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MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
REPORT ON 2004 ANNUAL INSPECTION
(REF. NO. VA101-01/7-1)

Rev. No.	Revision	Date	Approved
Rev 0	Issued in Final	February 8, 2005	KJS

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EXECUTIVE SUMMARY

The Mount Polley gold and copper mine is owned by Mount Polley Mining Corporation (MPMC). It is located 56 kilometres northeast of Williams Lake, in central British Columbia. Mount Polley mine stopped production in October 2001 and is currently managing the facilities for care and maintenance activities. The mine is scheduling to start up again in the first quarter of 2005 with the development of the Wight Pit to follow. There have been no significant construction activities since the mine was placed on care and maintenance status in October 2001.

Les Galbraith, P. Eng., of Knight Piésold Ltd. completed an inspection of the Tailings Storage Facility and associated works on August 30 2004.

The TSF has a "HIGH" hazard classification (or consequence category).

A total of 56 vibrating wire piezometers and two inclinometers have been installed at the TSF. There is thirteen months of data missing, from July 30, 2003 to September 2, 2004; however, the recent piezometer readings indicate that there have been no significant deviations from the piezometric trends seen prior to July 30, 2003. Two slope inclinometers were installed at the toe of the Main Embankment in July 2001 to measure potential deformation of the embankment materials. The inclinometers were read on October 21 2004 and the data was compared to the initial readings taken in 2001. The results show that there has been no significant deviation in the inclinometers since they were installed in 2001.

Six survey monuments were installed on the Stage 3B embankment crest following the 2001 construction. MPMC has reported that the initial survey of the monuments in 2001 was not closed properly, resulting in inconsistent surveys since their installation. New survey monuments will be installed on the embankment crests during the Stage 4 construction program, scheduled for the summer of 2005.

Flows from the 5 Foundation Drains and 2 Upstream Toe Drains at the Main Embankment are monitored (when possible) on a monthly basis during the Care and Maintenance period. The flow rates have not been monitored during the reporting period as the drain outlets are submerged. This condition was anticipated and flow monitoring is only possible during operations when the pond level is pumped down.

The TSF embankments were observed to be in good condition. No seepage or slumping was observed. The Southeast Sediment Pond, Millsite Sump, and South Bootjack Dam were

observed to be in a good condition with no geotechnical issues outstanding. However the Millsite Sump spillway was showing signs of erosion and should be repaired.

Surface water control at the mine site comprises the interception of runoff from the disturbed (and some undisturbed) catchment areas for diversion into the TSF. Surface water control ditches were excavated immediately up-gradient from the TSF to divert surface water from the undisturbed catchment area.

MPMC are currently discharging a small amount of surface water from the Main Embankment Seepage Collection Pond. They have been closely monitoring the water quality and have a permit in place for regulated discharge of this water during the care and maintenance period. MPMC has also discharged a small amount of from the Perimeter Embankment Seepage Collection Pond. This water consisted of local runoff and no water chemistry issues are anticipated at this location.

The Operation, Maintenance and Surveillance (OM&S) Manual, which includes the Emergency Preparedness Plan (EPP) was updated in December 2004. A formal Dam Safety Review for the TSF is scheduled for 2006.

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TAILINGS STORAGE FACILITY REPORT ON 2004 ANNUAL INSPECTION (REF. NO. VA101-01/7-1)

SECTION 1.0 - INTRODUCTION

The Mount Polley gold and copper mine is owned by Mount Polley Mining Corporation (MPMC). It is located 56 kilometres northeast of Williams Lake, in central British Columbia. Mount Polley mine stopped production in October 2001 and is currently managing the facilities for care and maintenance activities. The mine is scheduling to start up again in the first quarter of 2005 with the development of the Wight Pit to follow. Consequently, MPMC is currently in the process of upgrading the mine facilities, which includes increasing the elevation of the Tailings Storage Facility Embankments by approximately 2.5m. This construction program (Stage 3C) is the final part of a tailings embankment raise previously permitted by the Ministry of Energy and Mines, and had not started at the time of the annual inspection. The information contained within this report refers to the site conditions and measurements taken at the time of the inspection. The TSF instrumentation is being monitored regularly by MPMC during the Stage 3C Construction Program and will be reviewed and reported as part of the Stage 3C Construction Report. An aerial photograph of Mount Polley Mine that was flown in the summer 2004 is shown on Figure 1.1. The overall site plan showing the Stage 3B Tailings Storage Facility is shown on Drawing 11162-13-100.

Regular on-going inspections of the Tailings Storage Facility (TSF) and Ancillary Works have been conducted to ensure the safety and security of the system and to meet the guidelines of the Ministry of Energy and Mines. Knight Piésold Ltd. (KP) completed annual inspections in 2001 and 2002, which are described in KP Ref. 11162/14-2 (Report on 2000 and 2001 Annual Inspection) and KP Ref. VA101-00001/3-1 (Report on 2002 Annual Inspection), respectively.

Mr. Les Galbraith, P. Eng., conducted the 2004 annual inspection on August 30, 2004 in the company of Art Frye of MPMC. A summary of the current site status, along with observations and recommendations are provided in the following sections of this report. Selected photographs taken during the site inspection are included in Appendix A.

SECTION 2.0 - SITE OVERVIEW

2.1 GENERAL

Mount Polley mine began operations in June 1997. The mineral extraction process uses a selective flotation process to produce a copper-gold concentrate. Approximately 20,000 tonnes (7.3 million tonnes per year) of ore were processed each day during the most recent operations. Tailings materials from the mill were piped and discharged as slurry into the Tailings Storage Facility (TSF), where the solids settled out of the slurry. Process water was then collected and recycled back to the mill for recycle in the milling process. An aerial photograph of the TSF that was flown in the summer 2004 is shown on Figure 2.1.

On-going control and management of water is the most significant operational requirement during the care and maintenance period. Geotechnical and environmental monitoring programs have also been continued during the care and maintenance period to monitor the performance of the various waste and water management facilities.

2.2 TAILINGS STORAGE FACILITY

The principal objectives of the TSF are to provide secure containment for tailings solids and to ensure that the regional groundwater and surface water flows are not adversely affected during or after mining operations. The design and operation of the TSF is integrated with the overall water management objectives for the entire mine development, in that surface runoff from disturbed catchment areas is controlled, collected and contained on site. An additional requirement for the TSF is to allow effective reclamation of the tailings impoundment and associated disturbed areas at closure.

The TSF has a "HIGH" hazard classification (or consequence category). Therefore, the embankment has been designed to accommodate a maximum design earthquake (MDE) corresponding to 50% of the maximum credible earthquake (MCE) and the impoundment is sized to contain the probable maximum precipitation (PMP) storm event.

The TSF at Mount Polley consist of the Perimeter, Main, and South Embankments. At the time of the inspection the Perimeter Embankment was 11.5m high, the Main Embankment was 34.5m high, and the South Embankment was 1.5m high. The general layout of the TSF, showing the Stage 3B crest elevation of 942.5m, is shown on Drawing 11162-13-102.

The main components of the TSF are as follows:

- The TSF embankments incorporate the following zones and materials:
  - Zone S – core zone - fine grained glacial till.
  - Zone CS – upstream shell - cycloned or spigotted tailings sand.
  - Zone B – embankment shell zones - fine grained glacial till.
  - Zone F – filter, drainage zones, and chimney drain - processed gravel and sand.

  - Zone T – transition filter zone - select well-graded fine grained rockfill.
  - Zone C – downstream shell zone – rockfill.
- A low permeability basin liner (natural and constructed), which covers the base of the entire facility, at a nominal depth of 2 m.
- A foundation drain and pressure relief well system, located downstream of the Stage 1B Main Embankment. The foundation drain and pressure relief well system prevent the build-up of excess pore pressure in the foundation, and transfer groundwater and/or seepage to the collection ponds.
- Seepage collection ponds located downstream of the Main and Perimeter Embankments. These ponds were excavated in low permeability soils and store water collected from the embankment drains and from local runoff. Water from the Main Embankment Seepage Collection Pond is pumped back into the TSF during operations, but is now being discharged to down gradient watercourses. No seepage has reported to the Perimeter Embankment to Date. MPMC are actively monitoring water quality and discharge rates and regularly report this information to the relevant regulatory authorities.
- Instrumentation in the tailings, earth fill embankments and embankment foundations. This includes vibrating wire piezometers, survey monuments, and slope inclinometers. The embankment drain flows are also monitored, along with the level of the tailings supernatant water pond.
- A system of groundwater quality monitoring wells installed around the TSF.

There have been no significant construction activities since the mine was placed on care and maintenance status in October 2001. The only construction activities were related to the excavation of additional surface water control ditches, which divert surface water from the undisturbed catchment area immediately up-gradient from the TSF.

2.3 ANCILLARY WORKS

Some external facilities that are key to the operation of the TSF include the following:

- A Tailings Pipeline. The Tailings Pipeline conveys tailings slurry via gravity from the Millsite to the TSF. This pipeline consists of movable discharge sections with multiple spigots to distribute the tailings along the embankment crests. The existing tailings pipeline includes two major sections, distinguished by different pressure ratings and inside diameters. The first section, from the Millsite to the T2 Dropbox comprises 22 inch (556 mm) DR 17 HDPE pipe. The second section, from the T2 Dropbox to the TSF comprises 24 inch (610 mm) DR 15.5 HDPE pipe. Two short sections of 30 inch (762 mm) DR 15.5 HDPE pipe are located at the start of the two pipeline sections to ensure that flows are not restricted at the inlets. Millsite runoff is directed from the Millsite Sump into the tailings line near the mill. Runoff from the Rock Disposal Site is directed from the Southeast Sediment Pond to the tailings pipeline at the reclaim booster pump station and the T2 Tailings Drop Box..
- A Millsite Sump and Southeast Sediment Pond. Millsite runoff is directed from the Millsite Sump into the tailings line near the mill. Runoff from the Rock Disposal Site is directed

from the Southeast Sediment Pond to the tailings pipeline at the reclaim booster pump station and the T2 Tailings Drop Box.

- A Reclaim Water System. The reclaim water system consists of a reclaim barge, a booster pump station, and associated pipeworks to allow for continuous recycle of process water and site runoff from the TSF to the mill processing circuit during operations. This system has been maintained during the care and maintenance period and has been used to route excess water from the TSF to the Caribou Pit. The maintenance program includes for operation of the air bubbler system during winter months to prevent freezing at the pump barge.
- A make-up water supply system. This system included an intake and pump at Polley Lake along with a pipeline to convey water to the TSF near the West abutment of the Perimeter Embankment. The make-up water supply system has not been required during the current care and maintenance period and the pump station has been decommissioned.

SECTION 3.0 - WATER MANAGEMENT

3.1 GENERAL

MPMC mine personnel are required to complete on going surface water monitoring and water management activities in order to ensure compliance with current permits. The fundamental objective during the care and maintenance period has been to collect and contain runoff from disturbed mine development areas. A system of surface water ditches was constructed so that clean runoff could be diverted around the tailings impoundment to reduce the on-going accumulation of water within the system.

The focus of this Annual Review is to evaluate the physical aspects of the water management program at the TSF. Knight Piésold has not reviewed the geochemical characteristics of the water management operations. This report focuses on those aspects of the water management plan that are significant from a dam safety perspective.

MPMC are currently discharging a small amount of surface water from the Main Embankment Seepage Collection Pond. They have been closely monitoring the water quality and report that they have a permit in place for regulated discharge of this water provided that water quality objectives are met. Inflows to this pond include tailings seepage water from the embankment toe drains, groundwater recovered from the embankment foundation drains, and direct surface runoff from the area immediately downstream of the Main Embankment.

MPMC has also routed runoff from the undisturbed catchment area above the tailings facility to flow into the Perimeter Embankment Seepage Collection Pond where it overflows via the spillway culvert towards Hazeltine Creek. No water chemistry issues are anticipated at this location, as inflows of tailings seepage water are minimal.

3.2 WATER BALANCE REVIEW

The water balance developed for the TSF is updated regularly by MPMC. They also conduct periodic surveys of the tailings surface above and below the supernatant pond to confirm the water storage capacity of the facility. Proper management of the overall water balance for the site is very important as it is used to determine the make-up water requirements for the milling process during operations, and also to monitor the cumulative volume of water stored within the impoundment.

The objectives for the water balance during the care and maintenance period has been to minimize the on-going accumulation of water within the TSF. Since water is not required for reclaim to the mill during the care and maintenance period, the Tailings Impoundment is currently experiencing a water surplus situation rather than the water deficit situation that occurred during previous operations.

3.3 SURFACE WATER CONTROL

Surface water control at the mine site comprises the interception of runoff from the disturbed (and some undisturbed) catchment areas for diversion into the TSF. Surface water control structures include the following:

- Open Pit and Mill Site Areas - Surface water from the Open Pit and Mill Site Areas is routed into the mill-site sump where it is transferred to the TSF via the tailings pipeline.
- Waste Rock Storage Area - Surface water is intercepted by runoff collection ditches and transferred to the Southeast Sediment Pond for transfer to the TSF via the tailings pipeline.
- Tailings Storage Facility Area - Clean surface water runoff from the undisturbed catchment area above the impoundment is currently routed around the TSF to reduce the accumulation of water within the impoundment.

3.4 IMPOUNDMENT FREEBOARD REQUIREMENTS

The TSF is required to have sufficient live storage capacity for containment of runoff from the 24-hour PMP volume of 679,000 m^3 at all times, which would result in an incremental rise in the tailings pond level of approximately 0.39 m. The 24-hour PMP allowance is in addition to regular inflows from other precipitation runoff, including the spring freshet. The TSF design also incorporates an additional allowance of 1 meter of freeboard for wave run-up. Therefore, the maximum pond level can be determined by subtracting the 1 meter wave run-up requirement and the 0.39 m PMP allowance from the embankment crest elevation of 942.5 m. This results in a maximum pond elevation of 941.11 m. Knight Piésold reviewed the freeboard requirements in a letter to MPMC on April 29, 2003 (included in Appendix D) and concluded that a temporary reduction in the freeboard requirement of 1.0 m to 0.9 m was not considered to be significant based on the geometry of the TSF and the prevailing wind direction (Figure 3.1). This results in a slight increase in the maximum pond elevation to 941.21 m. MPMC generally operated the pond within these tolerances over the past year, and pumped approximately 700,000 m^3 to the Caribou Pit during the 2004 freshet to ensure compliance with this requirement.

The Stage 3C construction program involves raising the elevation of the tailings embankments to 945 m. This will provide sufficient storage capacity for both the 2005 freshet and for tailings discharge after the mine commences operations. The reclaim system is also continuously available in the event of a prolonged storm event that results in a significant rise in the tailings pond level. This capability provides an additional contingency for water management within the tailings impoundment.

3.5 DRAIN FLOW DATA

Flows from the 5 Foundation Drains and 2 Upstream Toe Drains at the Main Embankment are monitored (when possible) on a monthly basis during the Care and Maintenance period. The monitoring frequency will increase to weekly during operations. Samples from the Foundation Drains and the Upstream Toe Drain are collected by MPMC for water quality testing. The results

are available from MPMC and are reported in the Annual Environmental Reports. The flow rates have not been monitored during the reporting period as the drain outlets are submerged. This condition was anticipated and flow monitoring is only possible during operations when the pond level is pumped down.

3.6 SEEPAGE

No seepage associated with the embankments was observed during the inspection.

3.7 EXTERNAL WATER

MPMC staff carries out water quality monitoring of external water regularly. Monitoring includes surface water quality from ditches, streams, creeks and lakes, as well as groundwater quality from monitoring wells. The results of the water quality monitoring have been reported by Mount Polley in the report "Annual Environmental and Reclamation Report 2003". This report has been submitted to the appropriate agencies (Ministry of Water, Land and Air Protection and Ministry of Energy and Mines).

SECTION 4.0 - ANNUAL INSPECTION

4.1 TAILINGS STORAGE FACTILIY

The supernatant pond was at elevation 941.20 m at the time of Mr. Galbraith's inspection on August 30, 2004. During the current phase of care and maintenance, the TSF remains fully functional although no tailings have been deposited since October 2001. Pertinent observations regarding the operating condition of the TSF are as follows:

- No signs of instability were observed in the embankment fill slopes.
- The seepage collection ponds were observed to be in good condition with no observed erosion activity.
- No unexpected or uncontrolled seepage was observed from the embankments including fill slope and foundations.
- All perimeter surface water diversion ditches were unobstructed and those that were flowing had clear water.
- There is evidence of dust accumulation on the Main Embankment crest.

The TSF was observed to be in a good condition with no geotechnical issues outstanding.

Selected photographs of the TSF are presented in Appendix A.

4.2 ANCILLARY WORKS

4.2.1 Tailings and Reclaim Pipelines

The tailings and reclaim pipelines comprise 7 km of HDPE pipe of varying diameters and pressure ratings to convey tailings from the mill site to the TSF and reclaim water in the reverse direction. The tailings pipeline remains operational from the mill to the dump valve located at the west end of the Perimeter Embankment. MPMC tested the pipeline from the mill to the dump valve in October when they milled approximately 13,000 tonnes of ore from IWA's Cariboo Gold Project. The tailings pipeline on the embankment crest has been decommissioned for the period of care and maintenance, where several flanges were disconnected to prevent ice damage during cold periods.

The reclaim pipeline remains operational and has been utilized to pump excess water from the TSF to the Caribou Pit. There have been no reported problems with the reclaim pipeline and the pipeline was observed to be in sound condition.

4.2.2 Southeast Sediment Pond

The Southeast Sediment Pond collects runoff from the Southeast Rock Disposal Site via the Southeast Rock Disposal Site runoff ditch. Water from the pond is then transferred to the reclaim or tailings line through a series of sumps and pipelines.

Observations made at the Southeast Sediment Pond and Southeast Rock Disposal Site runoff ditch are:

- No seepage was observed for the embankments.
- Water flowing in the ditch was clear.
- The overflow culvert for the pond was clear of obstructions.
- The embankment fill slopes (inside and outside) looked to be in very good shape, with no signs of instability. No cracks were observed on the crest. No seepage or slumping of the slopes was observed.
- Grassy re-vegetation has become well established on the downstream embankment slopes.

MPMC staff conducts 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.

A photo of the Southeast Sediment Pond is included in Appendix A.

4.2.3 Millsite Sump

Surface water from the Open Pit and Mill Site Areas is routed into the mill-site sump where it is transferred to the TSF via the tailings pipeline. The embankments at the Millsite Sump were observed to be in good shape, and no cracks, seepage or slumping was noted. The emergency overflow culvert was clear of obstructions, however the spillway was showing signs of erosion and should be repaired. The erosion occurred during an extensive clean-up program at the mill site in preparation for start-up and is unlikely to happen again.

Photos of the Mill Site Sump and the Millsite Sump spillway are included in Appendix A.

4.2.4 South Bootjack Dam

The South Bootjack Dam was observed to be in good condition at the time of the inspection. Observations include the following:

- 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 minor vegetation, but was generally unobstructed.

A photo of the South Bootjack Dam is included in Appendix A.

SECTION 5.0 - INSTRUMENTATION

5.1 PIEZOMETER DATA

5.1.1 General

A total of 56 vibrating wire piezometers have been installed at the TSF along eight planes designated as Monitoring Plans A to H. The piezometer locations are shown on Drawings 250, 251, 254, 256, 258 and 259. The piezometers are grouped into tailings, foundation, embankment fill and drain piezometers. The results from each group are discussed below. There is thirteen months of data missing, from July 30, 2003 to September 2, 2004.

A summary of the piezometer monitoring data is presented on Table 5.1. The timeline plots for the piezometers are included in Appendix B. The Stage 3C construction program had not started at the time the piezometers were read for the 2004 annual inspection. A further review of the piezometers, which will discuss the piezometric pore pressures read during the Stage 3C Construction Program, will be included in the Stage 3C Construction Report.

5.1.2 Tailings Piezometers

A total of nine piezometers have been installed in the tailings mass, seven of which remain in operation. These piezometers are located on Planes A, B and C along the Main Embankment, as shown on Drawings 250 and 258B.

Timeline plots of the tailings piezometer data are included in Appendix B1. The pore pressures show a slight increasing trend as the pond elevation increases, however the pore pressures are below the pond level in the TSF. This confirms that the tailings mass at these locations is draining and consolidating as intended. The depressed phreatic surface illustrates that the upstream toe drain is effective in draining the sandy tailings adjacent to the embankment.

5.1.3 Embankment Foundation Piezometers

A total of 20 piezometers have been installed in the embankment foundations, 19 of which remain in operation. These piezometers are located on Planes A through F, as shown on Drawings 11162-13-250, 251, 254, 258 and 259.

Artesian conditions are present in the foundation under the Main Embankment. The piezometers in this area are used to monitor the pore pressures and to confirm that they remain below the threshold level of 6 metres above ground level (KP Ref. No. 1162/7-2). No unexpected high pore pressure increases were noted during the reporting period. The maximum artesian head values (above ground surface level) reached since the last reporting period are summarised in Table 5.2.

Artesian pressures have remained relatively constant in all the piezometers during the reporting period. No artesian conditions have been encountered at Plane E, where coarser glaciofluvial material is present.

The pore pressures of the foundation piezometers increased slightly over time during previous mine operations. This was likely due to elastic loading of the aquifer and/or seepage recharge from the TSF. However, seepage was minor as evidenced by foundation drain records.

Timeline plots of the embankment foundation piezometers are included in Appendix B2. There are no concerns with the embankment foundation piezometers.

5.1.4 Embankment Fill Piezometers

A total of 16 piezometers have been installed in the embankment fill materials, 14 of which remain in operation. These piezometers are located in Planes A through D, as shown in the plan view on Drawings 11162-13-250 and 251.

Timeline plots of the embankment fill piezometer data are included in Appendix B3. There have been no significant changes in the embankment fill piezometer data since the previous site inspection in 2002. A few of the embankment fill piezometers have previously shown pore pressure increases resulting from embankment raises, but the elevated pore pressures from the last construction program in 2000 have since dissipated. There are no concerns with the embankment fill piezometers.

5.1.5 Drain Piezometers

A total of 11 piezometers have been installed in the embankment drains including foundation drains, chimney drain and outlet drains. All 11 were functioning at the time of inspection. These piezometers are located on Planes A through D, as shown on Drawings 11162-13-250, 251, 258 and 259. Timeplots for the drain piezometers are shown on Figures B4-1 to B4-4 in Appendix B4.

All drain piezometers showed near-zero pore pressures, indicating that the drains are functioning as intended. Chimney drain piezometer C1-PE1-02 shows a pressure head increase of approximately 6m in May and June 2003 that is inconsistent with the pressures recorded in the adjacent chimney drain piezometer, A1-PE1-03, which showed no increase in pore pressures during this time. The anomalous readings in piezometer C1-PE1-02 have returned to showing zero pressures. There are no concerns with the drain piezometers.

5.2 SLOPE INCLINOMETERS

Two slope inclinometers were installed at the toe of the Main Embankment in July 2001 to measure potential deformation of the embankment materials. The inclinometers were read on

October 21 2004 and the data was compared to the initial readings taken in 2001. The results of the two readings are shown in Appendix C and a photo of the slope inclinometer test procedure is included in Appendix A.

The results show that there has been no significant deviation in the inclinometers since they were installed in 2001.

Regular monitoring should be undertaken in order to utilize this installation fully. Monitoring with the inclinometer probe should be undertaken on an annual basis. However, a 'poor-boy' monitoring rod should be constructed for use monthly (twice a month during construction programs). A 'poor-boy' rod simply consists of a two metre long steel bar (10, 20 or 30 mm in Diameter) connected to a lowering rope. The 'poor-boy' is lowered down the inclinometer casing to ensure that soil movement associated with settlement or instability has not deformed the inclinometer casing. Should resistance or blockage be encountered it is imperative that the inclinometer probe be utilized at the earliest opportunity to confirm the magnitude of displacements and to assess any potential instability.

5.3 SURVEY MONUMENT DATA

The survey monuments installed on the embankment crests are monitored on an annual basis. Six survey monuments were installed on the Stage 3B embankment crest following the 2001 construction. MPMC has reported that the initial survey of the monuments in 2001 was not closed properly, resulting in inconsistent surveys since their installation. New survey monuments will be installed on the embankment crests during the Stage 4 construction program, scheduled for the summer of 2005.

SECTION 6.0 - SUMMARY AND RECOMMENDATIONS

Mount Polley mine stopped production in October 2001 and is currently managing the facilities for care and maintenance activities. The mine is scheduling to start up again in the first quarter of 2005 with the development of the Wight Pit to follow. Consequently, MPMC is currently in the process of upgrading the mine facilities, which includes increasing the elevation of the Tailings Storage Facility embankments by approximately 2.5m.

Les Galbraith, P. Eng., of Knight Piésold Ltd. completed an inspection of the Tailings Storage Facility and associated works on August 30, 2004. The annual inspection was completed to ensure that the safety and security of the TSF and ancillary works remains high and meets the guidelines of the Ministry of Energy and Mines

Significant points relating to the TSF are as follows:

- There have been no significant construction activities since the mine was placed on care and maintenance status in October 2001. Drainage channels have been excavated west of the tailings facility in order to prevent undisturbed surface water from reaching the TSF.
- The TSF embankments were observed to be in good condition. No seepage or slumping was observed.
- The TSF is currently operating with a water budget surplus, as total inflows from precipitation and surface runoff exceed losses from evaporation and seepage removal.
- Approximately 700,000 m^3 of water was pumped from the TSF to the Cariboo Pit in 2004 to maintain freeboard requirements.
- The Seepage Collection Ponds were operating normally. MPMC are currently discharging a small amount of surface water from the Main Embankment Seepage Collection Pond. They have a permit to discharge from the MPMC Main Embankment Seepage Collection Pond during the Care and Maintenance Period. MPMC are also discharging surface water (local runoff only) from the Perimeter Embankment Seepage Collection Pond.
- Flows from the 5 Foundation Drains and 2 Upstream Toe Drains at the Main Embankment are monitored (when possible) on a monthly basis during the Care and Maintenance period. The flow rates have not been monitored during the reporting period as the drain outlets are submerged. This condition was anticipated and flow monitoring is only possible during operations when the pond level is pumped down.
- Piezometer and inclinometer data indicate that the embankments are performing as designed.
- The facility is being operated in accordance with the water management requirements of the design. The specified capacity for temporarily storing runoff from the design storm and the minimum freeboard wave run-up has generally been maintained.

The Southeast Sediment Pond, Millsite Sump, and South Bootjack Dam were observed to be in a good condition with no geotechnical issues outstanding. However the Millsite Sump spillway was showing signs of erosion and should be repaired.

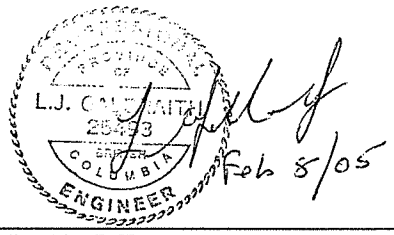
Recommendations for on-going operations of the TSF are summarized below:

- Repair the spillway at the Millsite Sump.
- Lower the water level in the Main Embankment Drain Monitoring Sump so that the flows from the Foundation and Upstream Toe Drains can be monitored at the required frequency.
- Ensure that the instrumentation is being monitored at the required frequency, as reported in the Operations, Maintenance and Surveillance Manual, (KP Ref. No. 101-1/9-1).
- Continue regular monitoring of the water quality and levels in the surrounding groundwater wells.
- Construct a 'poor-boy' monitoring rod for use in the inclinometers and use as required in the OM&S Manual.
- Continue regular monitoring of the tailings pond elevation. The TSF is required to have sufficient live storage capacity for containment of runoff from the 24-hour PMP, in addition to regular inflows from other precipitation runoff, including the spring freshet, while maintaining the minimum freeboard requirements.
- Re-connect the tailings pipeline on the embankment crest prior to depositing tailings in the tailings facility when the mill is started up again in the first quarter of 2005. Discharging tailings from the dump valve located to the west of the Perimeter Embankment will impact the development and distribution of tailings beaches and may cause the tailings beach at the Perimeter Embankment to be at a higher elevation that the embankment.
- Develop a tailings deposition plan that involves discharging tailings form the Perimeter, Main, and South Embankments. Discharging tailings from around the facility will facilitate the development of tailings beaches and help in the management and location of the tailings pond. The tailings pipeline should be extended to the South Embankment in 2005 to allow for beach development at the South Embankment.

A formal Dam Safety Review for the TSF is scheduled for 2006.

SECTION 7.0 - CERTIFICATION

This report was prepared and approved by the undersigned.



Prepared by:

Les Galbraith, P.Eng.
Senior Engineer

Approved by:

Ken J. Brouwer, P.Eng.
Managing Director

Knight Piésold CONSULTING

TABLE 5.1

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY - 2004 ANNUAL INSPECTION
PIEZOMETERS MONITORING DATA SUMMARY

Printed: 01-Feb-2005

M:\1\01\00001\07\A\Report\1-2004 Inspection Report\TABLES AND FIGURES\[TABLE 5.1.xls]Tab 5.1 R 0

Rev'd: Jan. 19/05

AREA	PIEZOMETER NO.	LOCATION	TIP EL. (m)	SURFACE EL. (m)	CALCULATED PRESSURE ELEVATION (m) 2003 [1]	2004 [2]	Change from Previous Reading	COMMENTS (piezometric trends 2002)
TAILINGS PIEZOMETERS	A0-PE1-01	Plane A	938.54		937.73	937.96	0.23	Tailings draining and consolidating as intended
	A0-PE2-01	Plane A	928.03	929.43	938.27	937.65	-0.62	Tailings draining and consolidating as intended
	A0-PE2-02	Plane A	927.87	929.27	937.41	937.89	0.48	Tailings draining and consolidating as intended
	B0-PE1-01	Plane B	939.40		938.37	938.43	0.06	Tailings draining and consolidating as intended
	B0-PE2-01	Plane B	927.30	928.70	938.43	939.29	0.86	Tailings draining and consolidating as intended
	B0-PE2-02	Plane B	927.18	928.58	936.77	936.99	0.22	Tailings draining and consolidating as intended
	C0-PE1-01	Plane C	938.00		937.47	937.76	0.29	Tailings draining and consolidating as intended
	C0-PE2-01	Plane C	927.80	928.88	No longer functioning			No longer functioning
	C0-PE2-02	Plane C	927.48	928.88	No longer functioning			No longer functioning
EMBANKMENT FOUNDATION PIEZOMETERS	A2-PE1-03	Plane A	909.34					Stopped functioning Oct. 11, 2000
	A2-PE2-01	Plane A	903.68	912.67	915.40	915.71	0.31	Artesian Pressure
	A2-PE2-02	Plane A	909.77	912.67	911.99	912.51	0.52	
	A2-PE2-06	Plane A	898.01	912.91	915.12	914.75	-0.37	Artesian Pressure
	A2-PE2-07	Plane A	902.81	912.91	915.33	914.92	-0.41	Artesian Pressure
	A2-PE2-08	Plane A	907.56	913.36	913.24	913.57	0.33	Artesian Pressure
	B2-PE1-03	Plane B	914.05	915.55	914.97	915.26	0.29	
	B2-PE2-01	Plane B	901.98	916.98	918.06	918.13	0.07	Artesian Pressure
	B2-PE2-02	Plane B	909.51	916.98	920.39	920.35	-0.04	Artesian Pressure
	B2-PE2-06	Plane B	914.59	916.89	915.69	915.18	-0.51	
	C2-PE1-03	Plane C	912.59		914.12	914.45	0.33	
	C2-PE2-01	Plane C	907.48		No longer functioning			No longer functioning
	C2-PE2-02	Plane C	910.53	915.71	916.93	917.23	0.30	
	C2-PE2-06	Plane C	906.84	915.99	915.72	915.32	-0.40	Artesian Pressure
	C2-PE2-07	Plane C	912.29	915.99	915.10	914.59	-0.51	
	C2-PE2-08	Plane C	914.03	915.99	914.65	914.08	-0.57	
	D2-PE2-02	Plane D	927.32	930.92	929.17	929.43	0.26	
	E2-PE2-01	Plane E	914.21	918.81	917.27	916.80	-0.47	
	E2-PE2-02	Plane E	909.66	918.81	916.99	916.55	-0.44	
	F2-PE2-01	Plane F	909.66	940.00	938.12	938.47	0.35	
EMBANKMENT FILL PIEZOMETERS	A2-PE1-01	Plane A, Zone T	912.90	913.30	911.76	911.99	0.23	Zero or negative piezometric head. Fill is freely draining
	A2-PE1-02	Plane A, Glacial Till	938.47		939.58	939.46	-0.12	Steady state pore pressure from pond - construction pressures have fully dissipated 2004
	A2-PE2-03	Plane A, Glacial Till	919.43		927.53	926.60	-0.93	Construction pressure has fully dissipated 2004
	A2-PE2-04	Plane A, Glacial Till	926.07		No longer functioning			No longer functioning
	A2-PE2-05	Plane A, Glacial Till	921.87		922.45	922.62	0.17	Increasing very slowly as pond level rises
	B2-PE1-01	Plane B, Zone T	916.27	916.87	915.48	915.53	0.05	Zero or negative piezometric head. Fill is freely draining
	B2-PE1-02	Plane B, Glacial Till	939.40	940.00	941.90	941.54	-0.36	
	B2-PE2-03	Plane B, Glacial Till	921.00		939.78	936.78	-3.00	
	B2-PE2-04	Plane B, Glacial Till	921.00		929.22	929.30	0.08	
	B2-PE2-05	Plane B, Glacial Till	921.66		921.90	NR		
	C2-PE1-01	Plane C, Zone T	915.02	916.17	914.17	914.38	0.21	Zero or negative piezometric head. Fill is freely draining
	C2-PE1-02	Plane C, Glacial Till	938.00		939.80	939.93	0.13	Steady state pore pressure from pond
	C2-PE2-03	Plane C, Glacial Till	921.00		921.34	921.54	0.20	
	C2-PE2-05	Plane C, Glacial Till	924.80		No longer functioning			No longer functioning
	D2-PE1-01	Plane D, Zone T	930.42	930.92	929.36	928.01	-1.35	Zero or negative piezometric head.
	D2-PE2-01	Plane D, Glacial Till	931.00		932.11	NR		Steady state pore pressure from pond - no new data after Jan 2003
DRAIN PIEZOMETERS	A1-PE1-01	Foundation Drain FD-3.	913.00		912.69	913.34	0.65	Near zero pore pressure - drains are functioning as intended.
	A1-PE1-02	Foundation Drain FD-4.	912.10		911.57	911.79	0.22	Near zero pore pressure - drains are functioning as intended.
	A1-PE1-03	Chimney Drain.	917.20		916.85	917.10	0.25	Near zero pore pressure - drains are functioning as intended.
	A1-PE1-04	Upstream Toe Drain	936.25	937.00	911.76	911.99	0.23	Near zero pore pressure - drains are functioning as intended.
	B1-PE1-01	Foundation Drain FD-1.	917.30		916.99	917.25	0.26	Near zero pore pressure - drains are functioning as intended.
	B1-PE1-02	Foundation Drain FD-2.	915.95		915.26	915.30	0.04	Near zero pore pressure - drains are functioning as intended.
	B1-PE1-03	Chimney Drain.	918.70		917.93	918.00	0.07	Near zero pore pressure - drains are functioning as intended.
	C1-PE1-01	Foundation Drain FD-1.	914.70	916.00	914.38	914.95	0.57	Near zero pore pressure - drains are functioning as intended.
	C1-PE1-02	Chimney Drain.	916.60		916.03	916.26	0.23	Near zero pore pressure - drains are functioning as intended.
	C1-PE1-04	Foundation Drain FD-5.	914.30	916.00	913.97	913.46	-0.51	Near zero pore pressure - drains are functioning as intended.
	D1-PE1-02	Outlet Drain OD-4.	928.76		928.02	926.91	-1.11	Near zero pore pressure - drains are functioning as intended.

Notes:

1/ Reading taken from last data available from VA101-1/3 (Report on 2002 Annual Inspection)

2/ First reading recorded after site inspection visit.

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TABLE 5.2

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY - 2004 ANNUAL INSPECTION
MAXIMUM ARTESIAN HEAD VALUES FOR EMBANKMENT FOUNDATION PIEZOMETERS

Printed: 01-Feb-2005
M:\1\01\00001\07\A\Report\1-2004 Inspection Report\TABLES AND FIGURES\[Table 5.2.xls]Calc Sheet Rev'd: Jan 11/05

Piezometer	Piezometer Elevation (m)	Surface Elevation (m)	Max. Calc. Pressure[1] (m)	Max. Artesian Pressure Attained[2] (m)
A2-PE2-01	903.68	912.67	915.71	3.04
A2-PE2-02	909.77	912.67	912.51	-0.16
A2-PE2-06	898.01	912.91	915.47	2.56
A2-PE2-07	902.81	912.91	915.68	2.77
A2-PE2-08	907.56	913.36	913.9	0.54
B2-PE1-03	914.05	915.55	915.01	-0.54
B2-PE2-01	901.98	916.98	918.25	1.27
B2-PE2-02	909.51	916.98	920.89	3.91
B2-PE2-06	914.59	916.89	915.89	-1
C2-PE1-03	912.59		914.44	
C2-PE2-02	910.53	915.71	914.44	-1.27
C2-PE2-06	906.84	915.99	917.14	1.15
C2-PE2-07	912.29	915.99	915.92	-0.07
C2-PE2-08	914.03	915.99	914.84	-1.15
D2-PE2-02	927.32	930.92	929.27	-1.65
E2-PE2-01	914.21	918.81	917.48	-1.33
E2-PE2-02	909.66	918.81	917.18	-1.63

Note:
1/ Max. Calculated Pressure - original piezometer data corrected for temp, pressure, etc.
2/ (+) values refer to artesian pressure above surface elevation of the piezometer.
3/ July 31, 2002 to September 2, 2004 data used for this analysis.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

MOUNT POLLEY MINE
AERIAL PHOTOGRAPH

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.	REV.
VA101-1/7	1	0

FIGURE 1.1

REV.	DDMMM'YY	ISSUED FOR REPORT
0		

XREF FILE : -

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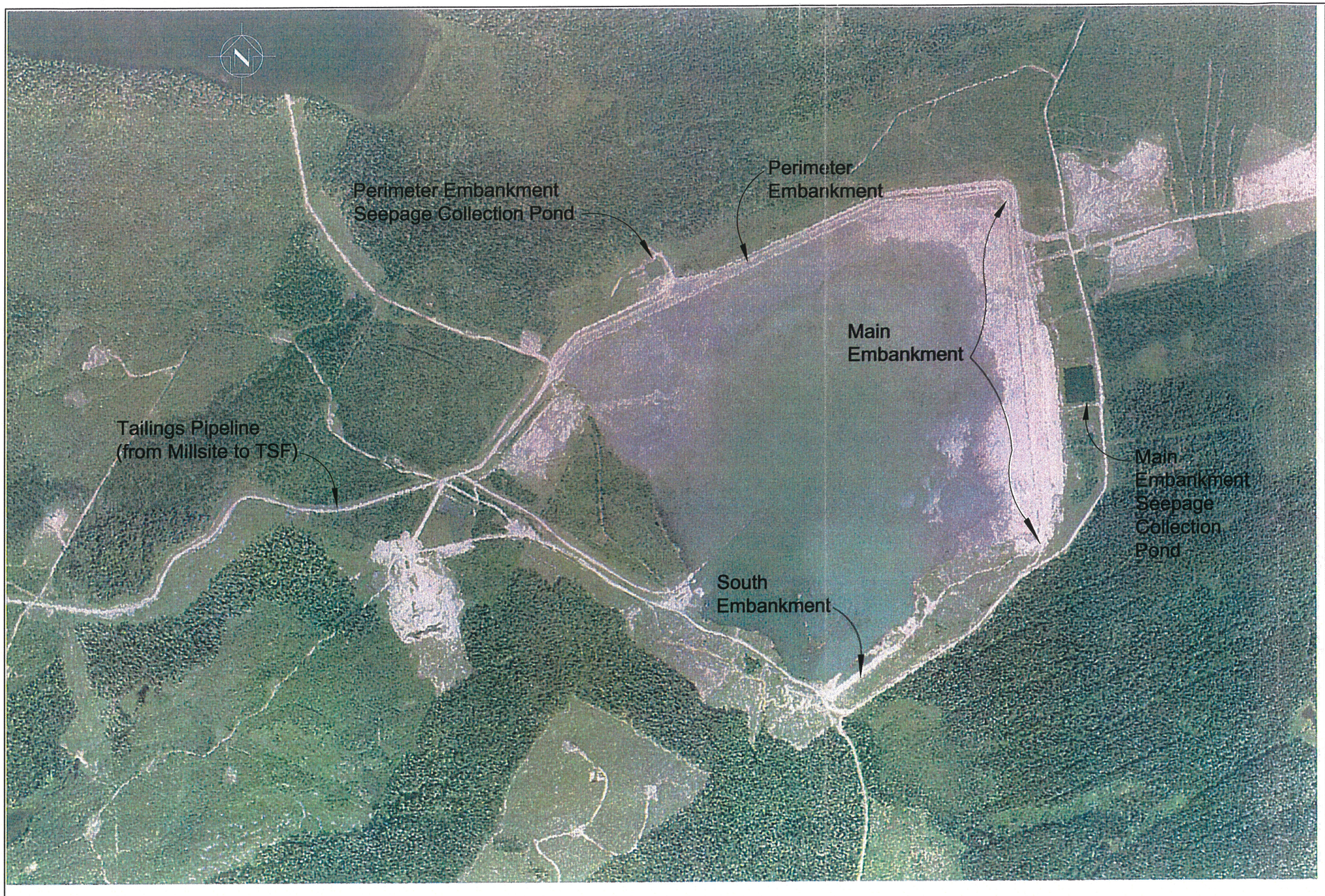


MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TSF GENERAL ARRANGEMENT

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.	REV.
VA101-1/7	1	0

FIGURE 2.1

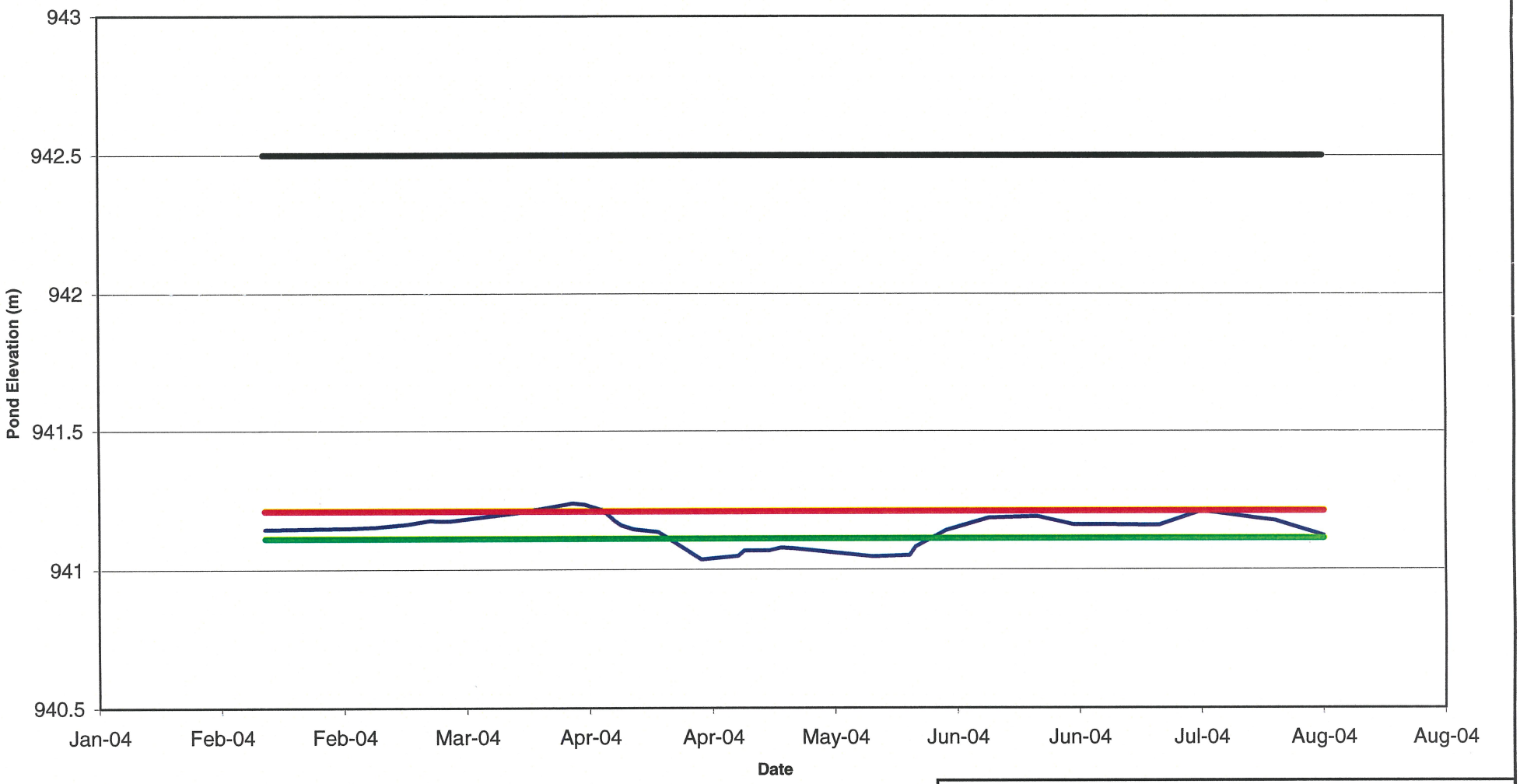
REV.	DDMMM'YY	ISSUED FOR REPORT
0		

XREF FILE : -

VANCOUVER B.C. CAD FILE: M:\1\01\00001\03\A\Acad\Figs\B01.dwg 1=20000 PLOT 1=1(PS) Jan 25 2005 by:jt Time ● 14:00

M:\1\01\00001\07\A\Report\2004 Inspection Report\Appendix D\Figure 3.1.xls 2004 Water Balance

Print 02/01/2005 1:53 PM
Rev'd Jan/25/05



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

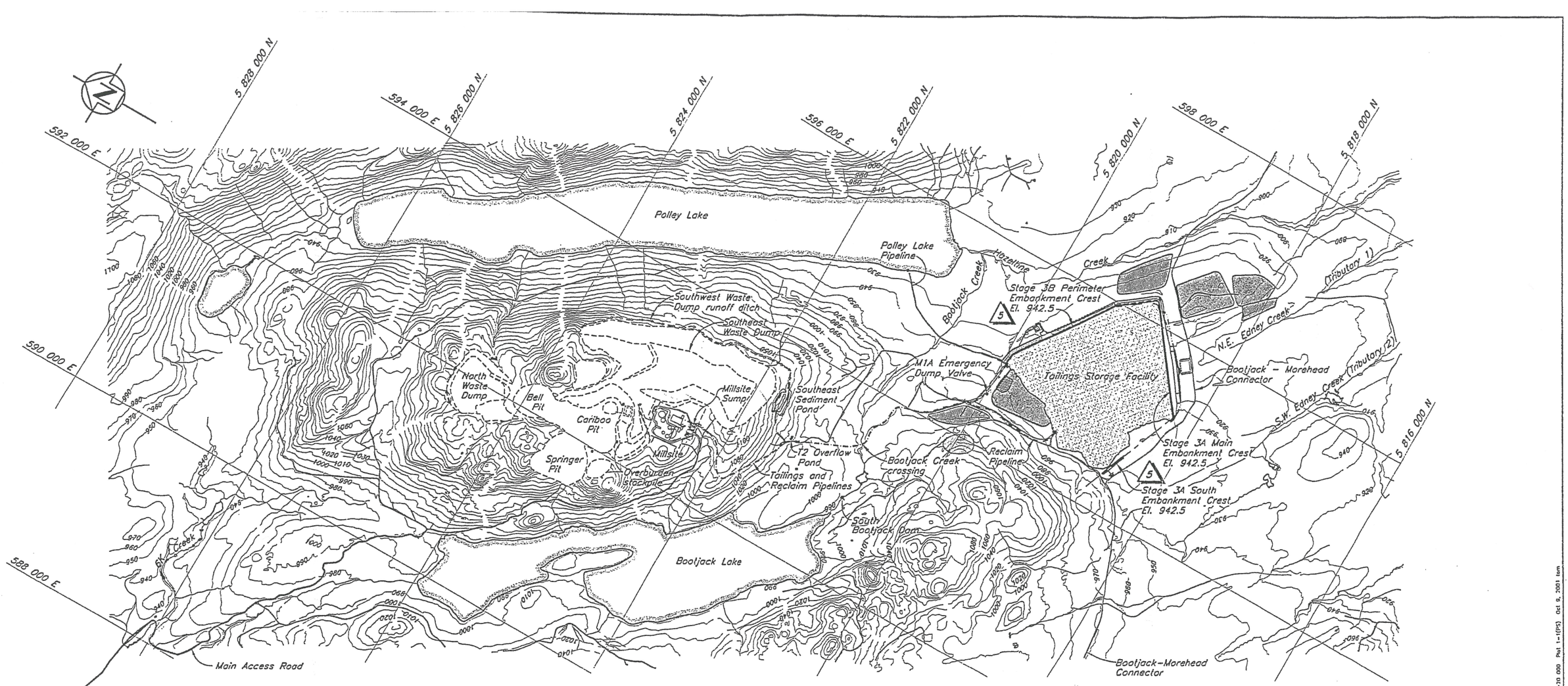
POND ELEVATION
2004 DATA

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO.	REF NO.	REV.
VA101-1/7	1	0

FIGURE 3.1

Rev 0 - Issued for Annual Report



NOTES

1. Open Pits and Waste Dumps are shown in their final configurations.
2. Topography at TSF generated from points and break lines sent from MPMC in July 1999. The topography outside the TSF area is from 1997 flyover. UTM, NAD83, ZONE 10.
3. Current size and location of potential and existing Borrow Areas and Topsoil Stockpiles are to be confirmed.
4. All dimensions in millimetres with elevations in metres, unless noted otherwise.
5. No work was completed at the Main and South Embankments during Stage 3B construction.

Scale 400 0 400 800 1200 1600 2000 m

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
5	05OCT'01	STAGE 3A/3B – AS CONSTRUCTED	CWM	TAM	[illegible]	KJB
4	13SEPT'01	ISSUED FOR 2000 & 2001 ANNUAL INSPECTON REPORT	CWM	TAM	JCV	KJB
3	08MAY01	ISSUED FOR STAGE 3B TENDER	CWM	DSR	JRK	KJB
2	25JAN'01	STAGE 3B CREST EL. 945	JRK	TAM	JMTW	KJB
1	2JUN'00	ISSUED FOR CONSTRUCTION	MDB	TAM	ABW	KJB
0	14APR'00	ISSUED FOR TENDER	MDB	TAM	JRK	KJB

REVISIONS

DRG. NO.	DESCRIPTION

REFERENCE DRAWINGS

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

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA C.W. MUIR

DESIGNED MDB | CHECKED JRK | DRAWN TAM | APPROVED KJB

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 3 TAILINGS EMBANKMENT
OVERALL SITE PLAN

Knight Piésold CONSULTING

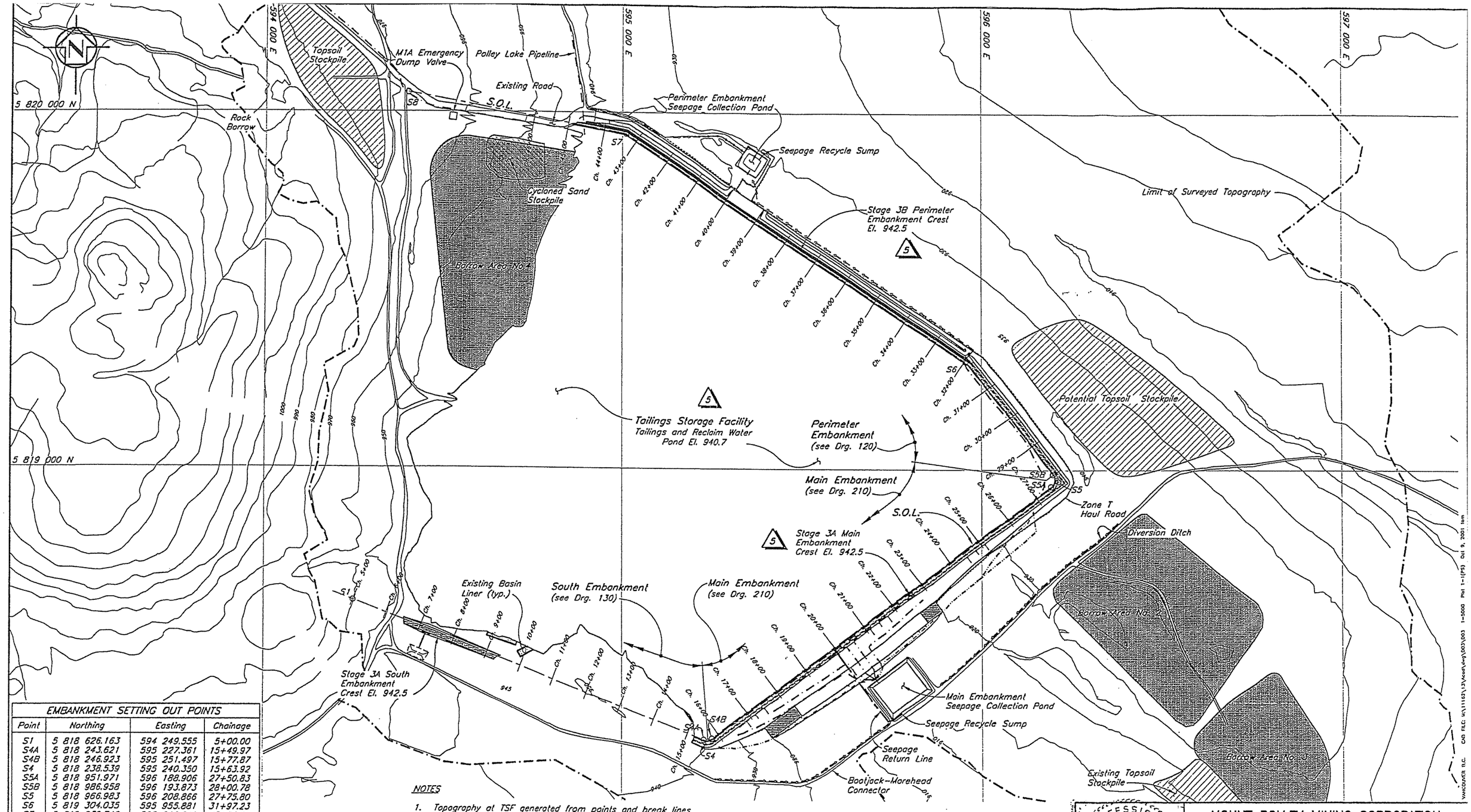
SCALE AS SHOWN | REVISION 5

DRAWING NO. 11162-13-100

VANCOUVER B.C.

CAD FILE: M:\11162\13\Acad\dwg\011\011 1=20 000 Plot 1=1(PS) Oct 9, 2001 tom

XREF FILE : TOPO99, AS BUILT



EMBANKMENT SETTING OUT POINTS			
Point	Northing	Easting	Chainage
S1	5 818 626.163	594 249.555	5+00.00
S4A	5 818 243.621	595 227.361	15+49.97
S4B	5 818 246.923	595 251.497	15+77.87
S4	5 818 238.539	595 240.350	15+63.92
S5A	5 818 951.971	596 188.906	27+50.83
S5B	5 818 986.958	596 193.873	28+00.78
S5	5 818 966.983	596 208.866	27+75.80
S6	5 819 304.035	595 955.881	31+97.23
S7	5 819 939.748	595 010.249	43+36.69
S8	5 820 053.034	594 396.471	49+60.83

NOTES

1. Topography at TSF generated from points and break lines sent from MPMC in July 1999. The topography outside the TSF area is from 1997 flyover. UTM, NAD83, Zone 10.
2. Current size and location of potential and existing Borrow Areas and Topsoil Stockpiles are to be confirmed.
3. All dimensions in millimetres with elevations in metres, unless noted otherwise.
4. No work was completed at the Main and South Embankments during Stage 3B construction.

Scale 100 0 100 200 300 400 500 m

REFERENCE DRAWINGS	
DRG. NO.	DESCRIPTION
210	T.S.F. – STAGE 3 MAIN EMBANKMENT – PLAN
130	T.S.F. – STAGE 3 SOUTH EMBANKMENT – PLAN AND SECTION
120	T.S.F. – STAGE 3 PERIMETER EMBANKMENT – PLAN

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

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
5	05OCT'01	STAGE 3A/3B – AS CONSTRUCTED	CWM	TAM	[illegible]	KJB
4	SEPT14'01	ISSUED FOR 2000 & 2001 ANNUAL INSPECTION REPORT	CWM	TAM	[illegible]	KJB
3	08MAY'01	ISSUED FOR STAGE 3B TENDER	CWM	DSR	JRK	KJB
2	26JAN'01	STAGE 3B – CREST EL. 945	JRK	TAM	JMTW	KJB
1	2JUN'00	ISSUED FOR CONSTRUCTION	MDB	TAM	ASW	KJB
0	14APR'00	ISSUED FOR TENDER	MDB	NSD	JRK	KJB

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA C.W. MOIR

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 3 TAILINGS EMBANKMENT
GENERAL ARRANGEMENT

DESIGNED	CHECKED
MDB	JRK
DRAWN	APPROVED
TAM	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN | REVISION 5

DRAWING NO. 11162-13-102

XREF FILE : TOPO99, AS-BUILT

CAD FILE: \\11162\13\Work\dwg\A001003 1-5000 Plot 1-1(PS) Oct 9, 2001 tom

VANCOUVER B.C.

595 000 E

596 000 E

5 819 000 N

5 818 000 N

PLANE B/258

PLANE A/258

PLANE C/258

PLANE E/259

PLANE B/258 (Ch. 22 + 40)

PLANE A/258 (Ch. 20 + 00)

PLANE C/258 (Ch. 18 + 50)

PLANE E/259 (Ch. 17 + 60)

Tailings and Reclaim Water Pond El. 940.7

Perimeter Embankment (see Drg. 251)

Main Embankment

South Embankment (see Drg. 254)

Stage 3A Main Embankment Crest El. 942.5

Chimney Drain

S.O.L.

Upstream Toe Drain Outlet Pipe to be realigned by MPMC in order to facilitate closure grouting if required

Existing Upstream Toe Drain Outlet Pipe

Existing Zone T Road

Drain Monitoring Sump

Main Embankment Seepage Collection Pond

Seepage Recycle Sump

Limit of Surveyed Topography

Boatjack-Morehead Connector

S4A

S4B

Ch. 27+00

Ch. 26+00

Ch. 25+00

Ch. 24+00

Ch. 23+00

Ch. 22+00

Ch. 21+00

Ch. 20+00

Ch. 19+00

Ch. 18+00

Ch. 17+00

Ch. 16+00

Ch. 15+00

B2-SM-13

A2-SM-12

C2-SM-14

B2-PE1-03

A2-PE1-03

C2-PE1-03

C2-PE1-04

S101-1

S101-2

S101-3

MP89-234

GW96-9

GW96-4A

GW96-4B

GW96-5A

GW96-5B

11162-13-251

11162-13-254

THIS DRAWING

KEY PLAN

NOTES

1. See Drg. No. 11162-13-256 for Summary of Instrumentation Installations, Typical Details and General Notes.
2. All dimensions in millimetres with elevations in metres, unless noted otherwise.
3. 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.
4. No work was completed at the Main Embankment during Stage 3B construction.

Scale 50 0 50 100 150 200 250 m

LEGEND

- GW96-9 Groundwater Monitoring Well
- A1-PE1-01 Previously installed Piezometer
- A2-PE2-06 New Stage 3 Piezometer
- A2-SM-01 New Embankment Survey Monument
- S101-1 Slope Inclinometer

REFERENCE DRAWINGS	
259	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION - SECTIONS - SHEET 2 OF 2
258	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION - SECTIONS - SHEET 1 OF 2
256	TSF-STAGE 3 TAILINGS EMBANKMENT-INSTRUMENTATION-SUMMARY OF INSTALLATION AND TYPICAL DETAILS
254	TSF - STAGE 3 SOUTH EMBANKMENT - INSTRUMENTATION - PLAN
251	TSF - STAGE 3 PERIMETER EMBANKMENT - INSTRUMENTATION - PLAN
DRG. NO.	DESCRIPTION

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

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
4	05OCT'01	STAGE 3A/3B - AS CONSTRUCTED	CWM	TAM		KJB
3	SEPT14'01	ISSUED FOR 2000 & 2001 ANNUAL INSPECTION REPORT	CWM	TAM	KJB	KJB
2	08MAY'01	ISSUED FOR STAGE 3B TENDER	CWM	DSR	JRK	KJB
1	26JAN'01	STAGE 3B - CREST EL 945	JRK	TAM	JMTW	KJB
0	2JUN'00	ISSUED FOR CONSTRUCTION	JRK	TAM	ABW	KJB

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA C.W. MUIR 08-15-01

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 3 MAIN EMBANKMENT
INSTRUMENTATION
PLAN

DESIGNED	CHECKED
JRK	ABW
DRAWN	APPROVED
NSD	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN

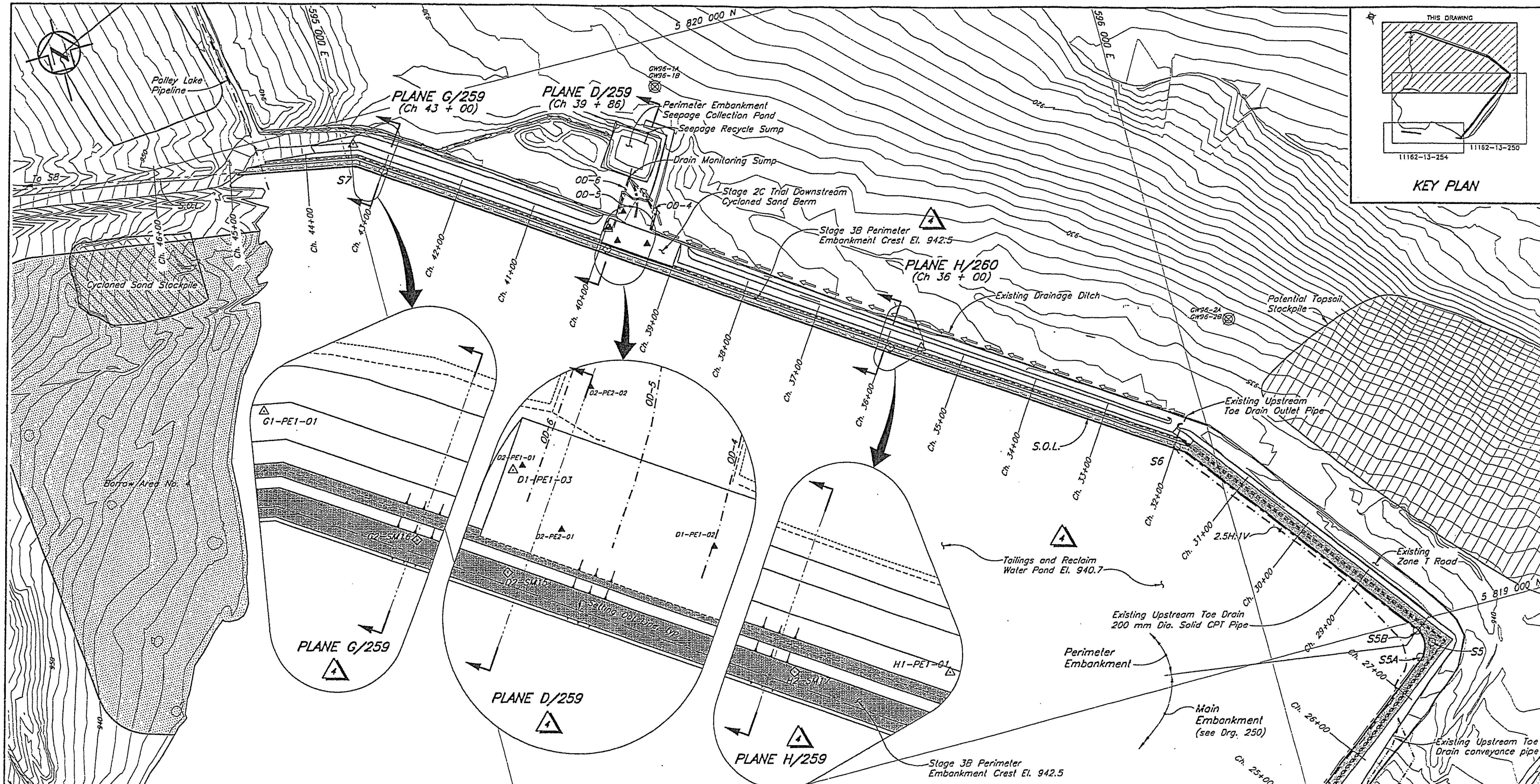
REVISION 4

DRAWING NO. 11162-13-250

XREF FILE : TOPO99, STOCK99, STAGE3B_AS-BUILT

CAD FILE: K:\11162\13\Acad\dwg\008\008 Plot 1=1(PS) 001 10, 1:2500

VANCOUVER B.C.



LEGEND

- GW96-9 Groundwater Monitoring Well
- A1-PE1-01 Previously installed Piezometer
- A2-PE2-06 New Stage 3 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. Topography outside the TSF area is from 1997 flyover.
3. See Drg. No. 11162-13-256 for Summary of Instrumentation Installations, Typical Details and General Notes.
4. All dimesnions in millimetres with elevations in metres, unless noted otherwise.
5. 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.

Scale 50 0 50 100 150 200 250 m

DRG. NO.	DESCRIPTION
259	TSF – STAGE 3 TAILINGS EMBANKMENT – INSTRUMENTATION – SECTIONS – SHEET 2 OF 2
258	TSF – STAGE 3 TAILINGS EMBANKMENT – INSTRUMENTATION – SECTIONS – SHEET 1 OF 2
250	TSF – STAGE 3 MAIN EMBANKMENT – INSTRUMENTATION – PLAN

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
4	05OCT'01	STAGE 3A/3B – AS CONSTRUCTED	CWM	TAM		KJB
3	14SEPT'01	ISSUED FOR 2000 & 2001 ANNUAL INSPECTION REPORT	CWM	TAM	LJB	KJB
2	08MAY'01	ISSUED FOR STAGE 3B TENDER	CWM	DSR	JRK	KJB
1	09MAR'01	STAGE 3B – CREST EL. 945	JRK	NSD	JMTW	KJB
0	20OCT'00	ISSUED FOR CONSTRUCTION	JRK	NSD	JMTW	KJB

REVISIONS

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — C.W. MUIR

DESIGNED JRK | CHECKED ABW | DRAWN NSD | APPROVED KJB

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

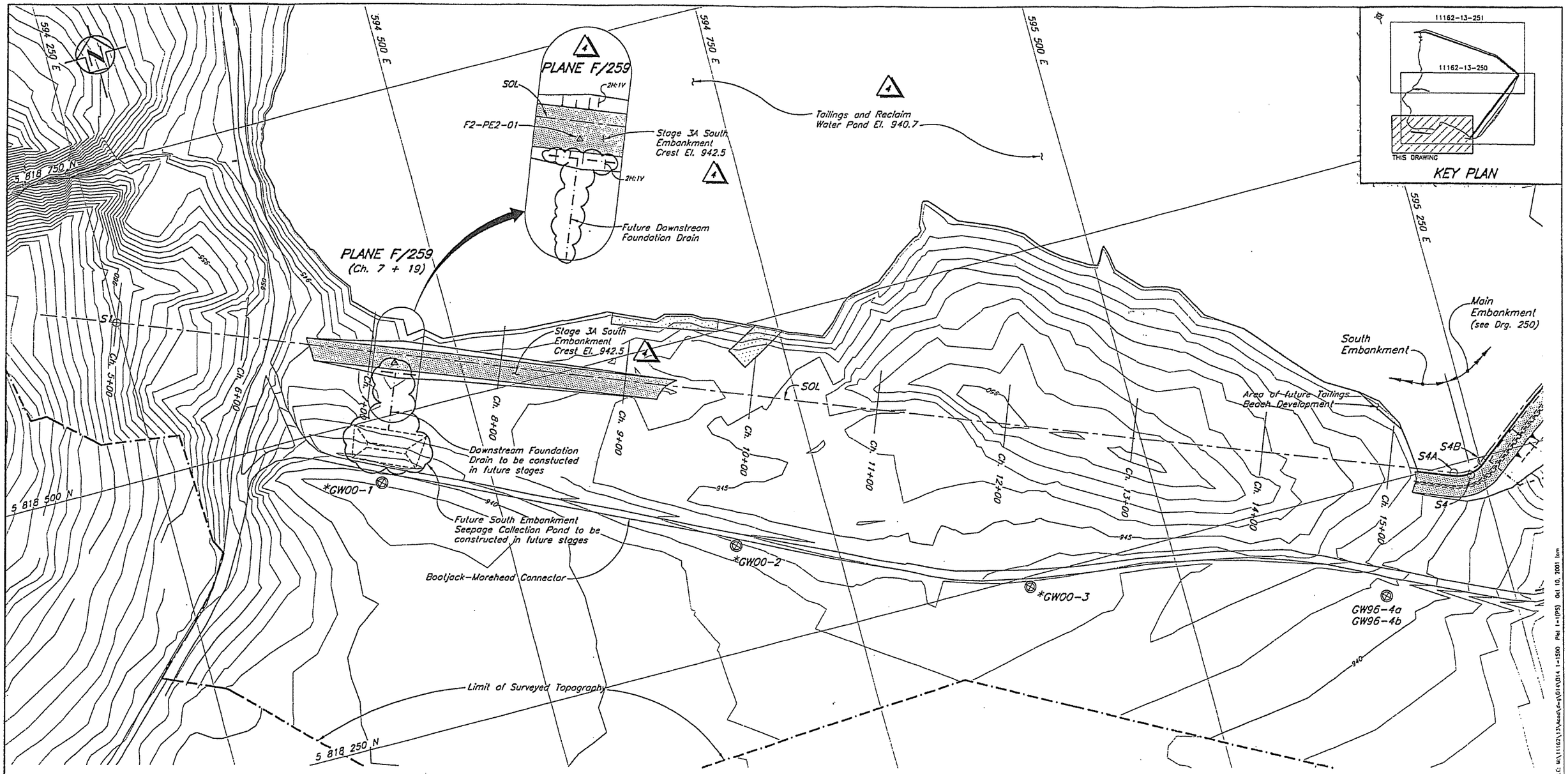
TAILINGS STORAGE FACILITY
STAGE 3 PERIMETER EMBANKMENT
INSTRUMENTATION PLAN

Knight Piésold CONSULTING

SCALE AS SHOWN | REVISION 4

DRAWING NO. 11162-13-251

XREF FILE : TOPO99, STOCK99, STAGE3B_PLAN



LEGEND

- ⊗ GW96-9 Groundwater Monitoring Well
- ▲ A1-PE1-01 Previously installed Piezometer
- △ A2-PE2-06 New Stage 3 Piezometer
- ◇ A2-SM-01 New Embankment Survey Monument

4 NOTES

1. See Drg. No. 11162-13-256 for Summary of Instrumentation Installations, Typical Details and General Notes.
2. All dimensions in millimetres with elevations in metres, unless noted otherwise.
3. No work was completed at the South Embankment during Stage 3B construction.
4. Piezometers are vibroting wire type, SINCA Model 52611030 and RST Model 45005-0100 with a pressure rating of 100 psi or equivalent, connnected to a readout panel via standard non-vented direct burial cable.

Scale 30 0 30 60 90 120 150 m

DRG. NO.	DESCRIPTION
259	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION SECTIONS - SHEET 2 OF 2
256	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION - SUMMARY OF INSTALLATION AND TYPICAL DETAILS
250	TSF - STAGE 3 MAIN EMBANKMENT - INSTRUMENTATION - PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
4	05OCT'01	STAGE 3A/3B - AS CONSTRUCTED	CWM	TAM		
3	14SEPT'01	ISSUED FOR 2000 & 2001 ANNUAL INSPECTION REPORT	CWM	TAM	JJQ	KJB
2	08MAY'01	ISSUED FOR STAGE 3B TENDER	CWM	DSR	JRK	KJB
1	26JAN'01	STABE 3B - CREST EL. 945	JRK	TAM	JMTW	KJB
0	2JUN'00	ISSUED FOR CONSTRUCTION	JRK	TAM	ABW	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA C.W. MUIR

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 3 SOUTH EMBANKMENT
INSTRUMENTATION PLAN

DESIGNED	CHECKED
JRK	ABW
DRAWN	APPROVED
NSD	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN | REVISION 4

DRAWING NO. 11162-13-254

XREF FILE : TOPO59, STAGE3B_PLAN

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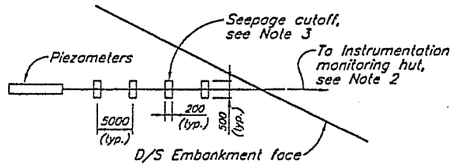
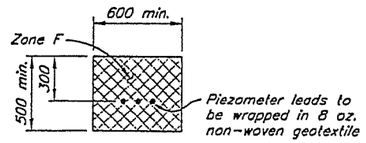
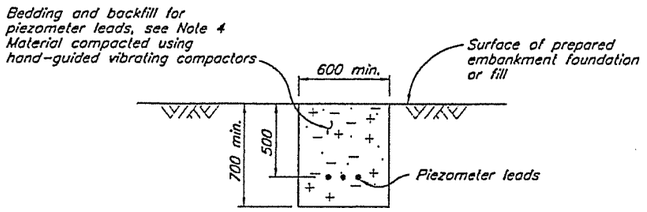


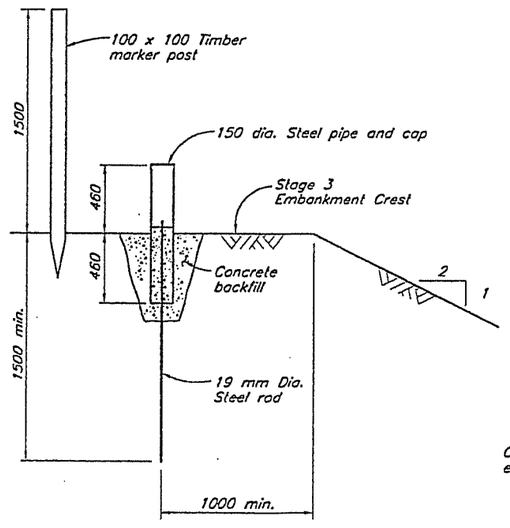
DETAIL A/258
TYPICAL INSTALLATION DETAIL OF SEEPAGE CUTOFF FOR PIEZOMETER LEADS IN GLACIAL TILL
NTS



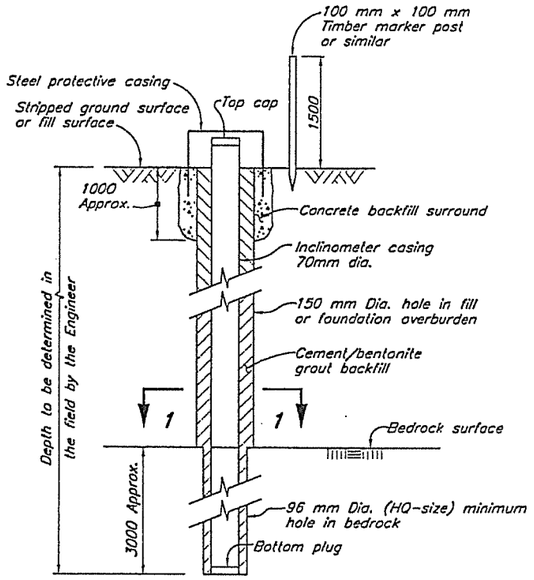
DETAIL B/258
TYPICAL INSTALLATION DETAIL FOR PIEZOMETER LEADS IN ZONE F



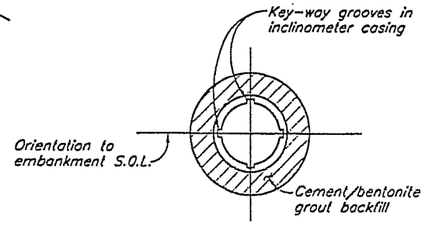
TYPICAL SECTION THROUGH PIEZOMETER LEAD TRENCH IN PREPARED EMBANKMENT FOUNDATION OR FILL



TYPICAL DETAIL OF SURFACE MOVEMENT MONUMENT



TYPICAL INCLINOMETER INSTALLATION IN BOREHOLE
N.T.S.



SECTION 1
N.T.S.

SUMMARY OF INSTRUMENTATION INSTALLATIONS

PIEZOMETER ID	NORTHING	EASTING	ELEV.	DATE INSTALLED
A0-PE1-01	5 818 495.773	595 588.746	938.542	25/02/00
A0-PE2-01	5 818 502.850	595 585.398	928.03	09/03/98
A0-PE2-02	5 818 513.042	595 578.418	927.87	09/03/98
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	5 818 495.773	595 588.746	936.5	01/11/99
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	27/02/00
A2-PE1-03	5 818 423.31	595 663.2	909.3	19/07/00
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
A2-SM-09	NOT INSTALLED		942.5	
A2-SM-12	5 818 492.317	595 592.84	942.5	
B0-PE1-01	5 818 681.542	595 831.874	939.05	20/02/00
B0-PE2-01	5 818 688.820	595 832.067	930.00	06/03/98
B0-PE2-02	5 818 697.980	595 826.160	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	5 818 676.310	595 836.050	939.536	20/02/00
B2-PE1-03	5 818 572.78	595 847.27	914.1	19/07/00
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
B2-SM-10	NOT INSTALLED		942.5	
B2-SM-13	5 818 643.472	595 793.692	942.54	
SI01-1	5 818 463.54	595 666.536	916.923	
SI01-2	5 818 400.999	595 588.808	918.152	

SUMMARY OF INSTRUMENTATION INSTALLATIONS (con't)

PIEZOMETER ID	NORTHING	EASTING	ELEV.	DATE INSTALLED
C0-PE1-01	5 818 408.969	595 469.750	939.267	26/02/00
(C0-PE2-01)	5 818 414.319	595 471.099	927.80	09/03/98
(C0-PE2-02)	5 818 426.495	595 463.101	927.48	09/03/98
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	03/04/98
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	939.26	26/02/00
C2-PE1-03	5 818 327.18	595 530.51	912.6	12/07/00
(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
C2-SM-11	NOT INSTALLED		942.5	
C2-SM-14	5 818 398.488	595 468.018	942.54	
D1-PE1-02	5 819 742.03	595 353.980	928.76	30/01/98
D1-PE1-03	5 819 774.953	595 307.851	933.323	20/07/01
(D2-PE1-01)	5 819 775.449	595 310.522	930	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
D2-SM-15	5 819 749.019	595 299.627	942.421	04/10/01
E2-PE2-01	5 818 307.454	595 435.983	908	17/06/98
E2-PE2-02	5 818 307.454	595 435.983	913	17/06/98
G1-PE1-01	5 818 9865.212	595 012.935	933.19	20/07/01
G2-SM-16	5 819 922.045	595 042.824	942.643	04/10/01
H1-PE1-01	5 819 517.62	595 667.86	936.8	20/07/01
H2-SM-17	5 819 528.085	595 628.739	942.342	04/10/01

( ) Piezometer no longer functioning.

LEGEND

A0-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
D2-PE1-02 △ New Stage 3 Piezometer
A2-SM-12 ◇ New Embankment Survey Monument
GW96-9 ⊗ Groundwater Monitoring Well
SI01-1 ⊕ Slope Inclinometer

NOTES
1. All dimensions in millimetres with elevations in metres, unless noted otherwise.
2. Piezometer leads extended as directed by the Engineer.
3. Seepage cutoffs placed at 5 m intervals with 10% bentonite added to fine grained till backfill.

Scale 1000 500 0 1000 2000 mm

REFERENCE DRAWINGS	
259	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION - SECTIONS - SHEET 2 OF 2
258	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION - SECTIONS - SHEET 1 OF 2
254	TSF - STAGE 3 SOUTH EMBANKMENT - INSTRUMENTATION - PLAN
251	TSF - STAGE 3 PERIMETER EMBANKMENT - INSTRUMENTATION - PLAN
250	TSF - STAGE 3 MAIN EMBANKMENT - INSTRUMENTATION - PLAN
DRG. NO.	DESCRIPTION

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

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
4	05OCT'01	STAGE 3A/3B - AS CONSTRUCTED	CWM	TAM	JRK	KJB
3	08MAY'01	ISSUED FOR STAGE 3B TENDER	CWM	DSR	JRK	KJB
2	26JAN'01	STAGE 3B - CREST ELEVATION 945	JRK	WAL	JMTW	KJB
1	20OCT'00	PERIMETER EMBANKMENT INSTRUMENTATION ADDED	JRK	NSD	JMTW	KJB
0	2JUN'00	ISSUED FOR CONSTRUCTION	JRK	TAM	JDC	KJB

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA C.W. MUIR

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 3 TAILINGS EMBANKMENT
INSTRUMENTATION
SUMMARY OF INSTALLATION & TYPICAL DETAILS

DESIGNED	CHECKED
JRK	JDC
DRAWN	APPROVED
DSR	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN | REVISION 4
DRAWING NO. 11162-13-256

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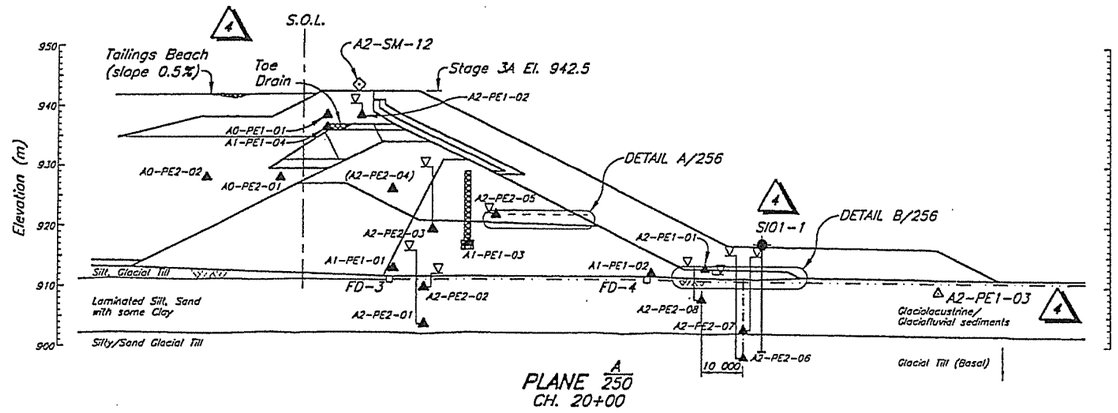
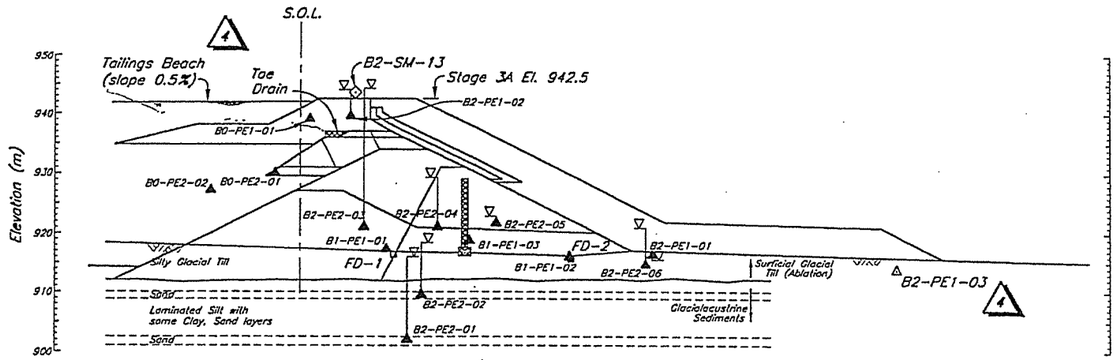
VANCOUVER B.C.



PLANE A/250
CH. 20+00



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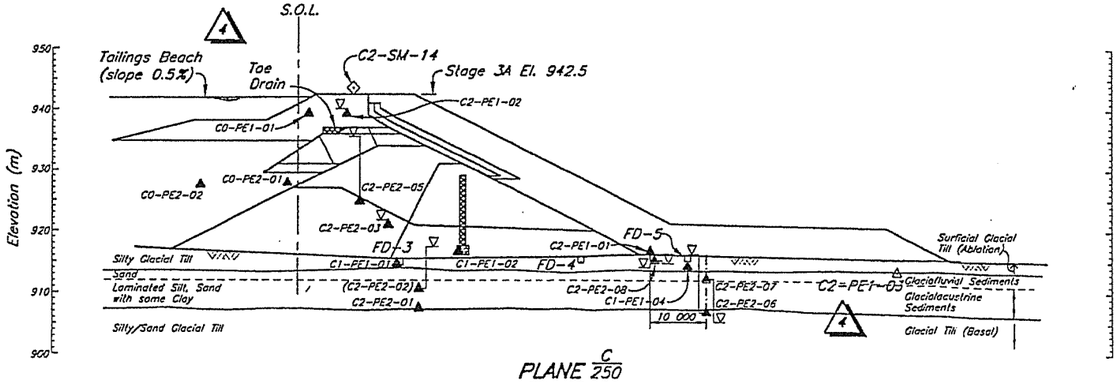
CH. 22+40



PLANE C/250
CH. 18+50

LEGEND

- Water level readings Apr. 21, 2001
- ▲ A1-PE1-01 Previously installed Piezometer
- △ A2-PE2-06 New Stage 3 Piezometer
- ◇ A2-SM-01 New Embankment Survey Monument
- SI01-1 Slope Inclinometer

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.
3. Zone fill materials and drain pipes not shown in drawing for clarity. For Details see Drg. 215.
4. See Drg. No. 11162-13-256 for Summary of Instrumentation Installations, Typical Details and General Notes.
5. All dimensions in millimetres with elevations in metres, unless noted otherwise.
6. No work was completed at the Main Embankment during Stage 3B construction.

Scale 10 0 10 20 30 40 50 m

REFERENCE DRAWINGS	
259	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION - SECTIONS 2 OF 2
256	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION - SUMMARY OF INSTALLATION & TYP. DETAILS
250	TSF - STAGE 3 MAIN EMBANKMENT - INSTRUMENTATION - PLAN
DRG. NO.	DESCRIPTION

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

REVISIONS						
4	05OCT'01	STAGE 3A/3B - AS CONSTRUCTED	CWM	TAM	VJG	KJB
3	13SEPT'01	ISSUED FOR 2000 & 2001 ANNUAL INSPECTION REPORT	CWM	DSR	VJG	KJB
2	08MAY'01	ISSUED FOR STAGE 3B TENDER	CWM	DSR	JRK	KJB
1	26JAN'01	STAGE 3B - CREST ELEVATION 945	JRK	AW	JMTW	KJB
0	2JUN'00	ISSUED FOR CONSTRUCTION	JRK	TAM	JDC	KJB
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA C.W. MOIR

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 3 TAILINGS EMBANKMENT
INSTRUMENTATION
SECTIONS - SHEET 1 OF 2

DESIGNED	CHECKED
JRK	JDC
DRAWN	APPROVED
DSR	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN | REVISION 4

DRAWING NO. 11162-13-258

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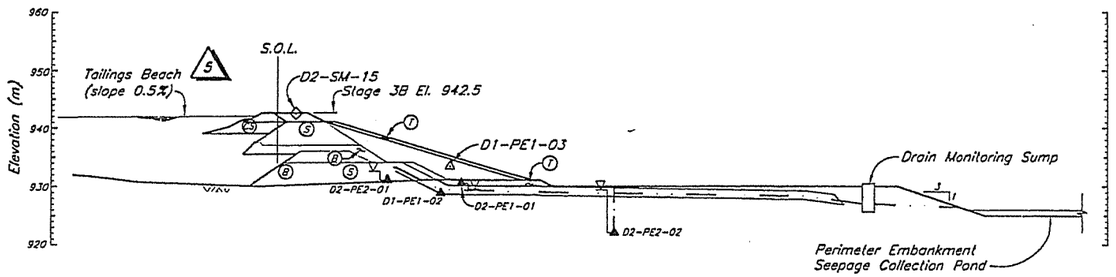
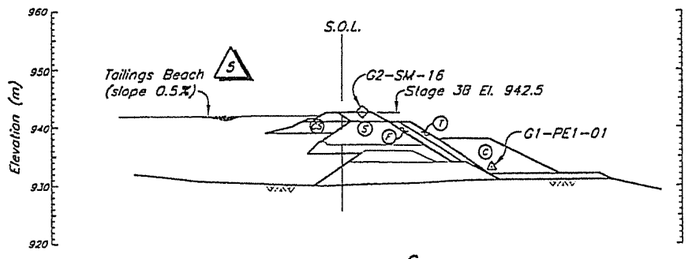
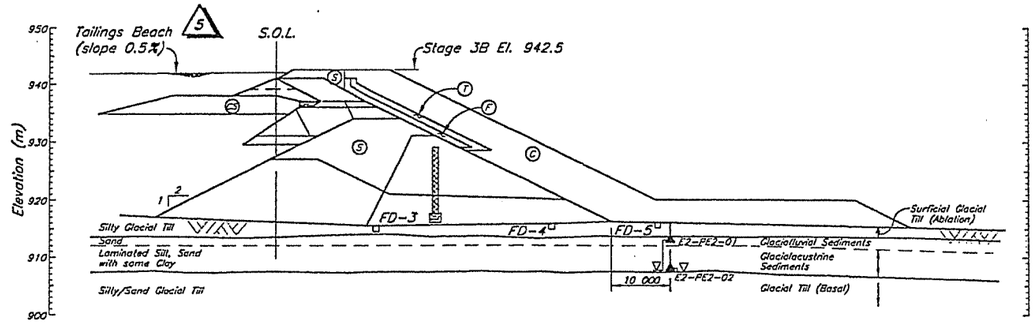
VANCOUVER B.C.



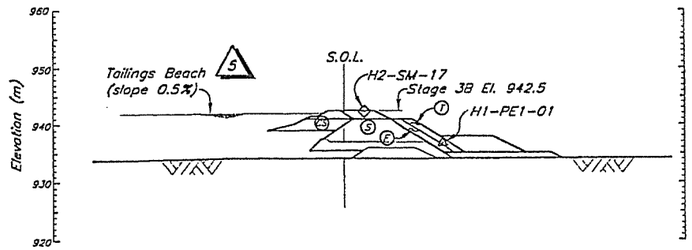
PLANE $\frac{D}{251}$
CH. 39+86



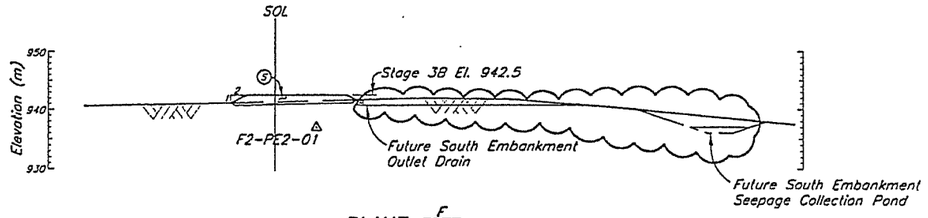
PLANE $\frac{G}{251}$
CH. 43+00



PLANE $\frac{E}{250}$
CH. 17+60



PLANE $\frac{H}{251}$
CH. 36+00



PLANE $\frac{F}{254}$
CH. 7+19

5 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.
3. Zone fill materials and drain pipes not shown in drawing for clarity. For Details see Drg. 215.
4. See Drg. No. 11162-13-256 for Summary of Instrumentation Installations, Typical Details and General Notes.
5. All dimensions in millimetres with elevations in metres, unless noted otherwise.
6. No work was completed at the Main and South Embankments during Stage 3B construction.

5 LEGEND

- Water level readings Apr. 21, 2001
- ▲ A1-PE1-01 Previously installed Piezometer
- △ A2-PE2-06 New Stage 3 Piezometer
- ◇ A2-SM-01 New Embankment Survey Monument

Scale 10 0 10 20 30 40 50 m

ORG. NO.	DESCRIPTION
256	TSF - STAGE 3 TAILINGS EMBANKMENT - INSTRUMENTATION SUMMARY OF INSTALLATION & TYPICAL DETAILS
254	TSF - STAGE 3 TAILINGS EMBANKMENT - SOUTH EMBANKMENT - INSTRUMENTATION PLAN
251	TSF - STAGE 3 PERIMETER EMBANKMENT - INSTRUMENTATION PLAN
250	TSF - STAGE 3 TAILINGS EMBANKMENT - MAIN EMBANKMENT - INSTRUMENTATION PLAN

REFERENCE DRAWINGS

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

REVISIONS

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1	20OCT'00	PERIMETER EMBANKMENT SECTIONS ADDED	JRK	NSD	JMTW	KJB
0	2JUN'00	ISSUED FOR CONSTRUCTION	JRK	TAM	ASW	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA C.W. MOIR

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 3 TAILINGS EMBANKMENT
INSTRUMENTATION
SECTIONS - SHEET 2 OF 2

DESIGNED	CHECKED
JRK	ASW
DRAWN	APPROVED
DSR	KJB

Knight Piésold CONSULTING

SCALE AS SHOWN | REVISION 5

DRAWING NO. 11162-13-259

XREF FILE :

VANCOUVER B.C. CAD FILE: M:\11162\13\Acad\Dwg\D15\D15 1=500 Plot 1=1[PS] Oct 10, 2001 tam

Knight Piésold
CONSULTING

APPENDIX A

2004 ANNUAL INSPECTION PHOTOGRAPHS

(Pages A1 to A6)

PHOTO 1 – Main Embankment Seepage Collection Pond.

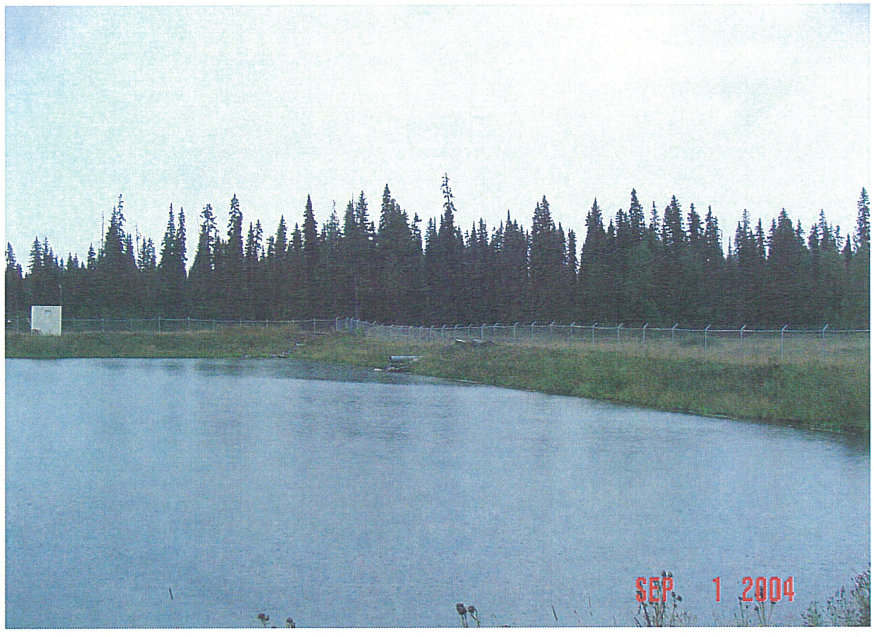


PHOTO 2 – Main Embankment and Seepage Collection Pond.

PHOTO 3 – Perimeter Embankment Seepage Collection Pond.

PHOTO 4 – Perimeter Embankment and Seepage Collection Pond.

PHOTO 5 – Perimeter Embankment cyclone sand test section before new construction and upgrades.

PHOTO 6 – South Embankment.

PHOTO 7 – Millsite Sump

PHOTO 8 – Millsite Sump Spillway showing signs of erosion.

PHOTO 9 – Southeast Sediment Collection Pond.

PHOTO 10 – South Bootjack Dam.

PHOTO 11 – Slope indicator tests.

Knight Piésold
CONSULTING

APPENDIX B

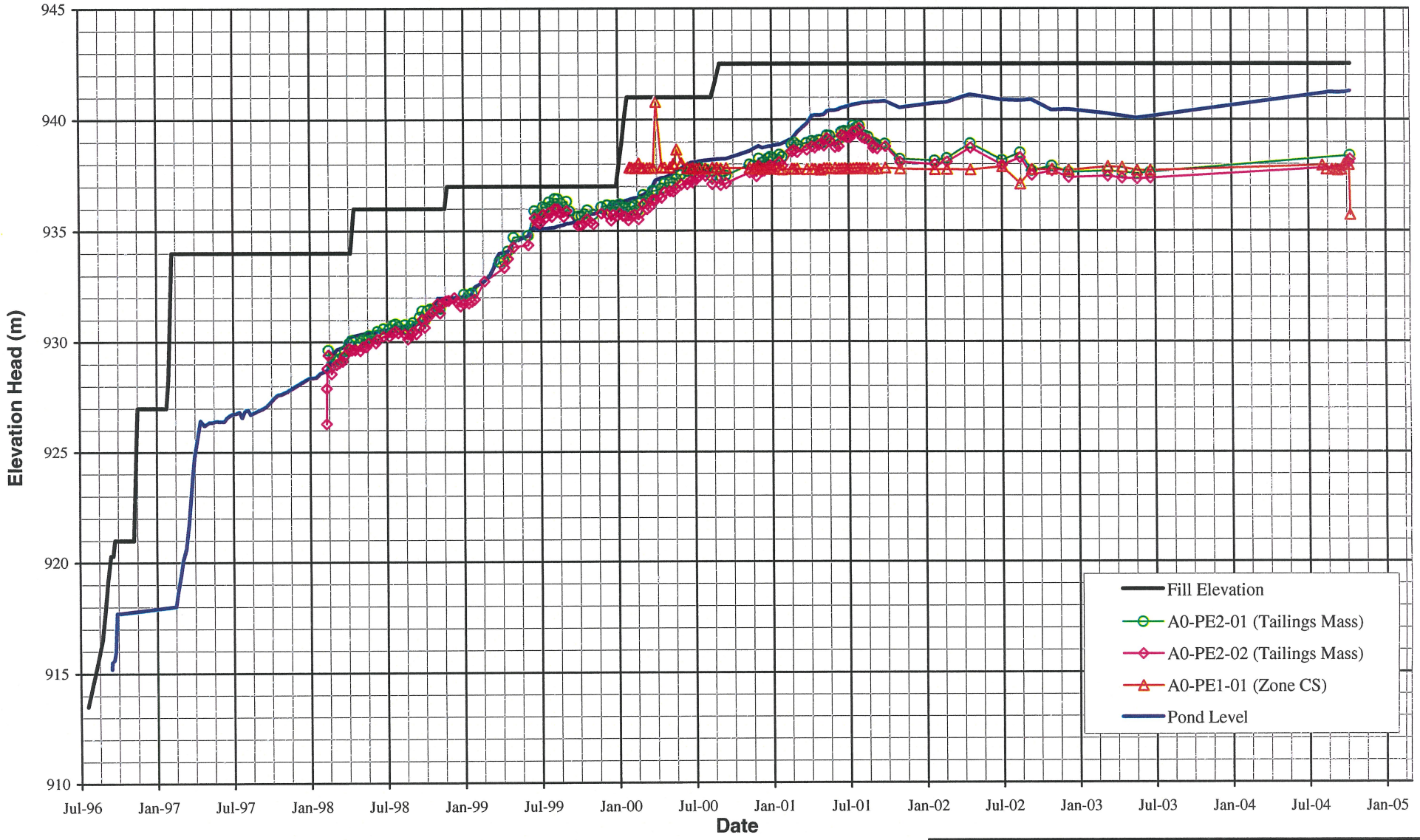
PIEZOMETER RECORDS

Appendix B1	Tailings Piezometer Records
Appendix B2	Embankment Foundation Piezometer Records
Appendix B3	Embankment Fill Piezometer Records
Appendix B4	Drain Piezometer Records

Knight Piésold
CONSULTING

APPENDIX B1

TAILINGS PIEZOMETERS RECORDS
(Pages B1-1 to B1-3)



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A TAILINGS PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA101-1/7	1	0

FIGURE B1-1

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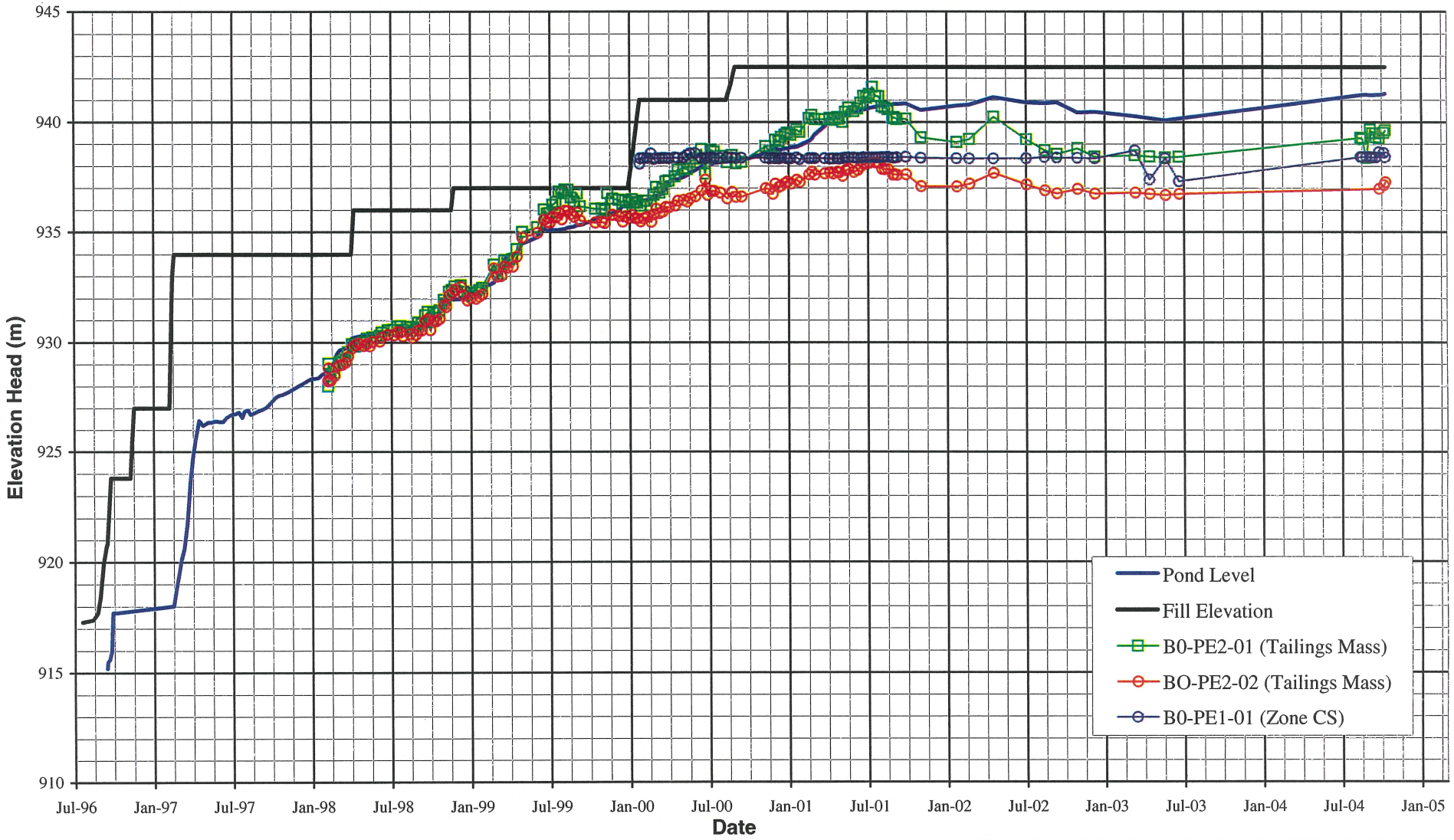
Rev'd Jan/25/05



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE B TAILINGS PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B1-2

Rev 0 - Issued for Annual Report

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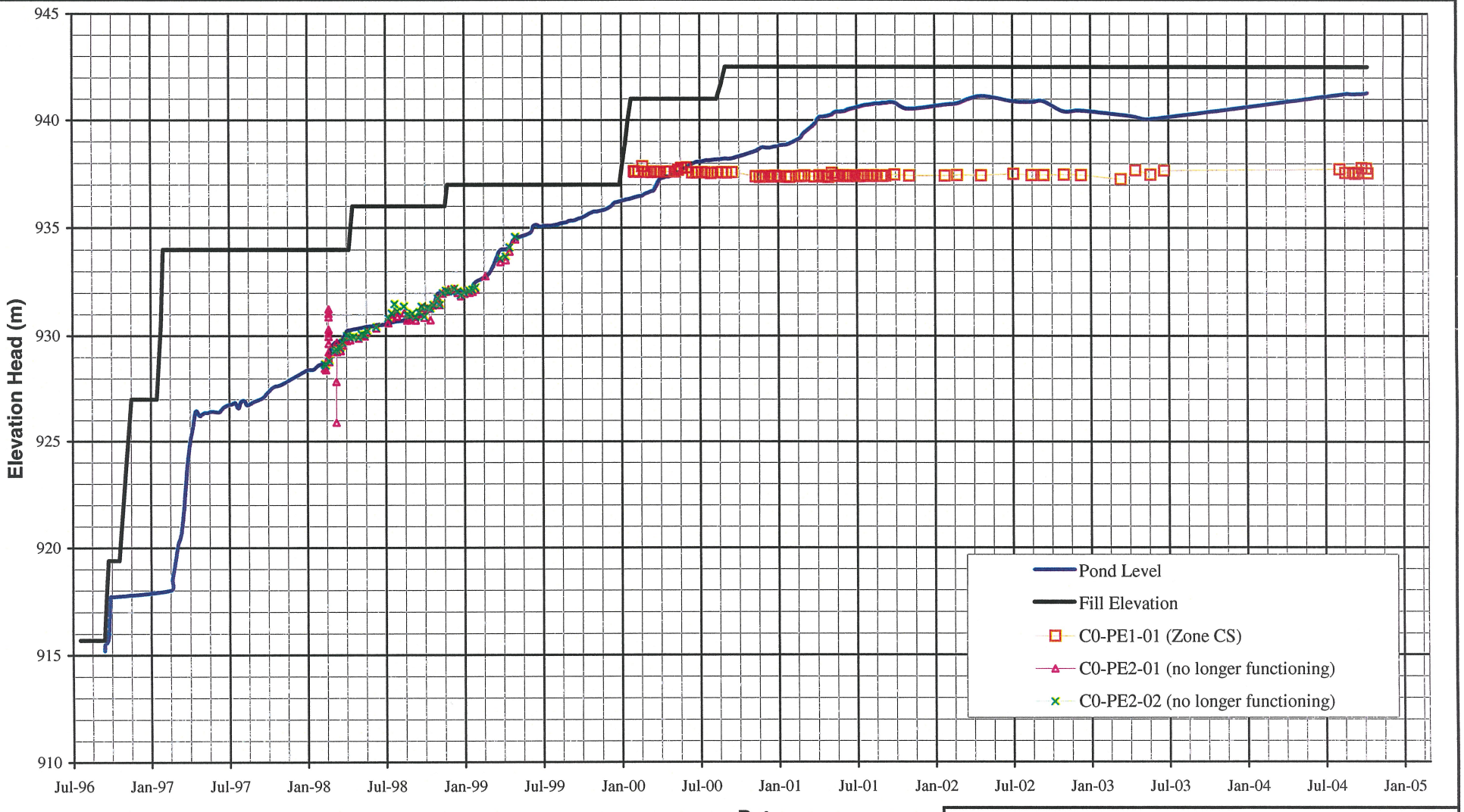
Rev'd Jan/25/05



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C TAILINGS PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B1-3

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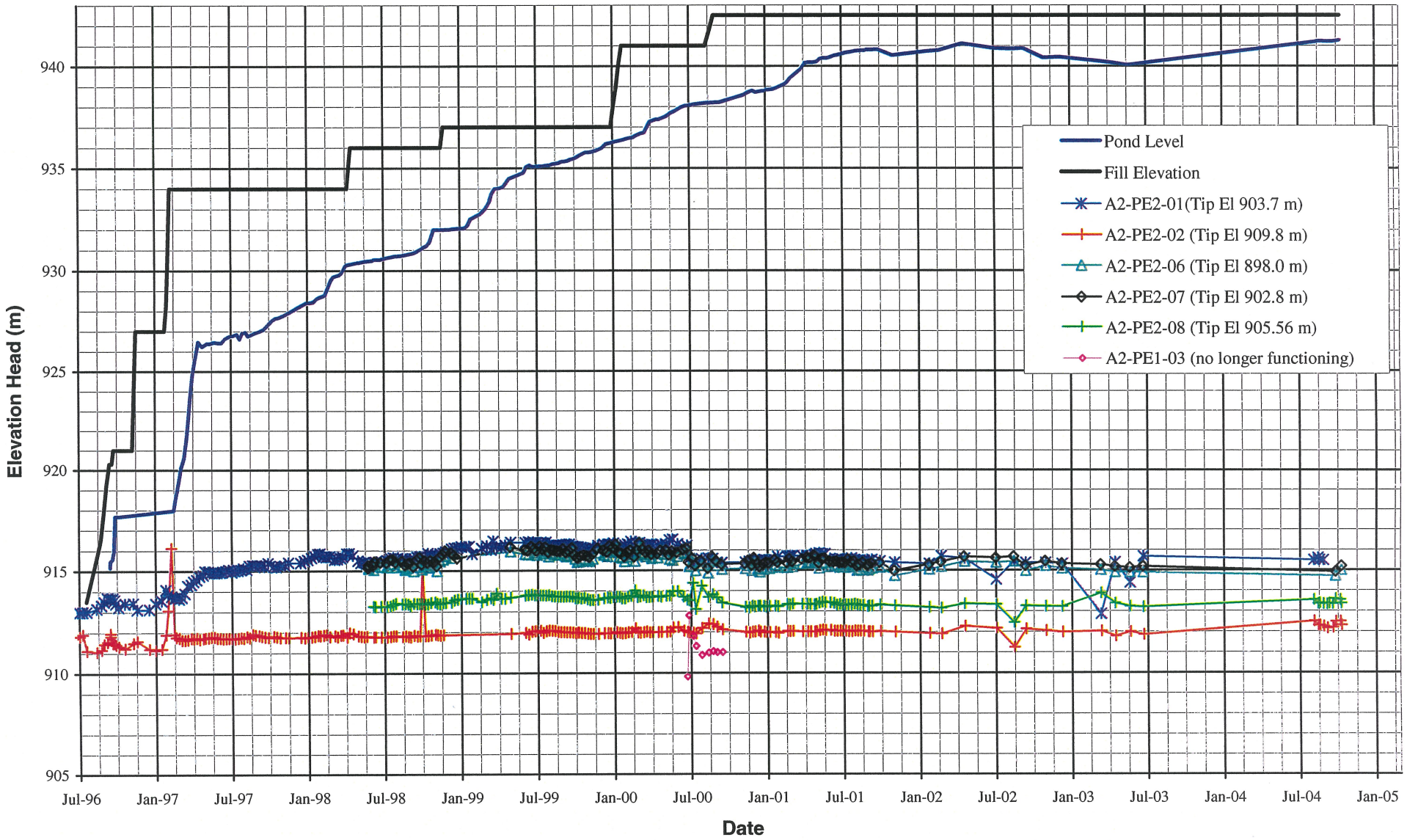
CONSULTING

APPENDIX B2

EMBANKMENT FOUNDATION PIEZOMETER RECORDS
(Pages B2-1 to B2-6)



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A FOUNDATION PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA101-1/7	1	0

FIGURE B2-1

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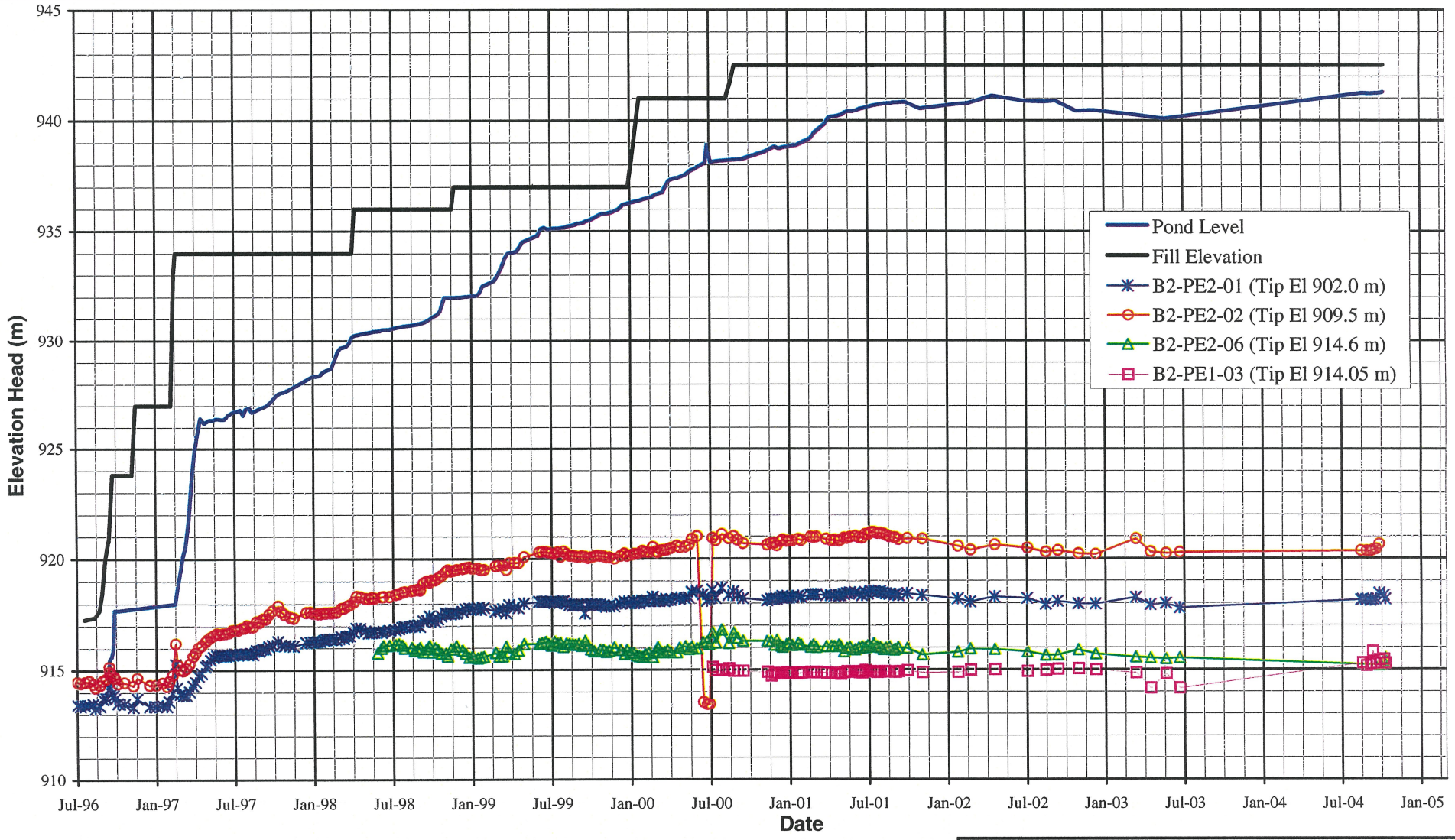
Rev'd Jan/25/05



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE B FOUNDATION PIEZOMETERS
GRAPH OF ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B2-2

Rev 0 - Issued for Annual Report

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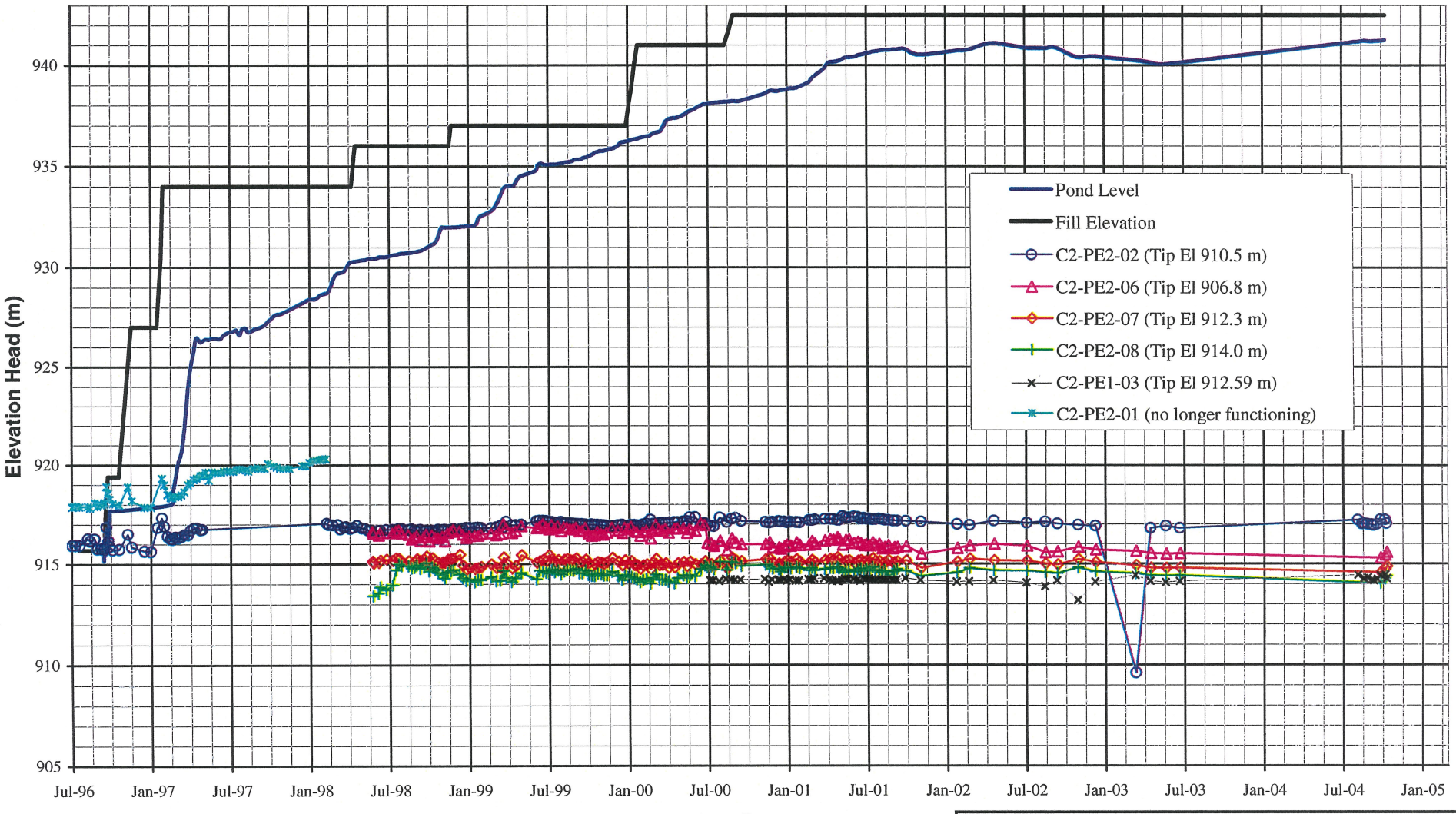

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C FOUNDATION PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B2-3

Rev 0 - Issued for Annual Report

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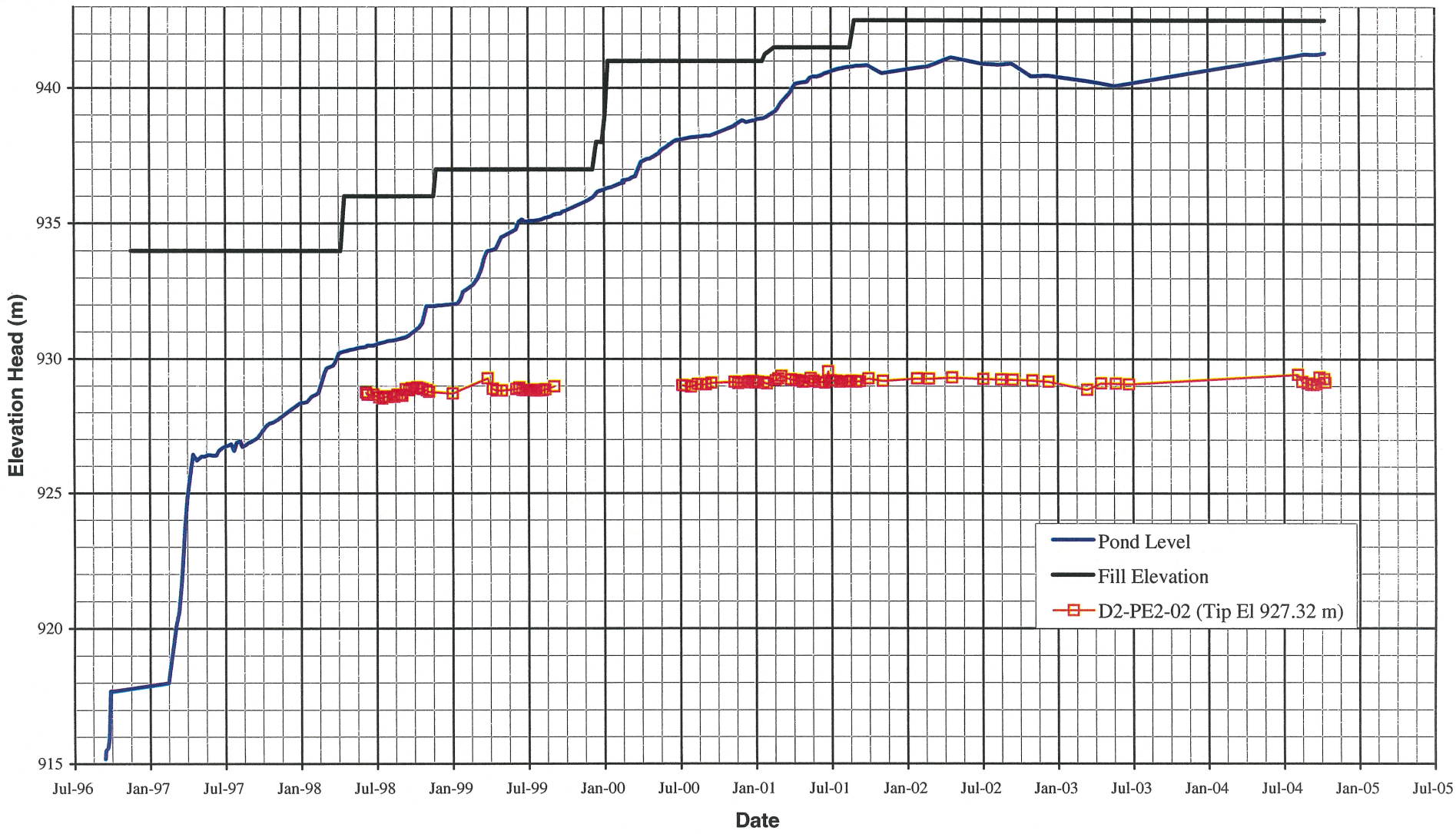

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE D FOUNDATION PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B2-4

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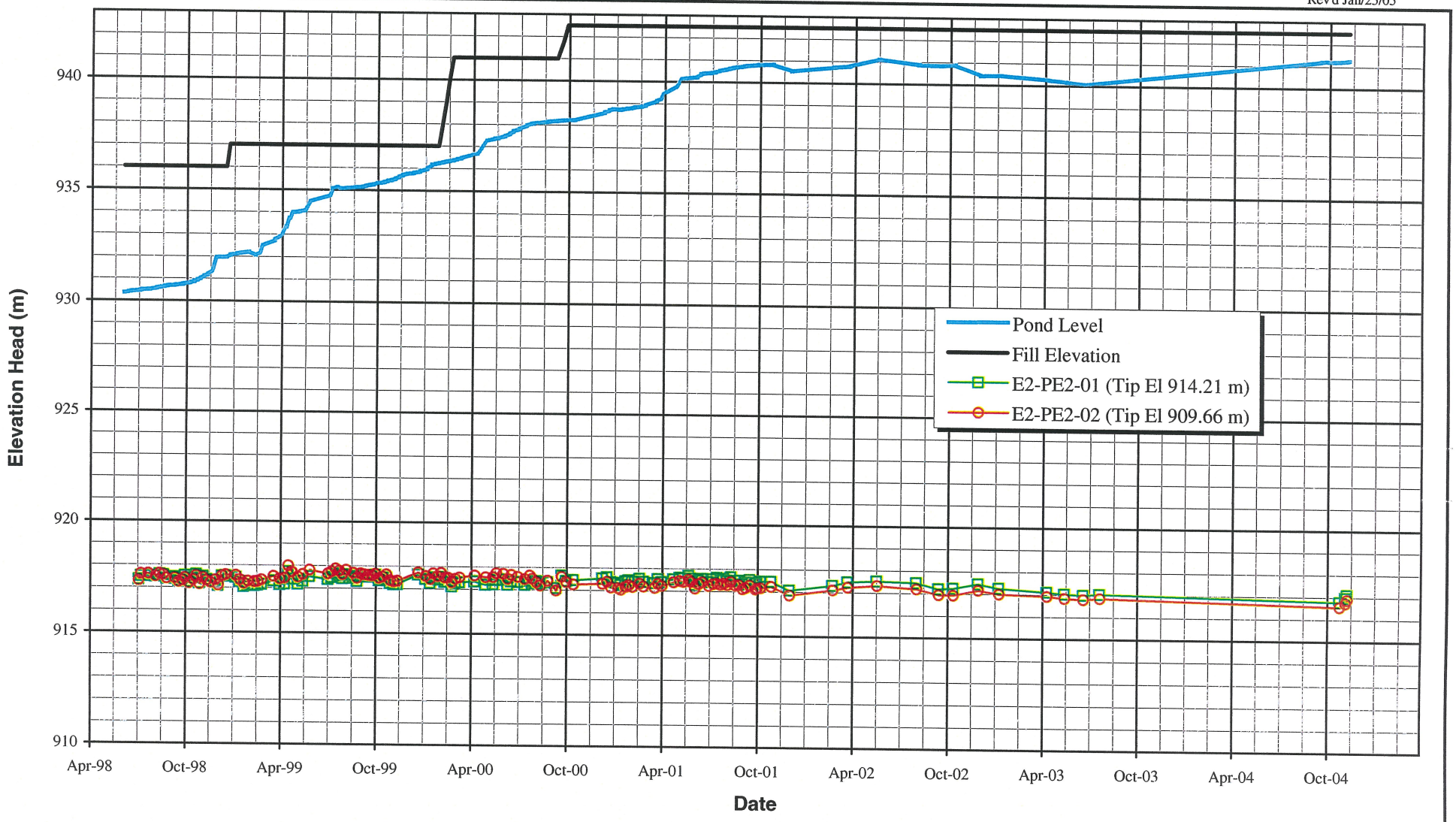

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE E FOUNDATION PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101 - 1/7	1	0

FIGURE B2-5

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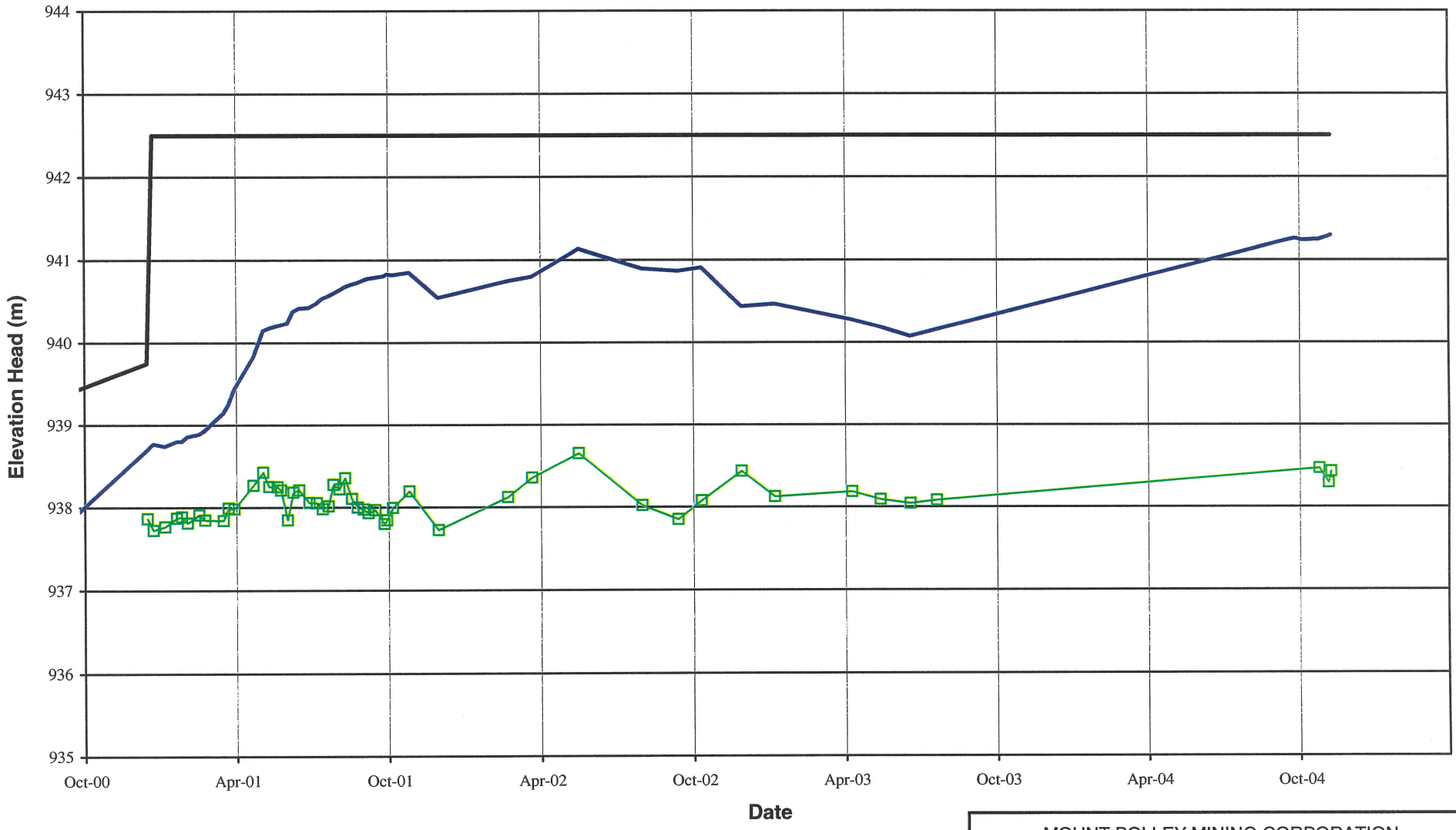
Rev'd Jan/25/05



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE F FOUNDATION PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101 - 1/7	1	0

FIGURE B2-6

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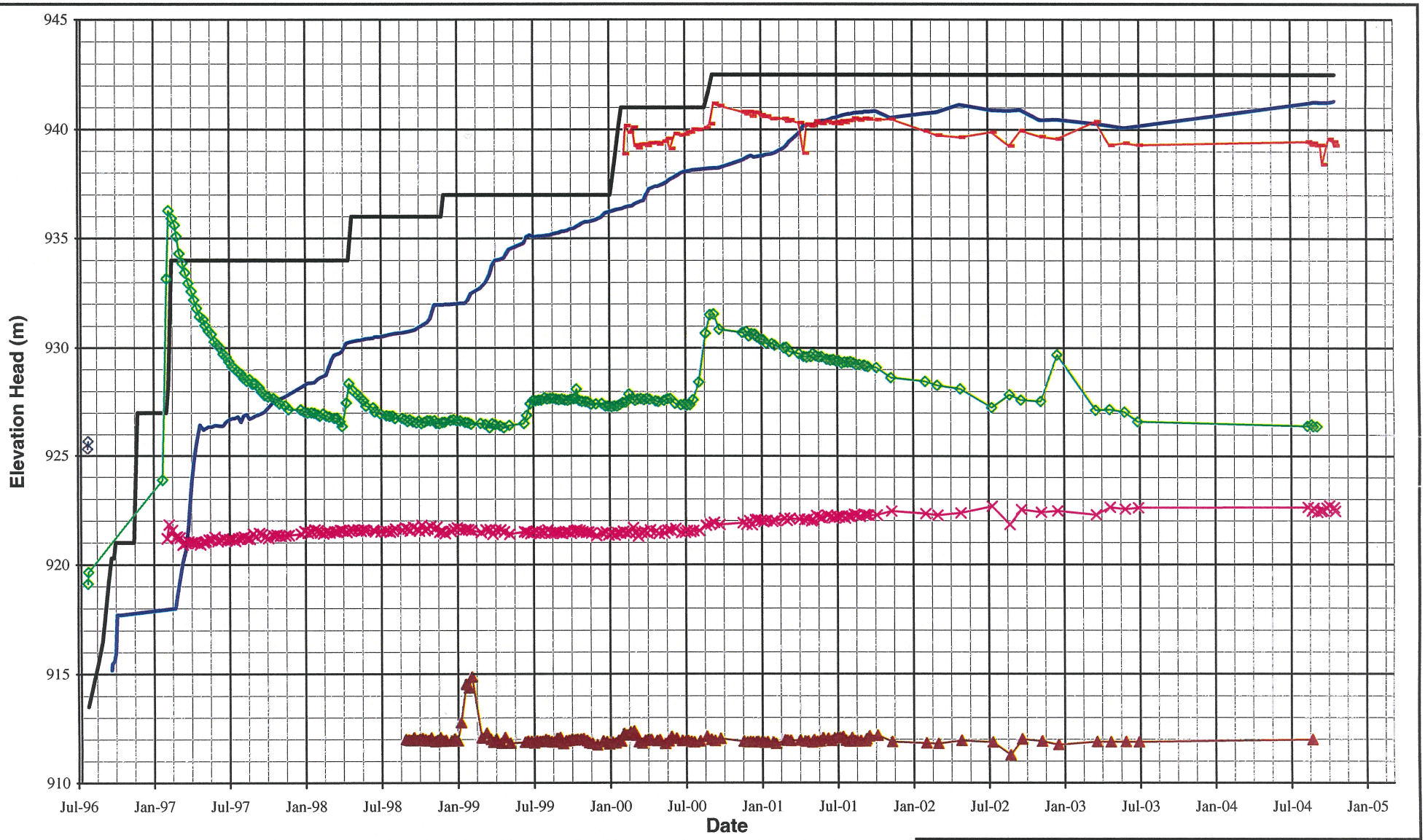
CONSULTING

APPENDIX B3

EMBANKMENT FILL PIEZOMETER RECORDS
(Pages B3-1 to B3-4)



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A FILL PIEZOMETERS
ELEVATION HEAD vs. TIME

PROJECT NO.	REF. NO.	REV.
VA101-1/7	1	0

Knight Piésold CONSULTING

FIGURE B3-1

Rev 0 - Issued for Annual Report

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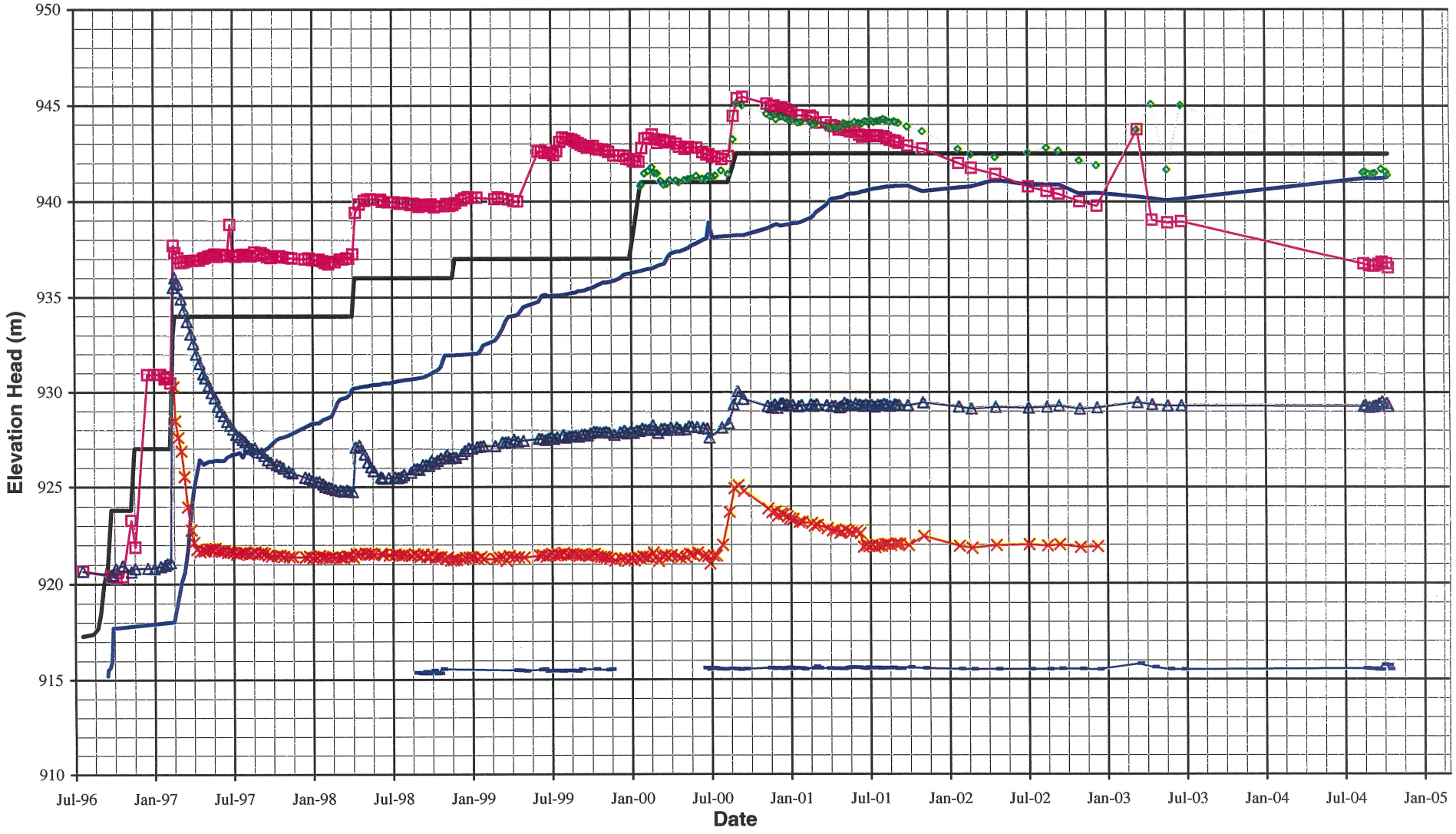
Rev'd Jan/25/05



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE B FILL PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B3-2

Rev 0 - Issued for Annual Report

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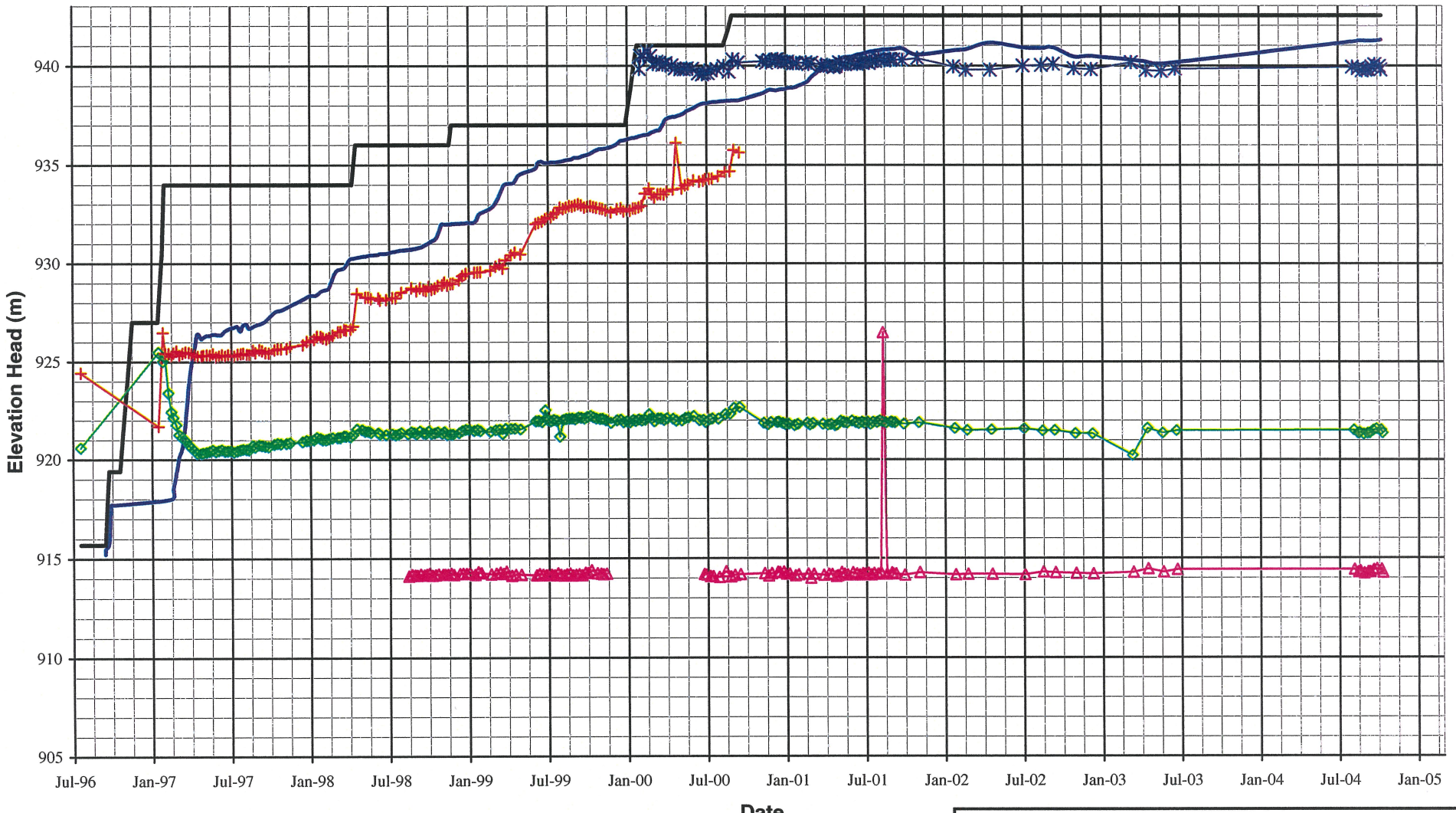
Rev'd Jan/25/05



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C FILL PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B3-3

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MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE D FILL PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

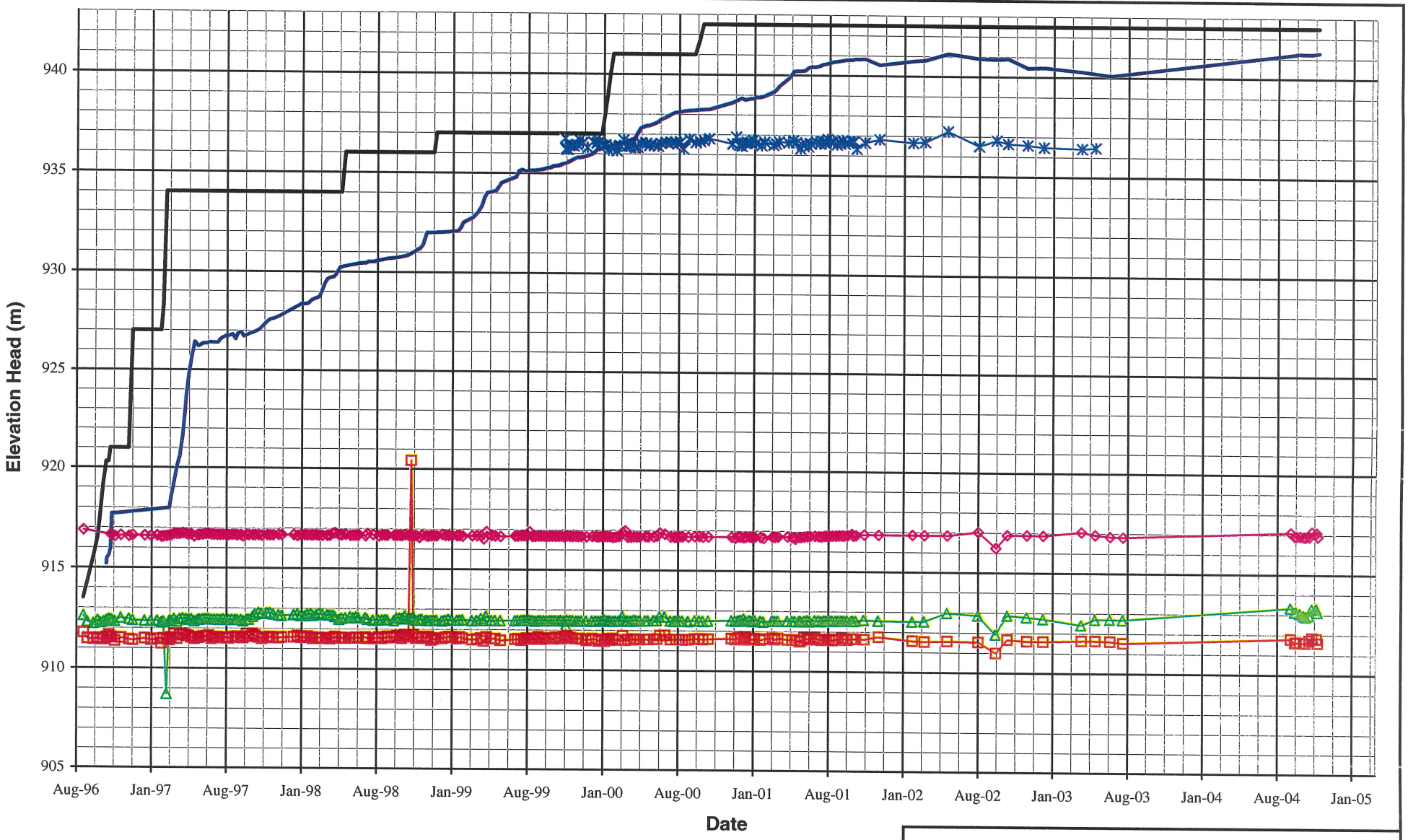
FIGURE B3-4

Rev 0 - Issued for Annual Report

Knight Piésold CONSULTING

APPENDIX B4

DRAIN PIEZOMETER RECORDS
(Pages B4-1 to B4-4)



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A DRAIN PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA101-1/7	1	0

FIGURE B4-1

Rev 0 - Issued for Annual Report

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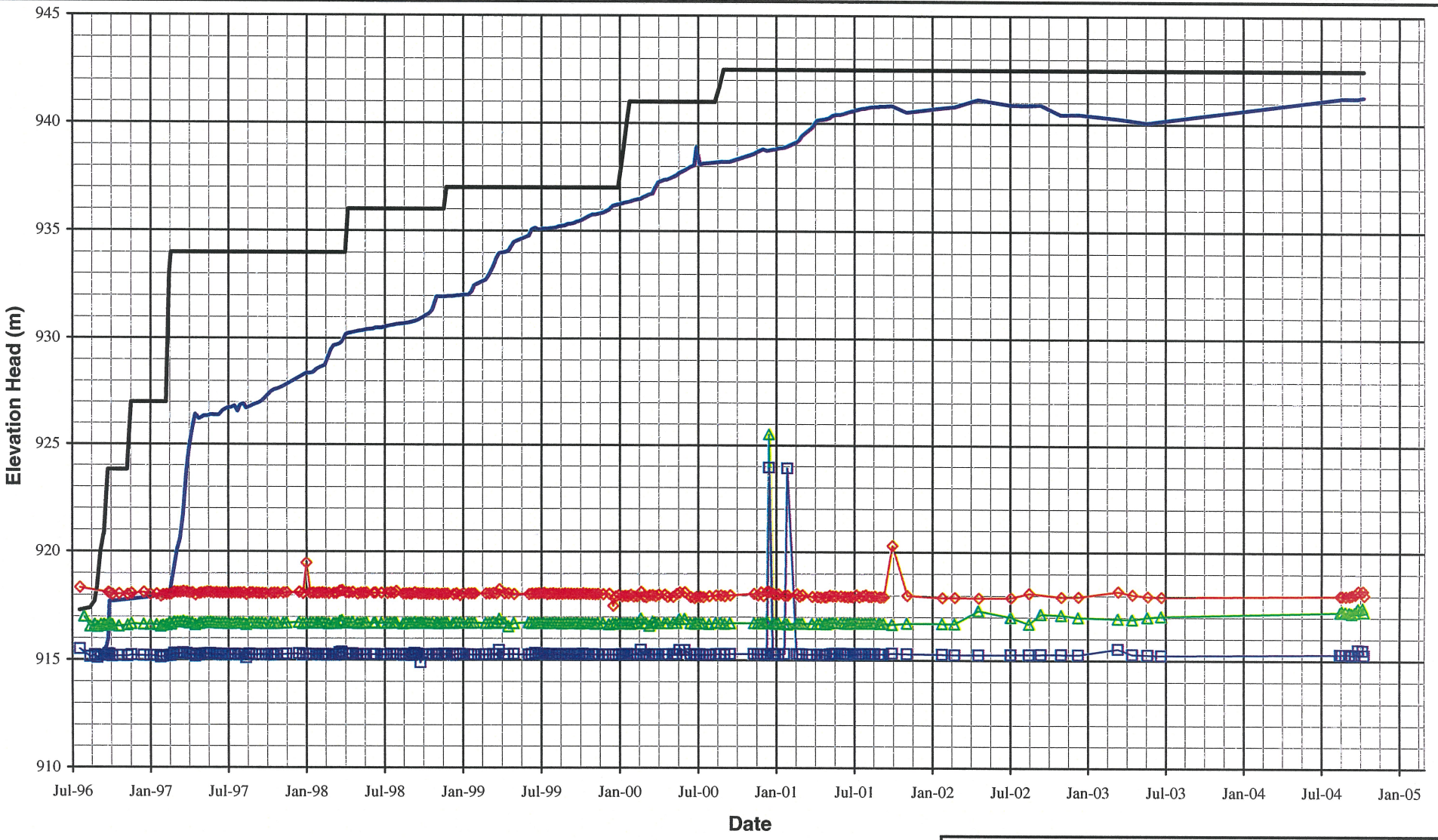

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE B DRAIN PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B4-2

Rev 0 - Issued for Annual Report

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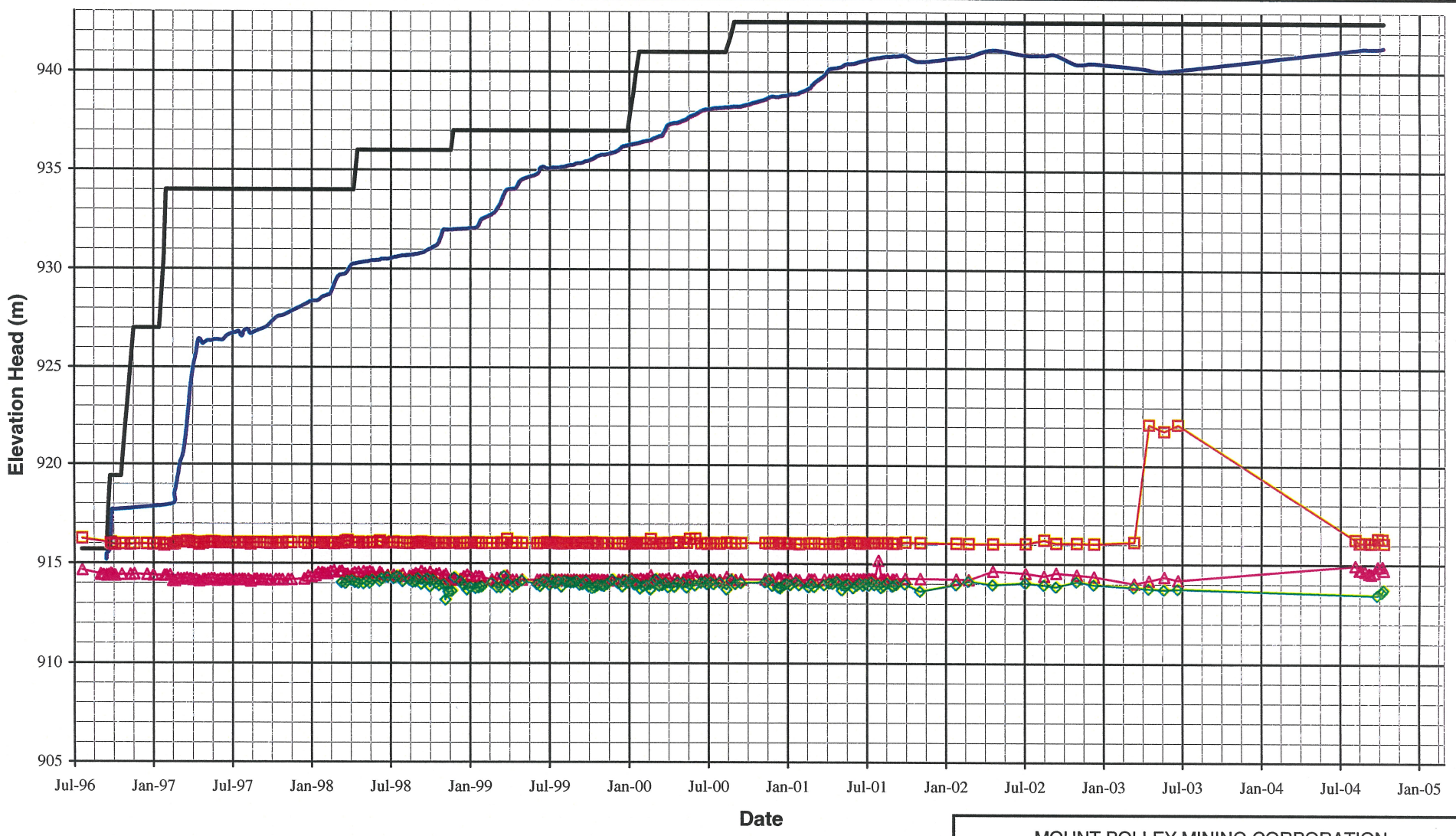

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C DRAIN PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

FIGURE B4-3

Rev 0 - Issued for Annual Report

M:\1\01\00001\07\A\Data\Piezo data nov 12,04\2004piezodata\Plane D.xls Drain Piezos Fig B4-4

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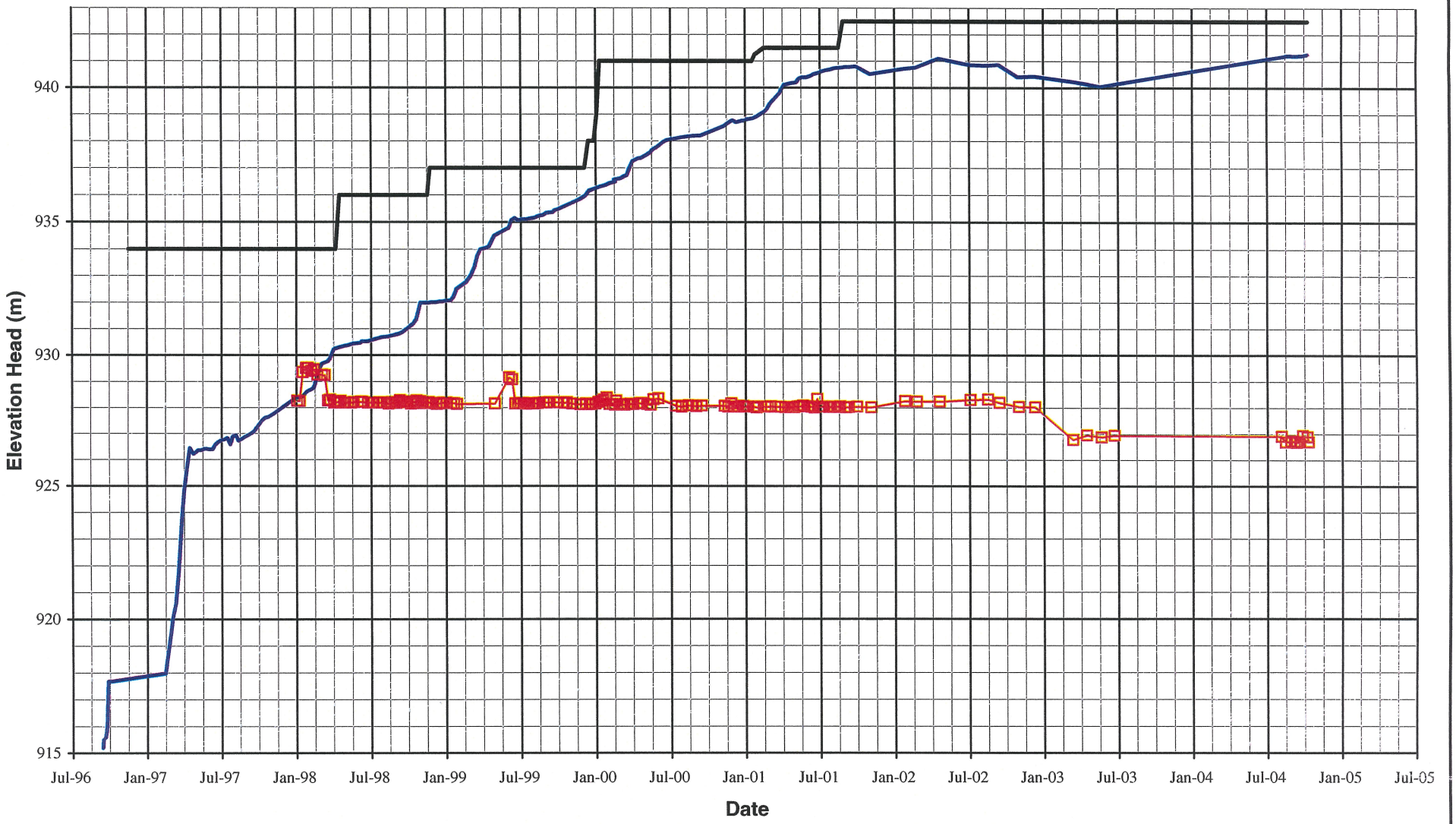


MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE D DRAIN PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/7	1	0

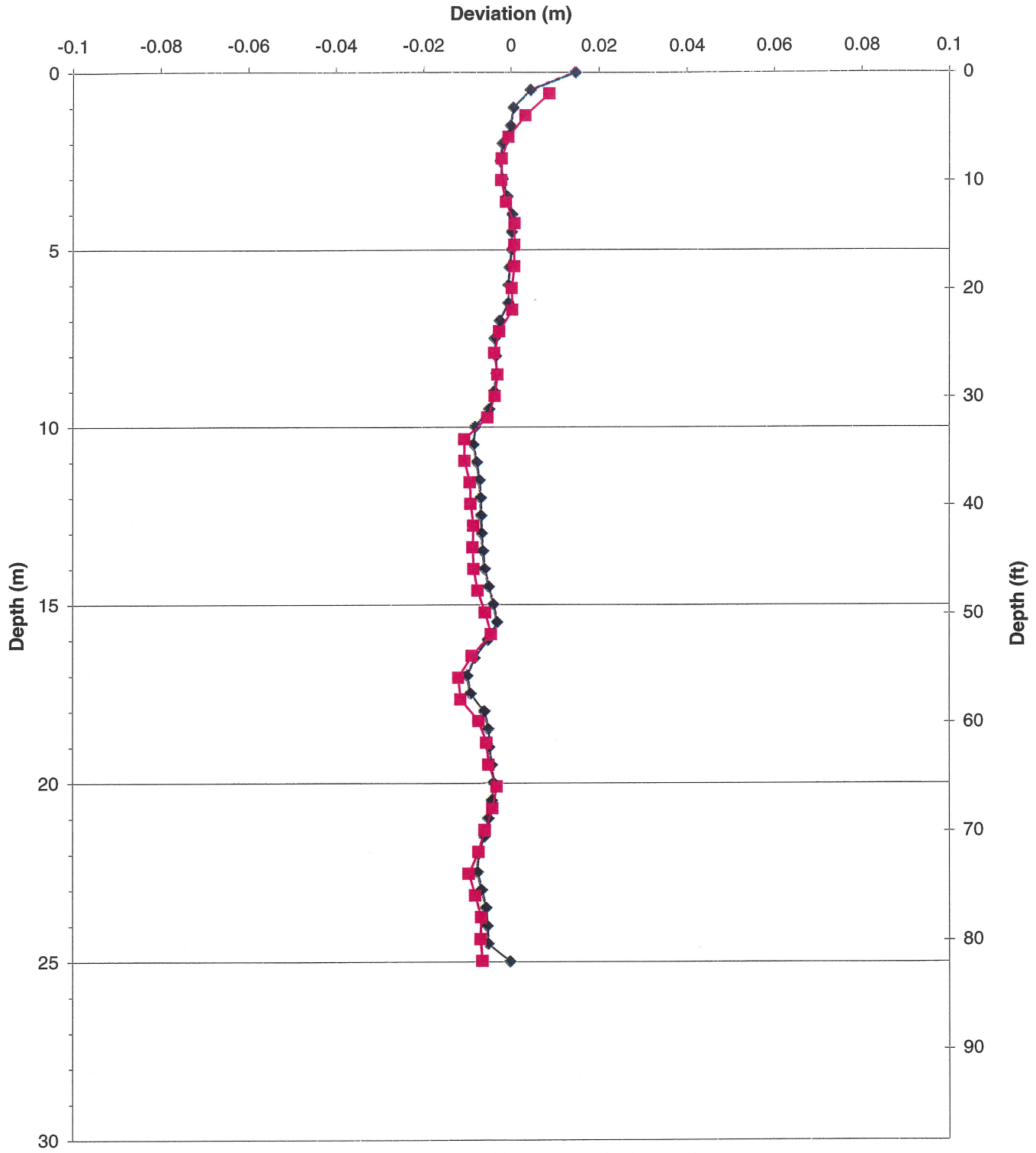
FIGURE B4-4

Rev 0 - Issued for Annual Report

Knight Piésold
CONSULTING

APPENDIX C

INCLINOMETER DATA
(Pages C1 to C2)



MOUNT POLLEY MINING CORPORATON

MOUNT POLLEY MINE

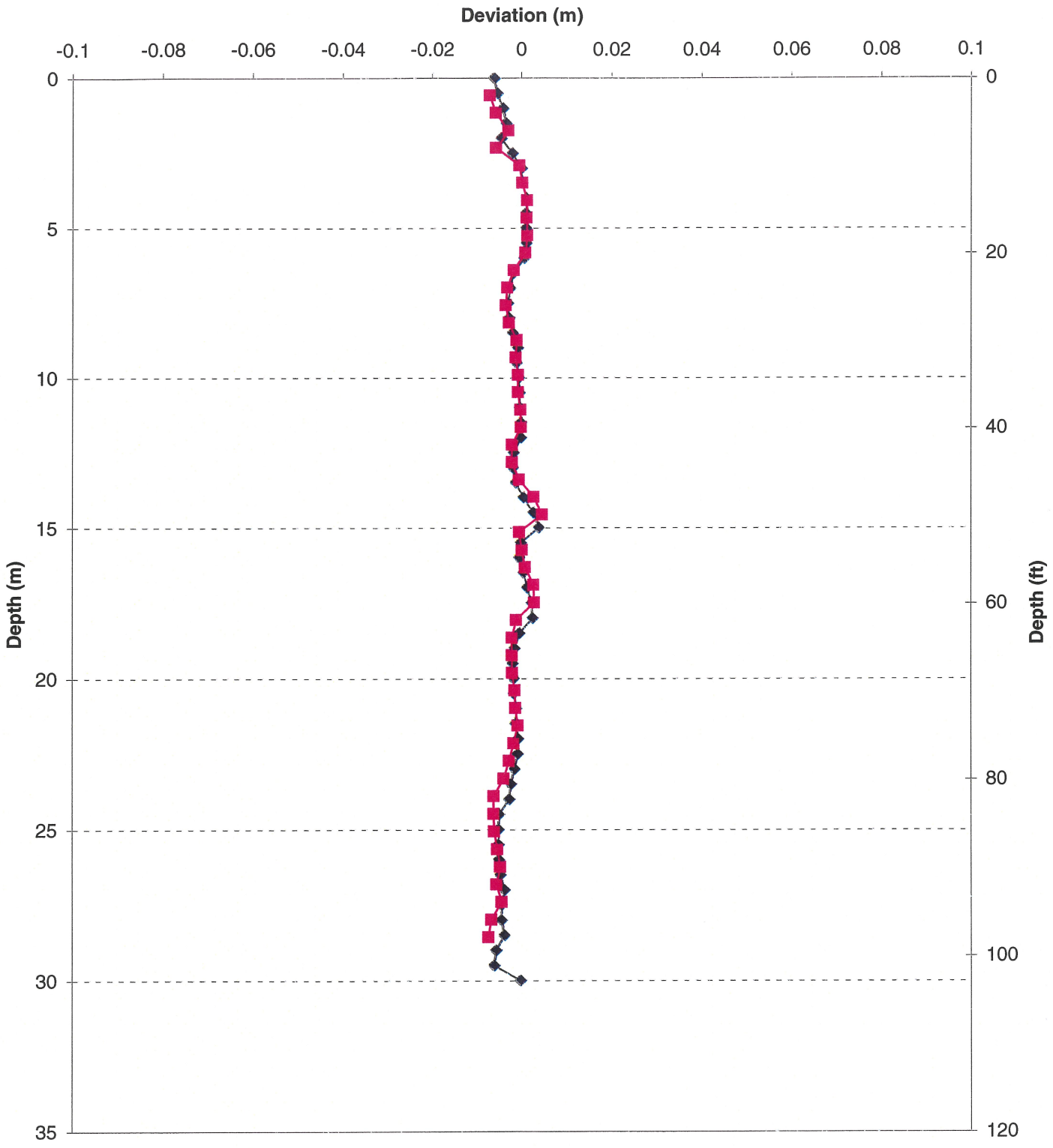
DOWN HOLE INCLINOMETER MEASUREMENT
HOLE 1
2001 DATA VS. 2004 DATA

Knight Piésold CONSULTING

PROJECT /ASSIGNMENT NO.	REF NO.	REV.
VA101-1/7	1	0

FIGURE C-1

Rev 0 - Issued for Annual Report



MOUNT POLLEY MINING CORPORATON

MOUNT POLLEY MINE

DOWN HOLE INCLINOMETER MEASUREMENT
HOLE 2
2001 DATA VS. 2004 DATA

Knight Piésold CONSULTING

PROJECT NO.	REF NO.	REV.
VA101-1/7	1	0

FIGURE C-2

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Knight Piésold CONSULTING

APPENDIX D

TAILINGS IMPOUNDMENT FREEBOARD LETTER

Knight Piésold
CONSULTING

KNIGHT PIESOLD LTD.				
IN / OUT 4/30/03				
Name	Routing	Date Read	Action By	Reply Date
JPH				
BSB				
KJB	1	KJB		
TFK	3			
TAV				
BG	2	BG.		
AH				
WJ				
EG				
YP				
FILE				

Knight Piésold Ltd.
Suite 1400
750 West Pender Street
Vancouver, British Columbia
Canada V6C 2T8

Telephone: (604) 685-0543
Facsimile: (604) 685-0147
E-mail: vancouver@knightpiesold.com

Our Reference: VA101-1/3-A.01
Continuity No.: 3-0479

April 29, 2003

Mr. Brian Kynoch
Imperial Metals Corporation
200 – 580 Hornby Street
Vancouver, BC V6C 3B6

Dear Mr. Kynoch,

Re: Mount Polley Tailings Impoundment ~~Freeboard Requirement~~

Mount Polley Mining Corporation (MPMC) has operated the Tailings Storage Facility (TSF) in accordance with the water balance objectives during the past year, while the TSF has been in a Care and Maintenance period. The TSF is required to have sufficient live storage capacity for containment of 679,000 cubic meters of runoff from the entire contributing catchment area during a 24-hour PMP event. This volume of stormwater would result in an incremental rise in the tailings pond level of 0.39 meters above the current pond level of 941.20 meters. The TSF design also incorporates an allowance of 1 metre of freeboard for wave run-up. Subtracting these requirements from the crest elevation of 942.50 meters, the maximum target pond level is therefore 941.11 metres. As indicated on Figure 3.1, MPMC has operated the pond within these tolerances over the past year, except that the pond level is currently slightly (9 cm) above the maximum target pond level. This pond level is projected to decrease below the target elevation by August 2003 due to evaporation losses and ongoing seepage from the upstream toe drain that takes place during the summer months.

It is noted that the reclaim pumping barge is continuously available. The reclaim water system can be started up quickly in the event of a prolonged storm event that results in a significant rise in the tailings pond level. This capability provides an additional contingency for water management within the tailings impoundment. It is also recognized that MPMC has constructed a series of diversion ditches to route surface water runoff around the facility. This further reduces the volume of water that will enter the TSF. However, it is assumed that these ditches will breach during an extreme precipitation event and therefore no reduction in the PMP runoff volume has been applied. The presence of the ditches does, however, add additional conservatism to the water management plan.

MPMC has monitored the prevailing wind directions and speeds during 2001 and 2002. The maximum-recorded wind speed during this period was 7 meters per second (25km/hr) and the dominant direction was approximately 335 degrees. At this bearing, the maximum fetch on the tailings pond is approximately 1.6 km. Using this data, and Table 6-7 given in the United States Department of the Interior's "Design of Small Dams," the predicted wave height would be

approximately 0.6 meters. However, it is noted that the extensive relatively flat sandy tailings beaches would tend to moderate the influence of wave action on the tailings embankments, so that the actual wave height impacting the dam would be significantly less than this maximum theoretical value. Therefore, the implications of a temporary reduction in the wave allowance from 1.0m to 0.9 meters after PMP flooding are not considered to be significant.

The water balance information illustrated on Figure 3.1 indicates that the pond elevation will increase above the maximum allowable level during the spring freshet of 2004. Therefore MPMC will be required to discharge water from the tailings impoundment prior to this period. MPMC plans to compile all water quality data during summer 2003 and present it to MWLAP to discuss options for discharging water from the TSF prior to spring 2004. This discharge application will likely be an amendment to MPMC's existing MWLAP permit PE 11678. We understand that a concept MPMC is currently considering is to use a siphon system to allow for controlled discharge of pond water over the Perimeter Embankment and into Hazeltine Creek during high flow periods when adequate dilution is available. Knight Piésold will be pleased to assist in evaluating the viability of this option and in supporting application for a discharge permit.

Please feel free to contact me if you have any comments or questions.

Yours truly,

KNIGHT PIESOLD LTD.

Ken Brouwer, P.Eng.
Managing Director

Encl: Figure 3.1 Rev 0 Water Balance – April 2001 to October 2004

/kjb