 11162-10-153

XREF FILE :

APPENDIX B

1999 ANNUAL INSPECTION PHOTOS

Photo No. 1: Main Embankment, view looking east from the right abutment.

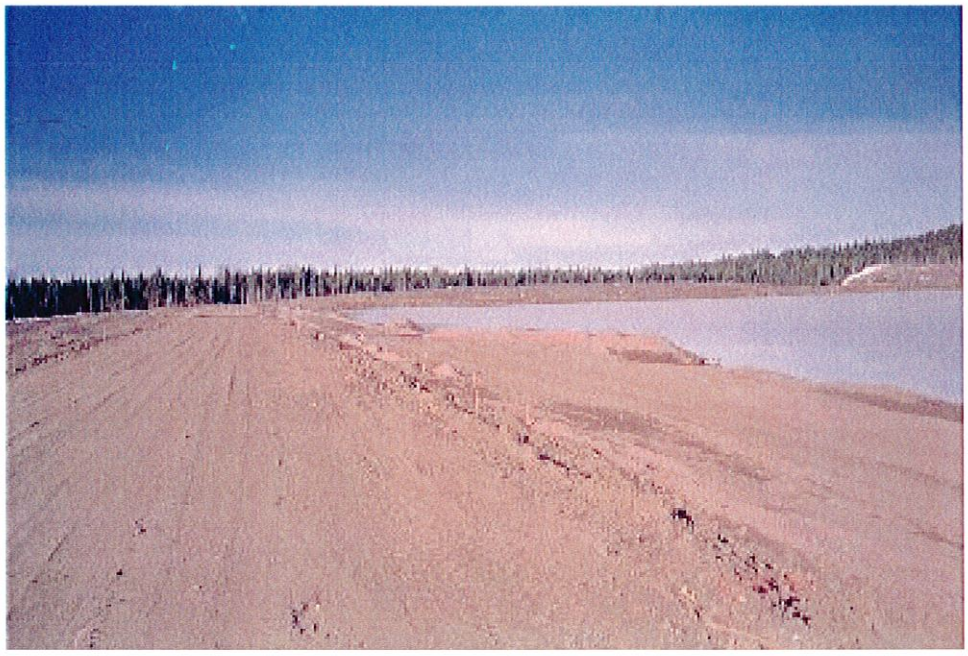


Photo No. 2: Main Embankment, view looking west from the left abutment.

Photo No. 3: Perimeter Embankment, looking north from right abutment.

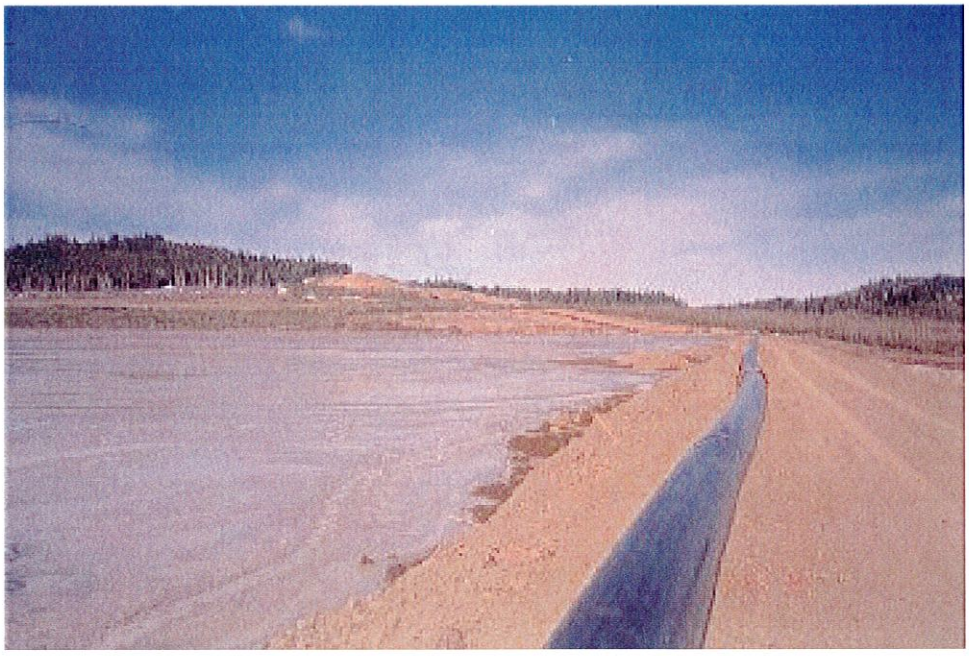


Photo No. 4: Perimeter Embankment, near CH 37+20 looking north. Note tailings beach development in northeast corner of the tailings impoundment.

Photo No. 5: Perimeter Embankment and Seepage Collection Pond.

Photo No. 6: Cyclones (20 inch Krebs) in Borrow Area No. 4 stockpile.

Photo No. 7: Biosolids Area, northeast of the tailings impoundment.

Photo No. 8: Pipeline Containment Channel. Downstream end of pipeline sleeves at Bootjack Creek Crossing.

Photo No. 9: Pipeline Containment Channel. Upstream end of pipeline sleeves at Bootjack Creek Crossing. Minor amount of tailings at the bottoms of the sleeves.

Photo No. 10: Bootjack Creek Culvert, upstream end.

Photo No. 10: Tailings Pipeline with T2 Drop Box and Reclaim Booster Pump Station in background. Vertical pipe provides pressure relief, if required, during cycloning.

Photo No. 11: T2 Overflow Pond, full of water.

Photo No. 12: Reclaim Barge and Channel.

Photo No. 13: Runoff collection ditch leading to the Southeast Sediment Pond. Mine waste dump in background.

Photo No. 14: Southeast Sediment Pond, looking east.

Photo No. 15: Southeast Sediment Pond. Downstream fill slope looking west. Slope is dry and stable and vegetation is well established.

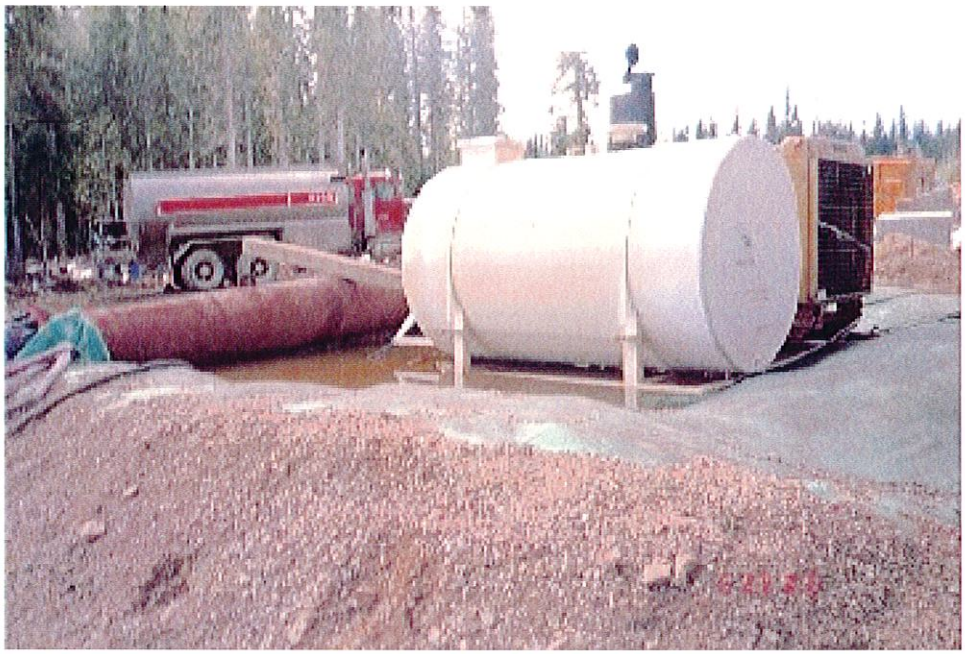


Photo No. 16: Polley Lake Pumping System.

Photo No. 17: South Bootjack Dam, downstream slope with spillway in foreground.

Photo No. 17: South Bootjack Dam, upstream slope.

Photo No. 18: Millsite Sump.

APPENDIX C

PIEZOMETER RECORDS

APPENDIX C

PIEZOMETER RECORDS

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C2 - EMBANKMENT FOUNDATION PIEZOMETERS

FIGURES

C3 - EMBANKMENT FILL PIEZOMETERS

FIGURES

C4 - DRAIN PIEZOMETERS

FIGURES

APPENDIX C1

TAILINGS PIEZOMETERS

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A0-PE1-01
(Tailings Piezometer El. 938.54 m)

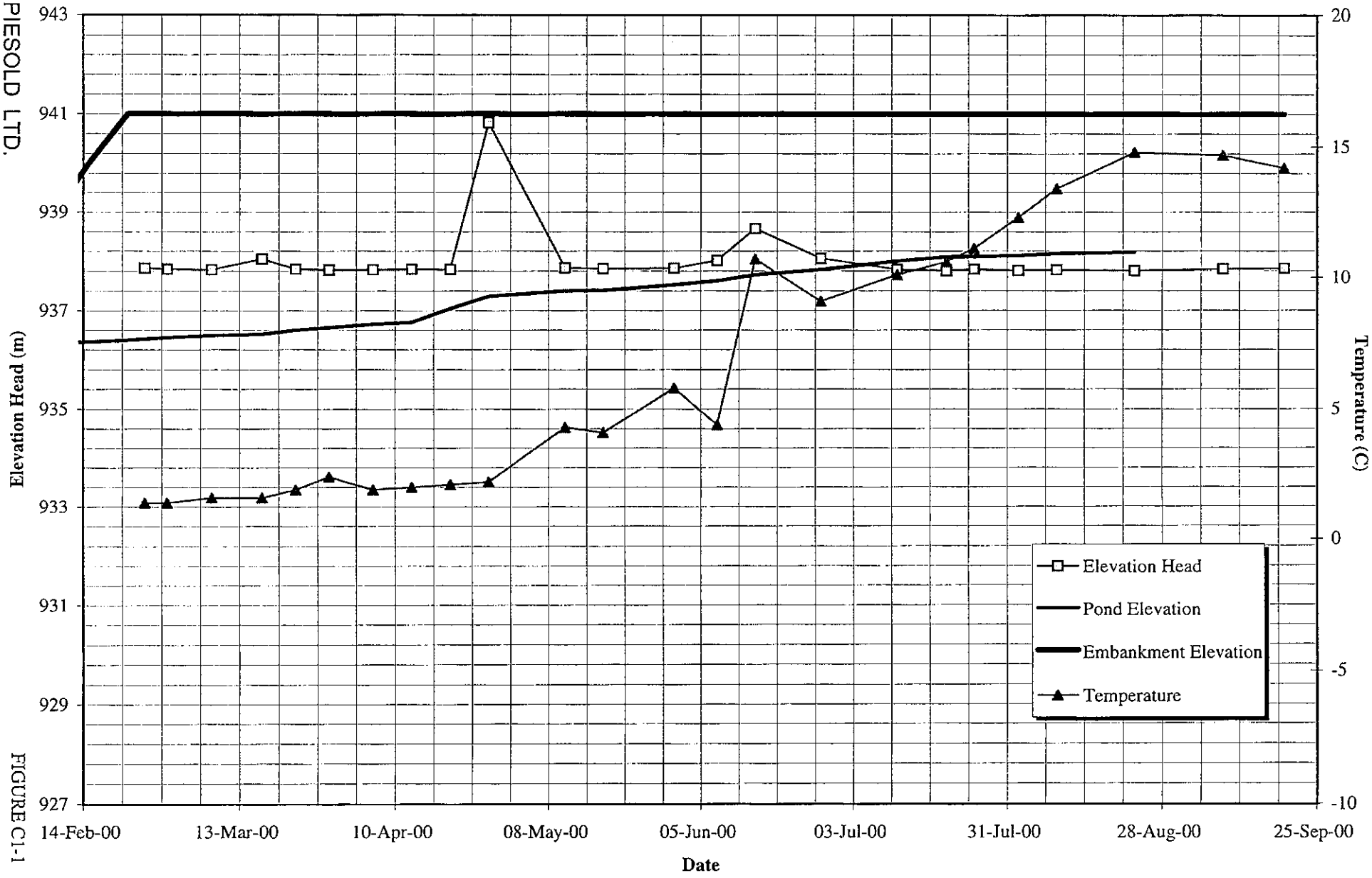


FIGURE C1-1

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A0-PE2-01
(Tailings Piezometer El. 928.03 m)

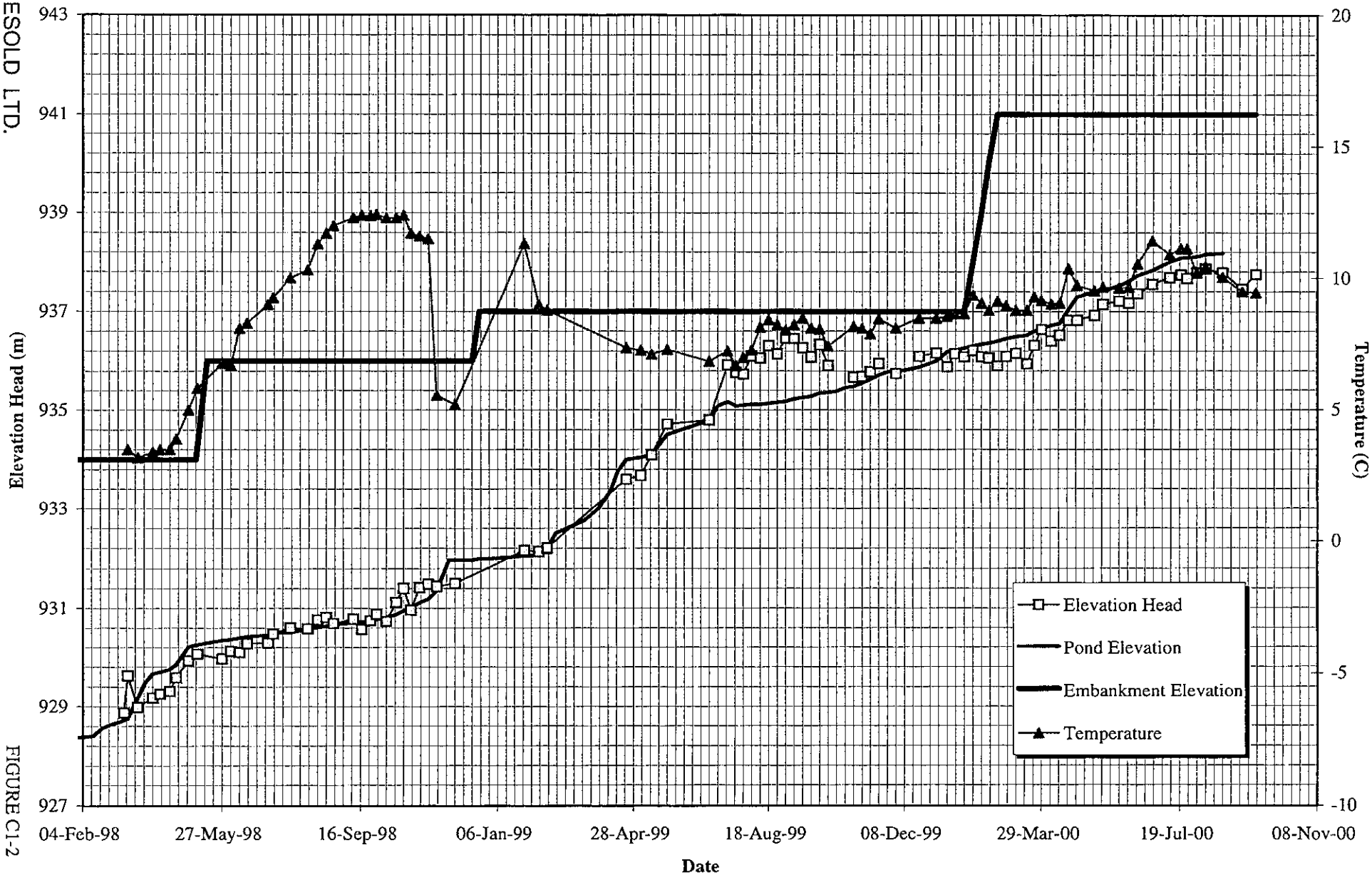


FIGURE C1-2

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A0-PE2-02
(Tailings Piezometer El. 927.87 m)

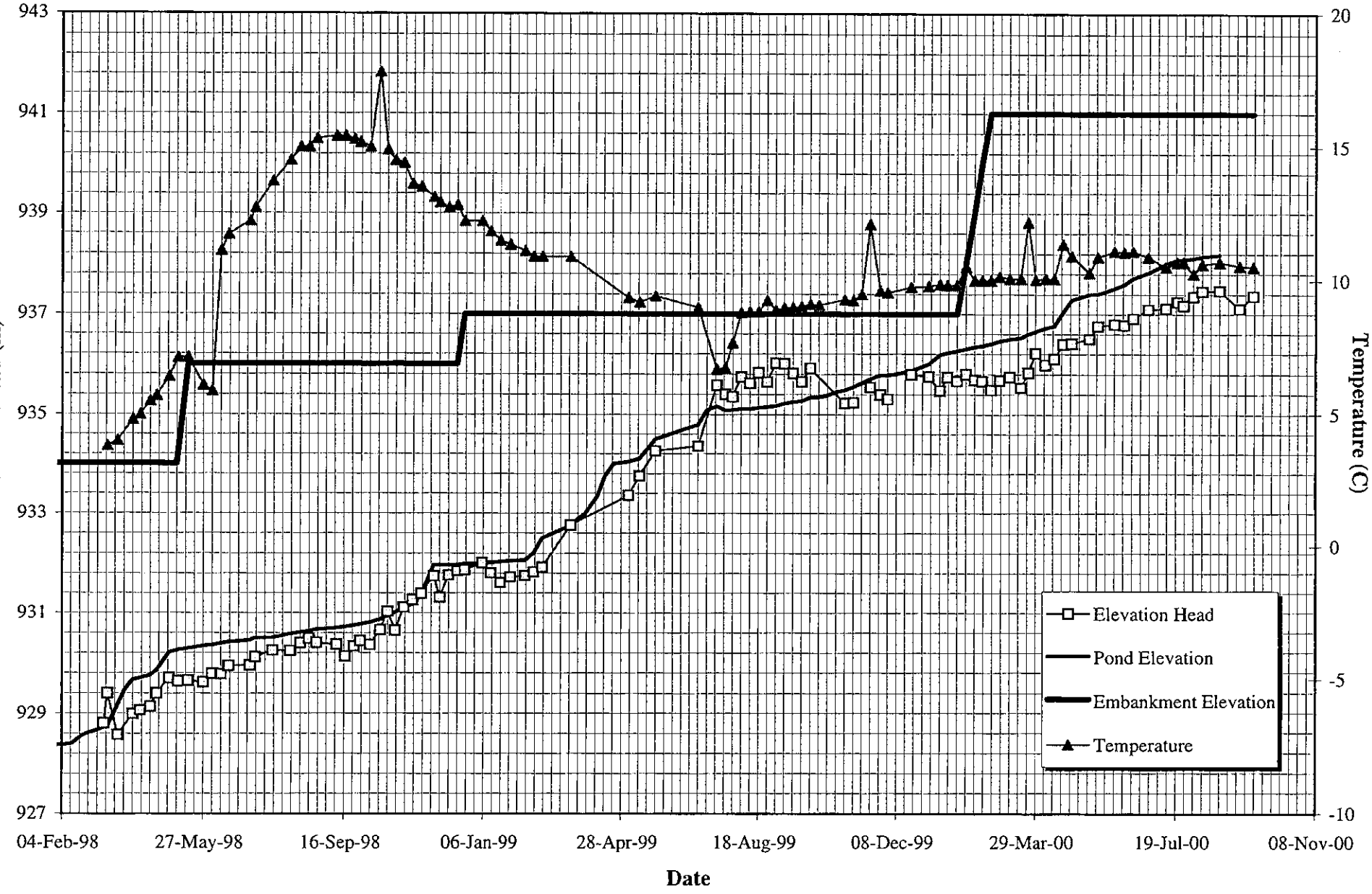


FIGURE C1-3

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B0-PE1-01
(Tailings Piezometer El. 939.4 m)

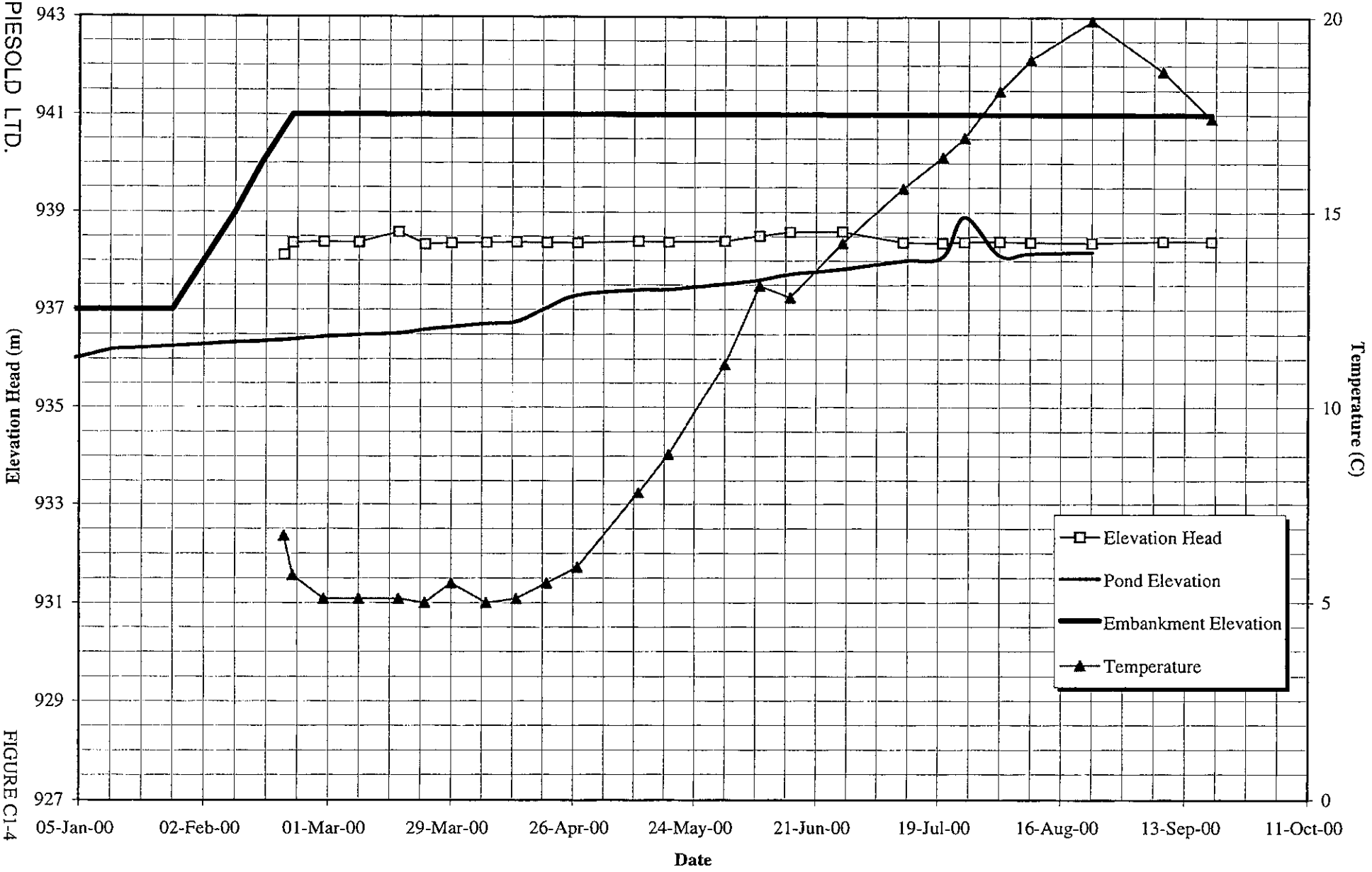


FIGURE C1-4

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B0-PE2-01
(Tailings Piezometer El. 927.30 m)

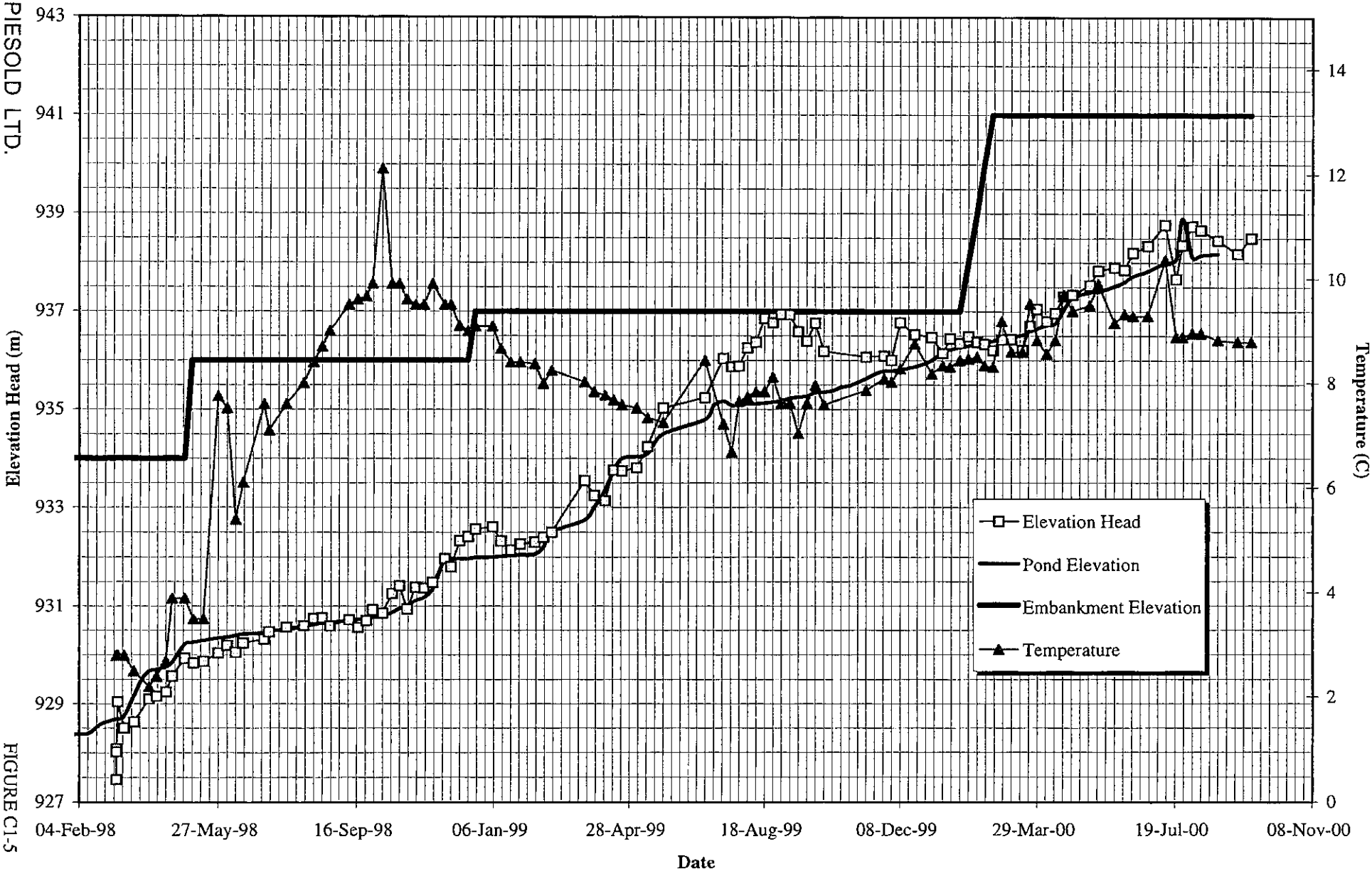


FIGURE C1-5

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B0-PE2-02
(Tailings Piezometer El. 927.18 m)

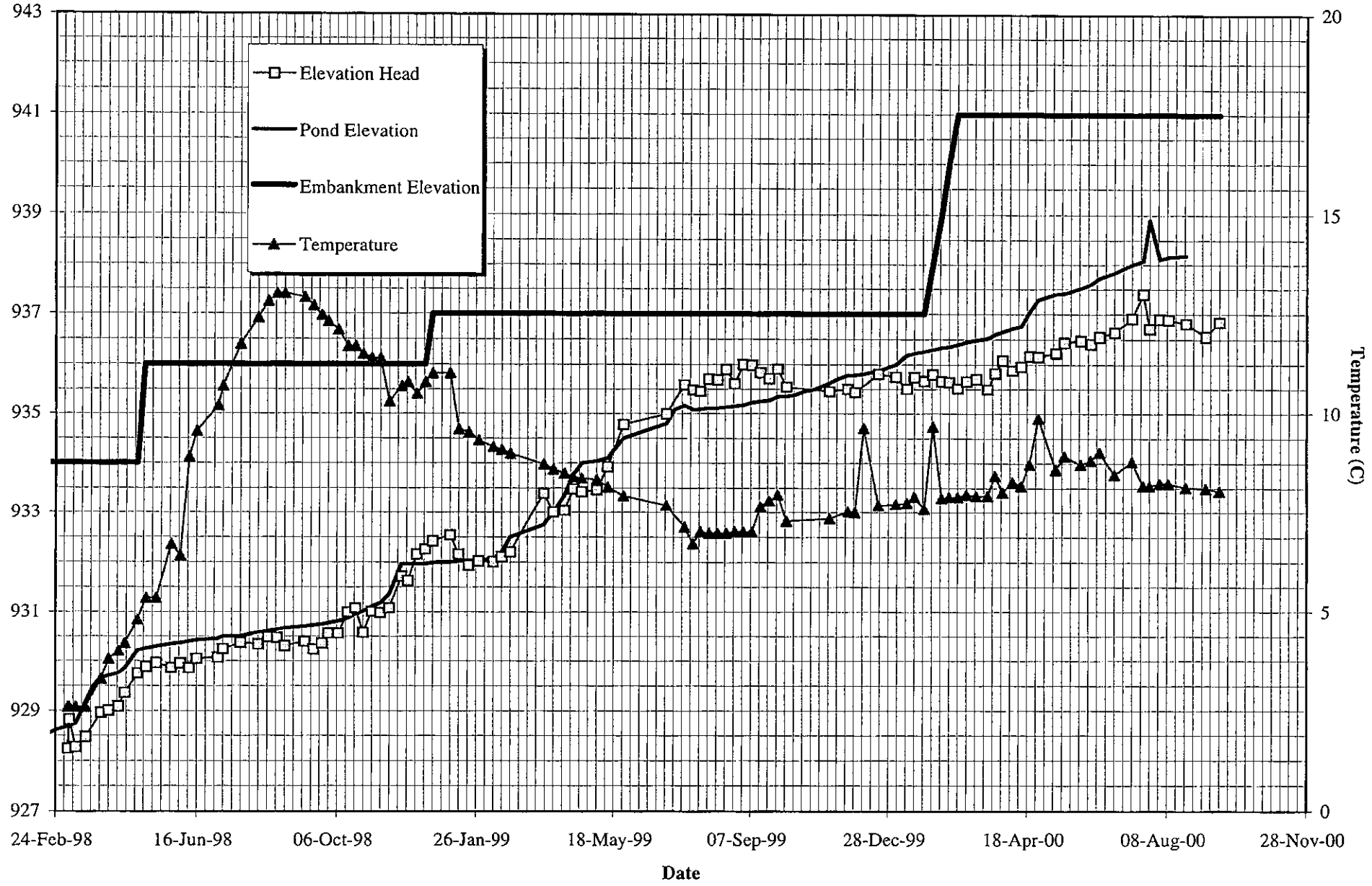


FIGURE C1-6

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C0-PE1-01
(Tailings Piezometer El. 938.2 m)

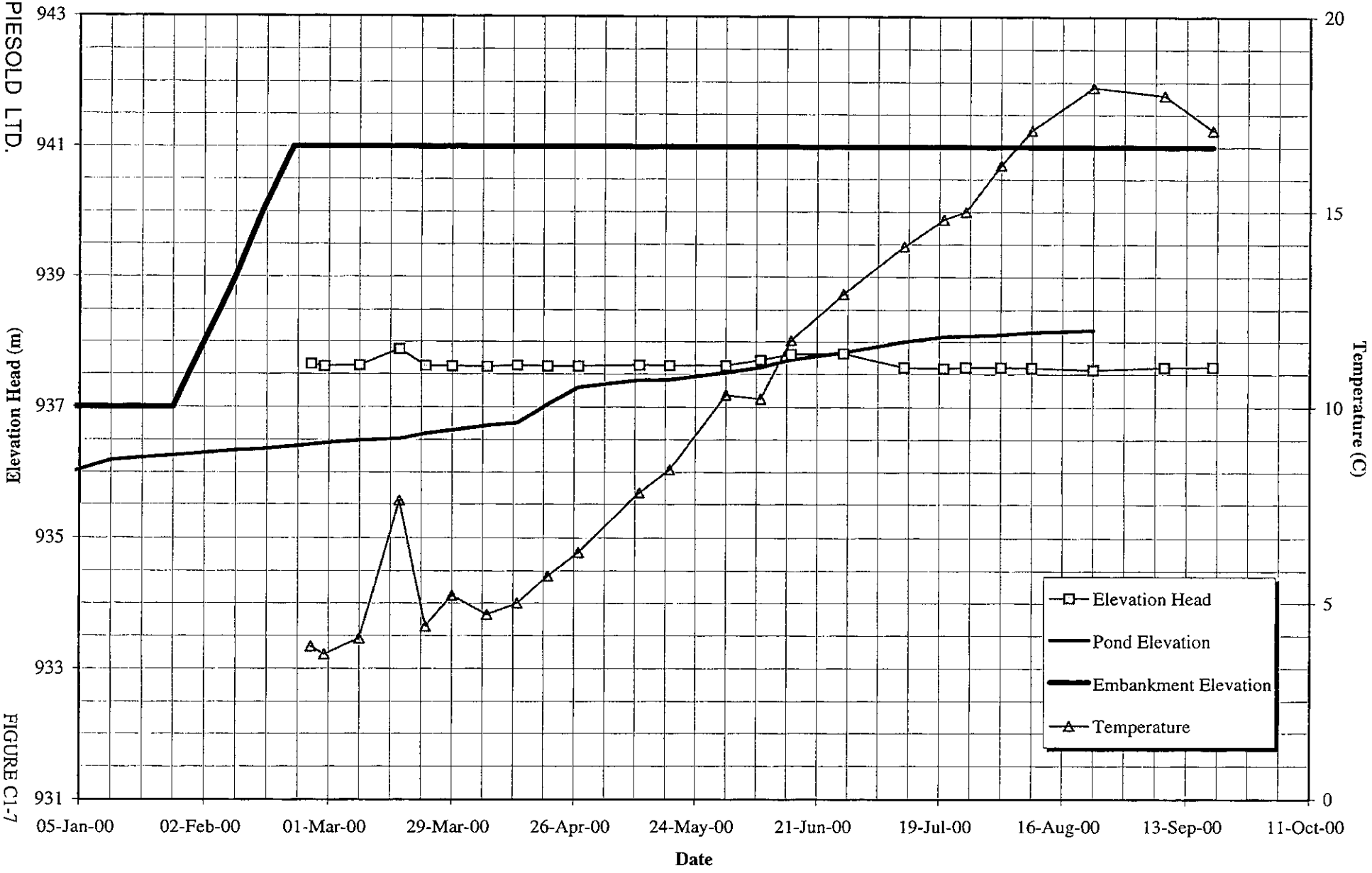


FIGURE C1-7

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C0-PE2-01
(Tailings Piezometer El. 927.8 m No Longer Functioning)

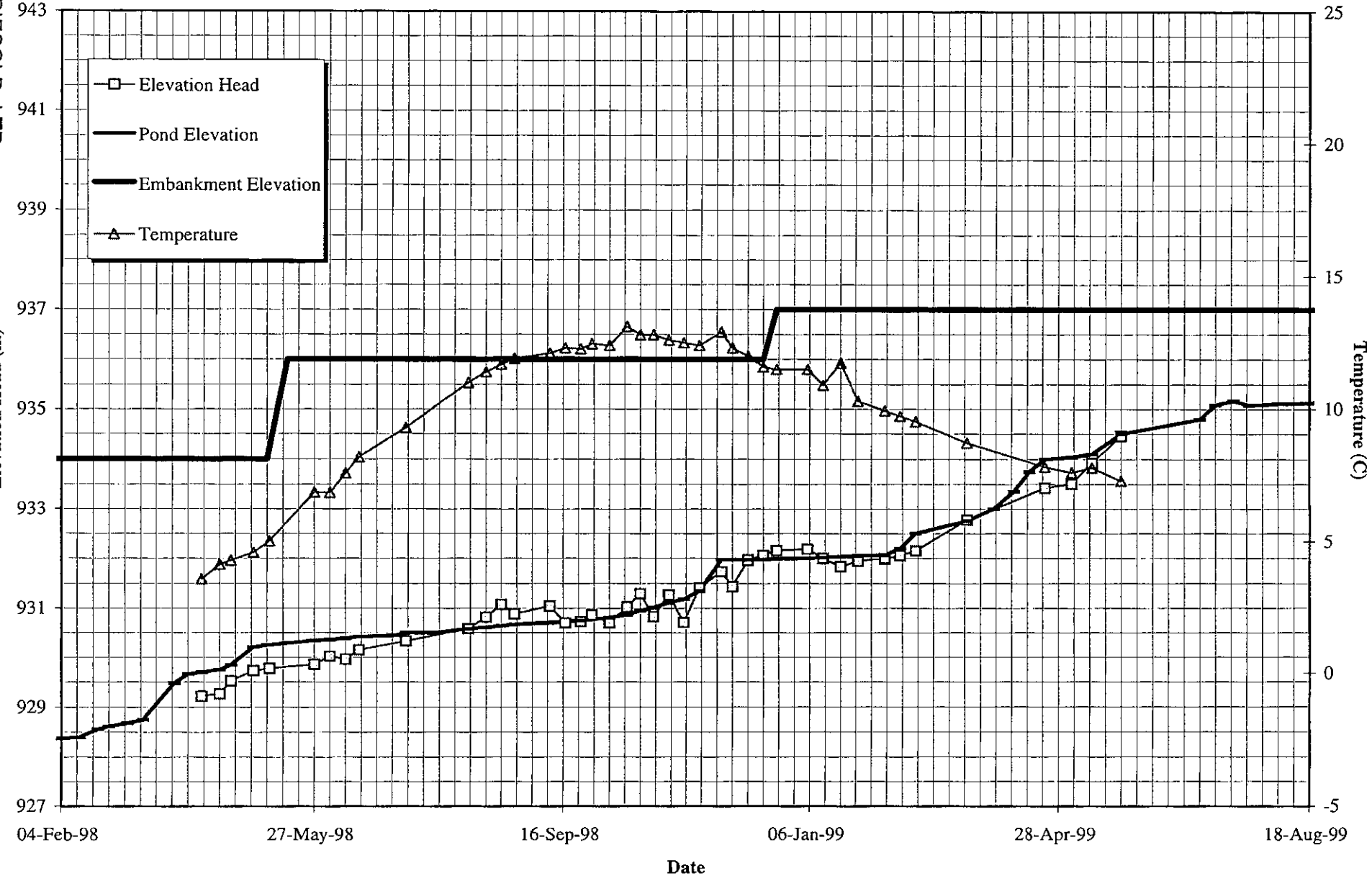


FIGURE C1-8

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C0-PE2-02
(Tailings Piezometer El. 927.5 m No Longer Functioning)

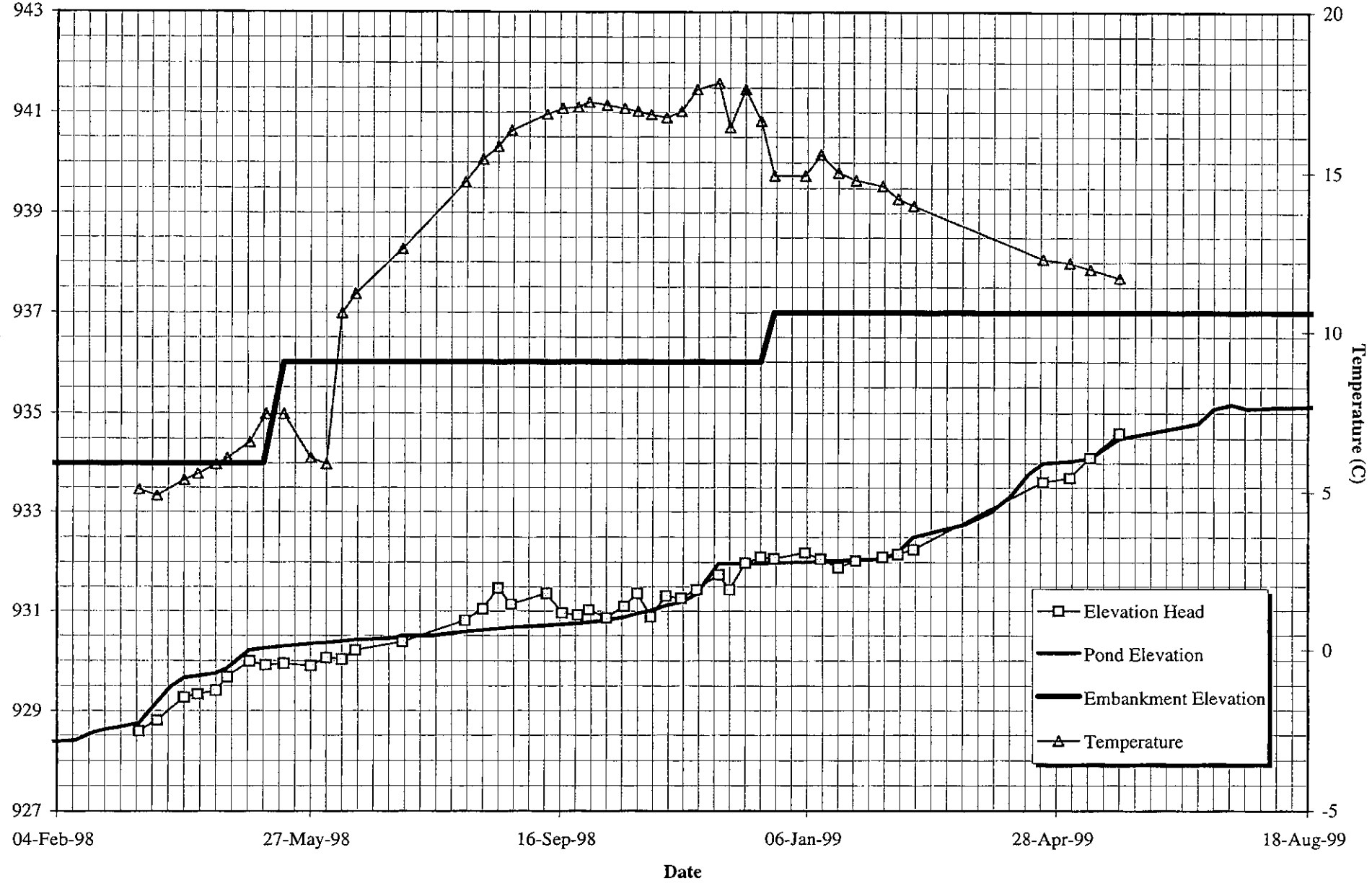


FIGURE C1-9

Knight Piésold
CONSULTING

APPENDIX C2

EMBANKMENT FOUNDATION PIEZOMETERS

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE1-03
(Foundation Piezometer El. 909.34 m)

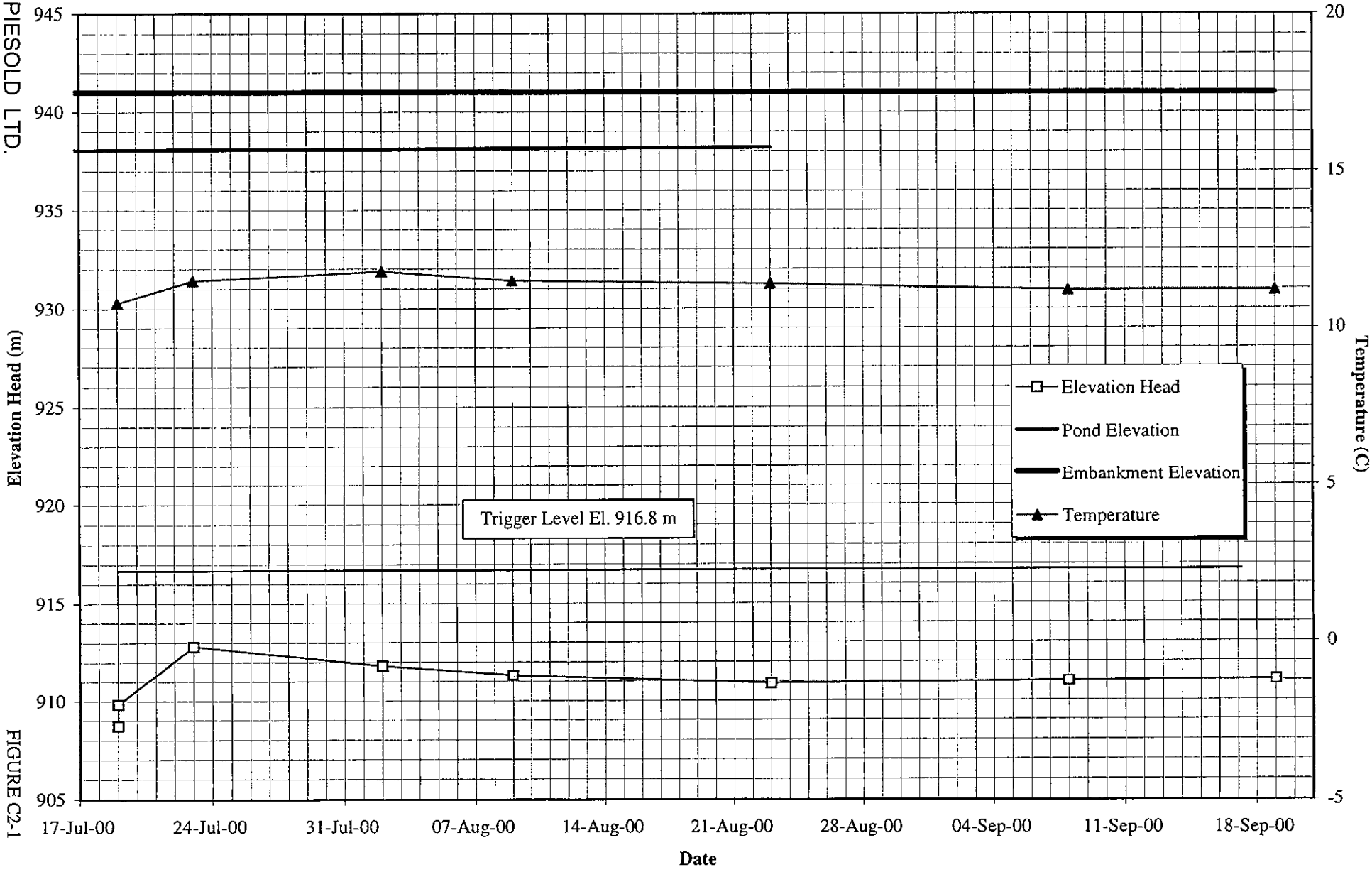


FIGURE C2-1

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
PIEZOMETER A2-PE2-01
(Foundation Piezometer El. 903.7 m)

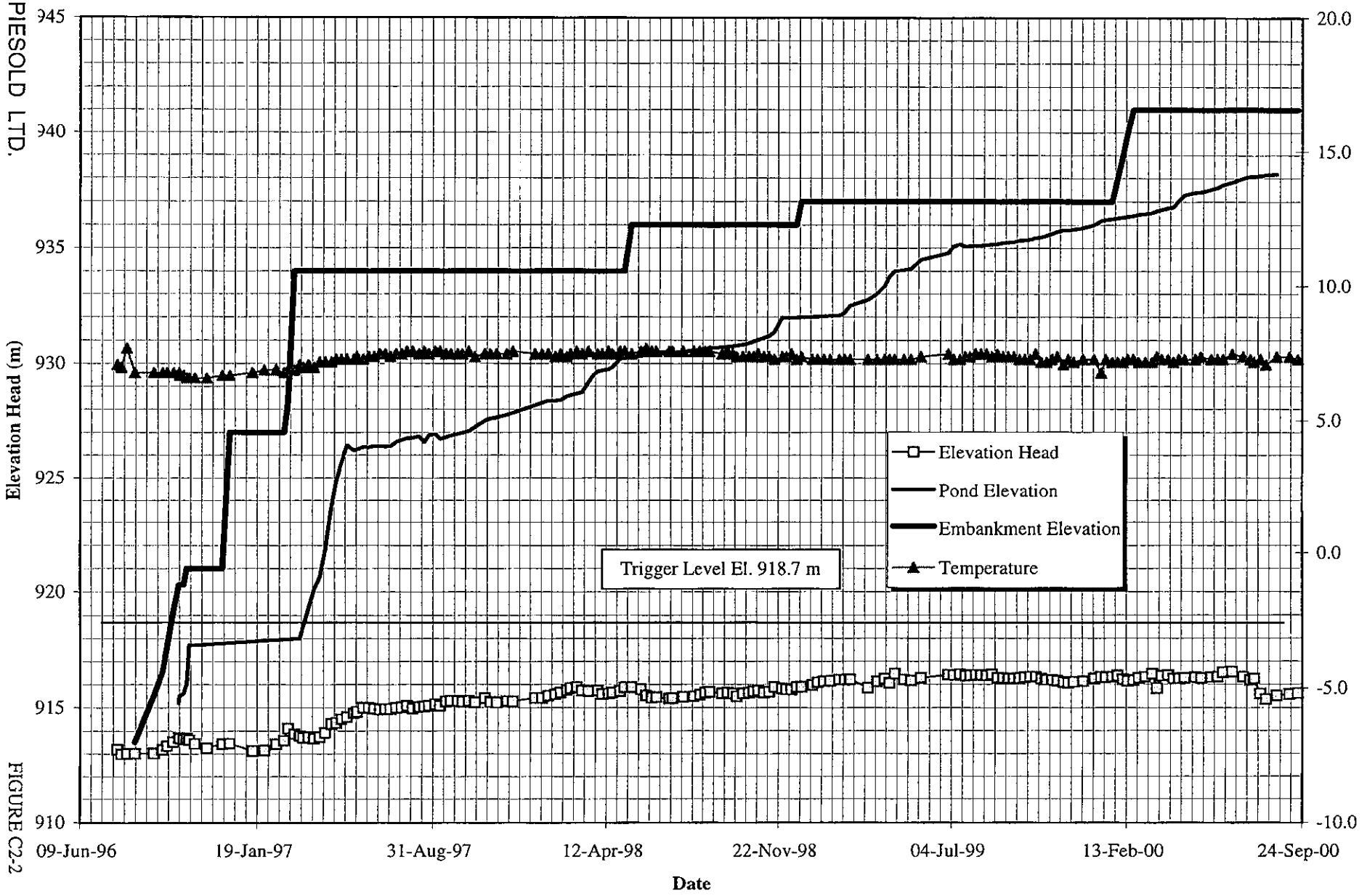


FIGURE C2-2

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE2-02
(Foundation Piezometer El. 909.8 m)

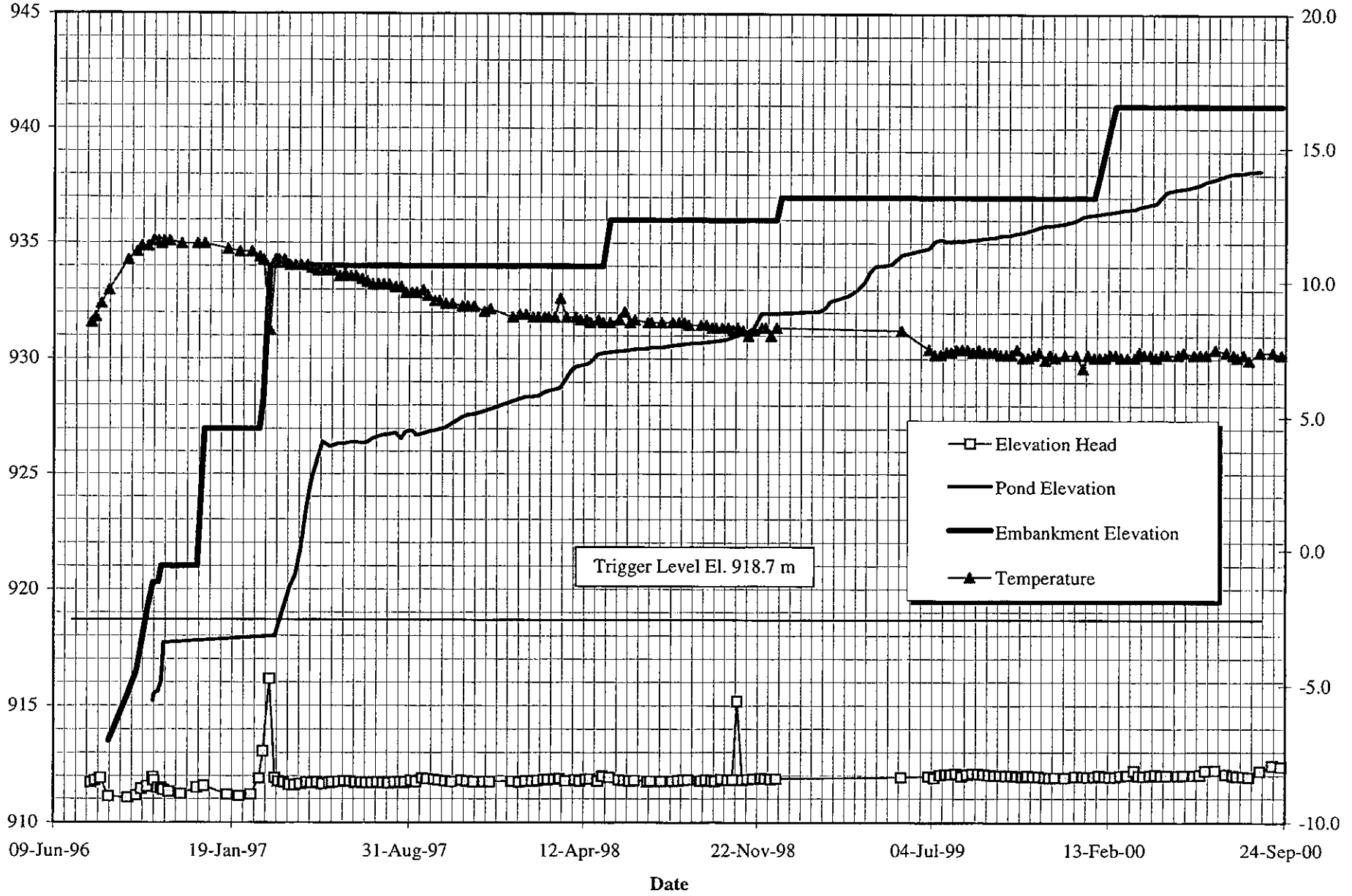


FIGURE C2-3

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE2-06
(Foundation Piezometer El. 898.0 m)

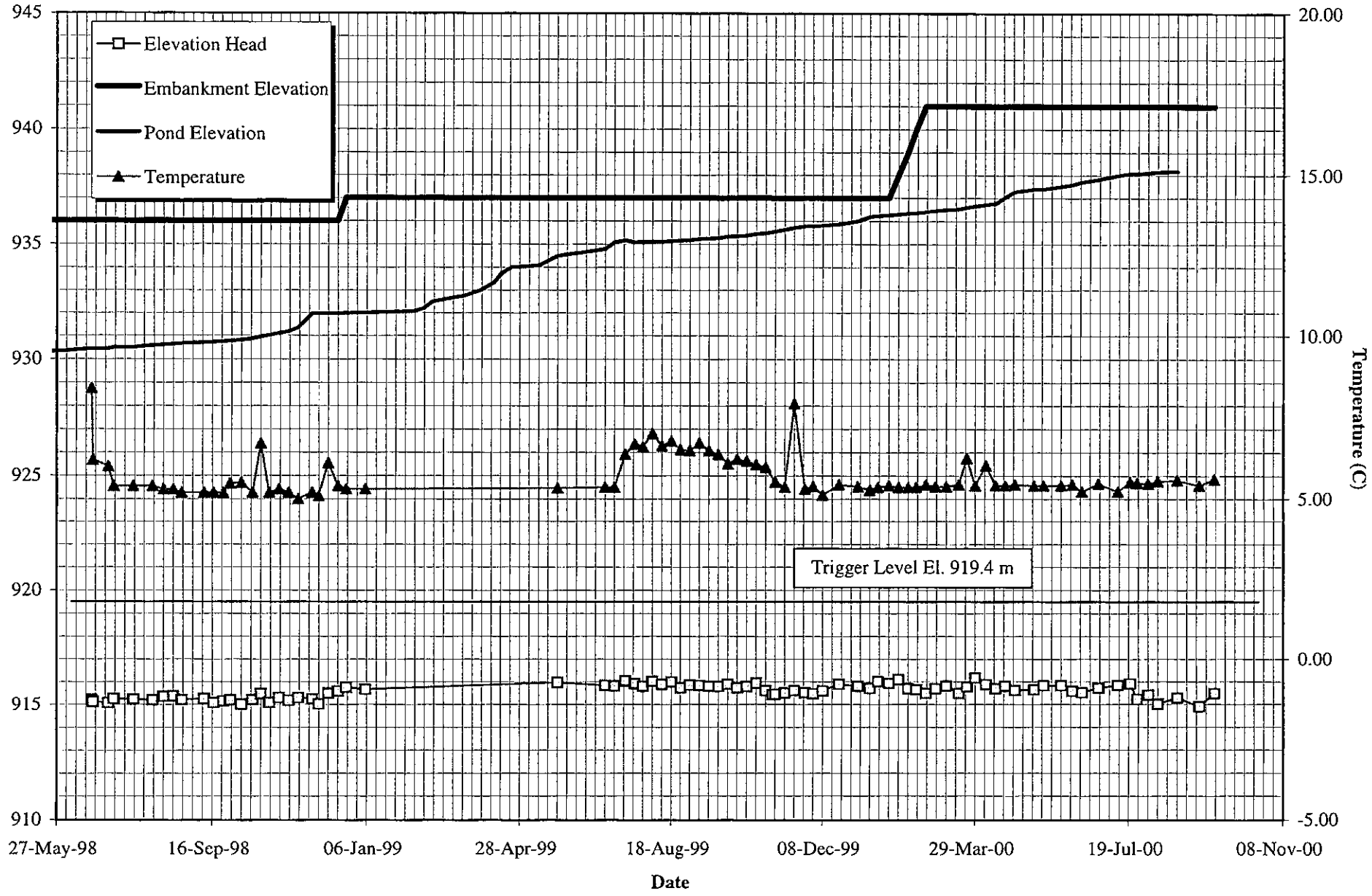


FIGURE C2-4

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE2-07
(Foundation Piezometer El. 902.8 m)

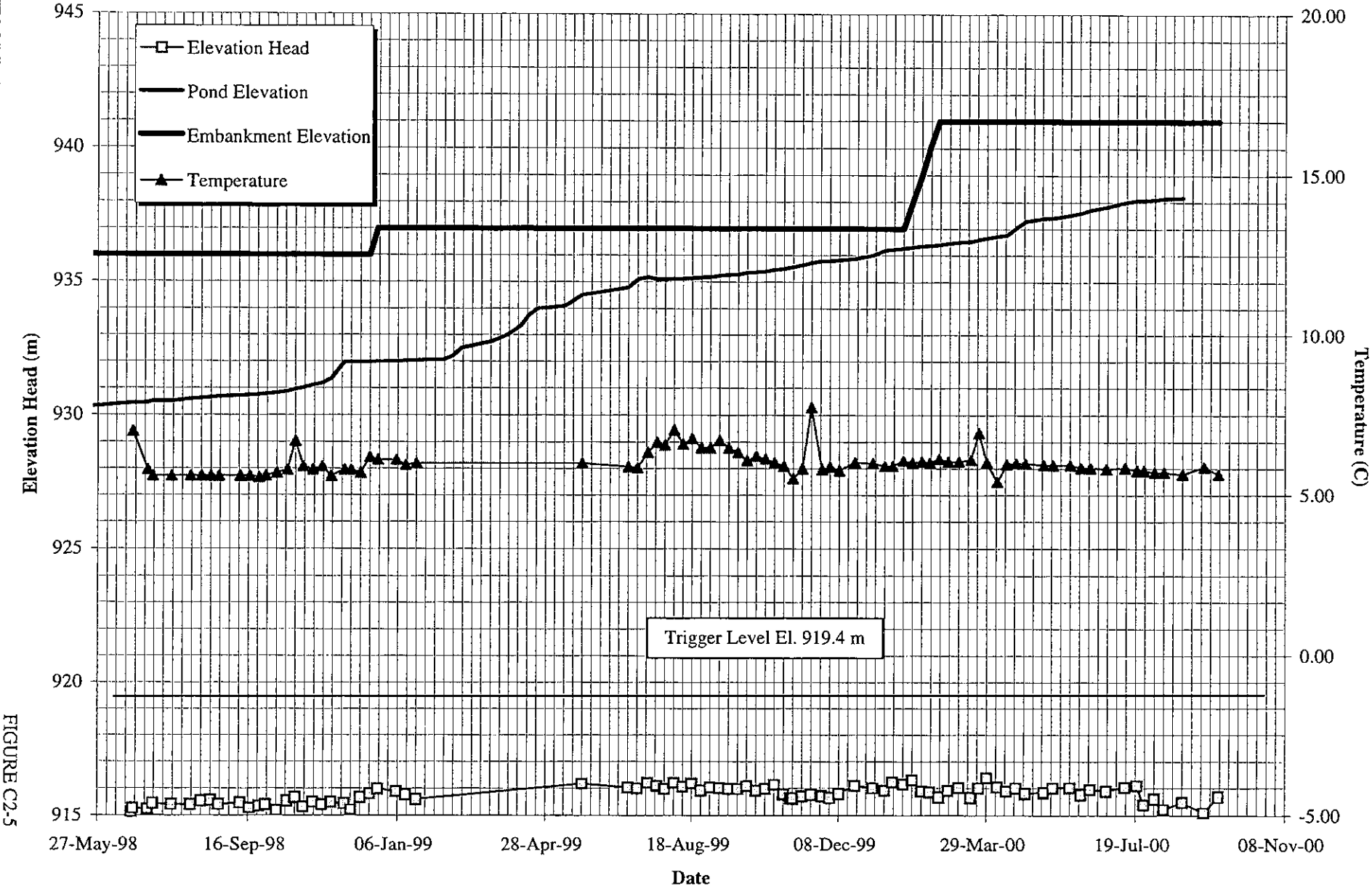


FIGURE C2-5

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE2-08
(Foundation Piezometer El. 907.6 m)

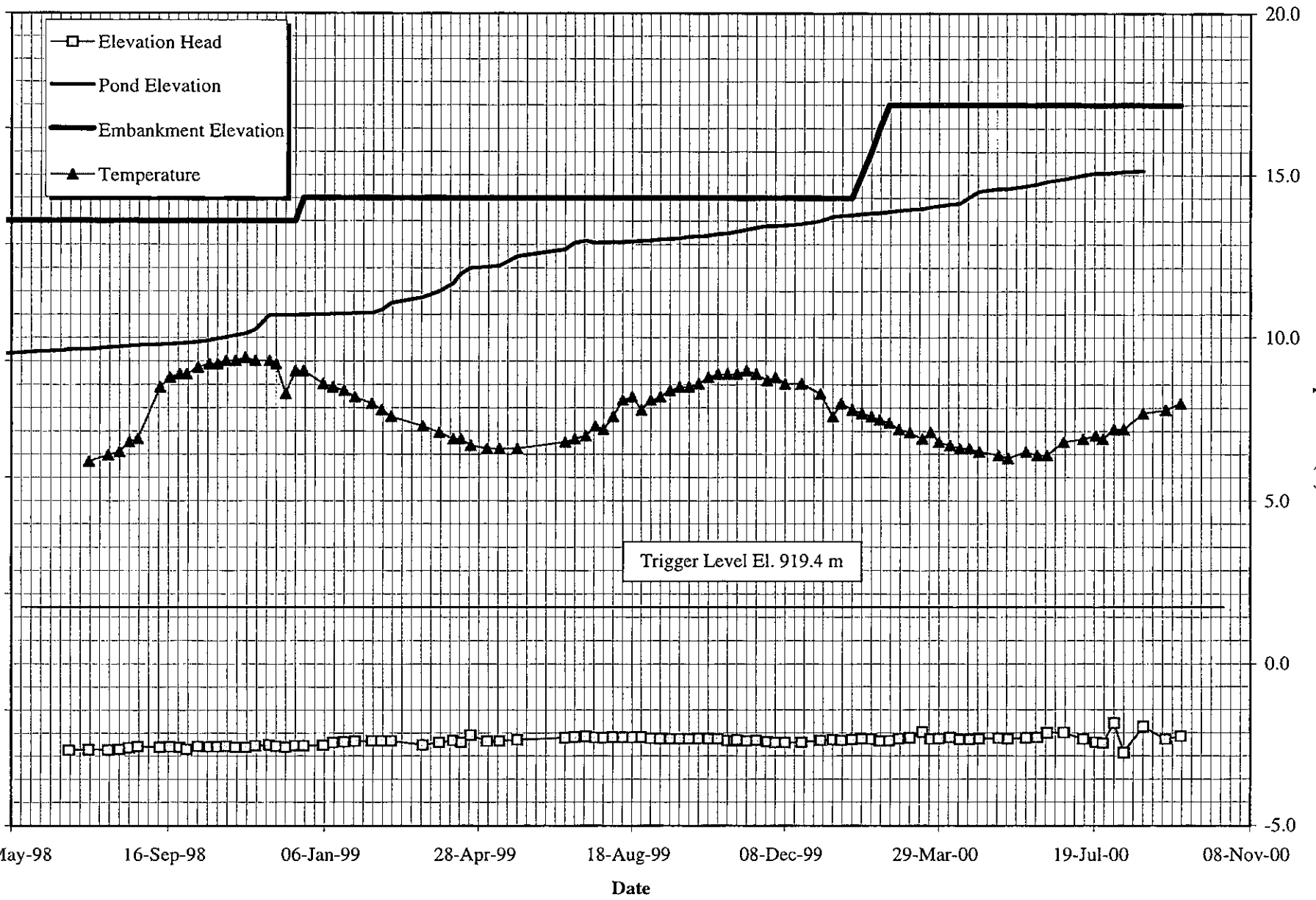


FIGURE C2-6

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE1-03
(Foundation Piezometer El. 914.05 m)

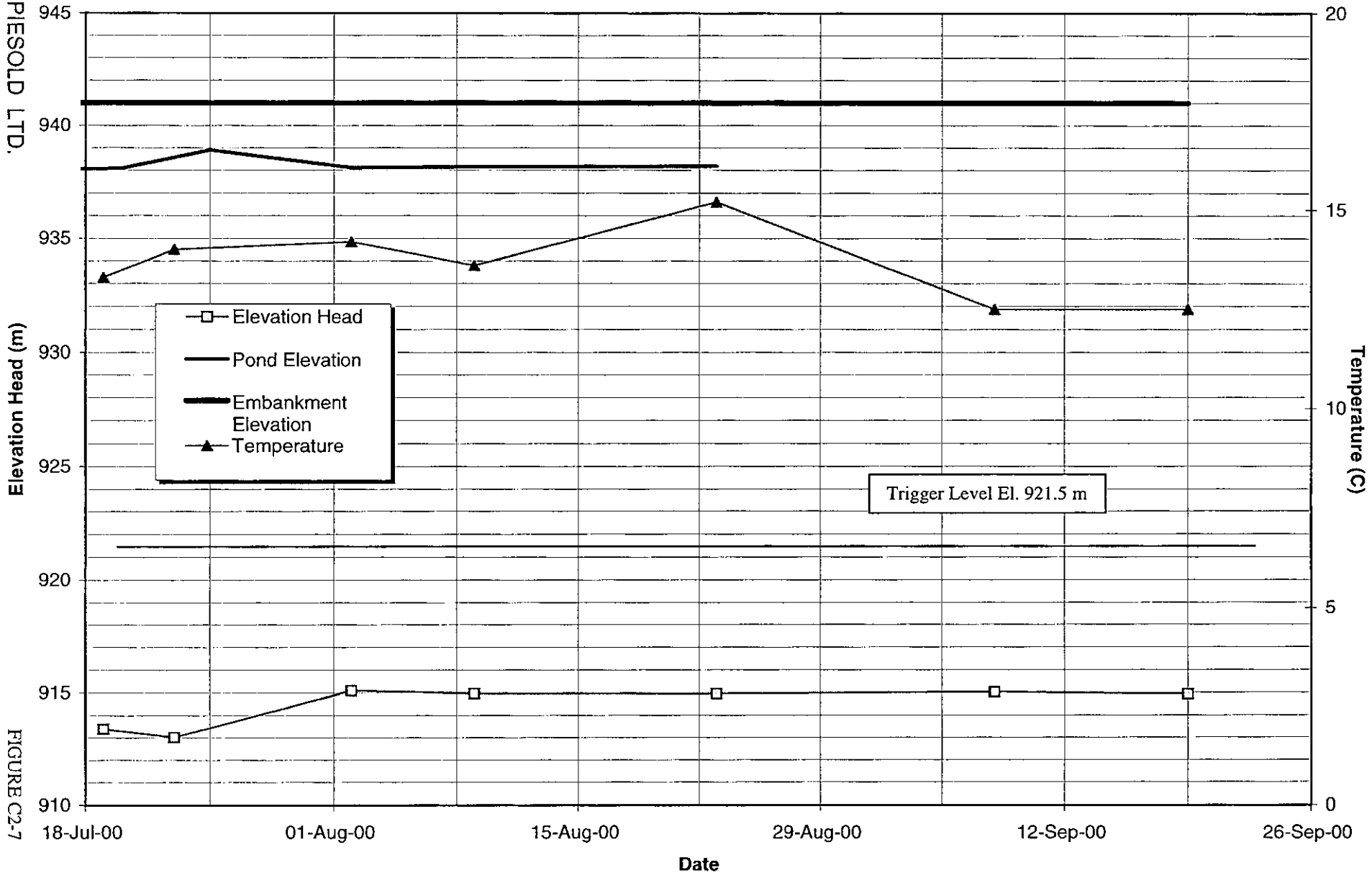


FIGURE C2-7

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE2-01
(Foundation Piezometer El. 902.0 m)

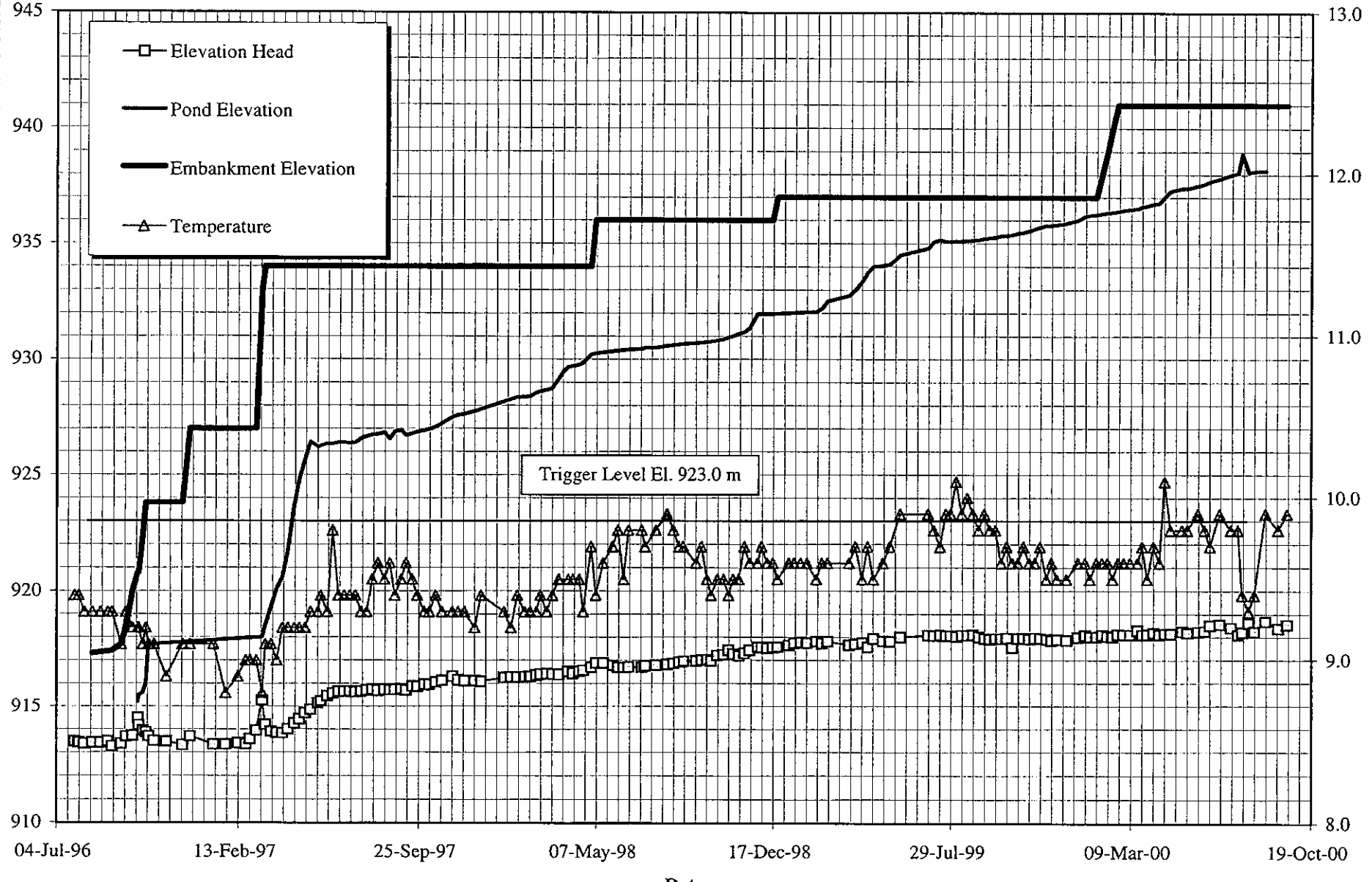


FIGURE C2-8

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE2-02
(Foundation Piezometer El. 909.5 m)

FIGURE C2-9

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE2-06
(Foundation Piezometer El. 914.6 m)

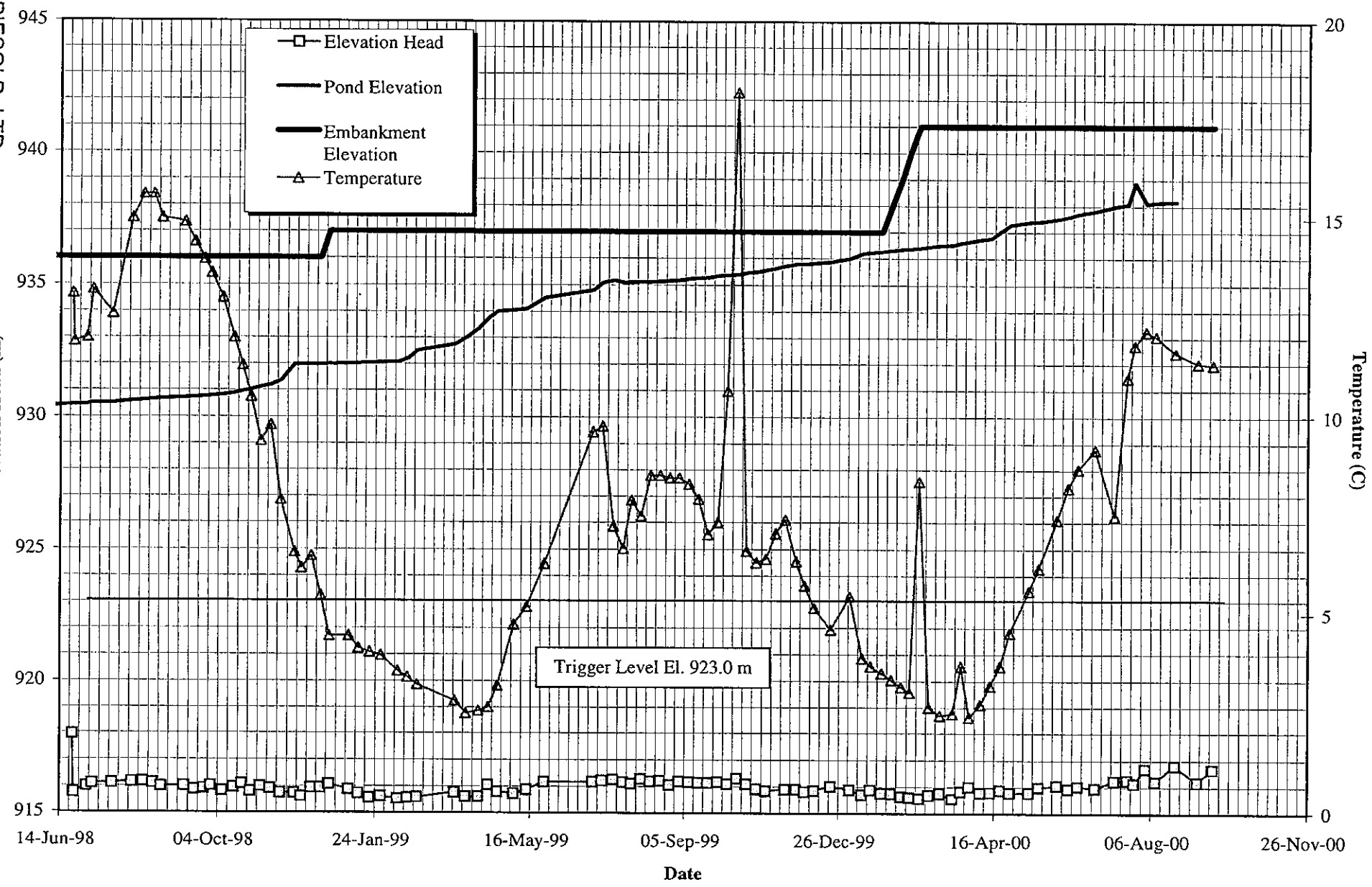


FIGURE C2-10

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE1-03
(Foundation Piezometer El. 912.6 m)

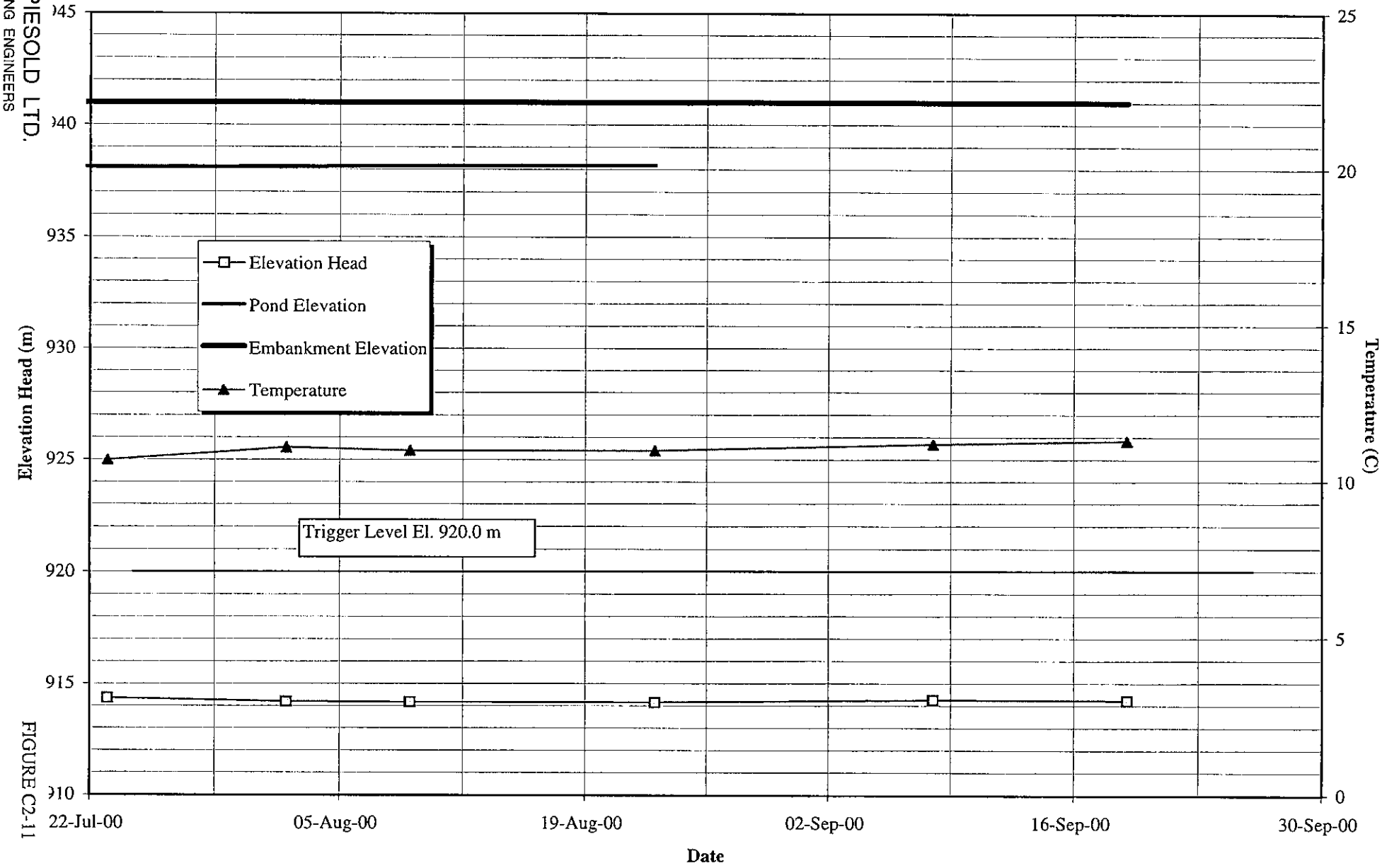


FIGURE C2-11

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE2-01
(Foundation Piezometer El. 907.5 m No Longer Functioning)

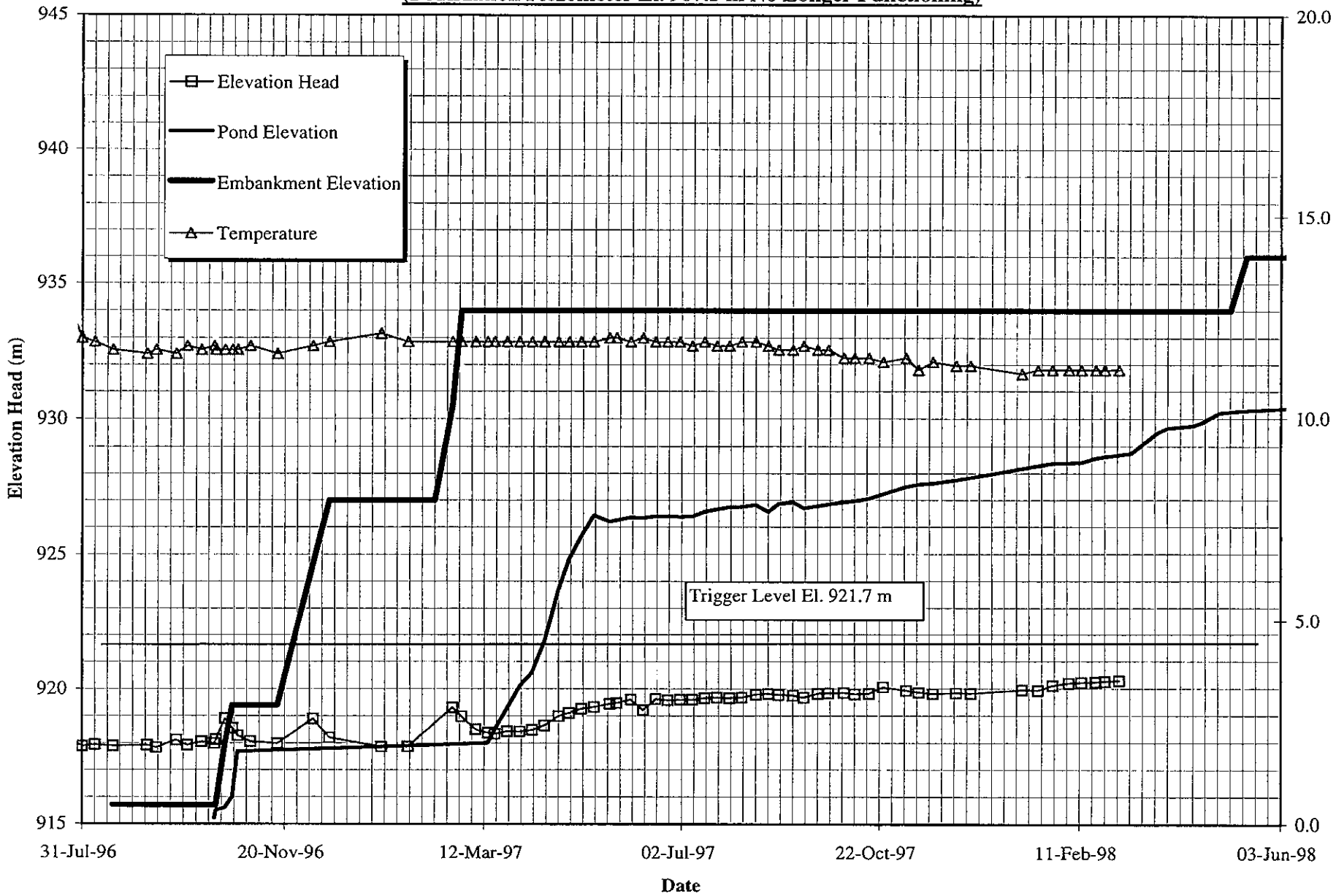


FIGURE C2-12

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE2-02
(Foundation Piezometer El. 910.5 m)

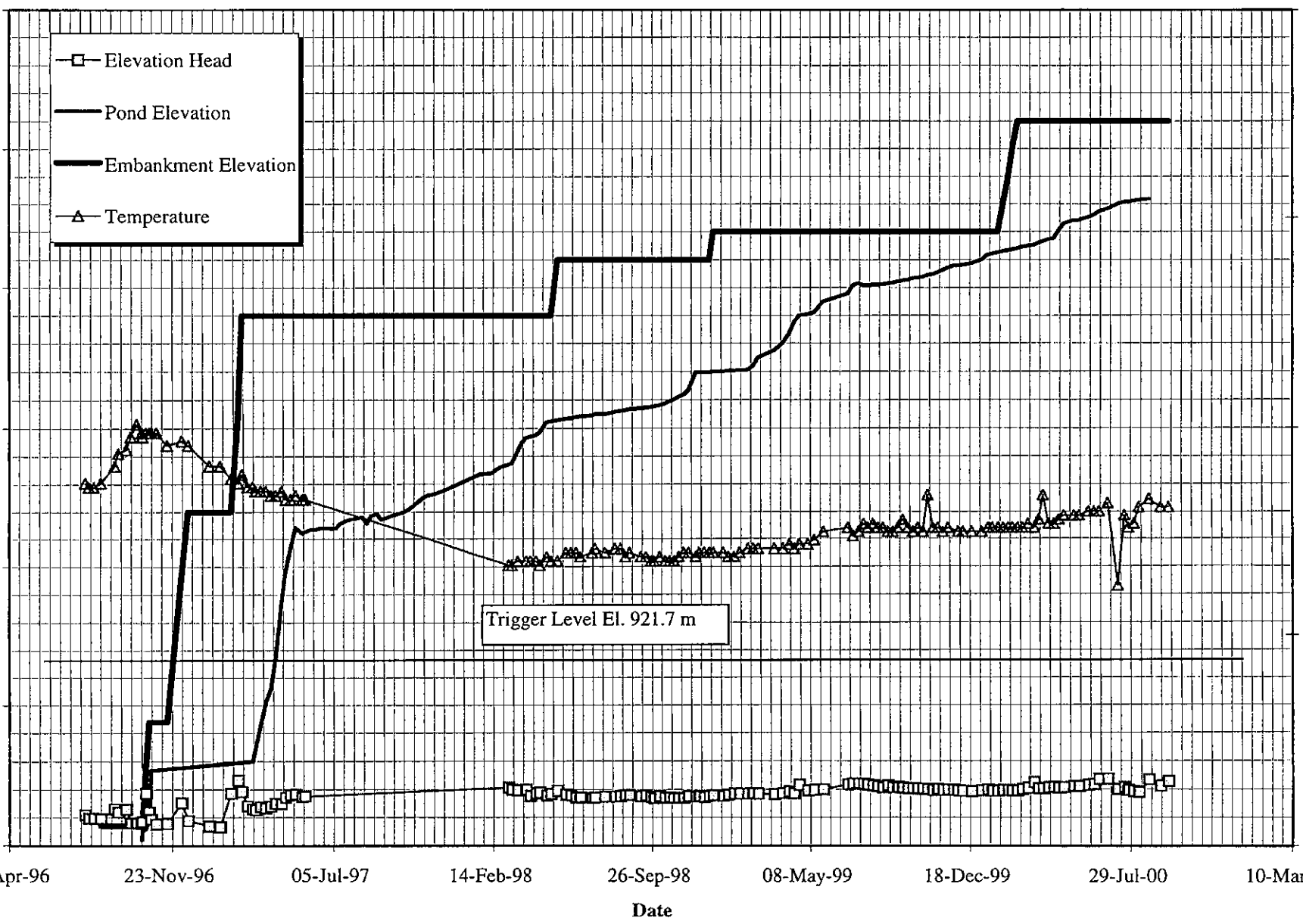


FIGURE C2-13

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE2-06
(Foundation Piezometer El. 906.8 m)

FIGURE C2-14

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE2-07
(Foundation Piezometer El. 912.3 m)

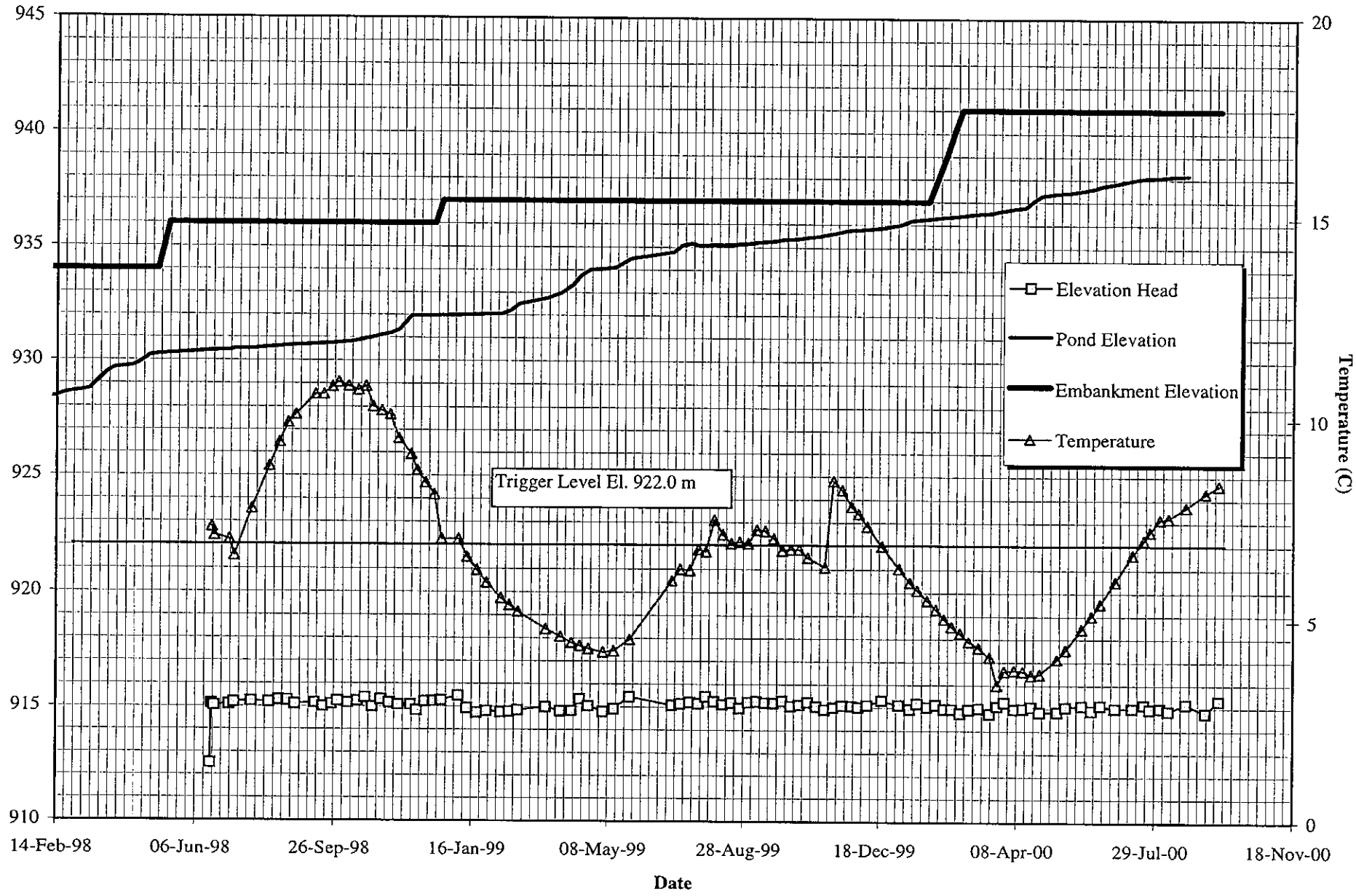


FIGURE C2-15

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE2-08
(Foundation Piezometer El. 914.0 m)

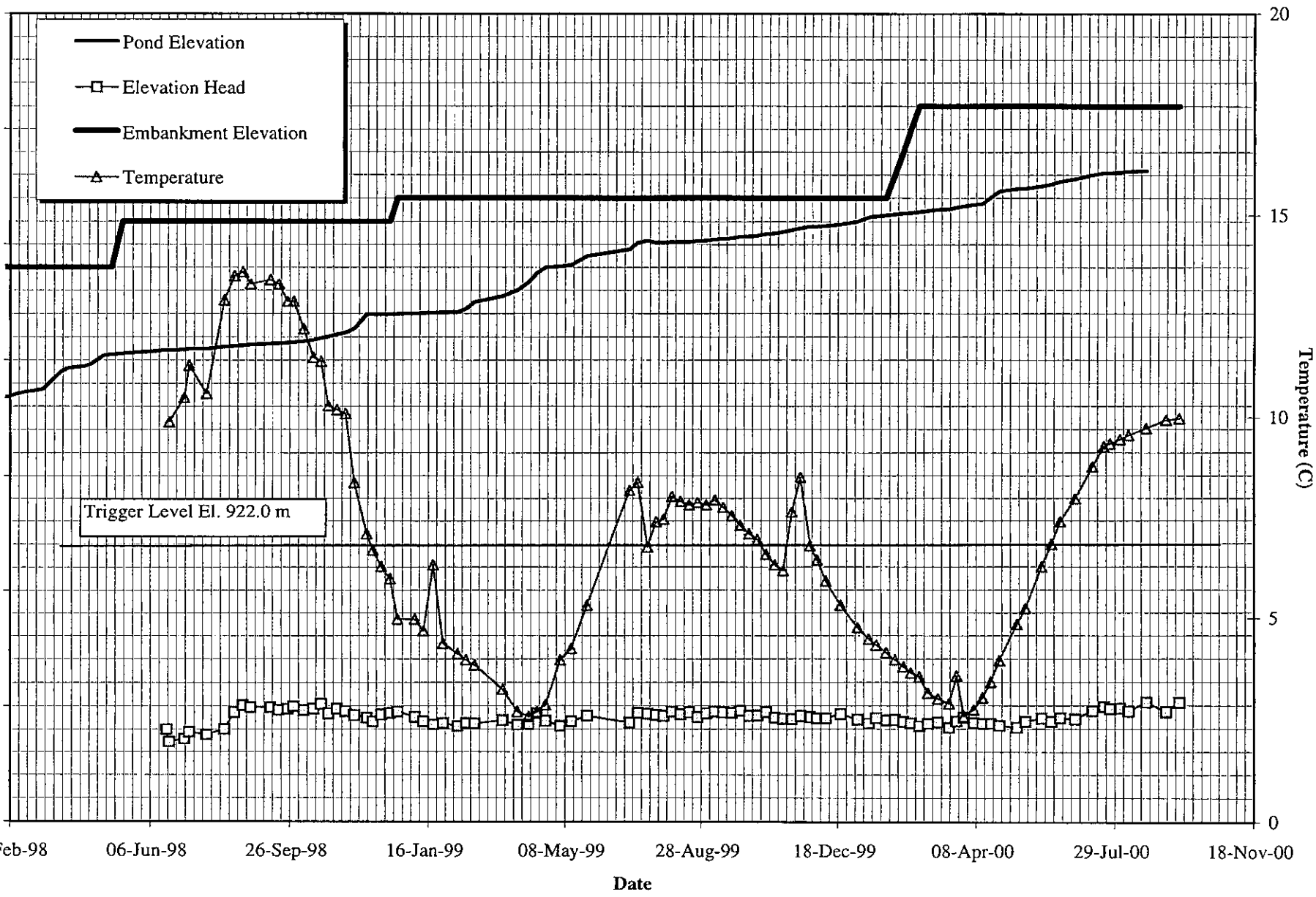


FIGURE C2-16

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER D2-PE2-02
(Foundation Piezometer El. 927.3 m)

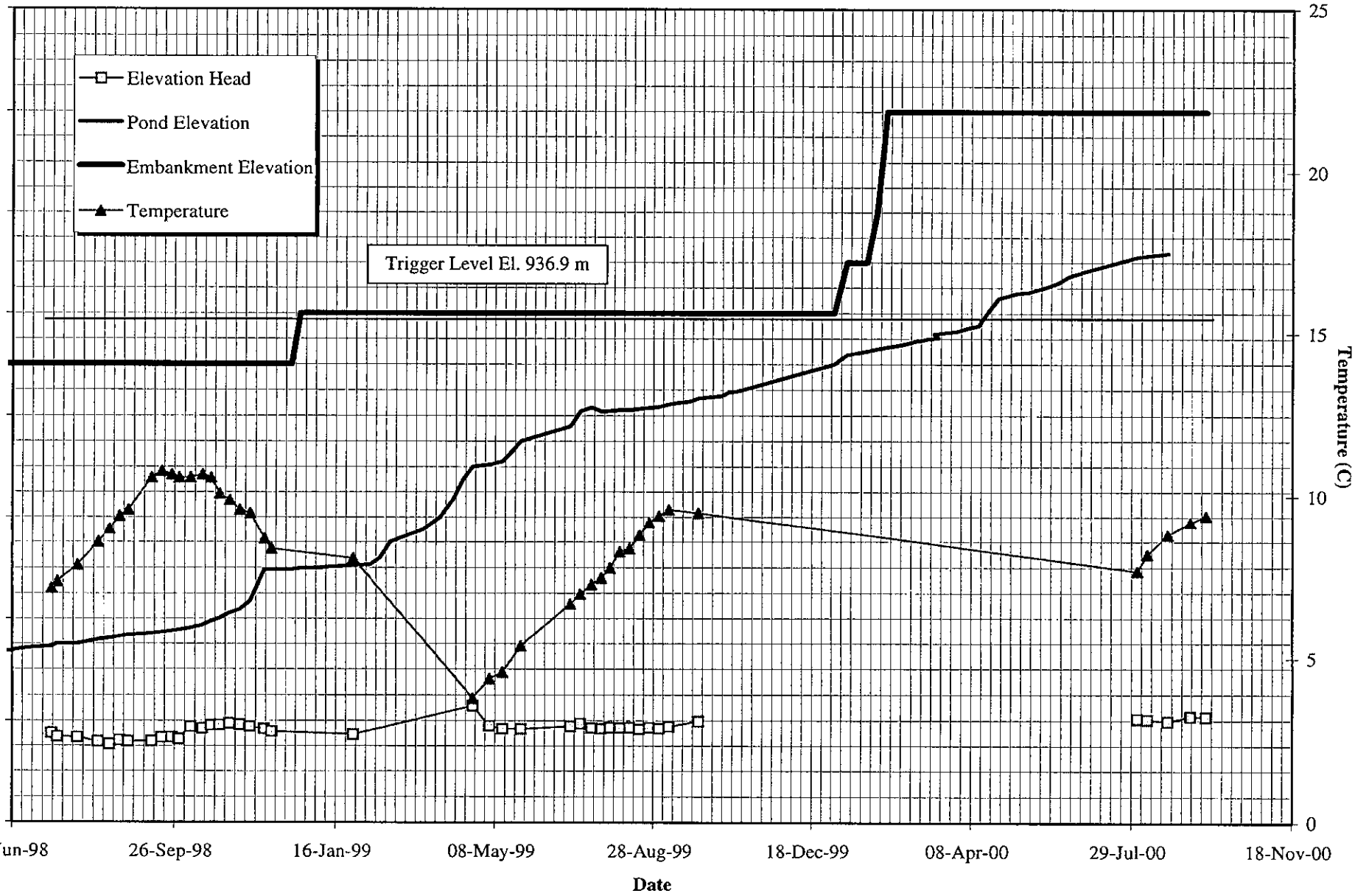


FIGURE C2-17

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER E2-PE2-01
(Tailings Piezometer El. 914.21 m)

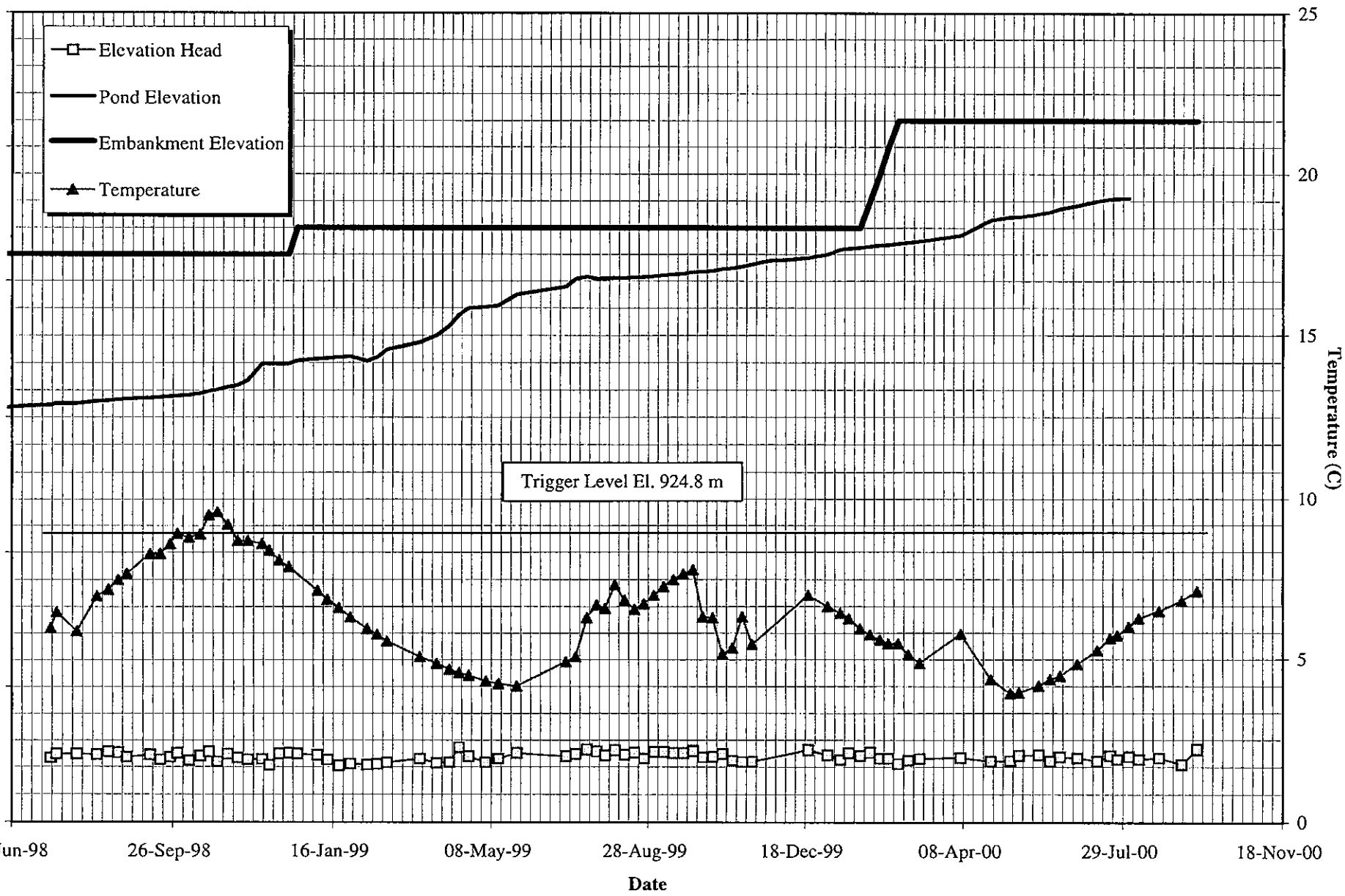
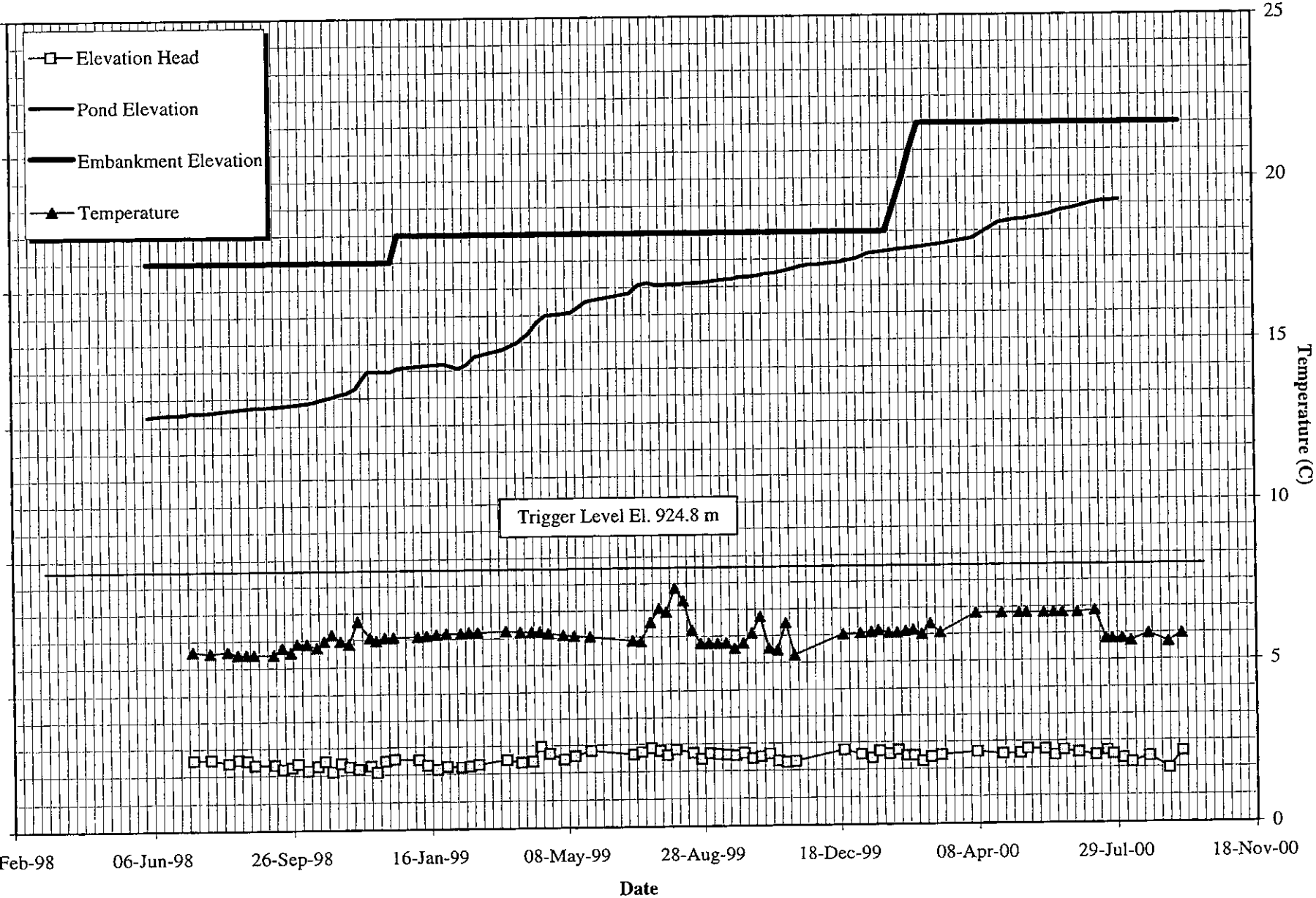


FIGURE C2-18

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER E2-PE2-02
(Foundation Piezometer El. 909.66 m)



KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

FIGURE C2-19

APPENDIX C3

EMBANKMENT FILL PIEZOMETERS

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE1-01
(Zone T El. 912.9 m)

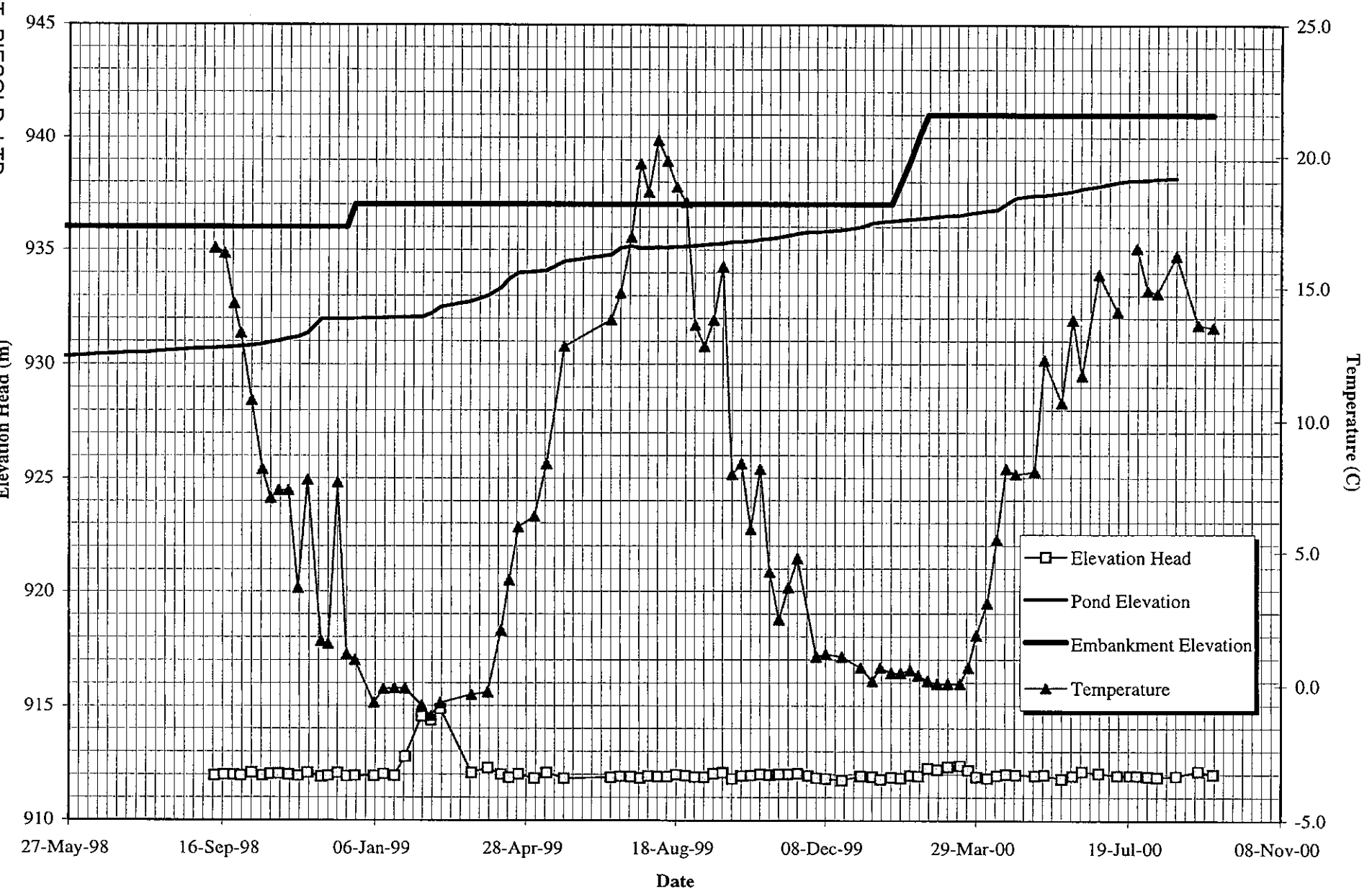


FIGURE C3-1

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE1-02
(Glacial Till Fill Piezometer El. 938.47 m)

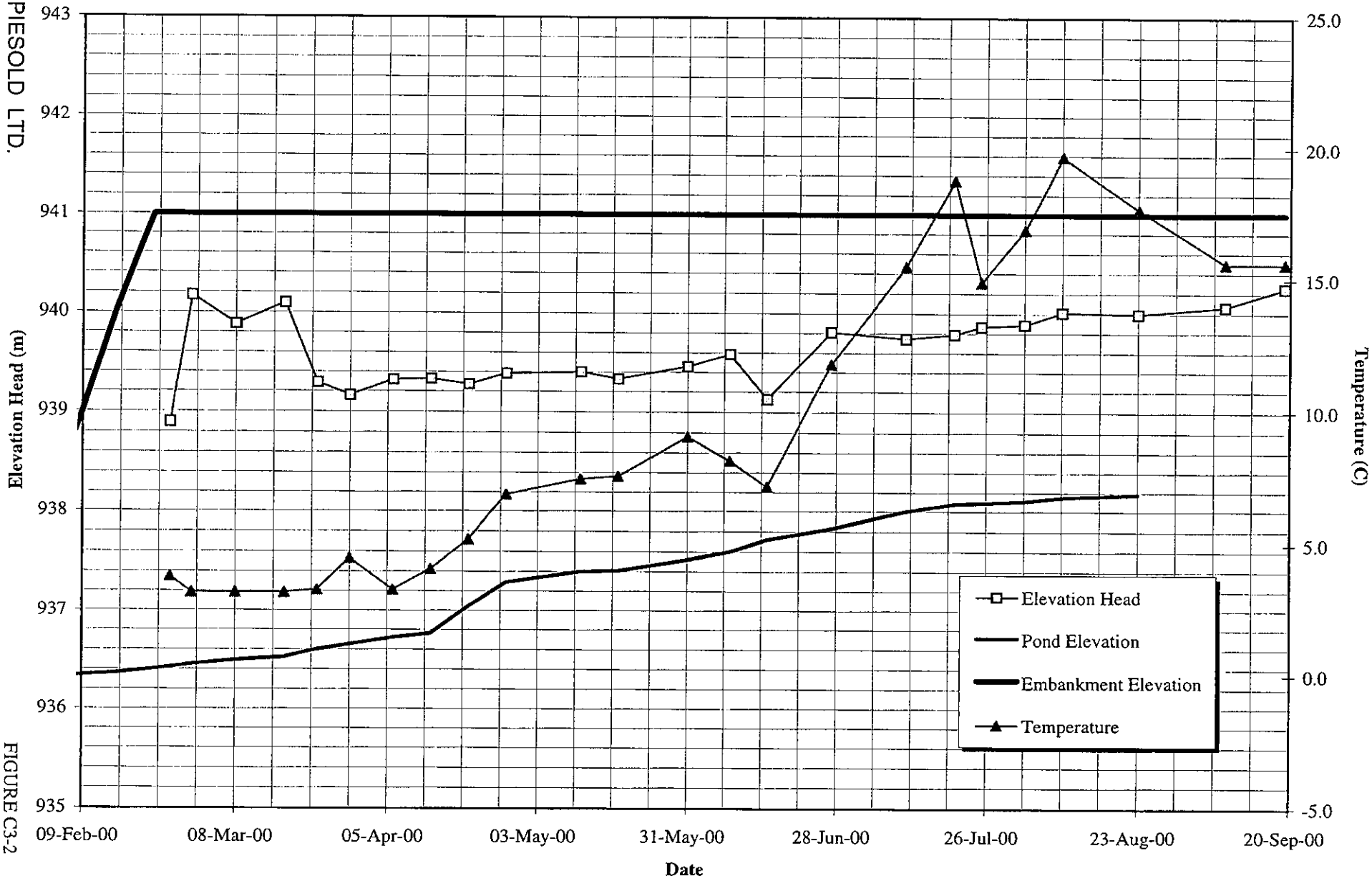


FIGURE C3-2

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE2-03
(Glacial Till Fill Piezometer El. 919.4 m)

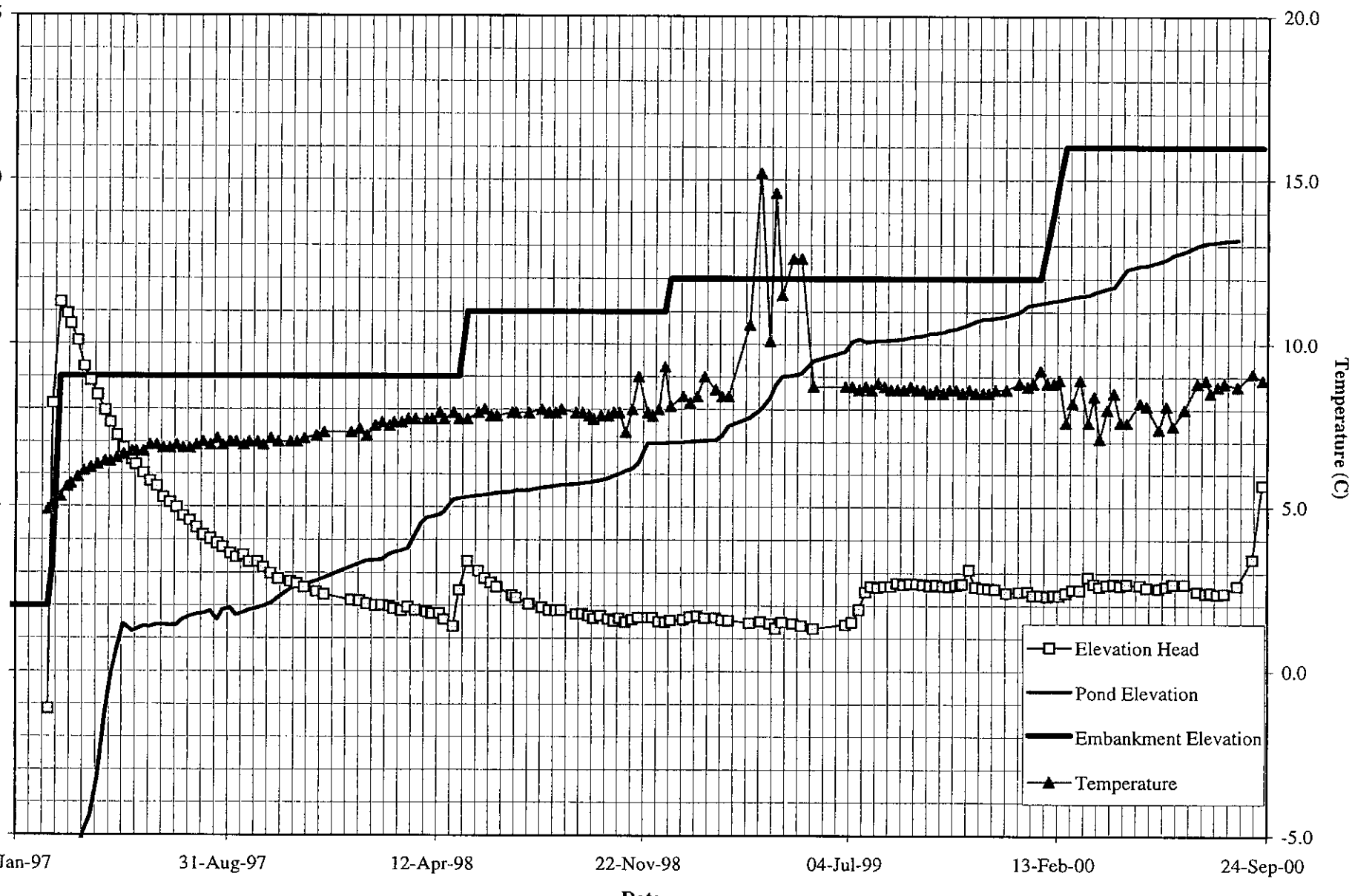


FIGURE C3-3

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE2-04
(Glacial Till Fill Piezometer El. 926.1 m, No Longer Functioning)

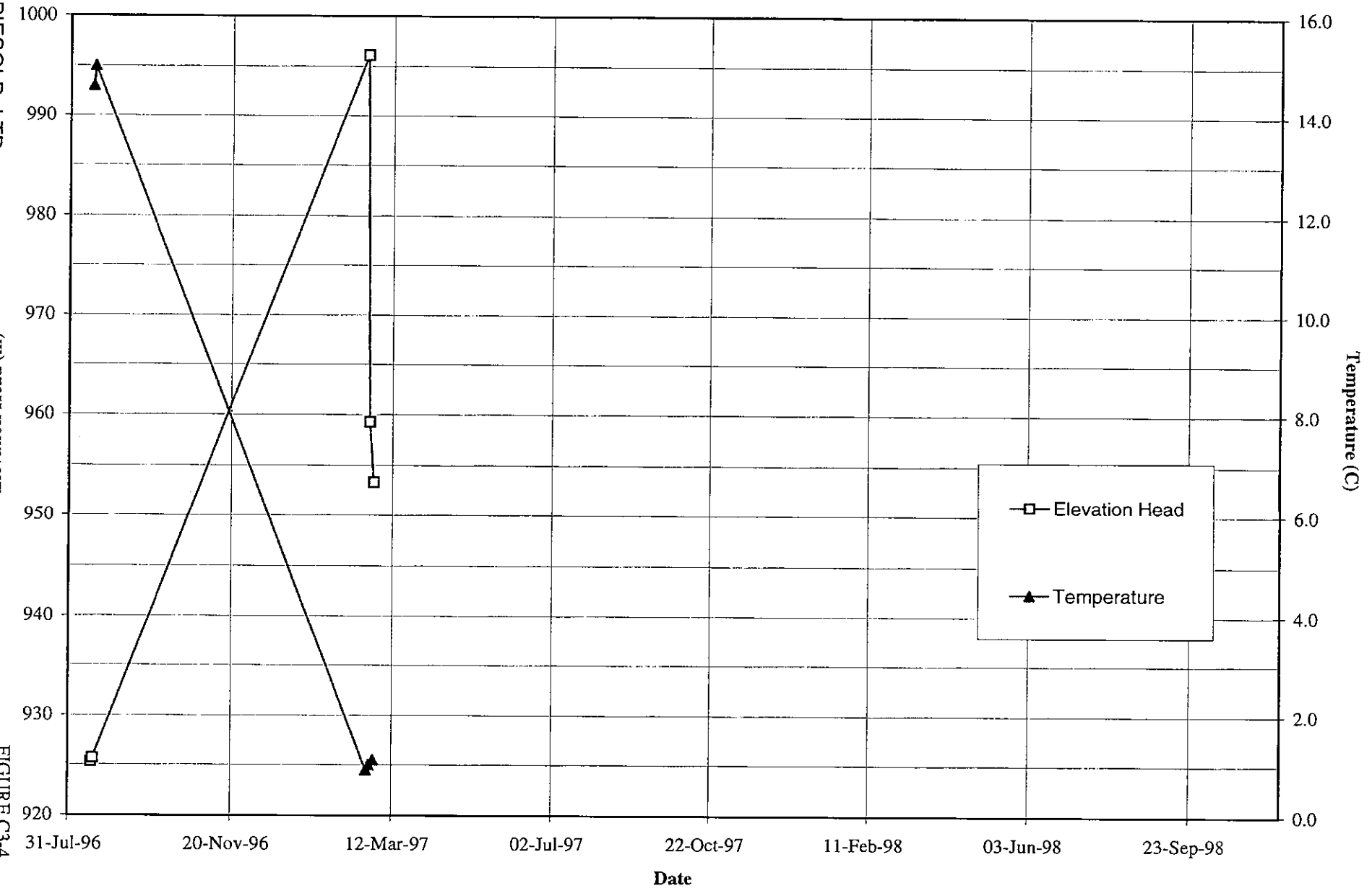


FIGURE C3-4

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A2-PE2-05
(Glacial Till Fill Piezometer El. 921.9 m)

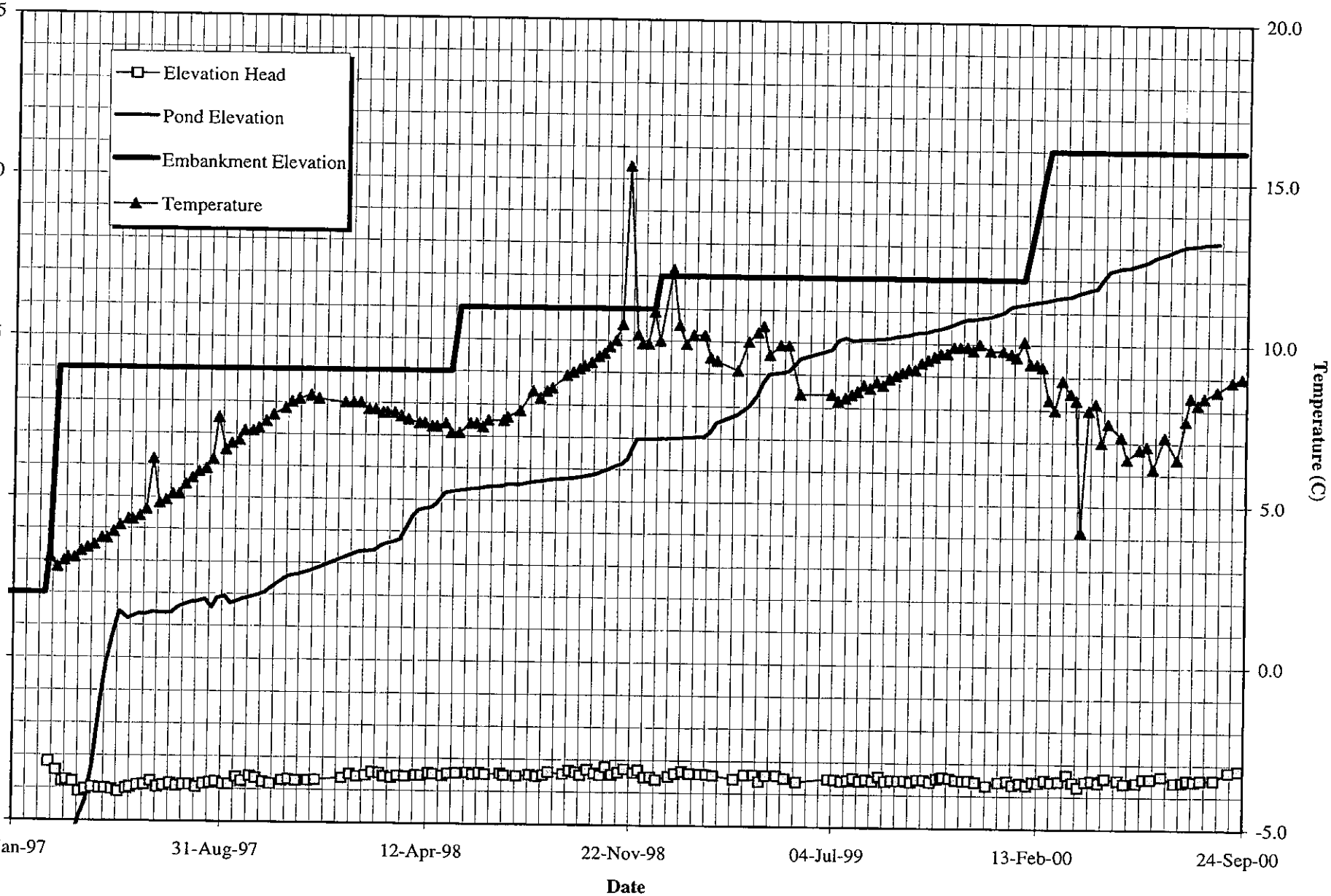


FIGURE C3-5

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE1-01
(Zone T Piezometer El. 916.27 m)

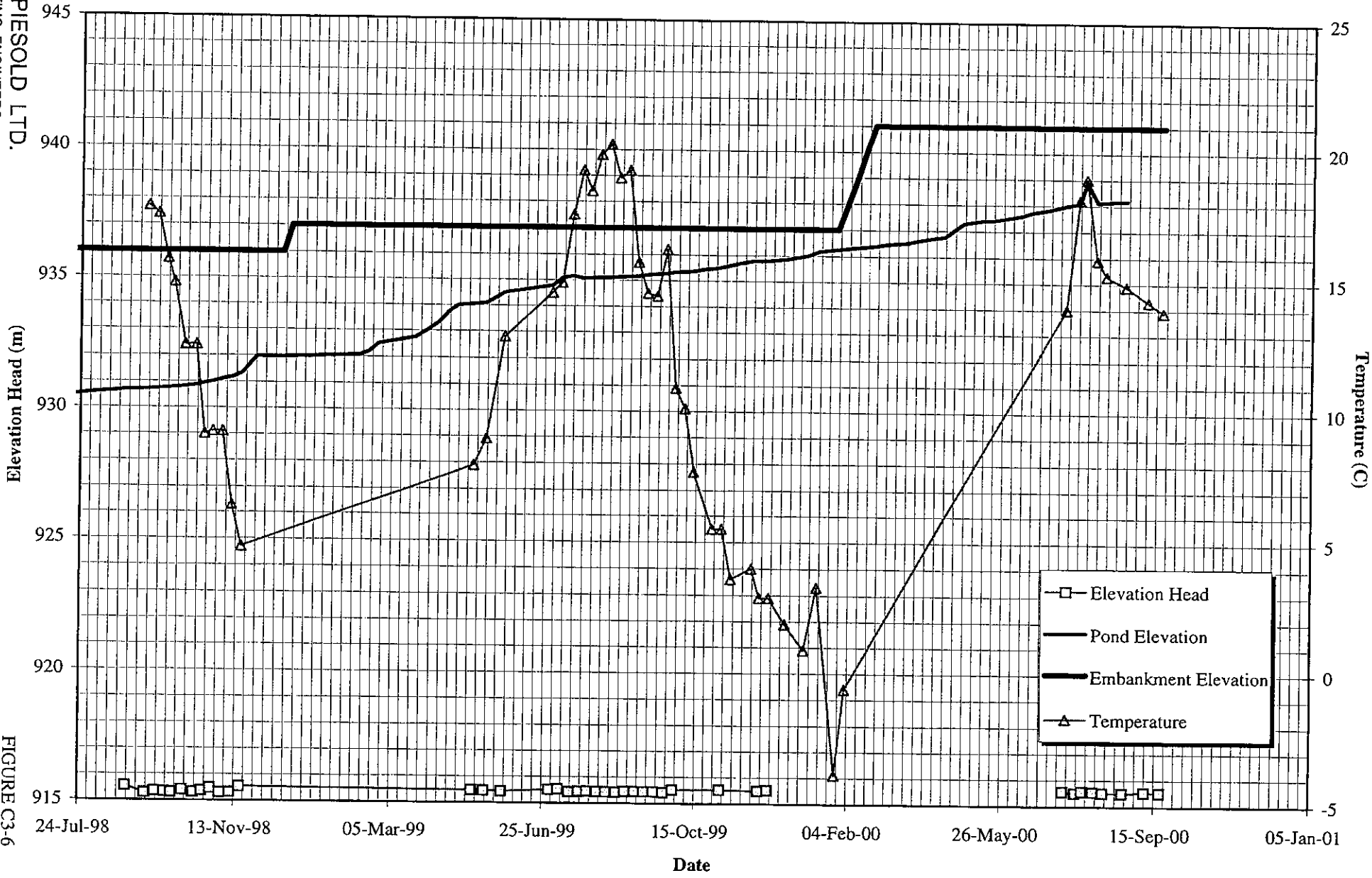


FIGURE C3-6

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE1-02
(Glacial Till Fill Piezometer El. 939.4 m)

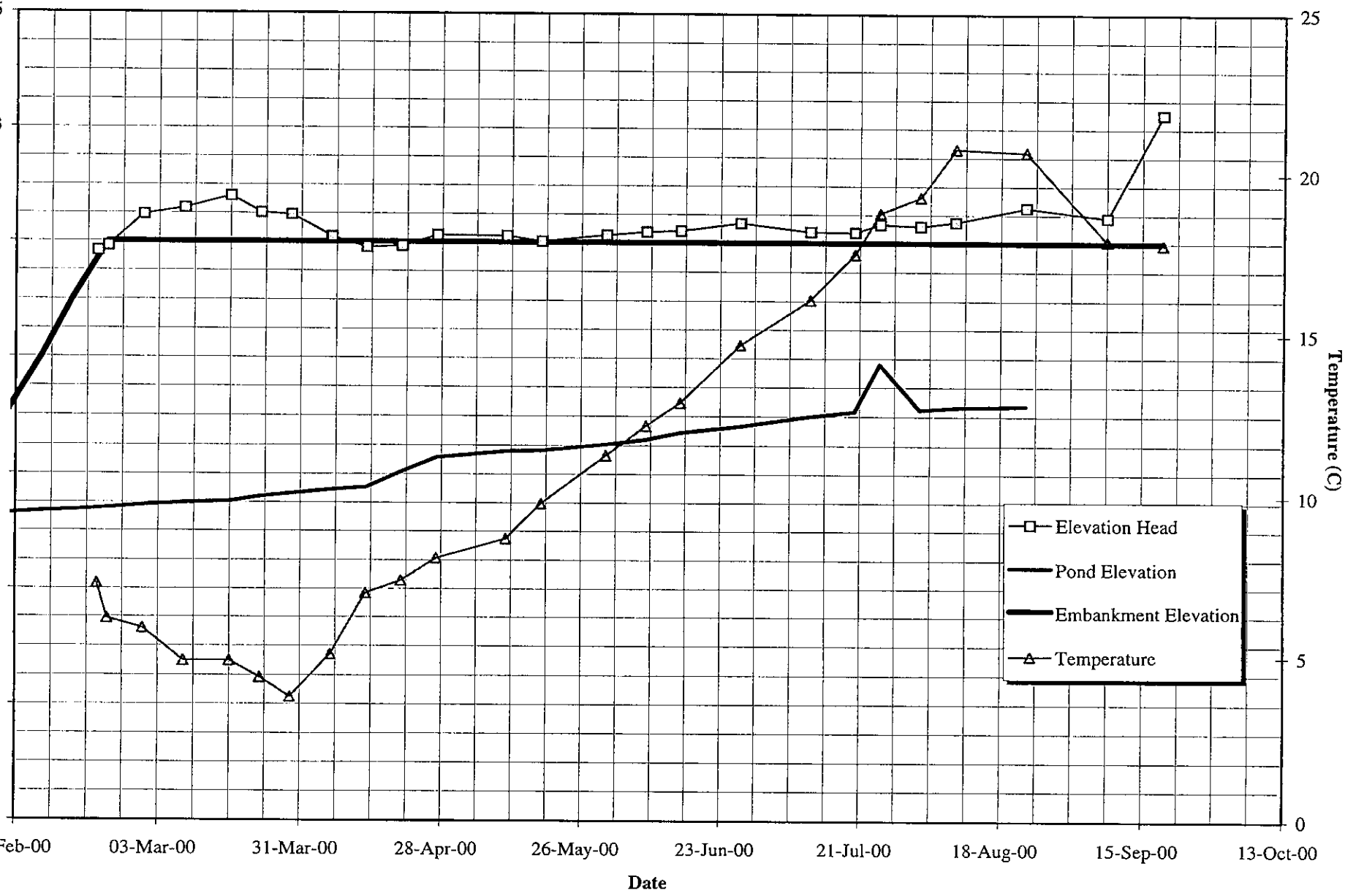


FIGURE C3-7

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE2-03
(Glacial Till Fill El. 921.0 m)

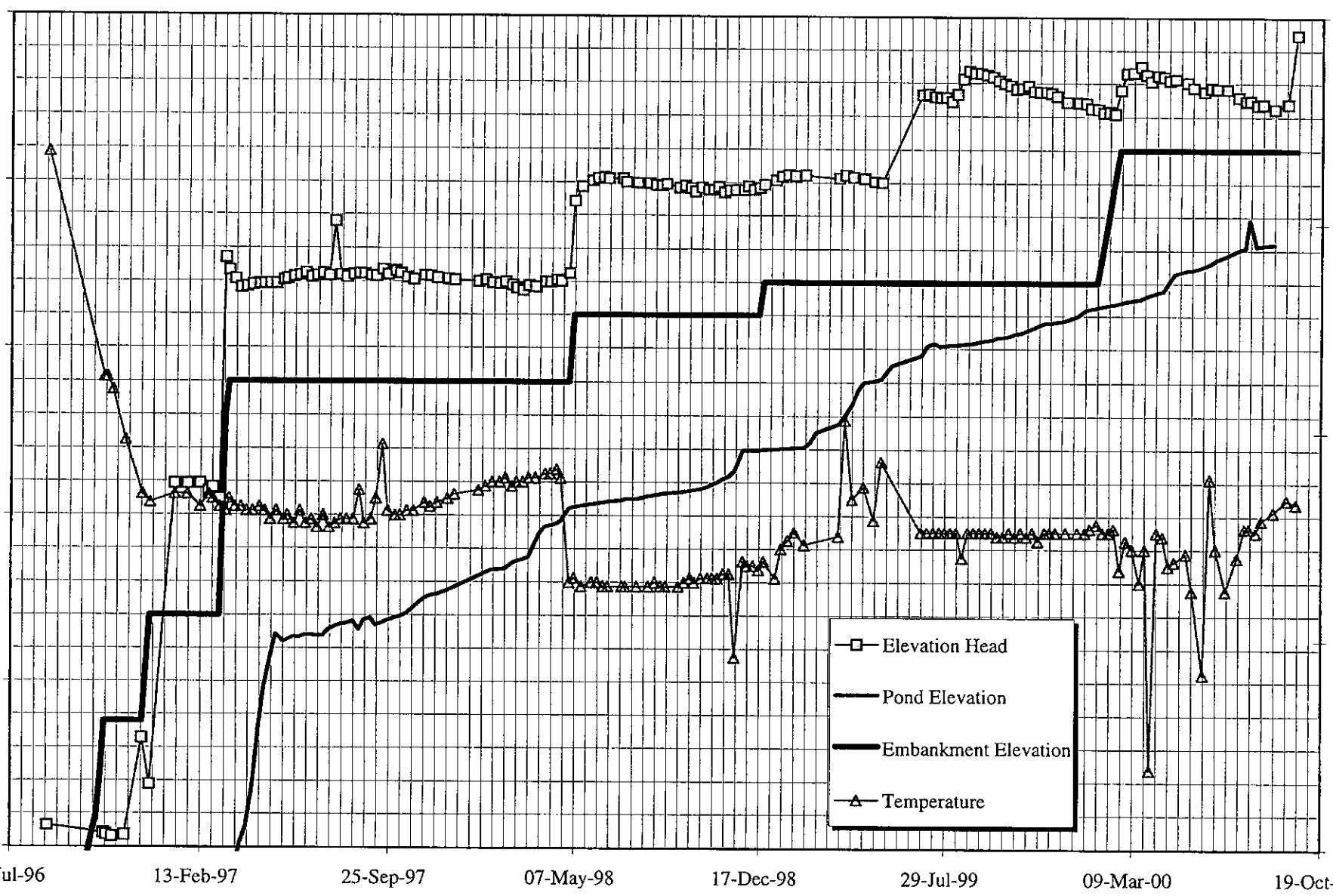


FIGURE C3-8

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE2-04
(Glacial Till Fill El. 921.0 m)

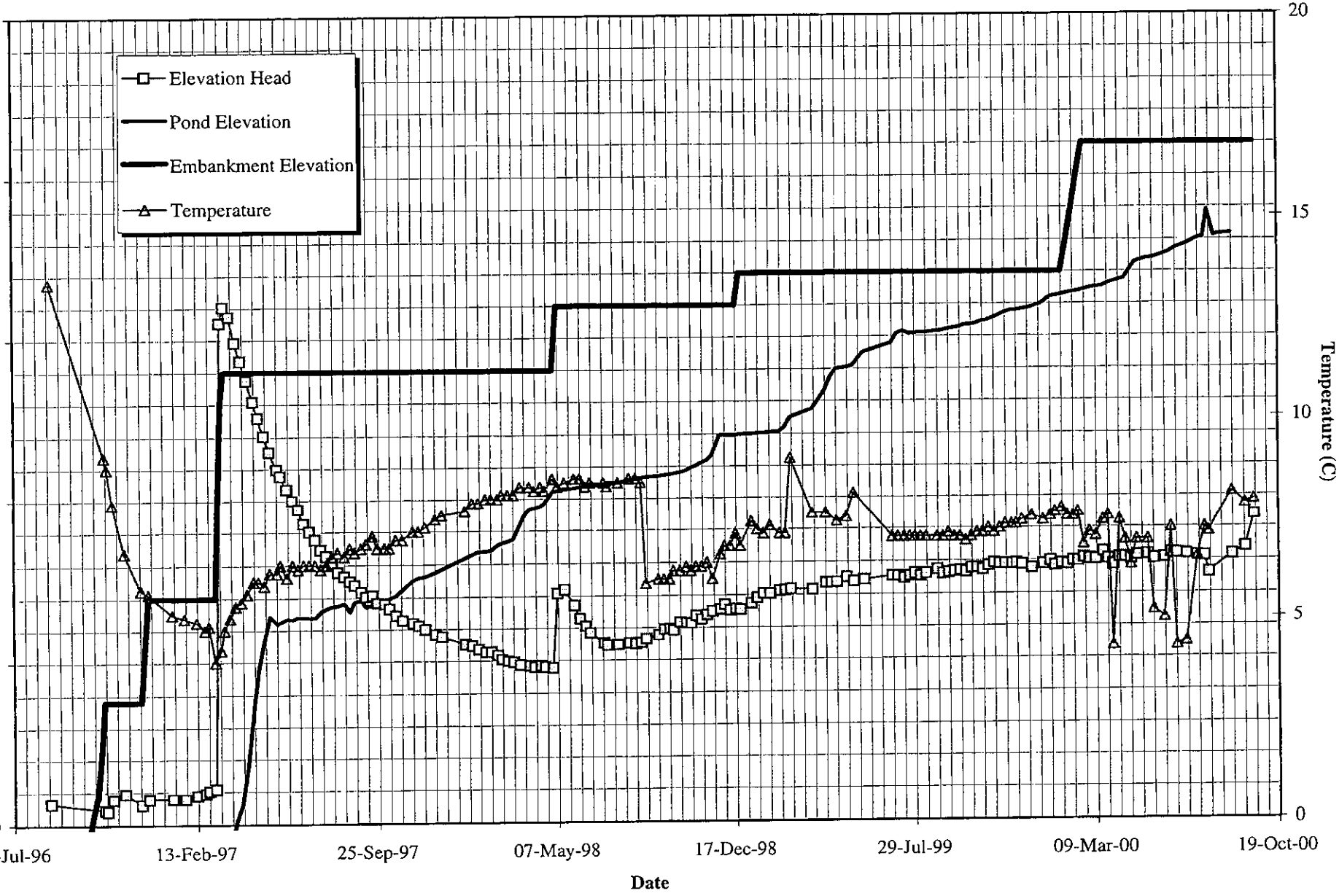


FIGURE C3-9

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B2-PE2-05
(Glacial Till Fill El. 921.7 m)

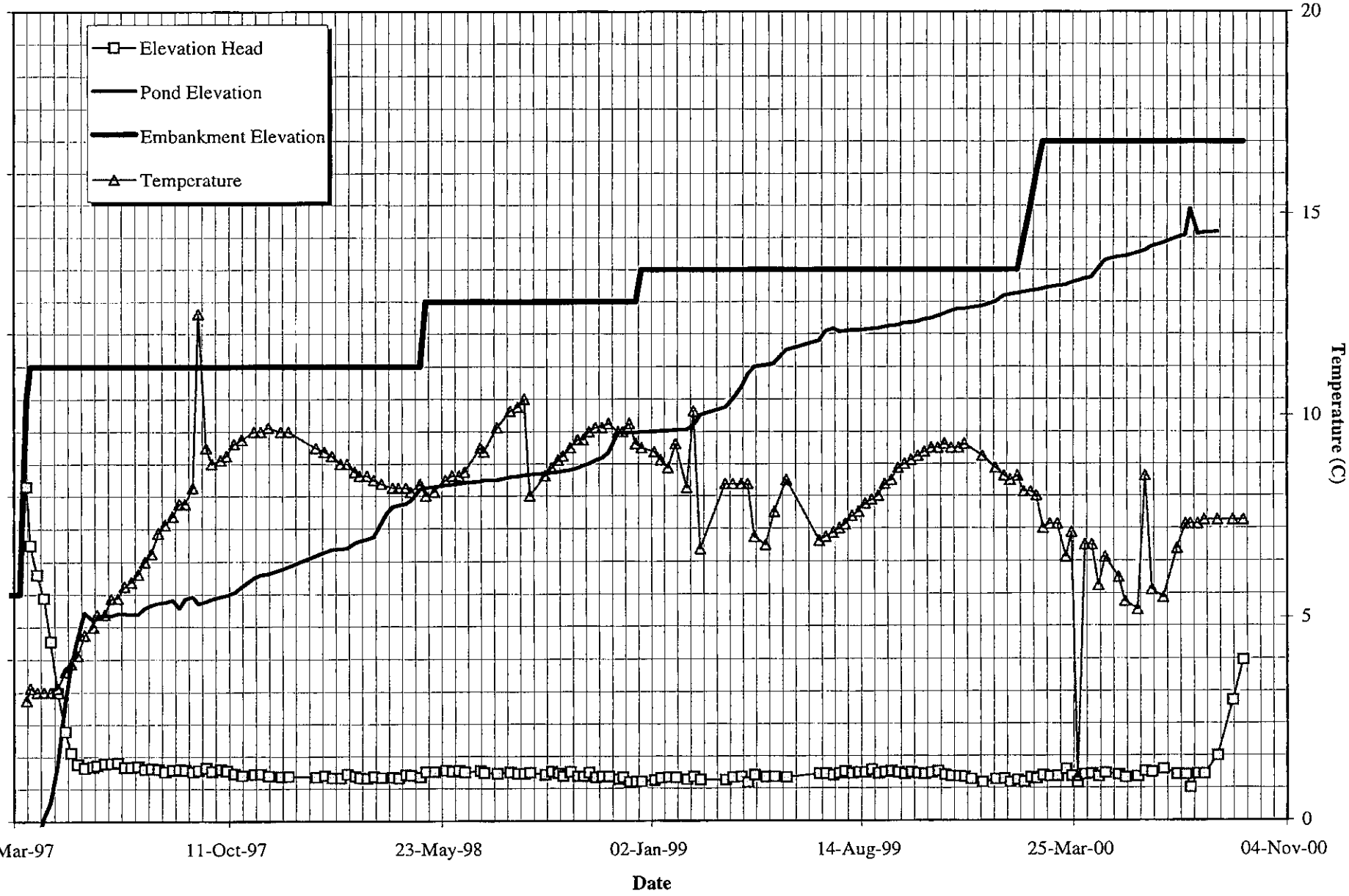


FIGURE C3-10

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE1-01
(Zone T Fill Piezometer El. 915.0 m)

FIGURE C3-11

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE1-02
(Glacial Till Fill Piezometer El. 938.5 m)

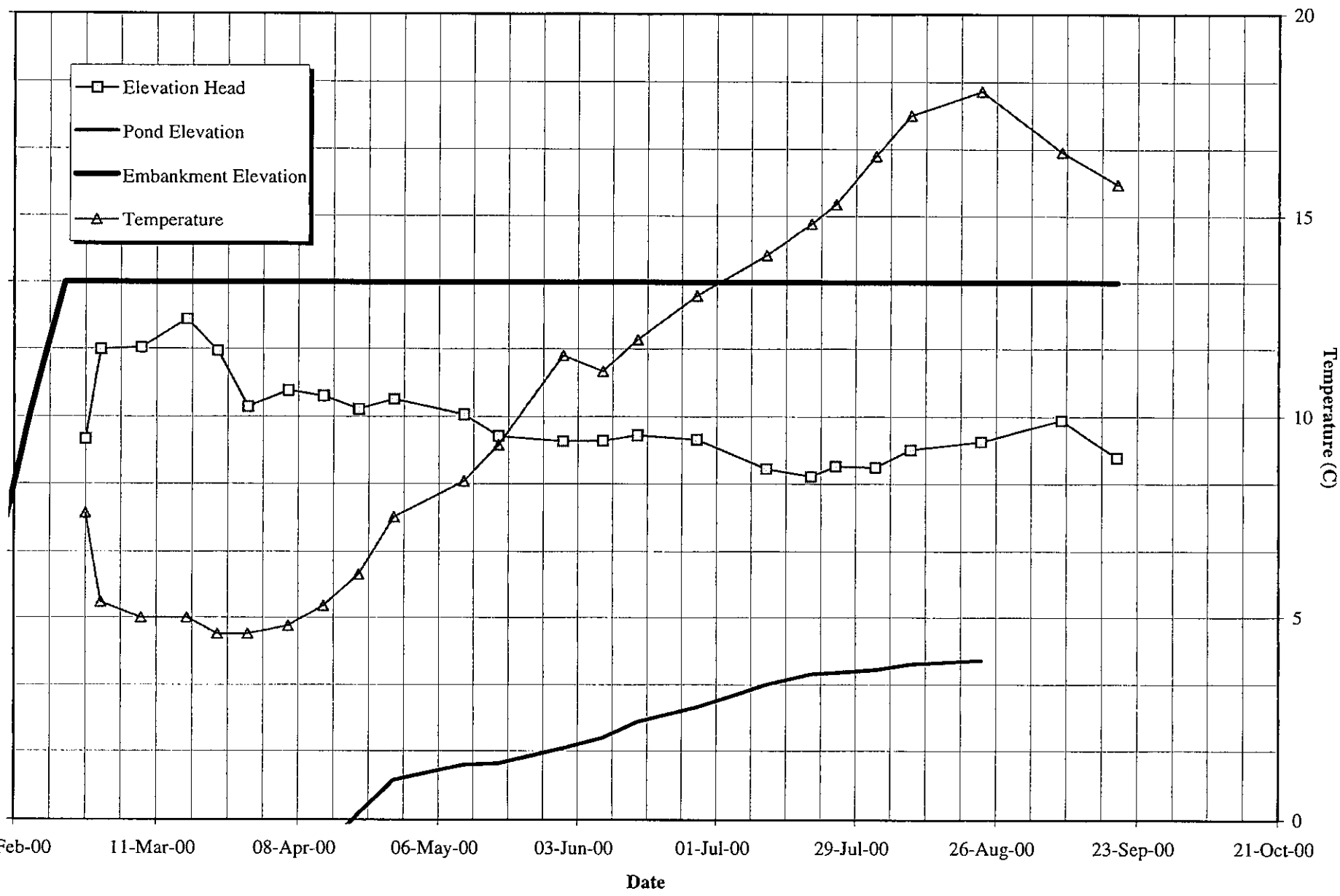


FIGURE C3-12

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE2-03
(Glacial Till Fill Piezometer El. 921 m)

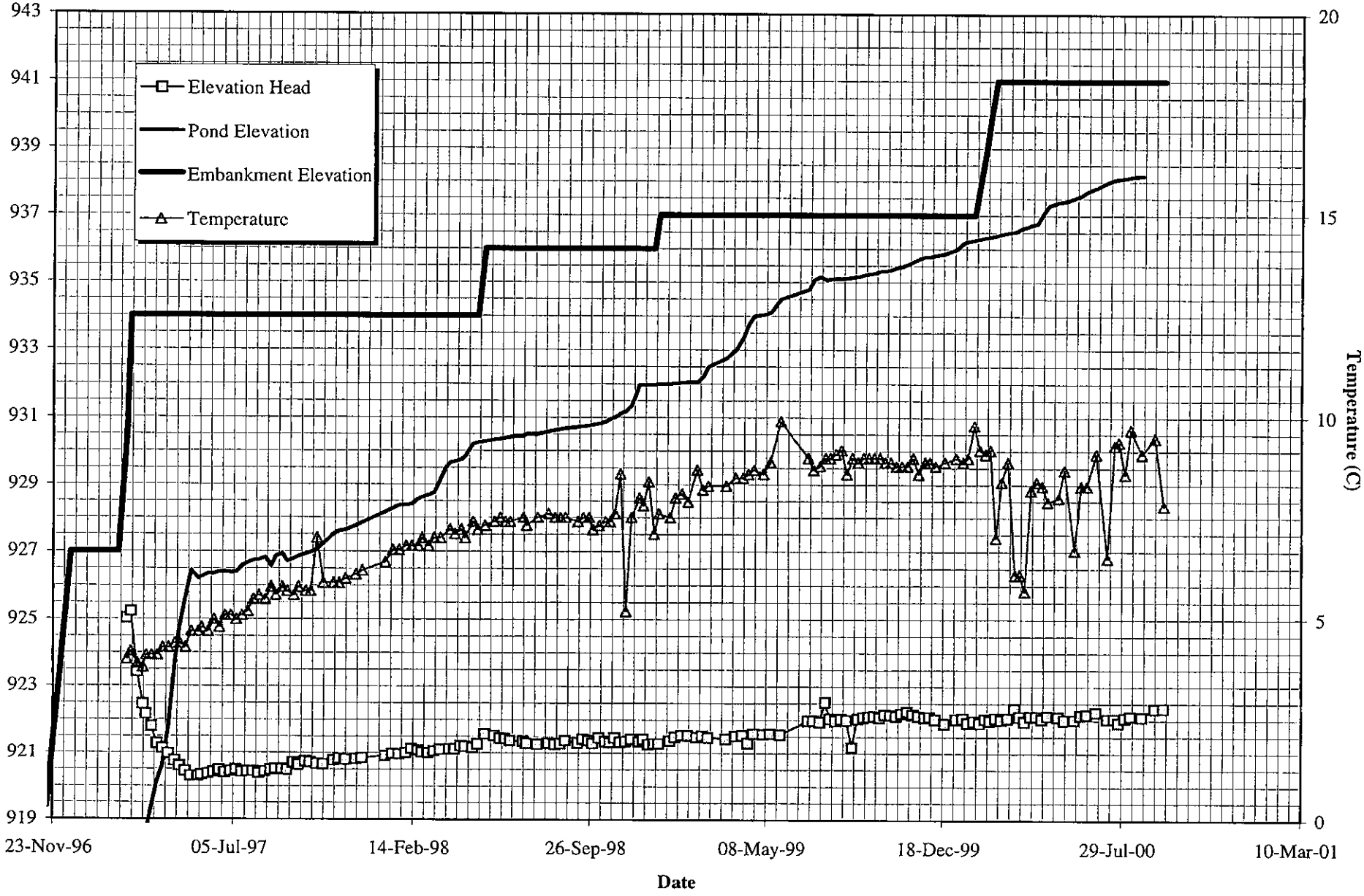


FIGURE C3-13

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C2-PE2-05
(Glacial Till Fill Piezometer El. 924.8 m)

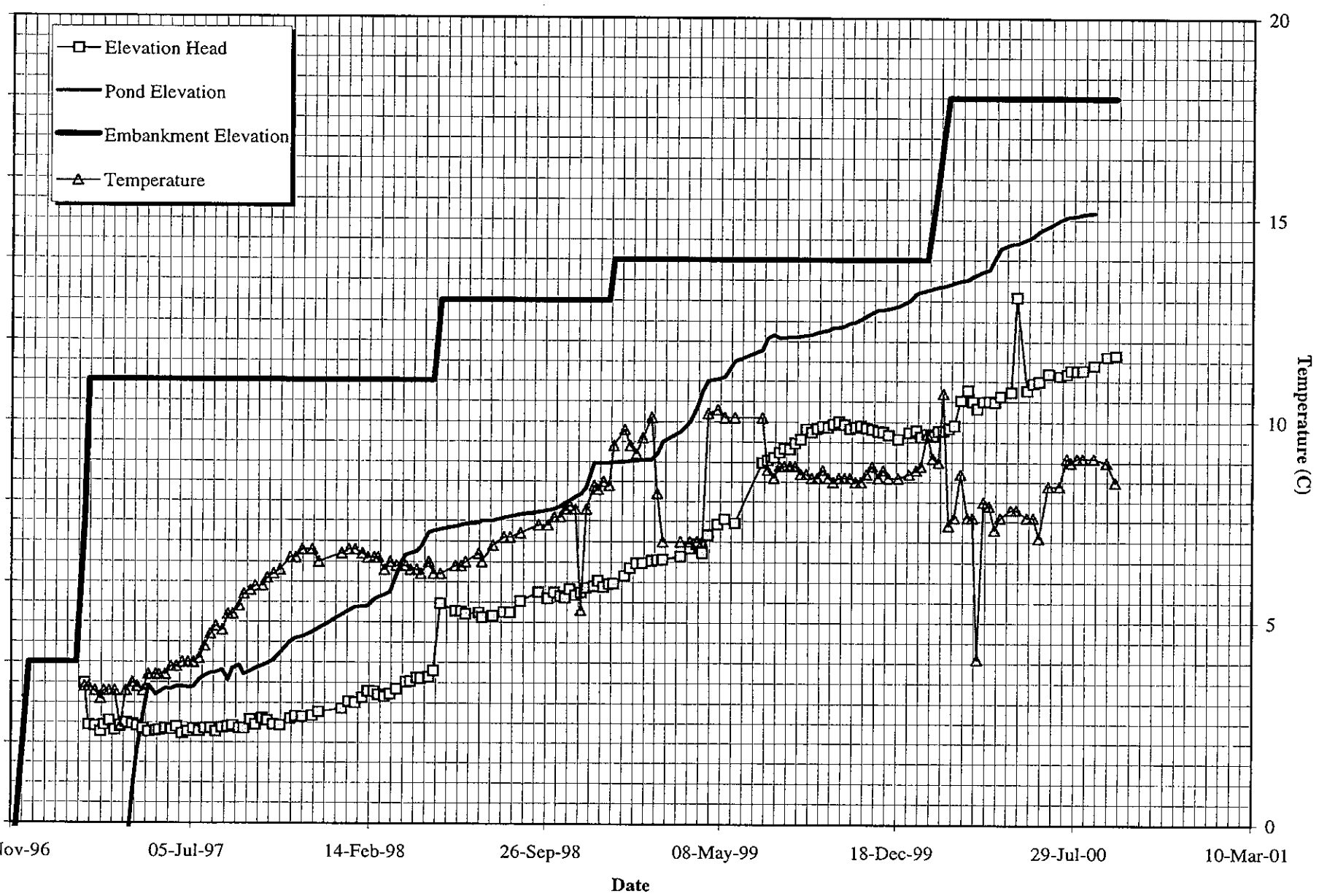


FIGURE C3-14

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER D2-PE1-01
(Zone T Piezometer El. 930.4 m)

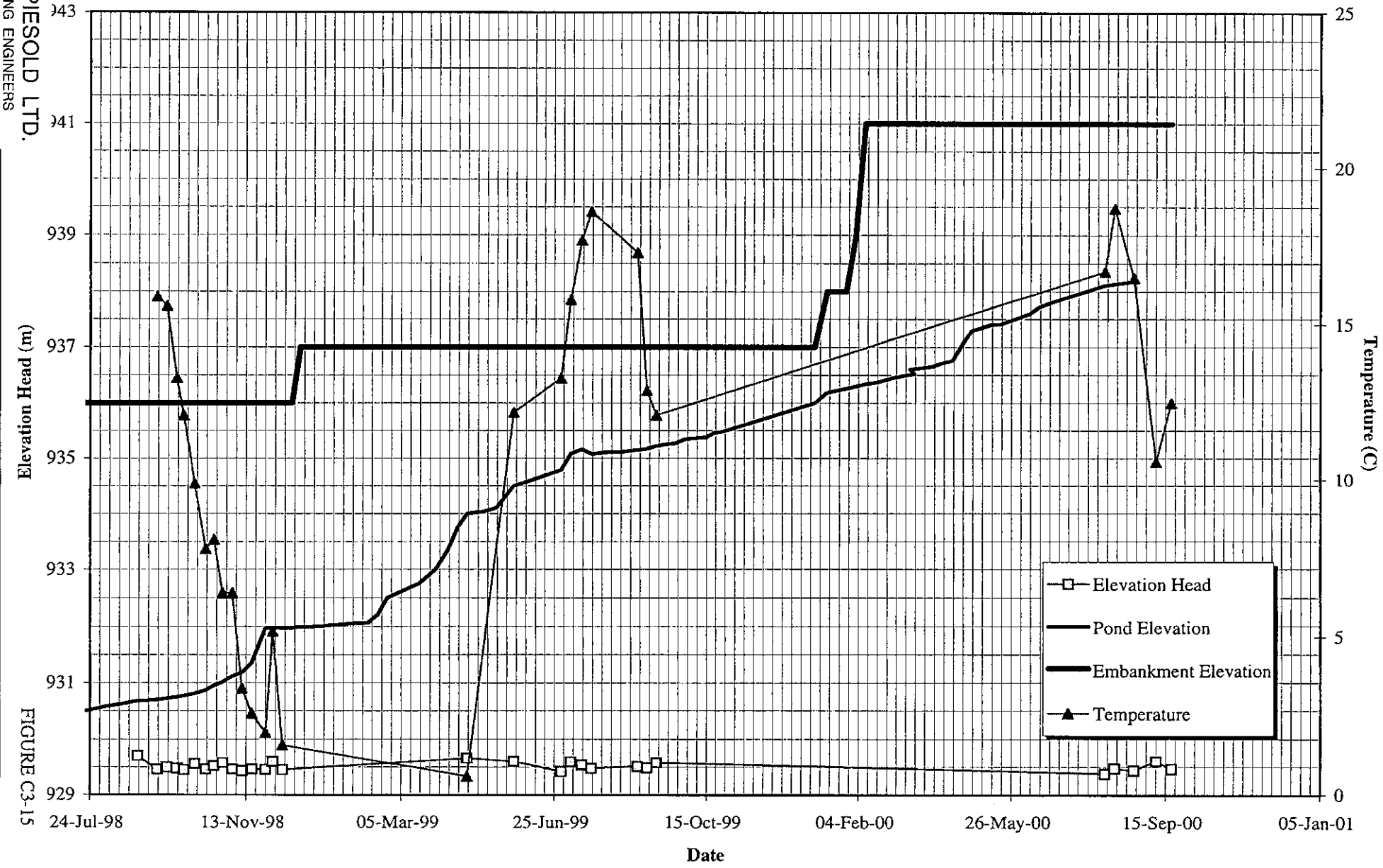


FIGURE C3-15

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER D2-PE2-01
(Glacial Till Fill Piezometer El. 931 m)

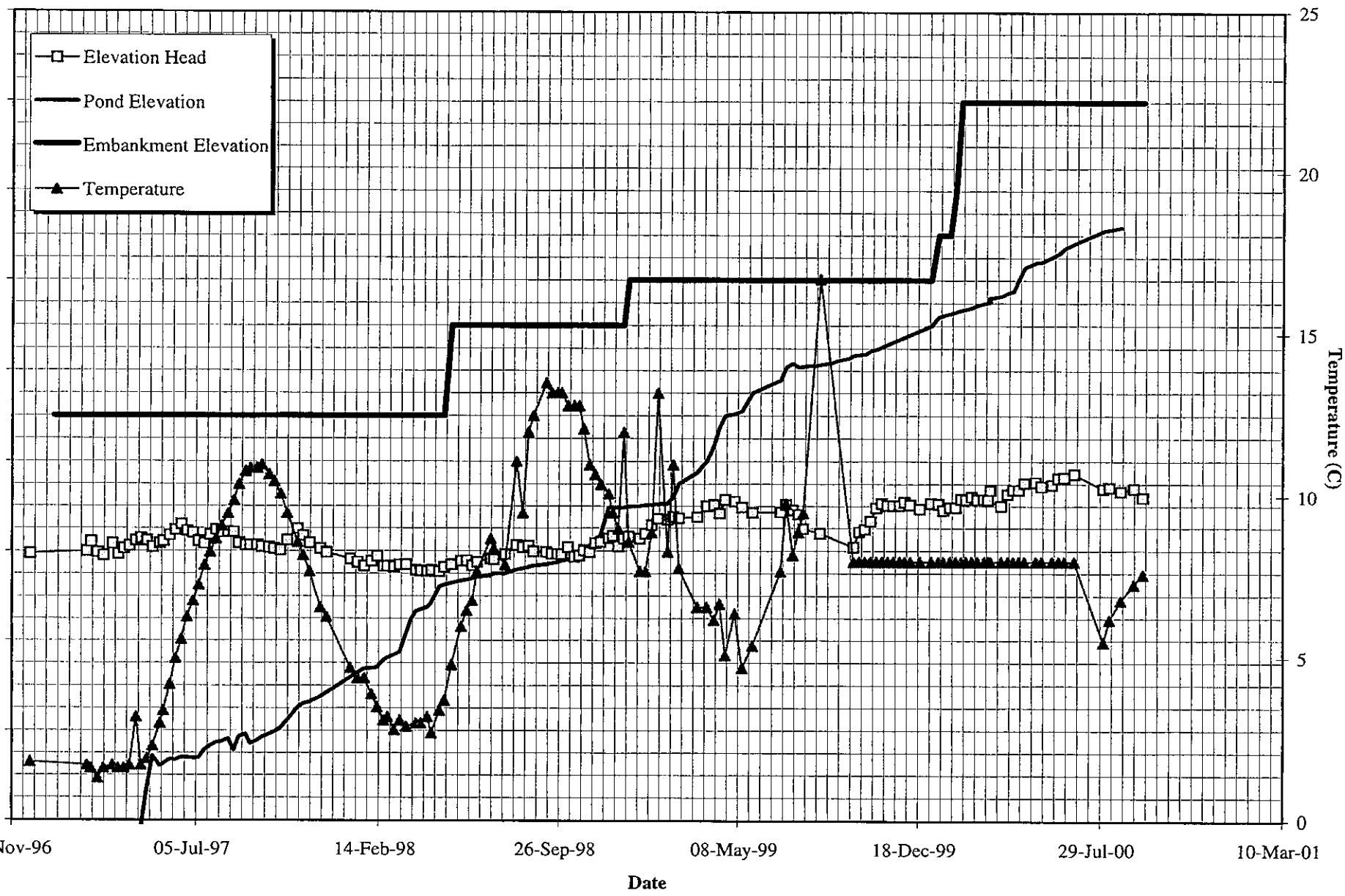


FIGURE C3-16

APPENDIX C4

DRAIN PIEZOMETERS

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A1-PE1-01
(Foundation Drain FD-3 El. 913.0 m)

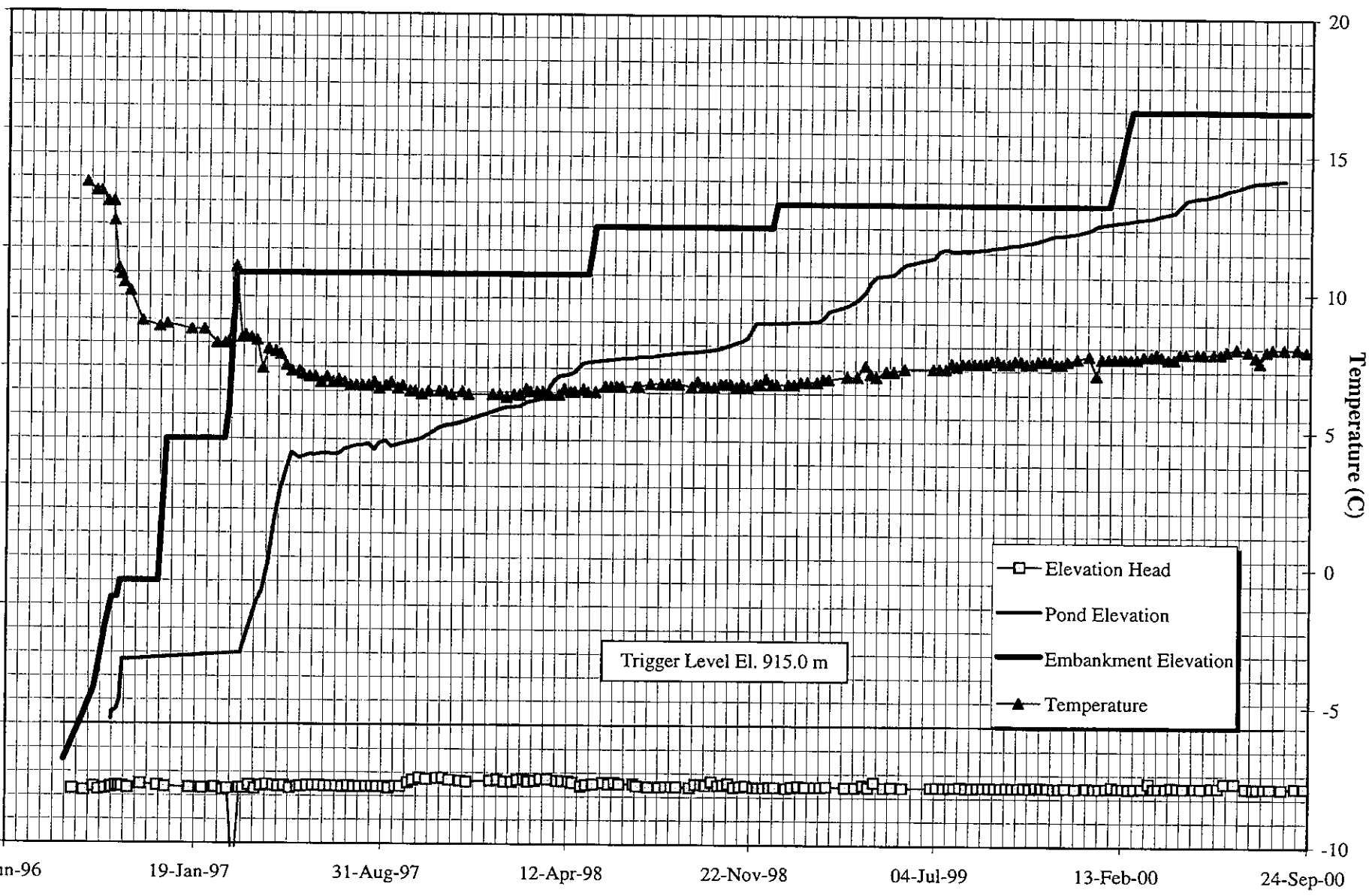


FIGURE C4-1

M:\1116 ...ATA\Piezometer Readings\Sept 19 00\Plane A.xls [graph 4] ...09-00

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A1-PE1-02
(Foundation Drain FD-4 El. 912.10 m)

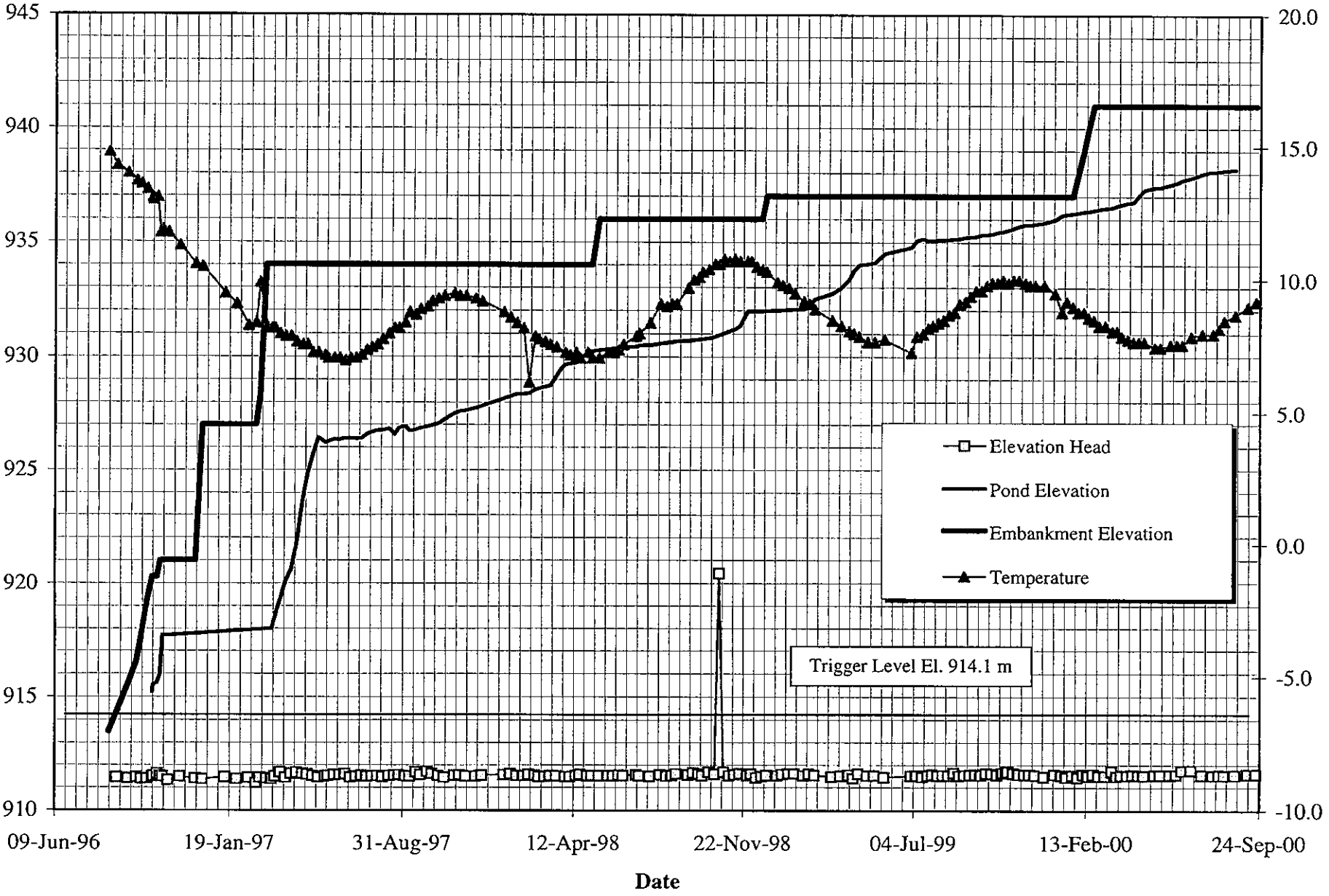


FIGURE C4-2

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A1-PE1-03
(Chimney Drain El. 917.4 m)

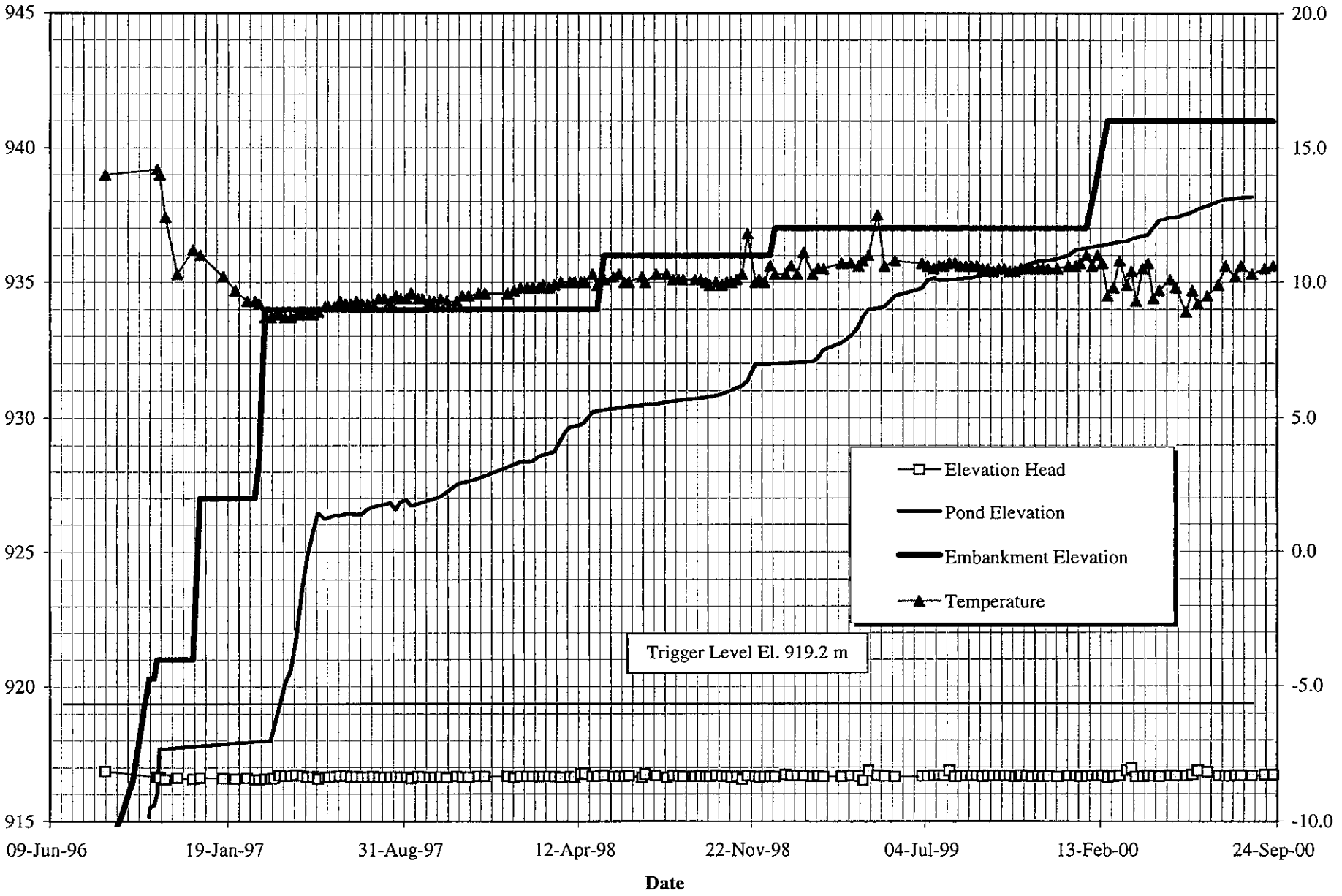


FIGURE C4-3

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER A1-PE1-04
(Upstream Toe Drain Piezometer El. 936.25 m)

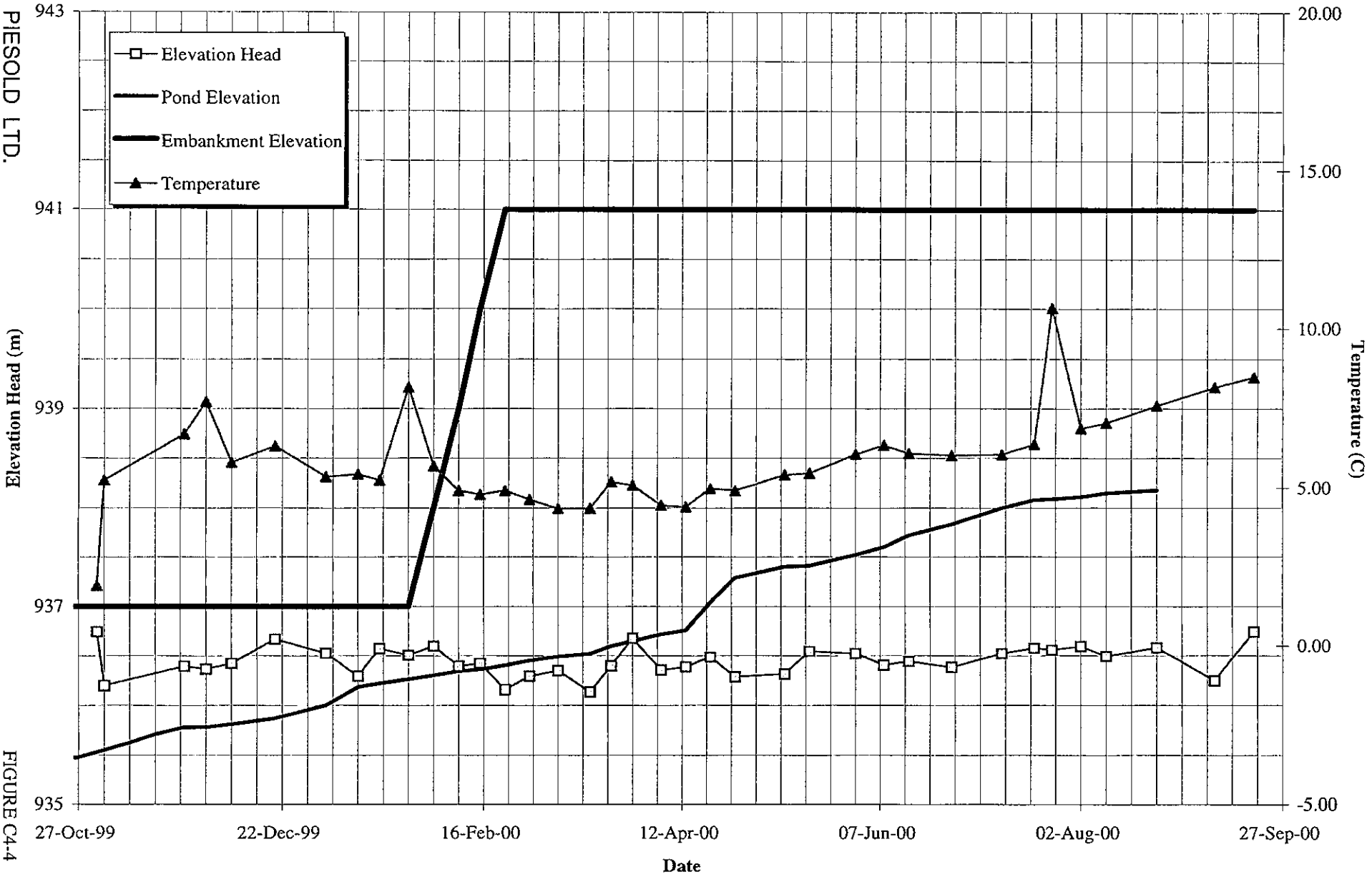


FIGURE C4-4

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B1-PE1-01
(Foundation Drain FD-1 El. 917.3 m)

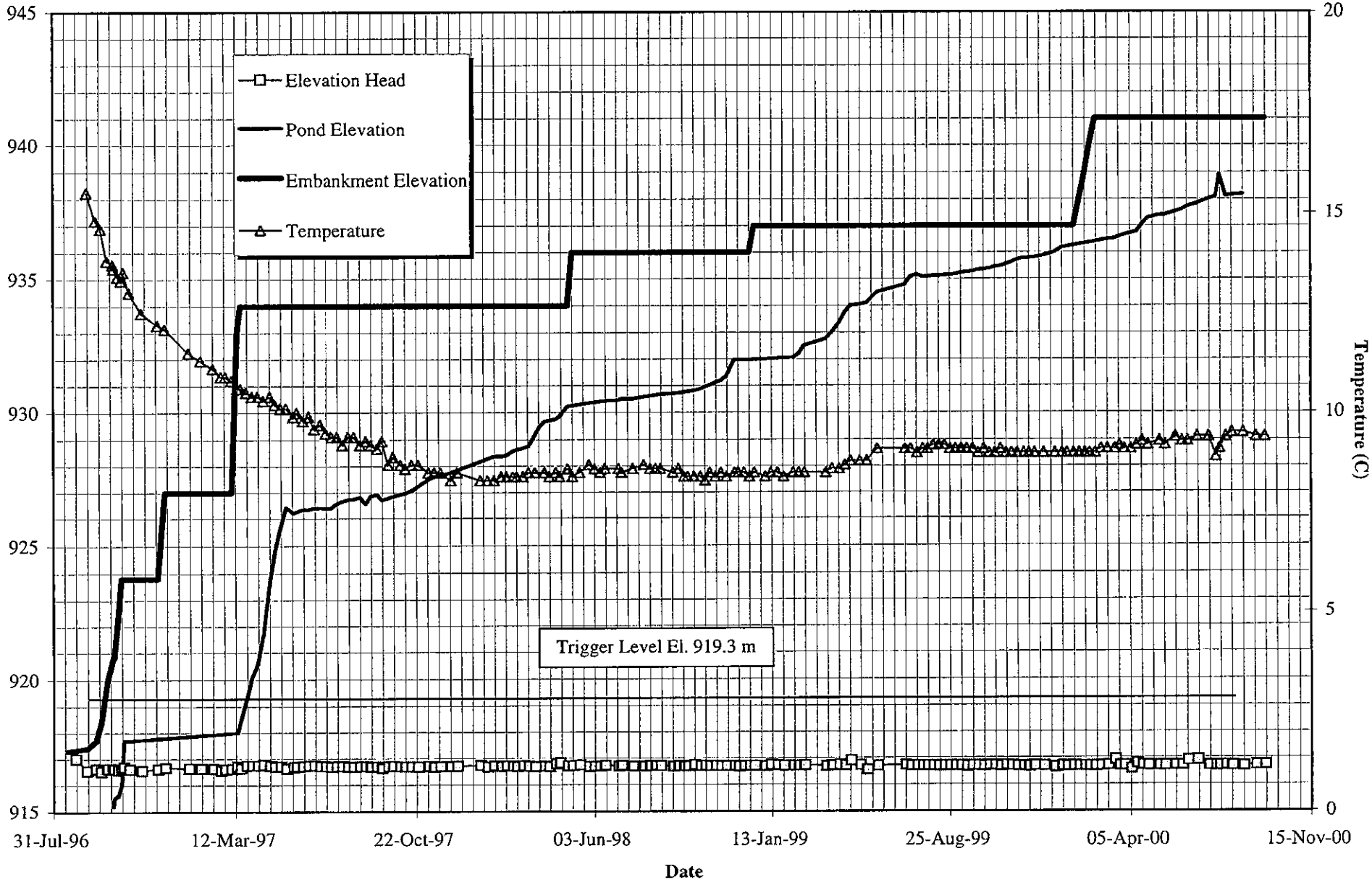


FIGURE C4-5

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B1-PE1-02
(Foundation Drain FD-2 El. 916.0 m)

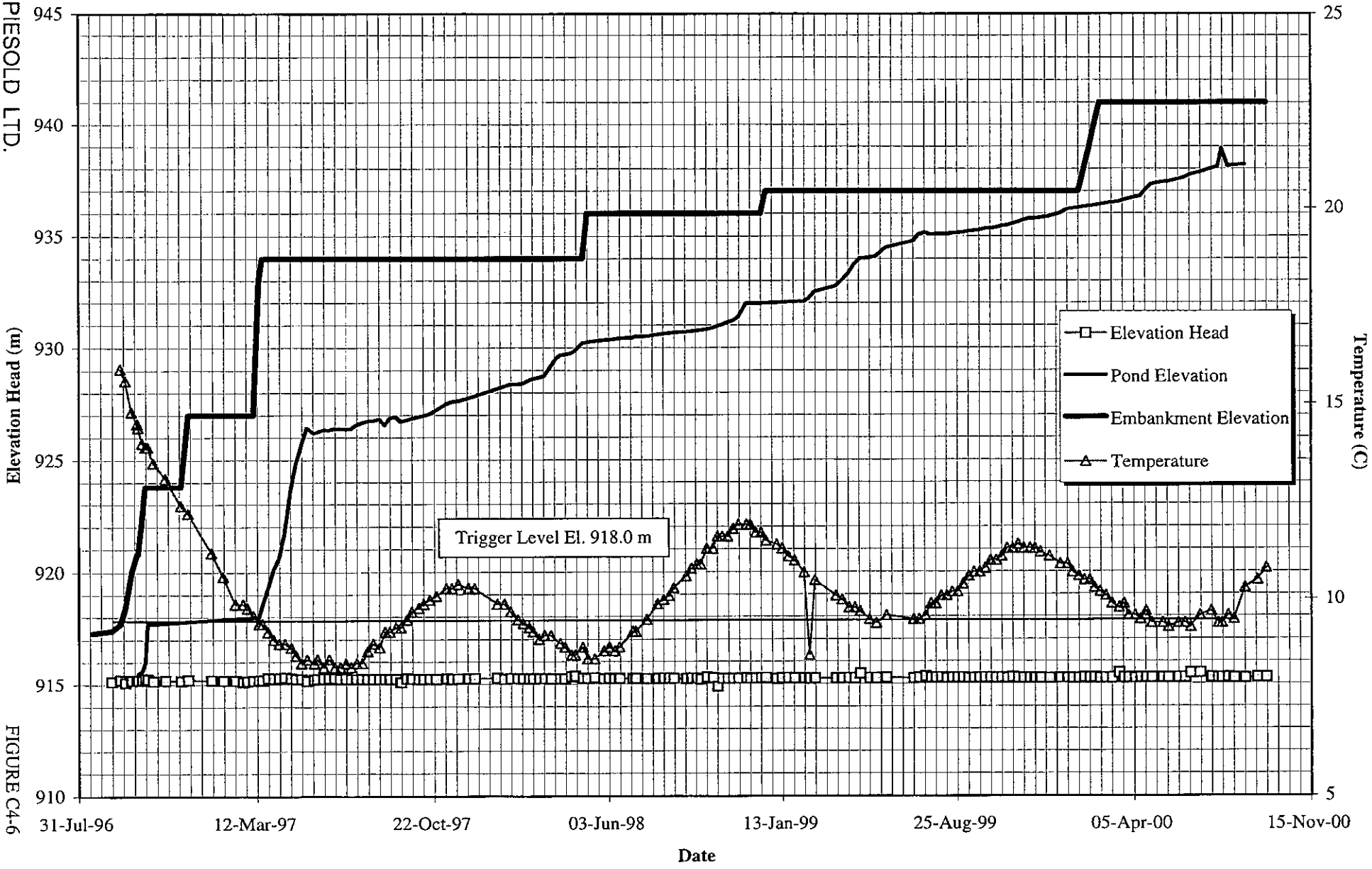


FIGURE C4-6

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER B1-PE1-03
(Chimney Drain El. 918.7 m)

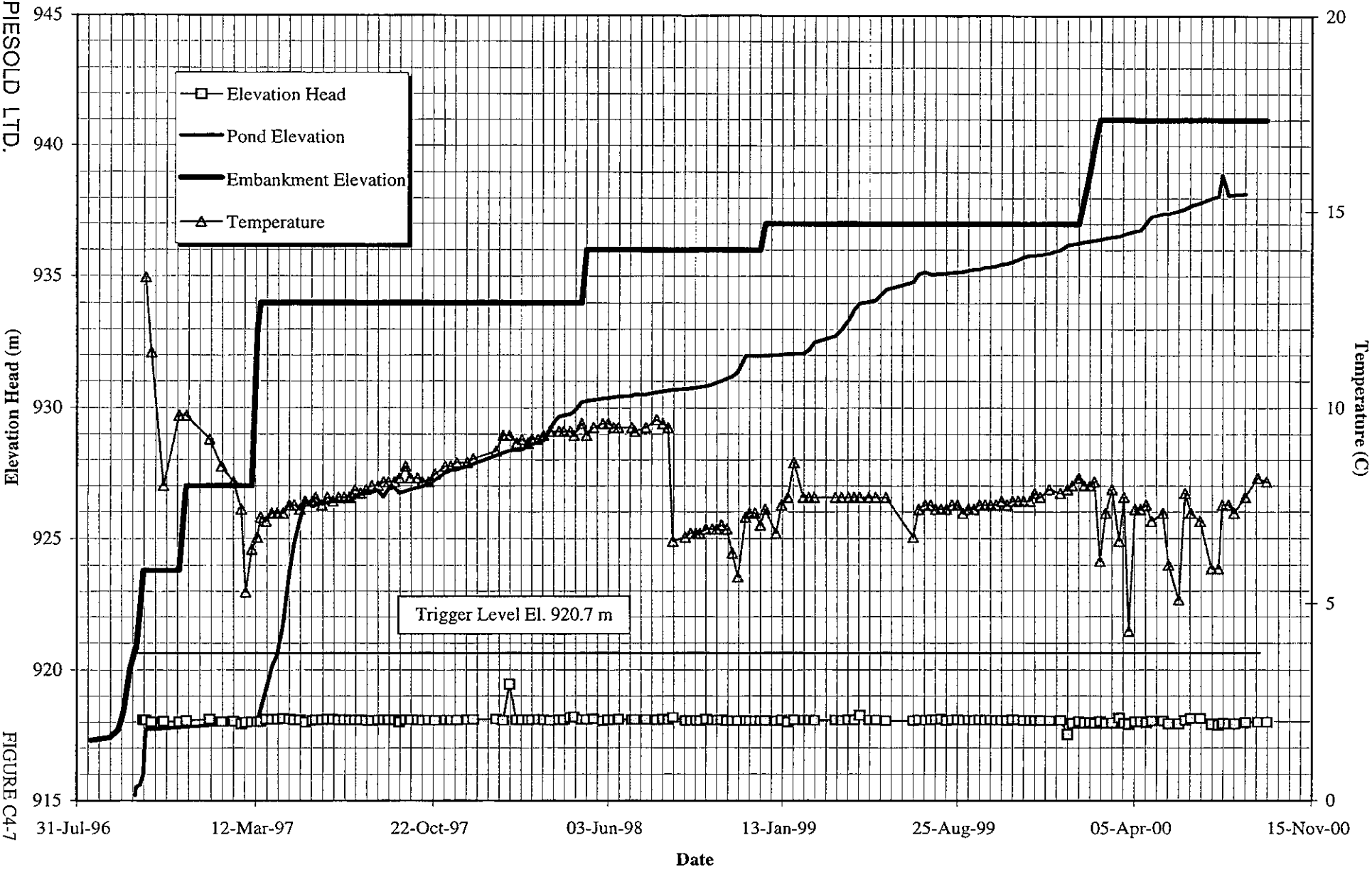


FIGURE C4-7

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C1-PE1-01
(Foundation Drain Piezometer El. 914.7 m)

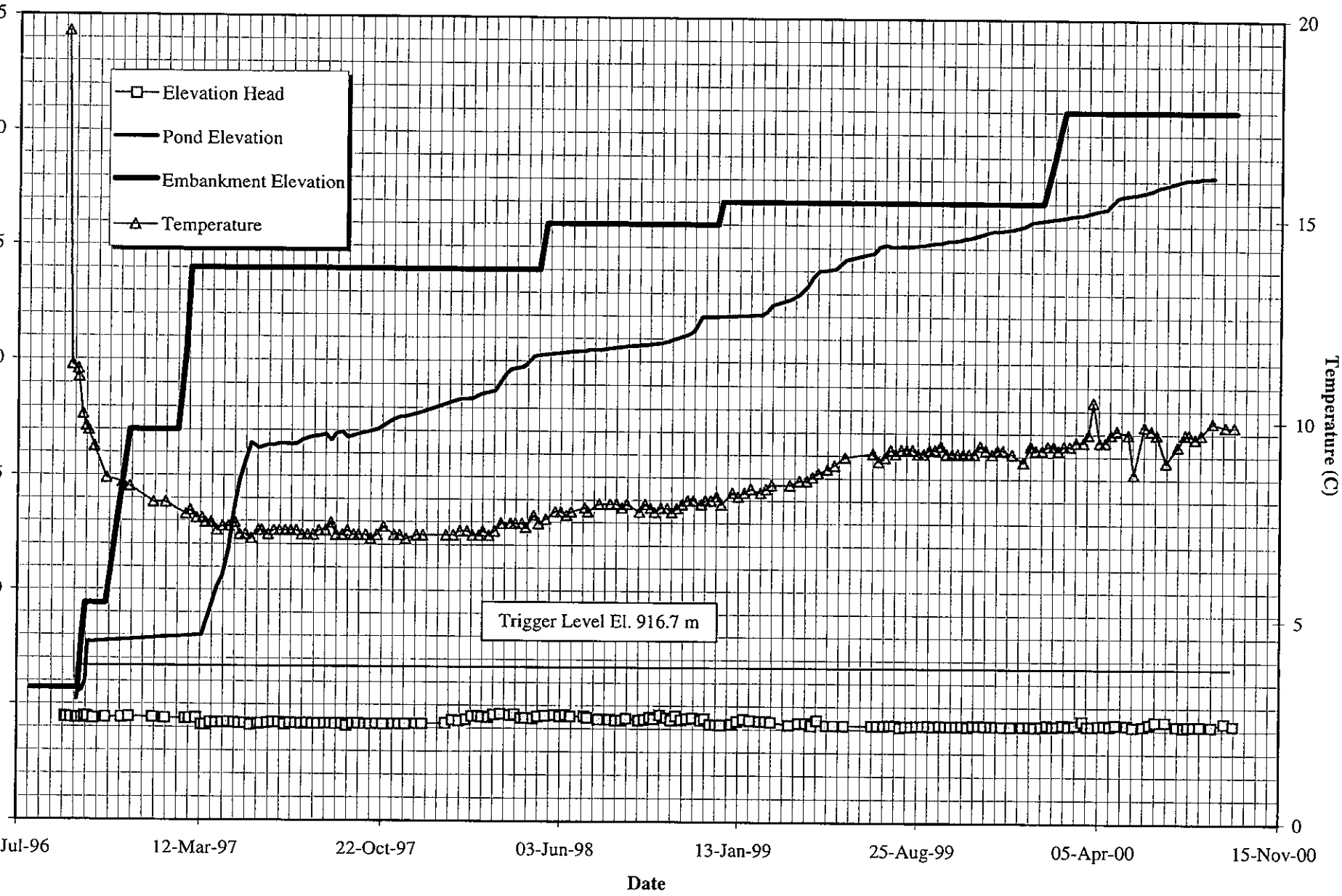


FIGURE C4-8

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C1-PE1-02
(Chimney Drain Piezometer El. 916.6 m)

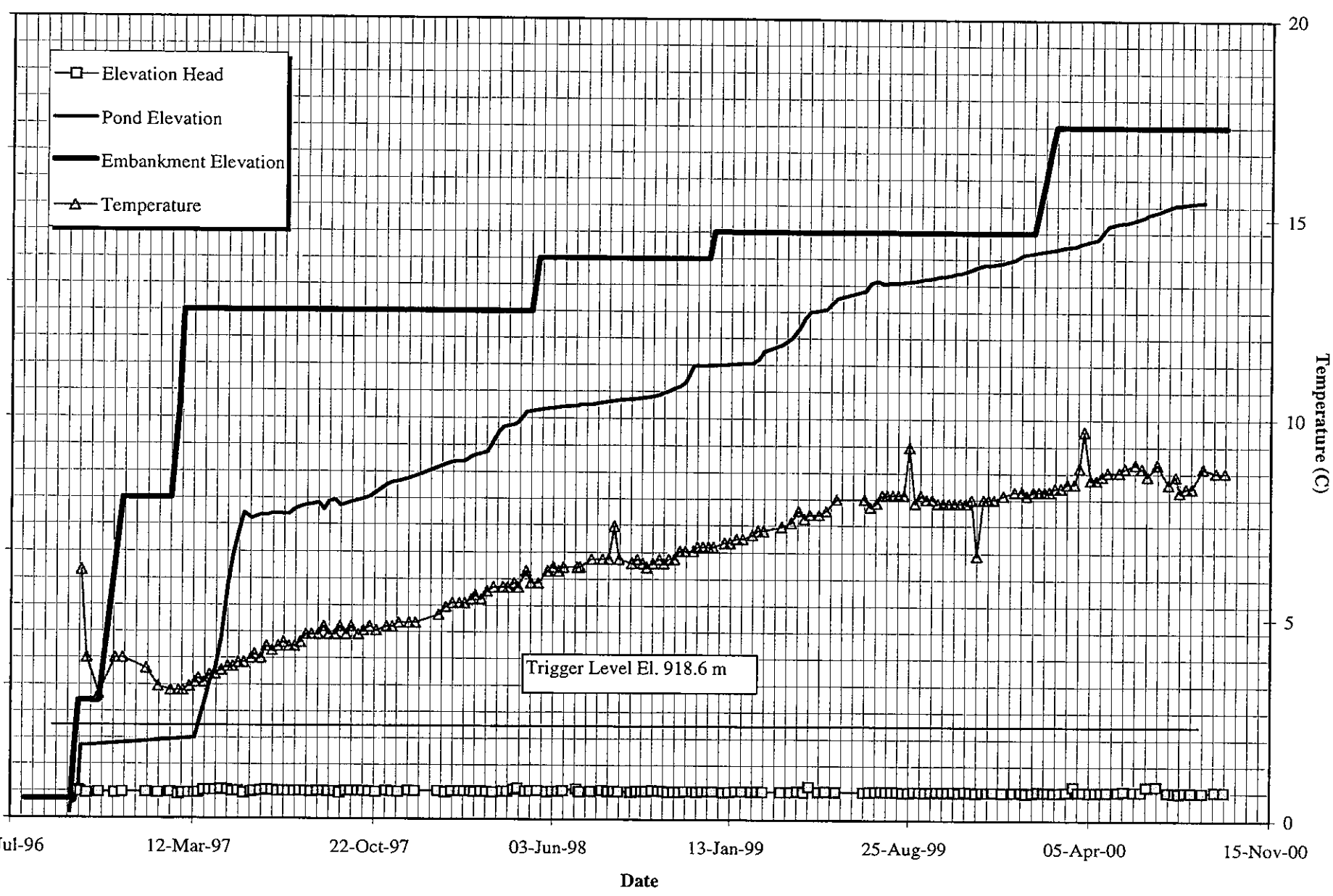


FIGURE C4-9

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER C1-PE1-04
(Foundation Drain Piezometer El. 914.3 m)

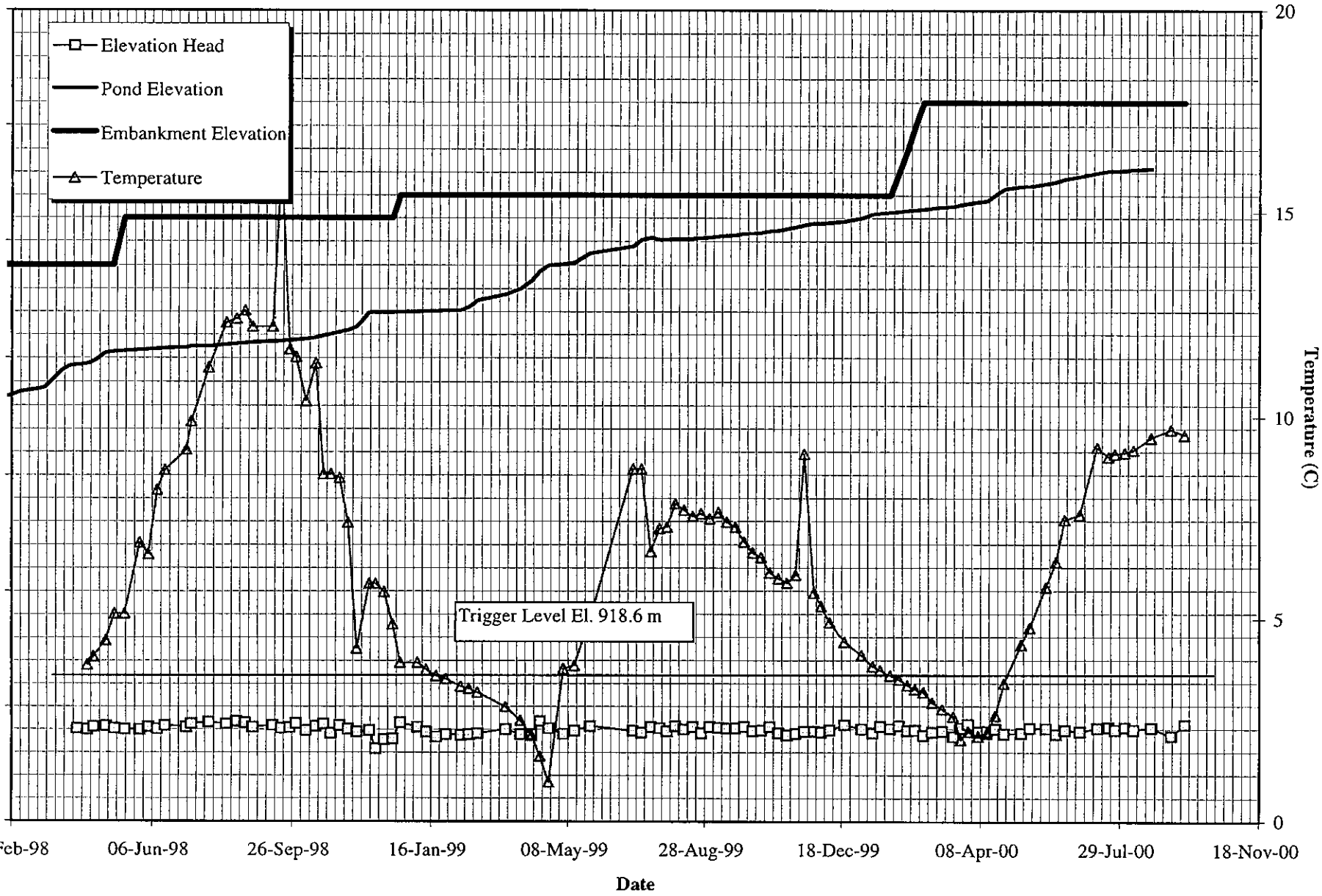


FIGURE C4-10

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
PIEZOMETER D1-PE1-02
(Outlet Drain Piezometer El. 928.76 m)

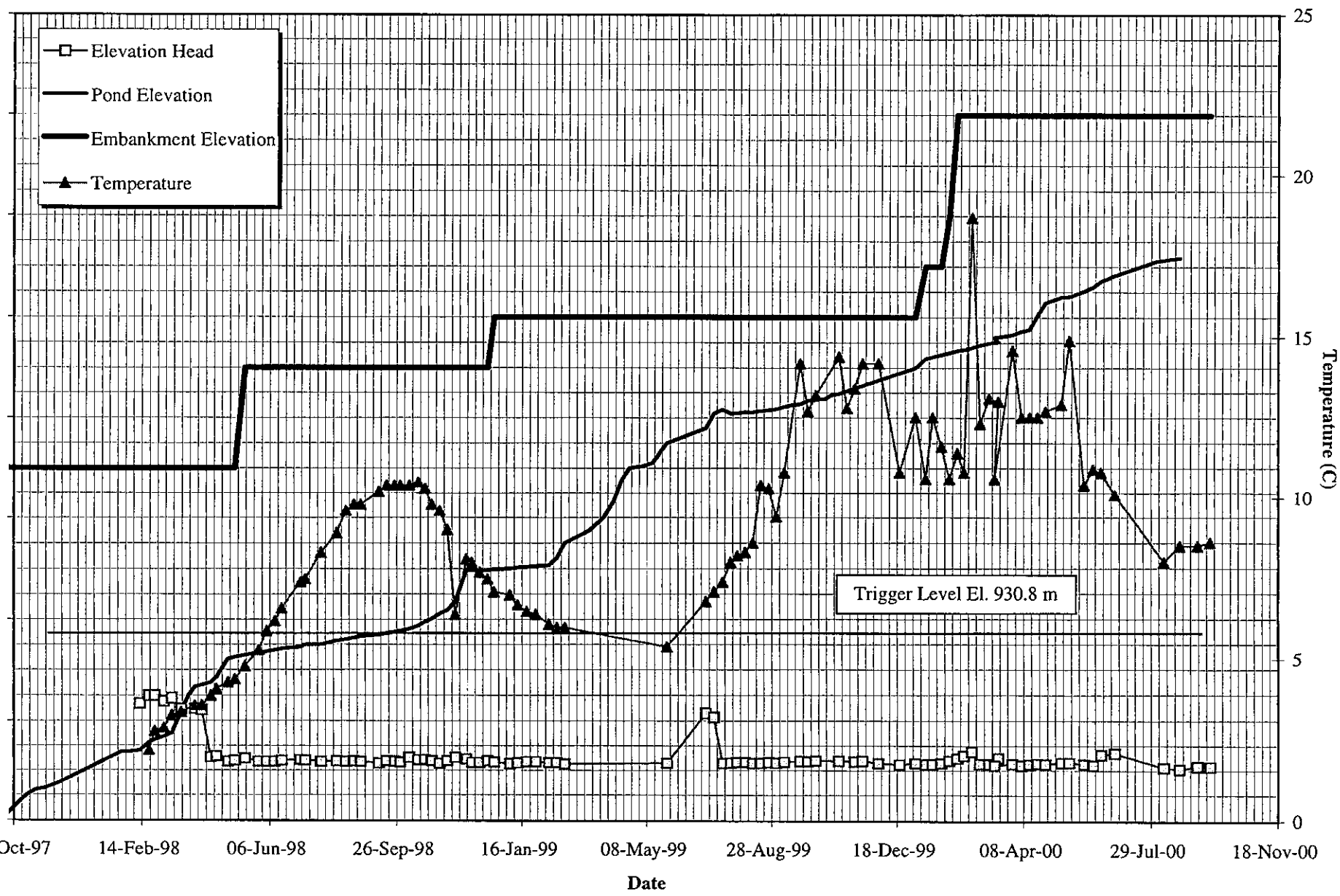


FIGURE C4-11