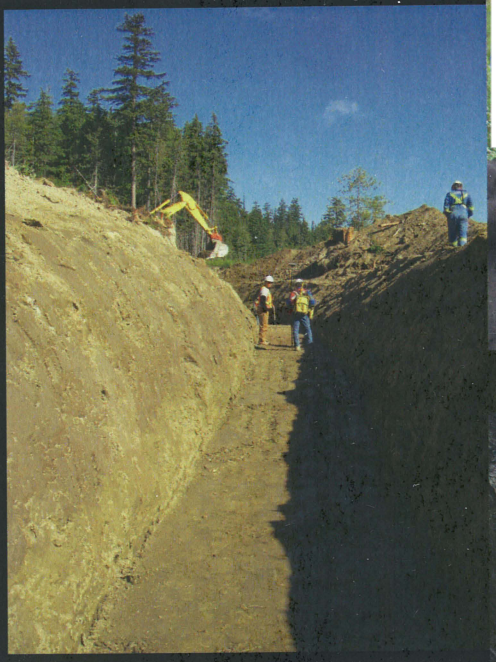
Knight Piésold

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
TAILINGS STORAGE FACILITY

REPORT ON STAGE 5 CONSTRUCTION



PREPARED FOR

Mount Polley Mining Corporation
P.O. Box 12
Likely, British Columbia
V0L 1N0

PREPARED BY

Knight Piésold Ltd.
Suite 1400 – 750 West Pender Street
Vancouver, BC V6C 2T8

VA101-1/14-1
Revision 0
March 27, 2008

Knight Piésold
CONSULTING

MOUNT POLLEY MINING CORPORATION

A DIVISION OF IMPERIAL METALS CORPORATION

April 28, 2008

Ministry of Energy, Mines and Petroleum Resources

Senior Geotechnical Engineer
7th floor 1675 Douglas Street
Victoria BC V8W 9N3

250-952-0485

Al Hoffman, Deputy Chief Inspector

Attention: Al Hoffman, Deputy Chief Inspector

RE: Stage 5 Tailings Construction Report - Mount Polley Mine

Please find a copy of our Stage 5 Construction report prepared by Knight Piesold Consulting. I also sent a copy to Bruce Milligan in Prince George.

Should you have any questions or comments, please feel free to contact me at (250) 790 –2215 extension 409

Sincerely,

Ron Martel C.E.T, CCEP
Environmental Superintendent
Mount Polley Mining Corporation
rmartel@mountpolley.com

CC Bruce Milligan

Mount Polley File

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
TAILINGS STORAGE FACILITY

REPORT ON STAGE 5 CONSTRUCTION
(REF.NO. VA101-1/14-1)

Rev. No.	Revision	Date	Approved
0	Issued in Final	March 27, 2008	KJB

MP000033

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: kpl@knightpiesold.com

Knight Piésold
CONSULTING

Grit: 004399

Knight Piésold
CONSULTING

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
TAILINGS STORAGE FACILITY

REPORT ON STAGE 5 CONSTRUCTION
(REF.NO. VA101-1/14-1)

EXECUTIVE SUMMARY

The Mount Polley copper and gold 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 started production in 1997 and had milled approximately 27.5 million tonnes of ore prior to stopping production in October 2001. Mount Polley Mining Corporation began upgrading the mine facilities in the second half of 2004 and started production again in March 2005. MPMC has since been mining at an approximate rate of 20,000 tpd. MPMC is currently mining the Bell and Wight Pits with the tailings material deposited as slurry into the Tailings Storage Facility (TSF). MPMC received a permit in 2006 approving the Stage 5 construction of the Tailings Storage Facility, which involved raising the Tailings Storage Facility embankments to an elevation of 951 m, an increase of 3 m from the previous Stage 4 elevation of 948 m.

The Stage 5 TSF construction program at Mount Polley Mine commenced in November 2006 and was completed in November of 2007. Earthworks for the Stage 5 Tailings Storage Facility construction program comprised the following zones and materials:

- Zone S Fine grained glacial till.
- Zone U Upstream shell zone – produced from coarse tailings in sand cells, or from hauling sand from a local borrow area.
- 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.
- Zone CBL Coarse Bearing Layer- rockfill.
- Zone FT Filter layer above the downstream foundation till- sand from local borrow.

The results of the technical supervision and QA/QC testwork indicate that the fill materials placed and compacted on the tailings embankments were within the required material specifications and were in accordance with the Stage 5 design of the TSF.

A total of 29 piezometers were installed during the Stage 5 construction program; the total number of functioning piezometers at the TSF is 63. The results of the instrumentation monitoring show that no unexpected or anomalous pore pressures have developed.

No new inclinometers were installed during Stage 5. Bi-monthly monitoring continued for the (4) four inclinometers previously installed downstream of the Main Embankment through the Lacustrine unit. The inclinometers were read with an inclinometer probe and deviations were

calculated relative to the baseline data. There have been no significant deviations in any of the inclinometer casings installed.

The monitoring frequency of the vibrating wire piezometers and inclinometers during the Stage 5 construction program was completed as outlined in the Operations and Maintenance Manual. The tailings pond elevation is monitored on a weekly basis to ensure that the stormwater and freeboard requirements are maintained during operations.

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
TAILINGS STORAGE FACILITY

REPORT ON STAGE 5 CONSTRUCTION
(REF.NO. VA101-1/14-1)

TABLE OF CONTENTS

PAGE

TABLES

FIGURES

DRAWINGS

APPENDICES

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
TAILINGS STORAGE FACILITY

REPORT ON STAGE 5 CONSTRUCTION
(REF.NO. VA101-1/14-1)

SECTION 1.0 - INTRODUCTION

1.1 PROJECT DESCRIPTION

The Mount Polley copper and gold mine is owned by Mount Polley Mining Corporation (MPMC). It is located 56 kilometres northeast of Williams Lake, in central British Columbia. The project site is accessible by paved road from Williams Lake to Morehead Lake and then by gravel road for the final 12 km. Mount Polley Mine started production in 1997 and had milled approximately 27.5 million tonnes of ore prior to stopping production in October 2001. Mount Polley Mining Corporation commenced upgrading the mine facilities in the second half of 2004 and started production again in March 2005. MPMC is currently mining the Bell and Wight Pits with the tailings material deposited as slurry into the Tailings Storage Facility (TSF). MPMC has milled approximately 45 million tonnes as of the end of 2007. Process water is collected and pumped back to the mill for recycle in the milling process. The mine throughput is approximately 20,000 tpd. An overall site plan of the Mount Polley Mine is shown on Drawing 100.

MPMC received a permit in 2006 approving the Stage 5 construction of the TSF, which involved raising the elevation of the TSF embankments to an elevation of 951 m, an increase of 3 m from the previous Stage 4 elevation of 948 m. This embankment raise will provide sufficient storage in the TSF for approximately one year of operations.

1.2 SCOPE OF REPORT

This report documents the Stage 5 construction program for the TSF. The report includes a discussion of the construction methods used to complete the work, the results of quality assurance tests, and a review of the instrumentation monitoring results. The report also includes a set of "As -Built" drawings corresponding to the Stage 5 construction program.

SECTION 2.0 - STAGE 5 CONSTRUCTION PROGRAM

2.1 GENERAL

The construction program involved raising the TSF embankments to an elevation of 951 m. The Stage 4 construction program evolved into the Stage 5 construction program in October/November 2006 with a minimal break in the construction activities or construction supervision provided by Knight Piésold Ltd. The Stage 5 TSF construction program at Mount Polley Mine was completed in November 2007.

The general arrangement of the TSF is shown on Drawing 102. The material specifications are shown on Drawing 104. The Stage 5 Main Embankment Plan and Section are shown on Drawings 210 and 215 respectively. The Stage 5 Perimeter Embankment Plan and Section are shown on Drawings 220 and 225 respectively. The Stage 5 South Embankment Plan and Sections are shown on Drawings 230 and 235 respectively. Details of the South Embankment Longitudinal Sections and Details are shown on Drawing 236. Select photographs of the construction program are included in Appendix E.

2.2 TAILINGS STORAGE FACILITY COMPONENTS

The TSF consists of the following main components:

- The TSF embankments, which incorporate the following zones and materials:
  - Zone S Core zone - fine grained glacial till.
  - Zone U Upstream shell zone – produced from coarse tailings in sand cells, or from hauling sand from a local borrow area.
  - Zone F Filter, drainage zones, and chimney drain - processed sand and gravel.
  - Zone T Transition filter zone - select well-graded fine-grained rockfill.
  - Zone C Downstream shell zone – rockfill.
  - Zone CBL Coarse Bearing Layer – rockfill.
  - Zone FT Filter layer above the downstream foundation till- sand from local borrow area.
- A low permeability basin liner (natural and constructed), which covers the base of the entire facility, at a nominal thickness of at least 2 m. The low permeability basin liner has proven to be effective in minimizing seepage from the TSF as there have been no indications of adverse water quality reporting to the groundwater monitoring wells (refer to Annual Reclamation Report for details).
- Embankment drainage provisions which include foundation drains, upstream toe drains, and chimney, longitudinal and outlet drains. The embankment drains have been incorporated into the design of the TSF to facilitate drainage of the tailings mass, dewater the foundation soils, and to control the phreatic surface within the embankments.
- 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.

- Instrumentation in the tailings, earthfill embankments, embankment foundations, and drains. This includes vibrating wire piezometers and slope inclinometers.
- A system of groundwater quality monitoring wells installed around the TSF.

2.3 QUALITY ASSURANCE/QUALITY CONTROL

Knight Piésold provided the Stage 5 design for the Tailings Embankments, prepared the Technical Specifications, provided technical assistance and performed quality assurance/quality control (QA/QC) testing during the construction Program. Key items addressed by Knight Piésold included:

- Foundation inspection and approval prior to fill placement.
- Assessment of borrow material suitability.
- Inspection of fill placement procedures.
- In-situ testing of placed and compacted fill for moisture content and density.
- Collection and testing of Control and Record samples.
- Instrumentation monitoring.

Knight Piésold worked under the overall management and administration of MPMC. Lake Excavating Ltd. and MPMC conducted the construction work. The QA/QC procedures followed by Knight Piésold were similar to previous construction programs at the TSF. Material samples collected for laboratory testing during the construction program included Control and Record samples. The Control tests were carried out on materials collected from the borrow areas or from source locations to determine their suitability for use in the construction. Record tests were performed on materials after placement and compaction to document the level of workmanship achieved and to ensure that the design objectives were met. The Control and Record laboratory test results are presented in Appendix A.

2.4 STAGE 5 EARTHWORKS

2.4.1 General

Earthworks for the Stage 5 Tailings Storage Facility construction program comprised the following zones and materials:

- Zone S Fine grained glacial till.
- Zone U Upstream shell zone.
- Zone F Filter, drainage zones, and chimney drain - processed sand and gravel.
- Zone T Transition filter zone - select well-graded fine-grained rockfill.
- Zone C Downstream shell zone – rockfill.
- Zone CBL Coarse Bearing Layer- rockfill.
- Zone FT Filter layer above downstream foundation till- sand from local borrow area.

The fill materials are discussed in the following sections, and their material specifications are shown on Drawing 104.

2.4.2 Zone S

Zone S forms the low permeability core and seal zones for the Main, Perimeter and South Embankments. The material used in Zone S was fine grained glacial till from Borrow Area Nos. 3 and 4, which are both located downstream of the left (East) abutment of the Main Embankment. The Control test results for the Zone S material are presented in Appendix A1 and summarized on Table 2.1. The results of the Control test particle size analyses on the Zone S material are shown on Figure 2.1.

The Zone S material specification required placement and compaction in maximum 300 mm thick horizontal lifts. The compaction specification was 95 percent of the Standard Proctor Maximum Dry Density. Each lift of Zone S was tested and approved prior to the placement of the subsequent lift. Areas that failed to meet the compaction requirements were re-compacted until the minimum compaction requirements were met. Material that did not meet the compaction requirements was removed by pushing upstream of the crest onto the tailings beach. Excessive wet weather conditions are problematic in this regard, as rain or intense heat induced moisture contents either too wet or dry of optimum to reach the required compaction.

Record tests on the compacted Zone S fill included the following:

- Moisture Content (ASTM D2216).
- Particle Size Distribution (ASTM D422).
- Laboratory Compaction (ASTM D698).
- Atterberg Limits (ASTM D4318).
- Field Density by Nuclear Methods (ASTM D2922).
- Field Moisture Content by Nuclear Methods (ASTM D3017).

A total of 14 Zone S Record samples were collected and tested in a soils laboratory during the Stage 5 construction program. The Record test results indicate that the well graded Zone S material is typically comprised of silty sand with some gravel and some clay. The Record test results for the Zone S material are presented in Appendix A and summarized in Table 2.2. The gradation curves of the Zone S Record Tests are shown on Figure 2.2. The moisture content of the Record Samples ranged from 7.2 to 11.9 percent, with an average of 9.7 percent. The Standard Proctor Maximum Dry Density ranged from 2,000 to 2,220 kg/m^3, with an average of 2,108 kg/m^3. The plastic limits ranged from 13.2 to 17.6 percent, with an average of 15.3 percent. The liquid limits ranged from 19.0 to 25.2 percent, with an average of 22.2 percent. The plasticity index ranged from 3.7 to 10.0 percent, with an average of 7.0 percent. All of the Zone S Record test results were within the specified limits for the material. The results of the lab testing indicate that the Zone S material used for the Stage 5 construction program was consistent with the Zone S materials used in previous construction programs.

An additional 884 field density and moisture content tests were performed on the Zone S material using a nuclear densometer to assess the compacted density and moisture content. The compacted dry density ranged from 1,906 to 2,176 kg/m^3, with an average of 2,048 kg/m^3. The compacted moisture content ranged from 5.9 to 13.6%, with an average of 10.4%. The percent compaction as compared to the Standard Proctor Maximum Dry Density ranged from 95.0 to 104.8%, with an average of 99.4%. Compacted material that failed to meet the compaction requirements was re-compacted until the minimum compaction requirements were met or the material was removed from the dam. The compacted dry density results are shown on Figure 2.3, with the percent compaction results shown on Figure 2.4. The compacted moisture content results are shown on Figure 2.5, with the deviation from the Standard Proctor Optimum Moisture Content results shown on Figure 2.6. The nuclear densometer results are presented in Appendix B. Only the tests that met the 95% minimum compaction requirement are presented; the sections that failed were either re-compacted or removed from the dam.

2.4.3 Zone U

Zone U forms the upstream shell zone immediately adjacent to Zone S and provides upstream support of the Zone S material required for modified centerline construction. The material used for Zone U was random fill material from Borrow Area No. 3, which is located downstream of the left (East) abutment of the Main Embankment. Zone U was also constructed using sand cells along the embankments. The sand cell process involved discharging tailings into constructed cells upstream of the embankment. The confining berms had discharge culverts installed to allow for the water and fine materials to exit the cells and flow into the TSF. The coarse tailings sand that settled out into the cells was constantly worked with a dozer to ensure proper distribution within the cells, to compact the sand and to expedite the drainage of excess water through the culverts. This method of constructing Zone U proved to be effective when the resources were available. Attempts to construct the sand cells without a dozer working the material were not successful and the resulting material was not approved by the Engineer. This unapproved material was pushed into the TSF with a dozer and the sand cell process was restarted. Sand cells were constructed on all embankments.

It was very important to prevent the tailings pipeline valves from freezing during the winter months. This was done by constructing the cells continuously, 24 hours a day during the winter months and housing the valve system in a heated unit. A photo of this unit is included in Appendix E.

Lab testing was performed on two Zone U control samples and 19 Zone U record samples and to determine Particle Size Distributions (ASTM D422) and Maximum Dry Densities. The majority of Record Tests were performed on Zone U material that was produced from sand cells. The particle size specifications for Zone U material were modified during Stage 5 to permit the use of coarse tailings sand as a material, while still maintaining trafficability. The results show that the material produced with sand cells was within the new Zone U specifications, generally consisting of sand, with the fines content ranging

from 12 to 41%. The gradation curves of the Zone U Record Tests are shown on Figure 2.7. Photographs showing the construction of the sand cells are included in Appendix E.

The material specifications allowed for a wide variety of fill materials to be used as Zone U material; the materials hauled from the local Borrow Area No. 3 varied greatly in density and Particle Size Distribution. However, the Zone U material produced in the sand cells was of a more uniform nature. The calculated Maximum Dry Densities of the tailings sand ranged from 1,570 to 1,840 kg/m^3 with an average of 1,661 kg/m^3. Material specifications required that the Zone U material be compacted to 95% of the Maximum Dry Density, or approximately 1,600 kg/m^3. Nuclear densometer tests performed on the Zone U material at various stages and elevations showed that the 95% compaction requirement was achieved for the Zone U material. (are these number not right?)

2.4.4 Zone F

The Zone F material forms the filter zone immediately downstream of Zone S on the Main and Perimeter Embankments. The material used in Zone F was mine waste rock that was processed at the millsite using the primary crusher.

Zone F material was placed in minimum 1 m wide sections immediately downstream of the Zone S core, in maximum 0.6 m lifts and was compacted with a two tonne vibrating drum roller.

Control and Record Particle Size Analyses were completed to ensure that the Zone F material was within specifications. A total of 45 Control and 79 Record Particle Size Analyses were performed on Zone F samples taken during Stage 5. The results are shown in Figures 2.8 and 2.9. A total of 6 of the 79 Record samples (8%) and 11 of the 45 Control samples (24%) were slightly courser than that specified for this material. The difference in the percentage of samples that were outside of the course limit between the Control and Record tests (24% vs. 8%) indicates that the Zone F material is very sensitive to sampling method as all of the Zone F material produced and stockpiled at the primary crusher was used in the embankment.

2.4.5 Zone T

Zone T is a transition zone immediately downstream of Zone F. The material used in Zone T was select rockfill from the Wight Pit. The waste rock was screened to remove the plus six inch material prior to placing in the embankment. Zone T was placed in maximum 0.6 m lifts and compacted with a two tonne vibrating drum roller.

A total of 22 Record Particle Size Analyses were performed during Stage 5, and the results of these tests are shown in Figure 2.10. All of the Zone T record test results fell inside the specified limits.

2.4.6 Zone C

Zone C is a rockfill zone immediately downstream of Zone F in the Embankments and forms the downstream shell zone of the embankments. Zone C is comprised of coarse rock from the Wight Pit and provides structural stability for the embankments as well as a large, trafficable surface for haul trucks to drive upon. Zone C was placed in maximum 3 m lifts, and was compacted with selective transportation of the various trucks and construction equipment. No Particle Size Analyses were performed on Zone C material. The Zone C slope at the end of Stage 5 varied for each embankment, but on average was 1.4H:1V. This is an interim slope, and in future stages the embankments will be constructed at 2H:1V.

2.4.7 Zone CBL

A Coarse Bearing Layer (CBL) was placed on top of the tailings beach adjacent to the embankments in select locations to provide a suitable traffic bearing surface for the Zone U material. The material consisted of waste rock and was placed using 777 haul trucks. The speed of the fill placement was carefully monitored during the placement of the CBL to ensure that the tailings below the CBL did not liquefy.

2.4.8 Zone FT

Zone FT material was placed on the prepared original ground surface downstream of the embankment beneath the shell zone. Zone FT provides a filter relationship with the in-situ glacial till in the downstream foundation and provides a horizontal path for any seepage to drain freely. The primary source of Zone FT material was sand hauled from Borrow Area No. 3. However, Zone F material met the Zone FT particle size specifications and thus was used when it proved to be more convenient or cost-effective than hauling sand.

Zone FT was placed in maximum 0.3 m lifts and was compacted with a two tonne vibrating drum roller.

2.5 INSTRUMENTATION MONITORING

2.5.1 Vibrating Wire Piezometers

2.5.1.1 General

Vibrating wire piezometers have been installed at the TSF along nine planes, designated as monitoring planes A to I. Monitoring planes A, B, C and E are located at the Main Embankment, monitoring planes D, G, and H are located at the Perimeter Embankment, and monitoring planes F and I are located at the South Embankment. A plan view of the piezometer planes is shown on Drawing 345, and they are shown in section on Drawings 346, 347, 348, and 349. The piezometers are grouped into tailings, foundation, fill and drain piezometers. The results from each group are

discussed below. The piezometers were discussed in detail in the Knight Piésold Ltd. "Report on 2007 Annual Inspection, (Ref. No. VA101-01/20-1). The timeline plots for the piezometers are presented in Appendix C.

There are currently two gaps in the piezometer data. The first gap, which was from July 30, 2003 to September 2, 2004, was during the Care and Maintenance Period. This data was collected by MPMC but was accidently misplaced. The second gap occurred from September 22, 2005 to April 30, 2006 and was due to a malfunctioning readout box connecter cable and the accidental destruction or burying of piezometer cables during the Stage 4 construction program.

A total of 22 piezometers were accidentally destroyed during the Stage 4 construction program. MPMC and Knight Piésold attempted to locate and splice the damaged piezometers and successfully repaired five of them. The readings were resumed for the piezometers that were damaged once the cables were repaired and the timeline plots updated. The piezometers that were not damaged during the construction program were read on a weekly basis. A total of 29 additional piezometers were installed during the Stage 5 construction program, bringing the total number of functioning piezometers to 63. A table presenting the UTM coordinates and elevations of the Stage 5 piezometer installations can be found on Drawing 346.

Several actions have been taken to prevent further damage to the piezometers. Steel protective covers have been set-up to shield the piezometer readout boxes. The new piezometers that had not been extended to the read-out boxes were coiled and placed in five-gallon buckets. The locations were also marked with large poles with fluorescent markings. These measures have proved to be effective thus far, as no piezometers were damaged during the Stage 5 construction program. Photos of the protective covers and poles are found in Appendix E.

2.5.1.2 Tailings Piezometers

A total of 16 piezometers have been installed in the tailings mass at the Main Embankment, 11 of which remain in operation. Timeline plots of the tailings piezometer data are included in Appendix C1.

The pore pressures in three tailings piezometers located below the elevation of the Main Embankment upstream toe drain show a slight increasing trend as the pond and tailings elevation increases; however the pore pressures are below the pond level in the TSF.

2.5.1.3 Embankment Foundation Piezometers

A total of 21 piezometers have been installed in the embankment foundations, 12 of which remain in operation. Artesian conditions are present in 3 of the 9 foundation piezometers installed under the Main Embankment. The piezometers installed 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 Stage 5 construction program with the artesian pressures ranging from 0.74 to 3.01 m above ground. The artesian head values (above ground surface level) measured in September 2007 are summarized in Table 2.3.

Timeline plots of the embankment foundation piezometers are included in Appendix C2. There are no concerns with the embankment foundation piezometers.

2.5.1.4 Embankment Fill Piezometers

A total of 32 piezometers have been installed in the embankment fill materials, 27 of which remain in operation. Timeline plots of the embankment fill piezometer data are included in Appendix C3.

There have been no significant changes in the trends for most of the embankment fill piezometers. Piezometer A2-PE2-O3, which is located at the Main Embankment, showed a slight increase in pore pressures corresponding to the placement of fill during the Stage 5 construction program. This trend has been observed in the past with this piezometer and it is anticipated that the slightly elevated pore pressures will dissipate following the construction program as they have previously.

2.5.1.5 Drain Piezometers

A total of 18 piezometers have been installed in the embankment drains, including foundation drains, chimney drains and outlet drains. Thirteen of the drain piezometers continue to function. Timeline plots for the drain piezometers are shown in Appendix C4.

The majority of the drain piezometers showed near-zero pore pressures, indicating that the drains are functioning as intended. Piezometer A1-PE1-04 showed an increase in pore pressures starting in approximately June 2006. This piezometer is located in the upstream toe drain at the Main Embankment and the increased pressures are a result of the tailings pond being up against the embankment at this location. The positive trend of the pore pressures coincides with the increased flow rates measured from the Main Embankment upstream toe drain. The pore pressures in piezometer A1-PE1-04 are expected to dissipate once the tailings beach has been established in this area and the pond is located away from the embankment. There are no concerns with the drain piezometers.

2.5.2 Slope Inclinometers

Three new inclinometers were installed downstream of the Main Embankment through the Lacustrine unit during the Stage 4 construction program, designated as SI06-01,

SI06-02, and SI06-03. Two inclinometers had been installed in 2001; SI01-01 was damaged during the placement of the shell zone material and is no longer functioning, while SI01-02 continues to function. The last reading for SI01-01 was March 2006. Thus there are currently four (4) functioning inclinometers installed at the Main Embankment.

A baseline data set was recorded in August 2006 in each hole, and bi-monthly readings were recorded thereafter. Displacements from the subsequent readings were then compared relative to the initial data sets for each hole.

The results of the inclinometer readings indicate that there have not been any significant deviations measured in the inclinometers since their installation. There were no measurable impacts on the inclinometers resulting from the Stage 5 construction program. The inclinometer data is presented in Appendix D.

2.5.3 Survey Monument Data

There are currently no survey monuments installed on the TSF embankment crests due to the ongoing construction of the TSF embankments.

2.5.4 Drain Flow Data

An Upstream Toe Drain was installed during the Stage 5 construction program in the Perimeter Embankment. It extends from CH. 30+00 to CH. 45+75, and has an invert elevation of 946.3 m. The drain provides seepage control within the embankment and drains and consolidates the tailings mass near the embankment. It also removes a certain amount of filtered water from the impoundment; experience has shown that the quality of water flowing from the toe drains is better than the supernatant water quality for most parameters, largely because the suspended solids are effectively filtered before the water enters the drain.

The upstream toe drain exits the TSF at the west abutment of the Perimeter Embankment in the in-situ foundation materials. The conduit through the abutment consists of a concrete encased steel pipe, which was constructed between October and November of 2006. A filter diaphragm consisting of Zone F material was constructed for seepage and piping control. Flows from the upstream toe drain are conveyed through a ditch into the sump located at the Perimeter Embankment Seepage Collection Pond for measurement and sampling. Details of the upstream toe drain at the Perimeter Embankment are shown on Drawing 240.

The upstream toe drain and foundation drains at the Main Embankment flow into the sump at the Main Embankment Seepage Collection Pond where the flows are measured. The flow rates have been measured since July 2000; however the flow rates from the drains were not monitored during the Care and Maintenance Period as the drain outlets were submerged within the sump. This condition was anticipated as flow monitoring is only possible during operations when the seepage pond level has been pumped down.

The seepage pond was pumped down in December 2005 and flow measurements resumed. Significant flows were also noticed at the downstream toe of the corner between the Main and South Embankments. A weir was installed in August 2006 to measure these flows, and they contribute to the total Main Embankment Foundation Drain Flows.

The water from the upstream toe drains and foundation drains is currently pumped back into the TSF. The flow rates for the Main and Perimeter Embankment upstream toe drains are shown on Figure 2.11. The flow rates for the foundation drains shown on Figure 2.12.

The flow rates from the upstream toe drains have increased in the last year. This is due to the increased size of the tailings pond which is considerably closer to the embankments and the upstream toe drains than in previous years. The majority of the flow from the upstream toe drains is currently from the Main Embankment upstream toe drain; the Perimeter Embankment upstream toe drain was installed in October 2006 and the first flows were not observed until July 2007. The total flow from the Main Embankment upstream toe drain was approximately 11 ℓ/s as of November 2007, with the flow from the Perimeter upstream toe drain being approximately 4 ℓ/s. The flow rate for the Perimeter Embankment Upstream Toe Drain is increasing as expected as the elevation of the tailings pond increases. The water flowing from the upstream toe drains was clear.

The total flows from the foundation drains have increased slightly in the last year, especially in foundation drain FD-5 and the ME Corner foundation drain, which are both located at the corner of the Main and South Embankments. The increased flows were most likely due to the lack of tailings beach development in this area, allowing the tailings pond to come up against the embankment.. The tailings embankment has only recently expanded to cover the gap between the Main and South Embankments and there was limited beach development in this area. The flow rates in these foundation drains appear to be declining as the tailings beach is developed in this area and the pond relocates away from the embankment. The flows from the foundation drains were clear.

Samples from the foundation drains and the upstream toe drains are collected by MPMC for water quality testing. The results are available from MPMC and are reported in the Annual Environmental Reports.

2.6 DESIGN MODIFICATIONS

Knight Piésold Ltd. employs a strict procedure for making design modifications (changes or substitutions) in the field. All design change requests are submitted in writing by the Resident Engineer to the Knight Piésold Ltd. Vancouver Office for review and evaluation. If approved by the Design Engineer and Project Principal, the design change request is forwarded to the Owner and Contractor in a formal, written decision.

The design modifications implemented during the Stage 5 construction program were as follows:

- The Zone U material specifications were adjusted to allow for the use of the coarse tailings sand as a construction material. Drawing 104 shows the new increased fine limit.
- The Perimeter Embankment upstream toe drain concrete encasement backfill was modified. The original design showed a 2 m high Zone S layer over top of the concrete encasement. This layer was reduced to 1 m, followed by geotextile cloth and 1m of Zone T material, before placement of Zone C resumed. This arrangement is shown on Drawing 240.
- The steel pipe encasement of the Perimeter Embankment upstream toe drain was formed in one pour instead of two as described in Detail A of Drawing 240. The 250 mm diameter steel pipe was supported on a stand composed of angle iron, riser clamps, and a steel plate used to secure the stand in the concrete mud slab. The steel pipe was welded together, fastened to the stands, and pressure-tested. The reinforcement bars were then installed, and the pour was completed all at once. One pour instead of two was cheaper, more efficient, and provided a more complete seal around the pipe.

2.7 TAILINGS PIPELINE

There were no reported problems with the tailings pipeline under normal operating conditions during the Stage 5 construction program. However, there was a rupture in the tailings pipeline on October 23, 2007 which resulted in the discharge of approximately 1 tonne of material out from within the containment ditch. The tailings discharge point was being transferred from the South Embankment to the Perimeter Embankment and the tailings pipeline to the Perimeter Embankment was not free and clear at the time of the transfer. This resulted in a pressure build-up in the tailings pipeline and it ruptured in two locations. Details of the rupture of the tailings pipeline, including the extent of the spill and the clean-up procedures undertaken by MPMC were presented to the Ministry of Environment by MPMC. There was no impact to the environment.

The condition of the entire tailings pipeline is being reviewed to ensure that the pressure build-up in the pipeline that resulted in the pipeline rupture did not reduce the integrity of the pipeline at other locations. The current condition of the tailings pipeline should also be reviewed to ensure that the pressure rating of the tailings pipeline is sufficient for the transport and discharge of tailings around the entire TSF to optimize the development of tailings beaches.

SECTION 3.0 - SUMMARY AND RECOMMENDATIONS

Stage 5 of the Mount Polley Mine Tailings Storage Facility was constructed between November 2006 and November 2007. The Stage 5 construction program involved raising the TSF embankments to an elevation of 951 m, a 3 m increase on top of the previous Stage 4 crest of 948 m.

Technical supervision of the work by Knight Piésold included QA/QC testing and monitoring the existing vibrating wire piezometers and inclinometers. The QA/QC component involved collecting and testing Record and Control samples, as well as testing the compacted fill materials using a nuclear densometer. The results of the QA/QC testwork indicate that the fill materials placed and compacted on the tailings embankments were within the required material specifications and were in accordance with the Stage 5 design of the TSF. Placement of the rockfill materials forming the downstream shell zone was also monitored. Control and Record samples were collected and analyzed; results showed that these materials were within the required material specifications and were in accordance with the Stage 5 design of the TSF.

Coarse tailings sand was used as Zone U material in places by developing sand cells and discharging tailings directly into the cells. This proved to be an effective way of constructing Zone U but required constant working by a dozer to segregate the full tailings stream; otherwise the material had to be wasted into the TSF as it did not drain properly.

An additional 29 vibrating wire piezometers were installed during the Stage 5 construction program, bringing the number of operating piezometers in the TSF to 63. The piezometers were measured on a weekly basis using a VWP Indicator readout box. The inclinometers were measured twice a month using a Slope Indicator inclinometer probe to provide a detailed assessment of any significant deviations in the inclinometer casing since their installations in 2001 and 2006. The results of the instrumentation monitoring show that no unexpected or anomalous pore pressures were observed while monitoring the vibrating wire piezometers and there were no measurable impacts on the inclinometers during the construction program. The vibrating wire piezometers and inclinometers should be read continually throughout the year as outlined in the Operations and Maintenance Manual.

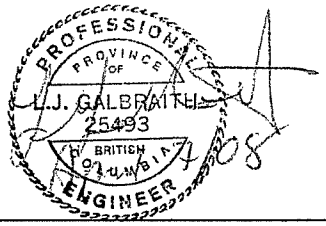
The TSF is required to have sufficient live storage capacity for containment of storm water runoff from the 72-hour PMP volume of 1,070,000 m^3 at all times. The 72-hour PMP allowance is in addition to regular inflows from other precipitation runoff, including the spring freshet. The total feeeboard requirement for the TSF is approximately 1.4 m. The tailings pond elevation should be monitored on a regular basis to ensure that the stormwater and freeboard requirements are not infringed upon during operations.

SECTION 4.0 - CERTIFICATION

This report was prepared, reviewed, and approved by the undersigned.

Prepared by:

Carolyn Grisé, E.I.T.
Staff Engineer



Reviewed by:

Les Galbraith, P.Eng.
Senior Engineer

Approved by:

Ken J. Brouwer, P.Eng.
Managing Director

Knight Piésold CONSULTING

TABLE 2.1

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
STAGE 5 CONSTRUCTION PROGRAM

ZONE S CONTROL SAMPLES - SUMMARY

Print: 02-Apr-08 2:26 PM

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\[Tables 2.1 to 2.3.xls]Table 2.1- Control

Revised: 29-Jan-08

Sample No.	Atterberg Limits			M.C.	Grain Size Analysis				Standard Proctor				MC
					Gravel	Sand	Silt	Clay	Uncorrected		Corrected		
	L.L. (%)	P.L. (%)	P.I. (%)	(%)	> #4 (%)	#4 to #200 (%)	#200 to .002 (%)	< .002 (%)	Max D.D. (kg/m^3)	Opt. M.C. (%)	Max D.D. (kg/m^3)	Opt. M.C. (%)	Deviation From Optimum (%)
KP06-ZS-01C	17.3	13.7	3.7	9.1	20.0	32.5	37.5	10.0	2000	9.0	2080	7.5	1.6
KP06-ZS-02C	17.6	13.3	4.3	7.8	14.1	31.0	41.0	14.0	2000	10.0	2060	9.0	-1.2
KP06-ZS-03C	18.6	15.2	3.4	9.8	18.0	31.0	37.0	14.0	2080	9.5	2140	8.5	1.3
KP06-ZS-04C	18.9	16.0	2.9	14.2	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
KP06-ZS-05C	23.5	14.2	9.3	11.2	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
KP06-ZS-06C	23.3	14.2	9.1	10.4	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
C-S5-ZS-08/07	24	16.1	7.9	12.5	19.1	29.5	32.8	18.6	2020	11.0	2020	10.0	2.5
AVERAGE	20.5	14.7	5.8	10.7	18	31	39	13	2025	9.9	2075	8.8	1.1
MAXIMUM	24.0	16.1	9.3	14.2	20	33	41	18	2080	11.0	2140	10.0	2.5
MINIMUM	17.3	13.3	2.9	7.8	14	30	37	10	2000	9.0	2020	7.5	-1.2

Rev 0- Issued for VA101-1/14-1

Knight Piésold CONSULTING

TABLE 2.2

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
STAGE 5 CONSTRUCTION PROGRAM

ZONE S RECORD SAMPLES - SUMMARY

Print: 02-Apr-08 2:26 PM

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\[Tables 2.1 to 2.3.xls]Table 2.2- Record

Rev'd 29-Jan-08

Sample No.	Atterberg Limits			M.C.	Grain Size Analysis				Standard Proctor				MC
					Gravel	Sand	Silt	Clay	Uncorrected		Corrected		Deviation From Optimum
	L.L. (%)	P.L. (%)	P.I. (%)	(%)	> #4 (%)	#4 to #200 (%)	#200 to .002 (%)	< .002 (%)	Max D.D. (kg/m^3)	Opt. M.C. (%)	Max D.D. (kg/m^3)	Opt. M.C. (%)	(%)
R-S5-ZS-01/06	21	17.3	3.7	11.7	14.5	28.1	46.8	10.6	2000	11.5	2050	10.5	1.2
R-S5-ZS-02/06	21.7	15.7	6	10.2	11.6	29.0	48.7	10.7	2030	11.5	2070	10.5	-0.3
R-S5-ZS-03/06	*N/A*	*N/A*	*N/A*	*N/A*	15.2	29.0	47.0	8.8	2000	11.5	2060	10.5	*N/A*
R-S5-ZS-01/07	22.5	15.1	7.4	7.2	16.8	26.5	43.4	13.3	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
R-S5-ZS-02/07	25.2	15.9	9.3	9.5	12.3	30.3	44.2	13.2	2150	11.5	2190	10.5	-1.0
R-S5-ZS-03/07	24.2	14.2	10.0	9.0	15.2	30.2	48.7	5.9	1940	11.0	2000	10.0	-1.0
R-S5-ZS-04/07	24.7	16.6	8.1	9.1	21.2	26.6	37.1	5.1	2150	14.5	2220	12.5	-3.4
R-S5-ZS-05/07	19.0	13.7	5.3	10.5	24.7	27.3	36.7	11.3	2020	10.5	2120	8.5	2.0
R-S5-ZS-06/07	19.5	14.8	4.7	10.8	15.5	26.0	45.0	13.5	2000	11.5	2060	10.5	0.3
R-S5-ZS-07/07	21.5	13.6	7.9	10.3	10.3	59.3	25.3	5.1	2070	11.0	2190	8.5	1.8
R-S5-ZS-08/07	23.0	17.1	5.9	11.9	18.6	28.8	37.9	14.7	1900	13.0	2000	11.0	0.9
R-S5-ZS-09/07	21.8	13.7	8.1	8.8	30.0	31.0	28.0	10.5	2030	10.5	2140	8.5	0.3
R-S5-ZS-10/07	21.3	13.2	8.1	8.7	29.0	34.0	27.0	10.0	2050	10.5	2160	8.5	0.2
R-S5-ZS-11/07	*23.6*	*17.6*	*6.0*	*7.9*	32.5	28.9	26.4	12.2	2000	11.5	2150	8.5	-0.6
AVERAGE	22.2	15.3	7.0	9.7	19.1	31.1	24.5	10.4	2026	11.5	2108	9.9	0.0
MAXIMUM	25.2	17.6	10.0	11.9	32.5	59.3	48.7	14.7	2150	14.5	2220	12.5	2.0
MINIMUM	19.0	13.2	3.7	7.2	10.3	26.0	5.1	5.1	1900	10.5	2000	8.5	-3.4

Rev 0- Issued for VA101-1/14-1

Knight Piésold
CONSULTING

TABLE 2.3

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY - REPORT ON STAGE 5 CONSTRUCTION
MAXIMUM ARTESIAN HEAD VALUES FOR EMBANKMENT FOUNDATION PIEZOMETERS

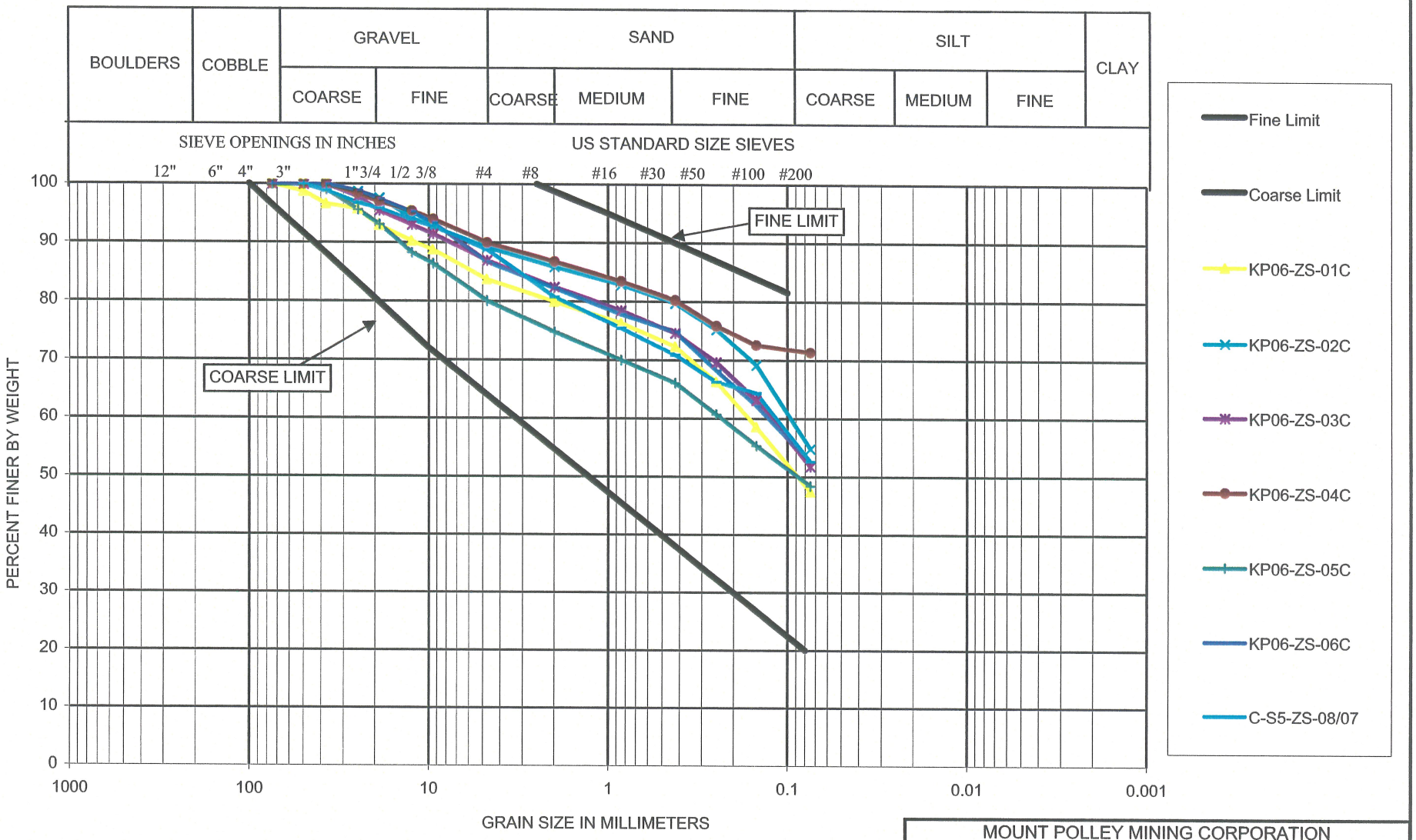
Print: 02-Apr-08 2:26 PM

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\[Tables 2.1 to 2.3.xls]Table 2.3- Artesion Head Values

Rev'd: 21-Dec-07

Piezometer	Piezometer Elevation (m)	Surface Elevation (m)	Sept 2007 Pressure Elevation (m)	Sept 2007 Artesian Pressure (m)
A2-PE2-01	903.68	912.67	No Longer Functioning	-
A2-PE2-02	909.77	912.67	No Longer Functioning	-
A2-PE2-06	898.01	912.91	No Longer Functioning	-
A2-PE2-07	902.81	912.91	915.38	2.47
A2-PE2-08	907.56	913.36	912.22	-1.14
B2-PE1-03	914.05	915.55	915.46	-0.09
B2-PE2-01	901.98	916.98	No Longer Functioning	-
B2-PE2-02	909.51	916.98	919.99	3.01
B2-PE2-06	914.59	916.89	No Longer Functioning	-
C2-PE1-03	912.59	-	-	-
C2-PE2-02	910.53	915.71	916.45	0.74
C2-PE2-06	906.84	915.99	914.57	-1.42
C2-PE2-07	912.29	915.99	No Longer Functioning	-
C2-PE2-08	914.03	915.99	914.7	-1.29
D2-PE2-02	927.32	930.92	930.21	-0.71
E2-PE2-01	914.21	918.81	917.27	-1.54
E2-PE2-02	909.66	918.81	916.59	-2.22

Rev 0- Issued for VA101-1/14-1



Rev 0- Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S CONTROL SAMPLES
PARTICLE SIZE ANALYSES

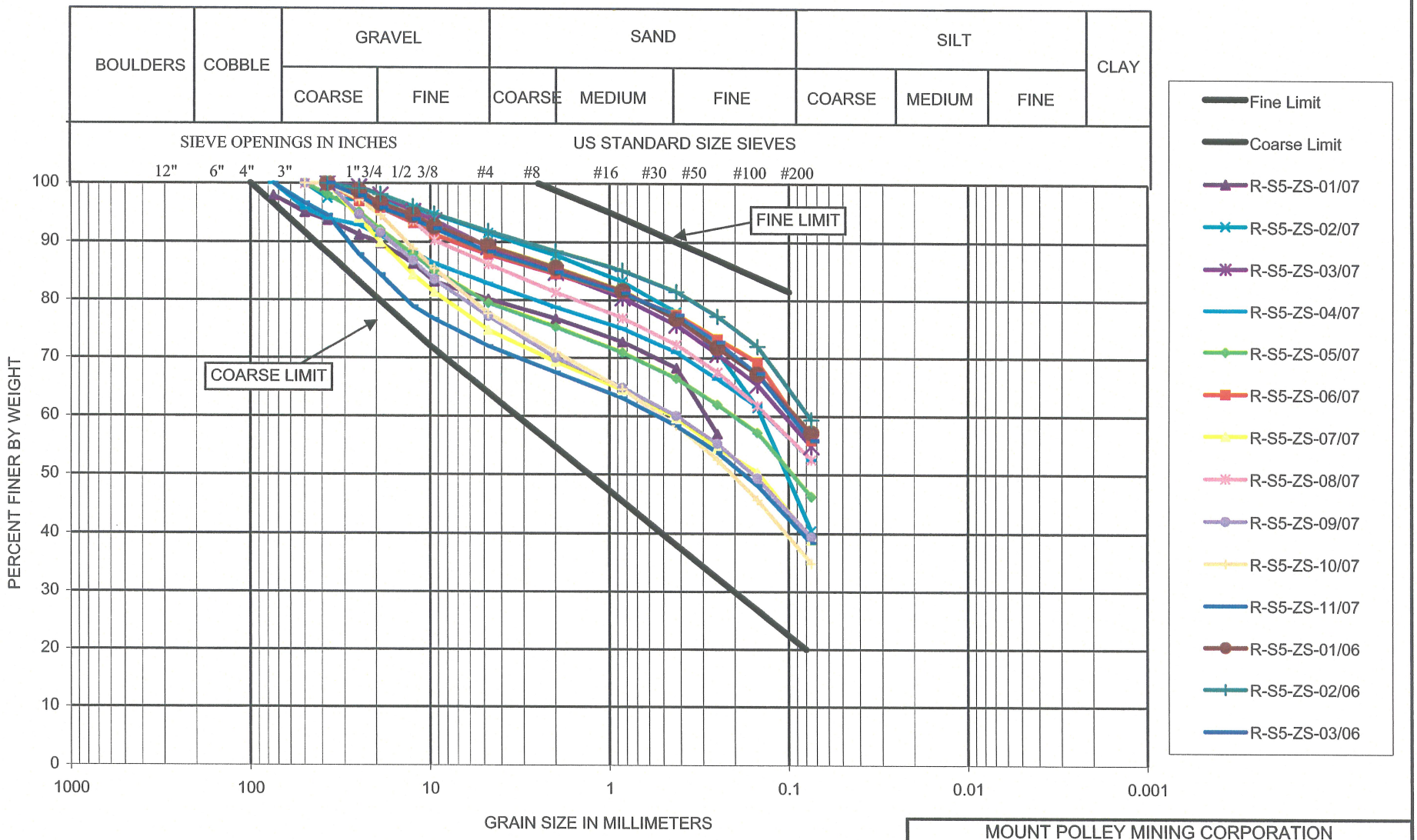
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.1

REV. 0



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD SAMPLES
PARTICLE SIZE ANALYSES

Knight Piésold CONSULTING

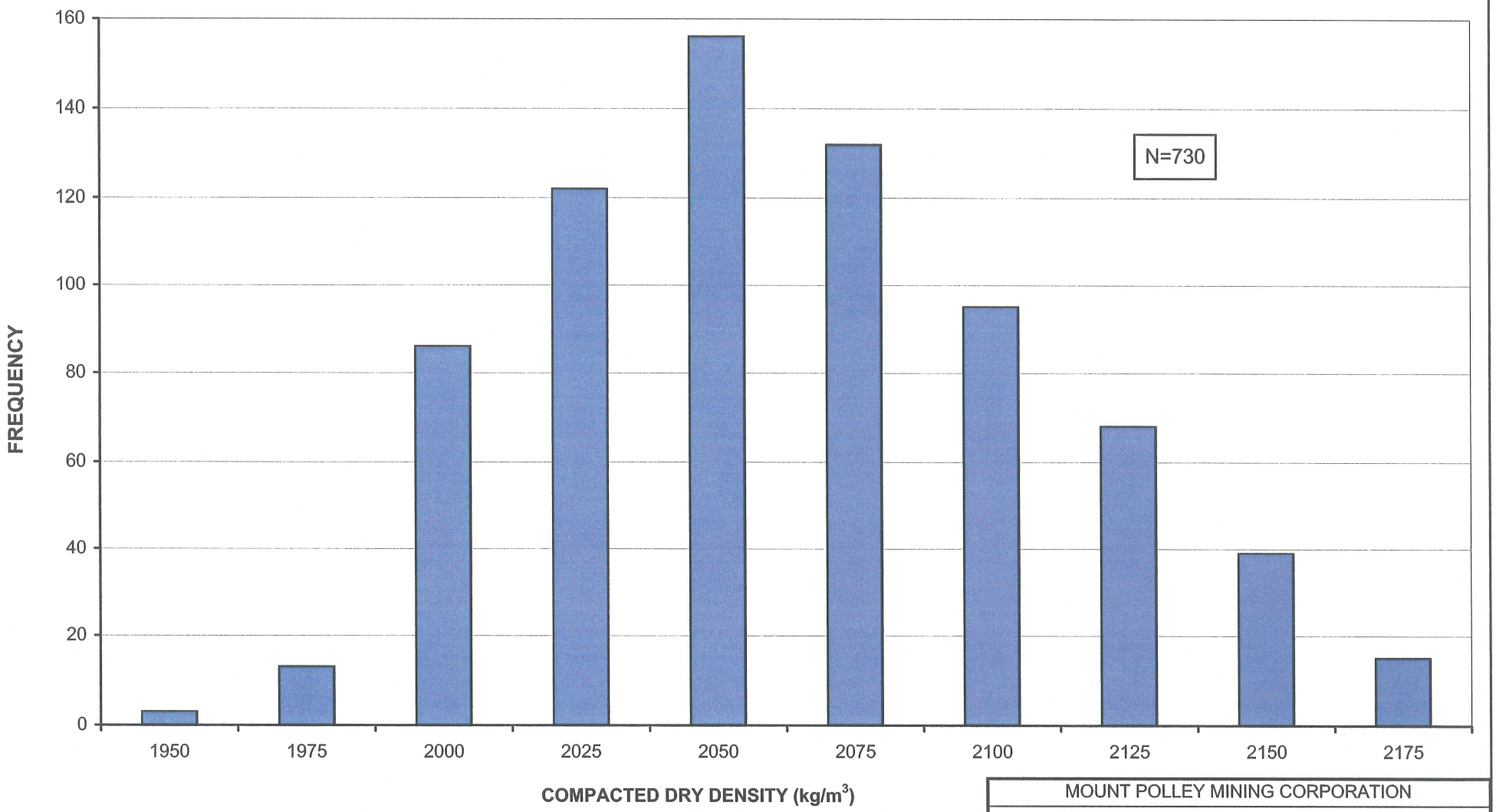
PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.2

REV. 0

Rev 0- Issued for VA101-1/14-1



Notes:
1. The compacted dry density was measured using a nuclear densometer.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD TESTS
FIELD DRY DENSITY

Knight Piésold CONSULTING

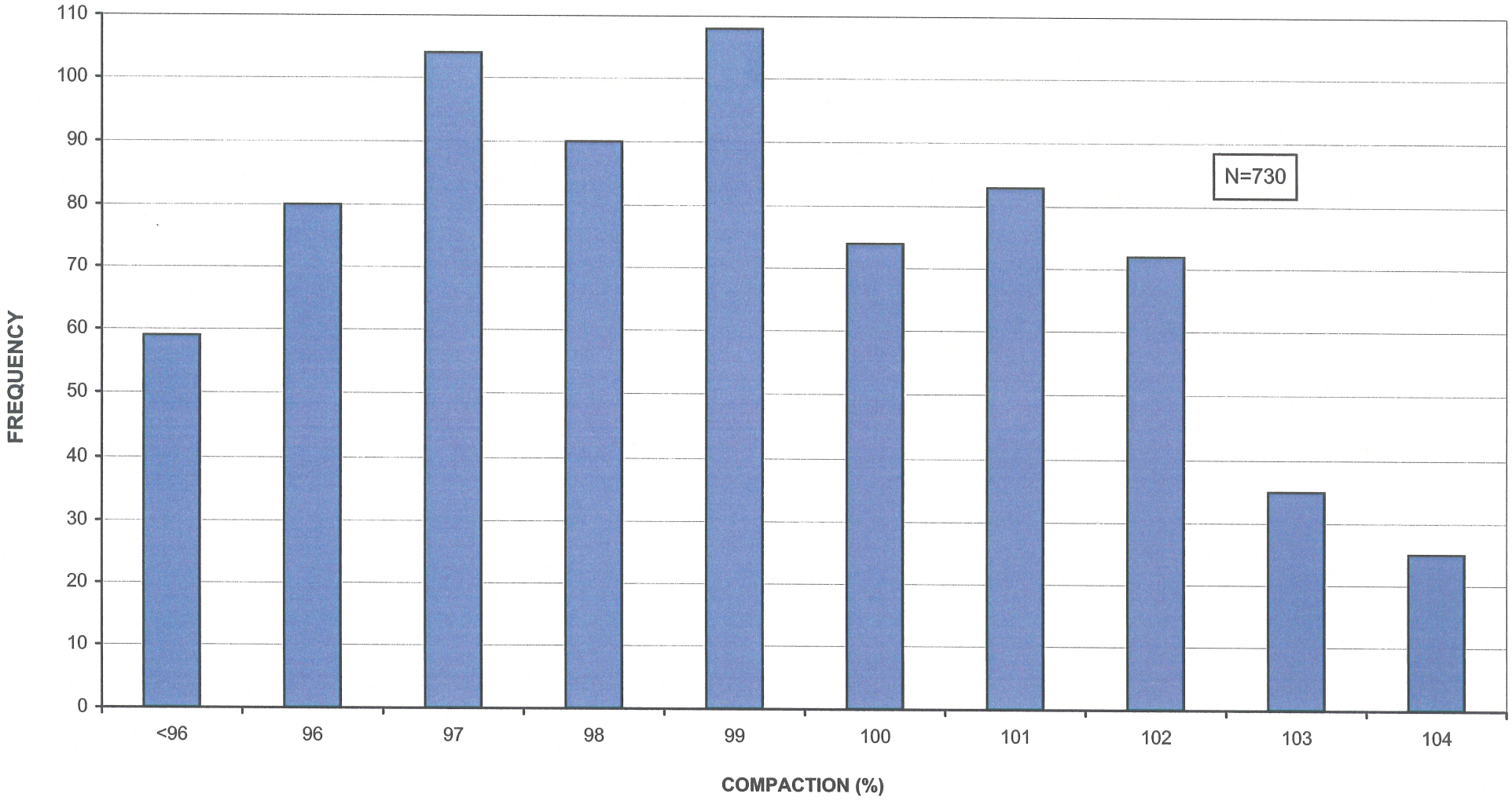
PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.3

REV. 0

Rev 0- Issued for VA101-1/14-1



Notes:
1. The field dry density was measured using a nuclear densometer.
2. The nuclear densometer test results were compared to the results from Zone S record tests peformed on till placed in the same area , which determined the maximum density for that particular material.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD TESTS
PERCENT COMPACTION

Knight Piésold CONSULTING

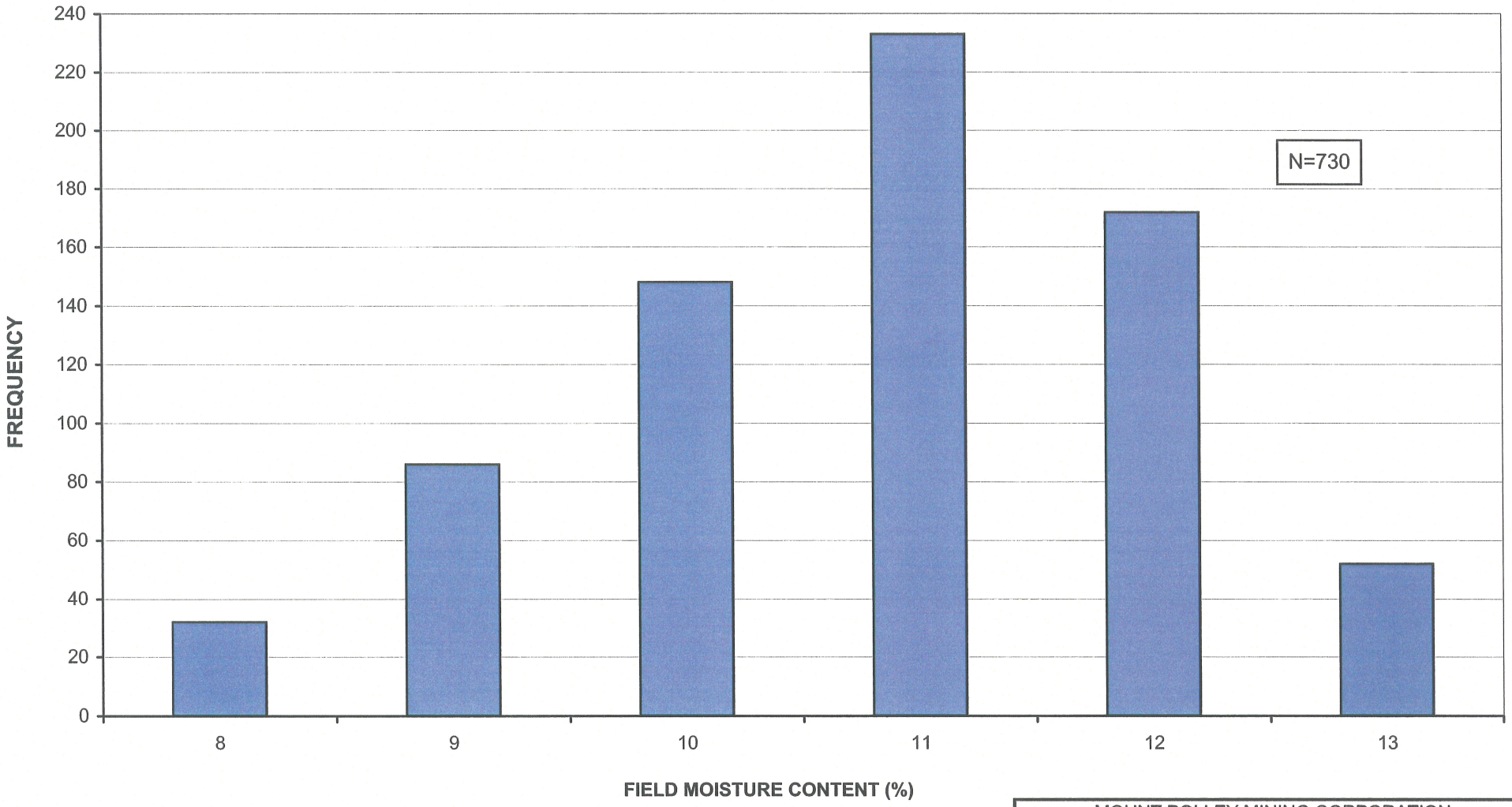
PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.4

REV. 0

Rev 0- Issued for VA101-1/14-1



Notes:
1. The compacted moisture content was measured using a nuclear densometer.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD TESTS
MOISTURE CONTENT

Knight Piésold CONSULTING

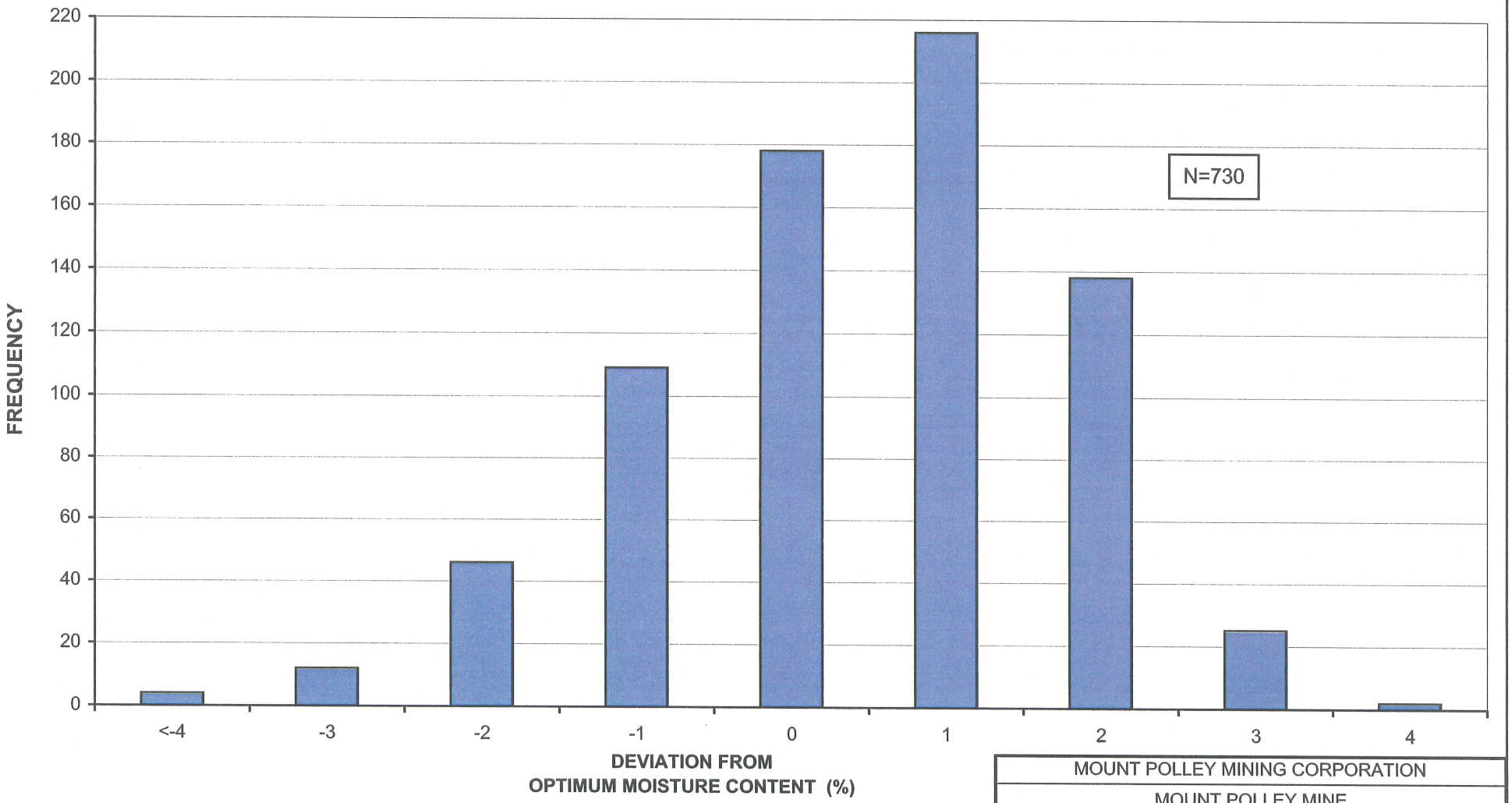
PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.5

REV. 0

Rev 0- Issued for VA101-1/14-1



Notes:
1. The Optimum Moisture Content refers to the Standard Proctor Optimum Moisture Content.
2. The compacted moisture content was measured using a nuclear densometer. The nuclear densometer test results were compared to the Standard Proctor Optimum Moisture Contents of the record samples for comparison.

Rev 0- Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD TESTS
DEVIATION FROM OPTIMUM MOISTURE CONTENT

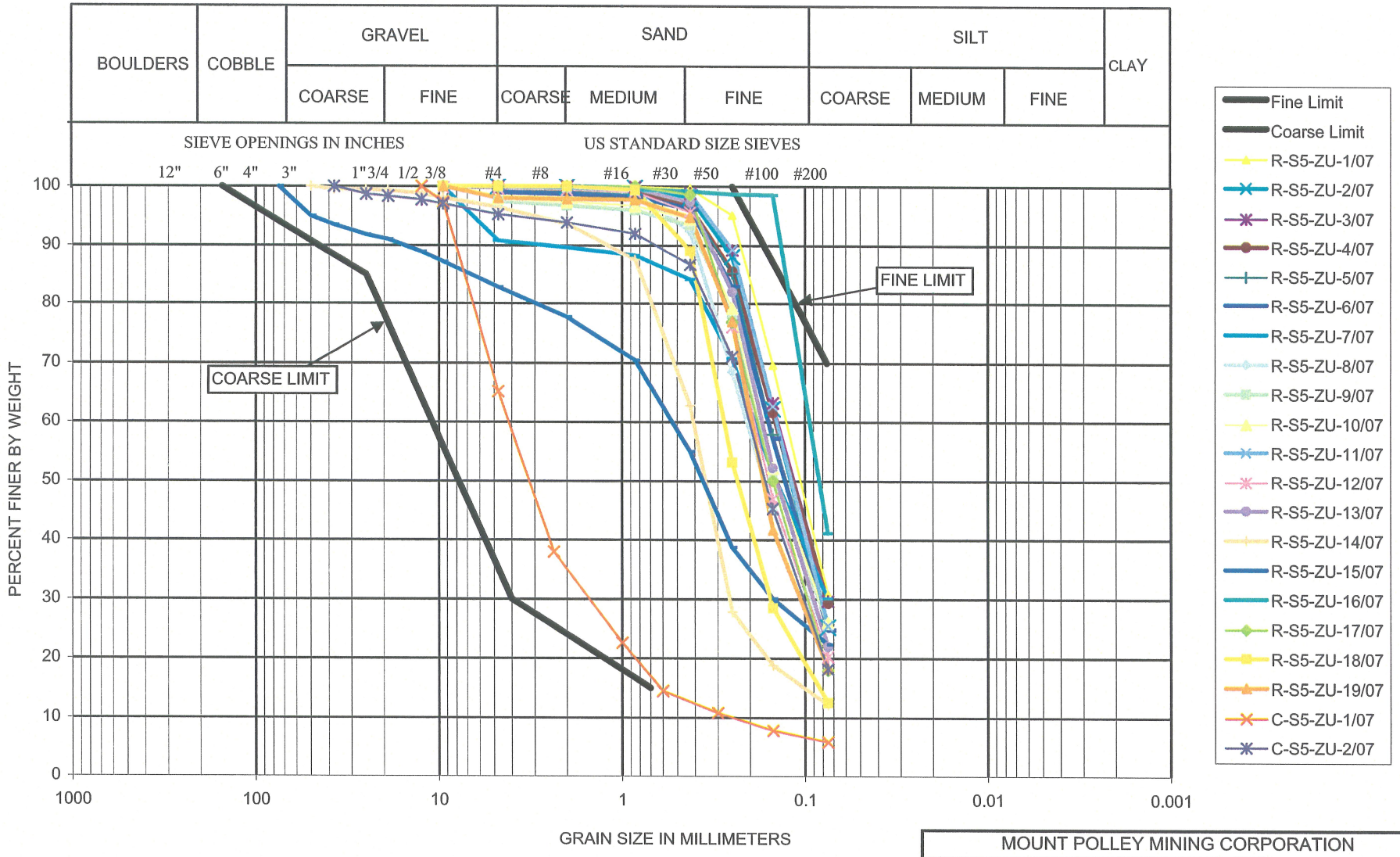
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.6

REV. 0



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE U RECORD AND CONTROL SAMPLES
PARTICLE SIZE ANALYSES

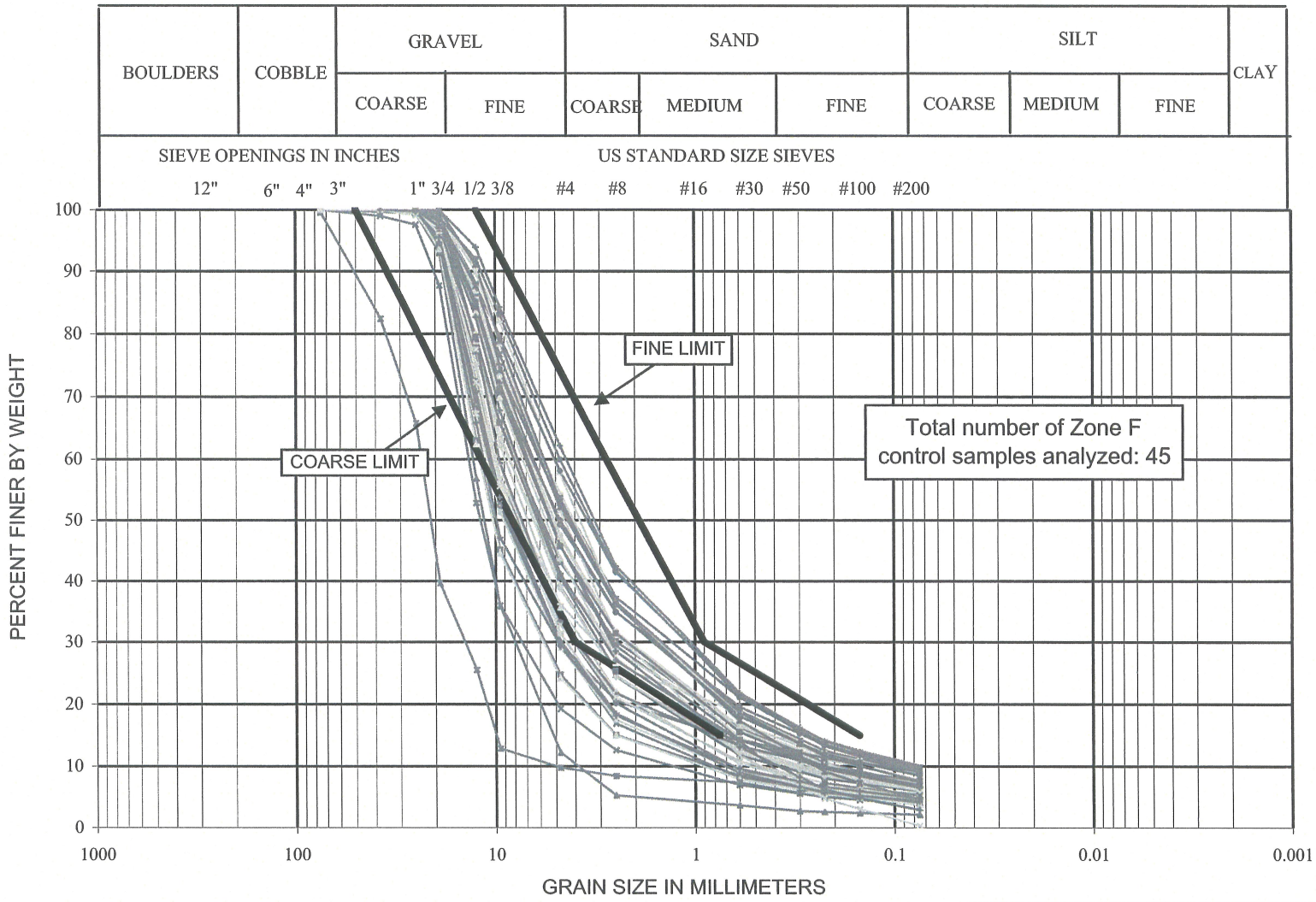
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE 2.7

REV. 0

Rev 0- Issued for VA101-1/14-1



Note: 11of the 45 Zone F samples were beyond the coarse limit. This is because the samples were collected from stockpiles, where the outer, most accessible material was generally coarser.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE F CONTROL SAMPLES
PARTICLE SIZE ANALYSES

Knight Piésold CONSULTING

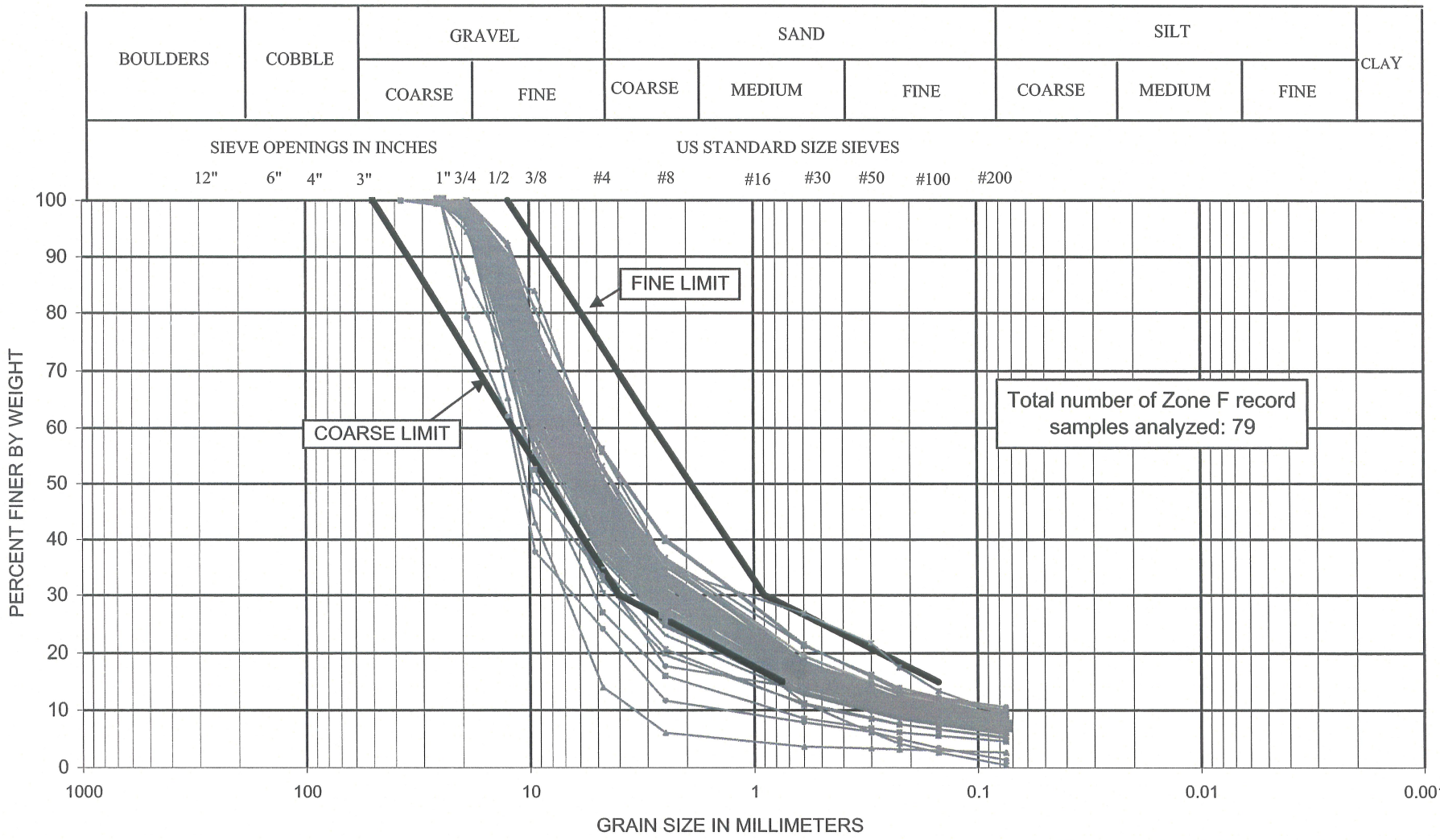
PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.8

REV. 0

Rev 0- Issued for VA101-1/14-1



Note: 6 of the 79 Zone F record samples analyzed were too coarse. The samples were taken from the Zone F after placement, but the excavator may have taken that material from the outside of the stockpile, where the material is generally coarser.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE F RECORD SAMPLES
PARTICLE SIZE ANALYSES

Knight Piésold CONSULTING

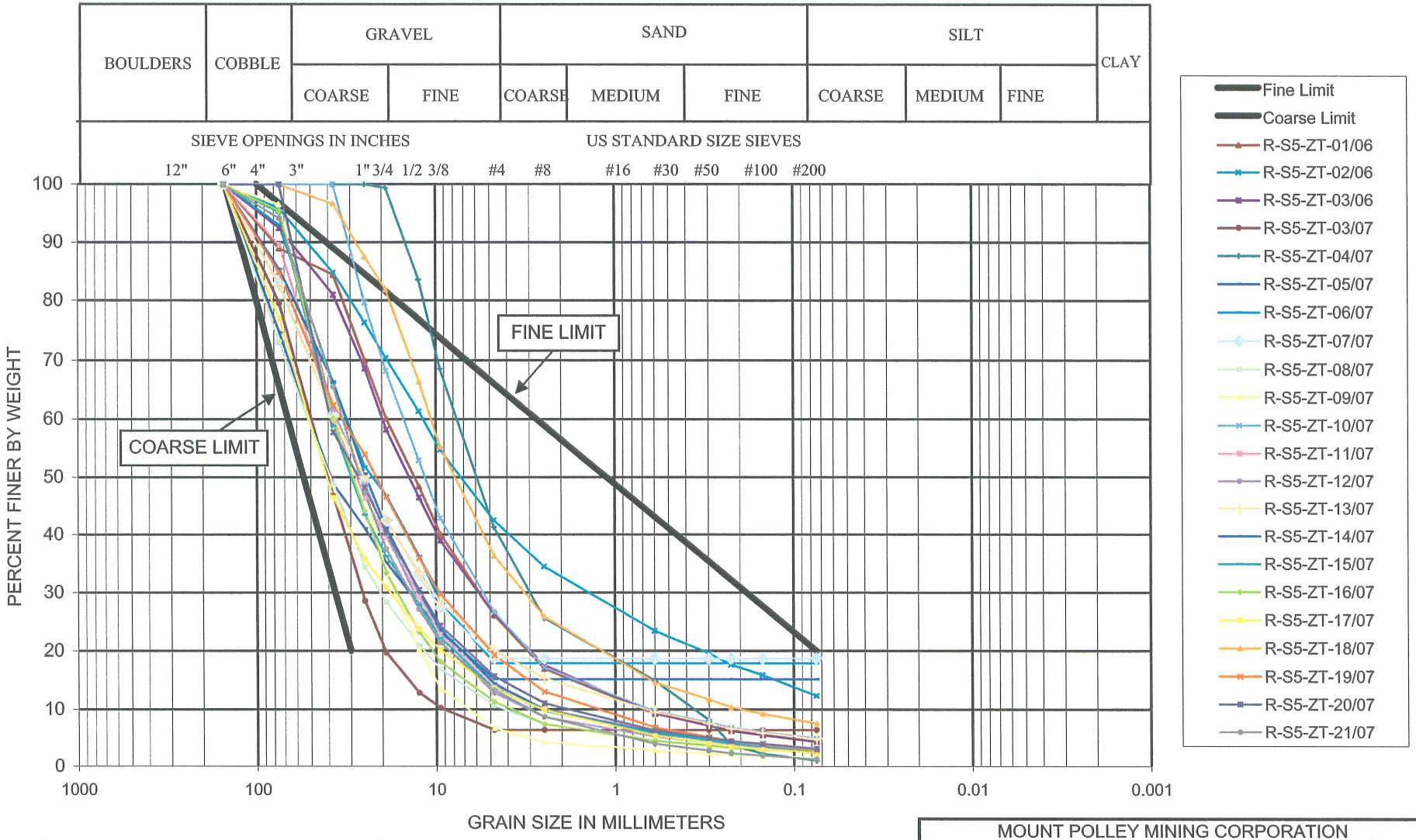
PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.9

REV. 0

Rev 0- Issued for VA101-1/14-1



Note: Several samples are 100% finer than 4", which is beyond the fine limit. This may be due to the size of the sample collected. The Field Engineer may avoid including the larger rocks as part of the representative sample, as they take up so much of the five-gallon bucket. The sample size may be increased in the future, in order to receive a more accurate analysis.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE T RECORD SAMPLES
PARTICLE SIZE ANALYSES

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

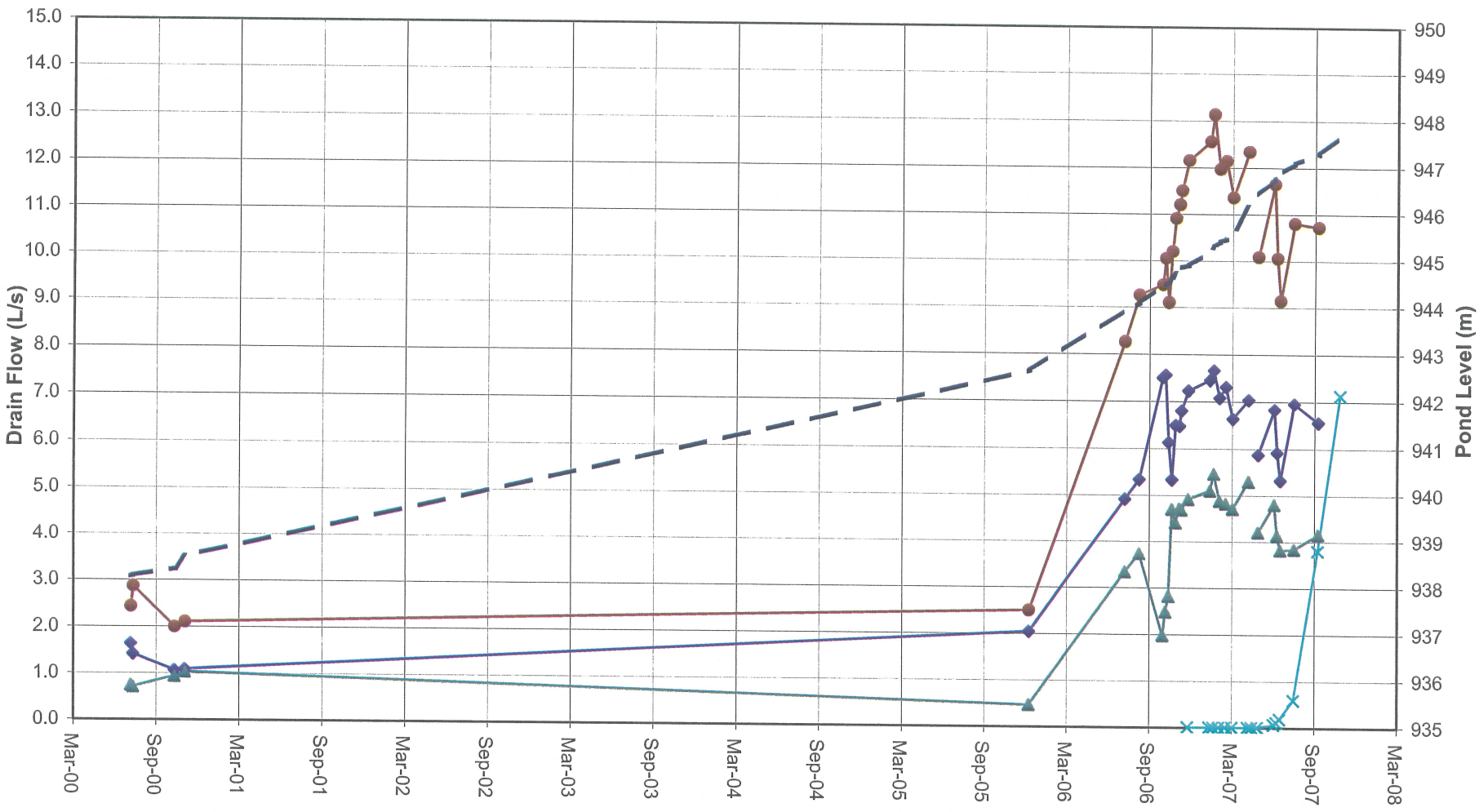
FIGURE 2.10

REV. 0

Rev 0- Issued for VA101-1/14-1

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Figures 2.1 to 2.12Fig 2.11- Upstream Toe Drains

Print4/8/2008 1:08 PM
Rev'd 31-Jan-08



Rev 0- Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

UPSTREAM TOE DRAIN FLOWS

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

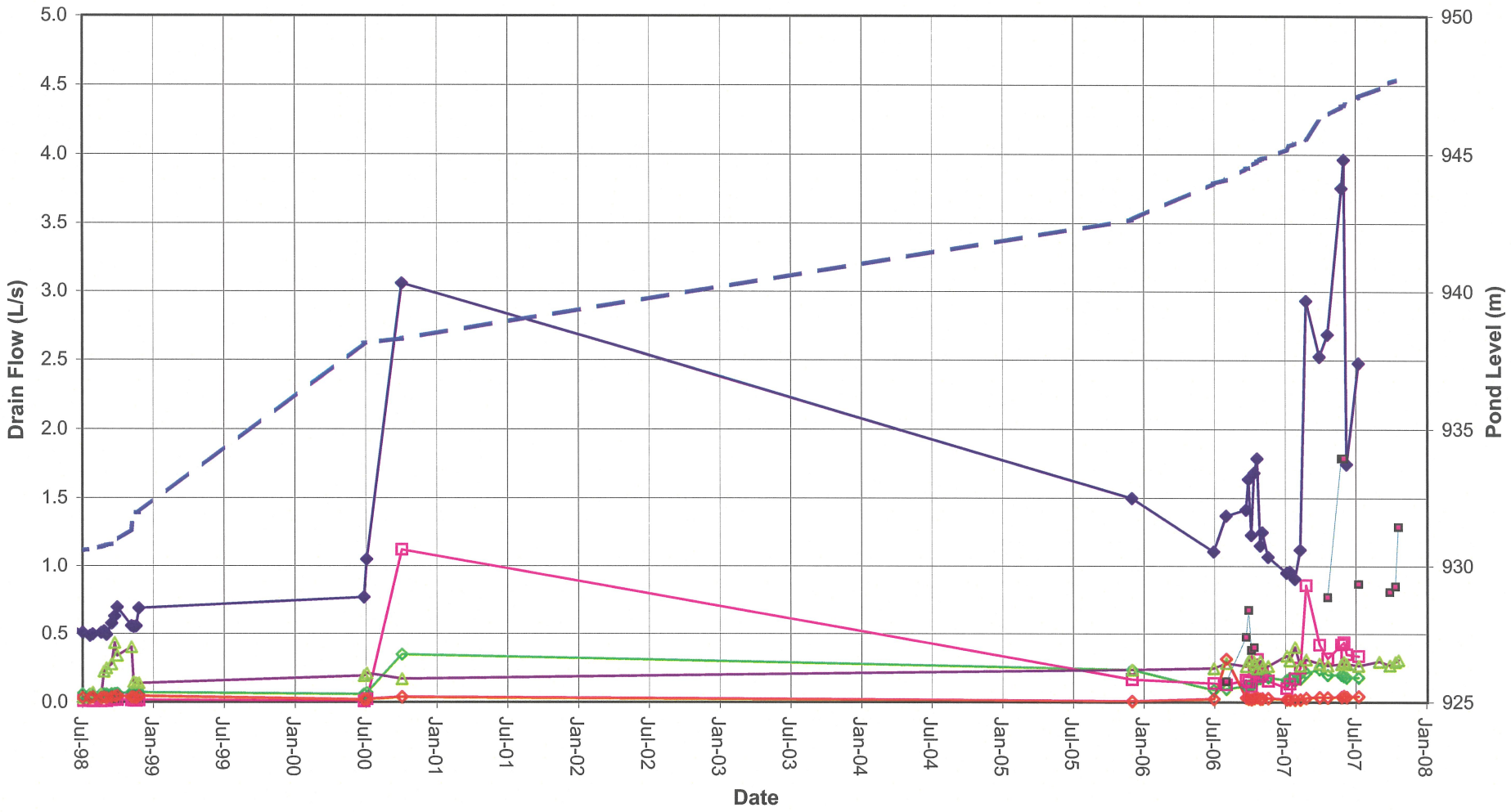
REF NO. 1

FIGURE 2.11

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Figures 2.1 to 2.12Fig 2.12- Foundation Drains

Print 4/8/20081:09 PM
Rev'd 31-Jan-08



Rev 0- Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

FOUNDATION DRAIN FLOWS

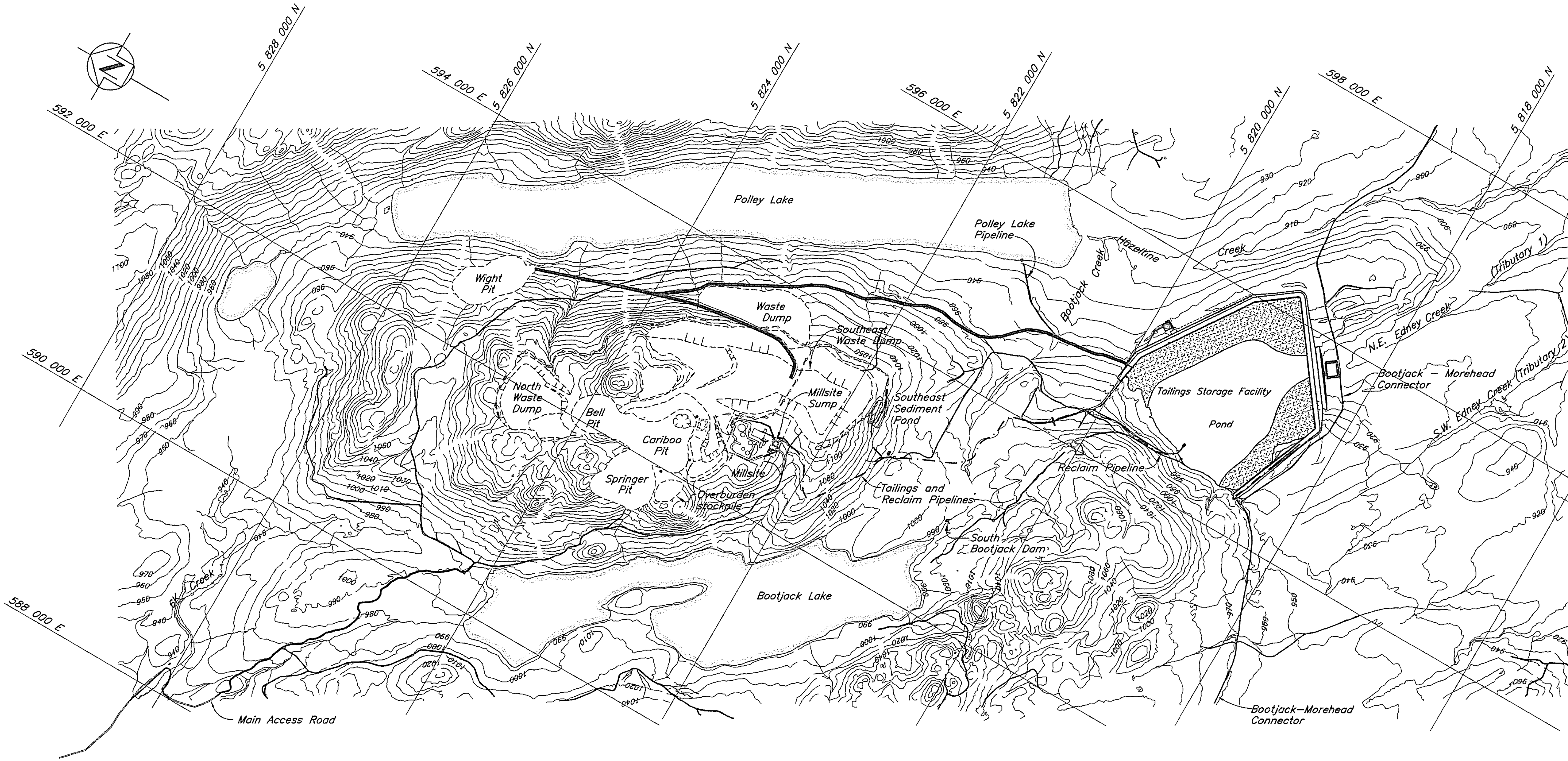
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE 2.12

REV. 0



Scale 400 0 400 800 1200 1600 2000 m

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. Drawing is for reference only.

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	28FEB'08	AS – BUILT	LJG	TAM	BB	
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	LJG	TAM		
REVISIONS						

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – L.J. GALBRAITH

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

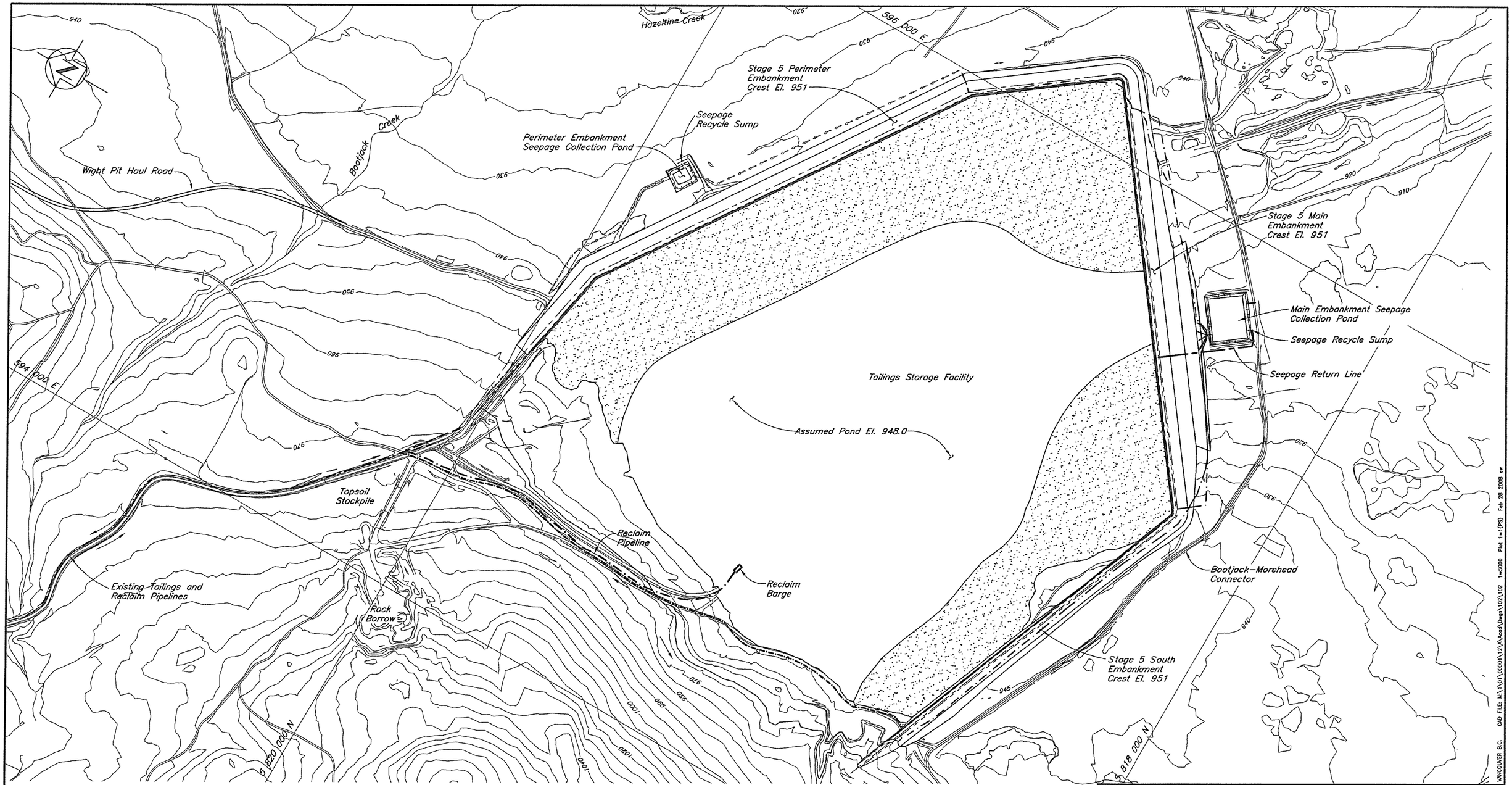
MOUNT POLLEY MINE

OVERALL SITE PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	100	1

VANCOUVER B.C. CAD FILE:M:\1\01\00001\12\A\Acad\Dwgs\100\100 1=20000 Plot 1=1(PS) Feb 28 2008

XREF FILE : TOPO99



NOTES

1. Topography from 2004 Flyover
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.

Scale 100 0 100 200 300 400 500m

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	28FEB'08	AS-BUILT	HPD	TAM	BB	KJB
1	07DEC'07	ISSUED FOR ANNUAL INSPECTION REPORT	HPD	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	HPD	TAM	BB	KJB

REVISIONS

DRG. NO.	DESCRIPTION
—	—

REFERENCE DRAWINGS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L. J. GALBRAITH 25493 Date: 28/02/08

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
GENERAL ARRANGEMENT
STAGE 5 CREST ELEVATION

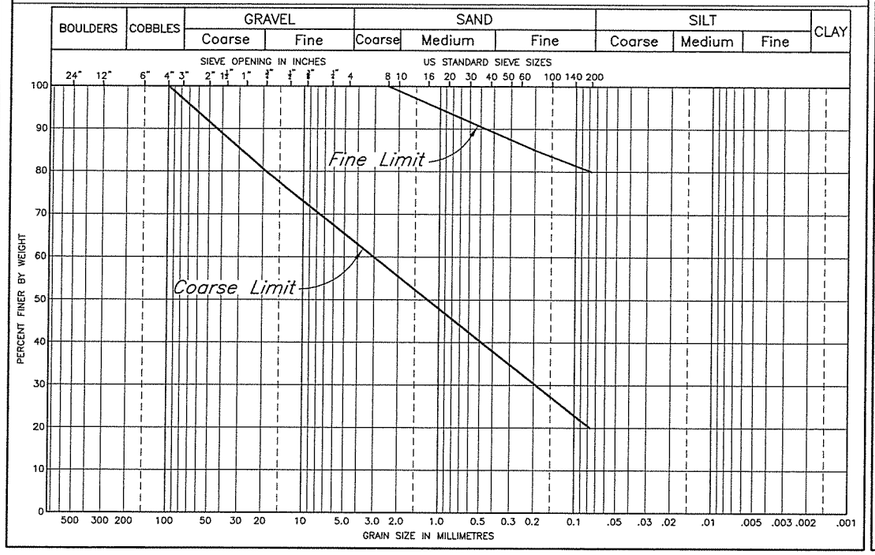
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	102	2

XREF FILE : Topo2004, Features

VANCOUVER B.C. CAD FILE: M:\1\01\00001\12\V\Acad\Dwgs\102\102 1=5000 Plot 1=1(PS) Feb 28 2008 ew

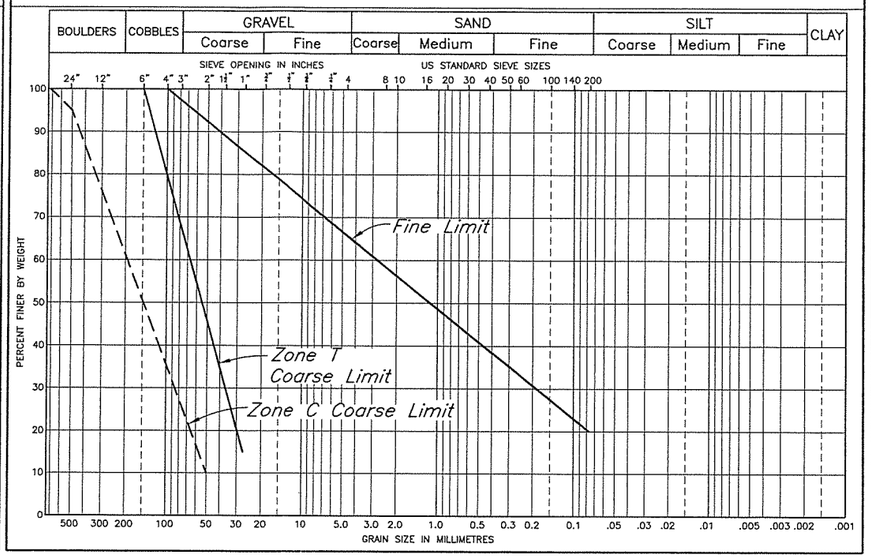
UNIFIED SOIL CLASSIFICATION SYSTEM

ZONE S



UNIFIED SOIL CLASSIFICATION SYSTEM

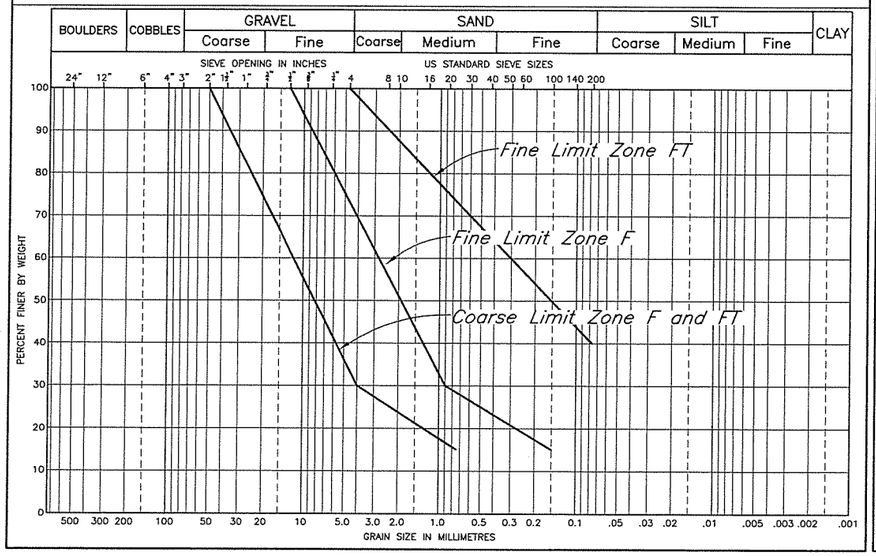
ZONE T and ZONE C



ZONE	MATERIAL TYPE	LOCATION	PLACEMENT & COMPACTION REQUIREMENTS
S	*Glacial till*	*Core Zone*	*Placed, moisture conditioned and spread in maximum 300 mm thick layers (after compaction). Vibratory compaction to 95% of Standard Proctor maximum dry density or as approved by the Engineer.*
R	*Rock*	*Shell Zone*	*Placed and spread in maximum 2000 mm thick layers and compacted by selective routing of mine haul trucks.*
T	*Rock*	*Transition Zone/ Confining Berm*	*Placed and spread in maximum 600 mm thick layers and compacted with minimum 4 passes of 10 ton smooth drum vibratory roller, or as approved by the Engineer.*
F	*Filter sand*	*Chimney Drain*	*Placed and spread in maximum 600 mm thick layers and compacted with minimum 4 passes of 10 ton smooth drum vibratory roller, or as approved by the Engineer.*
FT	*Sand*	*Downstream Foundation*	*Placed and spread in maximum 300 mm thick layers and compacted with minimum 4 passes of 10 ton smooth drum vibratory roller, or as approved by the Engineer.*
U	*Select Fill*	*Upstream Toe*	*Placement and compaction requirements to be determined based on material selection.*
CBL	*Select Coarse Rockfill*	*Upstream Toe*	*Placed to establish a firm foundation for subsequent fill placement.*

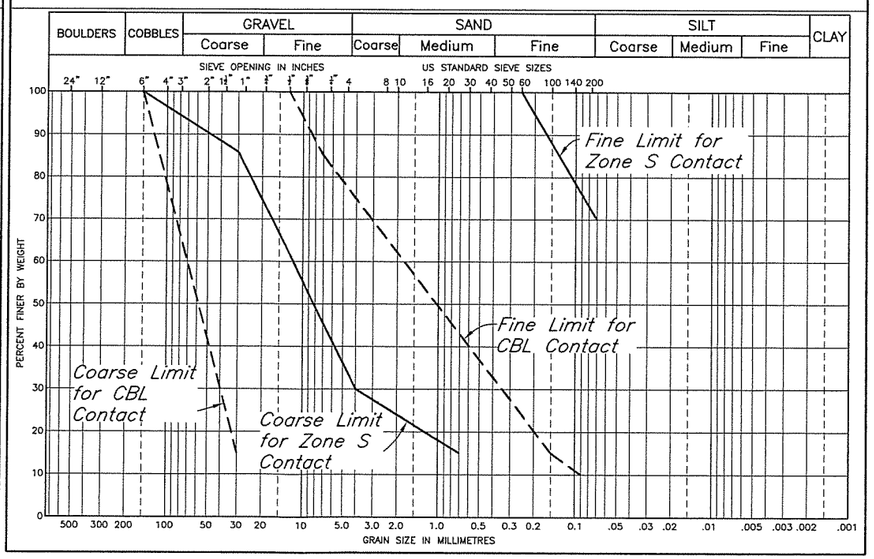
UNIFIED SOIL CLASSIFICATION SYSTEM

ZONE F AND ZONE FT



UNIFIED SOIL CLASSIFICATION SYSTEM

ZONE U



NOTE

1. *The Zone U fine limit was changed during Stage 5, so that coarse tailings could be used as a construction material.*

DRG. NO.	DESCRIPTION
235	STAGE 5 – SOUTH EMBANKMENT – SECTIONS
225/226	STAGE 5 – PERIMETER EMBANKMENT – SECTIONS AND DETAILS
215/216	STAGE 5 – MAIN EMBANKMENT – SECTIONS AND DETAILS
240	STAGE 5 – SOUTH EMBANKMENT – DRAIN – SECTIONS AND DETAILS

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	28FEB'08	AS – BUILT	LJG	TAM	BB	KJB
1	22JUN'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	LJG	TAM	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — L. J. GRAITH — 25493 — 2/08

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

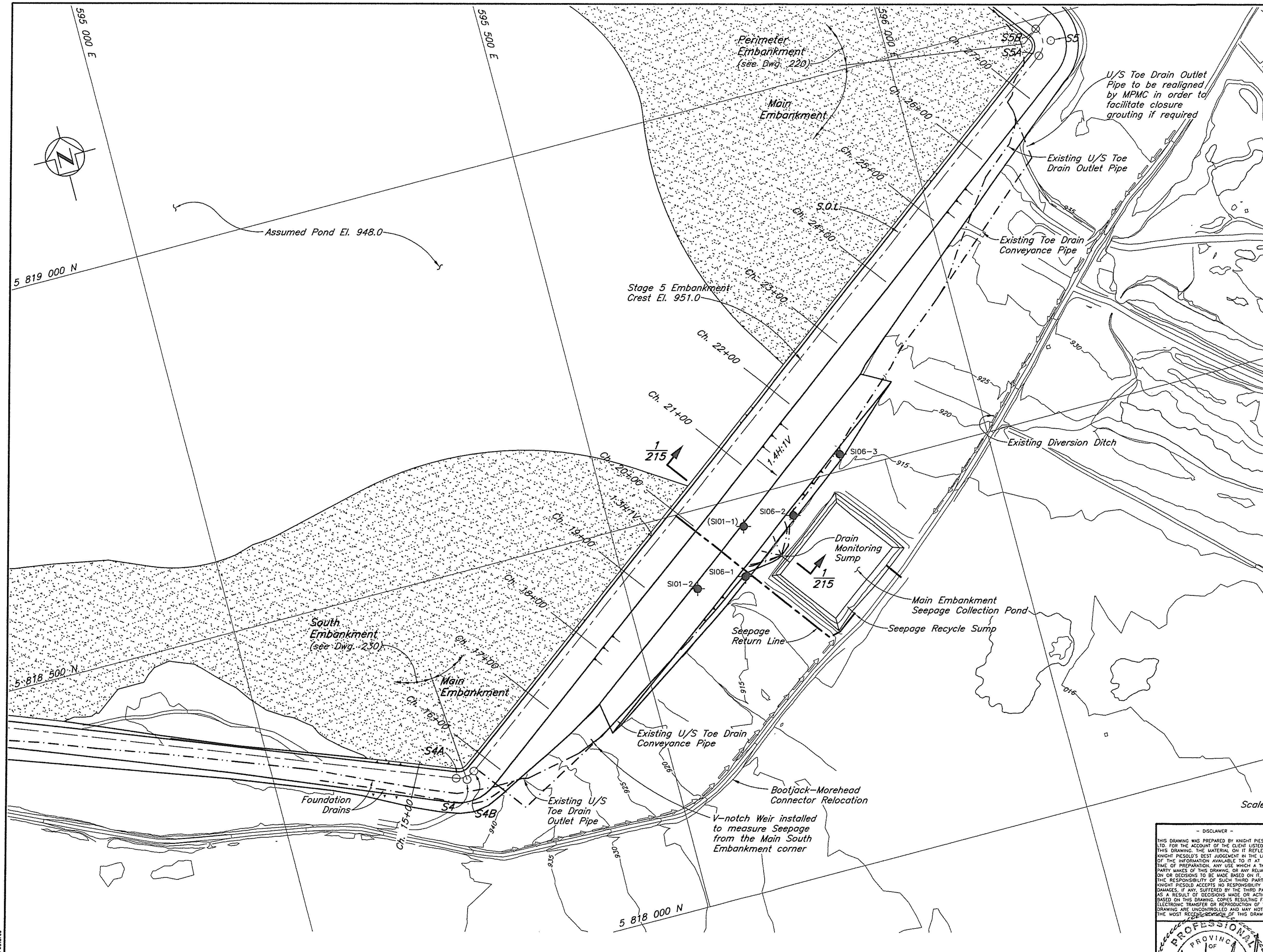
MOUNT POLLEY MINE

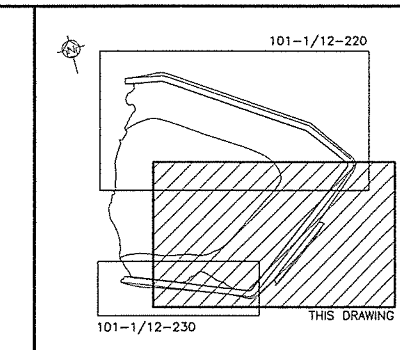
TAILINGS STORAGE FACILITY STAGE 5 TAILINGS EMBANKMENT MATERIAL SPECIFICATIONS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	104	2

XREF FILE : -

VANCOUVER B.C. CAD FILE: M:\101\00001\12\VA\cad\Dwgs\104 1=1 Plot 1=1 Nov 26 2007 tam





KEY PLAN

LEGEND

SI01-3 ● Existing Inclinometer

(SI01-1) ● Non-functioning Inclinometer

NOTES

1. Topography from 2004 flyover
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Inclinometer SI01-1 was damaged during the placement of the Zone C shell zone.

Scale 50 0 50 100 150 200 250 Metres

VANCOUVER B.C. CAD FILE: M:\1\01\00001\12\A\Acad\Dwgs\210\210 1=2500 Plot 1=1(PS) Feb 28 2008 ew

XREF FILE : Topo2004, Features

DRG. NO.	DESCRIPTION
230	STAGE 5 SOUTH EMBANKMENT – PLAN
220	STAGE 5 PERIMETER EMBANKMENT – PLAN
215	STAGE 5 MAIN EMBANKMENT – SECTIONS AND DETAILS

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	28FEB'08	AS – BUILT	LJG	TAM	BB	KJB
1	10JUL'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	LJG	TAM	BB	KJB

REVISIONS

– DISCLAIMER –
THIS DRAWING WAS PREPARED BY KNIGHT PIÉSOLD LTD. FOR THE ACCOUNT OF THE CLIENT LISTED ON THIS DRAWING. THE MATERIAL ON IT REFLECTS KNIGHT PIÉSOLD'S BEST JUDGEMENT IN THE LIGHT OF THE INFORMATION AVAILABLE TO IT AT THE TIME OF PREPARATION. ANY USE WHICH A THIRD PARTY MAKES OF THIS DRAWING, OR ANY RELIANCE ON OR DECISIONS TO BE MADE BASED ON IT, ARE THE RESPONSIBILITY OF SUCH THIRD PARTIES. KNIGHT PIÉSOLD ACCEPTS NO RESPONSIBILITY FOR DAMAGES, IF ANY, SUFFERED BY THE THIRD PARTY AS A RESULT OF DECISIONS MADE OR ACTIONS BASED ON THIS DRAWING. COPIES RESULTING FROM ELECTRONIC TRANSFER OR REPRODUCTION OF THIS DRAWING ARE UNCONTROLLED AND MAY NOT BE THE MOST RECENT REVISION OF THIS DRAWING.

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – J. GALBRAITH – 25493

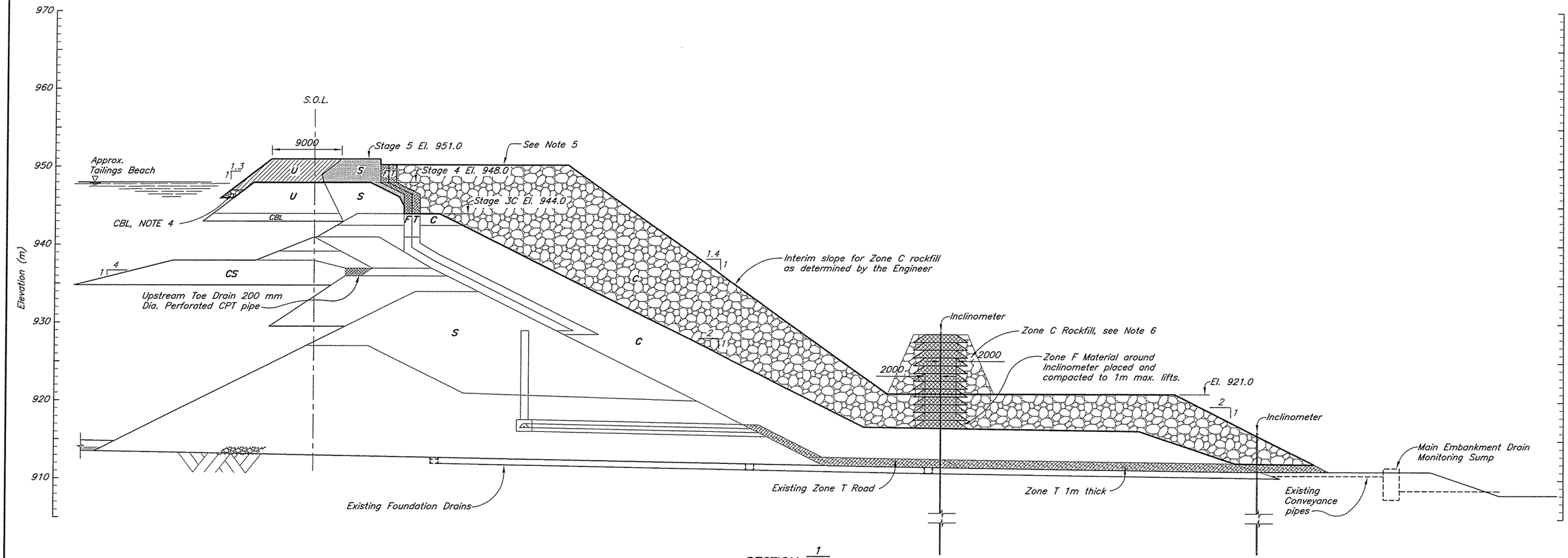
Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 5 MAIN EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	210	2



SECTION 1/210

NOTES

1. For material specifications see Drg. 104.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. The Zone S core width was reduced from 8 m at EL. 949.0 to 5 m at EL. 951.0 m.
4. Coarse bearing layer was required in some locations on tailings beach adjacent to the embankment to create a competent surface for placement on the Zone U material.
5. The elevations of Zones F, T, C and U vary along the Main Embankment.
6. Eight 1m lifts of Zone F material were placed around inclinometers SI01–1 and SI01–2 with Zone T and Zone C rockfill forming a mound to offer protection from boulders during placement of Zone C.

Scale 5 0 5 10 15 20 25 m

DRG. NO.	DESCRIPTION
210	STAGE 5 MAIN EMBANKMENT – PLAN
104	MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	28FEB'08	AS – BUILT	LJG	TAM	BB	KJB
1	10JUL'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	LJG	TAM	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. J. GALBRAITH 25493

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

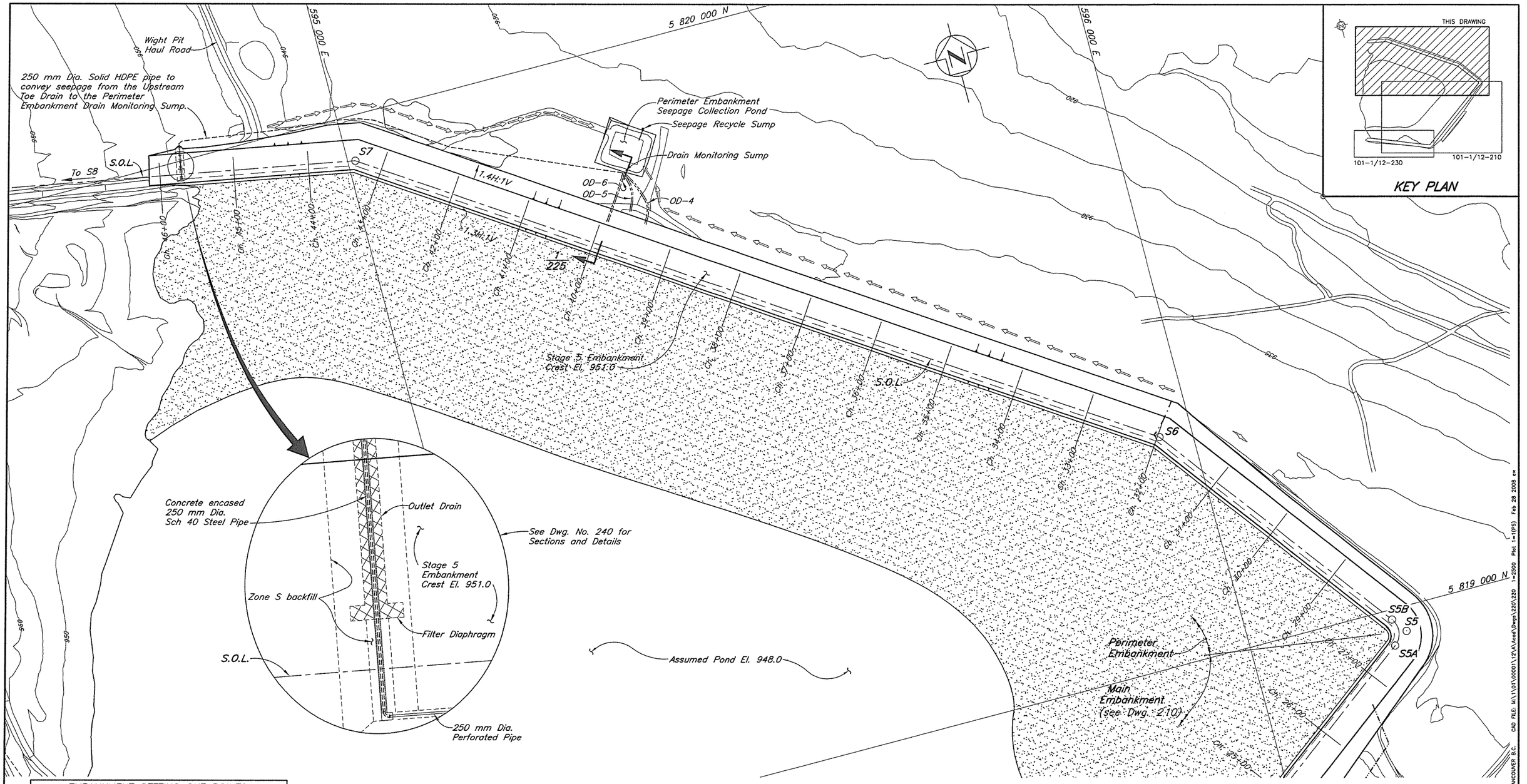
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 5 MAIN EMBANKMENT
SECTION

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101–1/12	215	2

XREF FILE :–

VANCOUVER B.C. CAD FILE: M:\1\01\00001\12\A\Acad\Dwgs\215\215 1=250 Plot 1=1(PS) Feb 28 2008 ew



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 from 2004 flyover.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.

Scale 50 0 50 100 150 200 250 m

REFERENCE DRAWINGS	
DRG. NO.	DESCRIPTION
240	STAGE 5 PERIMETER EMBANKMENT – UPSTREAM TOE DRAIN
230	STAGE 5 SOUTH EMBANKMENT – PLAN
225	STAGE 5 PERIMETER EMBANKMENT – SECTIONS
210	STAGE 5 MAIN EMBANKMENT – PLAN

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
3	28FEB'08	AS – BUILT	LJG	TAM	BB	KJB
2	13JUL'06	HOLD REMOVED, ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
1	21JUN'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	14JUN'06	ISSUED FOR STAGE 5 PERMITTING	LJG	NSD	BB	KJB

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.J. GALBRAITH 25493

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATIOIN

MOUNT POLLEY MINE

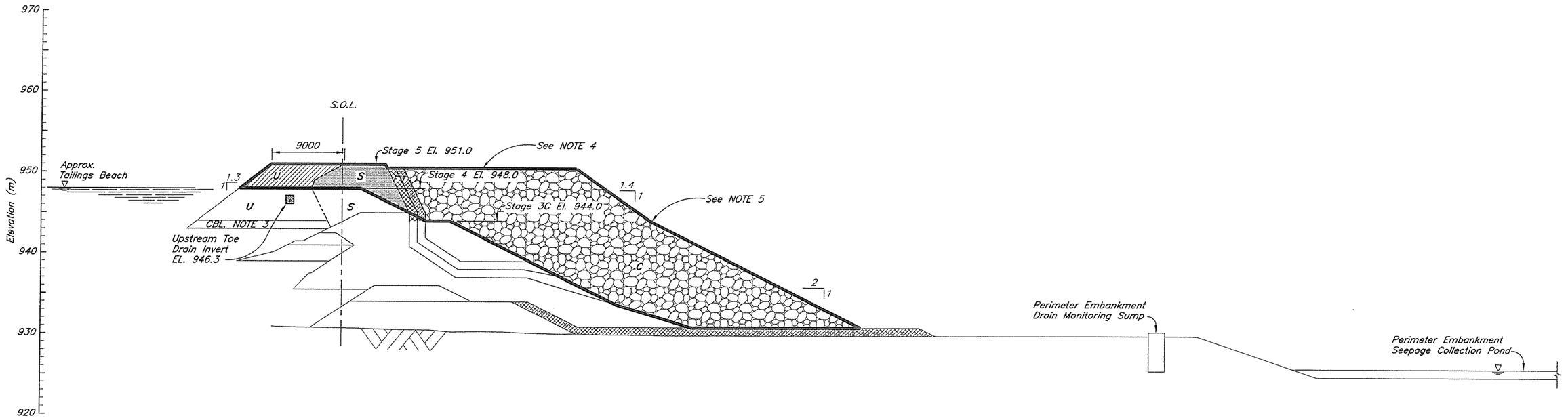
TAILINGS STORAGE FACILITY
STAGE 5 PERIMETER EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	220	3

XREF FILE : Topo2004

CAD FILE: M:\101\0000\12\VA\cad\Dwgs\220\220 1=2500 Plot 1=(PS) Feb 28 2008 ew

VANCOUVER B.C.



SECTION 1/220

NOTES

1. *For material specifications see Drg. 104.*
2. *All dimensions in millimetres and elevations in metres, unless noted otherwise.*
3. *Coarse bearing layer was required in some locations on tailings beach adjacent to the embankment to create a competent surface for placement on the Zone U material.*
4. *Elevations of Zones F, T, C and U vary along the Perimeter Embankment.*
5. *At approxmately EL. 944.0 m, the Zone C slope changes from 2H:1V to 1.4H:1V.*

Scale 5 0 5 10 15 20 25 m

DRG. NO.	DESCRIPTION
226	STAGE 5 – PERIMETER EMBANKMENT – DETAIL
220	STAGE 5 – PERIMETER EMBANKMENT – PLAN
104	STAGE 5 – MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	28FEB'08	AS – BUILT	LJG	TAM	BB	KJB
1	21JUN'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	14JUN'06	ISSUED FOR STAGE 5 PERMITTING	LJG	TAM	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER
L.J. GALBRAITH
25493
PROVINCE OF BRITISH COLUMBIA
April 2/08

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

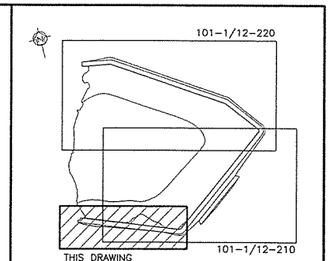
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 5 – PERIMETER EMBANKMENT
SECTION

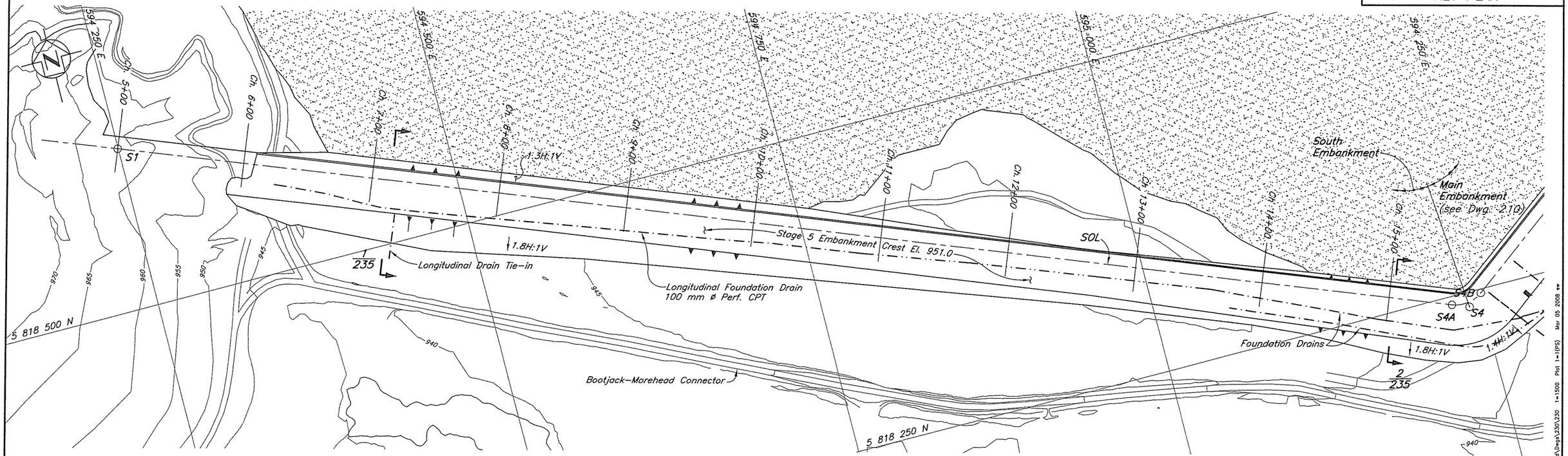
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	225	2

XREF FILE : –

CAD FILE: W:\1\01\00001\12\VA\Acad\Dwgs\225\225 1=250 Plot 1=1(PS) Feb 28 2008 ew
VANCOUVER B.C.



KEY PLAN



PLAN

Scale 30 0 30 60 90 120 150 m

NOTES

1. Topography from 2004 flyover.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.

DRG. NO.	DESCRIPTION
235	STAGE 5 SOUTH EMBANKMENT – SECTIONS
220	STAGE 5 PERIMETER EMBANKMENT – PLAN
210	STAGE 5 MAIN EMBANKMENT – PLAN
104	STAGE 5 TAILINGS EMBANKMENT – MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	05MAR'08	AS – BUILT	LJG	TAM	BB	KJB
1	22JUN'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	LJG	TAM	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.J. GALBRAITH 25493 ENGINEER 22/05/08

Knight Piésold CONSULTING

MOUNT POLLEY MINE CORPORATION

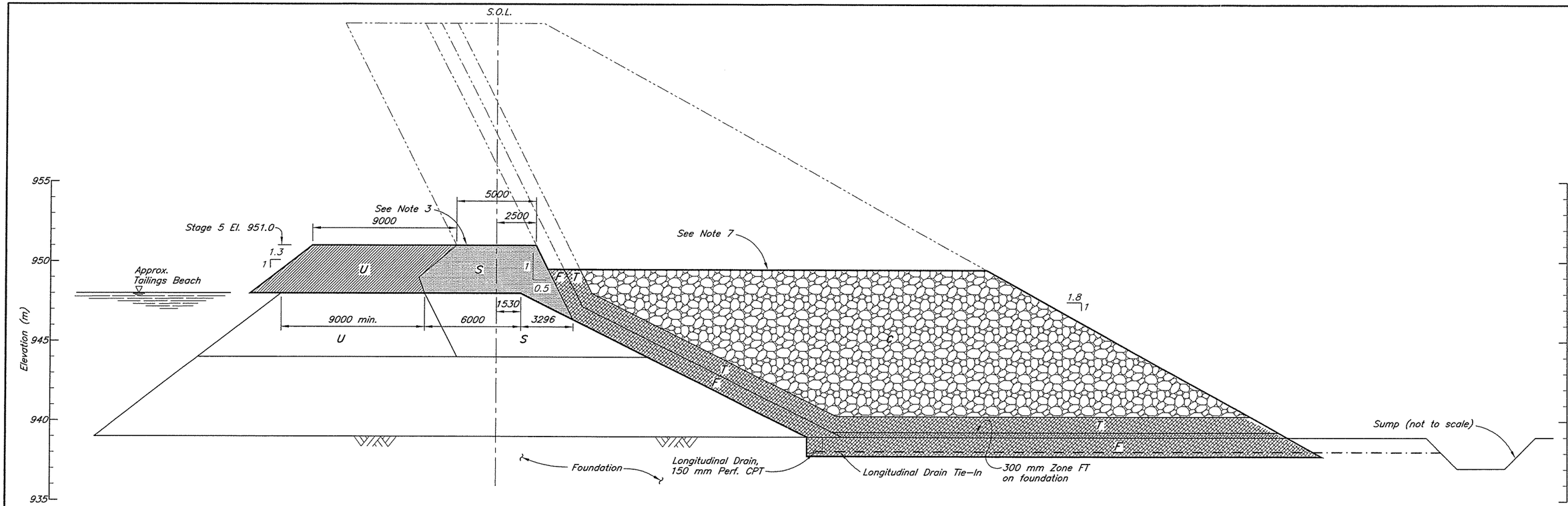
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 5 SOUTH EMBANKMENT
PLAN

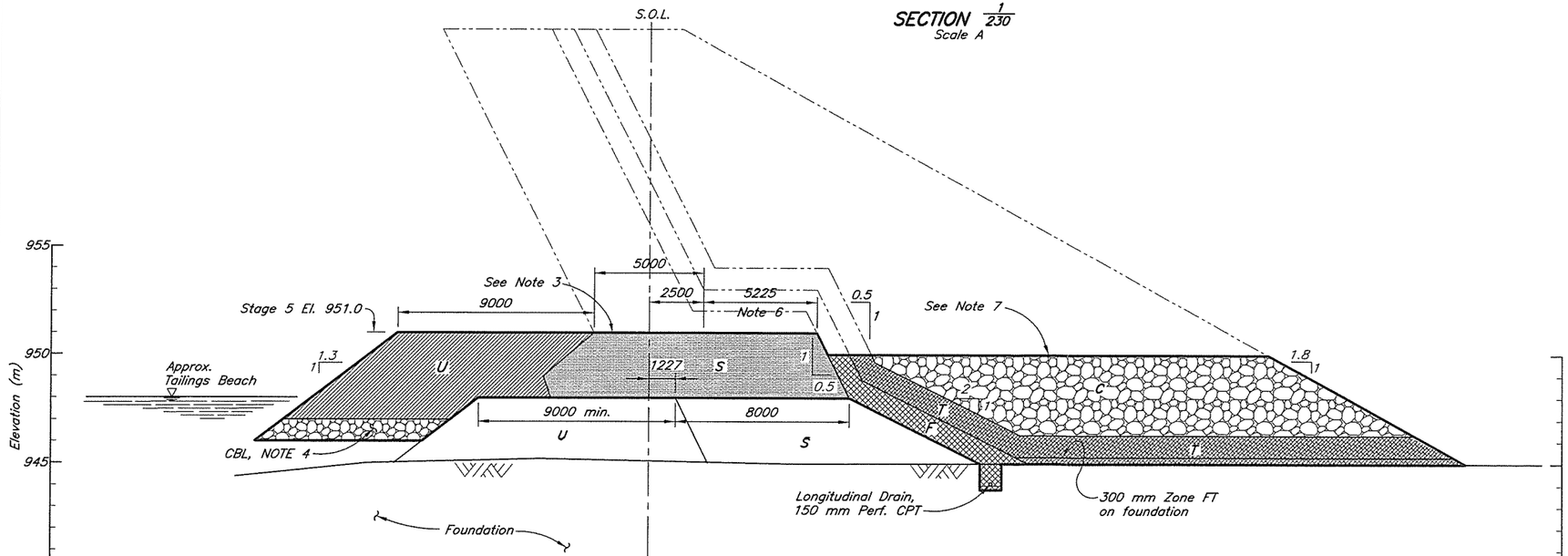
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	230	2

XREF FILE : –

CAD FILE: M:\101\00001\12\A\cad\Dwgs\230\230 1=1500 Plot 1=1(PS) Mar 05 2008 ##
VANCOUVER B.C.



SECTION 1/230
Scale A



SECTION 2/230
Scale A

NOTES

1. For material specifications see Drg. 104.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. The Zone S core width was reduced from 8 m at EL. 949.0 to 5 m at EL. 951.0.
4. Coarse bearing layer was required in some locations on tailings beach adjacent to the embankment to create a competent surface for placement on the Zone U material.
5. Subgrade preparation comprised stripping of topsoil and organics, removing saturated materials and proof rolling to establish a competent, bearing surface for fill placement as directed by the Engineer.
6. Maximum dimension of 5225 at Ch. 15+00 and gradually decreased to 0 at Ch. 13+50.
7. Elevations of Zones F, T, C and U vary along the South Embankment.

Scale 2.5 0 2.5 5 7.5 10 12.5 m

VANCOUVER B.C. CAD FILE: M:\1\01\00001\12\A\Acad\Dwgs\235\235 1=125 Plot 1=1(PS) Mar 05 2008 ##

VREF FILE : -

DRG. NO.	DESCRIPTION
236	STAGE 5 SOUTH EMBANKMENT – SECTIONS & DETAILS
230	STAGE 5 SOUTH EMBANKMENT – PLAN
104	STAGE 5 TAILINGS EMBANKMENT – MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	05MAR'08	AS – BUILT	LJG	TAM	BB	KJB
1	22JUN'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	LJG	TAM	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER
L.J. GALBRAITH
25493
PROVINCE OF BRITISH COLUMBIA
Apr 2/08

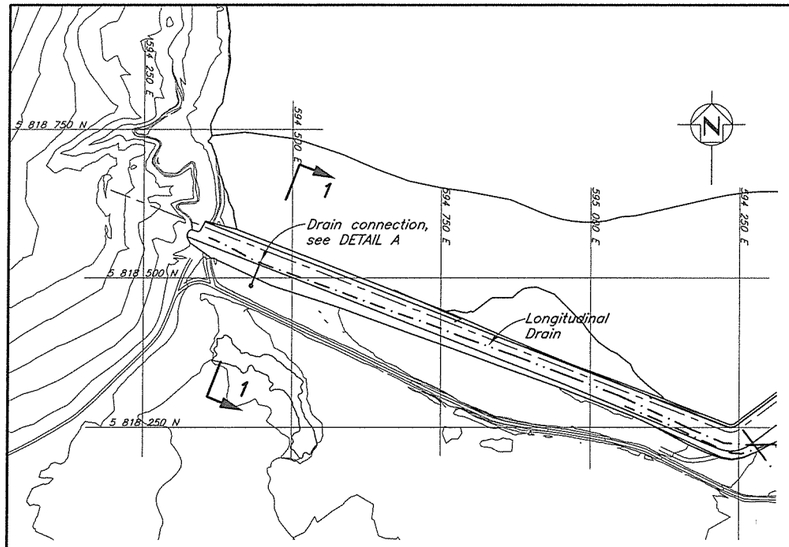
Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

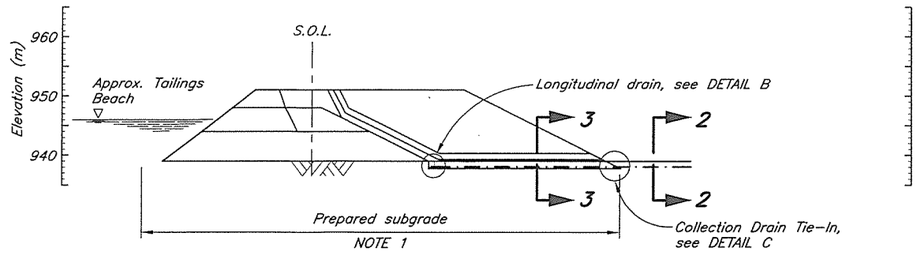
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 5 SOUTH EMBANKMENT
SECTIONS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	235	2



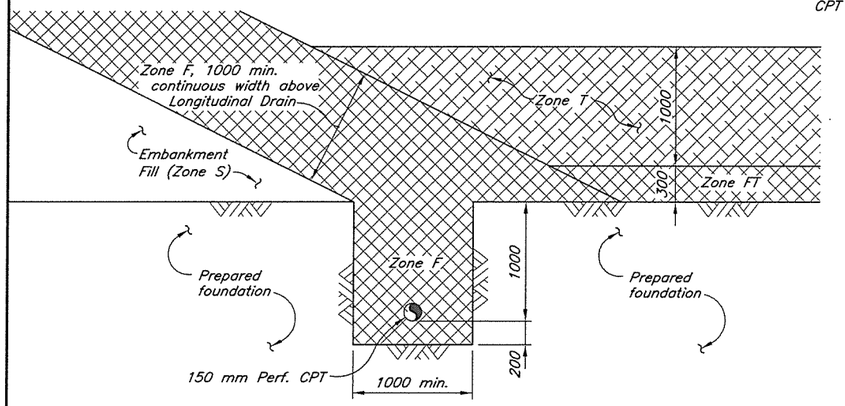
SOUTH EMBANKMENT PLAN
Scale A



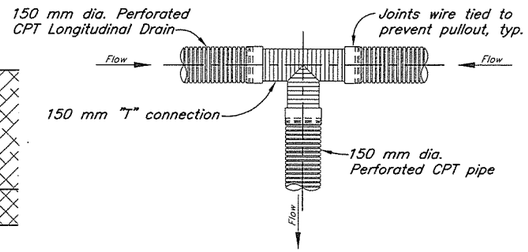
SECTION 1
Scale B

NOTES

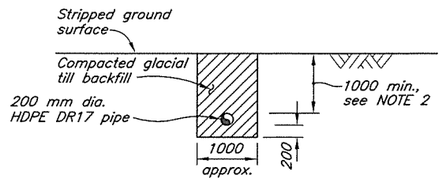
1. Subgrade preparation comprised stripping of topsoil and organics, removing saturated materials and proof rolling to establish a competent, bearing surface for fill placement as directed by the Engineer.
2. All pipework has a minimum of 1 m of cover for frost protection.
3. For material specifications, see Dwg. 104.



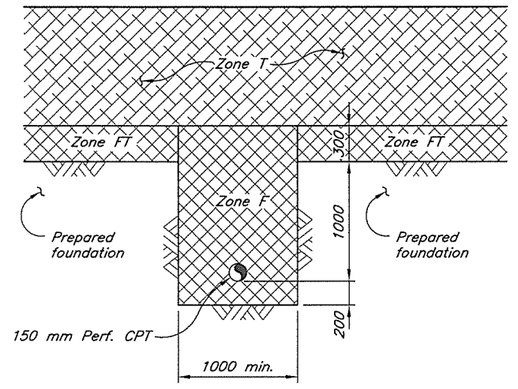
DETAIL B
LONGITUDINAL DRAIN
Scale C



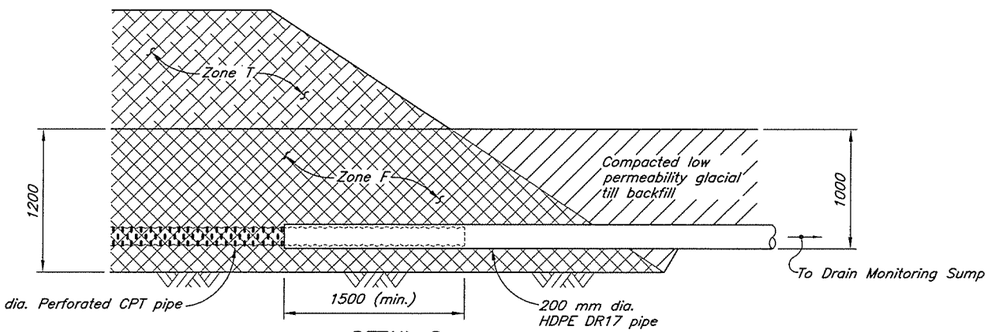
DETAIL A
LONGITUDINAL DRAIN TO OUTLET DRAIN CONNECTION
NTS



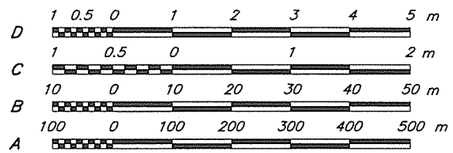
SECTION 2
Scale D



SECTION 3
Scale C



DETAIL C
LONGITUDINAL DRAIN TIE–IN
Scale C



REFERENCE DRAWINGS	
DRG. NO.	DESCRIPTION
104	ULTIMATE TAILINGS EMBANKMENT – MATERIAL SPECIFICATIONS

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

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	05MAR'08	AS – BUILT	LJG	TAM	BB	KJB
1	22JUN'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	LJG	ND	BB	KJB

PROFESSIONAL ENGINEER L.J. GALBRAITH 25493 BRITISH COLUMBIA Apr 22/08

Knight Piésold CONSULTING

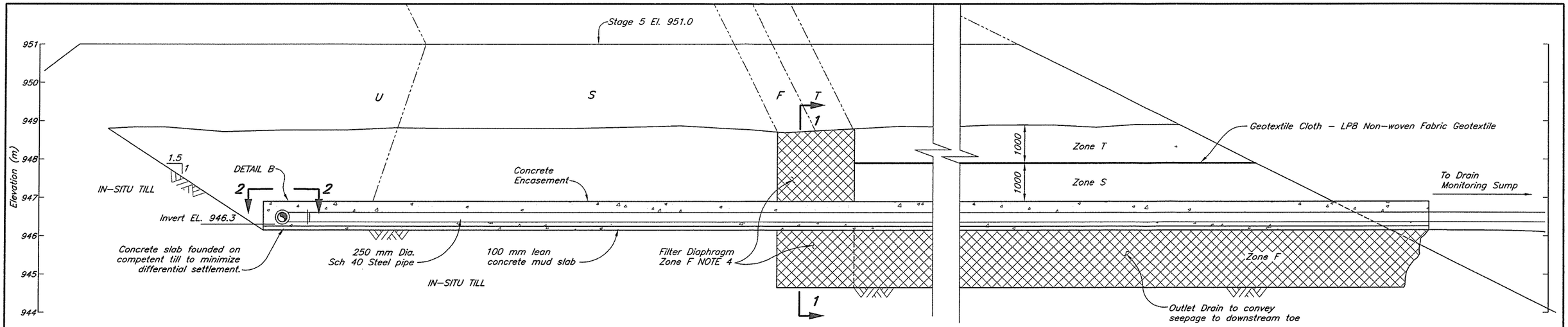
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

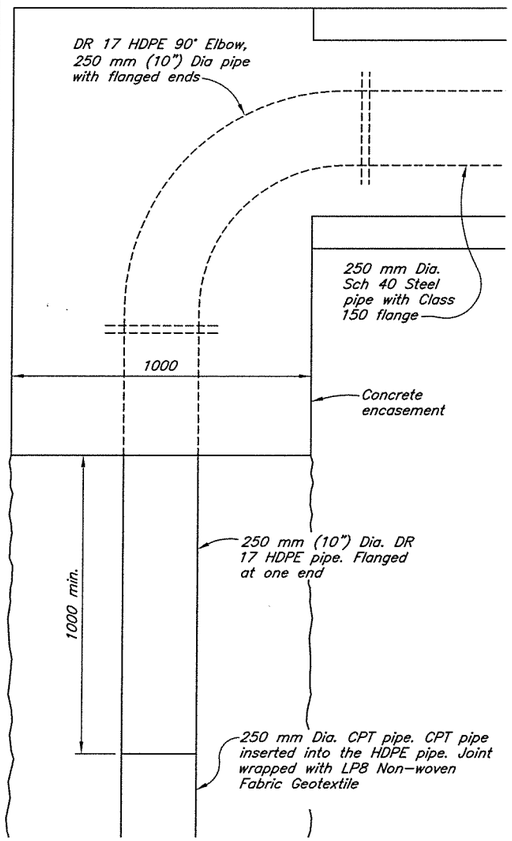
TAILINGS STORAGE FACILITY STAGE 5 – SOUTH EMBANKMENT LONGITUDINAL AND FOUNDATION DRAIN SECTIONS AND DETAILS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101–1/12	236	2

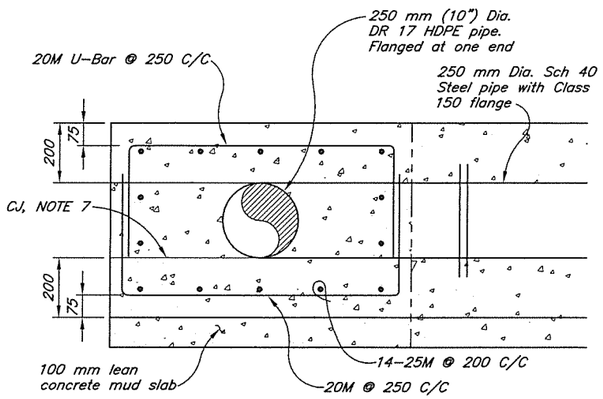
XREF FILE : Topo2004, Features
CAD FILE: M:\1\01\00001\12\VA\acad\Dwgs\236\236 1=500 Plot 1=1(PS) Mar 05 2008 ee
VANCOUVER B.C.



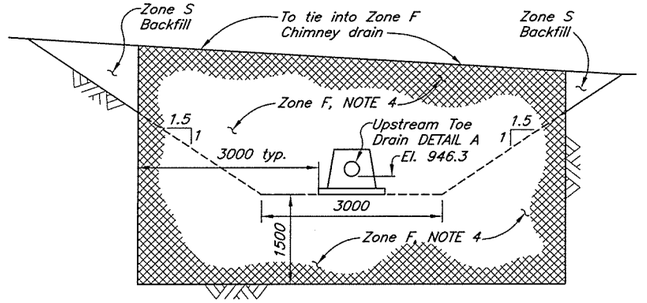
TYPICAL SECTION OF UPSTREAM TOE DRAIN AT ABUTMENTS
Scale A



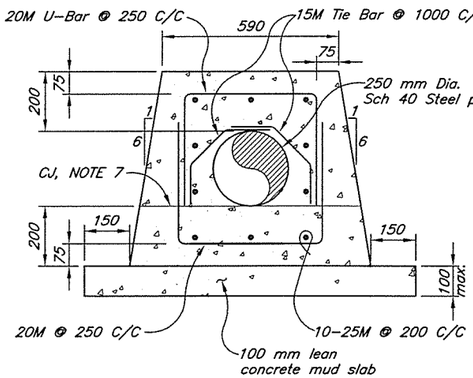
SECTION 2
UPSTREAM TOE DRAIN TO OUTLET DRAIN CONNECTION
Scale A



DETAIL B – UPSTREAM TOE DRAIN
CONCRETE ENCASEMENT REINFORCEMENT DETAILS
Scale B



SECTION 1 – FILTER DIAPHRAGM
Scale A



DETAIL A – OUTLET DRAIN
CONCRETE ENCASEMENT REINFORCEMENT DETAILS
Scale B

NOTES

1. Concrete strength: Type C30–20 (30 MPa with 20 mm coarse aggregate).
2. Minimum concrete cover 40mm.
3. Reinforcement steel to CSA G30.18 Grade 400R.
4. Zone F placed and spread in maximum 300 mm thick layers and compacted.
5. All dimensions in millimetres and elevations in metres, unless noted otherwise.
6. Upstream Toe Drain Steel pipe and HDPE elbows pressure tested for 2 hours at 640 kPa (100 psi.) prior to and after encasing in concrete.
7. After casting first pour, and once concrete achieved initial set, horizontal construction joint surface was pressure blasted to remove all laitance and expose top surface of coarse aggregate. All dirt, dust, rubbish and other deleterious materials were removed from surface of construction joint prior to casting second pour.

B 0.2 0 0.2 0.4 0.6 0.8 1.0 m
A 1 0 1 2 3 4 5 m

DRG. NO.	DESCRIPTION
220	STAGE 5 PERIMETER EMBANKMENT – PLAN
125	ULTIMATE PERIMETER EMBANKMENT – SECTIONS
120	ULTIMATE PERIMETER EMBANKMENT – PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	05MAR'08	AS – BUILT	LJG	TAM	BB	KJB
1	13JUL'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	14JUN'06	ISSUED FOR STAGE 5 PERMITTING	LJG	TAM	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER
J. J. GALBRAITH
25493
PROVINCE OF BRITISH COLUMBIA
April 2/08

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

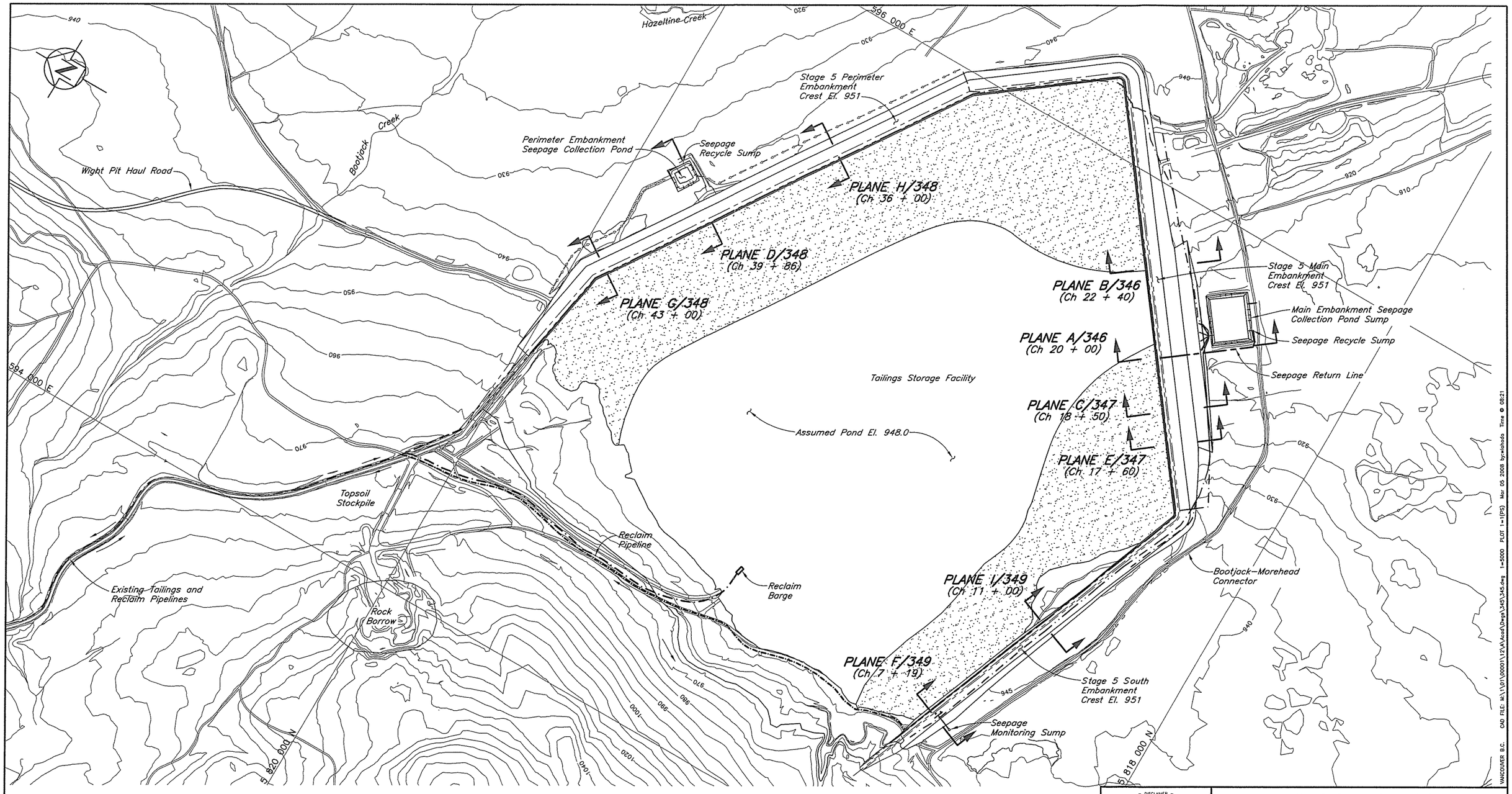
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 5 – PERIMETER EMBANKMENT
UPSTREAM TOE DRAIN
SECTIONS AND DETAILS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	240	2

XREF FILE : –

CAD FILE: M:\1\01\00001\12\A\Acad\Dwgs\240\240 1=50 Plot 1=1(PS) Mar 05 2008 ## VANCOUVER B.C.



NOTES

1. Topography from 2004 Flyover
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.

Scale 100 0 100 200 300 400 500m

DRG. NO.	DESCRIPTION
349	STAGE 5 INSTRUMENTATION – SOUTH EMB. – PLANES F & I
348	STAGE 5 INSTRUMENTATION – PERIMETER EMB. – PLANES D, G & H
347	STAGE 5 INSTRUMENTATION – MAIN EMB. – PLANES C & D
346	STAGE 5 INSTRUMENTATION – MAIN EMB. – PLANES A & B

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	05MAR'08	AS-BUILT	LJG	WAL	BB	KJB
0	07DEC'07	ISSUED FOR ANNUAL INSPECTION REPORT	LJG	WAL	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.J. GALBRAITH 25493 APR 23/08

Knight Piésold CONSULTING

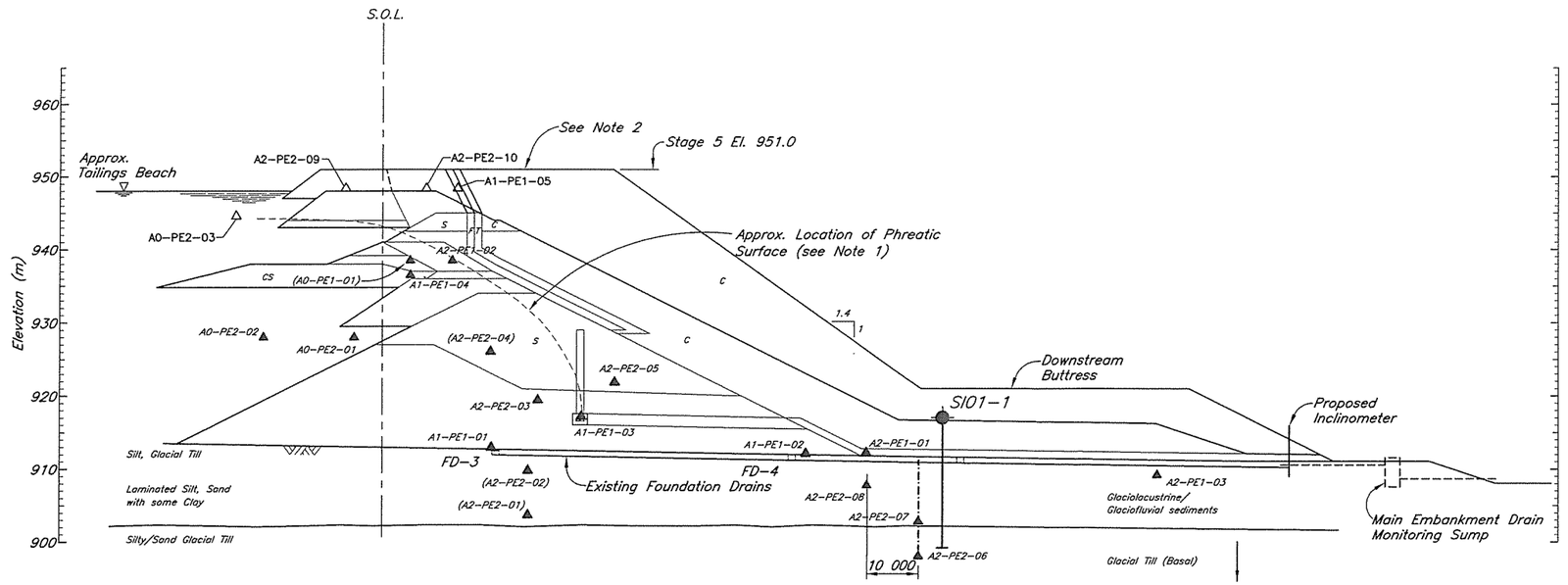
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

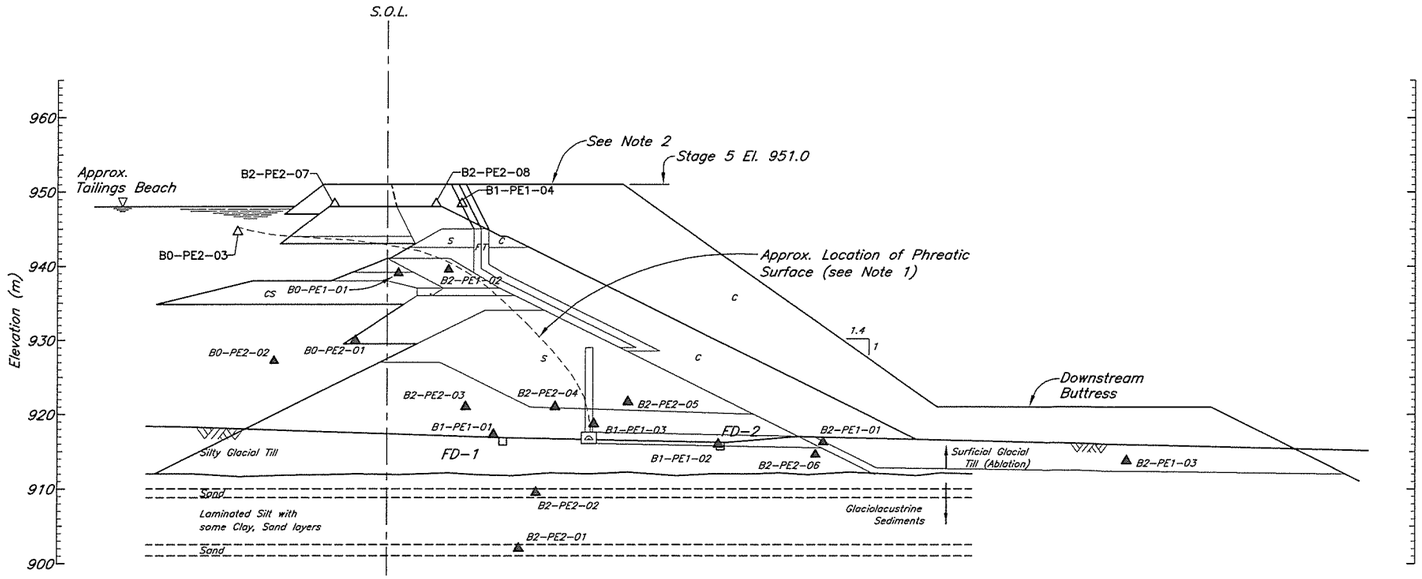
TAILINGS STORAGE FACILITY STAGE 5 – INSTRUMENTATION PLAN VIEW OF PIEZOMETER PLANES

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	345	1

XREF FILE : Topo2004, Features
VANCOUVER B.C. CAD FILE: M:\101\00001\12\A\Acad\Dwgs\345.dwg 1=5000 PLOT 1=1(PS) Mar 05, 2008 bjnelshado Time @ 08:21



PLANE A/336



PLANE B/336

SUMMARY OF STAGE 5 INSTRUMENTATION INSTALLATIONS			
PIEZOMETER ID	NORTHING	EASTING	ELEV. (m)
A0-PE2-03	5 818 508.84	595 559.34	944.20
A2-PE2-09	5 818 496.43	595 569.91	947.85
A2-PE2-10	5 818 495.80	595 592.68	948.04
A1-PE1-05	5 818 493.56	595 594.84	947.91
B0-PE2-03	5 818 660.10	595 768.61	944.22
B1-PE1-04	5 818 637.03	595 785.47	948.19
B2-PE2-07	5 818 651.02	595 777.66	948.31
B2-PE2-08	5 818 640.37	595 784.21	948.54
C0-PE2-03	5 818 422.35	595 460.80	944.96
C2-PE2-09	5 818 416.65	595 465.40	947.71
C2-PE2-10	5 818 409.05	595 471.03	947.73
D0-PE2-01	5 819 719.93	595 288.15	946.89
D2-PE2-03	5 819 737.37	595 295.08	948.64
D2-PE2-04	5 819 744.54	595 300.29	948.35
D1-PE1-04	5 819 749.14	595 303.73	948.17
E0-PE2-01	5 818 370.70	595 386.66	944.56
E2-PE2-03	5 818 360.56	595 396.06	947.63
E2-PE2-04	5 818 352.41	595 402.10	948.26
E1-PE1-01	5 818 349.12	595 401.97	947.86
F2-PE2-02	5 818 544.75	594 467.57	948.13
F2-PE2-03	5 818 528.58	594 460.86	940.07
G0-PE2-01	5 819 900.02	595 023.32	946.89
G2-PE2-01	5 819 913.06	595 036.51	947.85
G2-PE2-02	5 819 921.89	595 039.64	948.05
H0-PE2-01	5 819 513.04	595 607.47	946.96
H2-PE2-01	5 819 522.93	595 614.08	948.06
H2-PE2-02	5 819 530.83	595 619.44	948.48
I2-PE2-02	5 818 408.00	594 808.35	948.08
I2-PE2-03	5 818 400.00	594 805.80	944.70

NOTE

1. Phreatic surfaces determined through data collected by vibrating wire piezometers.
2. Only Zone S is at EL. 951 m. The other zones are at varying elevations along the embankment.

LEGEND

- Plane I.D. (A, B etc.)
- Area (0–Tailings, 1–Drain, 2–Embankment)
- A0–PE1–01 — Number I.D.
- Pressure Rating (1–Low, 2–High)
- Type of Instrumentation (PE–Piezometer electric, SM–Survey Monument)

A2–PE2–03 ▲ Previously installed Piezometer

△ Piezometer Installed during Stage 5

(A2–PE2–04) ▲ Piezometer no longer functioning

----- Phreatic Surface

Scale 8 0 8 16 24 32 40 m

CAD FILE: M:\1\01\00001\12\A\acad\Dwgs\346\346 1=400 Plot 1=1(PS) Mar 05 2008 ew

VANCOUVER B.C.

REFERENCE DRAWINGS	
DRG. NO.	DESCRIPTION
347	INSTRUMENTATION – MAIN EMBANKMENT – PLANES C AND E
336	INSTRUMENTATION – MAIN EMBANKMENT – PLAN

XREF FILE : –

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	05MAR'08	AS – BUILT	LJG	TAM	BB	KJB
1	18AUG'06	ISSUED FOR CONSTRUCTION	LJG	TAM	JIM	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	EER	NSD	BB	KJB

PROFESSIONAL ENGINEER L.J. GALBRAITH 25493 BRITISH COLUMBIA Apr 11 '08

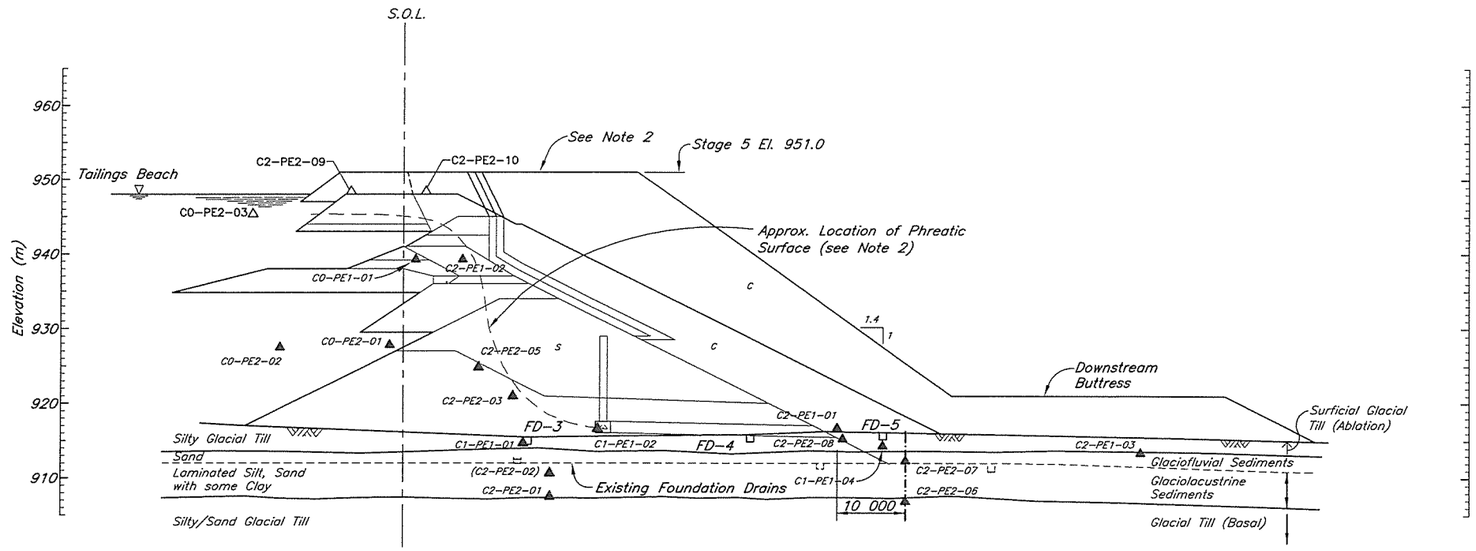
Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

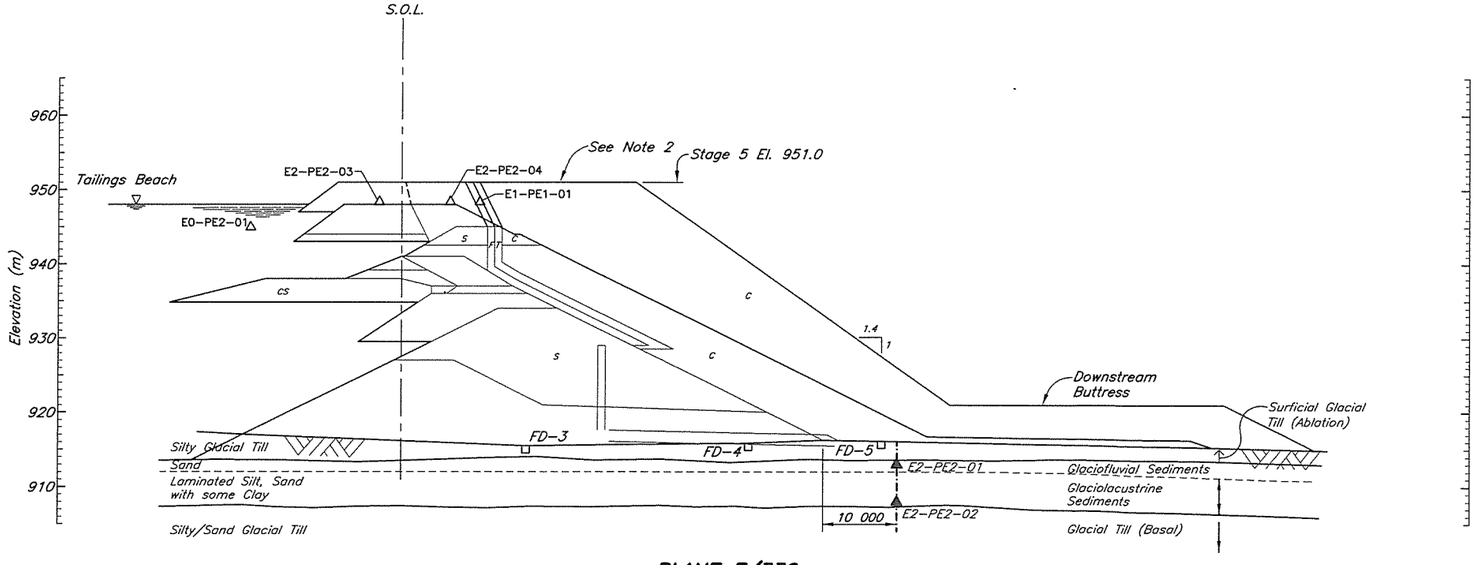
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY STAGE 5 – INSTRUMENTATION MAIN EMBANKMENT PLANES A AND B

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101–1/12	346	2



PLANE C/336



PLANE E/336

NOTES

1. For summary TABLE of Stage 5 Instrumentation Installations see Drg. 346.
2. Plane C phreatic surface was determined through data collected by vibrating wire piezometers.
3. Plane E piezometers data did not provide enough information to determine the phreatic surface.

NOTE

1. Piezometer data did not provide enough information to determine the phreatic surfaces.
2. Only Zone S is at EL. 951 m. The other zones are at varying elevations along the embankment.

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 Instrumentotion (PE–Piezometer electric, SM–Survey Monument)

A2-PE2-03 ▲ Previously installed Piezometer

△ Piezometer installed during Stage 5

(C2-PE2-02) ▲ Piezometer no longer functioning

Scale 8 0 8 16 24 32 40 m

CAD FILE: M:\1\01\00001\12\A\Acad\Dwgs\347\347.dwg 1:400 Plot=1(PS) Mar 05 2008 ##

VANCOUVER B.C.

DRG. NO.	DESCRIPTION
346	INSTRUMENTATION – MAIN EMBANKMENT – PLANES A AND B
336	INSTRUMENTATION – MAIN EMBANKMENT – PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	05MAR'08	AS – BUILT	LJG	TAM	BB	KJB
1	18AUG'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	EER	NSD	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER L.J. GALBRAITH 25493 BRITISH COLUMBIA

Knight Piésold CONSULTING

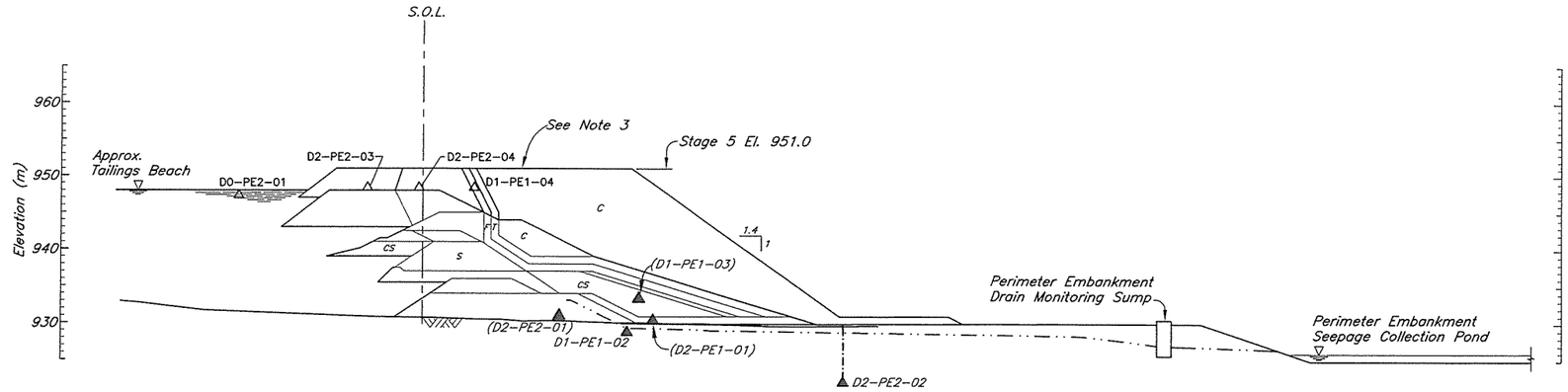
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

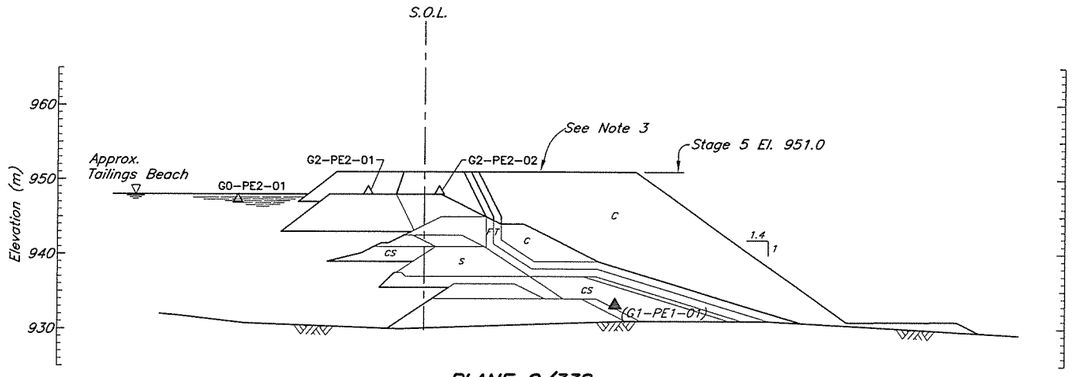
TAILINGS STORAGE FACILITY
STAGE 5 – INSTRUMENTATION
MAIN EMBANKMENT
PLANES C AND E

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	347	2

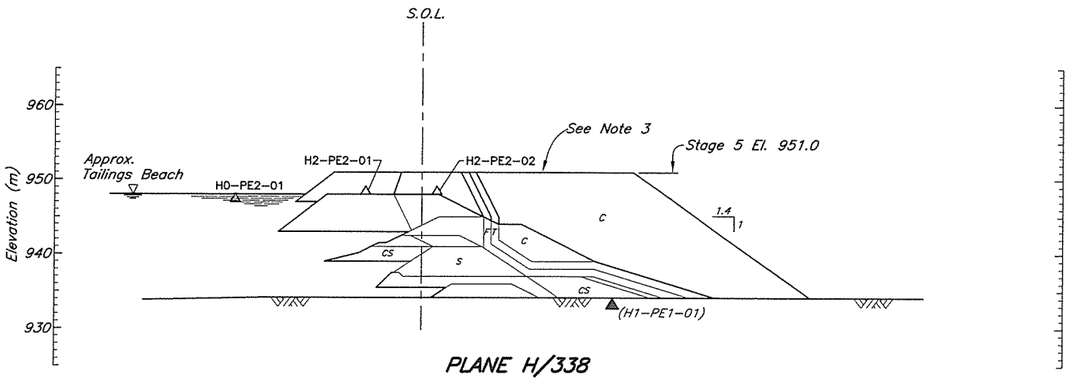
XREF FILE : -



PLANE D/338



PLANE G/338



PLANE H/338

NOTES

1. For summary TABLE of Stage 5 Instrumentation Installations see Drg. 346.
2. Piezometer data did not provide enough information to determine the phreatic surfaces.
3. Only Zone S is at EL. 951 m. The other zones are at varying elevations along the embankment.

LEGEND

Plane I.D. (A, B etc.)
Area (0–Tailings, 1–Drain, 2–Embankment)
A0–PE1–01 — Number I.D.
Pressure Rating (1–Low, 2–High)
Type of Instrumentation (PE–Piezometer electric, SM–Survey Monument)

A2–PE2–03 ▲ Previously installed Piezometer

△ Piezometer installed during Stage 5

(D1–PE1–03) ▲ Piezometer no longer functioning

Scale 8 0 8 16 24 32 40 m

CAD FILE: M:\1\101\00001\12\A\Acad\Dwgs\348\348 1=400 Plot 1=1(PS) Mar 05 2008 am

VANCOUVER B.C.

DRG. NO.	DESCRIPTION
346	INSTRUMENTATION – MAIN EMBANKMENT – PLANES A AND B
338	INSTRUMENTATION – PERIMETER EMBANKMENT – PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	05MAR'08	AS – BUILT	LJG	TAM	BB	KJB
1	18AUG'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	EER	NSD	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER
L.J. GALBRAITH
25493
BRITISH COLUMBIA
APRIL 2, 2008

Knight Piésold CONSULTING

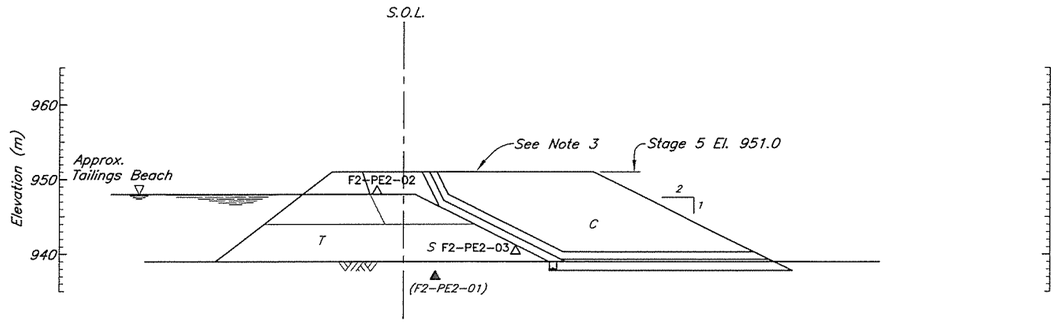
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

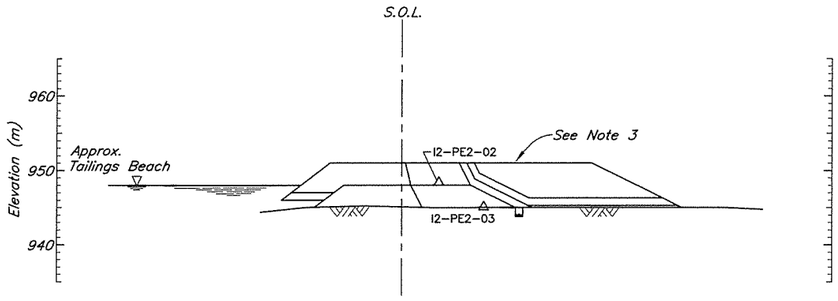
TAILINGS STORAGE FACILITY
STAGE 5 – INSTRUMENTATION
PERIMETER EMBANKMENT
PLANES D, G AND H

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101–1/12	348	2

XREF FILE: --



PLANE F/340



PLANE I/340

NOTES

1. For summary TABLE of Stage 5 Instrumentation Installations see Drg. 346.
2. Piezometer data did not provide enough information to determine the phreatic surfaces.
3. Only Zone S is at EL. 951 m. The other zones are at varying elevations along the embankment.

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)

A2–PE2–03 ▲ Previously installed Piezometer

△ Proposed Stage 5 Piezometer

(F2–PE2–01) ▲ Piezometer no longer functioning

Scale 8 0 8 16 24 32 40 m

VANCOUVER B.C. CAD FILE: M:\1\01\00001\12\A\cad\Dwgs\349\349 1=400 Plot 1=1(PS) Mar 05 2008 ew

~ DISCLAIMER ~

THIS DRAWING WAS PREPARED BY KNIGHT PIESOLD LTD. FOR THE ACCOUNT OF THE CLIENT LISTED ON THIS DRAWING. THE MATERIAL ON IT REFLECTS KNIGHT PIESOLD'S BEST JUDGEMENT IN THE LIGHT OF THE INFORMATION AVAILABLE TO IT AT THE TIME OF PREPARATION. ANY USE WHICH A THIRD PARTY MAKES OF THIS DRAWING, OR ANY RELIANCE ON OR DECISIONS TO BE MADE BASED ON IT, ARE THE RESPONSIBILITY OF SUCH THIRD PARTIES. KNIGHT PIESOLD ACCEPTS NO RESPONSIBILITY FOR DAMAGES, IF ANY, SUFFERED BY THE THIRD PARTY AS A RESULT OF DECISIONS MADE OR ACTIONS BASED ON THIS DRAWING. COPIES RESULTING FROM ELECTRONIC TRANSFER OR REPRODUCTION OF THIS DRAWING ARE UNCONTROLLED AND MAY NOT BE THE MOST RECENT REVISION OF THIS DRAWING.

PROFESSIONAL ENGINEER L.J. GALBRAITH 25493 BRITISH COLUMBIA Apr 15 '08

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 5 – INSTRUMENTATION
SOUTH EMBANKMENT
PLANES F AND I

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/12	349	2

XREF FILE : -

REFERENCE DRAWINGS

DRG. NO.	DESCRIPTION
346	INSTRUMENTATION – MAIN EMBANKMENT – PLANES A AND B
340	INSTRUMENTATION – SOUTH EMBANKMENT – PLAN

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
2	05MAR'08	AS – BUILT	LJG	TAM	BB	KJB
1	18AUG'06	ISSUED FOR CONSTRUCTION	LJG	TAM	BB	KJB
0	26MAY'06	ISSUED FOR STAGE 5 PERMITTING	EER	NSD	BB	KJB

APPENDIX A

LABORATORY TEST RESULTS

Appendix A1	Zone S Control Results
Appendix A2	Zone S Record
Appendix A3	Zone U Results
Appendix A4	Perimeter Embankment Concrete Encasement - Concrete Strength Test Results

Knight Piésold
CONSULTING

APPENDIX A1

ZONE S CONTROL RESULTS

(Page A1-1 TO A1-23)

1361 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

10 20 40 60 SERIES

TO Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

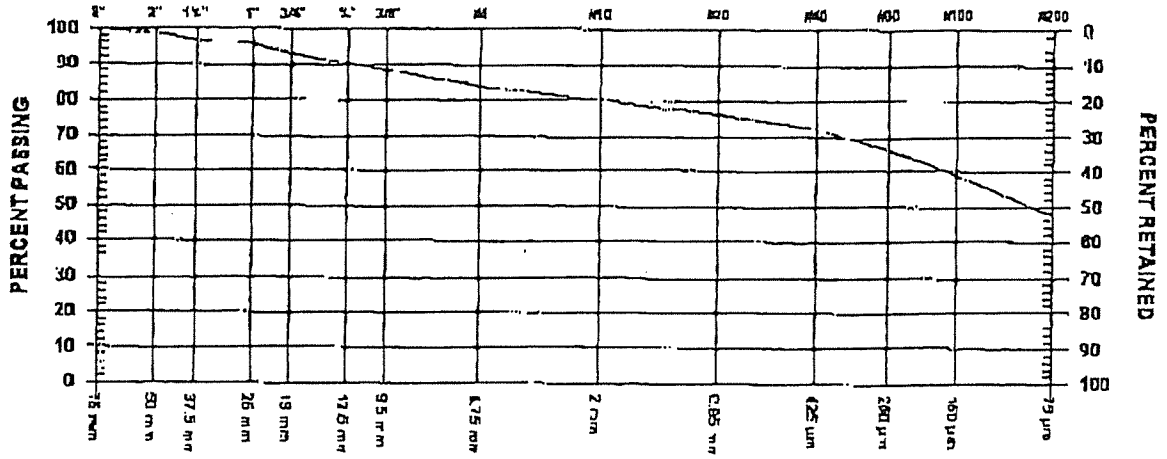
PROJECT M.P. Construction Program Stage 4
Materials Testing

CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 3 DATE RECEIVED 2006.Jun.26 DATE TESTED 2006.Jun.29 DATE SAMPLED 2006.Jun.21

SUPPLIER
SOURCE KP06-ZS-01C, TP06-13
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CLIENT
TESTED BY BO
TEST METHOD WASHED



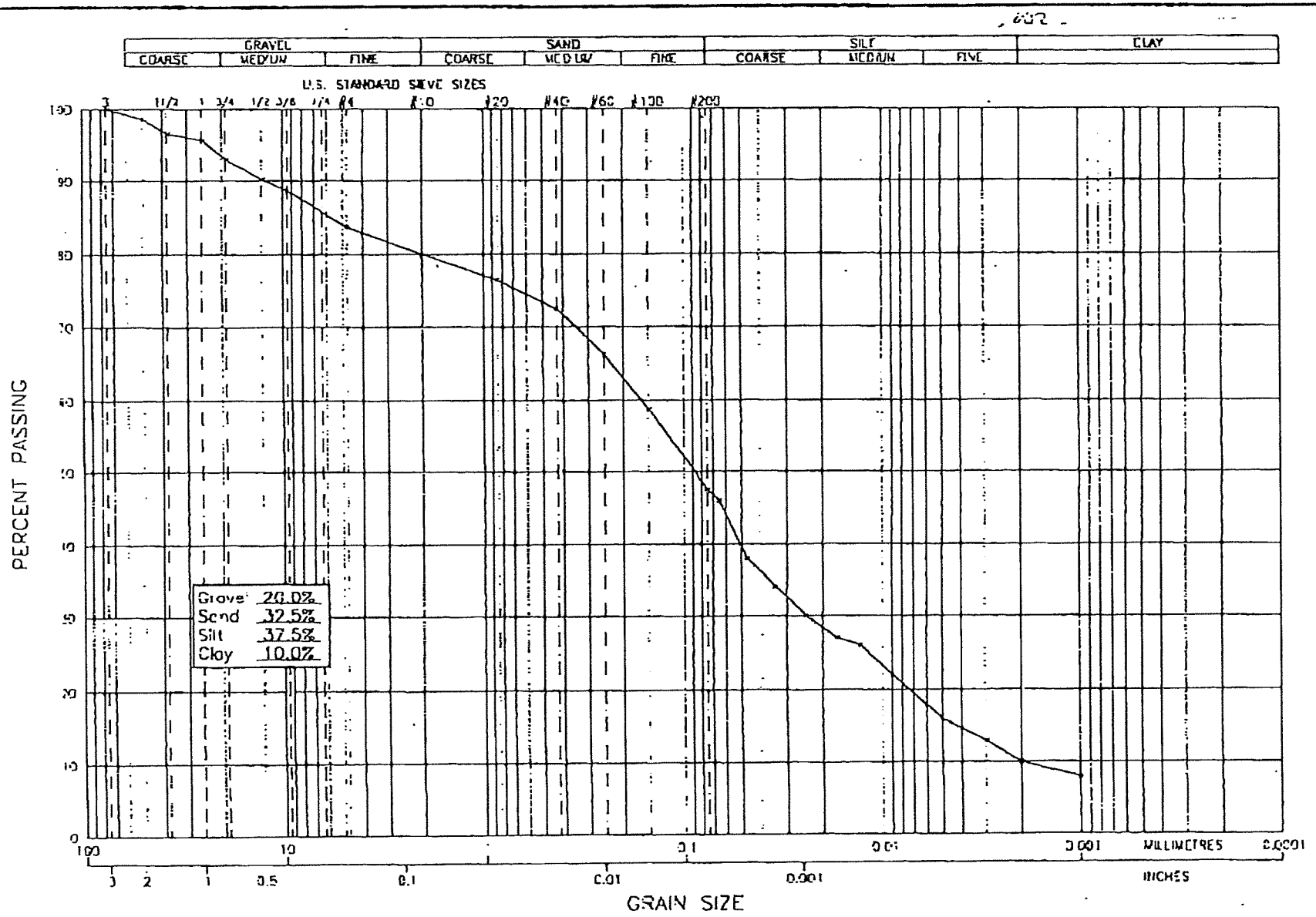
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	98.7	
1 1/2"	37.5 mm	96.6	
1"	25 mm	95.7	
3/4"	19 mm	92.9	
1/2"	12.5 mm	90.2	
3/8"	9.5 mm	88.7	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	83.7	
No. 10	2.00 mm	80.0	
No. 20	850 µm	76.4	
No. 40	425 µm	72.4	
No. 60	250 µm	66.4	
No. 100	150 µm	58.7	
No. 200	75 µm	47.5	

COMMENTS

 2006.Jun.29 GeoNorth Engineering Ltd. PER.

A1-1



GEONORTH ENGINEERING LTD. 1301 Kelther Road Prince George, B.C. V2L 5S8 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4 TAILINGS STORAGE FACILITY GRAIN SIZE ANALYSIS OF KP06-ZS-01C	SCALE: N.T.S.	DATE: 2006/07/05
		PROJECT NO: K-2036	DRAWING NO. 2036-B26

A1-2

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. (Knight Piesold)									Date: July 5, 2006		
Project Name: MPCP - Stage 4									Project #: K-2036		
Source/Location: KP06-ZS-01C									Type: Till		
Sample #:		Test #:		Hole #: TP06-13		Depth:			Time:		
Sampled By: Client			Tested By: DJ						Checked By: NK		
Date Sampled: 06.21.06			Date Received: 06.26.06						Date Tested: 07.04.06		
Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R`	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
40.0	0.800	0.5	23.0	24.0	0.01301				0.065	57.5	46.0
40.0	0.800	1	19.0	24.0	0.01301				0.047	47.5	38.0
40.0	0.800	2	17.0	24.0	0.01301				0.034	42.5	34.0
40.0	0.800	4	15.0	24.0	0.01301				0.024	37.5	30.0
40.0	0.800	8	13.5	24.0	0.01301				0.017	33.8	27.0
40.0	0.800	15	13.0	24.0	0.01301				0.013	32.5	26.0
40.0	0.800	30	11.0	24.0	0.01301				0.009	27.5	22.0
40.0	0.800	60	9.0	24.0	0.01301				0.006	22.5	18.0
40.0	0.800	120	8.0	24.0	0.01301				0.005	20.0	16.0
40.0	0.800	240	6.5	24.0	0.01301				0.003	16.3	13.0
40.0	0.800	480	5.0	24.0	0.01301				0.002	12.5	10.0
40.0	0.800	1440	4.0	24.0	0.01301				0.001	10.0	8.0
Hydrometer #: 794968			Graduate #: 1			Dispersing Agent: Sodium Hex			Amount: 125ml		
Density of Solids:											
Description of Sample:											

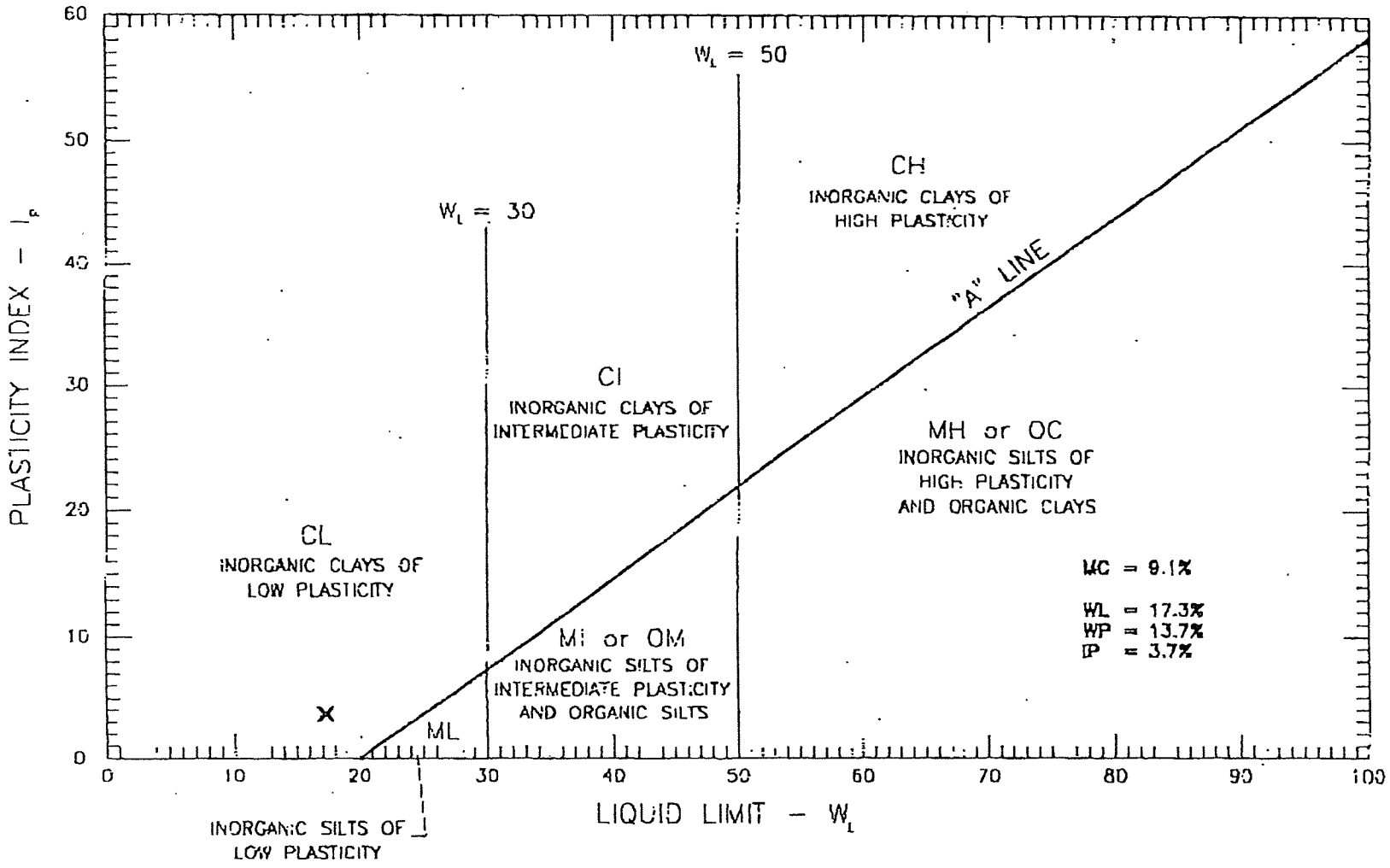
Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		40.0	100.0	80.0
20	1.7		95.8	76.6
40	2.0		90.8	72.6
60	3.0		83.3	66.6
100	2.8		76.3	61.0
200	2.8		69.3	55.4
Pan	27.7			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	SEE WASHED SIEVE RPT		
Total =			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

NSCS8

AL-3



GeoNorth Engineering Ltd. 1301 Kellner Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9223	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4 TAILINGS STORAGE FACILITY ATTERBERG LIMITS OF KP06-ZS-01C	SCALE: N.T.S.	DATE: 2006/07/35
		PROJECT NO: X-2036	DRAWING NO. 203 [illegible]3

AL-4

1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE DENSITY RELATIONSHIP REPORT

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

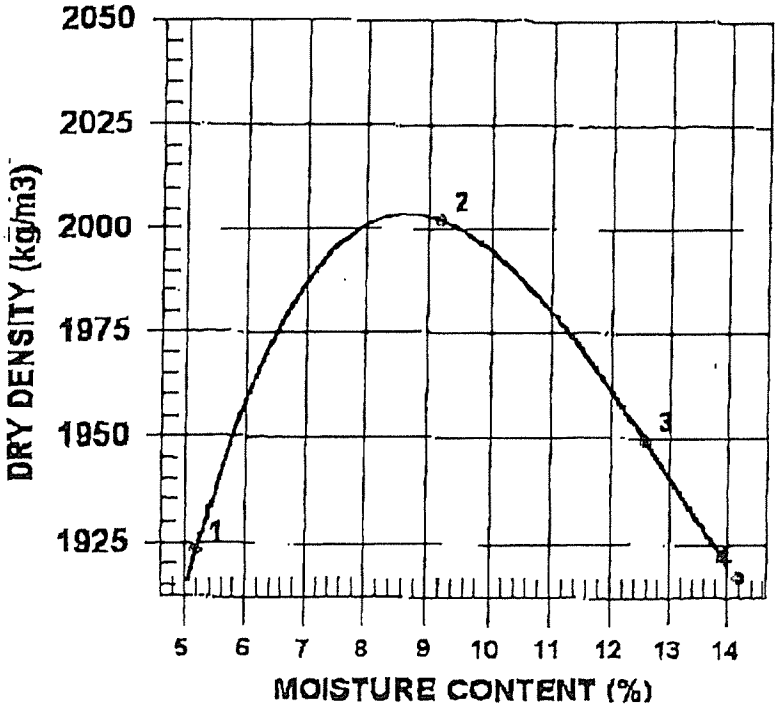
ATTN: Ron Martel @ 250-790-2268

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

PROCTOR NO. 2 DATE TESTED 2006.Jun.29 DATE RECEIVED 2006.Jun.26 DATE SAMPLED 2006.Jun.21

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CLIENT	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	HJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP06-ZS-01C, TP06-13	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	16.1 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.67
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2023	1923	5.2
2	2186	2002	9.2
3	2195	1949	12.6
4	2189	1917	14.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2000	9.0
OVERSIZE CORRECTED	2080	7.5

COMMENTS

 2006.Jun.29 GeoNorth Engineering Ltd. PER:

A1-5

1301 Kellner Road Prince Geo C V2L5S8
Phone (250)564-4304; fax (250)564-9323

10 20 40 60 SERIES

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1NO

ATTN: Ron Martel @ 250-790-2268

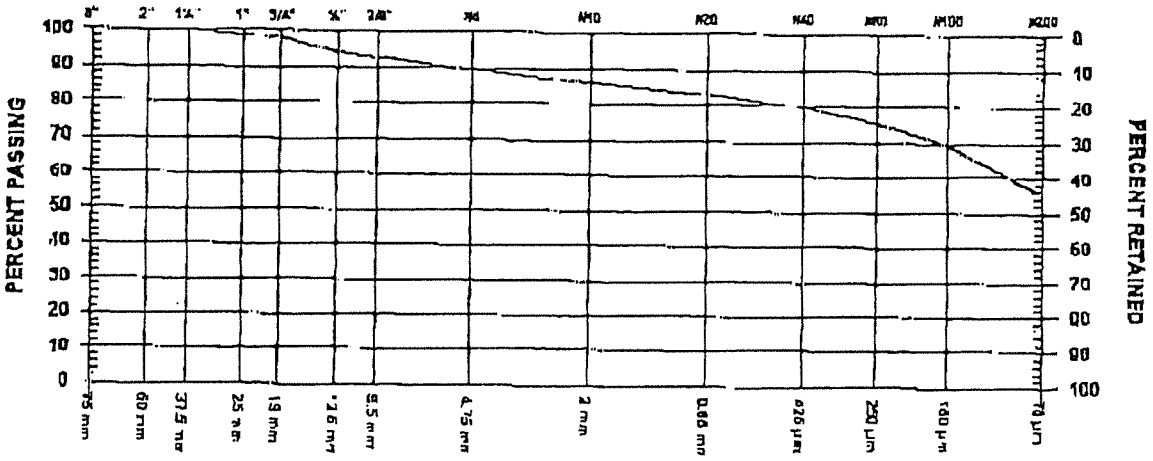
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 4 DATE RECEIVED 2006.Jun.26 DATE TESTED 2006.Jun.29 DATE SAMPLED 2006.Jun.21

SUPPLIER
SOURCE KP06-ZS-02C, TP06-15
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CLIENT
TESTED BY BO
TEST METHOD WASHED



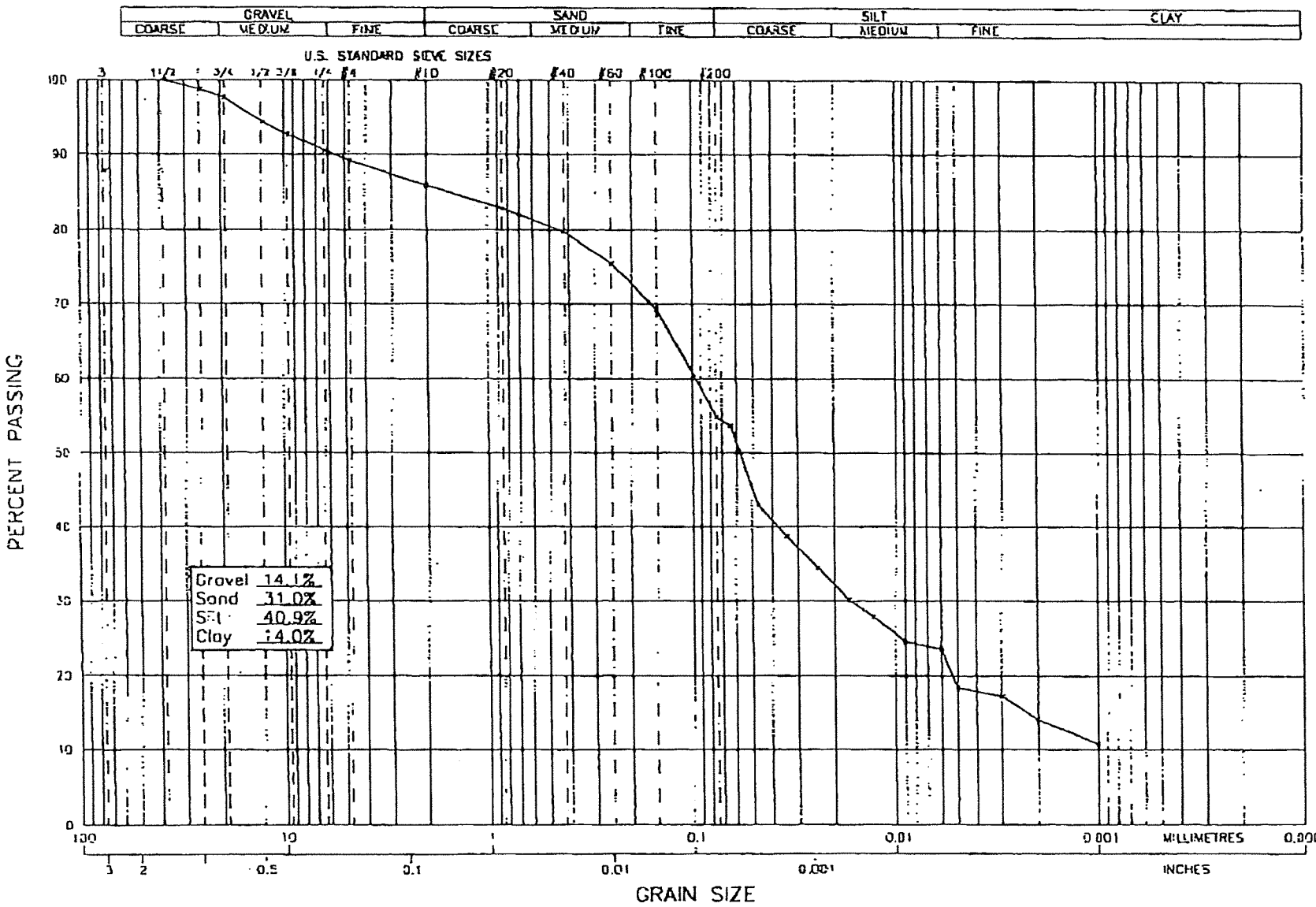
GRAVEL SIZES			PERCENT PASSING	GRADATION LIMITS
3"	75	mm		
2"	50	mm		
1 1/2"	37.5	mm	100.0	
1"	25	mm	98.8	
3/4"	19	mm	97.7	
1/2"	12.5	mm	94.3	
3/8"	9.5	mm	92.7	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	89.2	
No. 10	2.00	mm	85.9	
No. 20	850	µm	82.9	
No. 40	425	µm	79.8	
No. 60	250	µm	75.4	
No. 100	150	µm	69.3	
No. 200	75	µm	54.9	

COMMENTS

 2006.Jun.29 GeoNorth Engineering Ltd. PER.

A1-6



GEONORTH ENGINEERING LTD. 1301 Kelliher Road Prince George, B.C. V2L 5S8 Tel (250) 561-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4 TAILINGS STORAGE FACILITY GRAIN SIZE ANALYSIS OF KP06-2S-02C, TP06-15	SCALE: N.T.S.	DATE: 2006/07/05
		PROJECT NO: K-2036	DRAWING NO. 2036-327

A1-2

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. (Knight Piesold)				Date: July 5, 2006
Project Name: MPCP - Stage 4				Project #: K-2036
Source/Location: KP06-ZS-02C				Type: Till
Sample #:	Test #:	Hole #: TP06-15	Depth:	Time:
Sampled By: Client	Tested By: DJ			Checked By: NK
Date Sampled: 06.21.06	Date Received: 06.26.06			Date Tested: 07.04.06

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R`	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
40.0	0.859	0.5	25.0	24.0	0.01301				0.064	62.5	53.7
40.0	0.859	1	20.0	24.0	0.01301				0.047	50.0	43.0
40.0	0.859	2	18.0	24.0	0.01301				0.034	45.0	38.7
40.0	0.859	4	16.0	24.0	0.01301				0.024	40.0	34.4
40.0	0.859	8	14.0	24.0	0.01301				0.017	35.0	30.1
40.0	0.859	15	13.0	24.0	0.01301				0.013	32.5	27.9
40.0	0.859	30	11.5	24.0	0.01301				0.009	28.8	24.7
40.0	0.859	60	11.0	24.0	0.01301				0.006	27.5	23.6
40.0	0.859	120	8.5	24.0	0.01301				0.005	21.3	18.3
40.0	0.859	240	8.0	24.0	0.01301				0.003	20.0	17.2
40.0	0.859	480	6.5	24.0	0.01301				0.002	16.3	14.0
40.0	0.859	1440	5.0	24.0	0.01301				0.001	12.5	10.7

Hydrometer #: 794968	Graduate #: 2	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		40.0	100.0	85.9
20	1.3		96.8	83.2
40	1.6		92.8	79.7
60	1.8		88.3	75.8
100	2.4		82.3	70.7
200	3.4		73.8	63.4
Pan	29.5			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

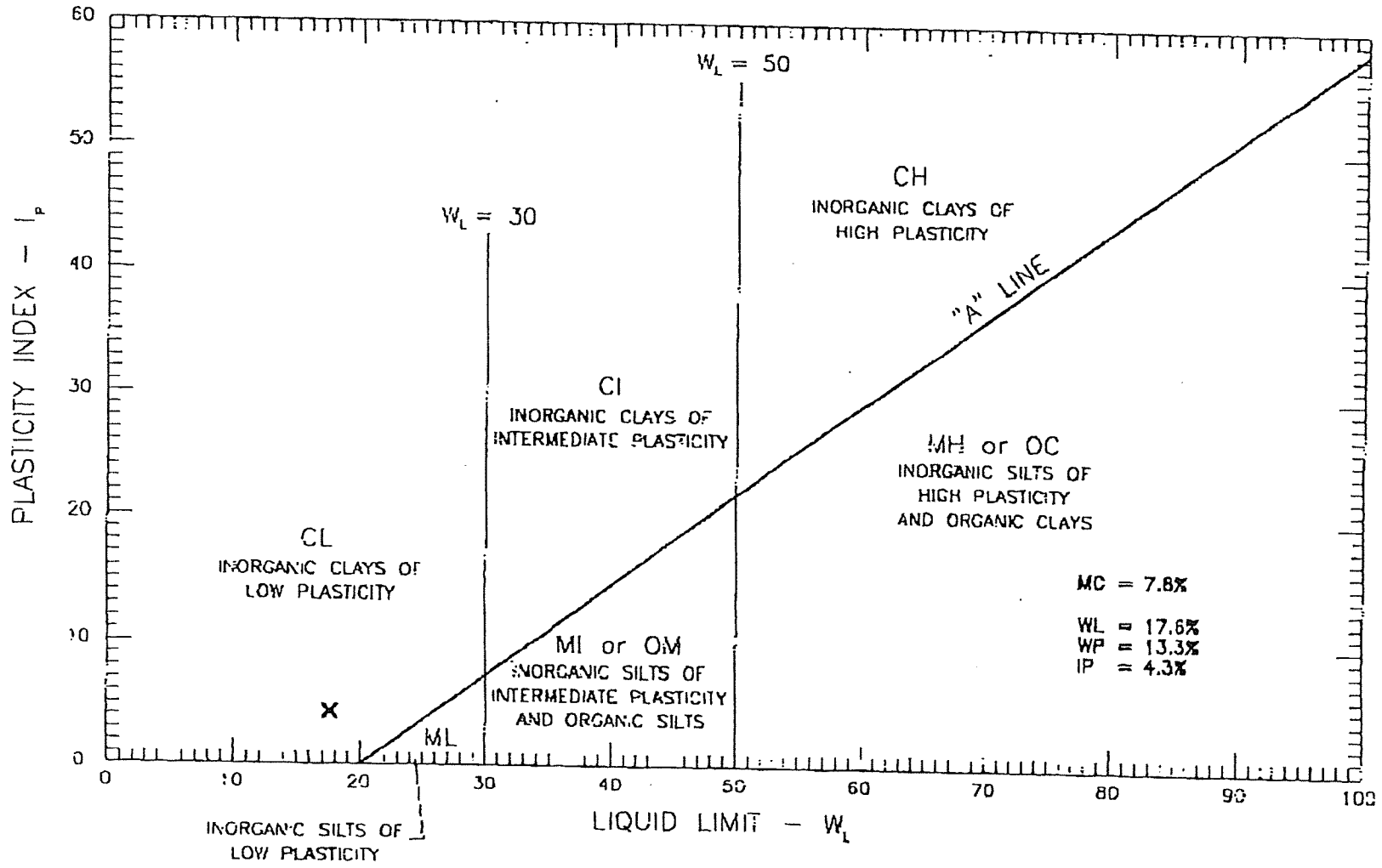
Sieve Analysis

Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	SEE WASHED SIEVE RPT		
Total =			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

AI-8



GEONORTH ENGINEERING LTD.
1301 Kelliher Road
Prince George, B.C. V2L 5S8
Tel. (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
ATTERBERG LIMITS OF KP06-ZS-02C

SCALE:	DATE:
N.T.S.	2006/07/05
PROJECT NO:	DRAWING NO.
K-2036	2036-824

1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

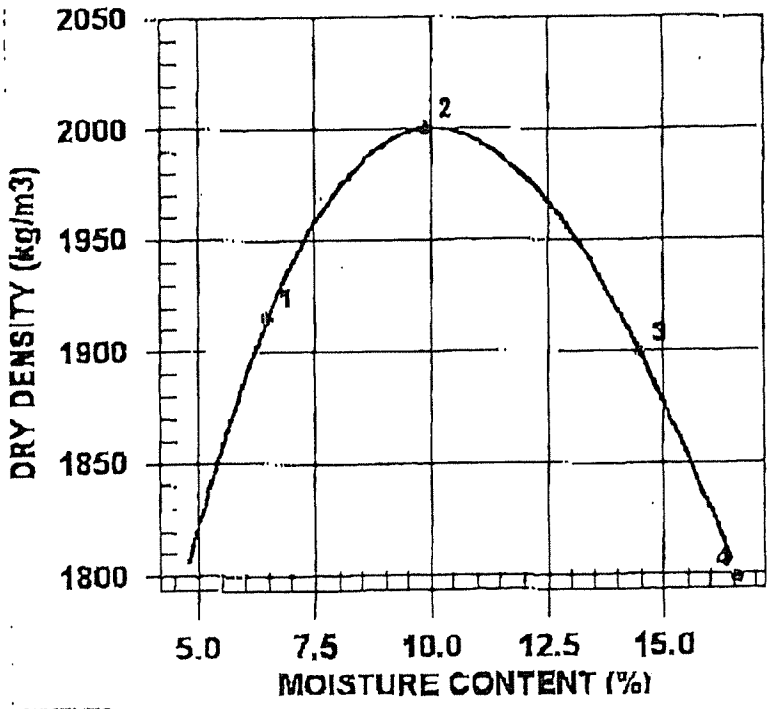
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Marlol @ 250-790-2268

PROJECT M.P. Construction Program Stage 4 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO. 3 DATE TESTED 2006.Jun.29 DATE RECEIVED 2006.Jun.26 DATE SAMPLED 2006.Jun.2

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CLIENT		
TESTED BY	HJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP06-MS-02C, TP06-15	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	10.6 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.67
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2039	1915	6.5
2	2198	2000	9.9
3	2174	1899	14.5
4	2097	1798	16.6

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2000	10.0
OVERSIZE CORRECTED	2060	9.0

COMMENTS

 2006.Jun.29 GeoNorth Engineering Ltd. PER.

A1-10

1561 Kellner Road Prince Geo C V2L5S8
Phone (250)564-4304: fax (250)564-9323

10 20 40 60 SERIES

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

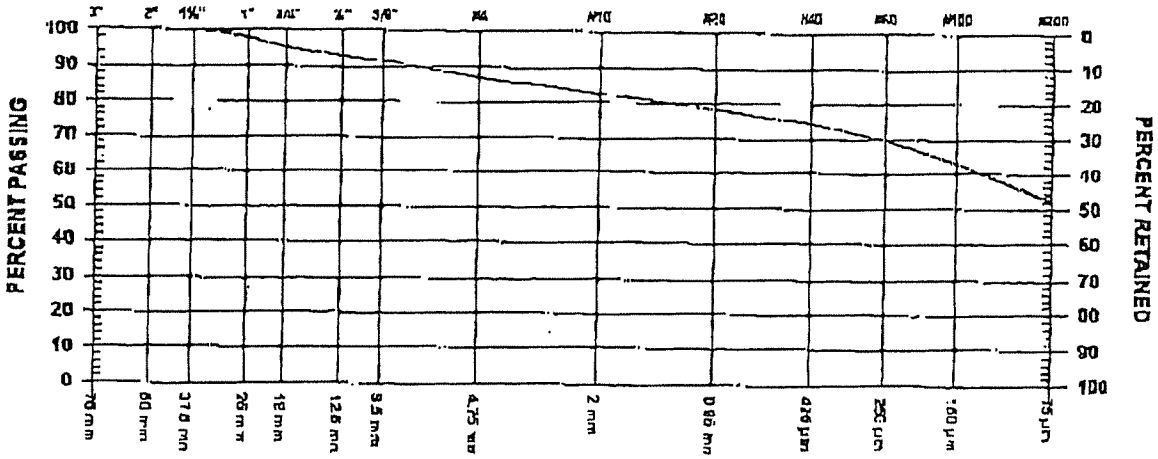
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 5 DATE RECEIVED 2006.Jun.26 DATE TESTED 2006.Jun.29 DATE SAMPLED 2006.Jun.21

SUPPLIER
SOURCE KP06-ZS-03C, TP06-16
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CLIENT
TESTED BY BO
TEST METHOD WASHED



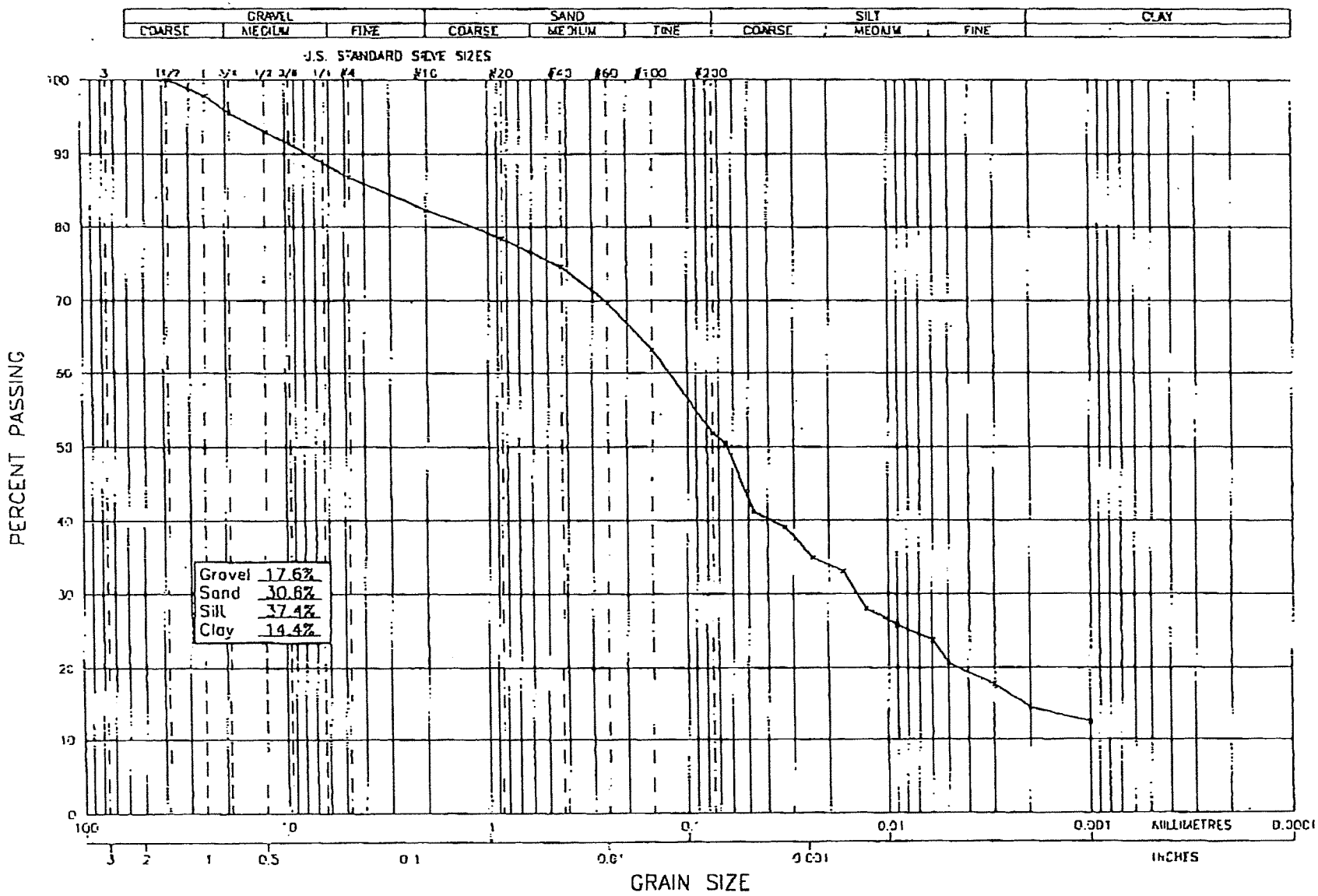
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	97.9	
3/4"	19 mm	95.5	
1/2"	12.5 mm	93.0	
3/8"	9.5 mm	91.4	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	86.9	
No. 10	2.00 mm	82.4	
No. 20	850 µm	78.5	
No. 40	425 µm	74.7	
No. 60	250 µm	69.7	
No. 100	150 µm	63.2	
No. 200	75 µm	51.8	

COMMENTS

 2006.Jun.29 GeoNorth Engineering Ltd. PER.

A1-11



GEONORTH ENGINEERING LTD.
1301 Kelliher Road
Prince George, B.C. V2L 5S8
Tel. (250) 561-4304 Fax (250) 561-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF KP06-ZS-03C, TP06-16

SCALE:	DATE:
N.T.S.	2006/07/06
PROJECT NO:	DRAWING NO.
K-2036	2036-B28

A1-12

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. (Knight Piesold)					Date: July 5, 2006
Project Name: MPCP - Stage 4					Project #: K-2036
Source/Location: KP06-ZS-03C					Type: Till
Sample #:	Test #:	Hole #: TP06-16	Depth:		Time:
Sampled By: Client	Tested By: DJ				Checked By: NK
Date Sampled: 06.21.06	Date Received: 06.26.06				Date Tested: 07.04.06

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R'	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
40.0	0.824	0.5	24.5	24.0	0.01301				0.065	61.3	50.5
40.0	0.824	1	20.0	24.0	0.01301				0.047	50.0	41.2
40.0	0.824	2	19.0	24.0	0.01301				0.033	47.5	39.1
40.0	0.824	4	17.0	24.0	0.01301				0.024	42.5	35.0
40.0	0.824	8	16.0	24.0	0.01301				0.017	40.0	33.0
40.0	0.824	15	13.5	24.0	0.01301				0.013	33.8	27.9
40.0	0.824	30	12.5	24.0	0.01301				0.009	31.3	25.8
40.0	0.824	60	11.5	24.0	0.01301				0.006	28.8	23.7
40.0	0.824	120	10.0	24.0	0.01301				0.005	25.0	20.6
40.0	0.824	240	8.5	24.0	0.01301				0.003	21.3	17.6
40.0	0.824	480	7.0	24.0	0.01301				0.002	17.5	14.4
40.0	0.824	1440	6.0	24.0	0.01301				0.001	15.0	12.4

Hydrometer #: 794968	Graduate #: 3	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		40.0	100.0	82.4
20	1.7		95.8	78.9
40	1.8		91.3	75.2
60	2.6		84.8	69.9
100	2.7		78.0	64.3
200	2.9		70.8	58.3
Pan	28.3			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

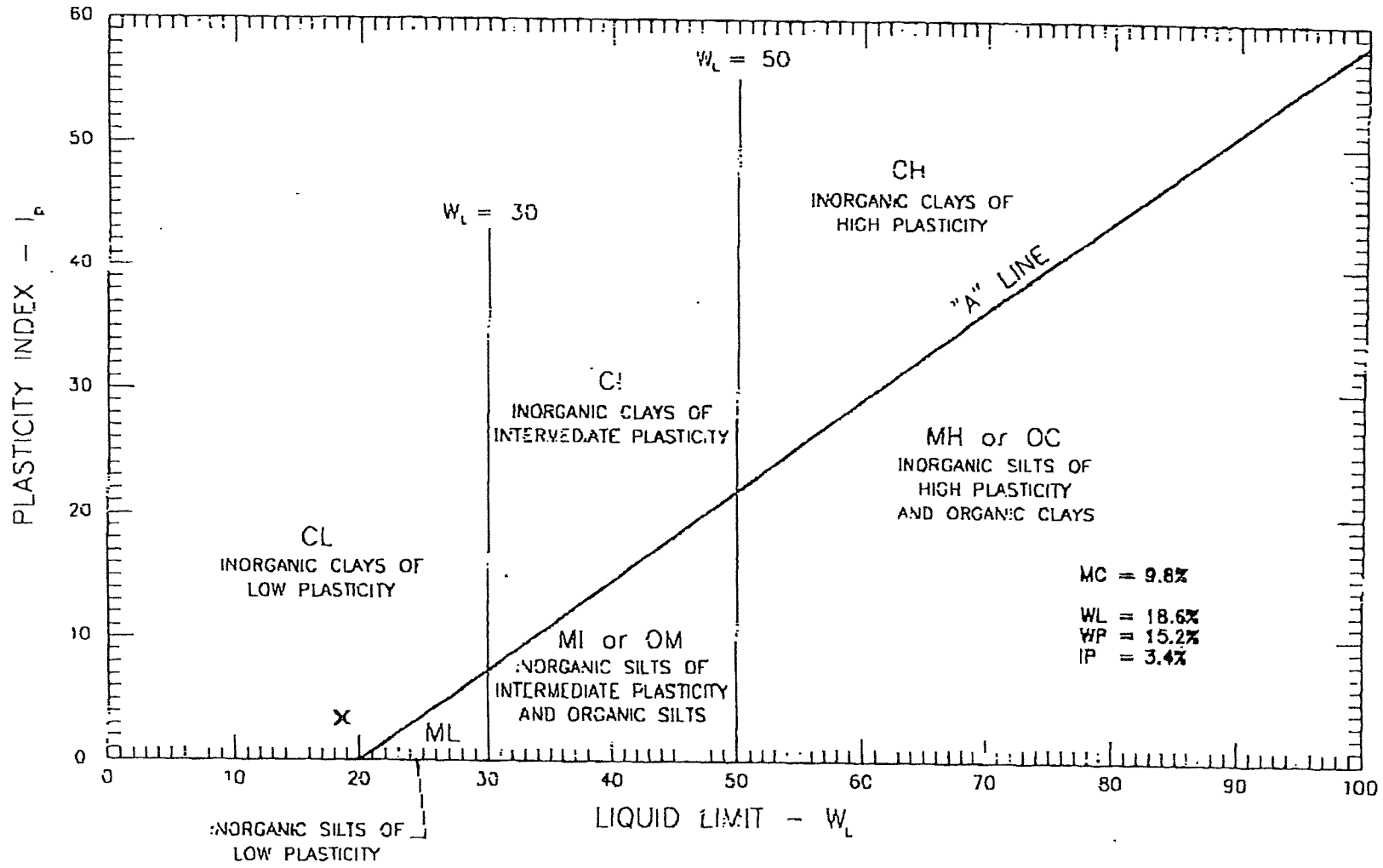
Sieve Analysis

Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	SEE WASHED SIEVE RPT		
Total =			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

A1-13



GeoNorth Engineering Ltd. 3301 Kellner Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4 TAILINGS STORAGE FACILITY ATTERBERG LIMITS OF KP06-ZS-03C	SCALE: N.T.S.	DATE: 2006/07/05
		PROJECT NO: 1-2036	DRAWING NO. 2035-

A1-14

1301 Kelliher Road Prince Geo..., BC V2L5S8
Phone (250)564-4304; fax (250)564-8323

RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

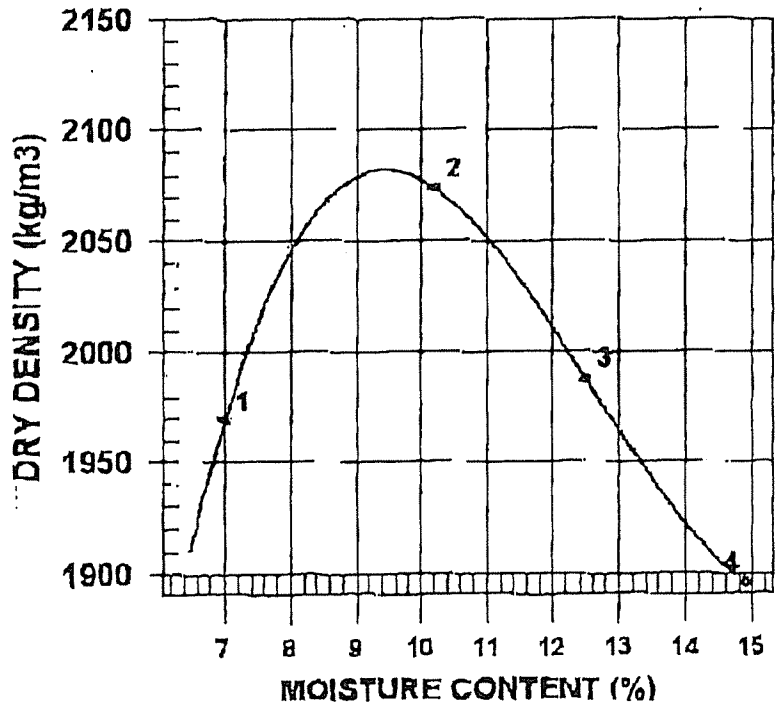
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1NO

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO. 4 DATE TESTED 2006.Jun.30 DATE RECEIVED 2006.Jun.26 DATE SAMPLED 2006.Jun.21

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CLIENT		
TESTED BY	BO	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP06-ZS-03C, TP06-16	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.76mm SCREEN	12.9 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.67
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



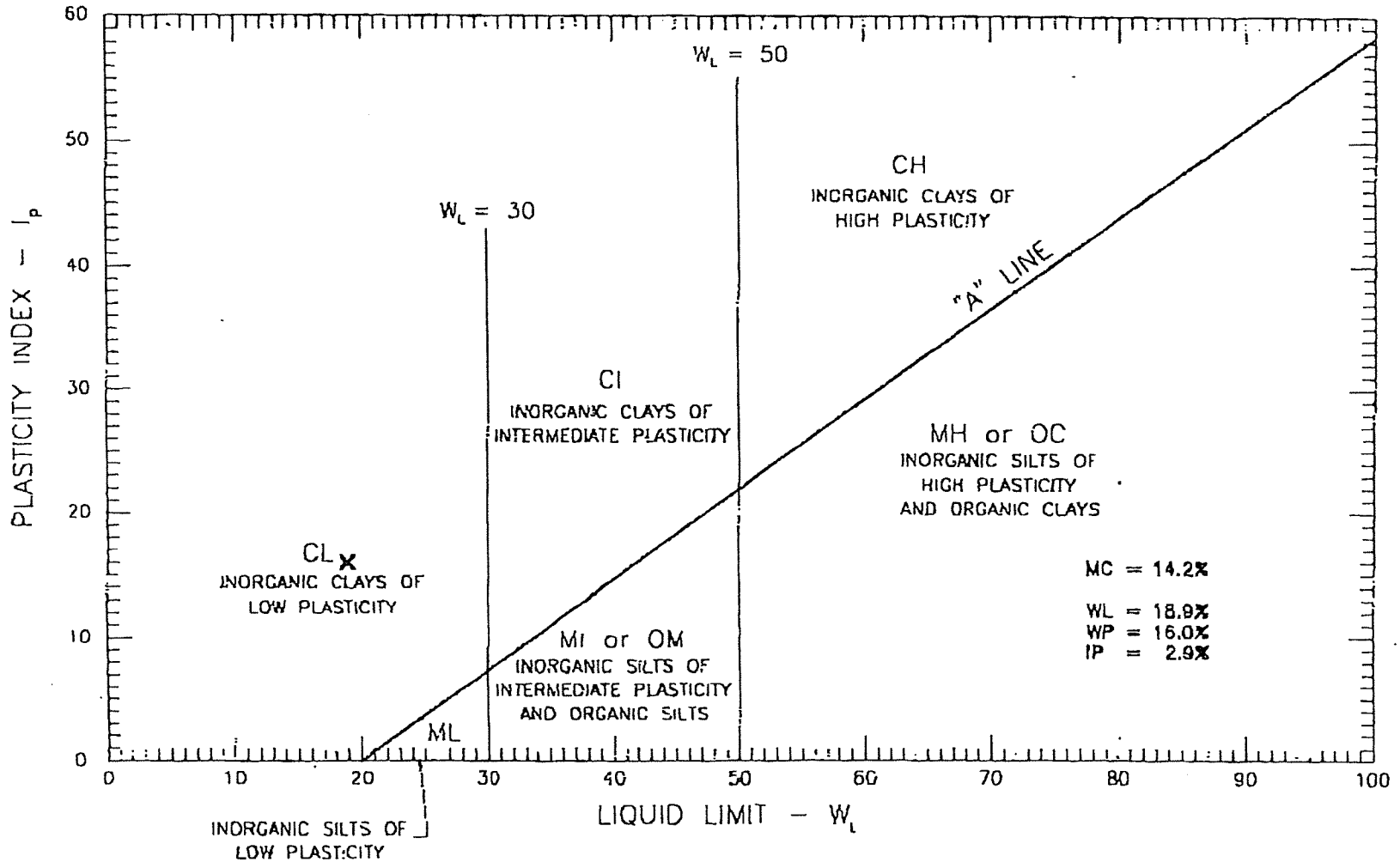
TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2107	1969	7.0
2	2285	2074	10.2
3	2237	1988	12.5
4	2179	1896	14.9

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2080	9.5
OVERSIZE CORRECTED	2140	8.5

COMMENTS

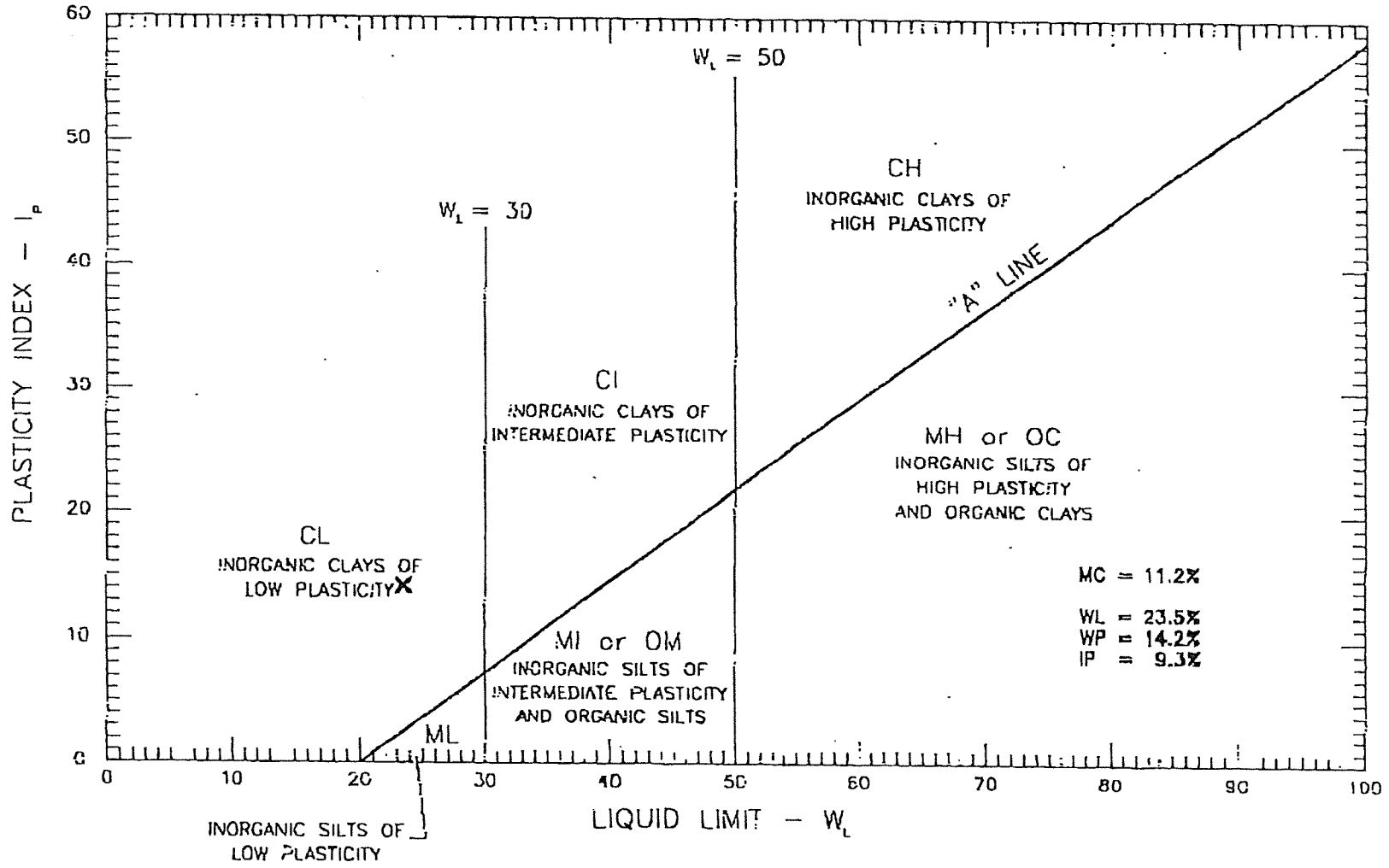
 2006.Jul.04 GeoNorth Engineering Ltd. PER

A1-15



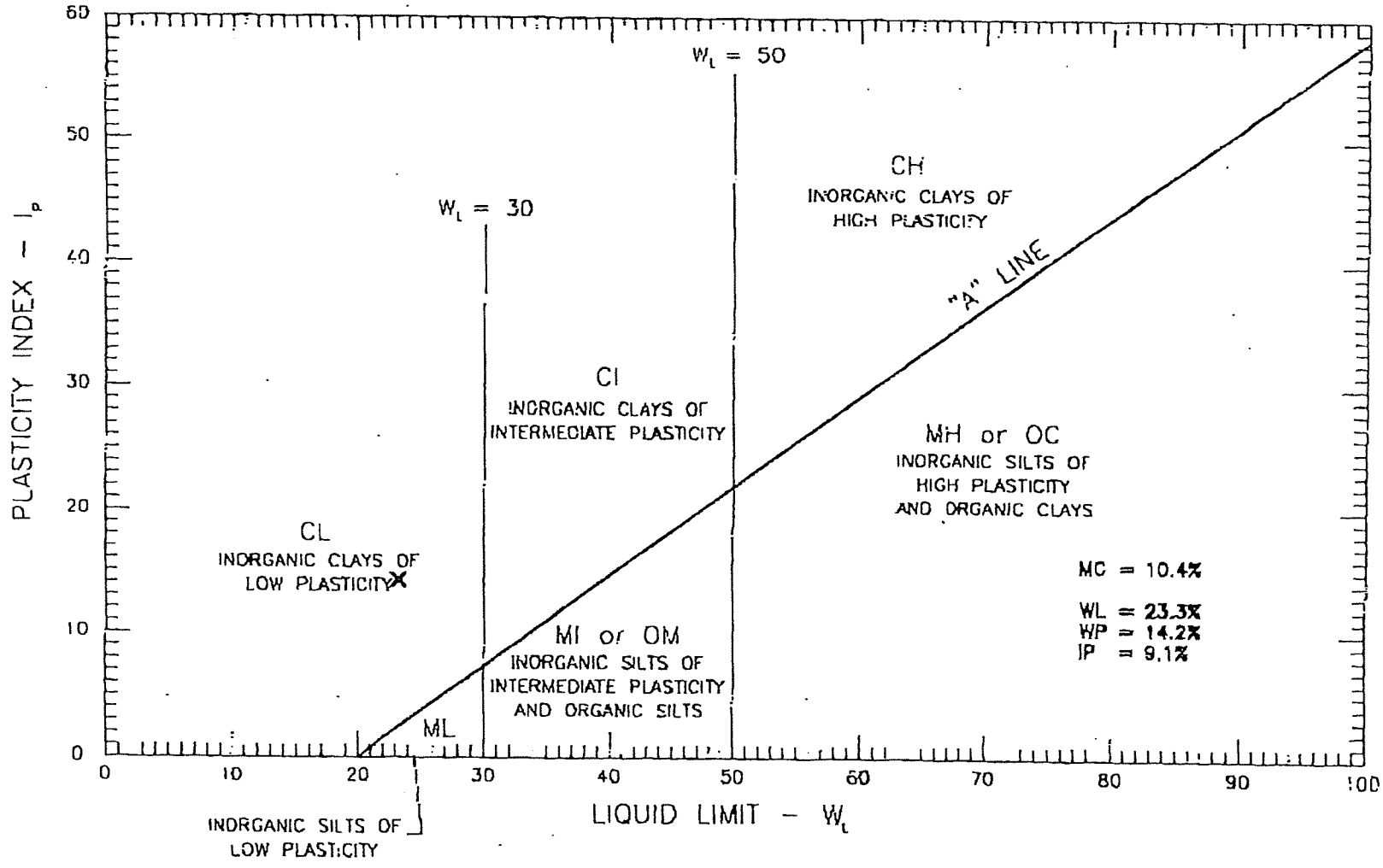
GEONORTH ENGINEERING LTD. 1301 Kelliher Road Prince George, B.C. V2L 5S8 tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4 ATTERBERG LIMITS OF KP06-ZS-04C, TP06-18	SCALE: N.T.S.	DATE: 2006/07/07
		PROJECT NO: K-2036	DRAWING NO. 2036-B32

A1-16



GEONORTH ENGINEERING LTD. 1301 Kelliher Road Prince George, B.C V2L 5S8 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4 ATTERBERG LIMITS OF KP06-ZS-05C, TP06-20	SCALE: N.T.S.	DATE: 2008/07/07
		PROJECT NO: K-2036	DRAWING NO. 2036-B33

A1-17



GEONORTH ENGINEERING LTD. 1301 Kelther Road Prince George, B.C. V2L 5S8 Tel: (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4 ATTERBERG LIMITS OF KP06-ZS-06C, TP06-04	SCALE: N.T.S.	DATE: 2006/07/10
		PROJECT NO: K-2036	DRAWING NO. 2036-B34

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

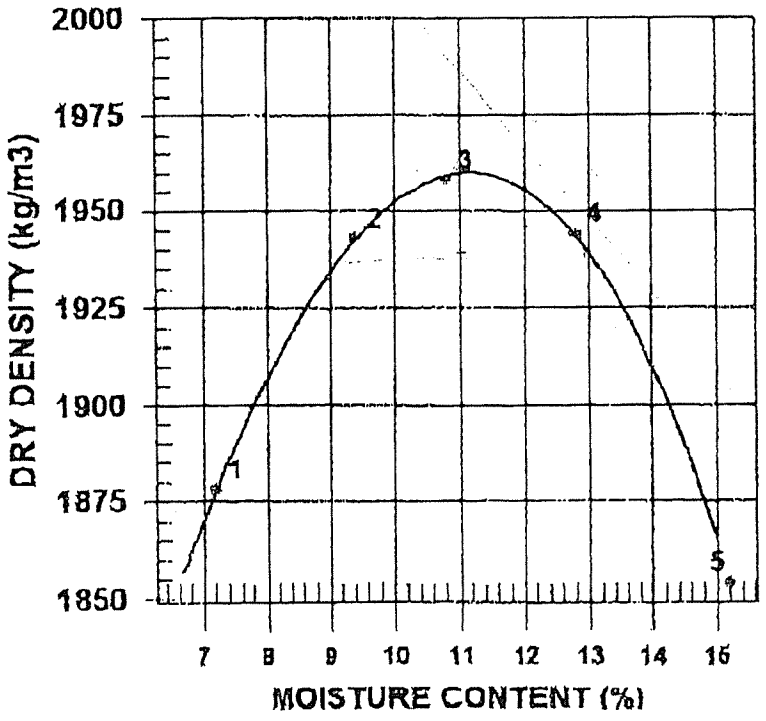
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO. 37 DATE TESTED 2007.Aug.15 DATE RECEIVED 2007.Aug.09 DATE SAMPLED 2007.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CG-client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	RO	RAMMER TYPE	Automatic
SUPPLIER		PREPARATION	Moist
SOURCE	C-S5-ZS-08/07	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4 75mm SCREEN	11.2 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE	37.5MM	TOTAL NUMBER OF TRIALS	5
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2013	1878	7.2
2	2126	1943	9.4
3	2169	1958	10.8
4	2193	1944	12.8
5	2136	1854	15.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1960	11.0
OVERSIZE CORRECTED	2020	10.0

COMMENTS
NEW TILL BORROW PIT, ZONE S MATERIAL

 PER.

A1-19

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

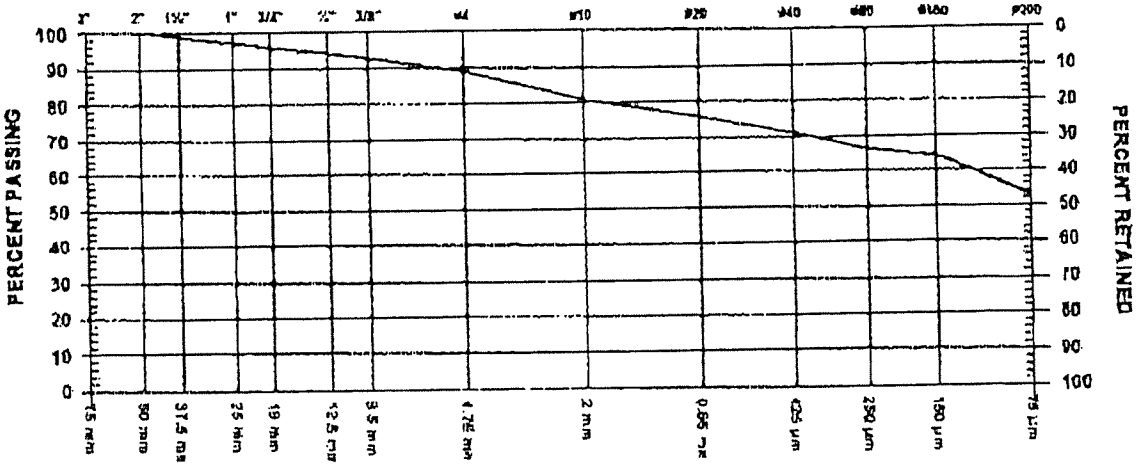
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
Mount Polley Mining Corp.
Likely
CONTRACTOR

SIEVE TEST NO. 39 DATE RECEIVED 200/.Aug.09 DATE TESTED 2007.Aug.15 DATE SAMPLED 2007.Aug.03

SUPPLIER
SOURCE C-S5-ZS-08/07
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CG-client
TESTED BY BT
TEST METHOD WASHED



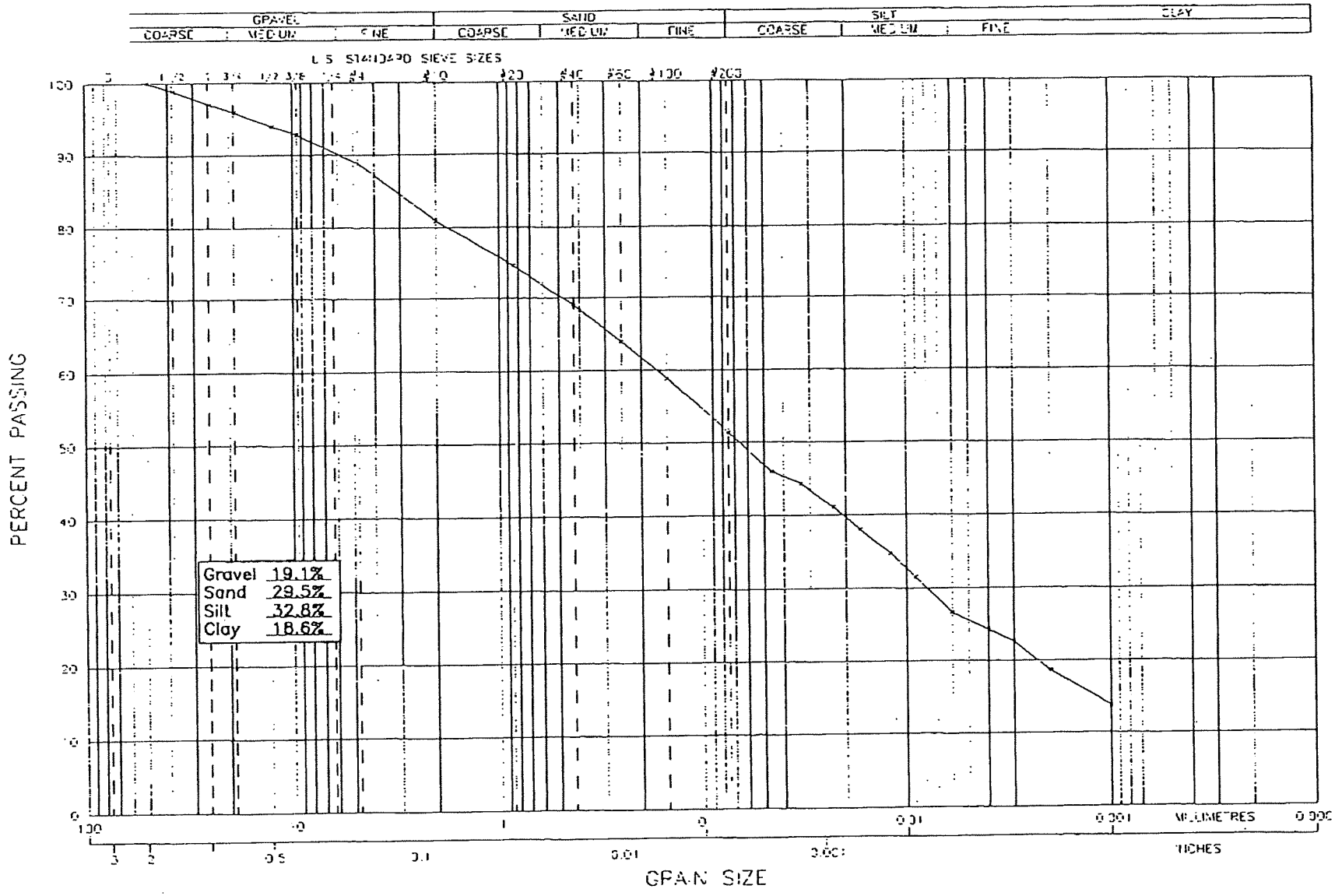
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	98.9	
1"	25 mm	96.9	
3/4"	19 mm	95.9	
1/2"	12.5 mm	93.9	
3/8"	9.5 mm	92.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	88.8	
No. 10	2.00 mm	80.8	
No. 20	850 µm	75.6	
No. 40	425 µm	71.0	
No. 60	250 µm	66.4	
No. 100	150 µm	64.5	
No. 200	75 µm	52.7	

MOISTURE CONTENT 12.5%

COMMENTS
NEW TILL BORROW PIT, ZONE S MATERIAL

A1-20



GeoNorth Engineering Ltd. 1301 Kelther Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF C-SS-ZS-08/07	SCALE: N.T.S	DATE: 2007/08/16
		PROJECT NO: K-2036	PLATE NO: 2036-335

GeoNorth Engineering

Hydrometer Analysis

Test Designation. ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold				Date: August 16, 2007
Project Name: MPCP Stage 4/5				**Project #: K-2036**
Source/Location: C-S5-ZS-08/07				**Type: TILL**
Sample #:	Test #:	**Hole #:**	**Depth:**	Time:
Sampled By: CG - Client	Tested By: NK			Checked By: NK
Date Sampled: 08.03.07	Date Received: 08.09.07			Date Tested: 08.15.07

Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50.0	0.808	0.5	31.5	21.0	0 01348				0.064	63.0	**50.9**
50.0	0.808	1	28.5	21.0	0 01348				0.046	57 0	**46.1**
50.0	0.808	2	27 5	21.0	0.01348				0.033	55.0	**44.4**
50.0	0.808	4	25.5	21.0	0 01348				0.023	51.0	**41.2**
50.0	0 808	8	23.5	21.0	0 01348				0.017	47.0	**38.0**
50.0	0.808	15	21.5	21.0	0.01348				0.012	43.0	**34.7**
50.0	0 808	30	19.5	21.0	0.01348				0.009	39 0	**31.5**
50.0	0.808	60	16.5	21.0	0 01348				0.006	33.0	**26.7**
50.0	0.808	120	15 0	21.0	0.01348				0.004	30.0	**24.2**
50.0	0.808	240	14.0	21.0	0.01348				0.003	28 0	**22.6**
50.0	0.808	480	11 5	21.0	0.01348				0 002	23.0	**18.6**
50.0	0 808	1440	8.5	21.0	0.01348				0.001	17.0	**13.7**

Hydrometer #: 794968	Graduate #: 1	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		50.0	100 0	**80.8**
20	3.8		92 4	**74.6**
40	3.5		85 4	**69.0**
60	3.1		79.2	**64.0**
100	3.1		73.0	**58.9**
200	4.7		63.6	**51.4**
Pan	31 8			
Total	50.0			
Unwashed Wt =				
Tare =		Wt Passing #200 =		

Sieve Analysis

Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total =			

Initial Moisture Content

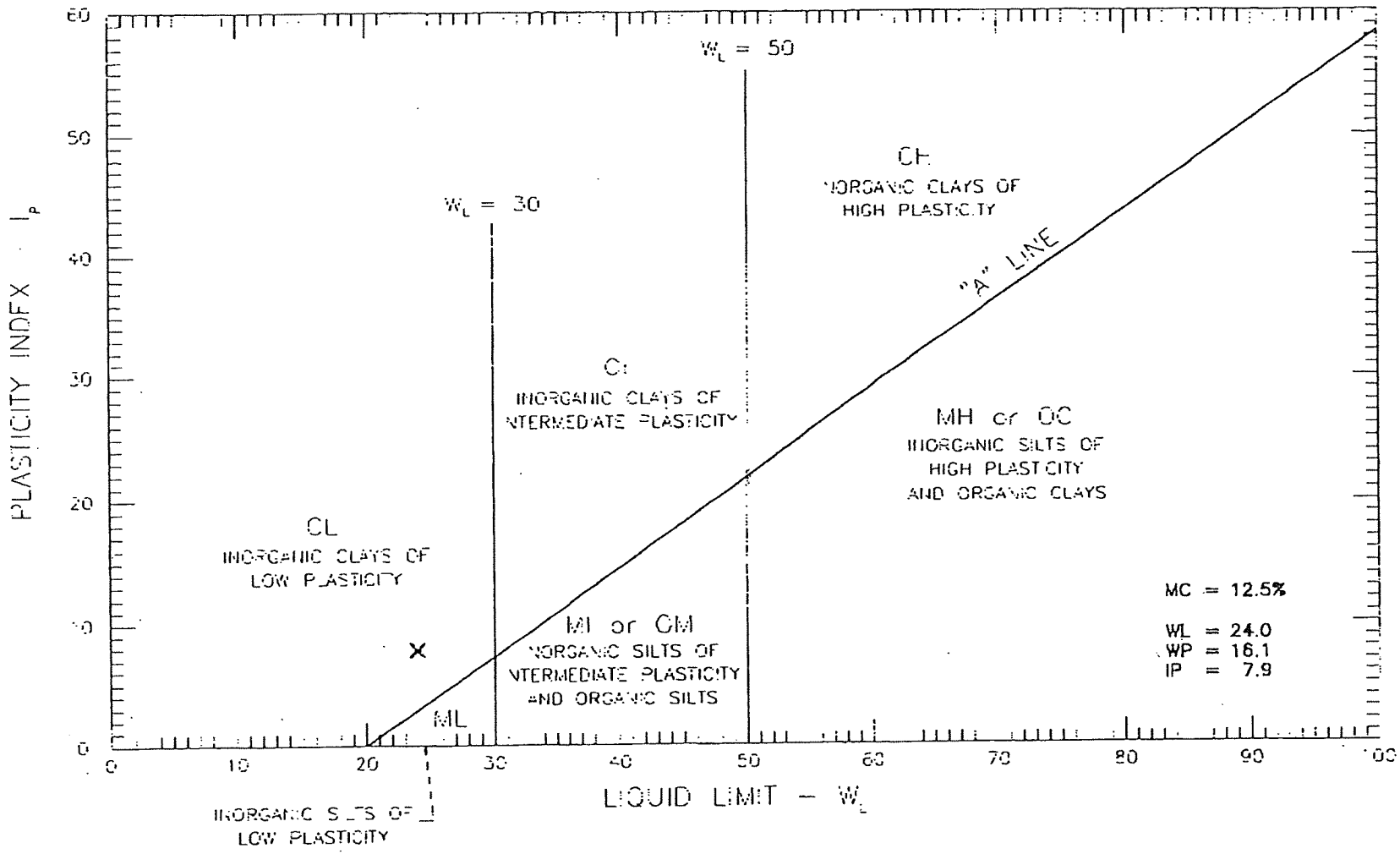
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt	
Tare Wt	
Wt. of Dry Soil	=W
Moisture Content	**12.5%**

Dry Wt. of Sample from Initial Moisture

=(100xWet Soil Wt)/(100 + Initial Moisture) =

Noeloc

A1-22



GeoNorth Engineering Ltd. 1331 Kelliher Road Prince George, B.C. V2L 5S8 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF C-SS-ZS-08/07	SCALE N.T.S	DATE 2007/08/17
		PROJECT NO. K-2036	DRAWING NO. 2036-B35

Knight Piésold
CONSULTING

APPENDIX A2

ZONE S RECORD

(Page A2-1 TO A2-65)

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

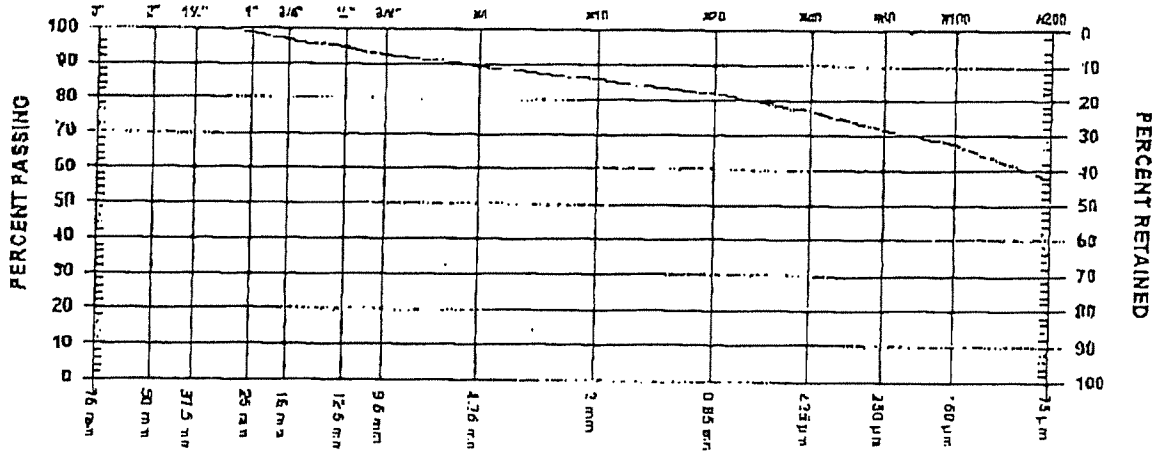
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

SIEVE TEST NO. 11 DATE RECEIVED 2006.Oct.16 DATE TESTED 2006.Oct.19 DATE SAMPLED 2006.Oct.13

SUPPLIER
SOURCE R-S5-25-~~30~~ 01
SPECIFICATION
MATERIAL TYPE T.I.L.

SAMPLED BY Client, EC
TESTED BY NK
TEST METHOD WASHED



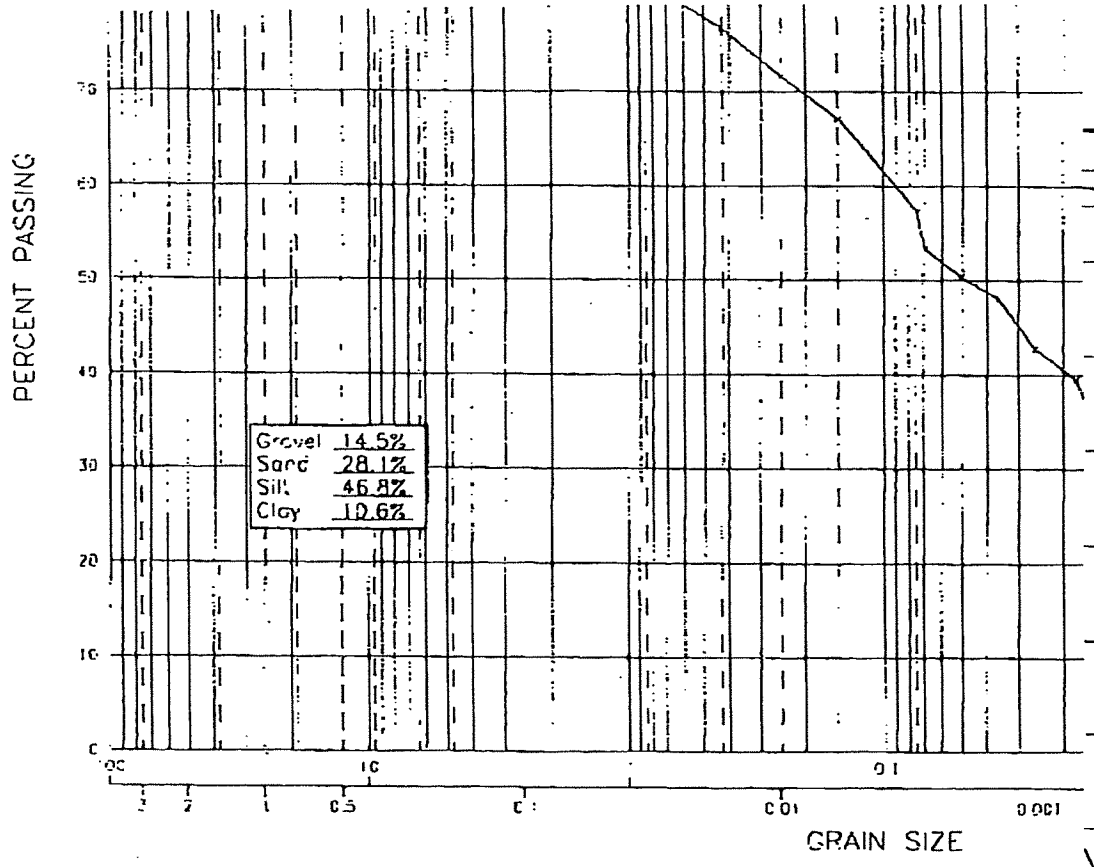
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	98.7	
3/4"	19 mm	96.5	
1/2"	12.5 mm	94.5	
3/8"	9.5 mm	92.6	

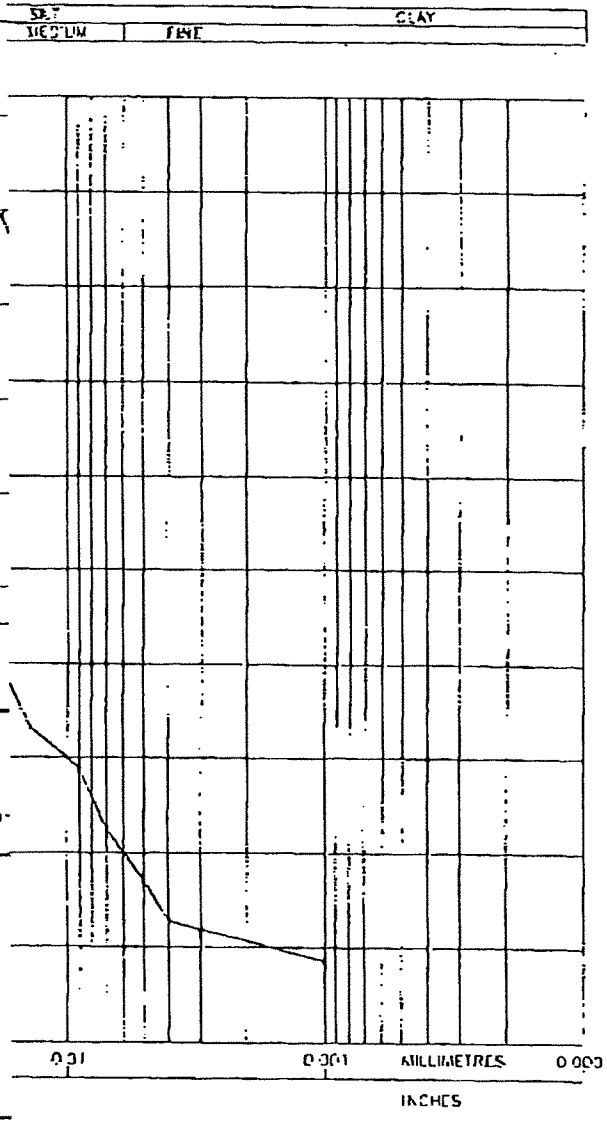
SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	89.3	
No. 10	2.00 mm	85.5	
No. 20	850 µm	81.6	
No. 40	425 µm	76.7	
No. 60	250 µm	71.7	
No. 100	150 µm	67.2	
No. 200	75 µm	57.1	

COMMENTS

 2006.Oct.20 GeoNorth Engineering Ltd. PER.

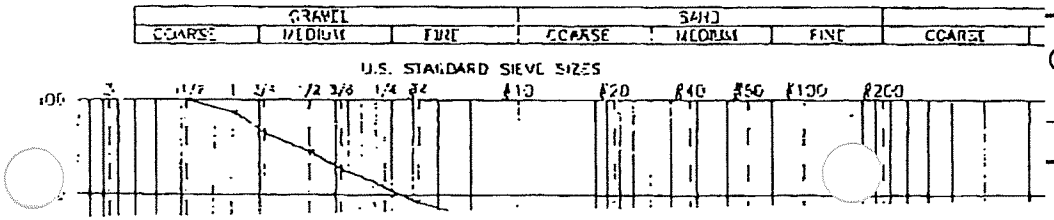
A2-1





GEONORTH ENGINEERING LTD.
1301 Kelther Road
Prince George, B.C. V2L 5S8
Tel: (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING
PHASE 5
GRAIN SIZE ANALYSIS OF R-S5-



CORP.

-ZS-~~38~~

SCALE:	DATE:
N.T.S.	2006/10/23
PROJECT NO: K-2036	DRAWING NO. 2036-B

A2-2

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

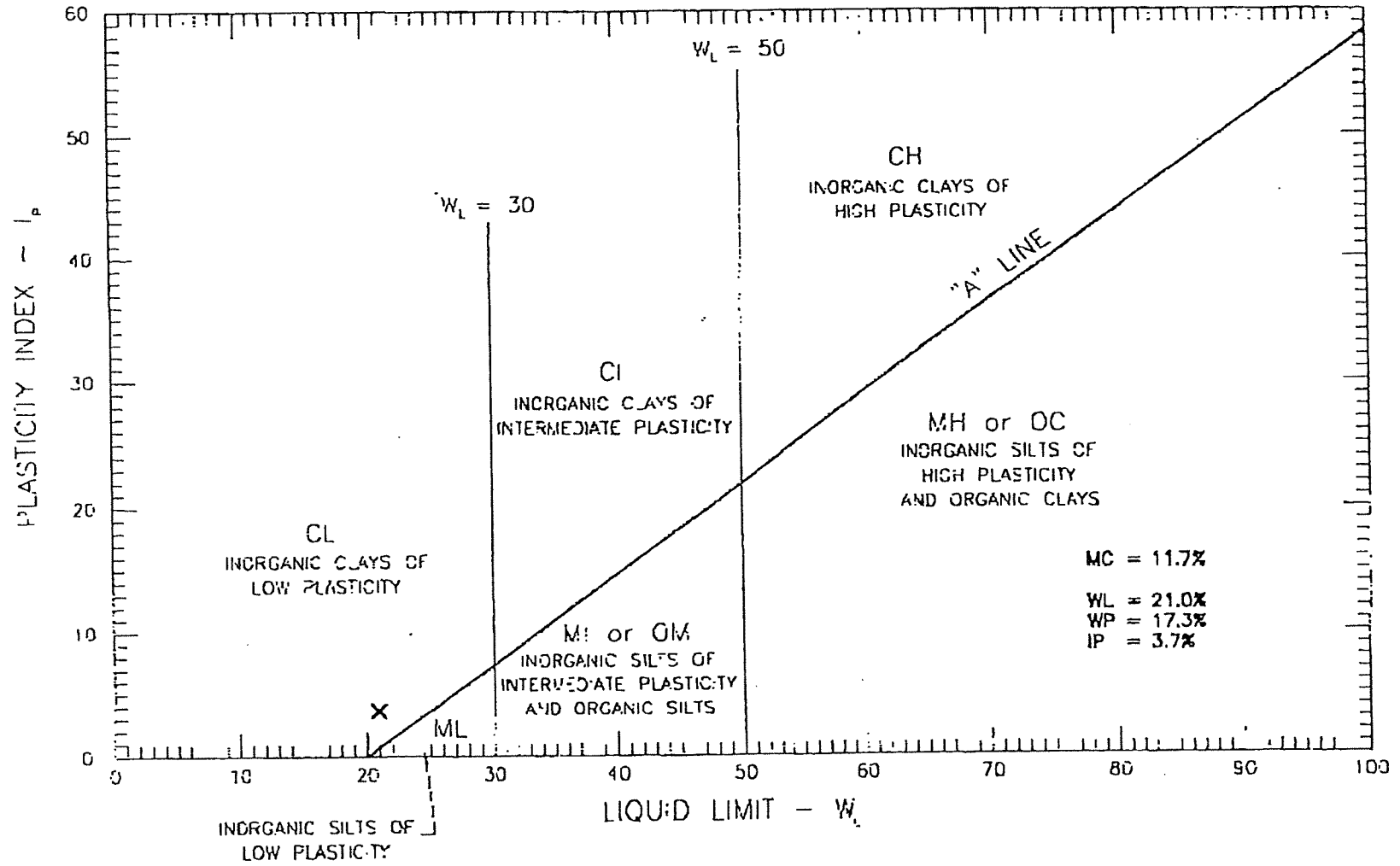
Client: Mount Polley Mining Corp. / Knight Piesold									Date: Oct 23, 2006		
Project Name: MPCP - Stage 5									Project #: K-2036		
Source/Location: ME 2+675, Elevation 949.5									Type: TILL		
Sample #: R-S5-ZS-~~300~~		Test #:		Hole #:		Depth:			Time:		
Sampled By: Client			Tested By: NK						Checked By:		
Date Sampled: 10.13.06			Date Received: 10.16.06						Date Tested: 10.20.06		
Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R'	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
40.0	0.855	0.5	25.0	17.0	0.01417				0.070	62.5	53.4
40.0	0.855	1	23.5	17.0	0.01417				0.050	58.8	50.3
40.0	0.855	2	22.5	17.0	0.01417				0.036	56.3	48.1
40.0	0.855	4	20.0	17.0	0.01417				0.026	50.0	42.8
40.0	0.855	8	18.5	17.0	0.01417				0.018	46.3	39.6
40.0	0.855	15	15.5	17.0	0.01417				0.014	38.8	33.2
40.0	0.855	30	13.5	17.0	0.01417				0.009	33.8	28.9
40.0	0.855	60	10.5	17.0	0.01417				0.007	26.3	22.5
40.0	0.855	120	8.0	17.0	0.01417				0.005	20.0	17.1
40.0	0.855	240	6.0	18.0	0.01399				0.004	15.0	12.8
40.0	0.855	480	5.5	18.0	0.01399				0.003	13.8	11.8
40.0	0.855	1440	4.0	17.0	0.01417				0.001	10.0	8.6
Hydrometer #: 794968			Graduate #. 3			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		40.0	100.0	85.5
20	1.6		96.0	82.1
40	2.1		90.8	77.6
60	2.2		85.3	72.9
100	2.4		79.3	67.8
200	3.6		70.3	60.1
Pan	28.1			
Total	40.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 =		

Sieve Analysis			
Seive No	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	SEE WASHED SIEVE		
Total = _____			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

A2-3



GeoNorth Engineering Ltd. 1301 Kelmer Road Prince George, B.C. V2L 3S9 Tel. (250) 564-4304 Fax (250) 564-9373	MOUNT POLLEY MINING CORP. PHASE 5 ATTERBERG LIMITS OF R-S5-ZS-~~30~~ 01	SCALE: N.T.S.	DATE: 2006/10/20
		PROJECT NO: K-203E	DRAWING NO. 203G-839

A2-4

1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

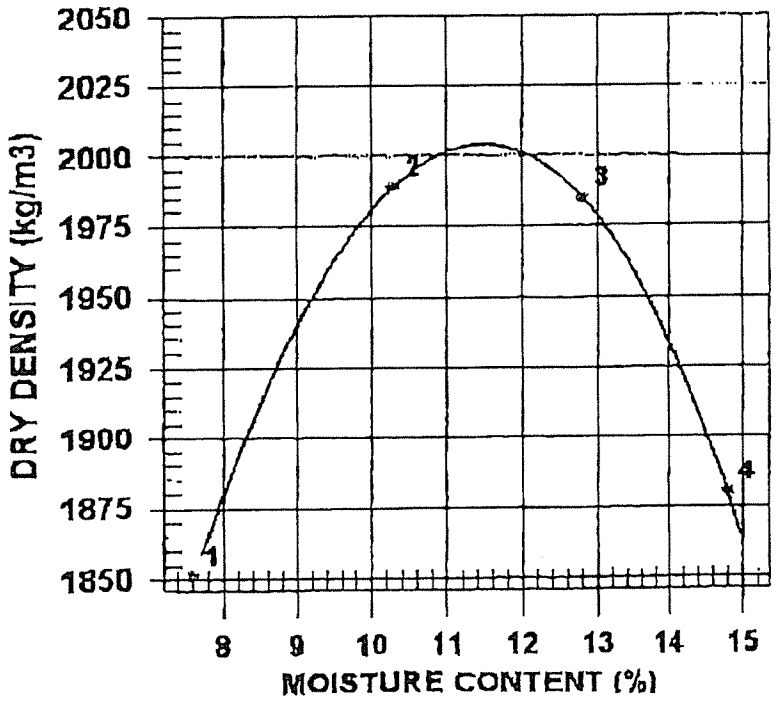
Mount Polley Mining Corp.
Likely

CONTRACTOR

PROCTOR NO. 10 DATE TESTED 2006.Oct.20 DATE RECEIVED 2006.Oct.16 DATE SAMPLED 2006.Oct.13

INSITU MOISTURE	N/A %
SAMPLED BY	Client, EC
TESTED BY	PN
SUPPLIER	
SOURCE	R-S5-ZS-01
MATERIAL IDENTIFICATION	
MAJOR COMPONENT	TILL
SIZE	25MM
DESCRIPTION	
ROCK TYPE	

COMPACTION STANDARD	Standard Proctor, ASTM D698
COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE	Manual
PREPARATION	Moist
OVERSIZE CORRECTION METHOD	ASTM 4718
RETAINED 4.75mm SCREEN	10.3 %
OVERSIZE SPECIFIC GRAVITY	2.65
TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1992	1851	7.6
2	2194	1989	10.3
3	2239	1985	12.8
4	2158	1880	14.8

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2000	11.5
OVERSIZE CORRECTED	2050	10.5

COMMENTS

 2006.Oct.20 GeoNorth Engineering Ltd PER.

A2-5

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-8323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

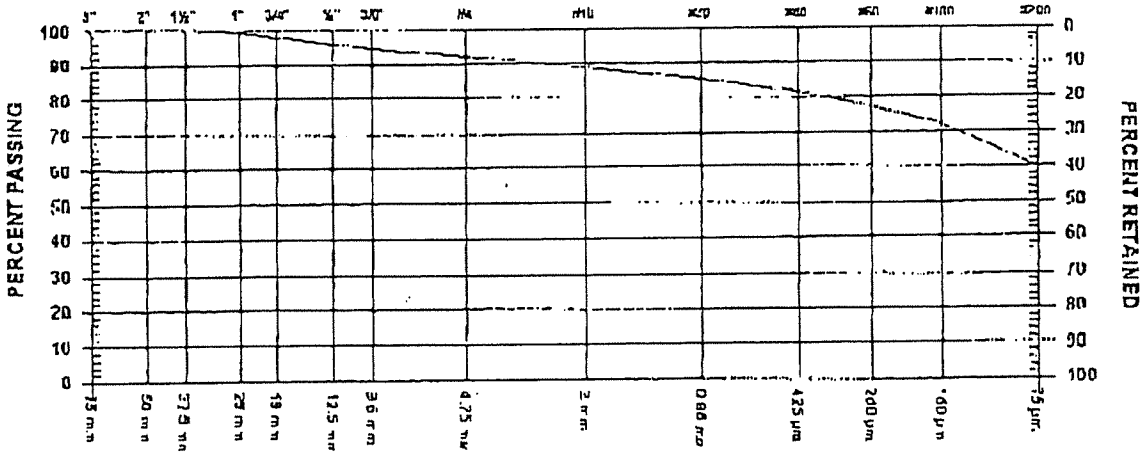
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Mount Polley Mining Corp.
Materials Testing Likely
CONTRACTOR

SIEVE TEST NO. 12 DATE RECEIVED 2006.Oct.16 DATE TESTED 2006.Oct.19 DATE SAMPLED 2006.Oct.13

SUPPLIER
SOURCE R-SS-ZS-91
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, EC
TESTED BY NK
TEST METHOD WASHED



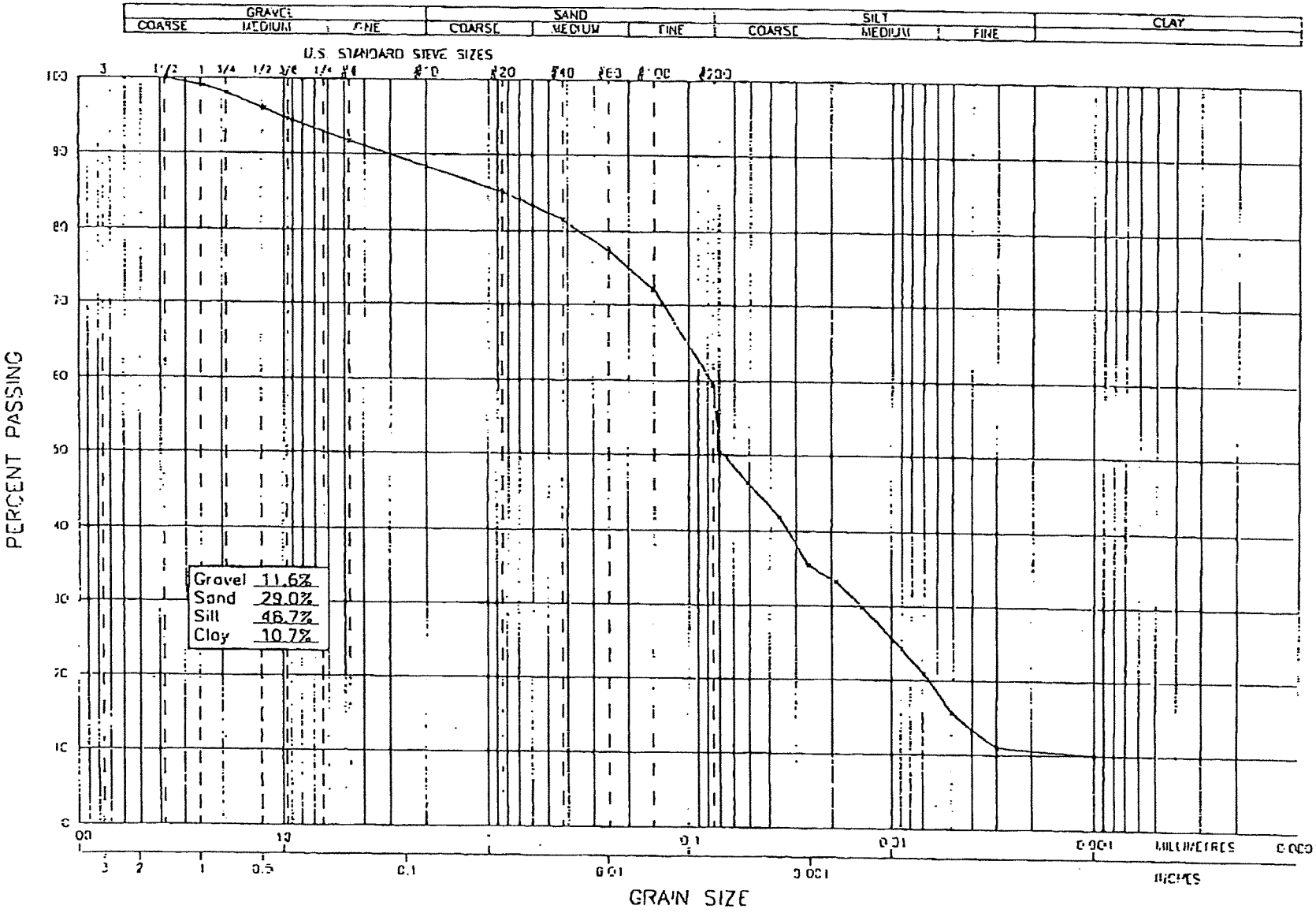
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	99.1	
3/4"	19 mm	98.1	
1/2"	12.5 mm	96.0	
3/8"	9.5 mm	94.7	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	91.8	
No. 10	2.00 mm	88.4	
No. 20	850 µm	85.1	
No. 40	425 µm	81.5	
No. 60	250 µm	77.2	
No. 100	150 µm	72.0	
No. 200	75 µm	59.4	

COMMENTS

 2006.Oct.20 GeoNorth Engineering Ltd PER.

A2-6



GEONORTH ENGINEERING LTD.
1301 Kelliher Road
Prince George, B.C. V2L 3S8
Tel. (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
PHASE 5
GRAIN SIZE ANAYLSIS OF R-S5-ZS-02

SCALE:	DATE:
N.T.S.	2006/10/23
PROJECT NO:	DRAWING NO.
K-2036	2036-B43

A2-7

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. / Knight Piesold			Date: October 23, 2006
Project Name: MPCP - Stage 5			Project #: K-2036
Source/Location: ME 2+175, Elevation 949.5			Type: TILL
Sample #: R-S5-ZS-3102	Test #:	Hole #: / Depth:	Time:
Sampled By: Client	Tested By: NK		Checked By:
Date Sampled: 10.13.06	Date Received: 10.16.06		Date Tested: 10.20.06

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R'	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
40.0	0.884	0.5	23.0	17.0	0.01417				0.071	57.5	50.8
40.0	0.884	1	21.0	17.0	0.01417				0.051	52.5	46.4
40.0	0.884	2	19.0	17.0	0.01417				0.036	47.5	42.0
40.0	0.884	4	16.0	17.0	0.01417				0.026	40.0	35.4
40.0	0.884	8	15.0	17.0	0.01417				0.019	37.5	33.2
40.0	0.884	15	13.5	17.0	0.01417				0.014	33.8	29.9
40.0	0.884	30	11.0	17.0	0.01417				0.009	27.5	24.3
40.0	0.884	60	9.5	17.0	0.01417				0.007	23.8	21.0
40.0	0.884	120	7.0	17.0	0.01417				0.005	17.5	15.5
40.0	0.884	240	6.0	18.0	0.01399				0.004	15.0	13.3
40.0	0.884	480	5.0	18.0	0.01399				0.003	12.5	11.1
40.0	0.884	1440	4.5	17.0	0.01417				0.001	11.3	10.0

Hydrometer #: 794968	Graduate #: 2	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt Finer Than	% Finer Than	% Finer Than Orig Samp.
10		40.0	100.0	88.4
20	1.5		96.3	85.1
40	1.6		92.3	81.6
60	1.9		87.5	77.4
100	2.6		81.0	71.6
200	5.3		67.8	59.9
Pan	27.1			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

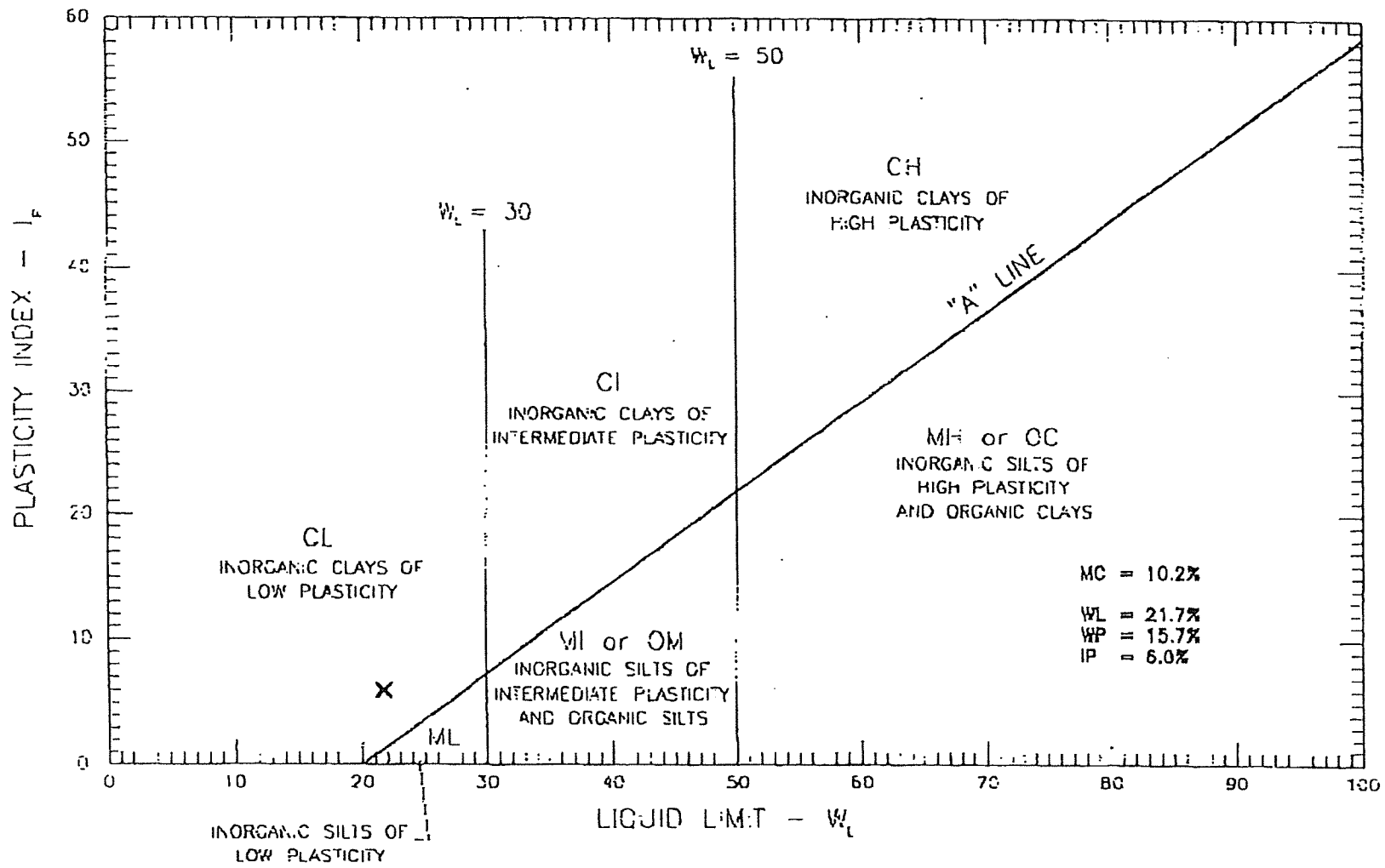
Sieve Analysis

Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	SEE WASHED SIEVE		
Total =			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

AZ-8



GeoNorth Engineering Ltd. 130 - Kelcher Road Prince George, B.C. V2L 5S6 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. PHASE 5 ATTERBERG LIMITS OF R-S5-ZS-~~3~~02	SCALE: N.T.S.	DATE: 2005/10/20
		PROJECT NO: A-2035	DRAWING NO. 2035-340

A2-9

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

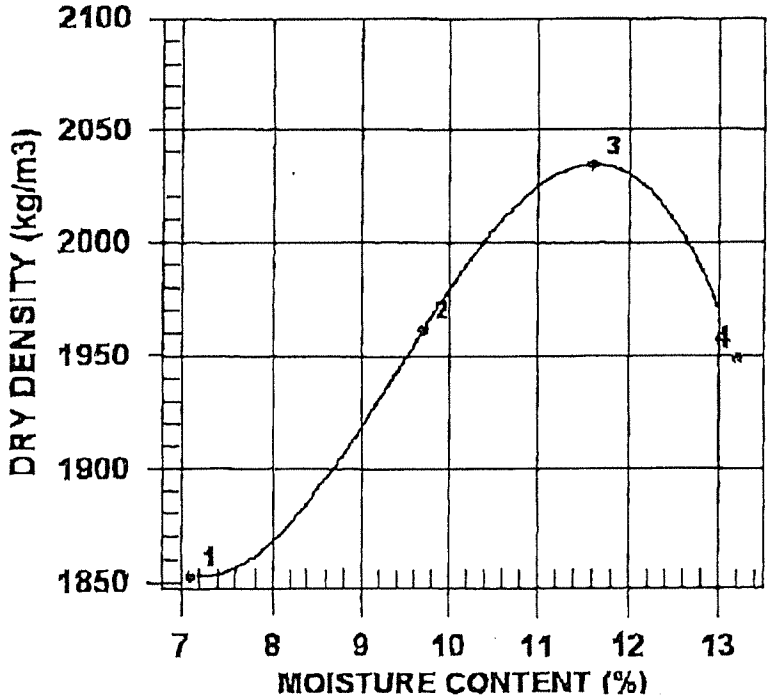
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR

Mount Polley Mining Corp.
Likely

PROCTOR NO. 11 DATE TESTED 2006.Oct.20 DATE RECEIVED 2006.Oct.16 DATE SAMPLED 2006.Oct.13

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, EC		
TESTED BY	PN	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-SS-ZS-01	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	25MM	RETAINED 4.75mm SCREEN	8.0 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.65
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1984	1852	7.1
2	2151	1961	9.7
3	2270	2034	11.6
4	2206	1949	13.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2030	11.5
OVERSIZE CORRECTED	2070	10.5

COMMENTS

 PER

A2-10

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

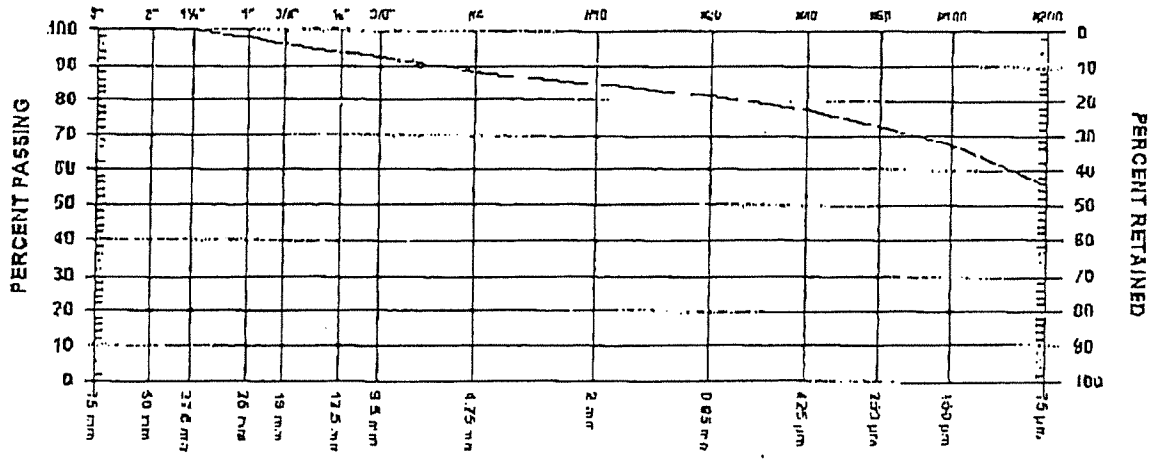
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Mount Polley Mining Corp.
Materials Testing Likely
CONTRACTOR

SIEVE TEST NO. 13 DATE RECEIVED 2006.Oct.16 DATE TESTED 2006.Oct.19 DATE SAMPLED 2006.Oct.13

SUPPLIER
SOURCE R-SS-ZS-03
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, EC
TESTED BY NK
TEST METHOD WASHED

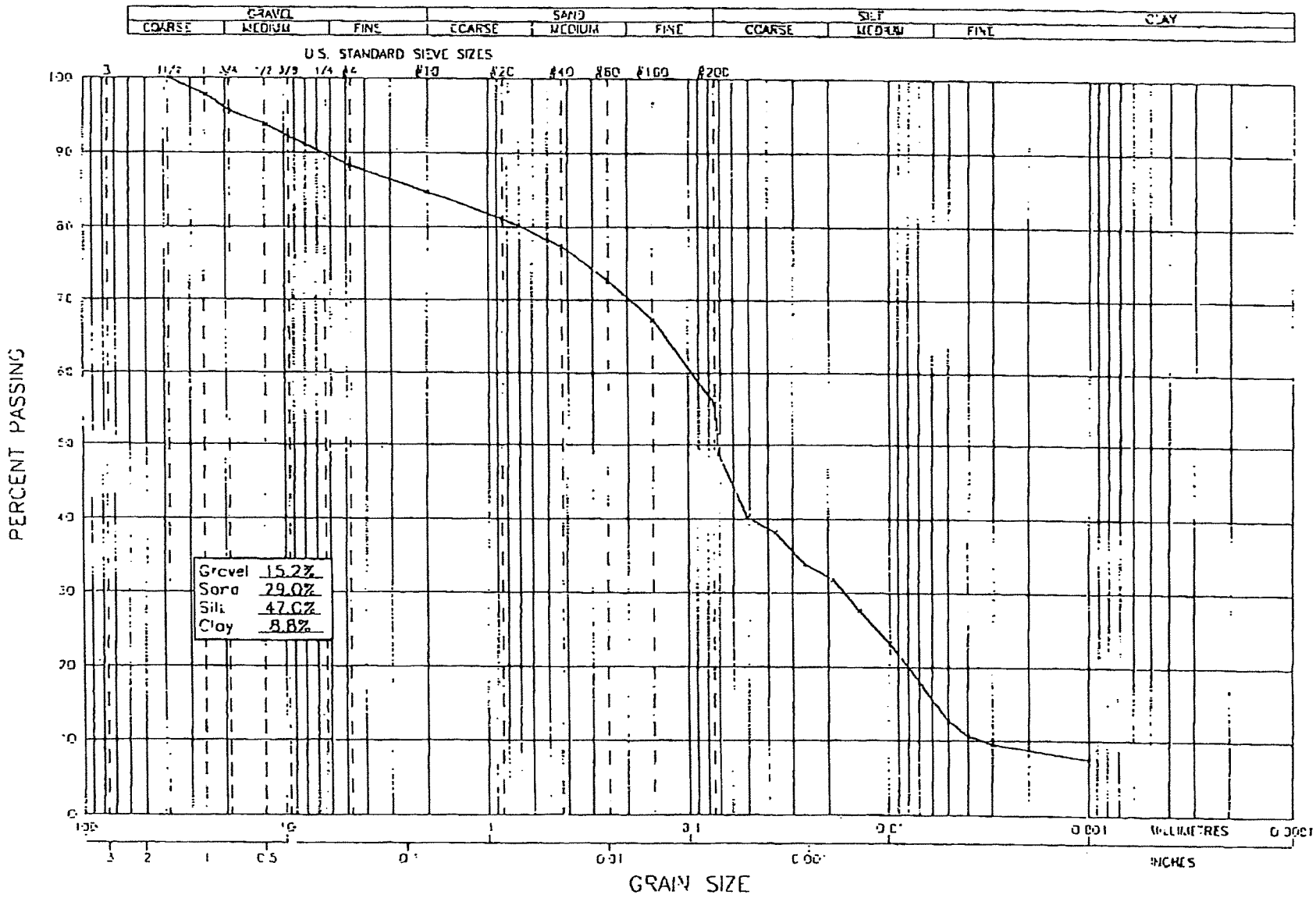


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	97.6	
3/4"	19 mm	95.7	
1/2"	12.5 mm	93.8	
3/8"	9.5 mm	92.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	88.3	
No. 10	2.00 mm	84.8	
No. 20	850 µm	81.2	
No. 40	425 µm	77.4	
No. 60	250 µm	72.7	
No. 100	150 µm	67.3	
No. 200	75 µm	55.8	

COMMENTS

A2-11



A2-12

GeoNorth Engineering Ltd. 1380 Kelliher Road Prince George, BC V2L 5S6 Tel: (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. PHASE 5 GRAIN SIZE ANALYSIS OF R-S5-ZS~~-32~~03	SCALE: N.T.S.	DATE: 2006/10/23
		PROJECT NO: K-2036	DRAWING NO. 2036-B4

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. / Knight Piesold			Date: October 23, 2006
Project Name: MPCP - Stage 5			Project #: K-2036
Source/Location: ME 1+400, Elevation 948.5			Type: TILL
Sample #: R-S5-ZS-3203	Test #:	Hole #:	Depth:	Time:
Sampled By: Client	Tested By: NK		Checked By:
Date Sampled: 10.13.06	Date Received: 10.16.06		Date Tested: 10.20.06

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R`	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
40.0	0.848	0.5	23.0	17.0	0.01417				0.071	57.5	48.8
40.0	0.848	1	19.0	17.0	0.01417				0.051	47.5	40.3
40.0	0.848	2	18.0	17.0	0.01417				0.037	45.0	38.2
40.0	0.848	4	16.0	17.0	0.01417				0.026	40.0	33.9
40.0	0.848	8	15.0	17.0	0.01417				0.019	37.5	31.8
40.0	0.848	15	13.0	17.0	0.01417				0.014	32.5	27.6
40.0	0.848	30	11.0	17.0	0.01417				0.010	27.5	23.3
40.0	0.848	60	8.5	17.0	0.01417				0.007	21.3	18.1
40.0	0.848	120	6.0	17.0	0.01417				0.005	15.0	12.7
40.0	0.848	240	5.0	18.0	0.01399				0.004	12.5	10.6
40.0	0.848	480	4.0	18.0	0.01399				0.003	10.0	8.5
40.0	0.848	1440	3.5	17.0	0.01417				0.001	8.8	7.5

Hydrometer #: 794968	Graduate #: 4	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		40.0	100.0	84.8
20	1.6		96.0	81.4
40	1.8		91.5	77.6
60	2.3		85.8	72.8
100	2.7		79.0	67.0
200	4.8		67.0	56.8
Pan	26.8			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

Sieve Analysis

Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	SEE WASHED SIEVE		
Total =			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

A2-13

GeoNorth Engineering Ltd.
1361 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1NO

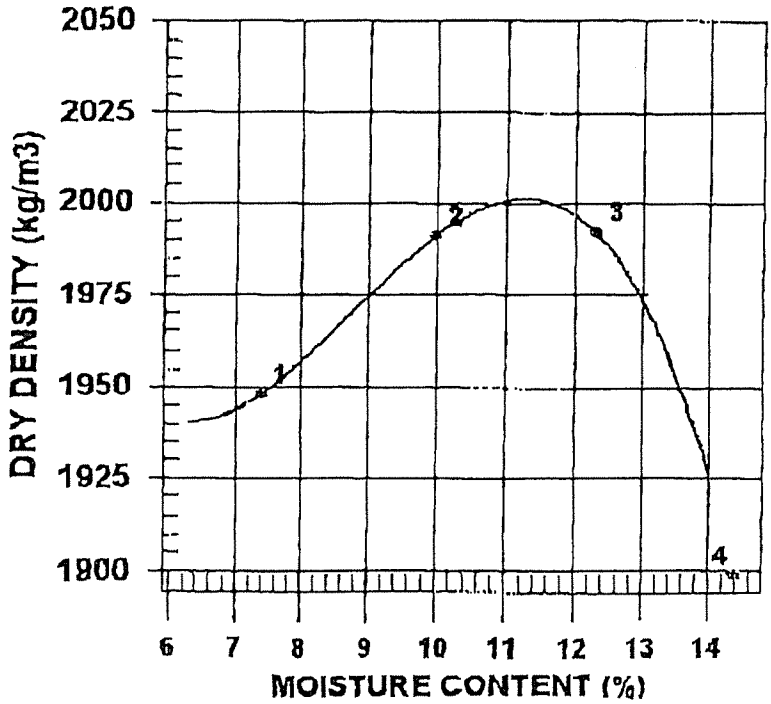
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

PROCTOR NO. 12 DATE TESTED 2006.Oct.20 DATE RECEIVED 2006.Oct.16 DATE SAMPLED 2006.Oct.13

INSITU MOISTURE N/A %
SAMPLED BY Client, EC
TESTED BY PN
SUPPLIER
SOURCE R-S5-ZS-~~32~~ 03
MATERIAL IDENTIFICATION
MAJOR COMPONENT TILL
SIZE 25MM
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Manual
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 11.3 %
OVERSIZE SPECIFIC GRAVITY 2.65
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2092	1948	7.4
2	2190	1991	10.0
3	2237	1992	12.3
4	2172	1899	14.4

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2000	11.5
OVERSIZE CORRECTED	2060	10.5

COMMENTS

 2006.Oct.20 GeoNorth Engineering Ltd PER.

A2-14

1301 Kelliher Road Prince George, B. C. V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

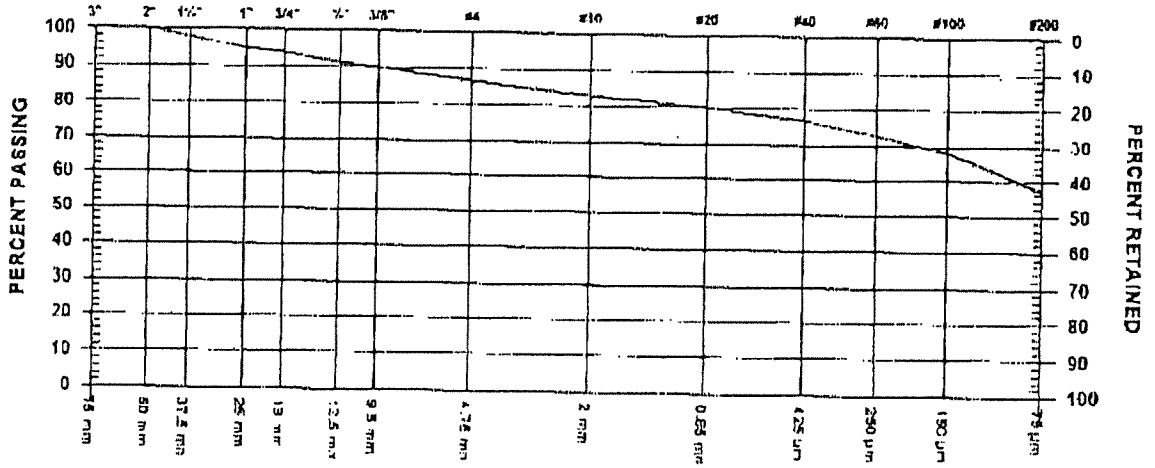
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 26 DATE RECEIVED 2007.May.25 DATE TESTED 2007.May.29 DATE SAMPLED 2007.May.17

SUPPLIER
SOURCE R-S5-Z5-01/07
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CLIENT
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	97.9	
1"	25 mm	95.0	
3/4"	19 mm	93.7	
1/2"	12.5 mm	91.2	
3/8"	9.5 mm	89.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	86.3	
No. 10	2.00 mm	83.2	
No. 20	850 µm	80.2	
No. 40	425 µm	76.8	
No. 60	250 µm	72.8	
No. 100	150 µm	68.3	
No. 200	75 µm	57.0	

MOISTURE CONTENT 7.2%

COMMENTS
LOCATION: ZONE 5 PE, CHAINAGE: 44+00, ELEVATION: 948.6m
COARSE SPECIFIC GRAVITY = 2.674

 2007.Jun.07 GeoNorth Engineering Ltd. PER.

A2-15

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. Attn: Knight Piesold Consulting			Date: June 7, 2007
Project Name: MPCP Stage 4/5			**Project #: K-2036**
Source/Location: R-S5-ZS-01/07			Type: Till
Sample #:	Test #:	**Hole #:**	**Depth:** Time:
Sampled By: Client - AG	Tested By: DJ		Checked By: NK
Date Sampled: 05.17.07	Date Received: 05.25.07		Date Tested: 05.29.07

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R`	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
50.0	0.832	0.5	29.0	23.0	0.01317				0.063	58.0	**48.3**
50.0	0.832	1	26.0	23.0	0.01317				0.046	52.0	**43.3**
50.0	0 832	2	25.0	23.0	0.01317				0.033	50.0	**41.6**
50.0	0.832	4	22.0	23.0	0.01317				0.023	44 0	**36.6**
50.0	0.832	8	21.0	23.0	0.01317				0.017	42.0	**34.9**
50.0	0.832	15	18 0	23.0	0 01317				0.012	36 0	**30.0**
50 0	0.832	30	17 0	22.0	0.01332				0.009	34.0	**28.3**
50.0	0.832	60	14.5	22.0	0 01332				0.006	29.0	**24.1**
50.0	0.832	120	12.0	22.0	0.01332				0.005	24.0	**20.0**
50.0	0.832	240	9 5	23 0	0.01317				0.003	19.0	**15.8**
50.0	0.832	.480	8.0	23.0	0.01317				0.002	16.0	**13.3**
50.0	0.832	1440	7 5	26 0	0.01272				0.001	15.0	**12.5**

Hydrometer #: 794968 | Graduate #: 8 | Dispersing Agent: Sodium Hex | Amount: 125ml

Density of Solids:

Description of Sample:

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp
10		50.0	100.0	**83.2**
20	2.1		95.8	**79.7**
40	2.0		91.8	**76.4**
60	2.7		86.4	**71.9**
100	4.4		77.6	**64.6**
200	4.7		68.2	**56.7**
Pan	34.1			
Total	50.0			
Unwashed Wt. =				

Tare = _____ Wt Passing #200 = _____

Sieve Analysis

Seive No.	Weight Retained	Total Wt Passing	% Finer Than Orig. Samp.
38 1			
25.4			
19.0			
12 5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		

Total = _____

Initial Moisture Content

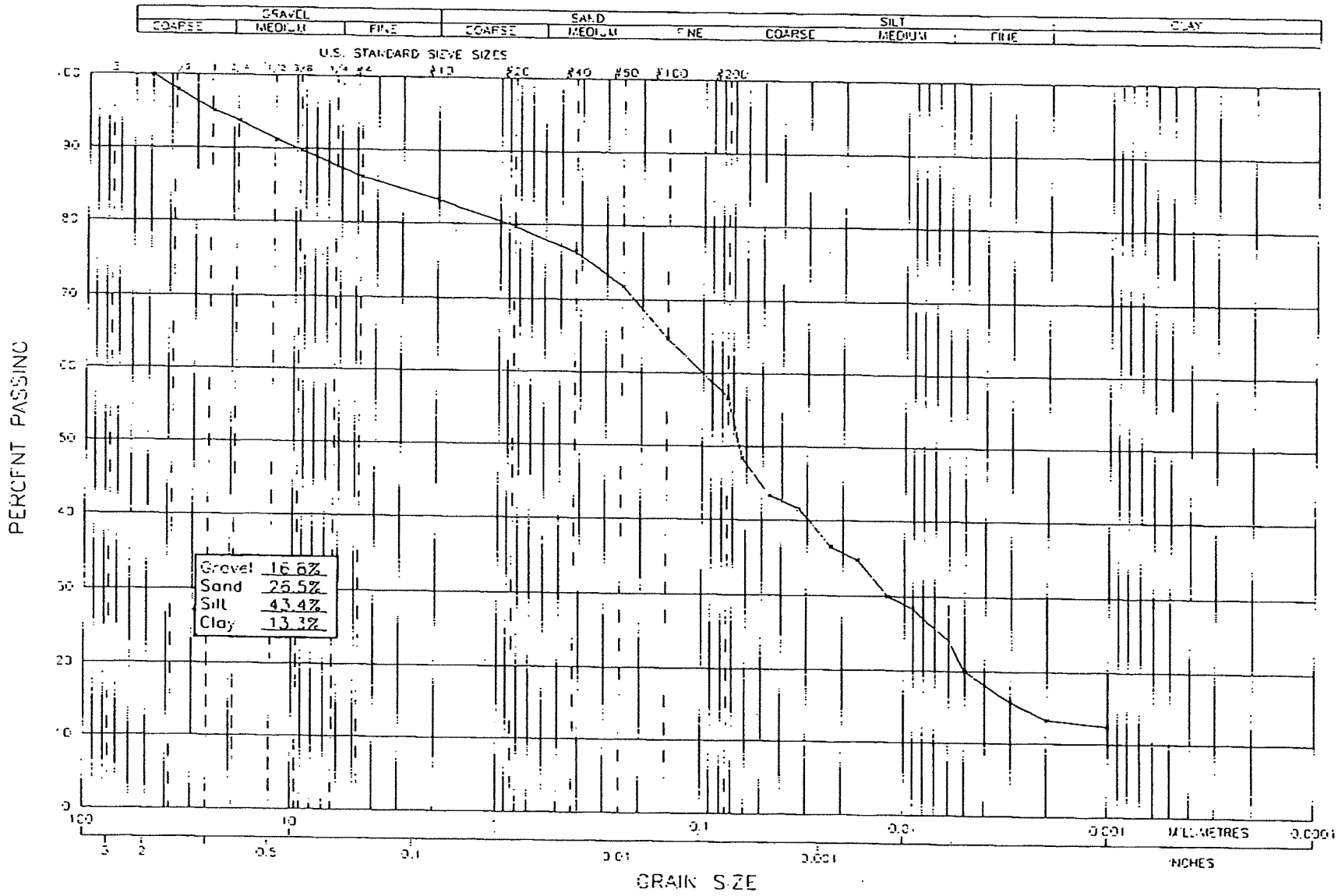
Tare No	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%

Dry Wt. of Sample from Initial Moisture

=(100xWet Soil Wt.)/(100 + Initial Moisture) =

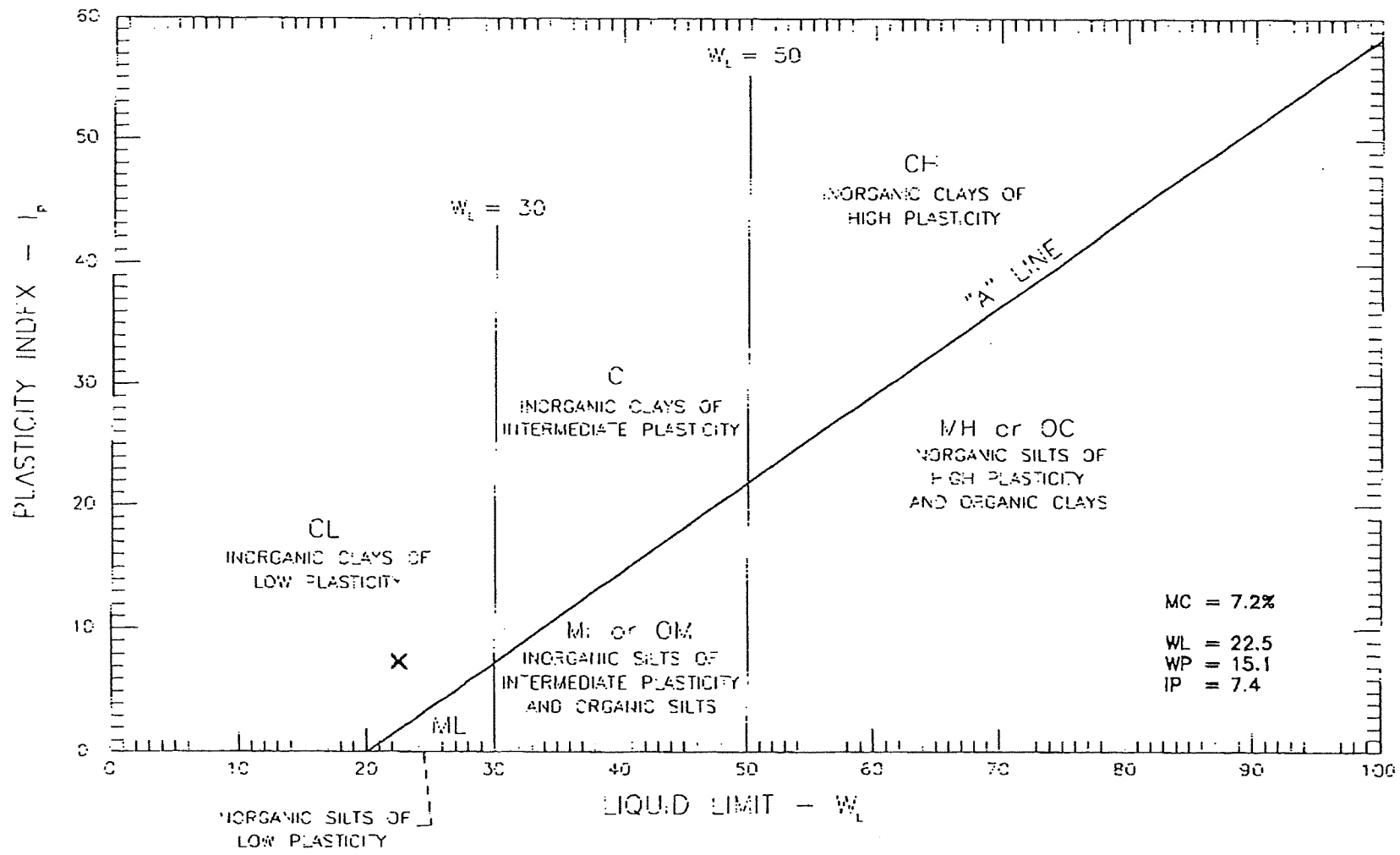
Ncelsp

A2-16



A2-17

GEONORTH ENGINEERING LTD. 1301 Kelliher Road Prince George, BC V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZS-01/07	SCALE: N.T.S.	DATE: 2007/06/07
		PROJECT NO: K-2036	PLATE NO: 2036-B19



GEONORTH ENGINEERING LTD. 1301 Kelther Road Prince George, B.C. V2L 5S8 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5-ZS-01/07	SCALE: NTS	DATE: 2007/06/07
		PROJECT NO: K-2036	DRAWING NO. 2036-B18

42-18

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

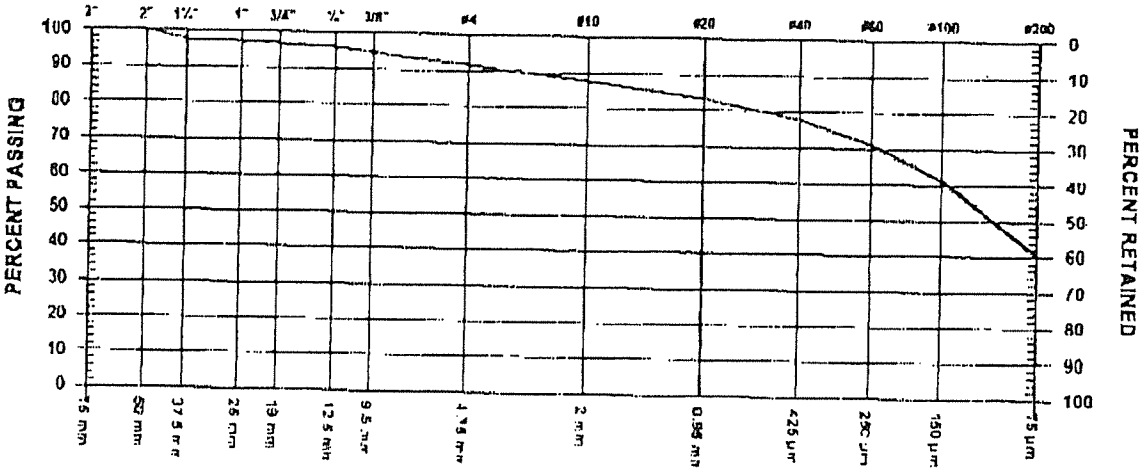
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 25 DATE RECEIVED 2007.May.25 DATE TESTED 2007.May.29 DATE SAMPLED 2007.May.17

SUPPLIER
SOURCE R-S5-ZS-02/07
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CLIENT
TESTED BY AG
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	97.4	
1"	25 mm	97.1	
3/4"	19 mm	96.8	
1/2"	12.5 mm	95.7	
3/8"	9.5 mm	94.6	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	91.5	
No. 10	2.00 mm	87.7	
No. 20	850 µm	83.2	
No. 40	425 µm	78.0	
No. 60	250 µm	71.1	
No. 100	150 µm	61.5	
No. 200	75 µm	40.5	

MOISTURE CONTENT 9.5%

COMMENTS
LOCATION: ZONE S PE, CHAINAGE: 41+00, ELEVATION: 949.2m
COARSE SPECIFIC GRAVITY = 2.659

 2007.Jun.07 GeoNorth Engineering Ltd PER

A2-19

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold Consulting				Date: June 7, 2007
Project Name: MPCP Stage 4/5				**Project #: K-2036**
Source/Location: R-S5-ZS-02/07				Type: Till
Sample #:	Test #:	**Hole #:**	**Depth:**	Time:
Sampled By. Client - AG	Tested By: DJ			Checked By: NK
Date Sampled: 05.17.07	Date Received: 05 25.07			Date Tested: 05 29.07

Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R'**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50.0	0.877	0.5	31.0	23 0	0.01317				0.062	62.0	**54.4**
50.0	0.877	1	27.0	23 0	0.01317				0.045	54 0	**47.4**
50.0	0.877	2	26.0	23.0	0.01317				0.032	52.0	**45.6**
50.0	0.877	4	24.0	23.0	0 01317				0.023	48.0	**42.1**
50.0	0.877	8	21.0	23 0	0 01317				0.017	42 0	**36.8**
50.0	0.877	15	19.5	23.0	0.01317				0.012	39.0	**34.2**
50.0	0.877	30	17 0	22.0	0.01332				0 009	34.0	**29.8**
50.0	0.877	60	14.5	22.0	0.01332				0.006	29.0	**25.4**
50.0	0.877	120	12.5	22.0	0 01332				0.005	25.0	**21.9**
50.0	0.877	240	10.0	23.0	0.01317				0.003	20 0	**17.5**
50.0	0.877	480	7.5	23.0	0 01317				0.002	15.0	**13.2**
50.0	0.877	1440	7 0	26 0	0.01272				0.001	14.0	**12.3**

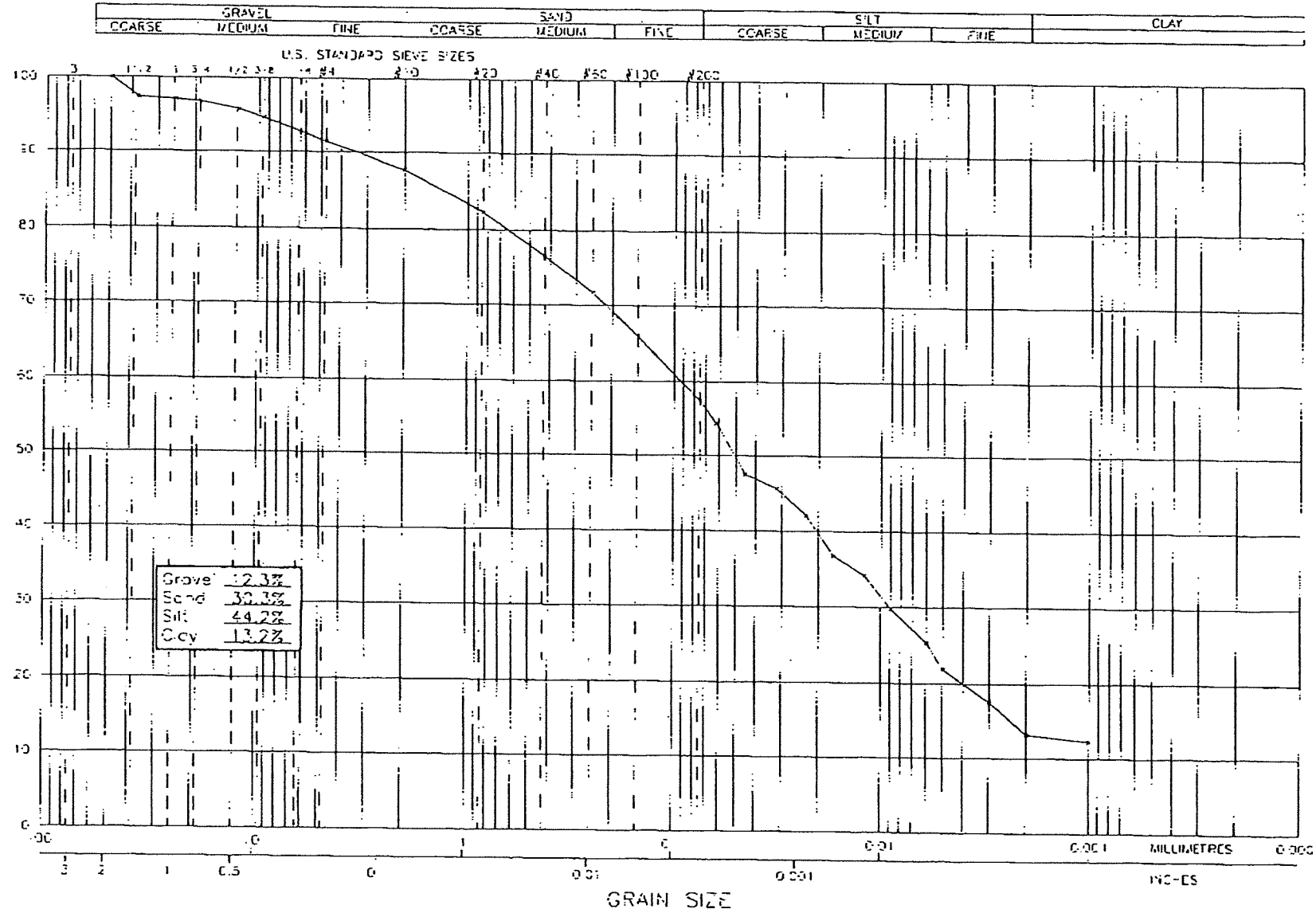
Hydrometer #: 794968	Graduate #: 6	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis					Sieve Analysis			
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.	Seive No	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
10		50 0	100 0	**87.7**	38.1			
20	3.1		93.8	**82.3**	25.4			
40	3.2		87.4	**76.6**	19.0			
60	2.8		81.8	**71.7**	12.5			
100	3.3		75.2	**65.9**	9.5			
200	4.9		65.4	**57.4**	4.75			
Pan	32.7				10	**SEE WASHED SIEVE**		
Total	50.0							
Unwashed Wt. =								
Tare = ______	Wt. Passing #200 = ______				Total = ______			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

N>elco

A2-20

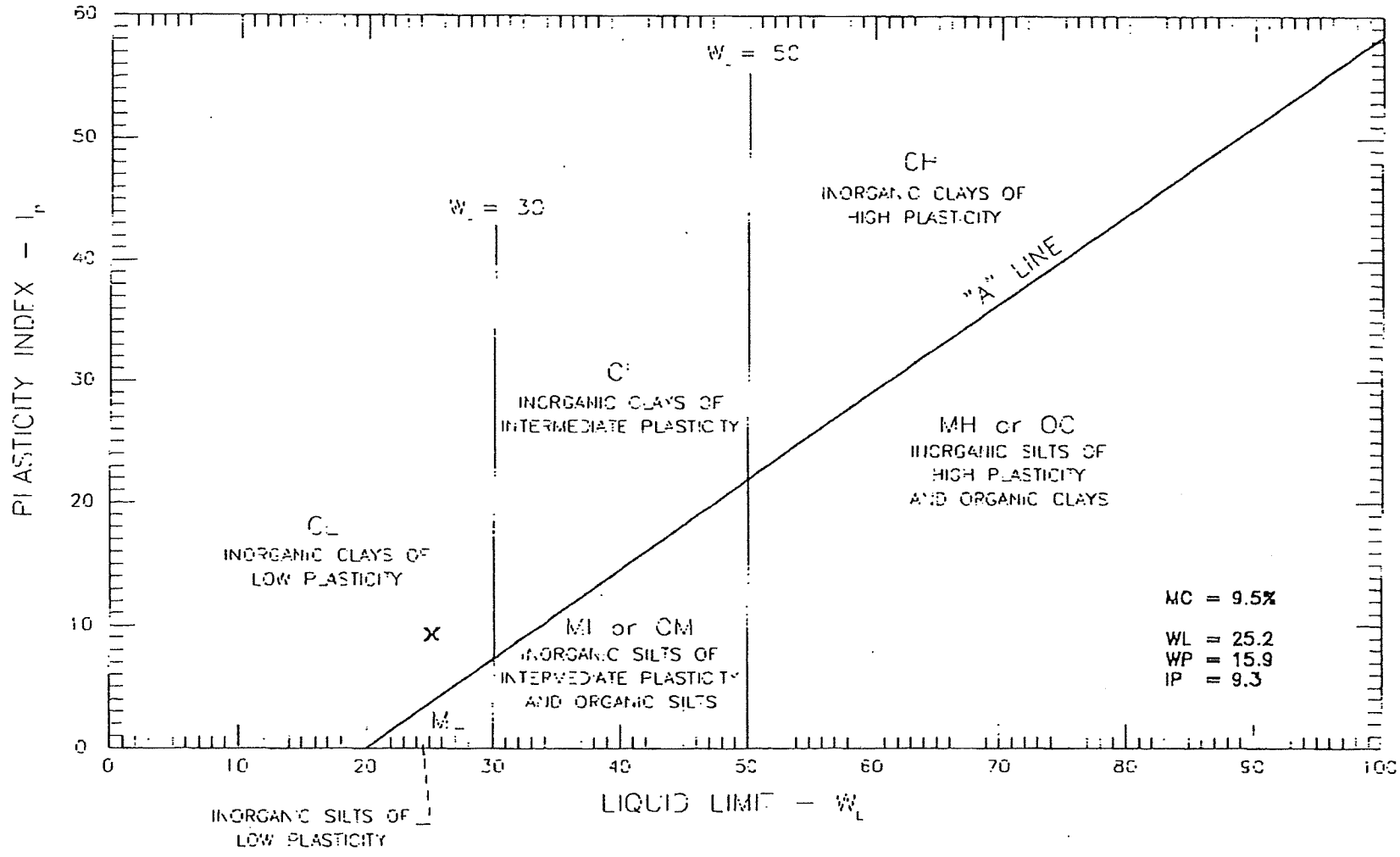


A2-24

GEONORTH ENGINEERING LTD.
1301 Kelliher Road
Prince George, BC V2L 5S8
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4/5
GRAIN SIZE ANALYSIS OF R-S5-ZS-02/07

SCALE:	DATE:
N.T.S	2007/06/07
PROJECT NO:	PLATE NO
K-2036	2036-B20



GeoNorth Engineering Ltd. 1301 Kelliher Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5-ZS-02/07	SCALE: N.T.S.	DATE: 2007/06/07
		PROJECT NO. K-2036	DRAWING NO. 2036-817

A2-22

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

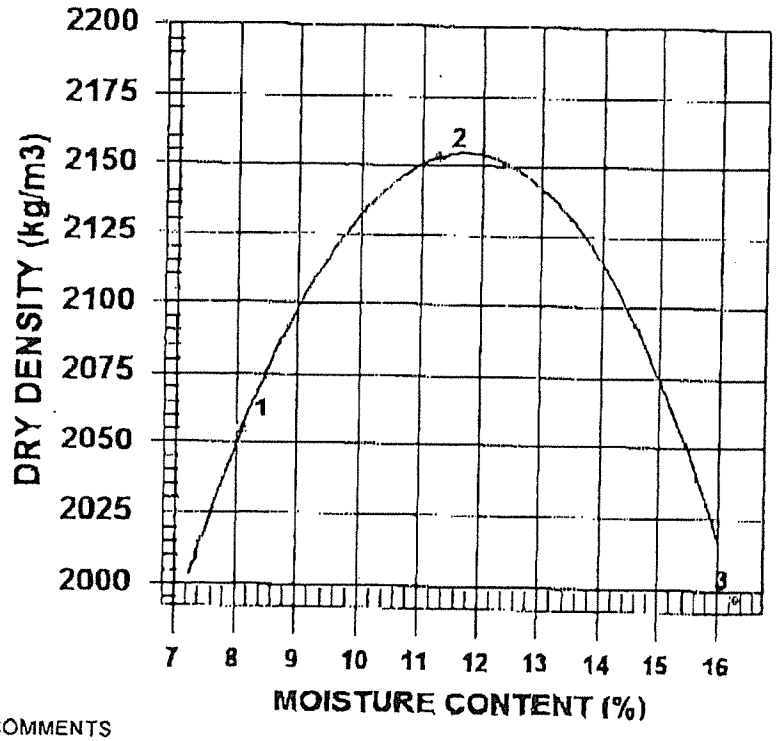
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

PROCTOR NO 24 DATE TESTED 2007.May.29 DATE RECEIVED 2007.May.25 DATE SAMPLED 2007.May.17

INSITU MOISTURE	N/A %
SAMPLED BY	Client - AC
TESTED BY	HJ
SUPPLIER	
SOURCE	R-S5-X5-02/07
MATERIAL IDENTIFICATION	
MAJOR COMPONENT	TILL
SIZE	
DESCRIPTION	
ROCK TYPE	

COMPACTION STANDARD	Standard Proctor, ASTM D698
COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE	Automatic
PREPARATION	Moist
OVERSIZE CORRECTION METHOD	ASTM 4718
RETAINED 4.75mm SCREEN	8.3 %
OVERSIZE SPECIFIC GRAVITY	2.66
TOTAL NUMBER OF TRIALS	3



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2221	2055	8.1
2	2396	2153	11.3
3	2322	1997	16.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2150	11.5
OVERSIZE CORRECTED	2190	10.5

COMMENTS

 2007.Jun.07 GeoNorth Engineering Ltd PER

AZ-23

1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Atln:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

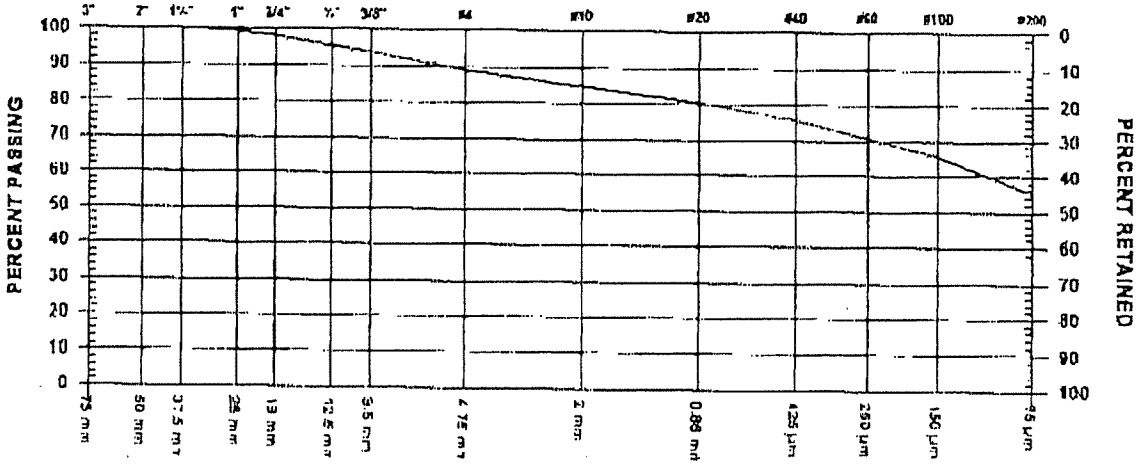
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO 27 DATE RECEIVED 2007.May.25 DATE TESTED 2007.May.31 DATE SAMPLED 2007.May.25

SUPPLIER
SOURCE R-S5-Z8-03/07
SPECIFICATION
MATERIAL TYPE Till

SAMPLED BY Client
TESTED BY HJ
TEST METHOD WASHED



GRAVEL SIZES			PERCENT PASSING	GRADATION LIMITS
3"	75	mm		
2"	50	mm		
1 1/2"	37.5	mm	100.0	
1"	25	mm	99.4	
3/4"	19	mm	98.0	
1/2"	12.5	mm	95.2	
3/8"	9.5	mm	93.6	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	89.1	
No. 10	2.00	mm	84.8	
No. 20	850	µm	80.4	
No. 40	425	µm	75.7	
No. 60	250	µm	70.7	
No. 100	150	µm	65.4	
No. 200	75	µm	54.8	

MOISTURE CONTENT 9.0%

COMMENTS
LOCATION: ZONE S, CHAINAGE: 38+00, ELEVATION: 948.5m
COARSE SPECIFIC GRAVITY = 2.667

 2007.Jun.07 GeoNorth Engineering Ltd PER

A2-24

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. Attn: Knight Piesold Consulting									Date: June 7, 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZS-03/07									Type: Till		
Sample #:		Test #:		Hole #:		Depth:			Time:		
Sampled By: Client - AG			Tested By: DJ						Checked By: NK		
Date Sampled: 05.17.07			Date Received: 05.25.07						Date Tested: 06.05.07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50.0	0.848	0 5	25.0	25.0	0.01286				0.064	50.0	**42.4**
50.0	0.848	1	22 5	25.0	0.01286				0.046	45.0	**38.2**
50.0	0 848	2	20 0	25.0	0.01286				0.033	40 0	**33.9**
50.0	0.848	4	18.0	25.0	0.01286				0.023	36.0	**30.5**
50.0	0.848	8	16.5	25.0	0.01286				0.017	33 0	**28.0**
50.0	0.848	15	14.5	25.0	0.01286				0 012	29.0	**24.6**
50.0	0.848	30	12.0	25.0	0.01286				0.009	24.0	**20.4**
50.0	0.848	60	9.5	25.0	0.01286				0.006	19.0	**16.1**
50.0	0.848	120	7 5	23.0	0.01317				0.004	15.0	**12.7**
50.0	0.848	240	6 0	23.0	0.01317				0.003	12 0	**10.2**
50.0	0.848	480	3.5	23 0	0.01317				0.002	7 0	**5.9**
50.0	0.848	1440	1.5	23.0	0.01317				0.001	3.0	**2.5**
Hydrometer #: 794968			Graduate #: 6			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		50 0	100.0	**84.8**
20	2.8		94.4	**80.1**
40	3.2		88.0	**74.6**
60	3.0		82.0	**69.5**
100	3.8		74.4	**63.1**
200	5.0		64.4	**54.6**
Pan	32.2			
Total	50.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis

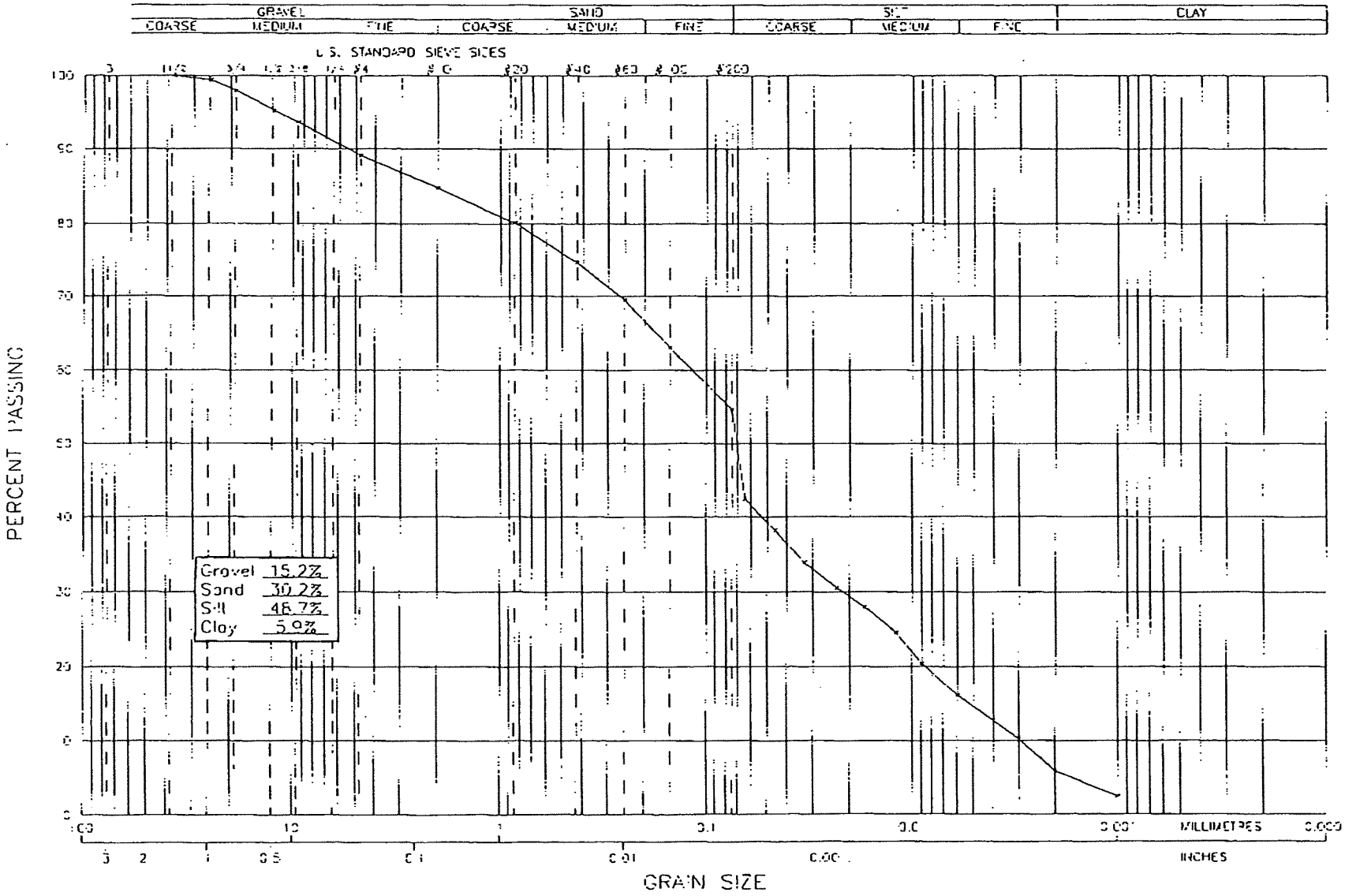
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9 5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100.+ Initial Moisture) =	

Nselco

AZ-25

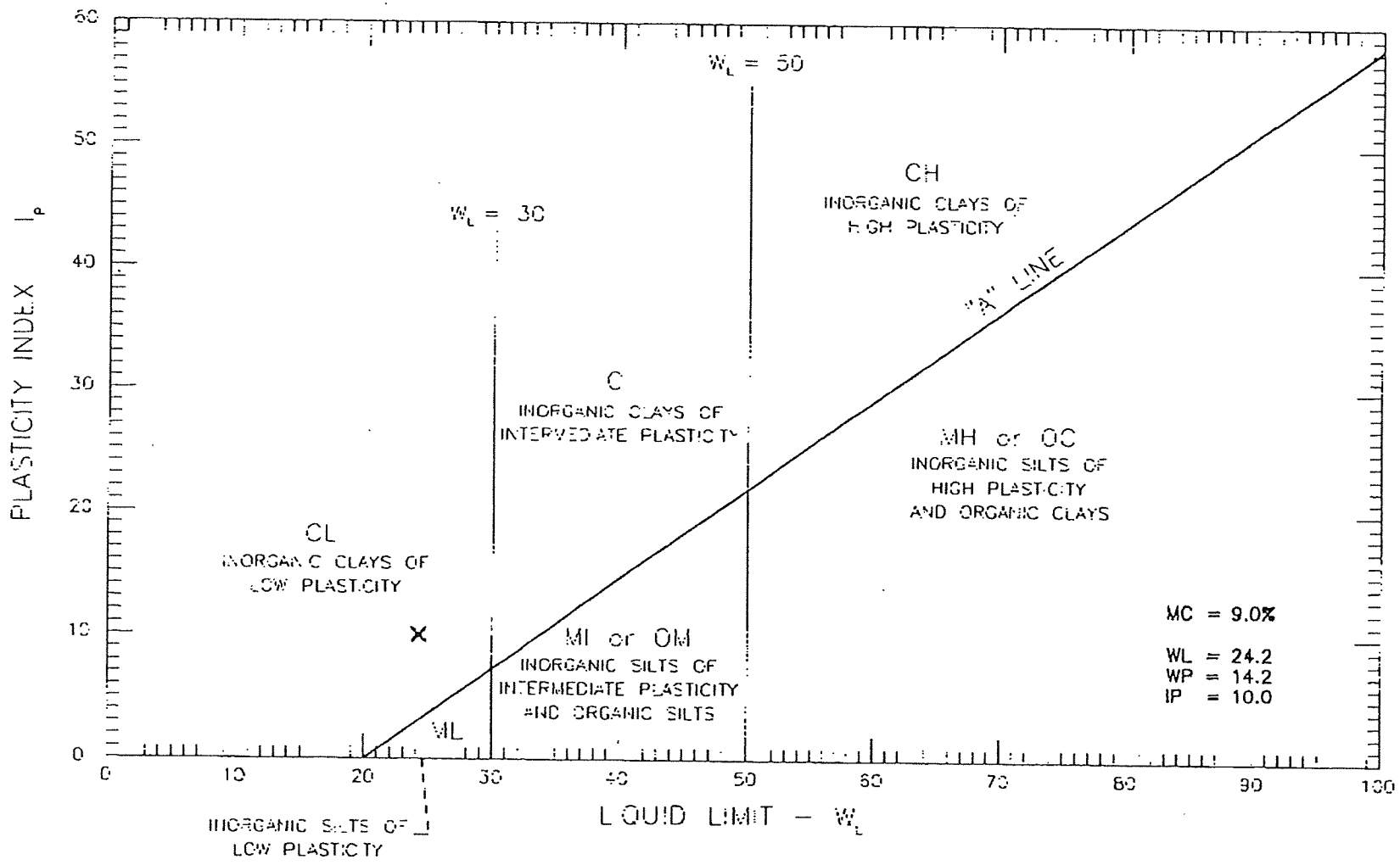


A2-26

GEONORTH ENGINEERING LTD.
1301 Kelsher Road
Prince George B.C. V2L 5S8
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4/5
GRAIN SIZE ANALYSIS OF R-S5-ZS-03/07

SCALE:	DATE:
N.T.S	2007/06/07
PROJECT NO:	PLATE NO
P-2036	2036-B21



GEONORTH ENGINEERING LTD. 1301 Feather Road Prince George, B.C. V2L 5S8 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5-ZS-03/07	SCALE: N.T.S	DATE: 2007/06/07
		PROJECT NO: K-2036	DRAWING NO: 2036-B19

A2-27

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn
C.C Knight Piesold Consulting

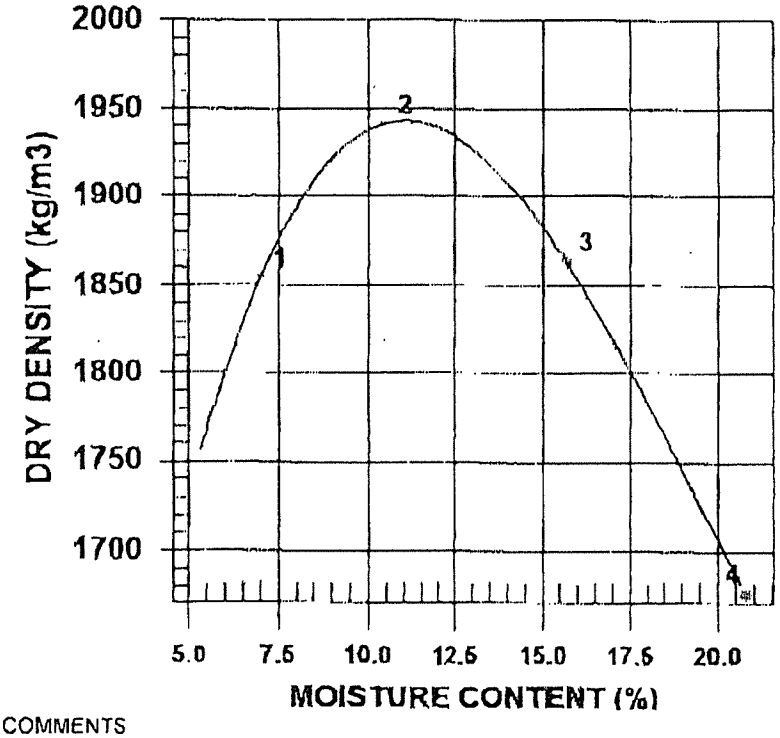
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

PROCTOR NO. 25 DATE TESTED 2007.Jun.05 DATE RECEIVED 2007.May.25 DATE SAMPLED 2007.May.17

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client - AC		
TESTED BY	DJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-S5-ZS-03/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	10.6 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.67
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1984	1854	7.0
2	2145	1941	10.5
3	2155	1863	15.7
4	2025	1676	20.8

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1940	11.0
OVERSIZE CORRECTED	2000	10.0

COMMENTS

 PER.

A2-28

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

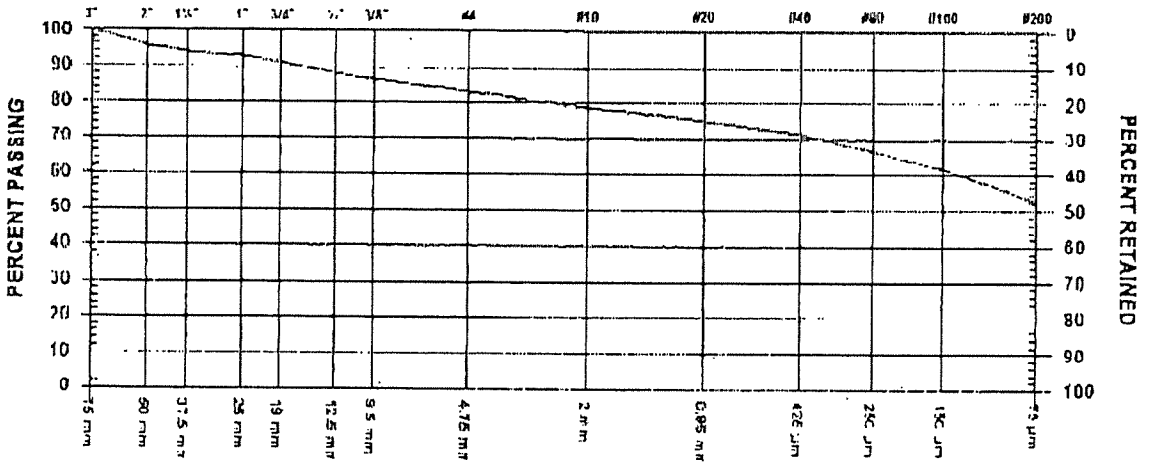
PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 31 DATE RECEIVED 2007.Jun.06 DATE TESTED 2007.Jun.08 DATE SAMPLED 2007.May.30

SUPPLIER
SOURCE B-85-Z6-04/07
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	95.6	
1 1/2"	37.5 mm	93.9	
1"	25 mm	92.8	
3/4"	19 mm	91.0	
1/2"	12.5 mm	88.1	
3/8"	9.5 mm	86.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	82.9	
No. 10	2.00 mm	78.8	
No. 20	850 µm	75.1	
No. 40	425 µm	71.0	
No. 60	250 µm	66.4	
No. 100	150 µm	61.7	
No. 200	75 µm	52.5	

MOISTURE CONTENT 9.1%

COMMENTS
LOCATION: PE, CHAINAGE: 34+50, ELEVATION: 947.9m

 2007.Jun.14 GeoNorth Engineering Ltd. PER.

AZ-29

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold									Date: June 14, 2007		
Project Name: MPCP - Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZS-04/07									Type. Till		
Sample #:		Test #		Hole #:		Depth: 947.9m			Time:		
Sampled By: Client - CG		Tested By. DJ							Checked By. NK		
Date Sampled: 05.30.07		Date Received: 06.06.07							Date Tested: 06.12 07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
60.0	0.788	0.5	35.5	22 0	0.01312				0.060	59.2	**46.6**
60.0	0.788	1	32.5	22.0	0.01312				0.044	54.2	**42.7**
60.0	0.788	2	30.5	22.0	0 01312				0.031	50.8	**40.0**
60 0	0.788	4	28.5	22.0	0 01312				0 022	47.5	**37.4**
60.0	0.788	8	26.0	22.0	0.01312				0.016	43.3	**34.1**
60.0	0.788	15	24.0	22.0	0 01312				0.012	40.0	**31.5**
60.0	0.788	30	21 5	22.0	0 01312				0 009	35.8	**28.2**
60.0	0.788	60	19.0	22.0	0.01312				0.006	31.7	**25.0**
60.0	0.788	120	16.5	22.0	0.01312				0.004	27.5	**21.7**
60.0	0.788	240	14 5	22.0	0 01312				0.003	24.2	**19.1**
60.0	0.788	480	11.5	22.0	0.01312				0.002	19.2	**15.1**
60.0	0.788	1440	10 5	22 0	0.01312				0.001	17 5	**13.8**
Hydrometer #. 794968			Graduate #: 6			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		60.0	100 0	**78.8**
20	2.6		95 7	**75.4**
40	3.7		89.5	**70.5**
60	3 7		83.3	**65.6**
100	4.2		76.3	**60.1**
200	6 0		66.3	**52.2**
Pan	39.8			
Total	60.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis

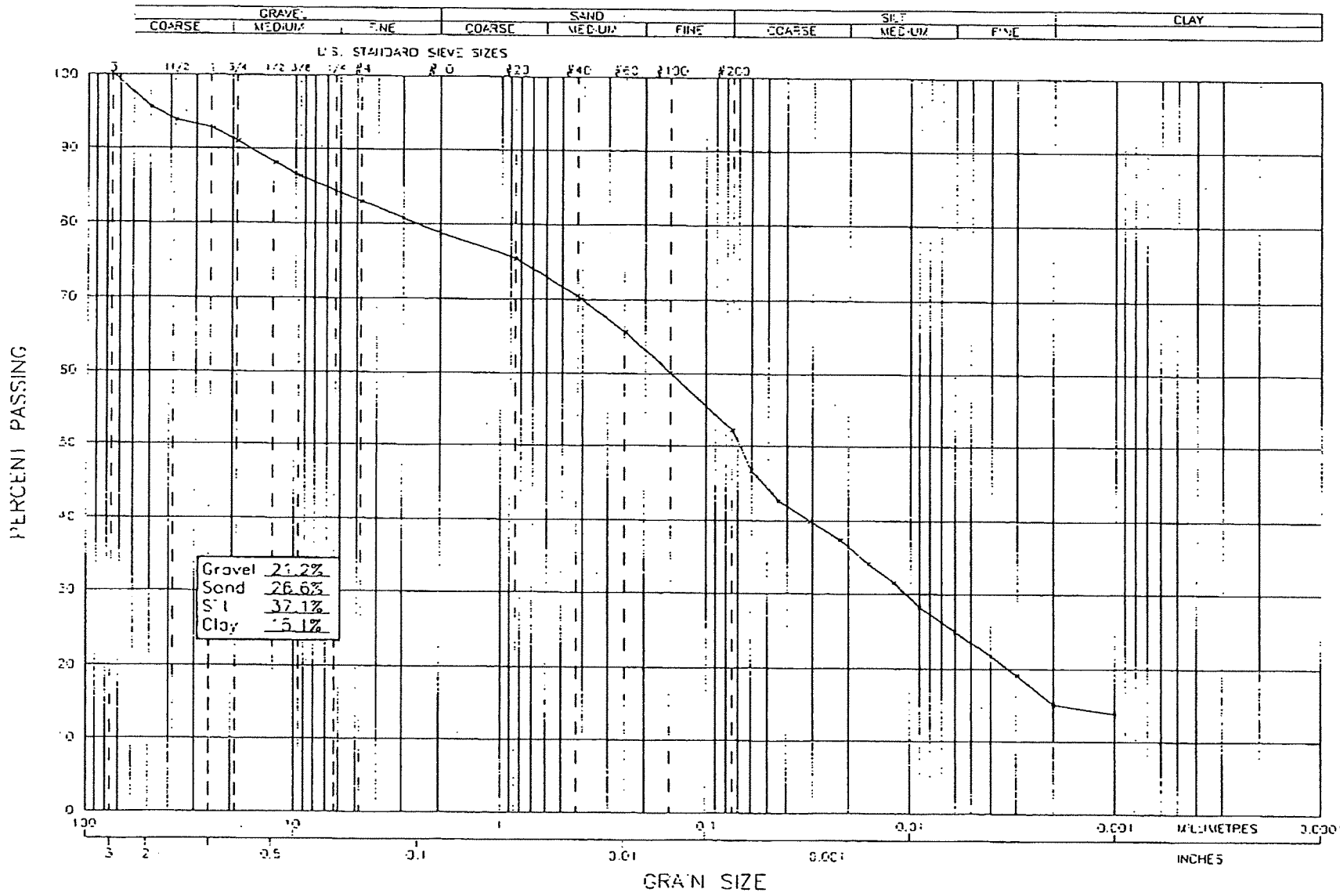
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp
38.1			
25 4			
19.0			
12 5			
9.5			
4 75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**9.1%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

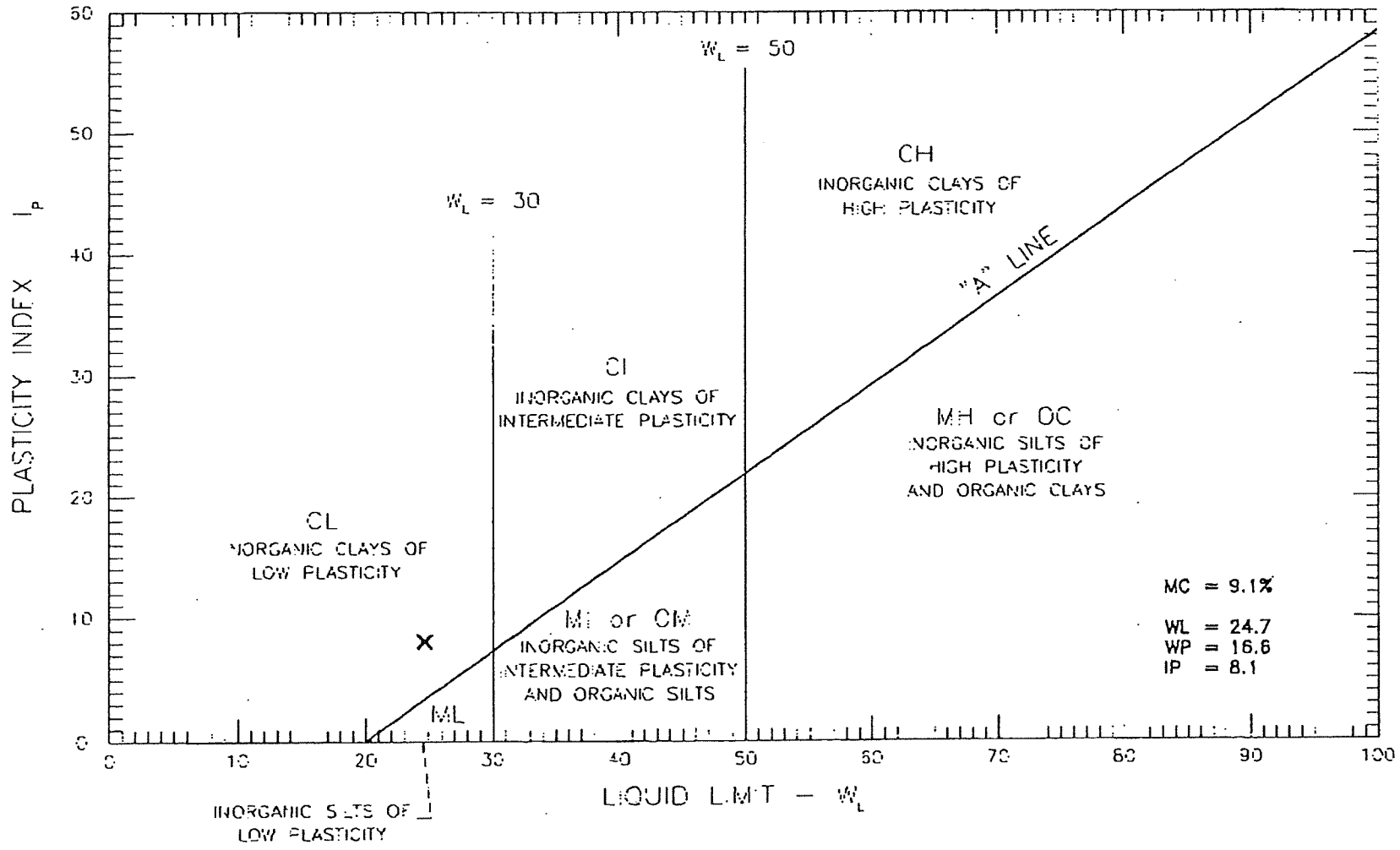
NoHoc

A2-36



A2-31

GeoNorth Engineering Ltd. 1301 Ketcher Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZS-04/07	SCALE: N.T.S	DATE: 2007/06/14
		PROJECT NO: K-2038	PLATE NO. 2038-326



GeoNorth Engineering Ltd.
1381 Kelliher Road
Prince George, B.C V2L 5S8
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4/5
ATTERBERG LIMITS OF R-S5-ZS-04/07

SCALE:	DATE.
N.T.S	2007/06/14
PROJECT NO.	DRAWING NO.
K-2036	2036-B25

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Marlel @ 250-790-2268

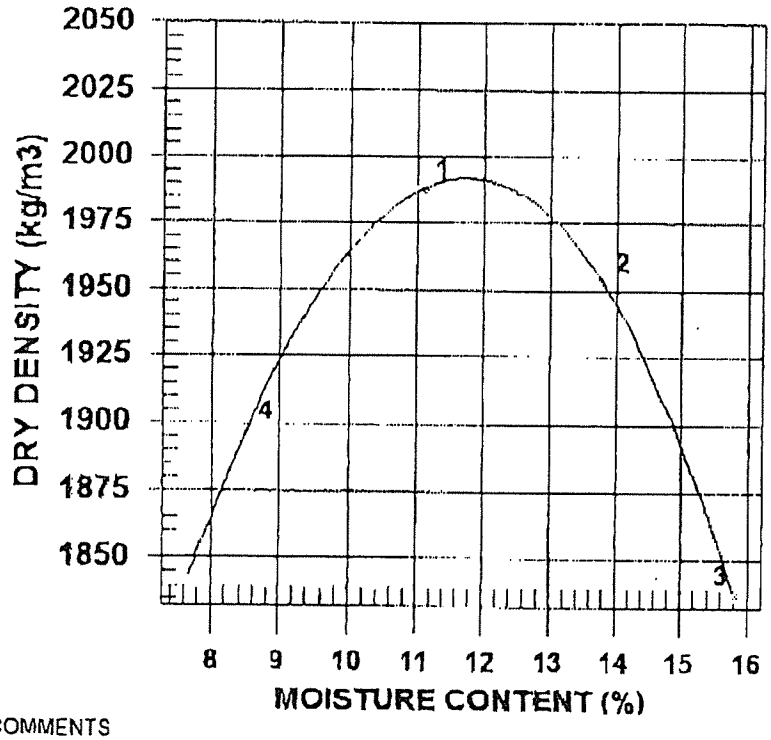
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

PROCTOR NO 29 DATE TESTED 2007.Jun.11 DATE RECEIVED 2007.Jun.06 DATE SAMPLED 2007.May.30

INSITU MOISTURE N/A %
SAMPLED BY CG - Client
TESTED BY CP
SUPPLIER
SOURCE R-S5-Z6-04/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT TILL
SIZE 50MM
DESCRIPTION SILTY/GRAVELLY
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 16.0 %
OVERSIZE SPECIFIC GRAVITY 2.71
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2209	1988	11.1
2	2222	1953	13.8
3	2127	1837	15.8
4	2058	1897	8.5

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2150	14.5
OVERSIZE CORRECTED	2220	12.5

COMMENTS
SPECIFIC GRAVITY OF ROCK - 2.705

SPECIFIC GRAVITY OF FINES - 2.684

 2007.Jun.14 GeoNorth Engineering Ltd PER

A2-33

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

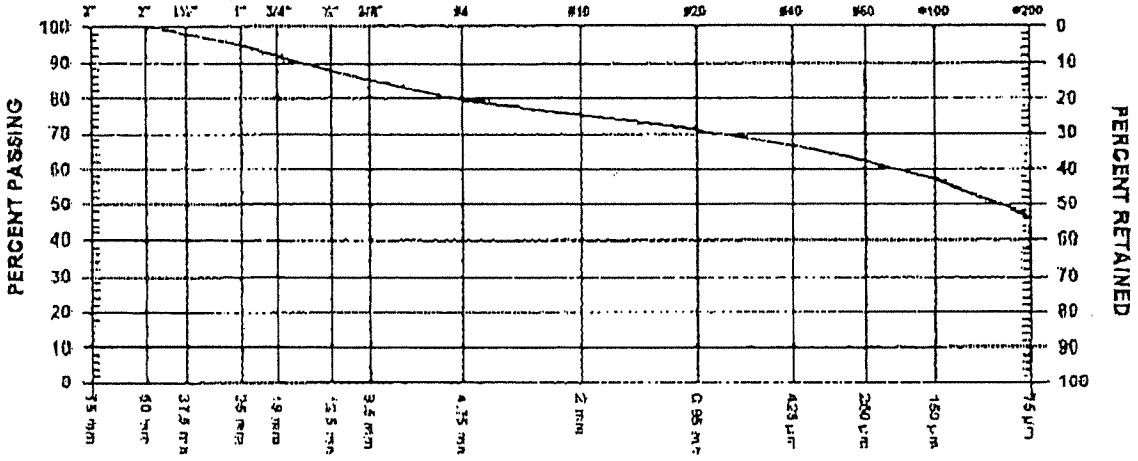
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
Mount Polley Mining Corp.
Likely
CONTRACTOR

SIEVE TEST NO 34 DATE RECEIVED 2007.Jun.29 DATE TESTED 2007.Jul.05 DATE SAMPLED 2007.Jun.20

SUPPLIER
SOURCE R-SB-ZS-05/07
SPECIFICATION
MATERIAL TYPE Till

SAMPLED BY EC - Client
TESTED BY CP/DJ
TEST METHOD WASHED



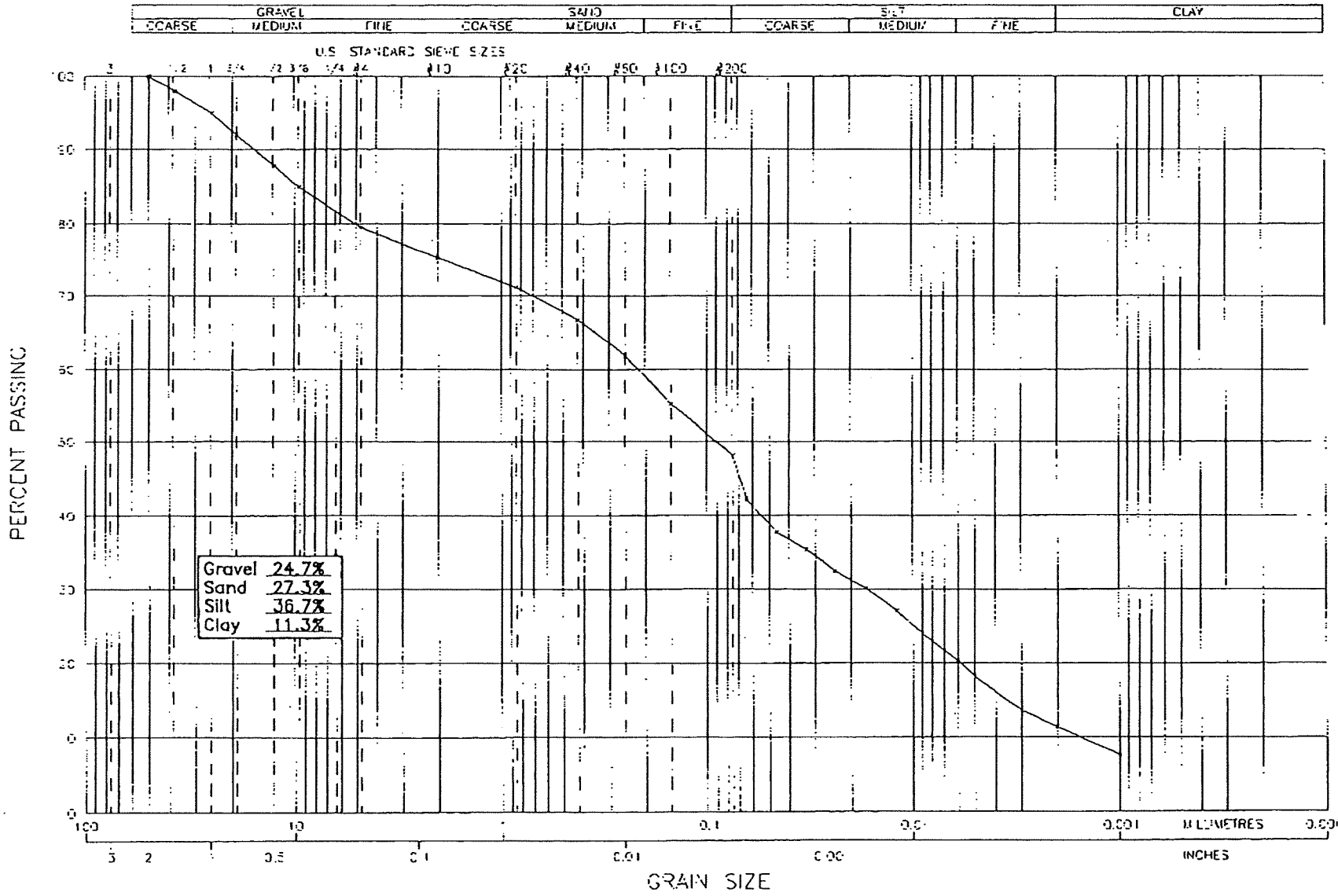
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	98.0	
1"	25 mm	95.0	
3/4"	19 mm	92.0	
1/2"	12.5 mm	87.8	
3/8"	9.5 mm	85.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	79.5	
No. 10	2.00 mm	75.3	
No. 20	850 µm	70.9	
No. 40	425 µm	66.5	
No. 60	250 µm	62.0	
No. 100	150 µm	57.2	
No. 200	75 µm	46.3	

COMMENTS
LOCATION: PB, CHAINAGE: 39+50, ELEVATION: 947.5m

 PER. _____

AZ-34



GeoNorth Engineering Ltd. 1301 Kelliher Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZS-05/07	SCALE: N.T.S	DATE: 2007/07/10
		PROJECT NO: K-2036	PLATE NO. 2036-331

A2-35

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold									Date: July 10, 2007		
Project Name: Mount Polley Construction Program Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZS-05/07									Type: TILL		
Sample #:		Test #:		**Hole #:**		**Depth:**			Time.		
Sampled By: EC - Client			Tested By: DJ						Checked By: NK		
Date Sampled: 06.20.07			Date Received: 06.29.07						Date Tested: 07.09.07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50.0	0.753	0.5	28.0	23.0	0.01317				0.064	56.0	**42.2**
50.0	0.753	1	25.0	23.0	0 01317				0.046	50.0	**37.7**
50.0	0 753	2	23.5	23.0	0 01317				0.033	47.0	**35.4**
50.0	0 753	4	21.5	23.0	0 01317				0.024	43.0	**32.4**
50.0	0.753	8	20.0	23 0	0 01317				0.017	40 0	**30.1**
50.0	0.753	15	18.0	23.0	0.01317				0.012	36.0	**27.1**
50.0	0.753	30	16.0	23.0	0.01317				0.009	32 0	**24.1**
50.0	0.753	60	13.5	23.0	0.01317				0.006	27.0	**20.3**
50.0	0.753	120	12.0	23.0	0.01317				0.005	24.0	**18.1**
50.0	0.753	240	9.0	23.0	0.01317				0.003	18.0	**13.6**
50.0	0.753	480	7.5	24 0	0.01301				0.002	15.0	**11.3**
50.0	0.753	1440	5.0	24.0	0.01301				0.001	10.0	**7.5**
Hydrometer #: 794968			Graduate #: 6			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

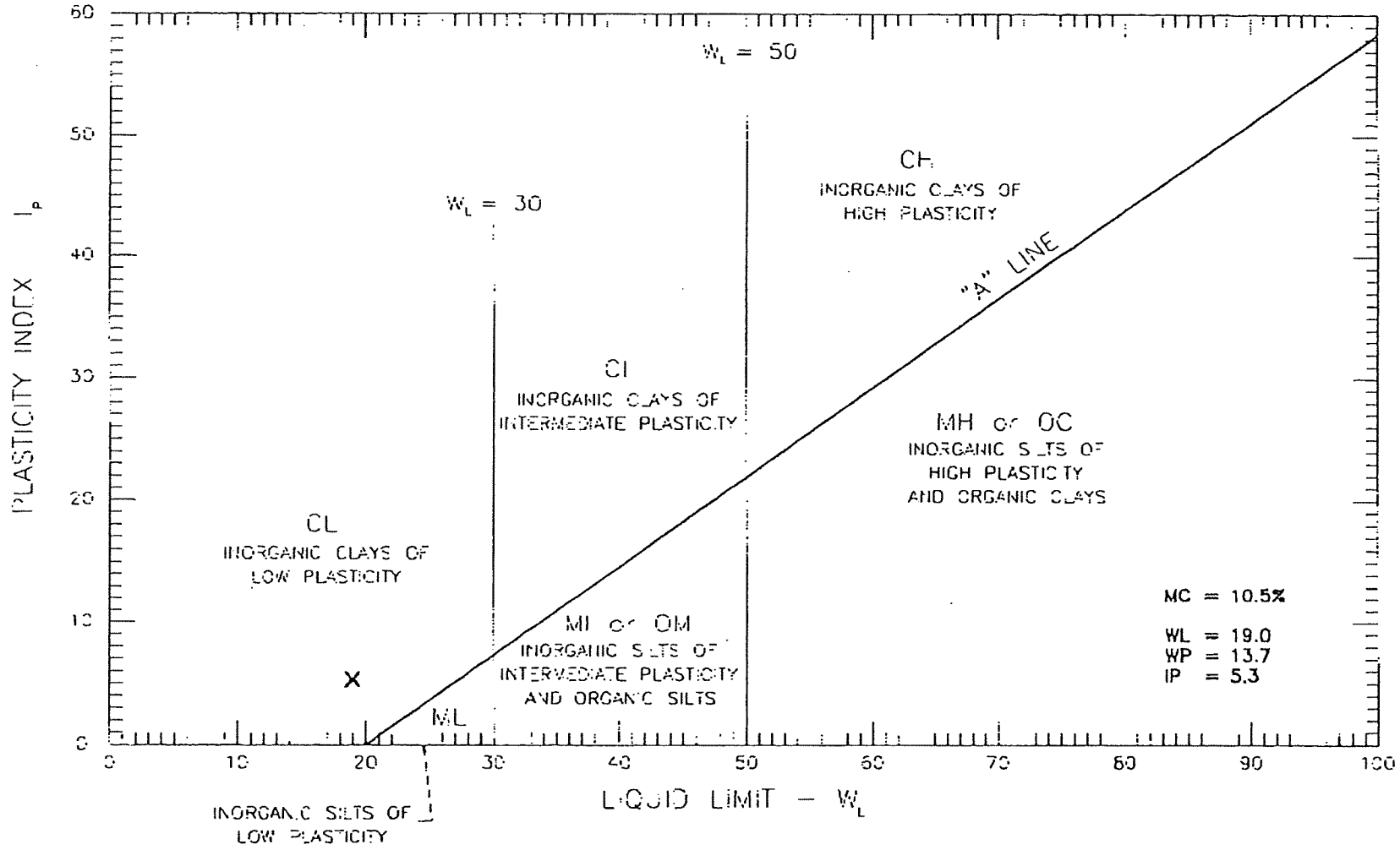
Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		50.0	100.0	**75.3**
20	2.7	47.3	94.6	**71.2**
40	2.9	44.4	88.8	**66.8**
60	3.3	41.1	82.2	**61.9**
100	4.4	36.7	73.4	**55.3**
200	4.8	31.9	63.8	**48.0**
Pan	31.9			
Total	50.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt Passing	% Finer Than Orig. Samp.
38.1			
25 4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt & Tare	
Water Wt.	
Tare Wt	
Wt. of Dry Soil	=W
Moisture Content	**10.5%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Nselco

A2-36



GEONORTH ENGINEERING LTD. 1301 Kelther Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5-ZS-05/07	SCALE: N.T.S	DATE: 2007/07/10
		PROJECT NO: K-2036	DRAWING NO. 2036-329

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

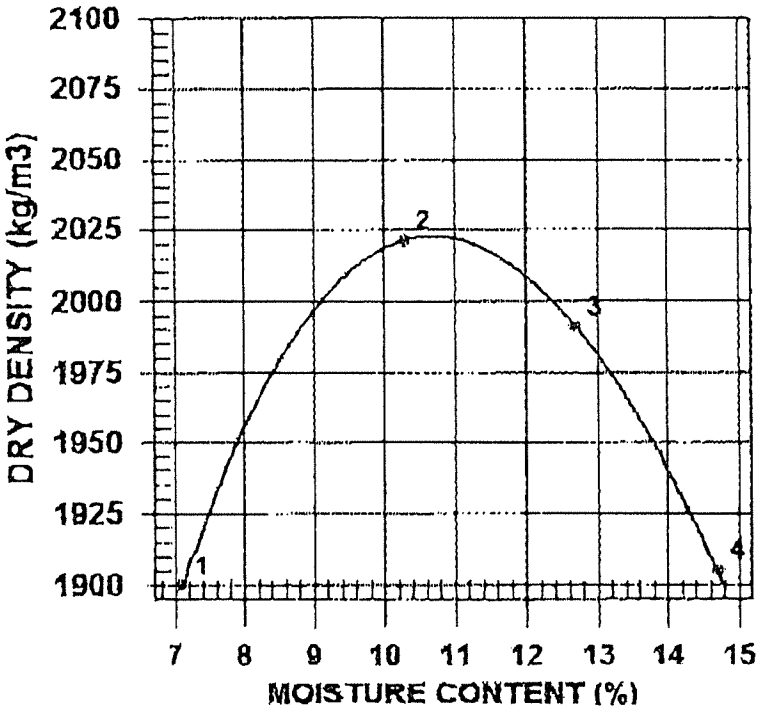
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

PROCTOR NO. 32 DATE TESTED 2007.Jul.04 DATE RECEIVED 2007.Jun.29 DATE SAMPLED 2007.Jun.20

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	EC - Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	CP	RAMMER TYPE	Automatic
SUPPLIER		PREPARATION	Moist
SOURCE	R-S5-ZS-05-07	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	19.0 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE	50MM	TOTAL NUMBER OF TRIALS	4
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2035	1900	7.1
2	2229	2021	10.3
3	2244	1991	12.7
4	2185	1905	14.7

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2020	10.5
OVERSIZE CORRECTED	2120	8.5

COMMENTS

 PER.

A2-38

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

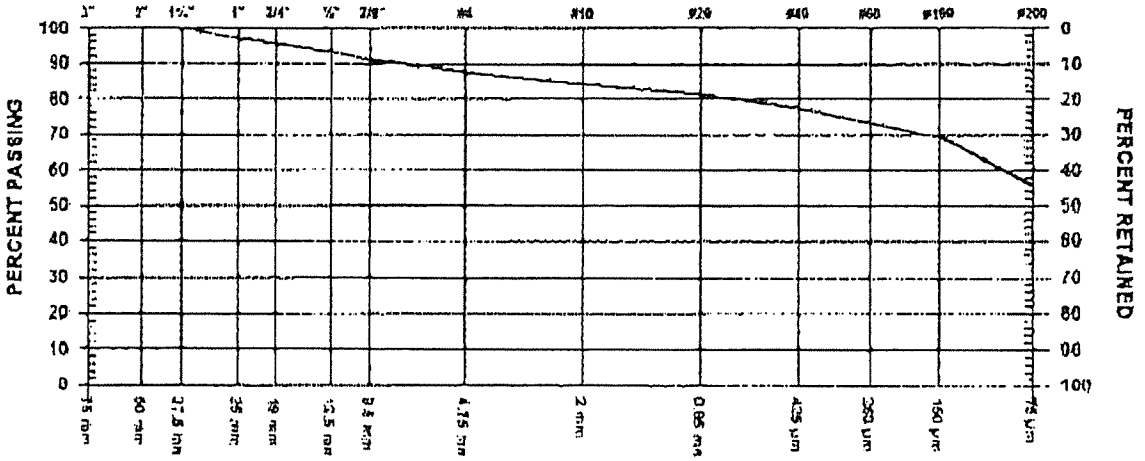
Mount Polley Mining Corp.
Likely

CONTRACTOR

SIEVE TEST NO. 35 DATE RECEIVED 2007.Jun.29 DATE TESTED 2007.Jul.05 DATE SAMPLED 2007.Jun.22

SUPPLIER
SOURCE R-S5-ZS-06/07
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CG - Client
TESTED BY AG
TEST METHOD WASHED

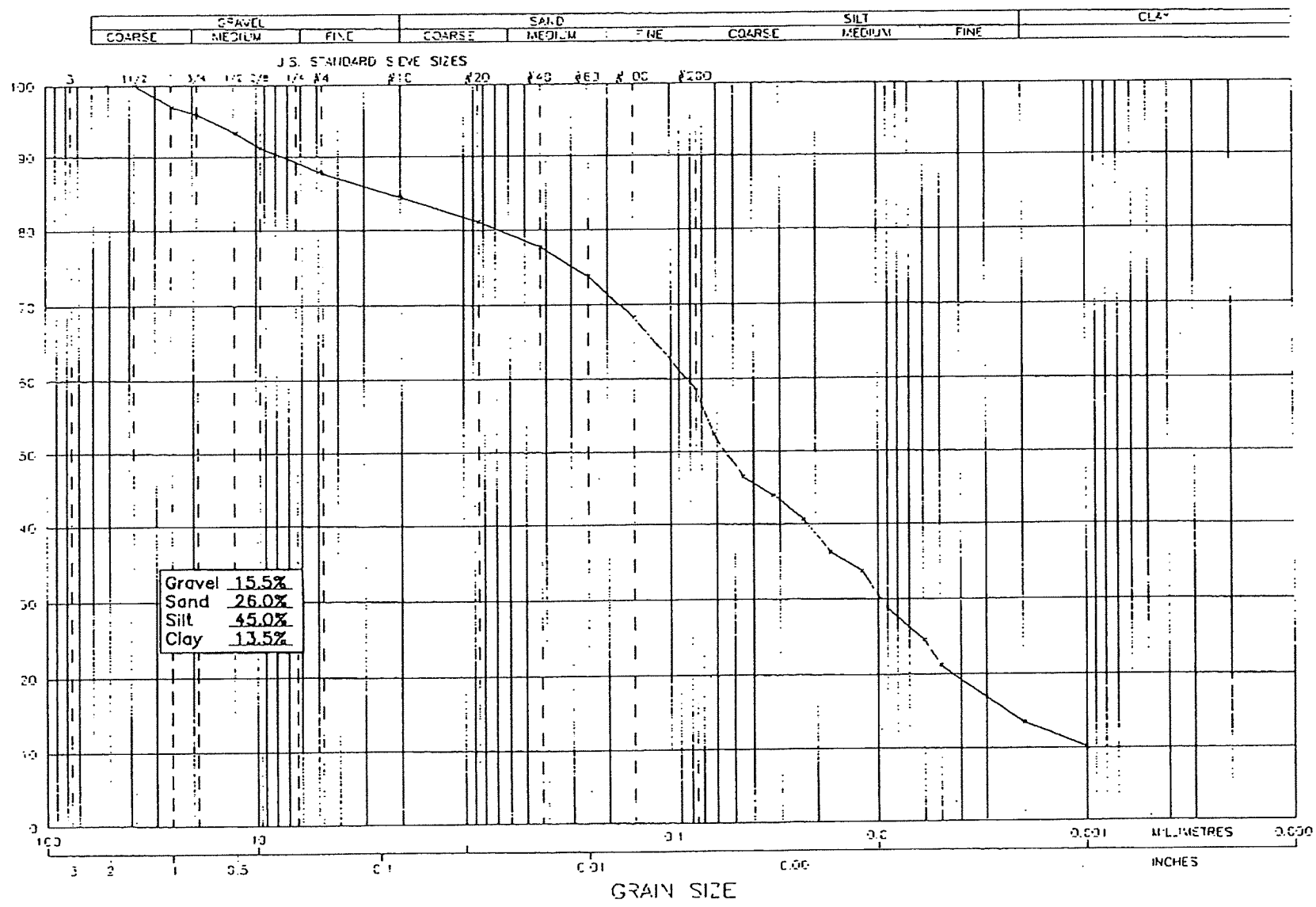


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	96.9	
3/4"	19 mm	95.8	
1/2"	12.5 mm	93.2	
3/8"	9.5 mm	91.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	87.8	
No. 10	2.00 mm	84.5	
No. 20	850 µm	81.1	
No. 40	425 µm	77.5	
No. 60	250 µm	73.3	
No. 100	150 µm	69.3	
No. 200	75 µm	55.8	

COMMENTS
LOCATION: PE, CHAINAGE: 41+25, ELEVATION: 948.8m

A2-39



AZ-40

GeoNorth Engineering Ltd.	MOUNT POLLEY MINING CORP.	SCALE:	DATE
1301 Kelther Road Prince George, B.C. V2L 5S8 Tel: (250) 564-4304 Fax (250) 564-9323	M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZS-06/07	N.T.S	2007/07/10
		PROJECT NO. K-2036	PLATE NO. 2036-B32

GeoNorth Engineering

Test Designation. ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. Attn: Knight Piesold									Date: July 10, 2007		
Project Name: Mount Polley Construction Program Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZS-06/07									Type. TILL		
Sample #:		Test #:		**Hole #:**		**Depth:**			Time:		
Sampled By: CG - Client			Tested By. DJ						Checked By. NK		
Date Sampled: 06.22.07			Date Received: 06.29.07						Date Tested: 07 09.07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50.0	0.845	0.5	31.0	23 0	0 01317				0.062	62.0	**52.4**
50.0	0.845	1	27.5	23.0	0.01317				0.045	55.0	**46.5**
50.0	0.845	2	26.0	23.0	0.01317				0.032	52.0	**43.9**
50.0	0.845	4	24.0	23.0	0.01317				0.023	48.0	**40.6**
50.0	0.845	8	21.5	23.0	0.01317				0.017	43.0	**36.3**
50.0	0.845	15	20 0	23.0	0.01317				0.012	40.0	**33.8**
50.0	0.845	30	17.0	23.0	0.01317				0 009	34 0	**28.7**
50.0	0.845	60	14.5	23.0	0.01317				0.006	29.0	**24.5**
50 0	0.845	120	12.5	23.0	0.01317				0.005	25 0	**21.1**
50.0	0.845	240	10.0	23.0	0.01317				0 003	20 0	**16.9**
50.0	0.845	480	8.0	24.0	0.01301				0.002	16.0	**13.5**
50.0	0.845	1440	6 0	24.0	0.01301				0.001	12 0	**10.1**
Hydrometer #: 794968			Graduate #: 7			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

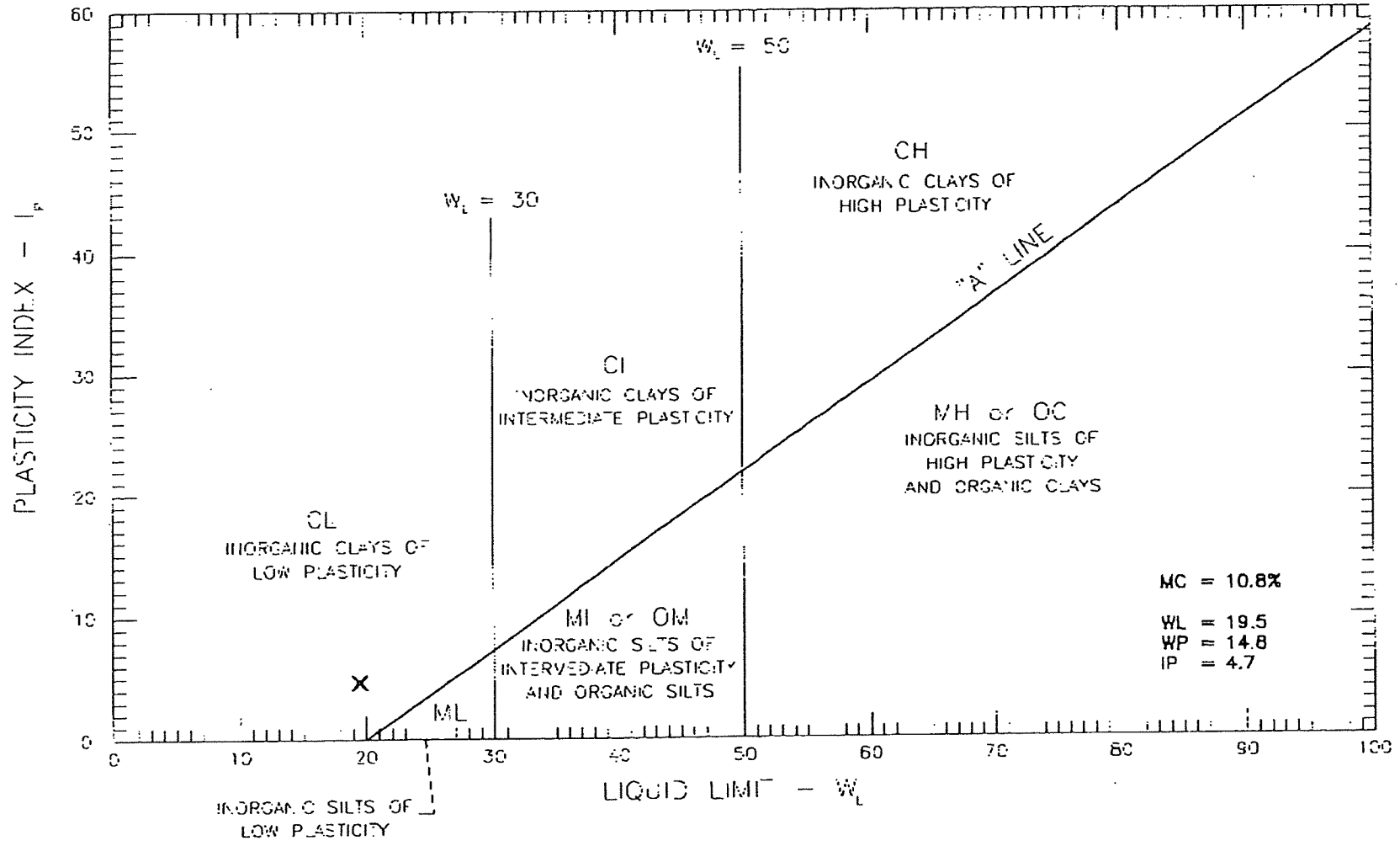
Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		50.0	100 0	**84.5**
20	2.0	48.0	96.0	**81.1**
40	2.0	46.0	92 0	**77.7**
60	2.4	43.6	87 2	**73.7**
100	3.2	40.2	80.8	**68.3**
200	5.8	34.6	69.2	**58.5**
Pan	34.6			
Total	50.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt Passing	% Finer Than Orig. Samp.
38.1			
25 4			
19.0			
12.5			
9.5			
4 75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**10.8%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Noe co

A2-41



GEONORTH ENGINEERING LTD. 1301 Kelther Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5-ZS-06/07	SCALE: N.T.S.	DATE: 2007/07/10
		PROJECT NO: 1-2036	DRAWING NO: 2036-330

A2-42

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c Knight Piesold Consulting

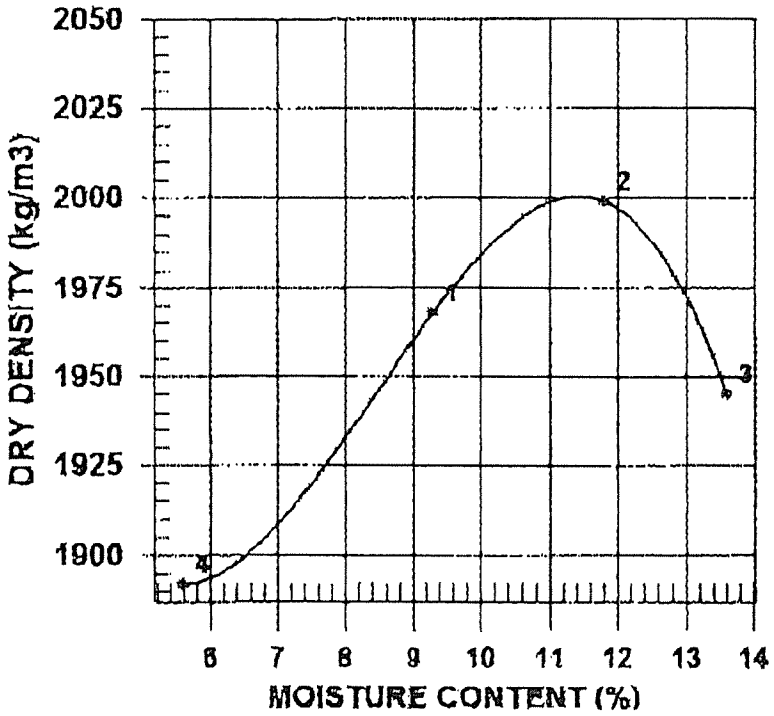
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO 33 DATE TESTED 2007.Jul.05 DATE RECEIVED 2007.Jun.29 DATE SAMPLED 2007.Jun.22

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CG - Client		
TESTED BY	CP	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-SS-ZS-06/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	38MM	RETAINED 4.75mm SCREEN	11.4 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.65
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2151	1968	9.3
2	2235	1999	11.8
3	2210	1945	13.6
4	1998	1892	5.6

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2000	11.5
OVERSIZE CORRECTED	2060	10.5

COMMENTS

PER. _____

A2-43

1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

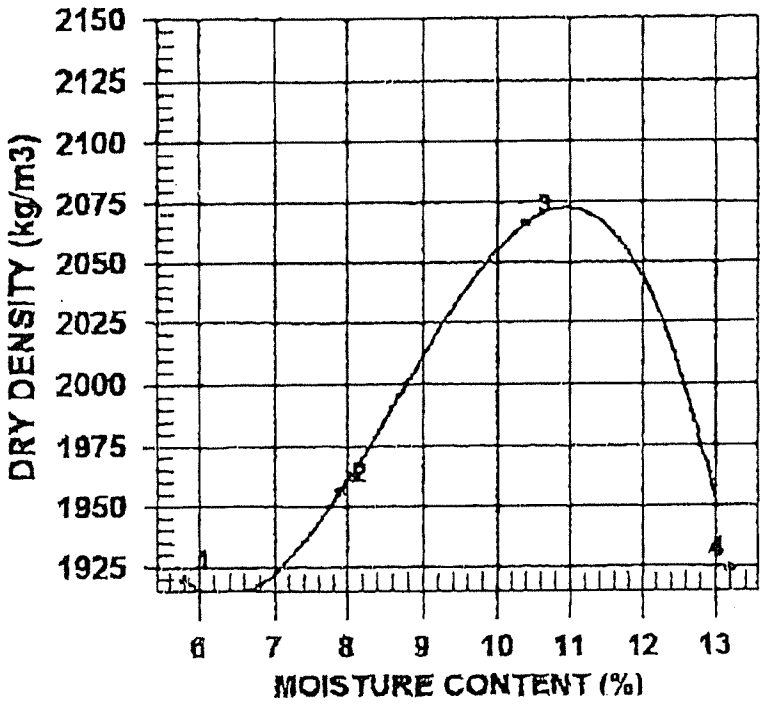
PROJECT M.P. Construction Program Stage 4/5 Materials Testing
Mount Polley Mining Corp.
Likely

CONTRACTOR

PROCTOR NO. 35 DATE TESTED 2007.Aug.09 DATE RECEIVED 2007.Aug.01 DATE SAMPLED 2007.Jul.29

INSITU MOISTURE N/A %
SAMPLED BY EC-client
TESTED BY DJ
SUPPLIER
SOURCE R-S5-ZS-07-07
MATERIAL IDENTIFICATION
MAJOR COMPONENT TILL
SIZE
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 25.0 %
OVERSIZE SPECIFIC GRAVITY 2.67
TOTAL NUMBER OF TRIALS 4



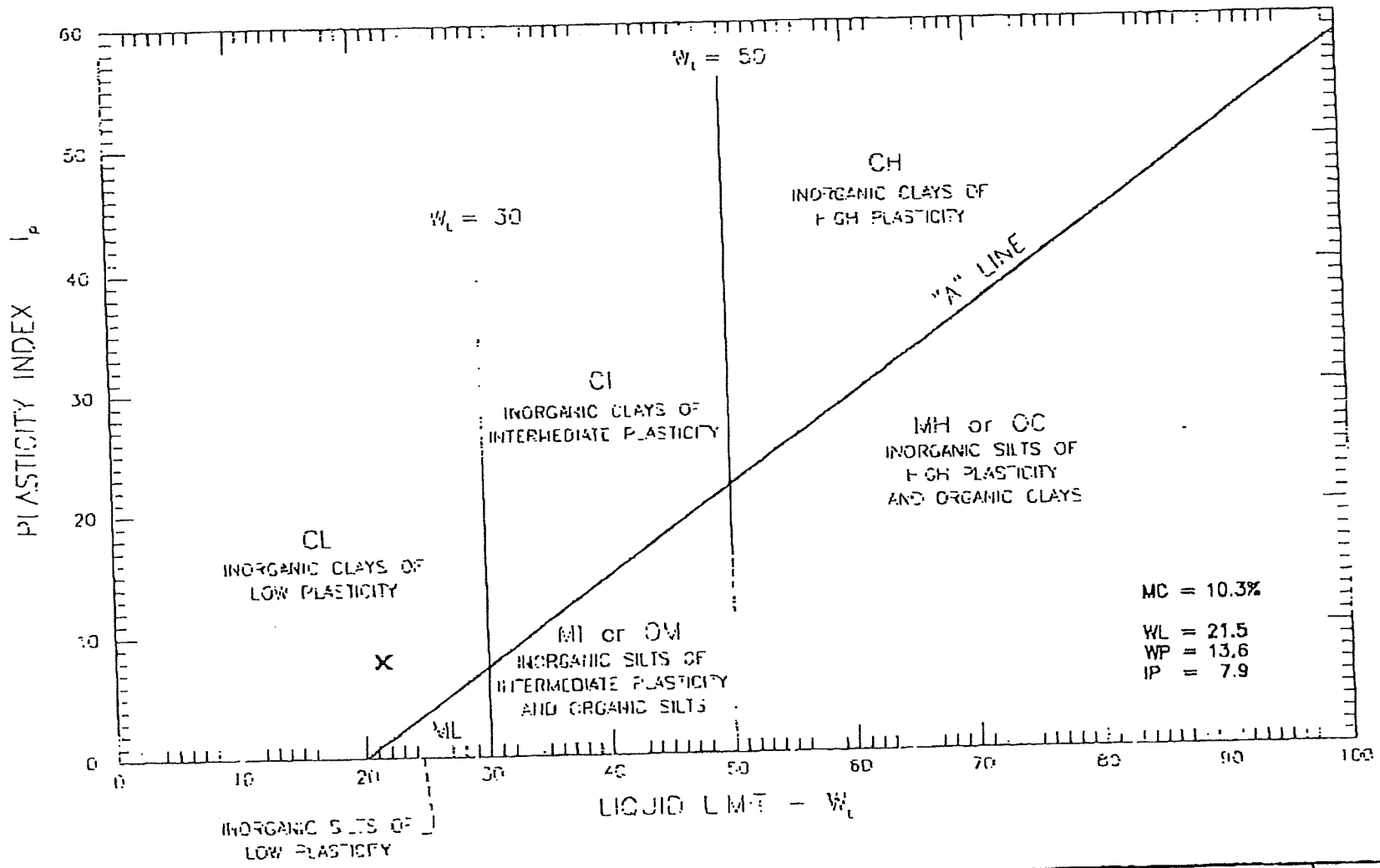
TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2031	1920	5.8
2	2110	1956	7.9
3	2281	2066	10.4
4	2178	1924	13.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2070	11.0
OVERSIZE CORRECTED	2190	8.5

COMMENTS

 2007.Aug.13 GeoNorth Engineering Ltd. PER.

A2-44



GEONORTH ENGINEERING LTD. 1201 Kelliher Road Prince George, BC V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-55-ZS-07/07	SCALE: N.T.S.	DATE: 2007/08/10
		PROJECT NO: K-2036	DRAWING NO. 2036-B33

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

1.4.5C

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

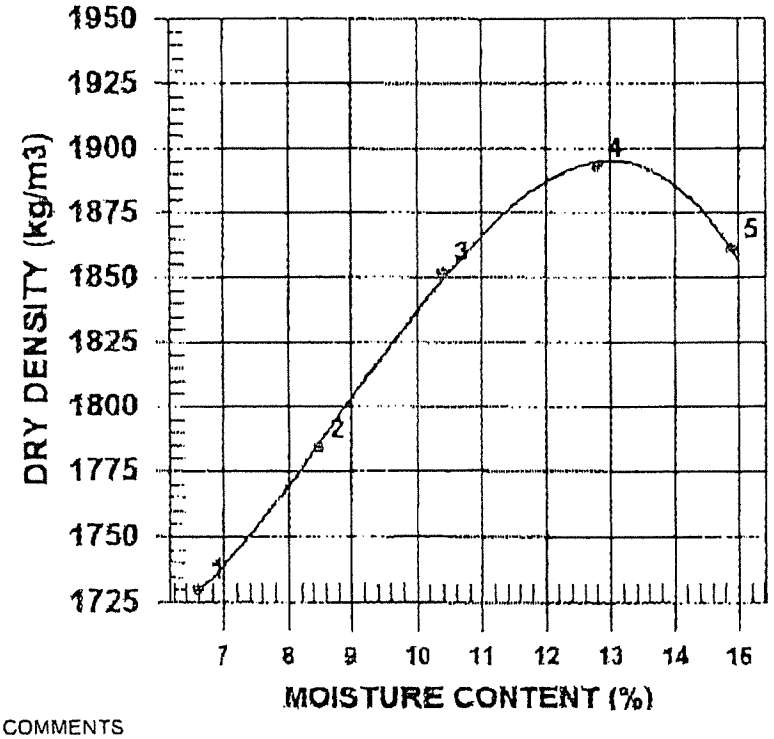
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO. 44 DATE TESTED 2007.Oct.10 DATE RECEIVED 2007.Sep.27 DATE SAMPLED 2007.Sep.18

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	SR	RAMMER TYPE	Automatic
SUPPLIER		PREPARATION	Moist
SOURCE	R-55-ZS-08/07	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	18.0 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.63
SIZE	50MM	TOTAL NUMBER OF TRIALS	5
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1844	1730	6.6
2	1936	1784	8.5
3	2045	1852	10.4
4	2135	1893	12.8
5	2138	1861	14.9

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1900	13.0
OVERSIZE CORRECTED	2000	11.0

COMMENTS
SPECIFIC GRAVITY OF FINES = 2.631

 PER

A2-46

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

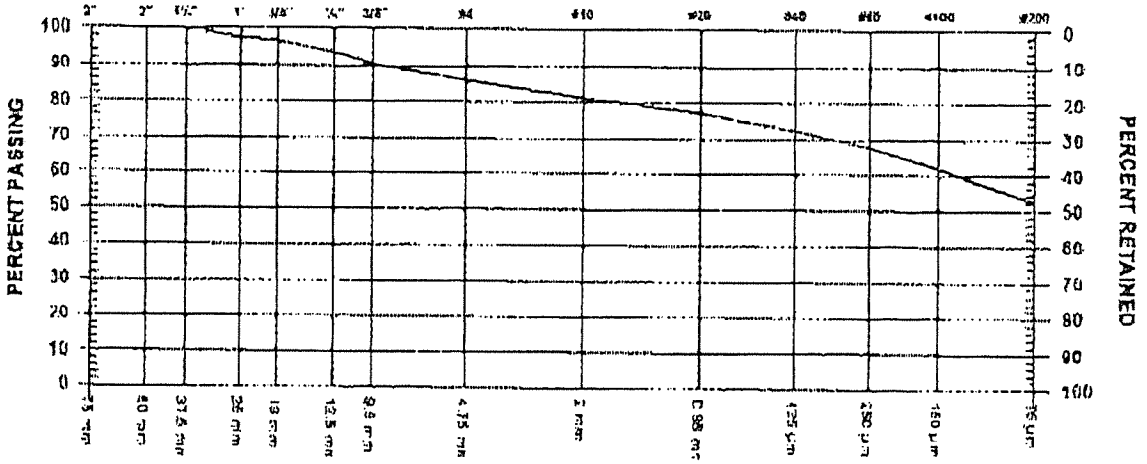
Mount Polley Mining Corp.
Likely

CONTRACTOR

SIEVE TEST NO. 45 DATE RECEIVED 2007.Sep.27 DATE TESTED 2007.Oct.11 DATE SAMPLED 2007.Sep.18

SUPPLIER
SOURCE R-S5-ZS-08/07
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client
TESTED BY DJ
TEST METHOD WASHED



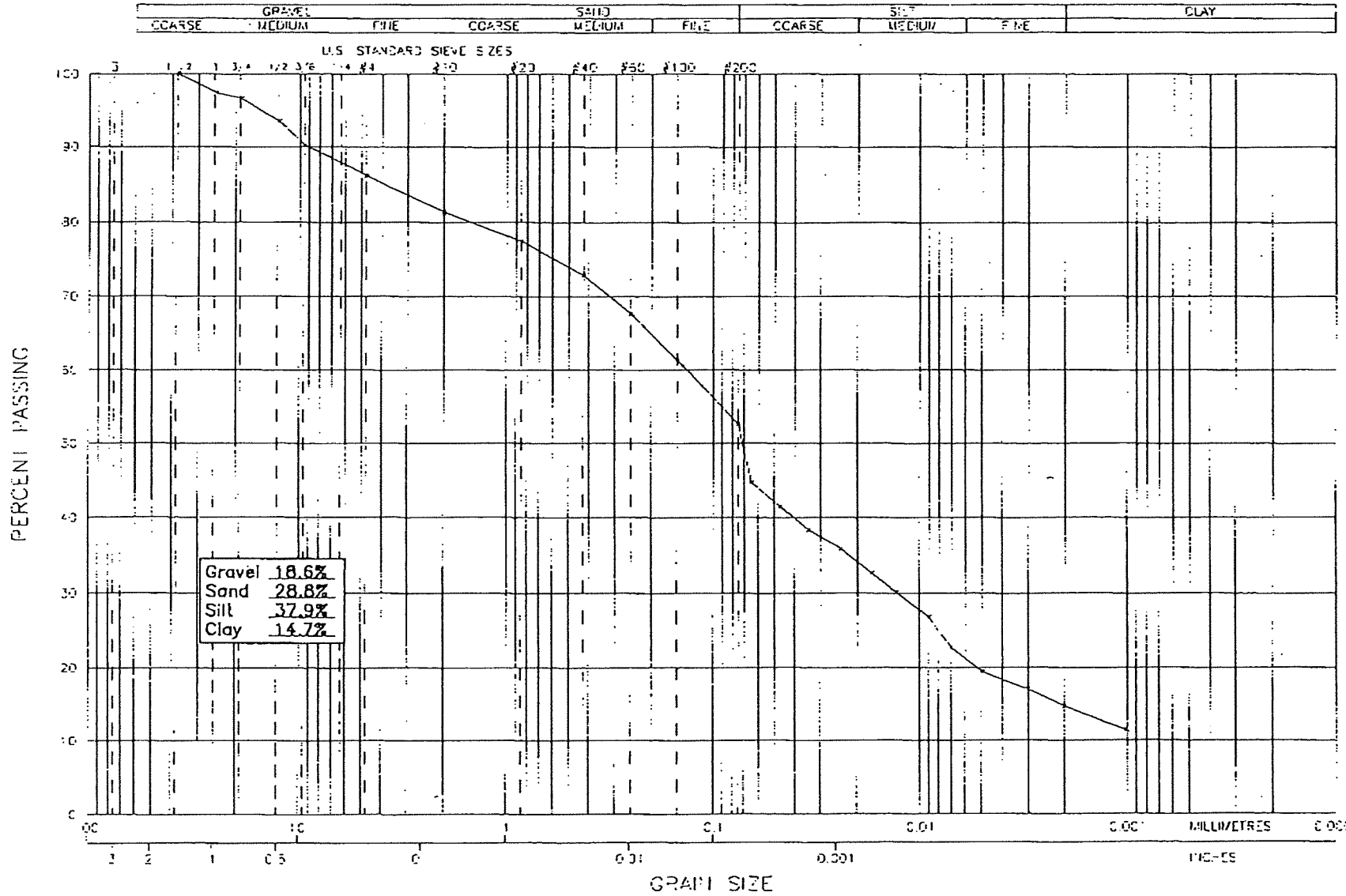
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	97.4	
3/4"	19 mm	96.6	
1/2"	12.5 mm	93.5	
3/8"	9.5 mm	90.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	86.2	
No. 10	2.00 mm	81.4	
No. 20	850 µm	76.9	
No. 40	425 µm	72.3	
No. 60	250 µm	67.6	
No. 100	150 µm	61.8	
No. 200	75 µm	52.5	

MOISTURE CONTENT 11.9%

COMMENTS

A2-47



AZ-48

GEONORTH ENGINEERING LTD.
1301 Kellner Road
Prince George, B.C. V2L 5S2
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4/5
GRAIN SIZE ANALYSIS OF R-S5-ZS-08/07

SCALE	DATE
N.T.S.	2007/10/15
PROJECT NO: 4-2035	PLATE NO 2035-B43

GeoNorth Engineering

Test Designation. ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp Attn: Knight Piesold									Date. October 15, 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZS-08/07									Type. TILL		
Sample #:		Test #		**Hole #:**		**Depth:**			Time:		
Sampled By: Client			Tested By: DJ						Checked By: NK		
Date Sampled. 09.18 07			Date Received 09.27 07						Date Tested: 10 11.07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50 0	0.814	0 5	27.5	21.0	0 01348				0.065	55.0	**44.8**
50.0	0.814	1	25 5	21.0	0 01348				0.047	51.0	**41.5**
50.0	0.814	2	23.5	21.0	0 01348				0.034	47.0	**38.3**
50.0	0 814	4	22 0	21.0	0.01348				0 024	44.0	**35.8**
50.0	0 814	8	20.0	21 0	0.01348				0 017	40.0	**32.6**
50.0	0.814	15	18.5	21 0	0 01348				0.013	37.0	**30.1**
50 0	0.814	30	16 5	21.0	0.01348				0.009	33.0	**26.9**
50 0	0.814	60	14 0	21 0	0.01348				0 007	28.0	**22.8**
50 0	0.814	120	12 0	21 0	0.01348				0.005	24 0	**19.5**
50.0	0.814	240	10.5	21 0	0.01348				0.003	21.0	**17.1**
50.0	0.814	480	9.0	19.0	0.01382				0.002	18.0	**14.7**
50 0	0.814	1440	7 0	19.0	0.01382				0 001	14 0	**11.4**
Hydrometer #: 794968			Graduate #: 6			Dispersing Agent. Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp
10		50.0	100.0	**81.4**
20	2 4		95.2	**77.5**
40	2 9		89.4	**72.8**
60	3.1		83.2	**67.7**
100	3.9		75.4	**61.4**
200	5 4		64.6	**52.6**
Pan	32.3			
Total	50 0			
Unwashed Wt. =				
Tare = _____		Wt Passing #200 = _____		

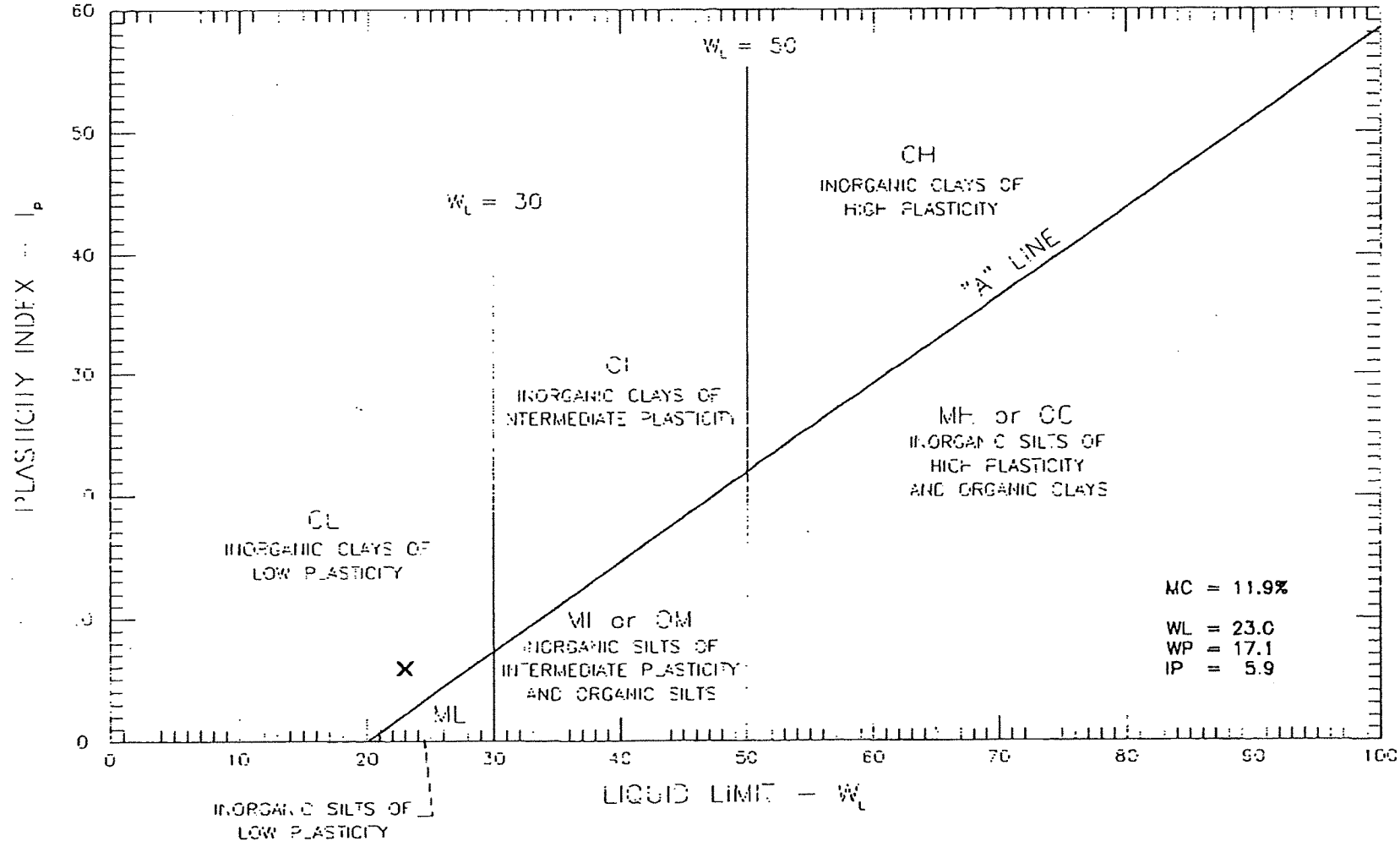
Sieve Analysis

Seive No	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp
38.1			
25 4			
19.0			
12 5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**11.9%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

Noeks



GeoNorth Engineering Ltd. 1301 Kelliher Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5-ZS-08/07	SCALE: N.T.S	DATE: 2007/10/15
		PROJECT NO: P-2036	DRAWING NO. 2036-B40

A2-50

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn: cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

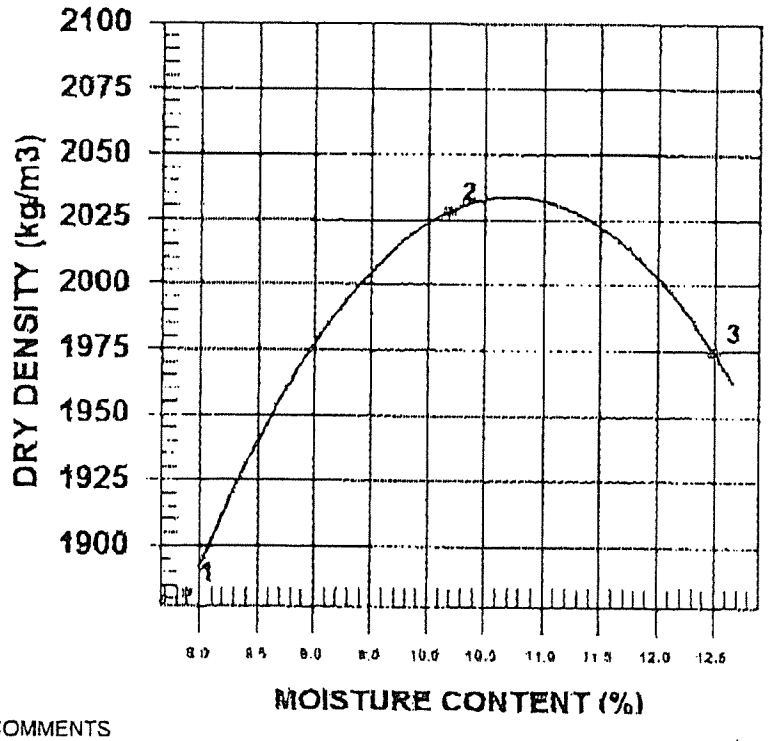
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

PROCTOR NO 42 DATE TESTED 2007.Oct.04 DATE RECEIVED 2007.Sep.27 DATE SAMPLED 2007.Sep.18

INSITU MOISTURE N/A %
SAMPLED BY Client
TESTED BY AG
SUPPLIER
SOURCE R-55-ZS-09/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT TILL
SIZE 50MM
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE C: 152.4mm Mold, Passing 19mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 19mm SCREEN 22.8 %
OVERSIZE SPECIFIC GRAVITY 2.65
TOTAL NUMBER OF TRIALS 3



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2031	1882	7.9
2	2235	2028	10.2
3	2221	1974	12.5

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2030	10.5
OVERSIZE CORRECTED	2140	8.5

COMMENTS
SPECIFIC GRAVITY OF FINES = 2.650

 2007.Oct.15 GeoNorth Engineering Ltd. PER.

A2-51

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

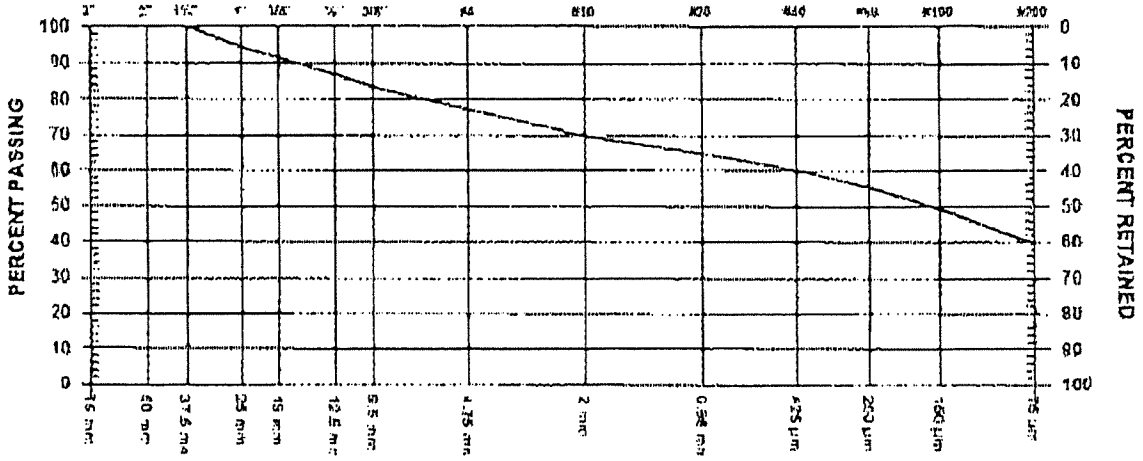
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

SIEVE TEST NO. 44 DATE RECEIVED 2007.Sep.27 DATE TESTED 2007.Oct.01 DATE SAMPLED 2007.Sep.18

SUPPLIER
SOURCE R-SS-ZS-09/07
SPECIFICATION
MATERIAL TYPE Till

SAMPLED BY Client
TESTED BY AG/DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	94.6	
3/4"	19 mm	91.5	
1/2"	12.5 mm	86.7	
3/8"	9.5 mm	83.5	

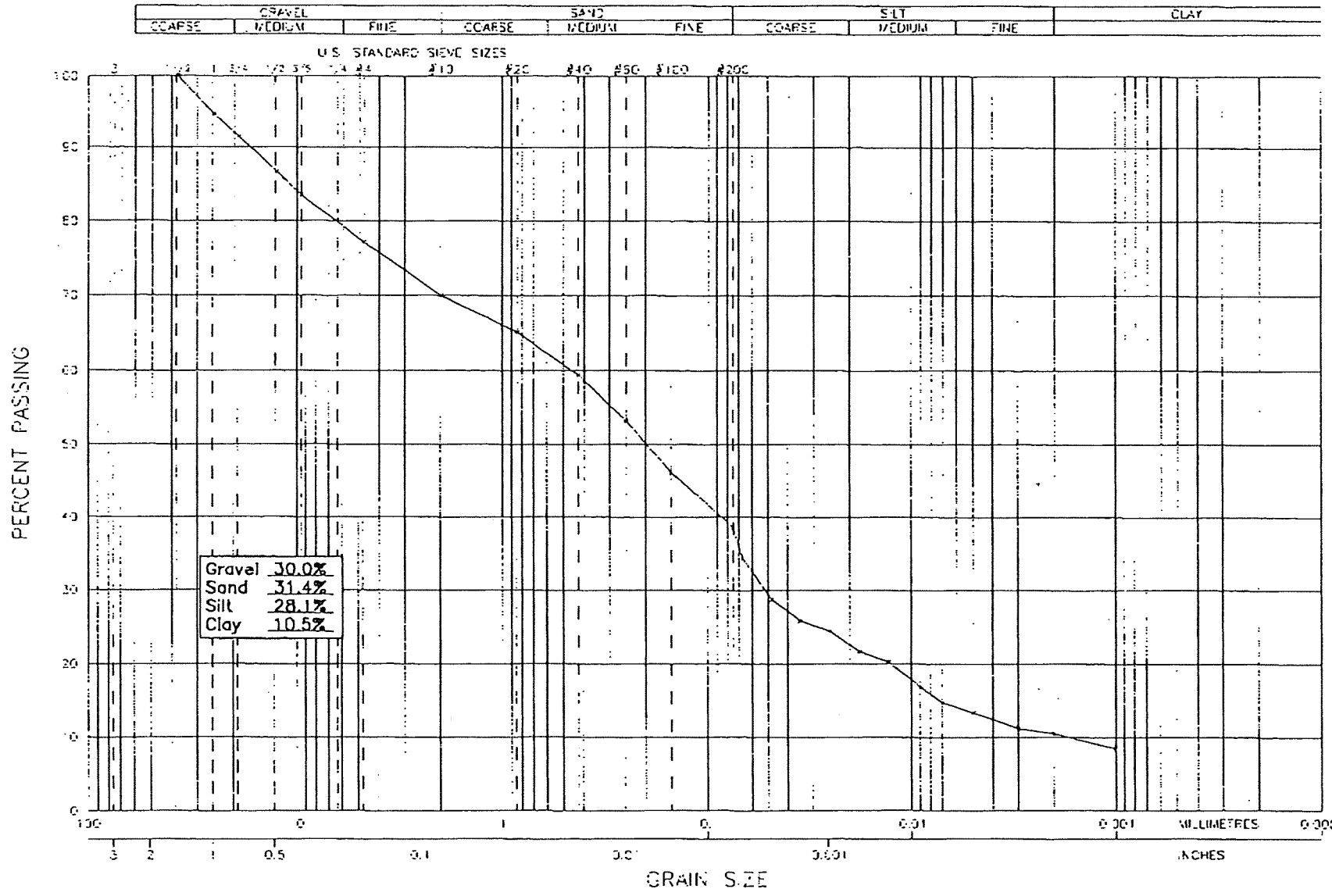
SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	77.2	
No. 10	2.00 mm	70.0	
No. 20	850 µm	64.9	
No. 40	425 µm	60.1	
No. 60	250 µm	55.3	
No. 100	150 µm	49.4	
No. 200	75 µm	39.4	

MOISTURE CONTENT 8.8%

COMMENTS

 2007.Oct.15 GeoNorth Engineering Ltd. PER _____

A2-52



A2-53

GeoNorth Engineering Ltd.	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-SS-ZS-09/07	SCALE:	DATE.
1301 Ketcher Road Prince George, BC V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323		PROJECT NO: K-2036	PLATE NO 2036-B44

GeoNorth Engineering

Hydrometer Analysis

Test Designation. ASTM D-422

Client: Mount Polley Mining Corp Attn: Knight Piesold									Date: October 15, 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZS-09/07									Type: TILL		
Sample #:		Test #:		Hole #:		Depth:			Time:		
Sampled By: Client			Tested By DJ						Checked By: NK		
Date Sampled: 09.18 07			Date Received: 09.27.07						Date Tested: 10.11 07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50.0	0 700	0.5	24.5	21.0	0.01348				0.067	49.0	**34.3**
50.0	0.700	1	20.5	21 0	0.01348				0.048	41.0	**28.7**
50.0	0.700	2	18.5	21 0	0.01348				0.035	37 0	**25.9**
50.0	0.700	4	17.5	21.0	0.01348				0 025	35 0	**24.5**
50.0	0.700	8	15.5	21.0	0 01348				0 018	31.0	**21.7**
50.0	0.700	15	14 5	21.0	0 01348				0.013	29 0	**20.3**
50.0	0.700	30	12 0	21.0	0 01348				0.009	24.0	**16.8**
50 0	0 700	60	10 5	21.0	0 01348				0.007	21.0	**14.7**
50.0	0 700	120	9 5	21.0	0.01348				0 005	19.0	**13.3**
50.0	0.700	240	8 0	21 0	0.01348				0 003	16.0	**11.2**
50.0	0 700	480	7 5	19 0	0.01382				0 002	15.0	**10.5**
50.0	0.700	1440	6.0	19 0	0.01382				0.001	12.0	**8.4**
Hydrometer #. 794968			Graduate #: 7			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample											

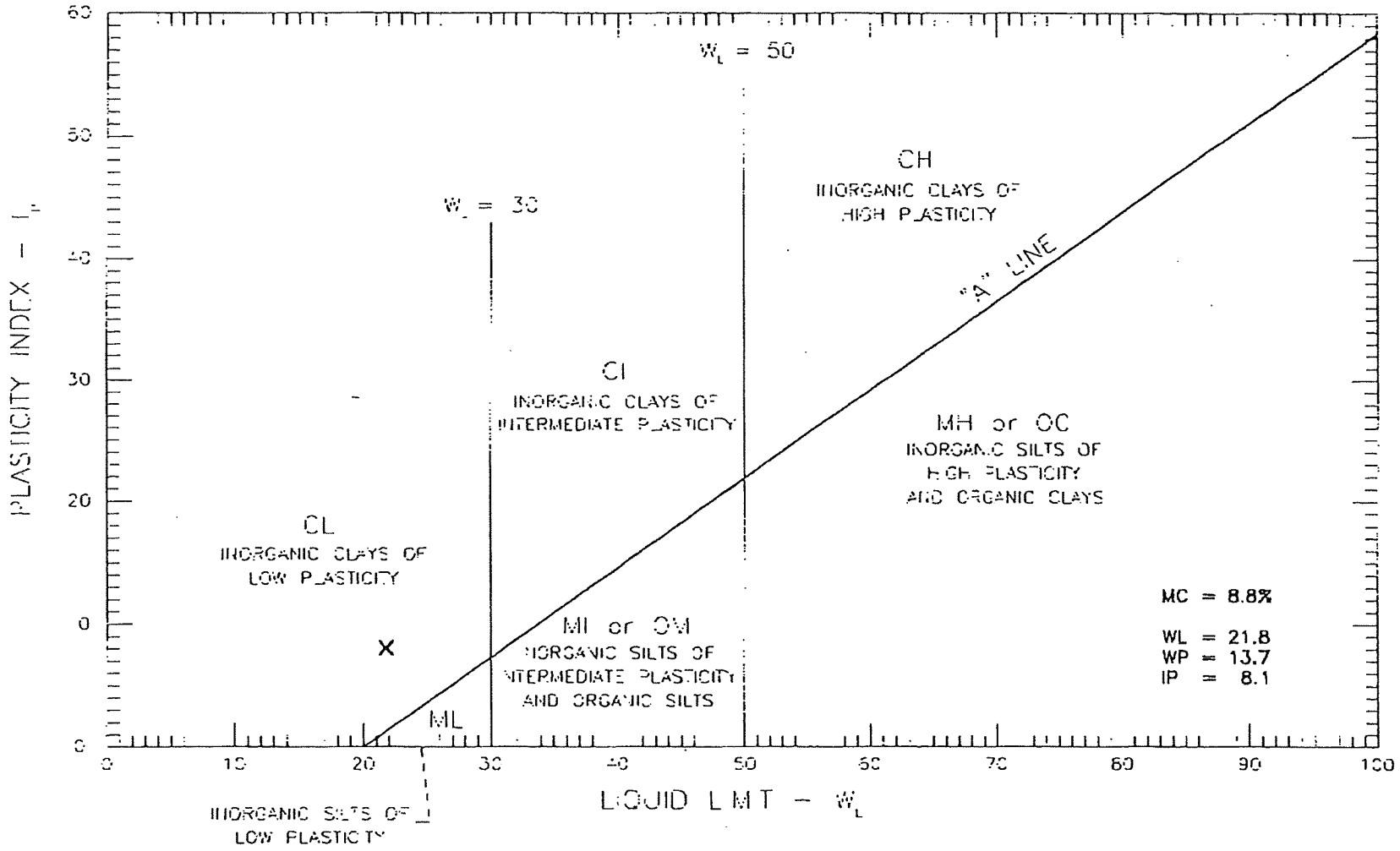
Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt Finer Than	% Finer Than	% Finer Than Orig Samp
10		50.0	100.0	**70.0**
20	3 4		93.2	**65.2**
40	4 2		84.8	**59.4**
60	4.4		76.0	**53.2**
100	5 1		65.8	**46.1**
200	5.3		55 2	**38.6**
Pan	27.6			
Total	50.0			
Unwashed Wt. =				
Tare = _____		Wt Passing #200 = _____		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt Passing	% Finer Than Orig Samp.
38.1			
25.4			
19 0			
12 5			
9.5			
4 75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content	
Tare No	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**8.8%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Noeloc

42-54



GeoNorth Engineering Ltd. 1301 Feather Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5-ZS-09/07	SCALE: N.T.S.	DATE: 2007/10/15
		PROJECT NO: K-2036	DRAWING NO: 2036-E4

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)584-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

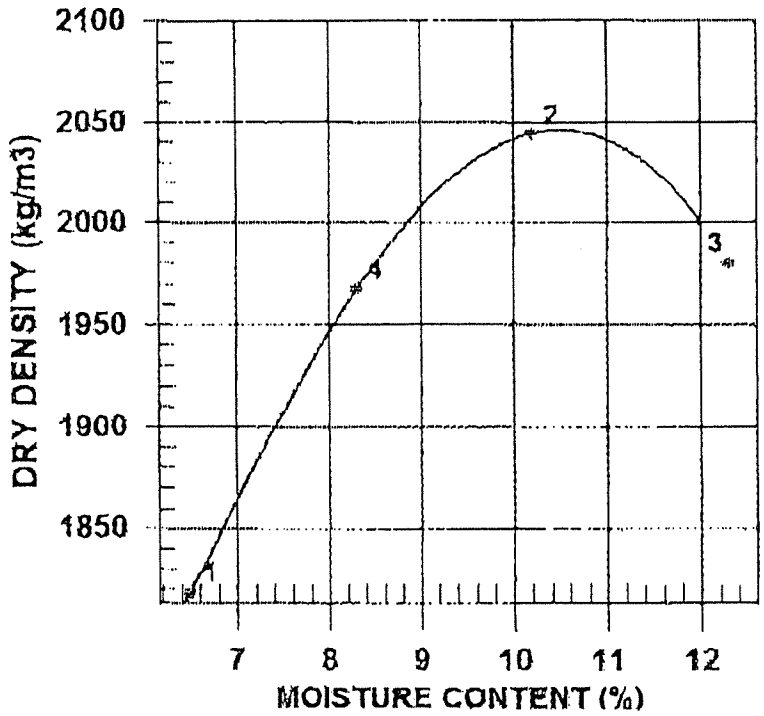
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO. 43 DATE TESTED 2007.Oct.04 DATE RECEIVED 2007.Sep.27 DATE SAMPLED 2007.Sep.18

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client		
TESTED BY	AG	COMPACTION PROCEDURE	C: 152.4mm Mold, Passing 19mm
SUPPLIER			
SOURCE	R-S5-XS-10/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	50MM	RETAINED 19mm SCREEN	21.9 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.67
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1936	1818	6.5
2	2253	2044	10.2
3	2223	1980	12.3
4	2130	1967	8.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2050	10.5
OVERSIZE CORRECTED	2160	8.5

COMMENTS
SPECIFIC GRAVITY OF FINES = 2.675

 2007.Oct.15 GeoNorth Engineering Ltd. PER

AZ-56

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

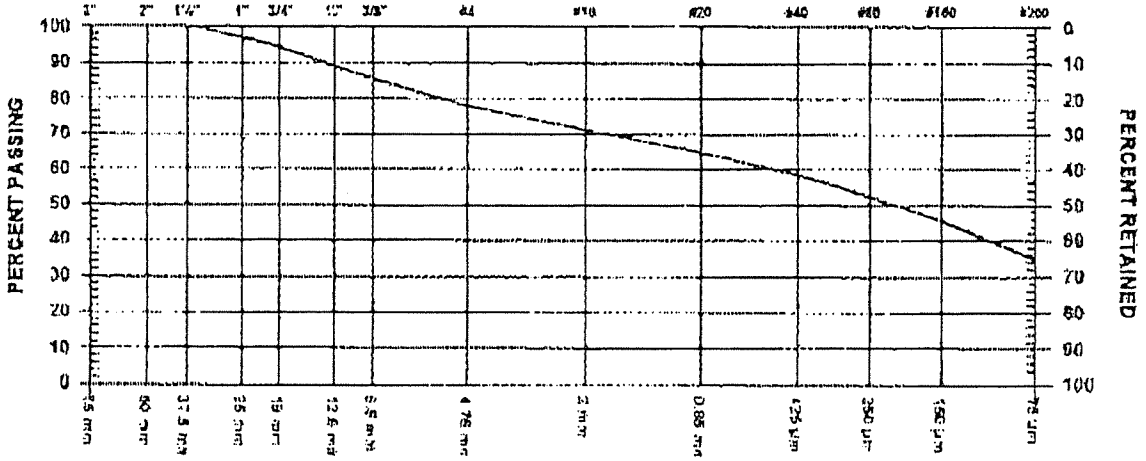
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
Mount Polley Mining Corp.
Likely
CONTRACTOR

SIEVE TEST NO. 46 DATE RECEIVED 2007.Sep.27 DATE TESTED 2007.Oct.03 DATE SAMPLED 2007.Sep.18

SUPPLIER
SOURCE R-S5-ZS-10/07
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client
TESTED BY DJ
TEST METHOD WASHED



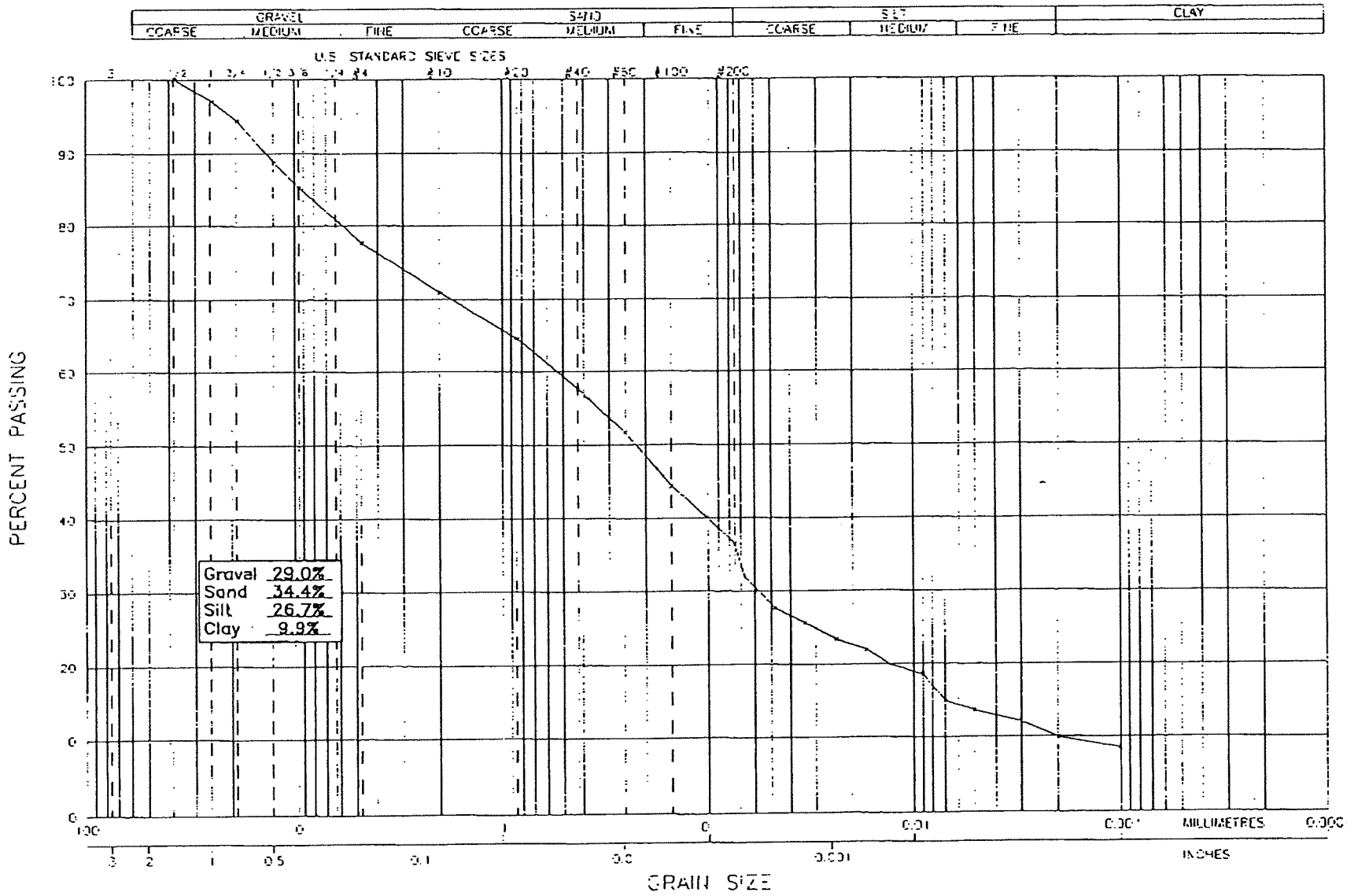
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	97.1	
3/4"	19 mm	94.5	
1/2"	12.5 mm	88.8	
3/8"	9.5 mm	85.4	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	77.7	
No. 10	2.00 mm	71.0	
No. 20	850 µm	64.6	
No. 40	425 µm	58.4	
No. 60	250 µm	52.5	
No. 100	150 µm	45.7	
No. 200	75 µm	34.9	

MOISTURE CONTENT 8.7%

COMMENTS

A2-57



A2-58

GeoNorth Engineering Ltd. 1301 Ketcher Road Prince George, B.C. V2L 5S8 Ph (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZS-10/07	SCALE: N.T.S	DATE: 2007/10/15
		PROJECT NO: K-2036	PLATE NO. 2036-B45

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp Attn: Knight Piesold									Date: October 15. 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZS-10/07									Type: TILL		
Sample #:		Test #:		**Hole #:**		**Depth:**			Time:		
Sampled By: Client			Tested By: DJ						Checked By: NK		
Date Sampled. 09.18.07			Date Received: 09.27.07						Date Tested. 10.11.07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R'**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50.0	0.710	0.5	22.5	21.0	0.01328				0.067	45.0	**32.0**
50.0	0.710	1	19.5	21.0	0.01328				0.048	39.0	**27.7**
50.0	0.710	2	18.0	21.0	0.01328				0.034	36.0	**25.6**
50.0	0.710	4	16.5	21.0	0.01328				0.024	33.0	**23.4**
50.0	0.710	8	15.5	21.0	0.01328				0.017	31.0	**22.0**
50.0	0.710	15	14.0	21.0	0.01328				0.013	28.0	**19.9**
50.0	0.710	30	13.0	21.0	0.01328				0.009	26.0	**18.5**
50.0	0.710	60	10.5	21.0	0.01328				0.007	21.0	**14.9**
50.0	0.710	120	9.5	21.0	0.01328				0.005	19.0	**13.5**
50.0	0.710	240	8.5	21.0	0.01328				0.003	17.0	**12.1**
50.0	0.710	480	7.0	19.0	0.01361				0.002	14.0	**9.9**
50.0	0.710	1440	6.0	19.0	0.01361				0.001	12.0	**8.5**
Hydrometer #: 794968			Graduate #: 4			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis

Seive No	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp
10		50.0	100.0	**71.0**
20	4.5		91.0	**64.6**
40	4.9		81.2	**57.7**
60	4.2		72.8	**51.7**
100	5.1		62.6	**44.4**
200	5.5		51.6	**36.6**
Pan	25.8			
Total	50.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis

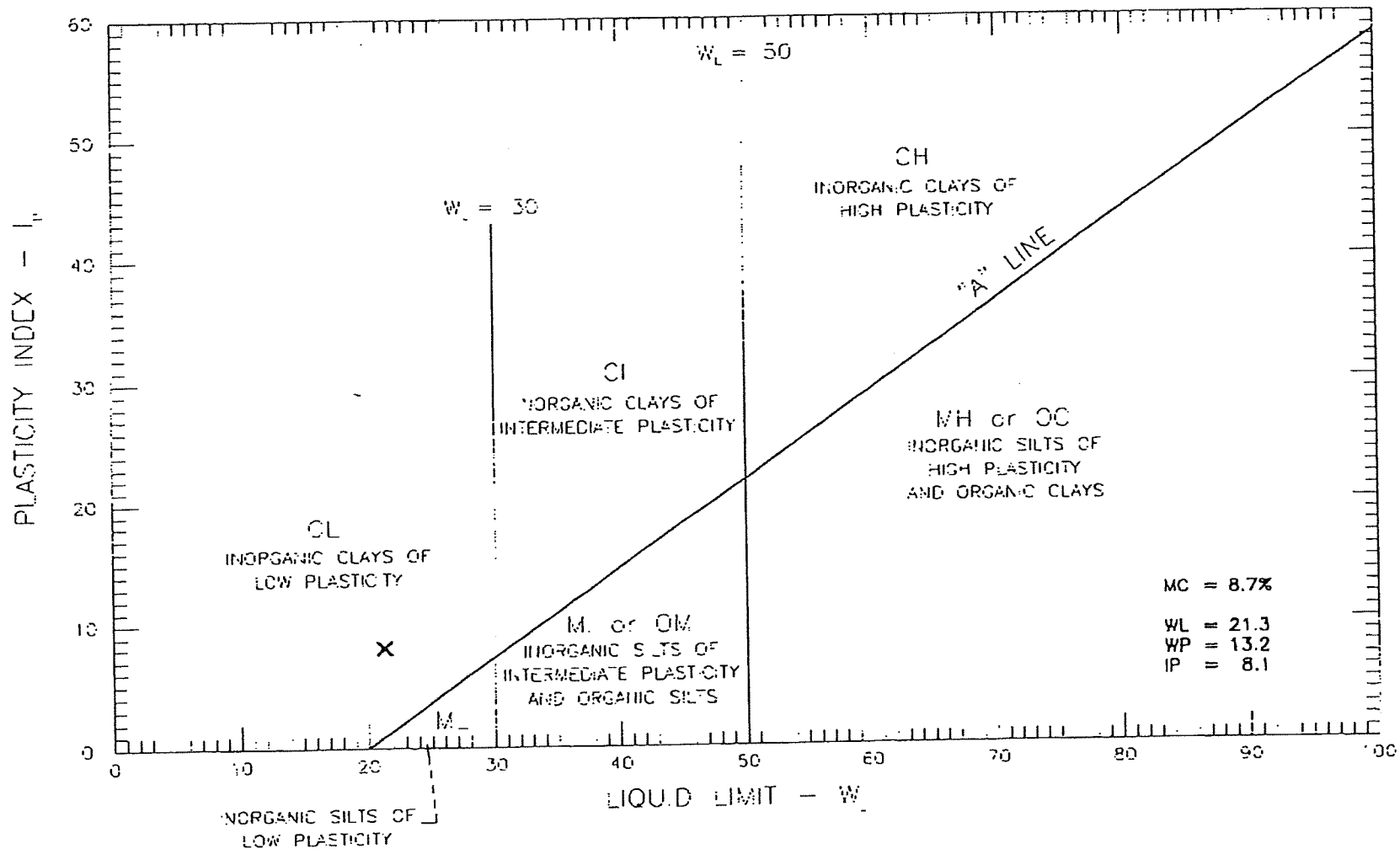
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig Samp
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**8.7%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

Notes

A2-59



GEONORTH ENGINEERING LTD. 1301 Kelsher Road Prince George, B.C V2L 5S6 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5-ZS-10/07	SCALE: N.T.S.	DATE: 2007/10/15
		PROJECT NO: K-2036	DRAWING NO: 2036-B42

A2-60

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

1.4DG-

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

101-1/14.02

VA 101-1/14-A.C

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

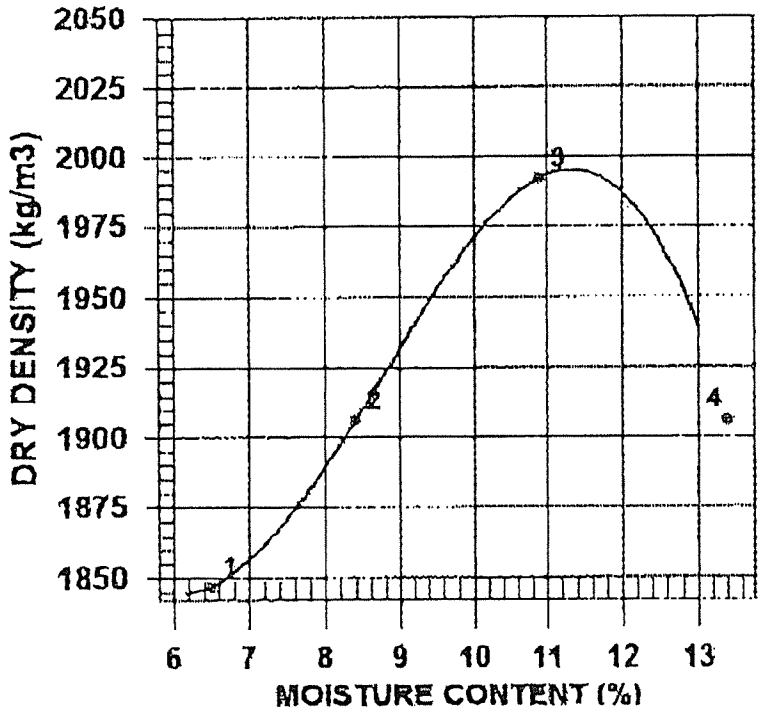
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
Mount Polley Mining Corp.
Likely
CONTRACTOR

PROCTOR NO. 10 DATE TESTED 2007.Sep.18 DATE RECEIVED 2007.Sep.11 DATE SAMPLED 2007.Sep.07

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client		
TESTED BY	DJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-SS-ZS-9/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	50MM	RETAINED 4.75mm SCREEN	27.6 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.65
ROCK TYPE		TOTAL NUMBER OF TRIALS	4

Alcdas ZS-11/07



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1967	1847	6.5
2	2066	1906	8.4
3	2209	1992	10.9
4	2161	1906	13.4

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2000	11.5
OVERSIZE CORRECTED	2150	8.5

COMMENTS

 PER.

AZ-61

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL - 1NO

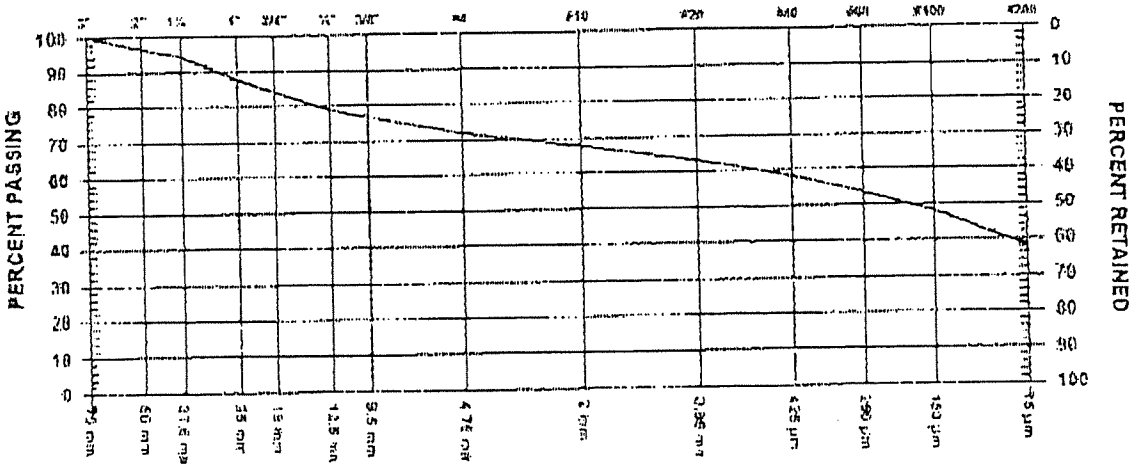
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Mount Polley Mining Corp.
Materials Testing Likely
CONTRACTOR

SIEVE TEST NO 42 DATE RECEIVED 2007.Sep.11 DATE TESTED 2007.Sep.17 DATE SAMPLED 2007.Sep.07

SUPPLIER
SOURCE R-S5-~~28-9/07~~ 25-11/07
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CLIENT
TESTED BY DJ
TEST METHOD WASHED



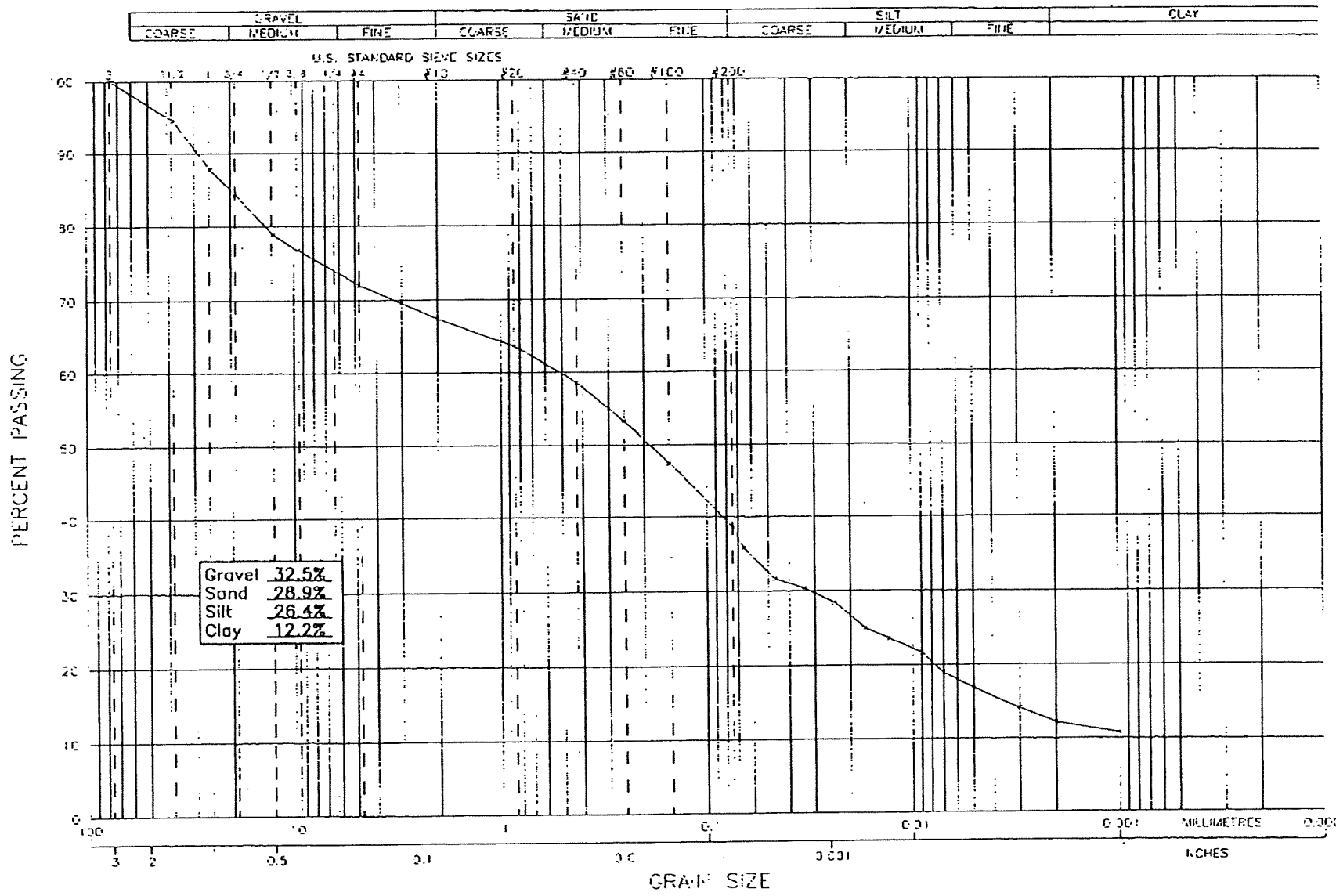
GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	96.6	
1 1/2"	37.5 mm	94.5	
1"	25 mm	87.8	
3/4"	19 mm	84.4	
1/2"	12.5 mm	78.9	
3/8"	9.5 mm	76.7	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	72.0	
No. 10	2.00 mm	67.5	
No. 20	850 µm	63.1	
No. 40	425 µm	58.4	
No. 60	250 µm	53.8	
No. 100	150 µm	48.2	
No. 200	75 µm	38.4	

COMMENTS
LOCATION: SOUTH EMBANKMENT, CH:14+25, ELEVATION: 950.1

 2007.Sep.17 GeoNorth Engineering Ltd. PER

A2-62



AZ-63

GeoNorth Engineering Ltd.	MOUNT POLLEY MINING CORP.	SCALE: N.T.S	DATE: 2007/09/20
1301 Kelliher Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5 ~~ZS-09/07~~	PROJECT NO: 4-2035	PLATE NO. 2035-B39

ZS-11/07

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold					Date: Sept 20, 2007
Project Name: MPCP - Stage 4/5					**Project #: K-2036**
Source/Location R-S5-~~ZS-09/07~~ ZS-11/07					Type:
Sample #:	Test #:	**Hole #:**	**Depth:**		Time:
Sampled By: Client	Tested By: DJ				Checked By: NK
Date Sampled: 09.07 07	Date Received: 09 11.07				Date Tested: 09.18 07

Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
50.0	0.675	0.5	26.5	21.0	0 01348				0.066	53.0	**35.8**
50.0	0.675	1	23.5	21.0	0.01348				0.047	47.0	**31.7**
50.0	0.675	2	22.5	21.0	0.01348				0.034	45.0	**30.4**
50.0	0.675	4	21.0	21.0	0.01348				0.024	42 0	**28.4**
50.0	0.675	8	18.5	21.0	0.01348				0.017	37.0	**25.0**
50.0	0.675	15	17.5	21.0	0.01348				0.013	35 0	**23.6**
50.0	0.675	30	16.0	21.0	0.01348				0.009	32.0	**21.6**
50.0	0.675	60	14.0	21 0	0 01348				0.007	28.0	**18.9**
50.0	0.675	120	12.5	21 0	0.01348				0.005	25 0	**16.9**
50.0	0.675	240	10.5	20.0	0.01365				0.003	21.0	**14.2**
50.0	0.675	480	9.0	20 0	0 01365				0.002	18.0	**12.2**
50 0	0 675	1440	8 0	20.0	0.01365				0.001	16.0	**10.8**

Hydrometer #. 794968	Graduate #: 2	Dispersing Agent. Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt Finer Than	% Finer Than	% Finer Than Orig Samp.
10		50.0	100.0	**67.5**
20	2.8		94 4	**63.7**
40	3.8		86 8	**58.6**
60	3.9		79 0	**53.3**
100	4.4		70 2	**47.4**
200	6.5		57 2	**38.6**
Pan	28.6			
Total	50.0			
Unwashed Wt. =				
Tare = _____	Wt. Passing #200 = _____			

Sieve Analysis

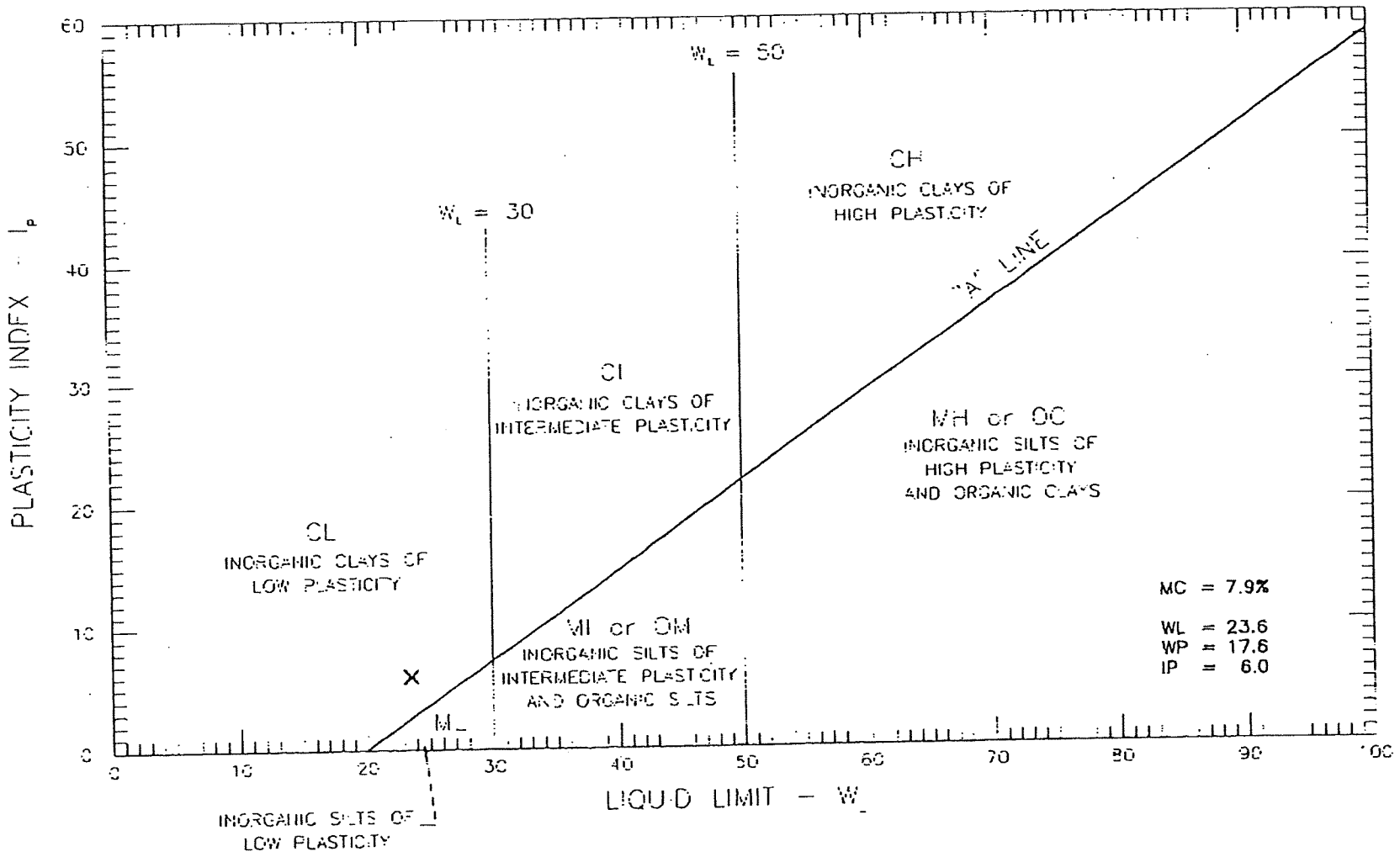
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**7.9%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

Ncelco

AZ-64



GeoNorth Engineering Ltd. 1380 Kelliher Road Prince George, B.C. V2L 5S8 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 ATTERBERG LIMITS OF R-S5 ~~25-09/07~~ 25-11/07	SCALE: N.T.S.	DATE 2007/09/19
		PROJECT NO: K-2036	DRAWING NO. 2036-B38

A2-65

Knight Piésold
CONSULTING

APPENDIX A3

ZONE U RESULTS

(Page A3-1 TO A3-63)

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

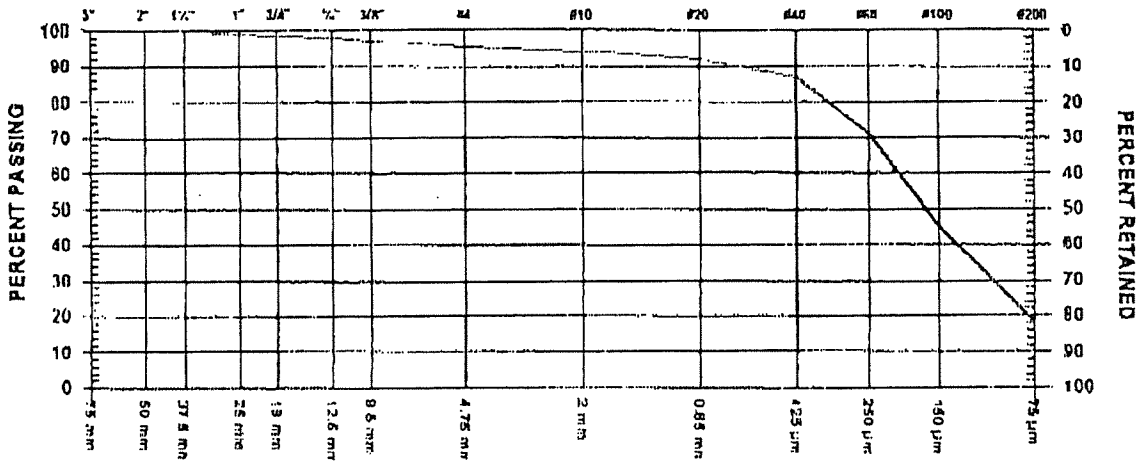
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

SIEVE TEST NO 16 DATE RECEIVED 2007.Mar.07 DATE TESTED 2007.Mar.09 DATE SAMPLED 2007.Mar.02

SUPPLIER C-85-ZU-2/07
SOURCE Sand Cell #8
SPECIFICATION
MATERIAL TYPE Zone U Tailings Sand

SAMPLED BY AC - Client
TESTED BY PN
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	98.7	
3/4"	19 mm	98.4	
1/2"	12.5 mm	97.8	
3/8"	9.5 mm	97.1	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	95.3	
No. 10	2.00 mm	93.9	
No. 20	850 µm	92.0	
No. 40	425 µm	86.7	
No. 60	250 µm	71.1	
No. 100	150 µm	45.3	
No. 200	75 µm	18.2	

COMMENTS
LOCATION: PE SAND CELL #8 PE/ME CORNER

A3-1

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

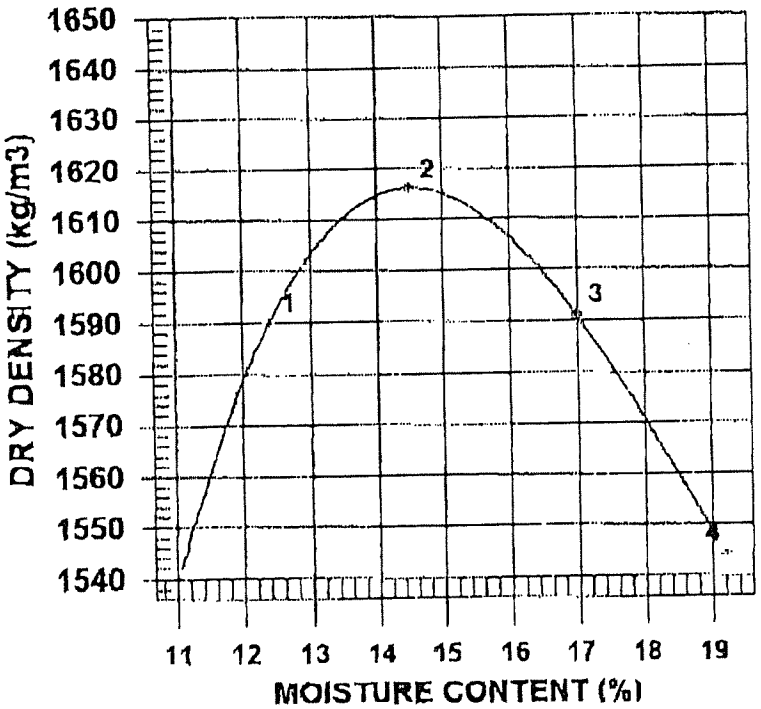
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO. 15 DATE TESTED 2007.Mar.08 DATE RECEIVED 2007.Mar.07 DATE SAMPLED 2007.Mar.02

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CLT	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	PN	RAMMER TYPE	Automatic
SUPPLIER	C-S5-ZU-2/07	PREPARATION	Moist
SOURCE	SAND CELL #8	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	4.2 %
MAJOR COMPONENT	SAND	OVERSIZE SPECIFIC GRAVITY	2.78
SIZE	25MM	TOTAL NUMBER OF TRIALS	4
DESCRIPTION	CLEAN		
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1787	1590	12.4
2	1850	1616	14.5
3	1861	1591	17.0
4	1841	1544	19.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1620	14.5
OVERSIZE CORRECTED	1650	14.0

COMMENTS
ZONE U TAILINGS SAND STOCKPILE, PE SAND CELL #8 (PE/ME CORNER)

SPECIFIC GRAVITY OF FINES = 2.612, COARSE = 2.778

 2007.Mar.19 GeoNorth Engineering Ltd PER

A3-2

1301 Kelliher Road Prince George, B 2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

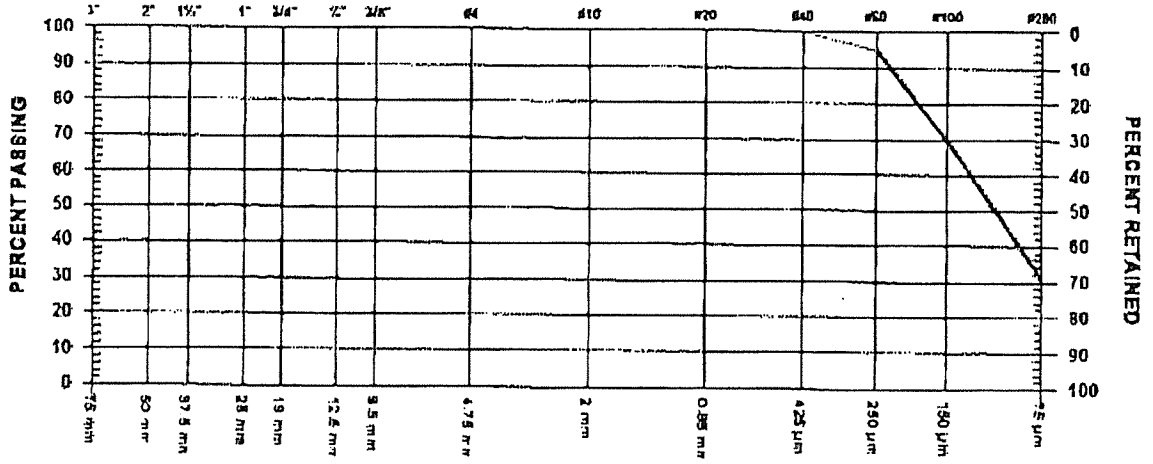
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 14 DATE RECEIVED 2007.Feb.13 DATE TESTED 2007.Feb.14 DATE SAMPLED 2007.Feb.07

SUPPLIER R-S5-~~20-01~~/07
SOURCE SANDCELL #7
SPECIFICATION
MATERIAL TYPE SILTY SAND

SAMPLED BY TG - CLIENT
TESTED BY PN
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm		

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	100.0	
No. 10	2.00 mm	99.9	
No. 20	850 µm	99.9	
No. 40	425 µm	99.6	
No. 60	250 µm	95.1	
No. 100	150 µm	69.7	
No. 200	75 µm	30.7	

MOISTURE CONTENT 21.0%

COMMENTS
LOCATION: MOUNT POLLEY TSF ZONE U PF
CHAINAGE: 31+00

 2007.Feb.15 GeoNorth Engineering Ltd PER.

A3-3

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-8323

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

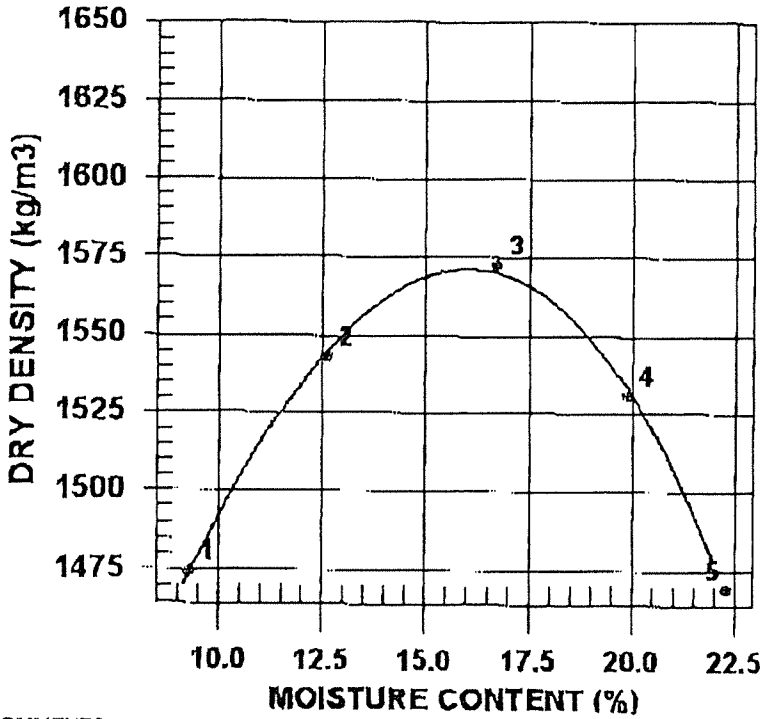
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

PROCTOR NO. 13 DATE TESTED 2007.Feb.14 DATE RECEIVED 2007.Feb.13 DATE SAMPLED 2007.Feb.13

INSITU MOISTURE N/A %
SAMPLED BY CLT
TESTED BY PN ZU-01/07
SUPPLIER R-S5-~~AF-U1/07~~
SOURCE SANDCELL #7
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE 12MM
DESCRIPTION SILTY
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 5



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1611	1474	9.3
2	1737	1543	12.6
3	1835	1572	16.7
4	1836	1531	19.9
5	1797	1469	22.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1570	16.0

COMMENTS
LOCATION: MOUNT POLLEY TSF ZONE U PE

CHAINAGE: 31+00

 2007.Feb.15 GeoNorth Engineering Ltd. PER

A3-4

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

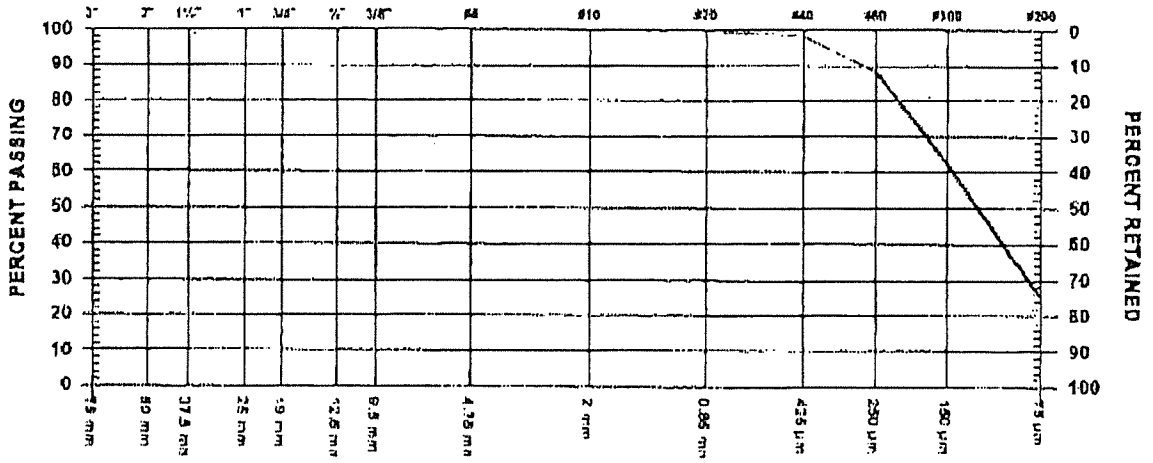
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO 15 DATE RECEIVED 2007.Mar.07 DATE TESTED 2007.Mar.09 DATE SAMPLED 2007.Mar.03

SUPPLIER R-S5-ZU-2/07
SOURCE Sand Cell #7
SPECIFICATION
MATERIAL TYPE Zone U Tailings Sand

SAMPLED BY AG - Client
TESTED BY PN
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm		

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	100.0	
No. 10	2.00 mm	100.0	
No. 20	850 µm	99.8	
No. 40	425 µm	98.2	
No. 60	250 µm	88.1	
No. 100	150 µm	62.3	
No. 200	75 µm	25.3	

COMMENTS
LOCATION: ZONE U TAILINGS SAND, CHAINAGE: 31+00

A3-5

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

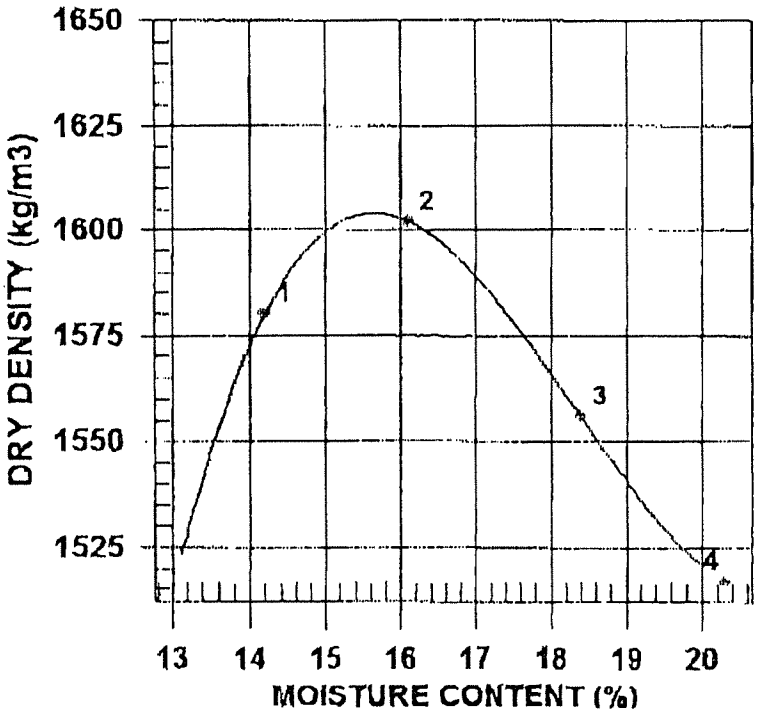
PROJECT M.P. Construction Program Stage 4/5
Materials Testing

Mount Polley Mining Corp.
Likely

CONTRACTOR

PROCTOR NO 14 DATE TESTED 2007.Mar.08 DATE RECEIVED 2007.Mar.07 DATE SAMPLED 2007.Mar.02

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CLT	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	PN	RAMMER TYPE	Automatic
SUPPLIER	R-S5-ZU-2/07	PREPARATION	Moist
SOURCE	SAND CELL #7	OVERSIZE CORRECTION METHOD	None
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	%
MAJOR COMPONENT	SAND	OVERSIZE SPECIFIC GRAVITY	
SIZE	12MM	TOTAL NUMBER OF TRIALS	4
DESCRIPTION	CLEAN		
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1804	1580	14.2
2	1860	1602	16.1
3	1842	1556	18.4
4	1825	1517	20.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1600	15.5

COMMENTS
ZONE U TAILINGS SAND, CHAINAGE: 31+00

SPECIFIC GRAVITY ON FINES - 2.622

 PER.

A3-6

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

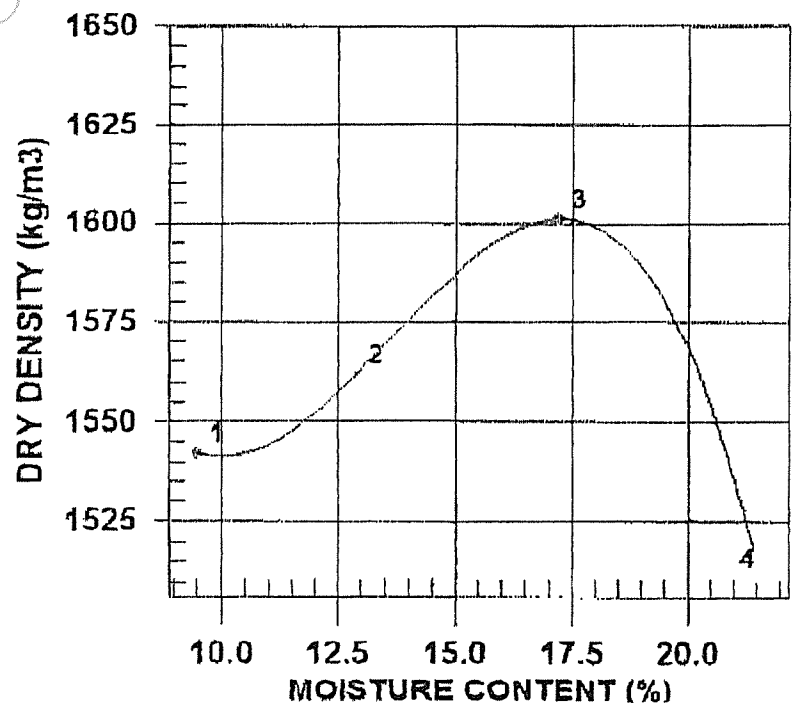
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO. 16 DATE TESTED 2007.Mar.19 DATE RECEIVED 2007.Mar.15 DATE SAMPLED 2007.Mar.09

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	AG-Client		
TESTED BY	DJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER	R-S5-ZU-03/07		
SOURCE	PK SAND CELL #8	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	SAND	OVERSIZE CORRECTION METHOD	None
SIZE	4.75mm	RETAINED 4.75mm SCREEN	%
DESCRIPTION	SILTY	OVERSIZE SPECIFIC GRAVITY	
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1688	1542	9.5
2	1763	1562	12.9
3	1876	1601	17.2
4	1837	1511	21.6

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1600	17.5

COMMENTS
ZONE U TAILINGS SAND; CHAINAGE: 29+00, ELEVATION: 948.15m

SPECIFIC GRAVITY ON FINES = 2.589

 2007.Mar.23 GeoNorth Engineering Ltd. PER.

A3-7

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L 5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Att
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

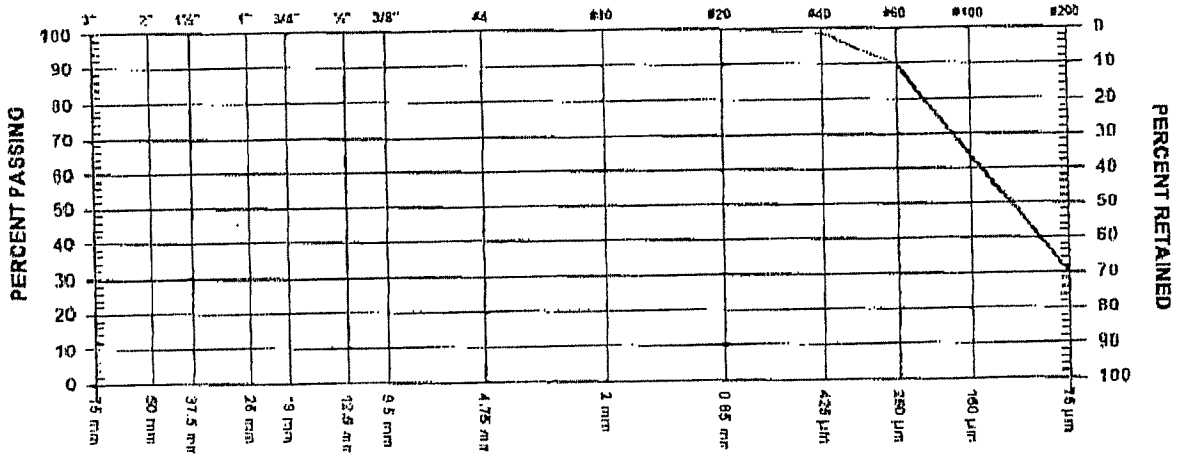
PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR

Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 17 DATE RECEIVED 2007.Mar.15 DATE TESTED 2007.Mar.21 DATE SAMPLED 2007.Mar.09

SUPPLIER R-S5-ZU-03/07
SOURCE PE SAND CELL #8
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY AG-CLIENT
TESTED BY DJ
TEST METHOD WASHED

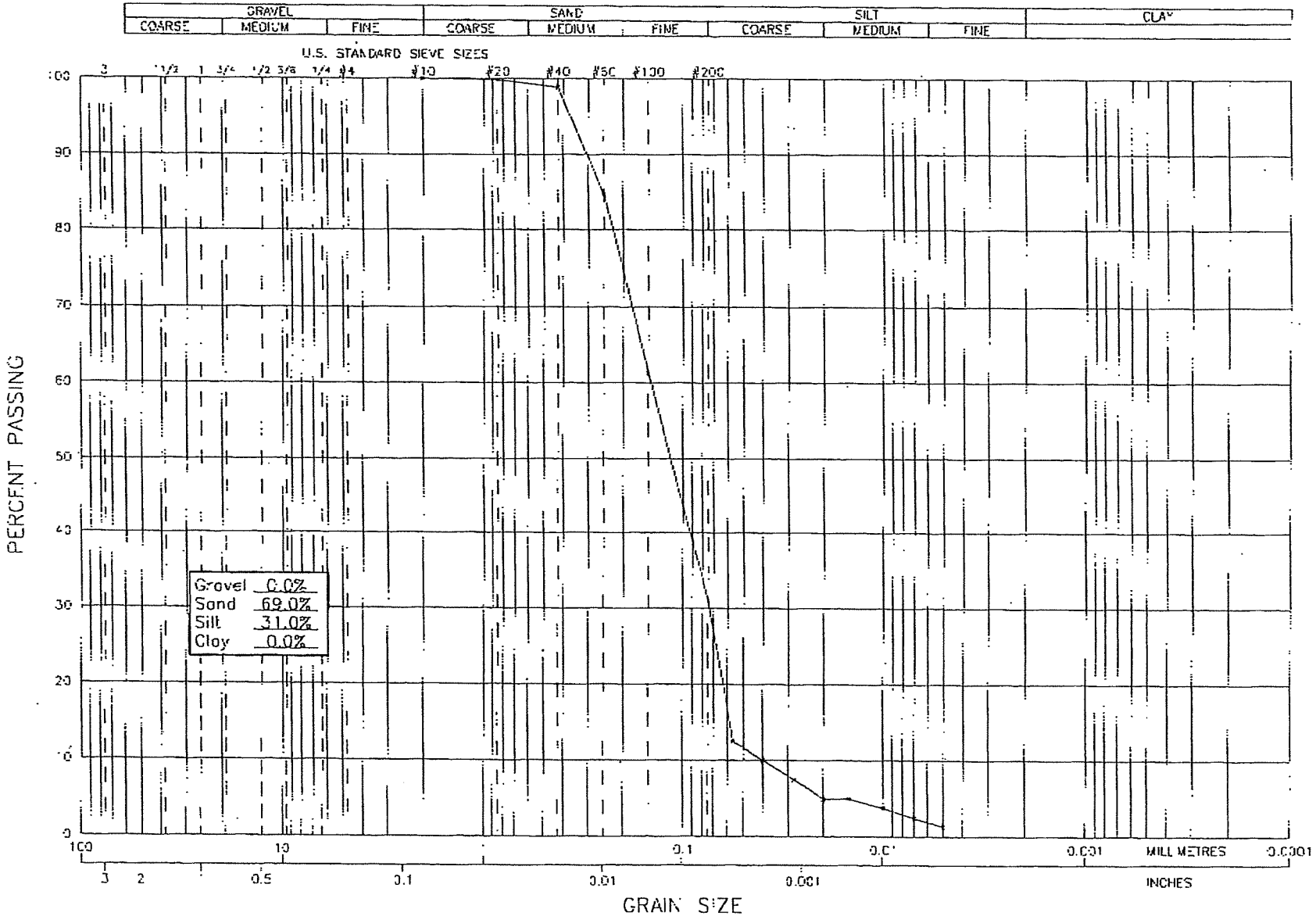


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm		

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	100.0	
No. 10	2.00 mm	100.0	
No. 20	850 µm	99.9	
No. 40	425 µm	98.9	
No. 60	250 µm	89.2	
No. 100	150 µm	63.3	
No. 200	75 µm	29.7	

COMMENTS
ZONE U TAILINGS SAND; CHAINAGE:29+00, ELEVATION: 948.15m

 2007.Mar.22 GeoNorth Engineering Ltd. PER.



GEONORTH ENGINEERING LTD.
1301 Kelleher Road
Prince George, B.C. V2L 5S8
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
ATTN: KNIGHT PIESOLD
MPCP STAGE 4/5
GRAIN SIZE ANALYSIS OF R-S5-ZU-03/07
PE SAND CELL #8

SCALE:	DATE:
N.T.S.	2007/03/22
PROJECT NO:	PLATE NO.
K-2036	2036-07-31

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

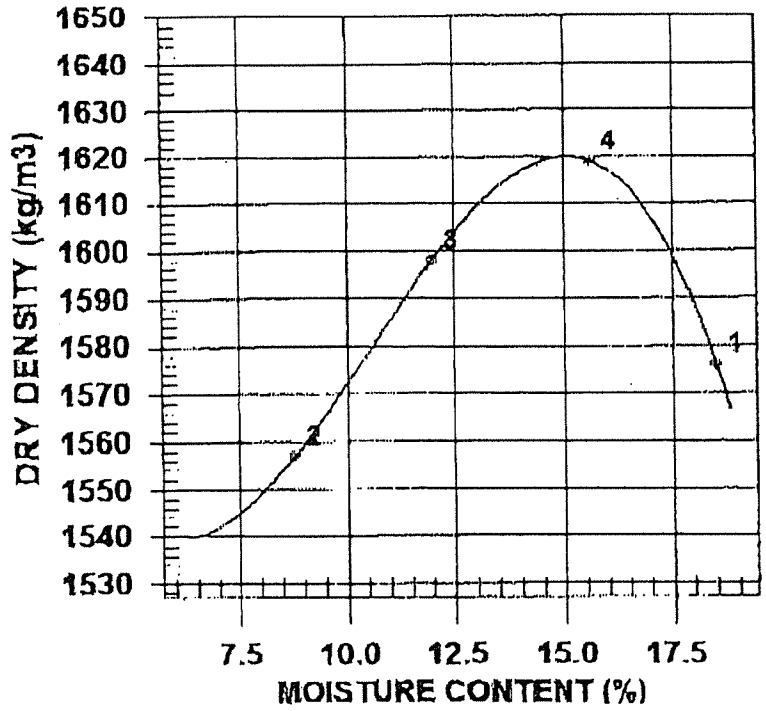
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
Mount Polley Mining Corp.
Likely
CONTRACTOR

PROCTOR NO 1/ DATE TESTED 2007.May.02 DATE RECEIVED 2007.May.01 DATE SAMPLED 2007.Apr.27

INSITU MOISTURE N/A %
SAMPLED BY AG - CLIENT
TESTED BY AG - GEL
SUPPLIER
SOURCE R-S5-ZU-04/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE 9.5mm
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1867	1576	18.5
2	1694	1557	8.8
3	1790	1598	12.0
4	1871	1619	15.6

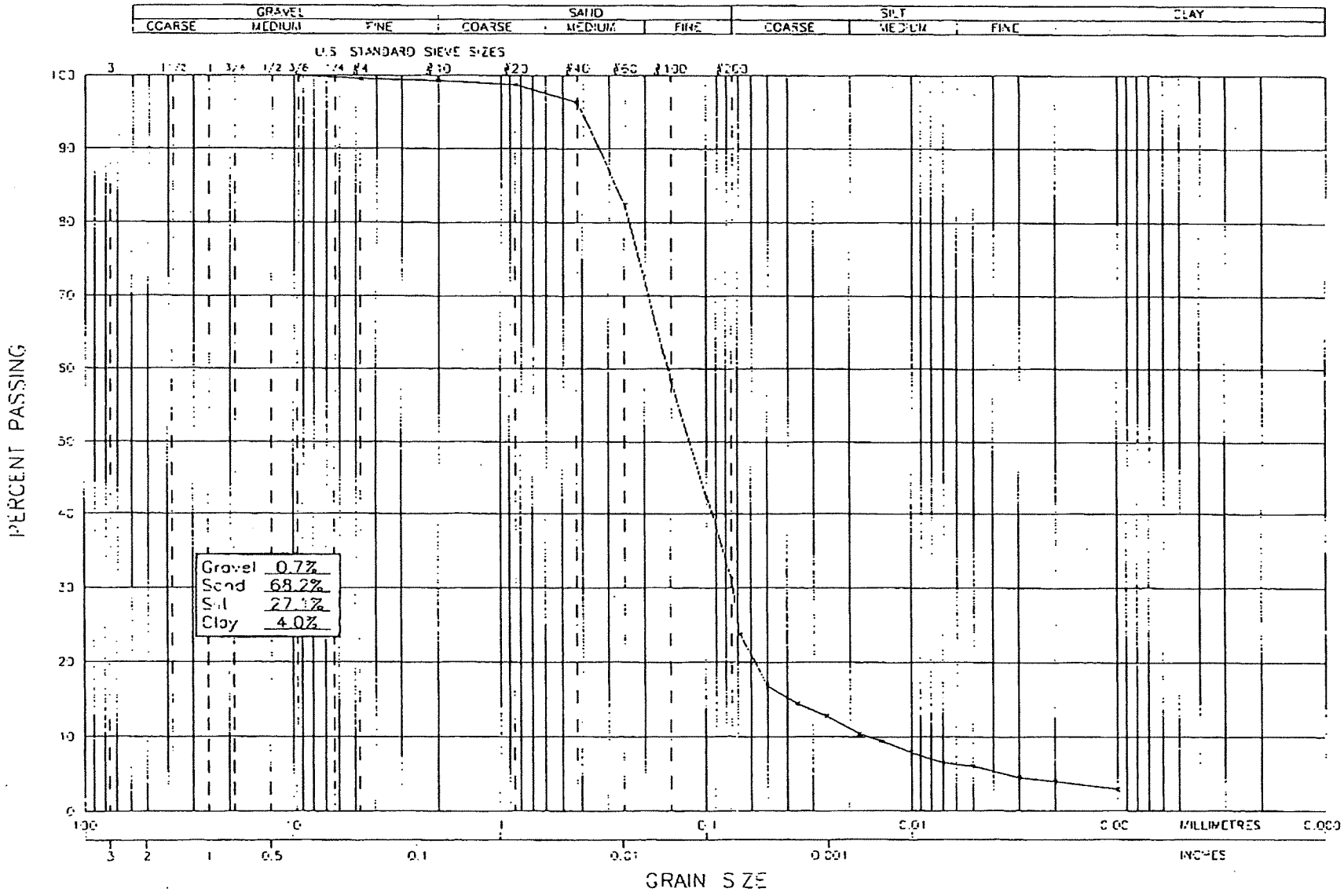
	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1620	15.0

COMMENTS
LOCATION: PE, CHAINAGE: 33+00, ELEVATION:948.2m

SPECIFIC GRAVITY OF FINES - 2.651

 2007.May.08 GeoNorth Engineering Ltd. PER.

A3 -10



A3-11

GEONORTH ENGINEERING LTD. 1301 Kelsher Road Prince George, B.C. V2L 5S8 Tel: (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZU-04/07	SCALE: N.T.S.	DATE 2007/05/07
		PROJECT NO: 4-2036	PLATE NO. 2036-B9

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold									Date: May 7, 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZU-04/07									**Type: Sand**		
Sample #:		Test #:		Hole #:		Depth.			Time.		
Sampled By. AG - Client			Tested By: DJ						Checked By: NK		
Date Sampled: 04.27			Date Received 05 01						Date Tested: 05.04		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
100.0	0 993	0.5	24 0	20.0	0.01365				0.068	24.0	**23.8**
100.0	0.993	1	17.0	20 0	0.01365				0.050	17 0	**16.9**
100.0	0.993	2	14.5	20.0	0.01365				0.036	14.5	**14.4**
100.0	0.993	4	13.0	20.0	0.01365				0.026	13.0	**12.9**
100.0	0.993	8	10.5	20.0	0.01365				0.018	10.5	**10.4**
100.0	0.993	15	9 5	20 0	0.01365				0.014	9.5	**9.4**
100.0	0.993	30	8.0	20.0	0.01365				0.010	8.0	**7.9**
100.0	0.993	60	6.5	20.0	0.01365				0.007	6.5	**6.5**
100.0	0.993	120	6.0	20 0	0.01365				0.005	6 0	**6.0**
100.0	0.993	240	4 5	20 0	0 01365				0.003	4 5	**4.5**
100.0	0.993	480	4 0	20 0	0 01365				0.002	4 0	**4.0**
100.0	0.993	1440	3.0	20.0	0.01365				0.001	3.0	**3.0**
Hydrometer #. 794968			Graduate #. 8			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids.											
Description of Sample:											

Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**99.3**
20	0.6	99.4	99.4	**98.7**
40	2.4	97.0	97.0	**96.3**
60	14.1	82.9	82.9	**82.3**
100	24.0	58.9	58.9	**58.5**
200	27.6	31.3	31.3	**31.1**
Pan	31.3			
Total	100.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis			
Seive No	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**19.3%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Nceloo

A3-12

GeoNorth Engineering
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

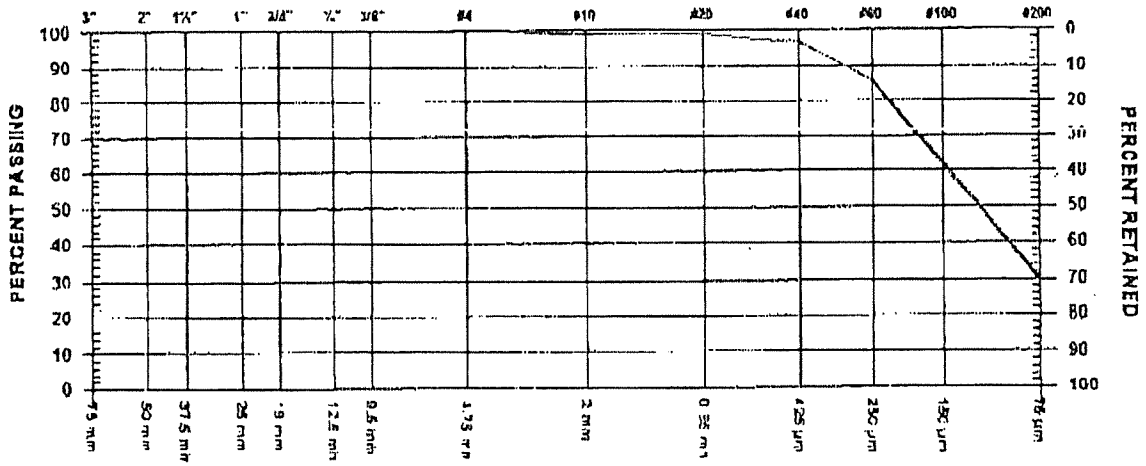
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

SIEVE TEST NO 18 DATE RECEIVED 2007.May.01 DATE TESTED 2007.May.04 DATE SAMPLED 2007.Apr.27

SUPPLIER
SOURCE R-S5-ZU-04/07
SPECIFICATION
MATERIAL TYPE Zone U - Tailings Sand

SAMPLED BY AC - Client
TESTED BY HJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm	100.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	99.6	
No. 10	2.00 mm	99.3	
No. 20	850 µm	98.9	
No. 40	425 µm	96.6	
No. 60	250 µm	85.5	
No. 100	150 µm	61.6	
No. 200	75 µm	29.3	

MOISTURE CONTENT 19.3%

COMMENTS
LOCATION: PE
CHAINAGE: 33+00
ELEVATION: 948.2m

PER

A3 - 13

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

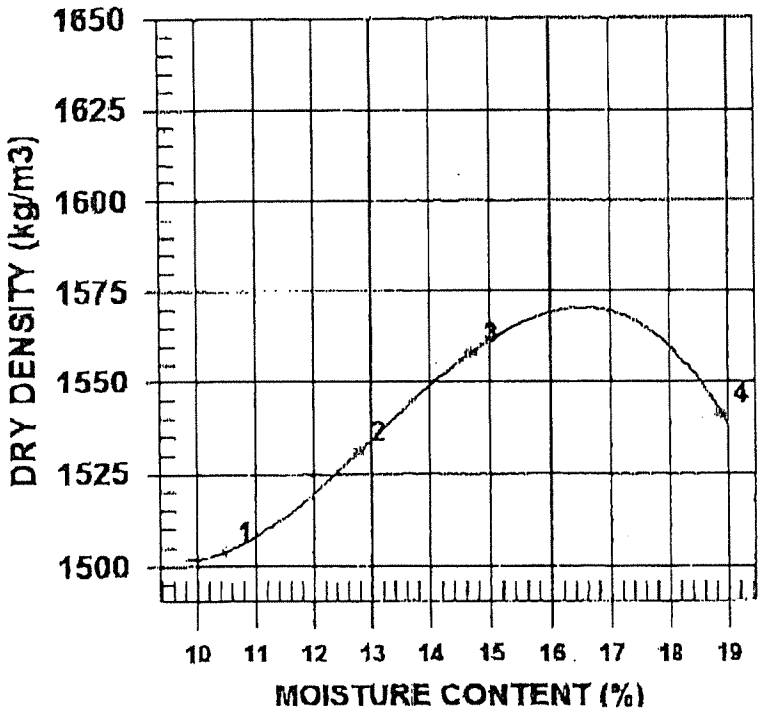
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO 18 DATE TESTED 2007.May.02 DATE RECEIVED 2007.May.01 DATE SAMPLED 2007.Apr.27

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	AG - CLIENT		
TESTED BY	AG - GEL	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-S5-ZU-05/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	SAND	OVERSIZE CORRECTION METHOD	None
SIZE	9.5MM	RETAINED 4.75mm SCREEN	%
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	
ROCK TYPE		TOTAL NUMBER OF TRIALS	4

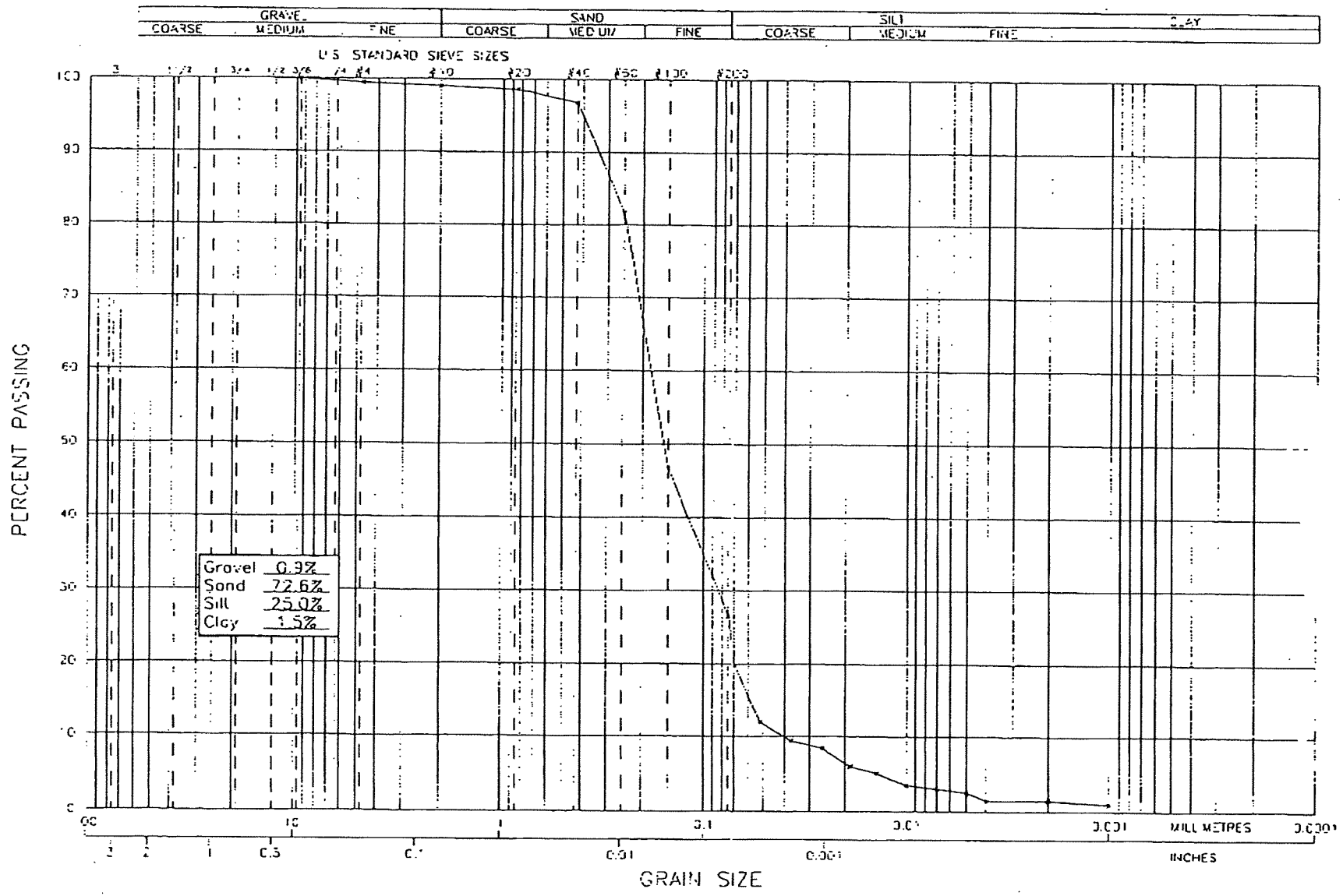


TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1662	1504	10.5
2	1727	1531	12.8
3	1787	1558	14.7
4	1832	1541	18.9

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1570	16.5

COMMENTS
LOCATION: PR, CHAINAGE: 35+00, ELEVATION: 948.5m

SPECIFIC GRAVITY OF FINES = 2.653



A3 - 15

GEONORTH ENGINEERING LTD.
1301 Kelleher Road
Prince George, B.C. V2L 5S6
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4/5
GRAIN SIZE ANALYSIS OF R-S5-ZU-05/07

SCALE:	DATE:
N T S	2007/05/07
PROJECT NO:	PLATE NO.
4-2036	2036-B10

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold									Date: May 7, 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZU-05/07									**Type: Sand**		
Sample #:		Test #:		Hole #:		Depth:			Time:		
Sampled By: AG - Client		Tested By: DJ							Checked By: NK		
Date Sampled: 04.27		Date Received: 05 01							Date Tested: 05.04		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
100.0	0.991	0.5	20.0	20 0	0.01365				0.070	20 0	**19.8**
100.0	0.991	1	12 0	20 0	0.01365				0.052	12.0	**11.9**
100.0	0.991	2	9.5	20.0	0.01365				0.037	9.5	**9.4**
100.0	0.991	4	8.5	20.0	0.01365				0.026	8.5	**8.4**
100.0	0.991	8	6 0	20 0	0.01365				0.019	6.0	**5.9**
100.0	0 991	15	5.0	20.0	0.01365				0.014	5 0	**5.0**
100.0	0.991	30	3 5	20 0	0 01365				0.010	3.5	**3.5**
100.0	0.991	60	3.0	20 0	0.01365				0.007	3.0	**3.0**
100.0	0.991	120	2 5	20 0	0 01365				0.005	2.5	**2.5**
100.0	0.991	240	1.5	20 0	0 01365				0.004	1.5	**1.5**
100.0	0.991	480	1.5	20.0	0.01365				0.002	1.5	**1.5**
100.0	0 991	1440	1 0	20 0	0 01365				0.001	1.0	**1.0**
Hydrometer #: 794968		Graduate #: 3				Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample											

Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100 0	100.0	**99.1**
20	0.5	99.5	99.5	**98.6**
40	1.9	97.6	97.6	**96.7**
60	15.1	82.5	82.5	**81.8**
100	35.4	47.1	47.1	**46.7**
200	20.4	26.7	26.7	**26.5**
Pan	26.7			
Total	100.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp
38.1			
25.4			
19.0			
12.5			
9 5			
4.75			
10	**SEE WASHED SIEVE**		
Total =			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt	
Wt. of Dry Soil	=W
Moisture Content	**10.2%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

Nos'oc

A3 - 16

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

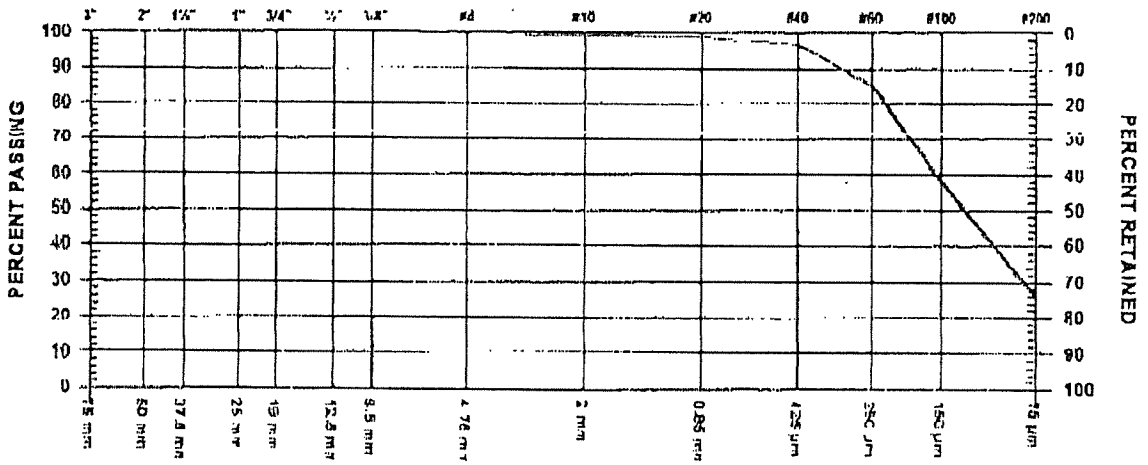
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

SIEVE TEST NO 19 DATE RECEIVED 2007.May.01 DATE TESTED 2007.May.04 DATE SAMPLED 2007.Apr.27

SUPPLIER
SOURCE R-SS-ZU-05/07
SPECIFICATION
MATERIAL TYPE Zone U - Tailings Sand

SAMPLED BY AG - Client
TESTED BY HJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm	100.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	99.5	
No. 10	2.00 mm	99.1	
No. 20	850 µm	98.6	
No. 40	425 µm	96.5	
No. 60	250 µm	85.2	
No. 100	150 µm	58.0	
No. 200	75 µm	25.8	

MOISTURE CONTENT 10.2%

COMMENTS
LOCATION: PE
CHAINAGE: 35+00
ELEVATION: 948.5m

Page 1 of 1 2007.May.04 GeoNorth Engineering Ltd. PER

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

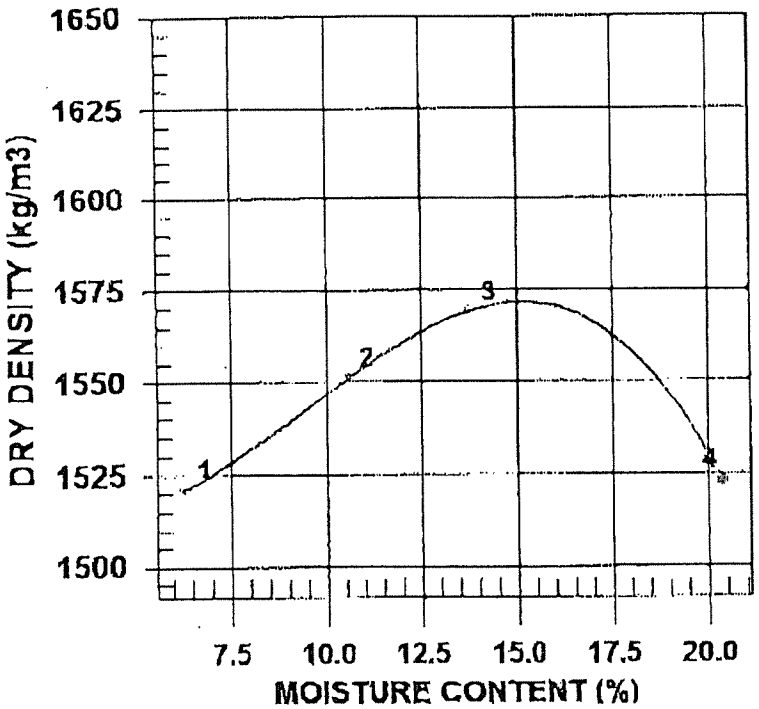
Mount Polley Mining Corp.
Likely

CONTRACTOR

PROCTOR NO. 19 DATE TESTED 2007.May.03 DATE RECEIVED 2007.May.01 DATE SAMPLED 2007.Apr.27

INSITU MOISTURE N/A %
SAMPLED BY AG - CLIENT
TESTED BY HJ
SUPPLIER
SOURCE R-S5-ZU-06/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE 12.5MM
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 4

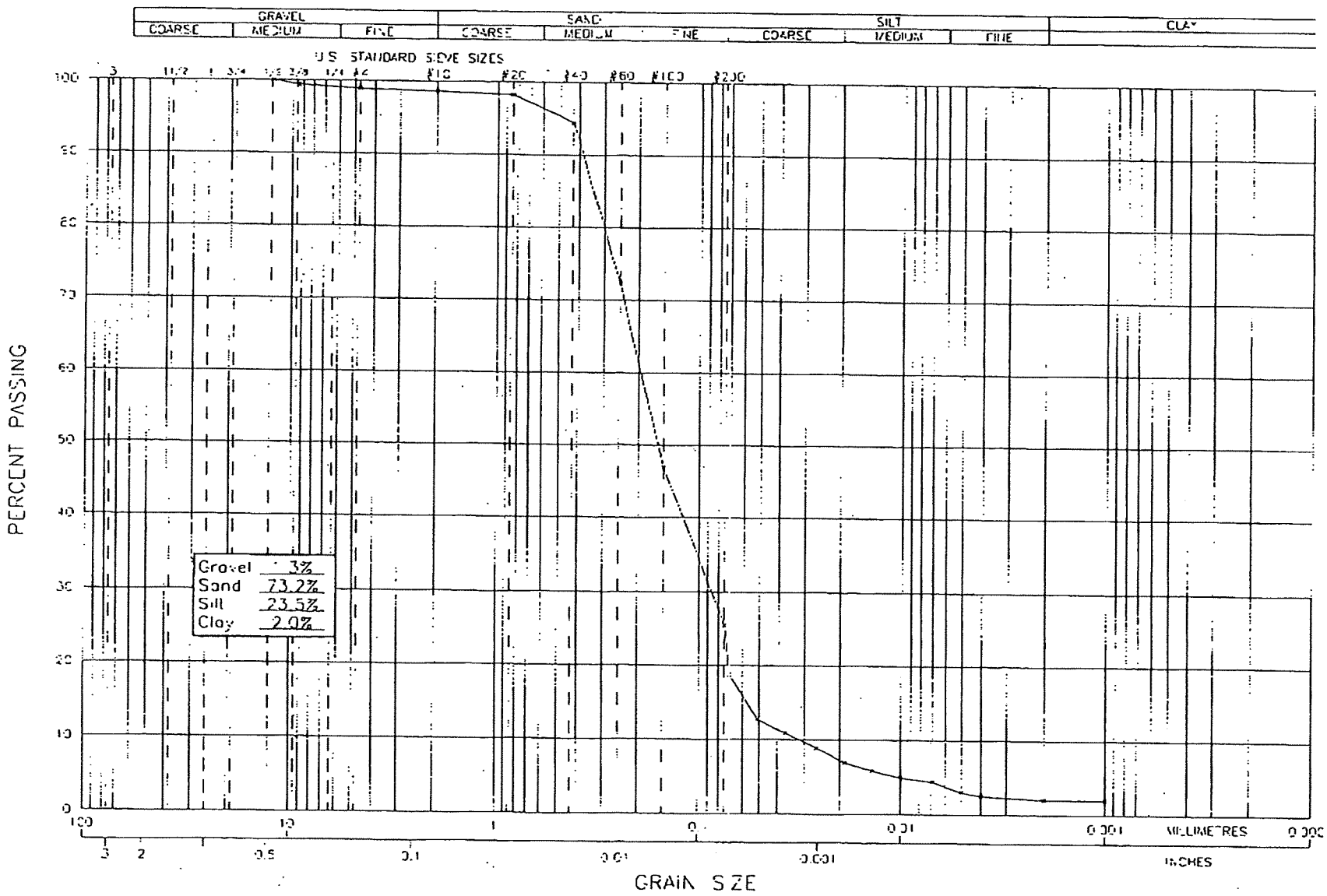


TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1617	1521	6.3
2	1715	1551	10.6
3	1785	1569	13.8
4	1834	1523	20.4

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1580	15.5

COMMENTS
LOCATION: PE, CHAINAGE: 37+00, ELEVATION: 948.5m

SPECIFIC GRAVITY OF FINES = 2.680



A3-19

GEONORTH ENGINEERING LTD.	MOUNT POLLEY MINING CORP.	SCALE:	DATE:
1301 Kelther Road Prince George, B.C. V2L 5S9 Tel (250) 564-4304 Fax (250) 564-9323	M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-SS-ZU-06/07	N.T.S	2007/05/07
		PROJECT NO: K-2036	PLATE NO. 2036-B11

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold									Date: May 7 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZU-06/07									**Type: Sand**		
Sample #:		Test #:		Hole #:		Depth:			Time:		
Sampled By: AG - Client			Tested By: DJ						Checked By: NK		
Date Sampled: 04.27			Date Received: 05 01						Date Tested: 05 04		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
100.0	0.987	0.5	19.0	20.0	0.01365				0.070	19.0	**18.8**
100.0	0.987	1	13.0	20.0	0.01365				0.051	13.0	**12.8**
100.0	0.987	2	11 0	20 0	0.01365				0.037	11 0	**10.9**
100.0	0.987	4	9.0	20.0	0.01365				0.026	9.0	**8.9**
100.0	0.987	8	7.0	20.0	0 01365				0.019	7.0	**6.9**
100.0	0.987	15	6.0	20.0	0.01365				0.014	6.0	**5.9**
100.0	0.987	30	5.0	20.0	0 01365				0.010	5.0	**4.9**
100.0	0.987	60	4 5	20 0	0.01365				0.007	4.5	**4.4**
100.0	0.987	120	3 0	20.0	0.01365				0.005	3.0	**3.0**
100.0	0.987	240	2 5	20.0	0.01365				0.004	2.5	**2.5**
100.0	0.987	480	2.0	20.0	0.01365				0.002	2.0	**2.0**
100.0	0.987	1440	2.0	20.0	0 01365				0.001	2 0	**2.0**
Hydrometer #: 794968			Graduate #: 6			Dispersing Agent: Sodium Hex				Amount. 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**98.7**
20	0.4	99.6	99.6	**98.3**
40	4.0	95.6	95.6	**94.4**
60	22 2	73.4	73.4	**72.4**
100	26.0	47.4	47.4	**46.8**
200	21.6	25.8	25.8	**25.5**
Pan	25.8			
Total	100.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total =			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**8.8%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

N>100

A3 - 20

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

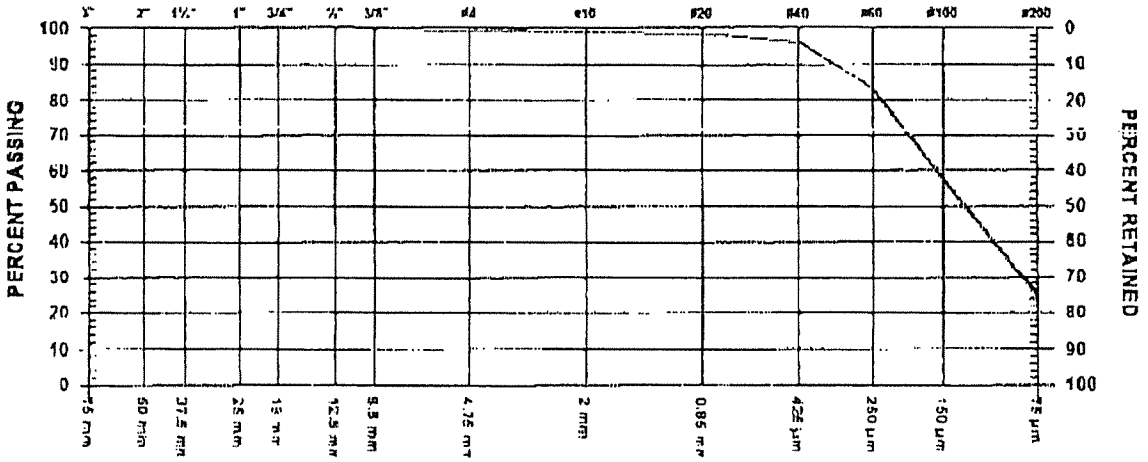
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

SIEVE TEST NO. 20 DATE RECEIVED 2007.May.01 DATE TESTED 2007.May.04 DATE SAMPLED 2007.Apr.27

SUPPLIER
SOURCE R-S5-ZU-06/07
SPECIFICATION
MATERIAL TYPE Zone U - Tailings Sand

SAMPLED BY AG - Client
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm	100.0	
3/8"	9.5 mm	99.5	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	99.0	
No. 10	2.00 mm	98.7	
No. 20	850 µm	98.3	
No. 40	425 µm	96.2	
No. 60	250 µm	82.9	
No. 100	150 µm	57.3	
No. 200	75 µm	24.8	

MOISTURE CONTENT 8.8%

COMMENTS
LOCATION: PE
CHAINAGE: 37+00
ELEVATION: 948.5m

Page 1 of 1 2007.May.04 GeoNorth Engineering Ltd PER

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

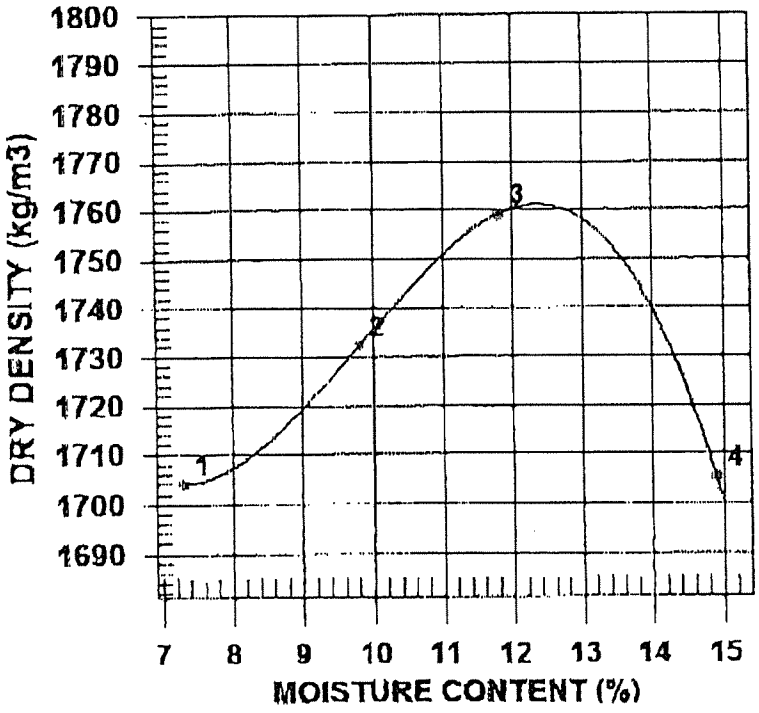
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
Mount Polley Mining Corp.
Likely
CONTRACTOR

PROCTOR NO 20 DATE TESTED 2007.May.03 DATE RECEIVED 2007.May.01 DATE SAMPLED 2007.Apr.27

INSITU MOISTURE N/A %
SAMPLED BY AG - CLIENT
TESTED BY HJ
SUPPLIER
SOURCE R-S5-ZU-07/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE 37.5MM
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 4.2 %
OVERSIZE SPECIFIC GRAVITY 2.65
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1828	1704	7.3
2	1902	1732	9.8
3	1966	1759	11.8
4	1959	1705	14.9

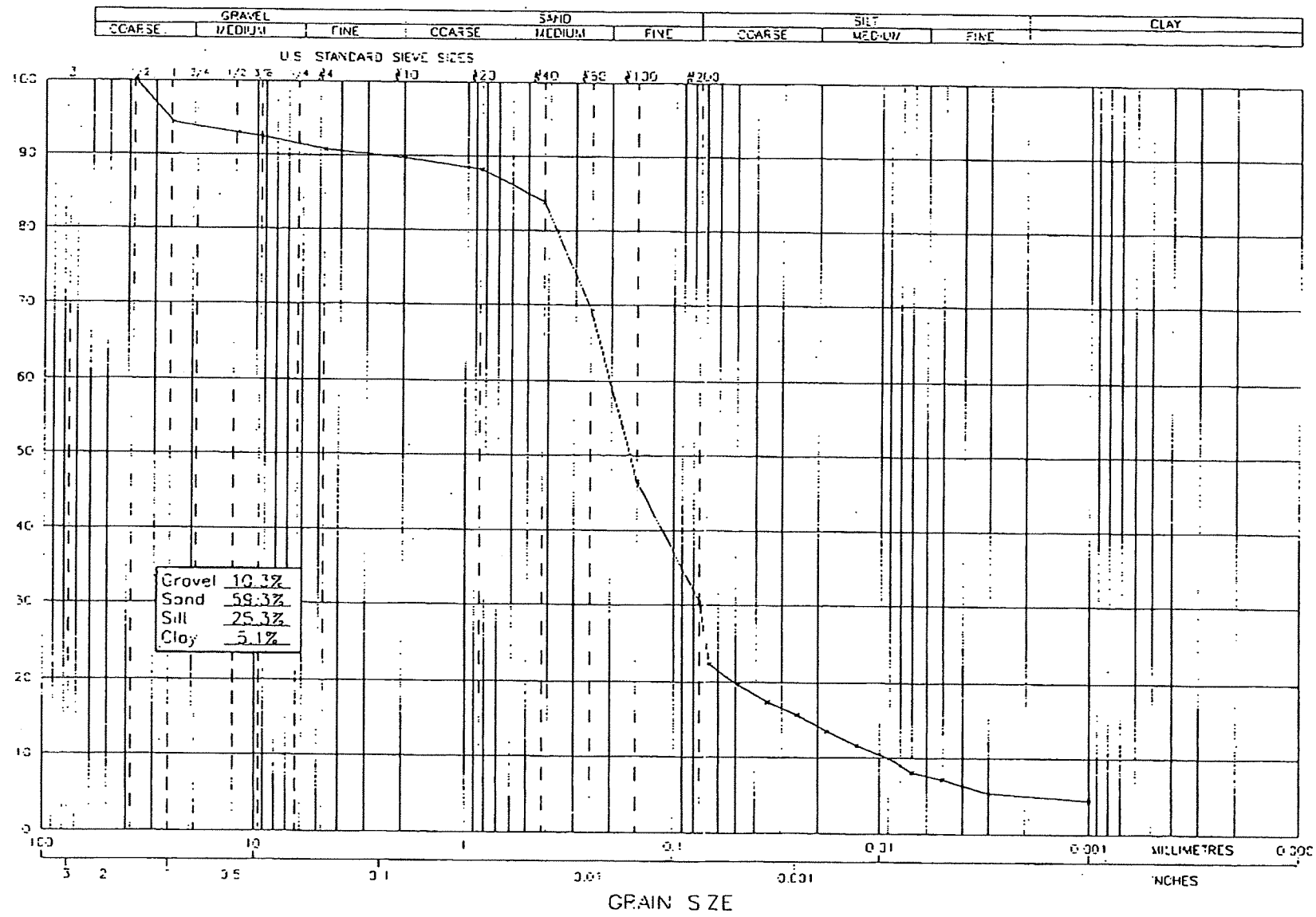
	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1760	12.5
OVERSIZE CORRECTED	1790	12.0

COMMENTS
LOCATION: PE, CHAINAGE: 39+00, ELEVATION: 948.5m

SPECIFIC GRAVITY OF FINES - 2.673

 PER

A3-22



A3-23

GeoNorth Engineering Ltd. 1301 Kelliher Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZU-07/07	SCALE: N.T.S.	DATE 2007/05/07
		PROJECT NO: K-2036	PLATE NO. 2036-312

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold				Date: May 7, 2007
Project Name: MPCP Stage 4/5				**Project #: K-2036**
Source/Location: R-S5-ZU-07/07				**Type: Sand**
Sample #:	Test #:	Hole #:	Depth:	Time:
Sampled By: AG - Client	Tested By: DJ			Checked By: NK
Date Sampled: 04.27	Date Received: 05.01			Date Tested: 05.04

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R`	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
100.0	0.897	0.5	25.0	20 0	0.01365				0.067	25.0	**22.4**
100.0	0.897	1	22 0	20.0	0.01365				0.049	22.0	**19.7**
100.0	0.897	2	19 5	20.0	0.01365				0.035	19.5	**17.5**
100.0	0 897	4	17.5	20.0	0.01365				0.025	17.5	**15.7**
100.0	0.897	8	15.0	20.0	0.01365				0.018	15 0	**13.5**
100.0	0.897	15	13.0	20.0	0.01365				0.013	13 0	**11.7**
100.0	0 897	30	11.0	20.0	0.01365				0.009	11.0	**9.9**
100.0	0.897	60	9.0	20 0	0.01365				0.007	9.0	**8.1**
100.0	0.897	120	8.0	20 0	0.01365				0.005	8.0	**7.2**
100.0	0.897	240	6 0	20.0	0.01365				0.003	6 0	**5.4**
100.0	0.897	480	5.0	20.0	0.01365				0.001	5.0	**4.5**
100.0	0.897	1440	5.0	20 0	0.01365				0.001	5.0	**4.5**

Hydrometer #: 794968	Graduate #: 1	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**89.7**
20	1.7	98.3	98 3	**88.2**
40	4.8	93.5	93.5	**83.9**
60	16.3	77 2	77.2	**69.2**
100	25.2	52.0	52.0	**46.6**
200	18.1	33.9	33 9	**30.4**
Pan	33.9			
Total	100.0			
Unwashed Wt. =				
Tare = _____	Wt. Passing #200 = _____			

Sieve Analysis

Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig Samp.
38 1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content

Tare No.	
Wet Wt & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**10.3%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

Nosico

A3 - 24

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

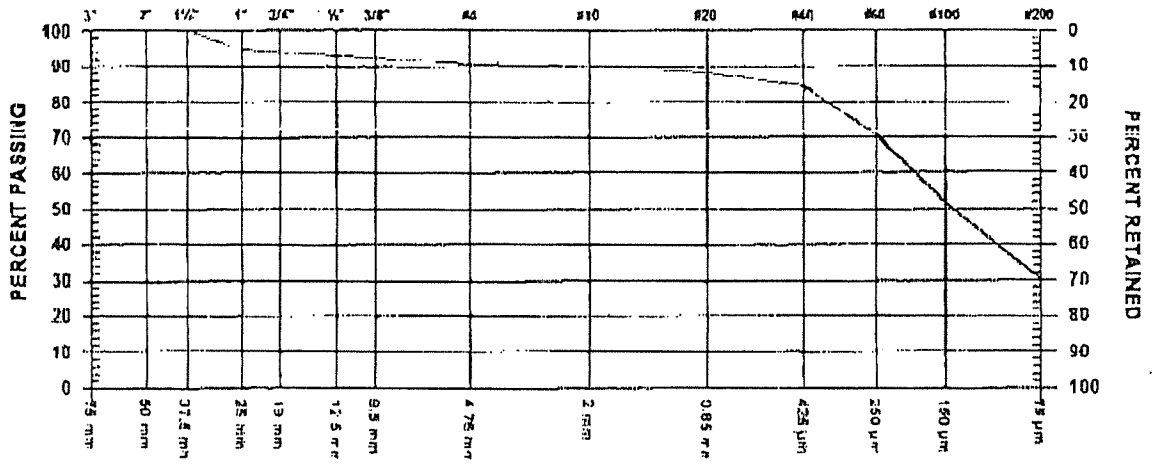
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

SIEVE TEST NO 21 DATE RECEIVED 2007.May.01 DATE TESTED 2007.May.04 DATE SAMPLED 2007.Apr.27

SUPPLIER
SOURCE R-S5-ZU-07-07
SPECIFICATION
MATERIAL TYPE Zone U - Tailings Sand

SAMPLED BY AG - Client
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	94.4	
3/4"	19 mm		
1/2"	12.5 mm	93.0	
3/8"	9.5 mm	92.5	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	90.8	
No. 10	2.00 mm	89.7	
No. 20	850 µm	88.3	
No. 40	425 µm	84.2	
No. 60	250 µm	70.8	
No. 100	150 µm	51.5	
No. 200	75 µm	30.1	

MOISTURE CONTENT 10.3%

COMMENTS
LOCATION: PE
CHAINAGE: 39100
ELEVATION: 948.5m

 2007.May.04 GeoNorth Engineering Ltd PER

A3-25

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

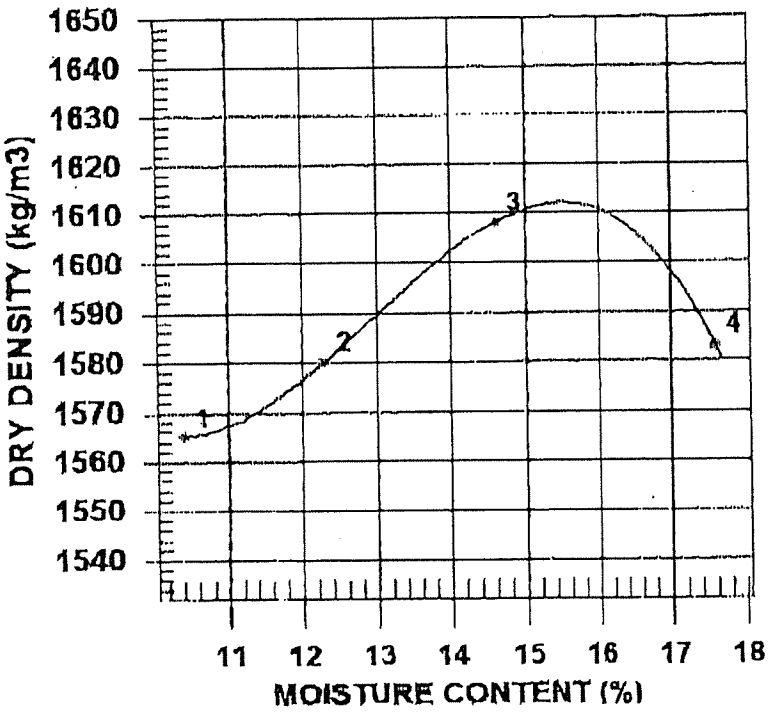
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
Mount Polley Mining Corp.
Likely
CONTRACTOR

PROCTOR NO. 21 DATE TESTED 2007.May.03 DATE RECEIVED 2007.May.01 DATE SAMPLED 2007.Apr.27

INSITU MOISTURE N/A %
SAMPLED BY AG - CLIENT
TESTED BY HJ
SUPPLIER
SOURCE R-SS-ZU-08/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE 12.5MM
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 4



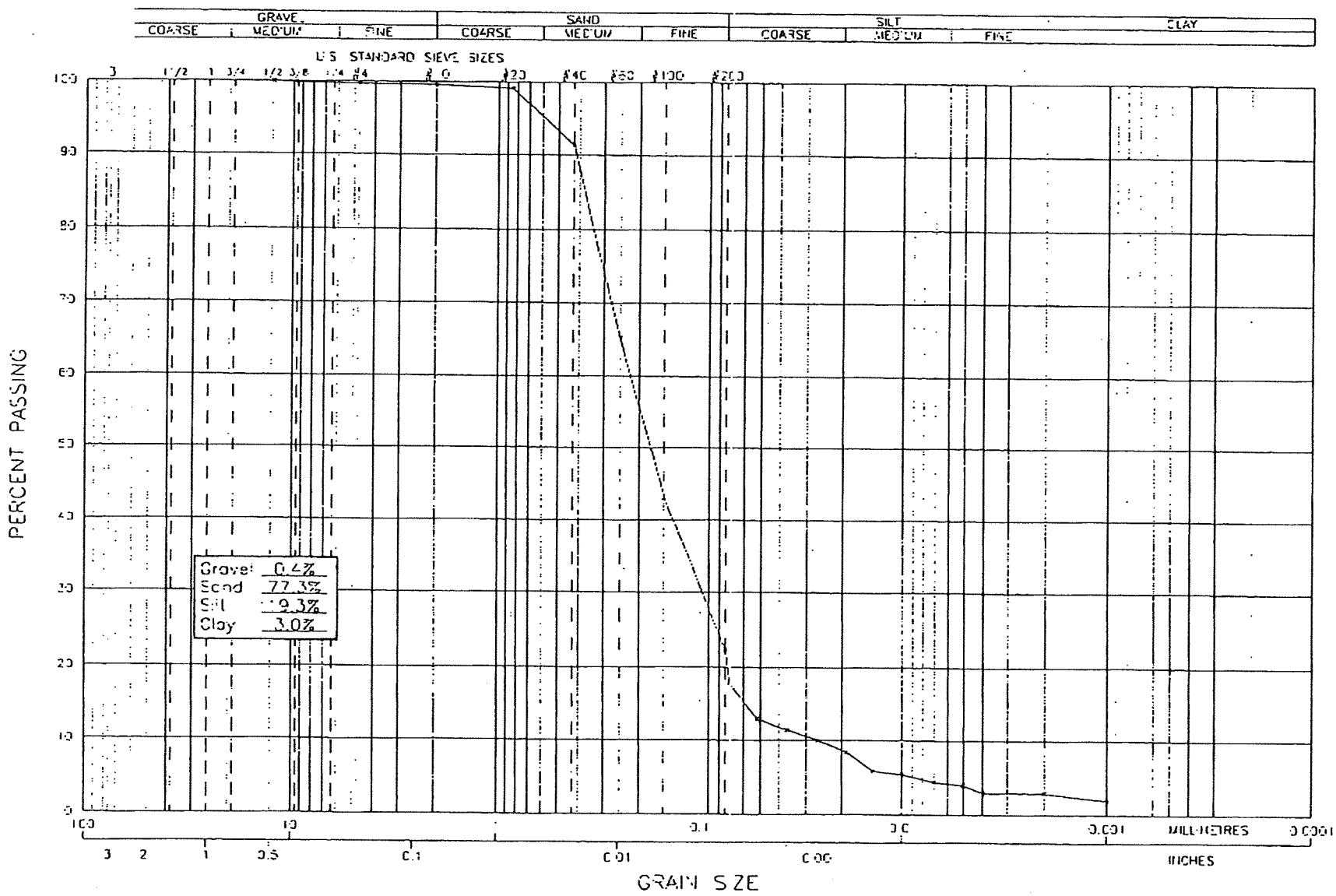
TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1728	1565	10.4
2	1774	1580	12.3
3	1843	1608	14.6
4	1862	1583	17.6

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1610	15.5

COMMENTS
LOCATION: PE, CHAINAGE: 41+00, ELEVATION: 948.5m

SPECIFIC GRAVITY OF FINES - 2.679

A3-26



A3-27

GEONORTH ENGINEERING LTD. 1301 Kelliher Road Prince George, BC V2L 5S6 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZU-08/07	SCALE: N.T.S.	DATE 2007/05/08
		PROJECT NO: K-2036	PLATE NO. 2036-B13

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold									Date: May 8, 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZU-08/07									**Type: Sand**		
Sample #:		Test #:		Hole #:		Depth:			Time:		
Sampled By: AG - Client			Tested By: DJ						Checked By: NK		
Date Sampled: 04.27			Date Received: 05.01						Date Tested: 05.07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
100.0	0.996	0.5	18 0	19 0	0.01382				0.071	18.0	**17.9**
100.0	0.996	1	13.0	19.0	0 01382				0.052	13 0	**12.9**
100.0	0.996	2	11.5	19.0	0.01382				0.037	11 5	**11.5**
100.0	0.996	4	10.0	19.0	0.01382				0.026	10.0	**10.0**
100.0	0.996	8	8 5	19.0	0 01382				0.019	8.5	**8.5**
100.0	0.996	15	6.0	19.0	0.01382				0.014	6 0	**6.0**
100.0	0.996	30	5 5	19.0	0 01382				0.010	5.5	**5.5**
100.0	0.996	60	4.5	19.0	0.01382				0.007	4 5	**4.5**
100.0	0.996	120	4.0	19.0	0.01382				0.005	4.0	**4.0**
100.0	0.996	240	3.0	19.0	0.01382				0.004	3.0	**3.0**
100.0	0.996	480	3 0	21.0	0 01348				0.002	3.0	**3.0**
100.0	0.996	1440	2.0	20.0	0.01365				0.001	2.0	**2.0**
Hydrometer #: 794968			Graduate # 8			Dispersing Agent Sodium Hex				Amount 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**99.6**
20	0.5	99.5	99 5	**99.1**
40	7.7	91.8	91.8	**91.4**
60	26.2	65.6	65.6	**65.3**
100	22.3	43.3	43 3	**43.1**
200	20.9	22.4	22.4	**22.3**
Pan	22.4			
Total	100.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig Samp.
38.1			
25 4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**10.9%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Noelco

A3-28

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

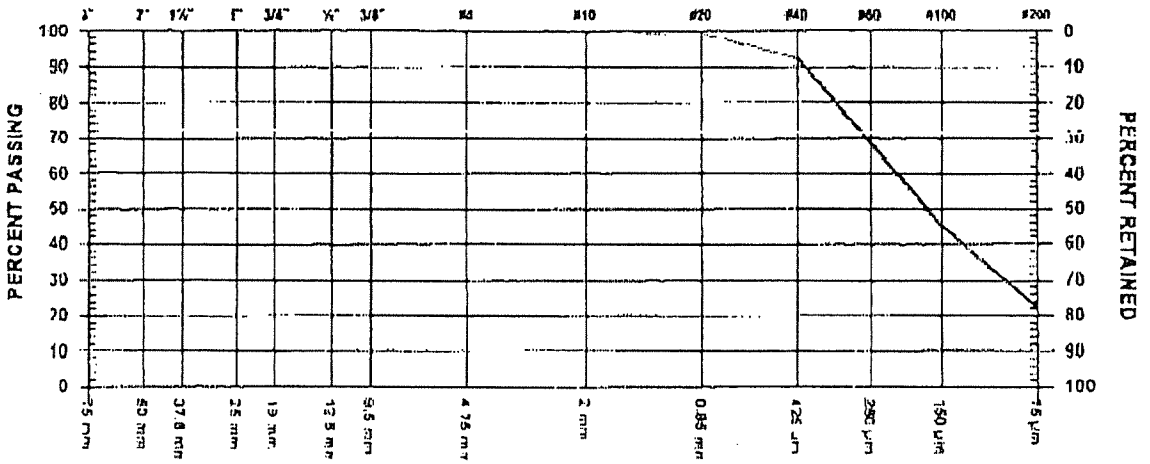
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 — Mount Polley Mining Corp.
Materials Testing — Likely
CONTRACTOR

SIEVE TEST NO 22 DATE RECEIVED 2007.May.01 DATE TESTED 2007.May.04 DATE SAMPLED 2007.Apr.27

SUPPLIER
SOURCE R-S5-ZU-08/07
SPECIFICATION
MATERIAL TYPE Zone U Tailings Sand

SAMPLED BY AC - Client
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm	100.0	
3/8"	9.5 mm	99.9	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	99.7	
No. 10	2.00 mm	99.6	
No. 20	850 µm	99.1	
No. 40	425 µm	92.4	
No. 60	250 µm	68.6	
No. 100	150 µm	45.2	
No. 200	75 µm	22.0	

MOISTURE CONTENT 10.9%

COMMENTS
LOCATION: PE
CHAINAGE: 41+00
ELEVATION: 948.5m

Page 1 of 1 2007.May.04 GeoNorth Engineering Ltd. PER.

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)584-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

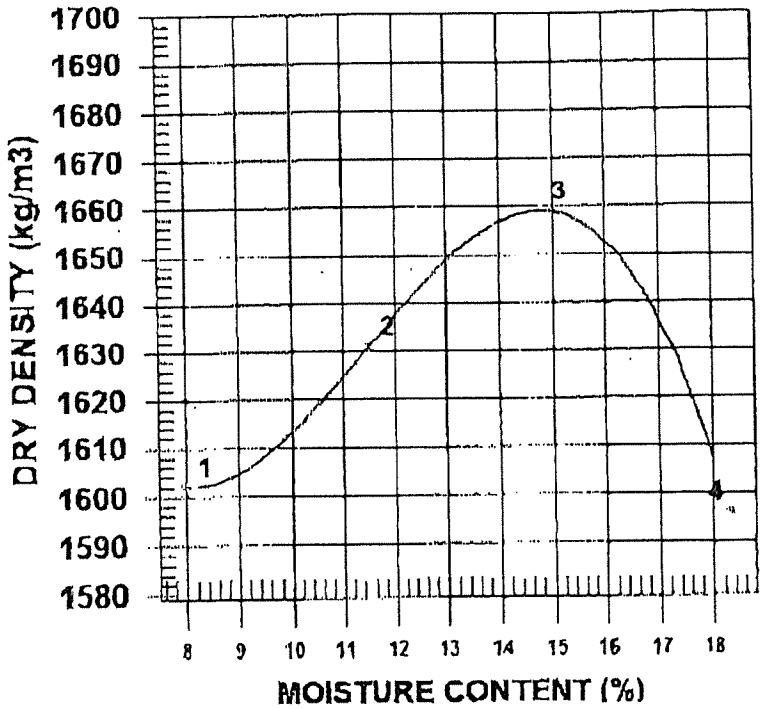
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
Mount Polley Mining Corp.
Likely

CONTRACTOR

PROCTOR NO. 22 DATE TESTED 2007.May.04 DATE RECEIVED 2007.May.01 DATE SAMPLED 2007.Apr.27

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	AG - CLIENT	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	HJ	RAMMER TYPE	Automatic
SUPPLIER		PREPARATION	Moist
SOURCE	R-SS-ZU-09/07	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	2.9 %
MAJOR COMPONENT	SAND	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE	37.5MM	TOTAL NUMBER OF TRIALS	4
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1730	1602	8.0
2	1819	1631	11.5
3	1904	1659	14.8
4	1888	1596	18.3

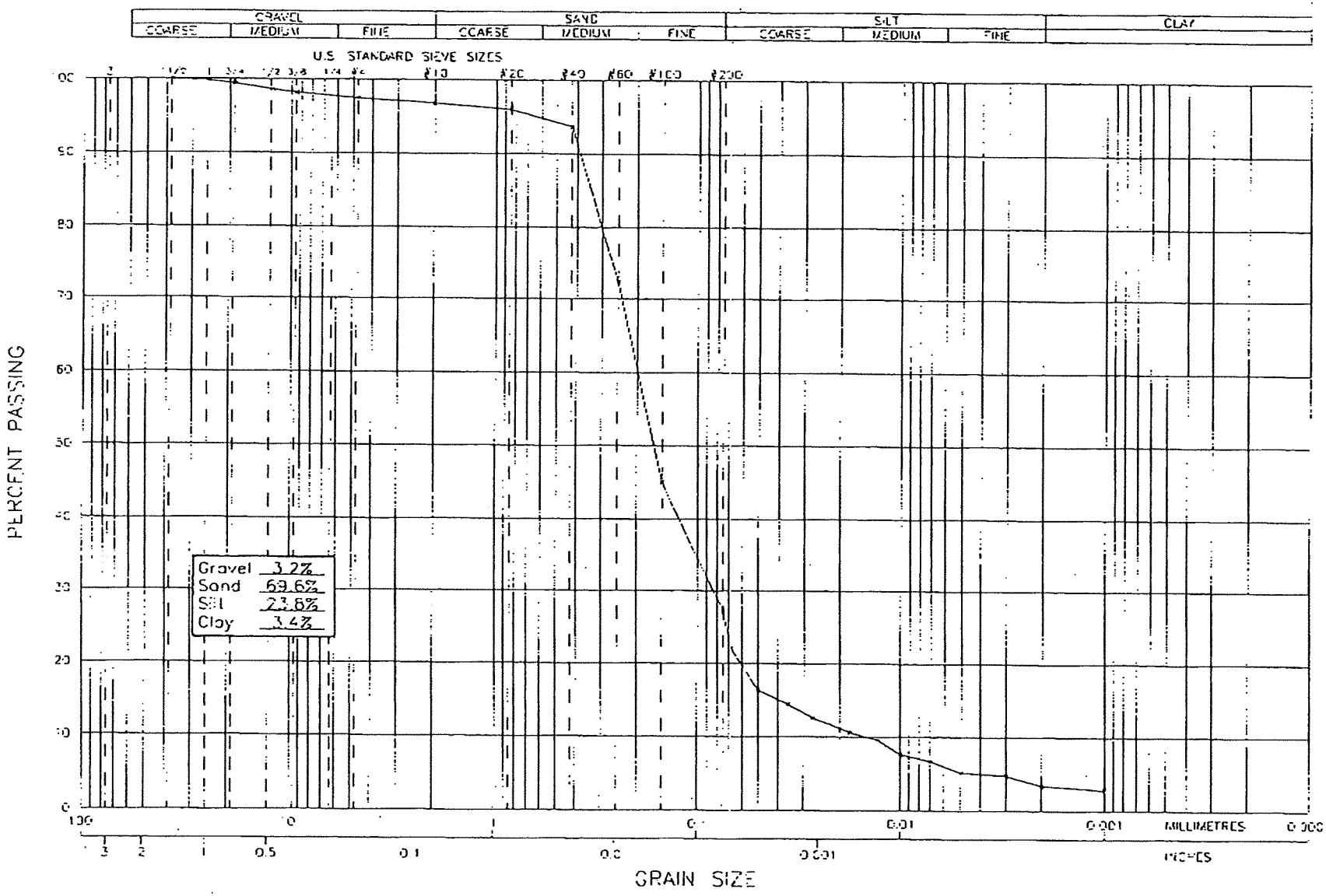
	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1660	15.0
OVERSIZE CORRECTED	1680	14.5

COMMENTS
LOCATION: PR, CHAINAGE: 43+00, ELEVATION: 948.5m

SPECIFIC GRAVITY - 2.731

 2007.May.08 GeoNorth Engineering Ltd. PER

A3 - 30



A3-31

GeoNorth Engineering Ltd. 1301 Kelliher Road Prince George, BC V2L 5S6 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZU-09/07	SCALE: N.T.S	DATE: 2007/05/08
		PROJECT NO: K-2036	PLATE NO. 2036-B14

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold									Date: May 8, 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZU-09/07									**Type: Sand**		
Sample #:		Test #:		Hole #:		Depth:			Time:		
Sampled By: AG - Client			Tested By: DJ						Checked By: NK		
Date Sampled: 04.27			Date Received: 05.01						Date Tested: 05.07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
100.0	0.968	0.5	22.8	19.0	0.01382				0.068	22.8	**22.1**
100.0	0.968	1	16.8	19.0	0.01382				0.050	16.8	**16.3**
100.0	0.968	2	14.9	19.0	0 01382				0.036	14.9	**14.4**
100.0	0.968	4	12.9	19.0	0.01382				0.027	12.9	**12.5**
100 0	0 968	8	10.9	19.0	0.01382				0.018	10.9	**10.6**
100.0	0.968	15	9.9	19 0	0.01382				0.013	9.9	**9.6**
100 0	0 968	30	7.9	19.0	0.01382				0.010	7 9	**7.6**
100.0	0.968	60	6.9	19.0	0.01382				0.007	6.9	**6.7**
100.0	0.968	120	5 4	19 0	0.01382				0.005	5.4	**5.2**
100.0	0.968	240	5.0	19.0	0.01382				0.003	5 0	**4.8**
100.0	0.968	480	3.5	21.0	0.01348				0 002	3.5	**3.4**
100.0	0.968	1440	3.0	20 0	0.01365				0.001	3.0	**2.9**
Hydrometer #: 794968			Graduate #: 3			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**96.8**
20	0.8	99.2	99.2	**96.0**
40	2.4	96.8	96.8	**93.7**
60	22.0	74 8	74 8	**72.4**
100	28.3	46.5	46.5	**45.0**
200	18.4	28.1	28.1	**27.2**
Pan	28.1			
Total	100 0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total =			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**8.4%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

NoHoc

A3-32

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

EVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1NO

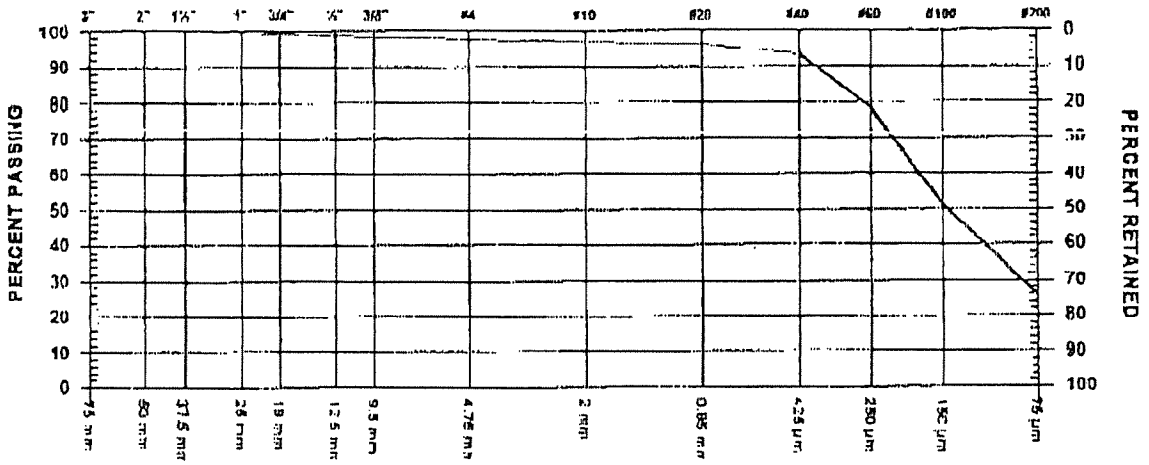
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

SIEVE TEST NO 23 DATE RECEIVED 2007.May.01 DATE TESTED 2007.May.04 DATE SAMPLED 2007.Apr.27

SUPPLIER
SOURCE R-S5-ZU-09/07
SPECIFICATION
MATERIAL TYPE Zone U - Tailings Sand

SAMPLED BY AG - Client
TESTED BY IIJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	99.8	
3/4"	19 mm	99.4	
1/2"	12.5 mm	98.6	
3/8"	9.5 mm	98.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	97.5	
No. 10	2.00 mm	96.8	
No. 20	850 µm	96.0	
No. 40	425 µm	93.4	
No. 60	250 µm	78.3	
No. 100	150 µm	51.1	
No. 200	75 µm	25.7	

MOISTURE CONTENT 8.4%

COMMENTS
LOCATION: PE
CHAINAGE: 43+00
ELEVATION: 948.5m

Page 1 of 1 2007.May.04 GeoNorth Engineering Ltd PER

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

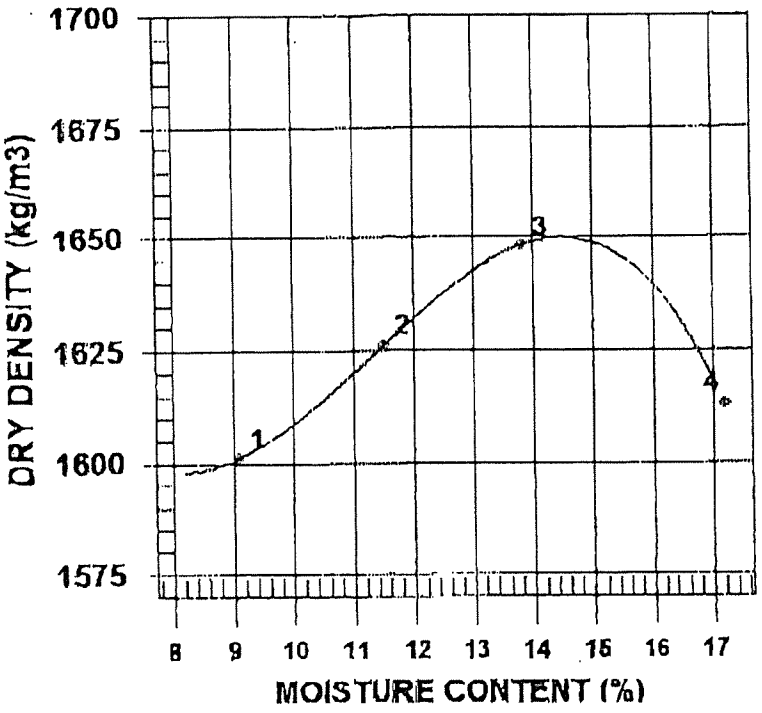
PROJECT M.P. Construction Program Stage 4/5
Materials Testing

Mount Polley Mining Corp.
Likely

CONTRACTOR

PROCTOR NO 23 DATE TESTED 200/.May.04 DATE RECEIVED 2007.May.01 DATE SAMPLED 2007.Apr.27

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	AG - CLIENT		
TESTED BY	HJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-S5-ZU-10/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	SAND	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	25MM	RETAINED 4.75mm SCREEN	2.0 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.65
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1747	1601	9.1
2	1813	1626	11.5
3	1875	1648	13.8
4	1890	1613	17.2

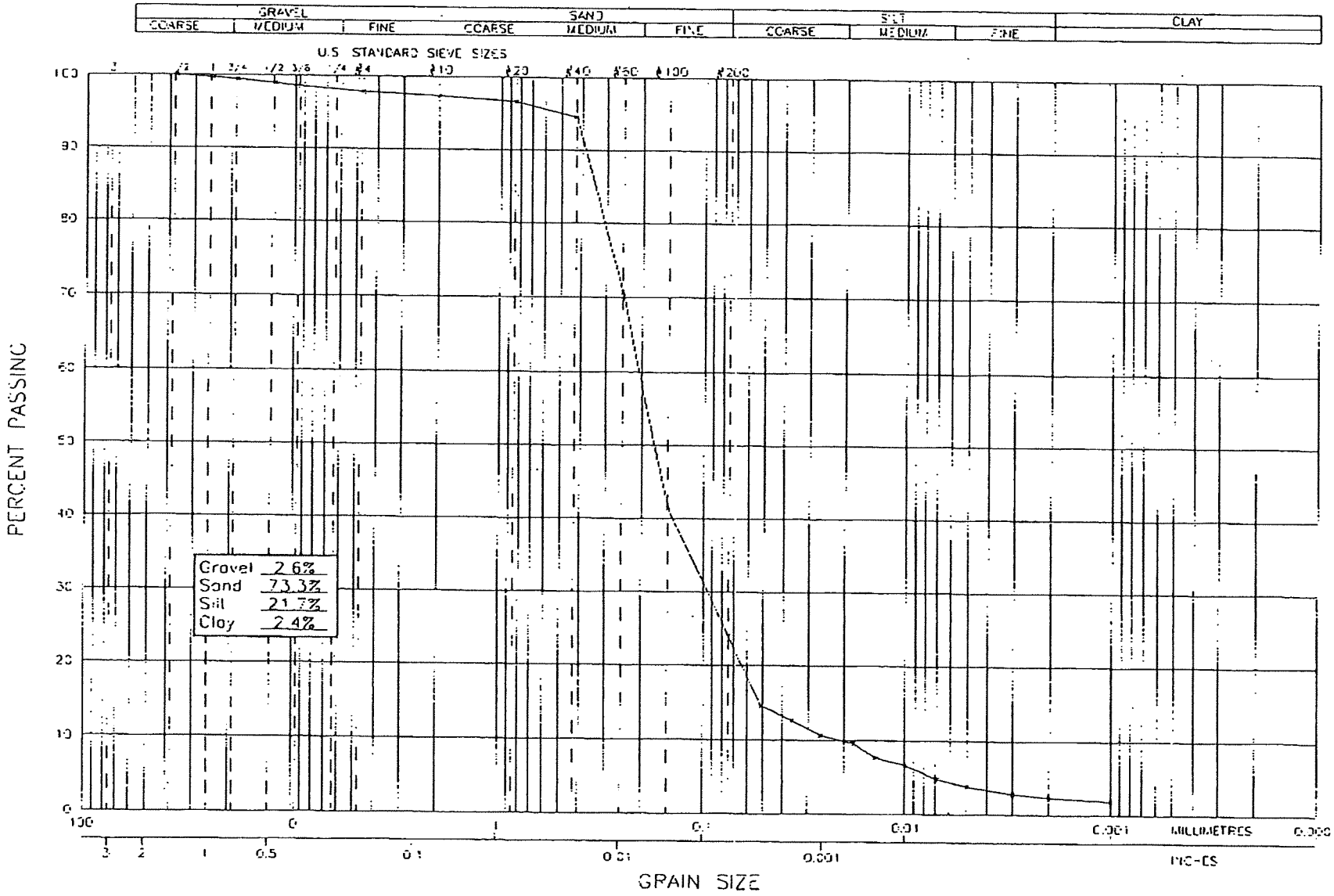
	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1650	14.5
OVERSIZE CORRECTED	1660	14.0

COMMENTS
LOCATION: PE, CHAINAGE: 45+00, ELEVATION: 948.5m

SPECIFIC GRAVITY OF FINES = 2.734

 2007.May.08 GeoNorth Engineering Ltd. PER

A3-34



A3-35

GEONORTH ENGINEERING LTD. 1301 Kelliher Road Prince George, BC V2L 5S8 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZU-10/07	SCALE N.T.S.	DATE: 2007/05/08
		PROJECT NO: K-2036	PLATE NO. 2036-B15

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. Attn: Knight Piesold				Date: May 8, 2007
Project Name: MPCP Stage 4/5				**Project #: K-2036**
Source/Location: R-S5-ZU-10/07				**Type: Sand**
Sample #:	Test #:	Hole #:	Depth:	Time:
Sampled By: AG - Client	Tested By: DJ			Checked By: NK
Date Sampled: 04.27	Date Received: 05.01			Date Tested: 05.07

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R`	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
100.0	0.974	0 5	22.3	19.0	0.01382				0.069	22.3	**21.7**
100.0	0.974	1	14.9	19.0	0.01382				0.051	14.9	**14.5**
100.0	0.974	2	12.9	19 0	0.01382				0.036	12.9	**12.6**
100.0	0.974	4	10.9	19.0	0.01382				0 026	10 9	**10.6**
100.0	0.974	8	9.9	19.0	0.01382				0.018	9.9	**9.6**
100.0	0.974	15	7.9	19.0	0.01382				0.014	7.9	**7.7**
100.0	0.974	30	6 9	19.0	0.01382				0.010	6 9	**6.7**
100.0	0.974	60	4.9	19.0	0.01382				0.007	4.9	**4.8**
100.0	0.974	120	4 0	19.0	0.01382				0.005	4.0	**3.9**
100.0	0 974	240	3 0	19 0	0.01382				0.003	3.0	**2.9**
100.0	0.974	480	2.5	21.0	0.01348				0.002	2.5	**2.4**
100.0	0.974	1440	2.0	20.0	0.01365				0.001	2.0	**1.9**

Hydrometer #: 794968	Graduate #: 6	Dispers ng Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**97.4**
20	0.7	99.3	99 3	**96.7**
40	2.2	97.1	97.1	**94.6**
60	24.5	72.6	72.6	**70.7**
100	30.1	42.5	42.5	**41.4**
200	17.8	24.7	24.7	**24.1**
Pan	24.7			
Total	100.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis

Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content

Tare No	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**9.1%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

Noelc3

A3-36

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

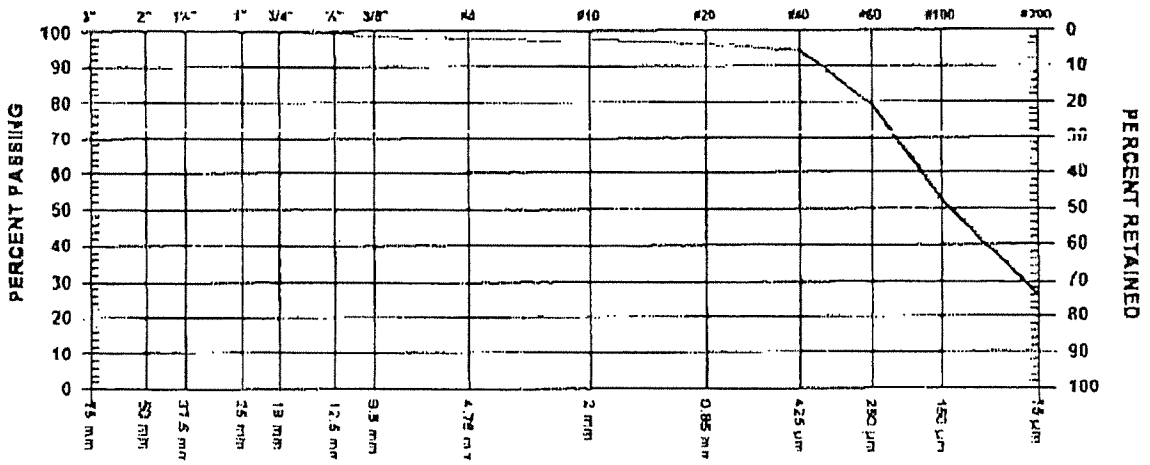
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

SIEVE TEST NO 24 DATE RECEIVED 2007.May.01 DATE TESTED 2007.May.04 DATE SAMPLED 2007.Apr.27

SUPPLIER
SOURCE R-S5-ZU-10/07
SPECIFICATION
MATERIAL TYPE Zone U - Tailings Sand

SAMPLED BY AG - Client
TESTED BY HJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	99.7	
3/4"	19 mm	99.5	
1/2"	12.5 mm	99.0	
3/8"	9.5 mm	98.6	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	97.9	
No. 10	2.00 mm	97.4	
No. 20	850 µm	96.7	
No. 40	425 µm	94.5	
No. 60	250 µm	79.2	
No. 100	150 µm	52.3	
No. 200	75 µm	26.0	

MOISTURE CONTENT 9.1%

COMMENTS
LOCATION: PE
CHAINAGE: 45+00
ELEVATION: 948.5m

Page 1 of 1 2007.May.04 GeoNorth Engineering Ltd. PER

A3-37

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1NO

ATTN: Ron Martel @ 250-790-2268

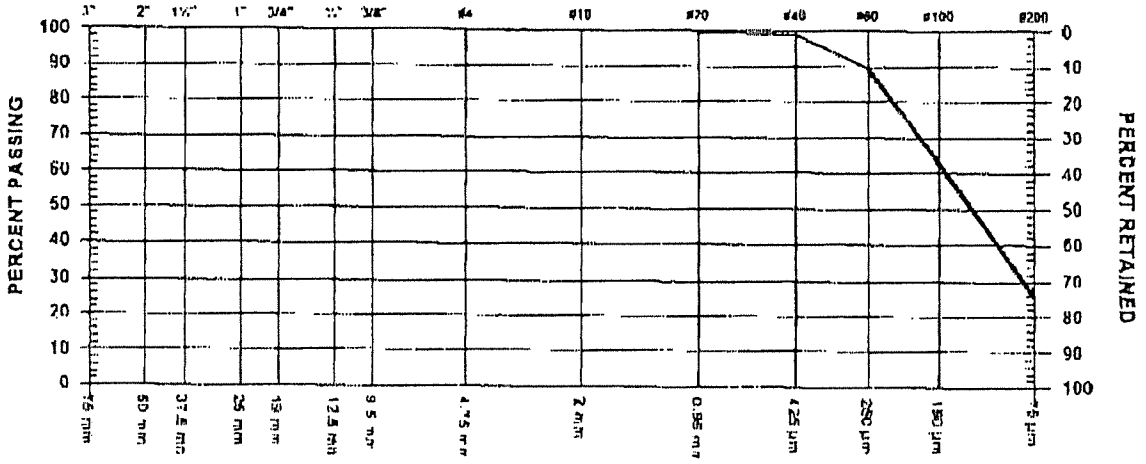
PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO. 28 DATE RECEIVED 2007.May.25 DATE TESTED 2007.Jun.05 DATE SAMPLED 2007.May.17

SUPPLIER
SOURCE R-55-ZU-11/07
SPECIFICATION
MATERIAL TYPE Sand

SAMPLED BY Client - AG
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm	100.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	99.9	
No. 10	2.00 mm	99.8	
No. 20	850 µm	99.7	
No. 40	425 µm	98.9	
No. 60	250 µm	89.3	
No. 100	150 µm	62.7	
No. 200	75 µm	25.5	

MOISTURE CONTENT 10.5%

COMMENTS
LOCATION: ZONE U-TAILINGS, CHAINAGE: 26+50, ELEVATION: 948.5m
SPECIFIC GRAVITY OF FINES = 2.678

 2007.Jun.07 GeoNorth Engineering Ltd. PER

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. Attn: Knight Piesold Consulting									Date: June 7, 2007		
Project Name: MPCP Stage 4/5									**Project #: K-2036**		
Source/Location: R-S5-ZU-11/07									Type: Sand		
Sample #:		Test #:		**Hole #:**		**Depth:**			Time:		
Sampled By: Client - AG			Tested By: DJ						Checked By: NK		
Date Sampled: 05 17.07			Date Received: 05.25.07						Date Tested: 06 05.07		
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R'**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
100.0	0.998	0.5	16.0	25 0	0 01286				0.066	16 0	**16.0**
100.0	0.998	1	9.5	25.0	0.01286				0.049	9.5	**9.5**
100.0	0.998	2	7.0	25.0	0.01286				0.035	7.0	**7.0**
100 0	0.998	4	5.0	25 0	0 01286				0.025	5 0	**5.0**
100.0	0.998	8	3 5	25.0	0.01286				0.018	3.5	**3.5**
100.0	0.998	15	2.5	25 0	0 01286				0.013	2 5	**2.5**
100.0	0.998	30	1 5	25.0	0.01286				0.009	1.5	**1.5**
100.0	0 998	60	0.0	0.0							
100.0	0.998	120	0.0	0 0							
100.0	0.998	240	0.0	0 0							
100.0	0.998	480	0.0	0.0							
100.0	0.998	1440	0.0	0.0							
Hydrometer #. 794968			Graduate #. 4			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

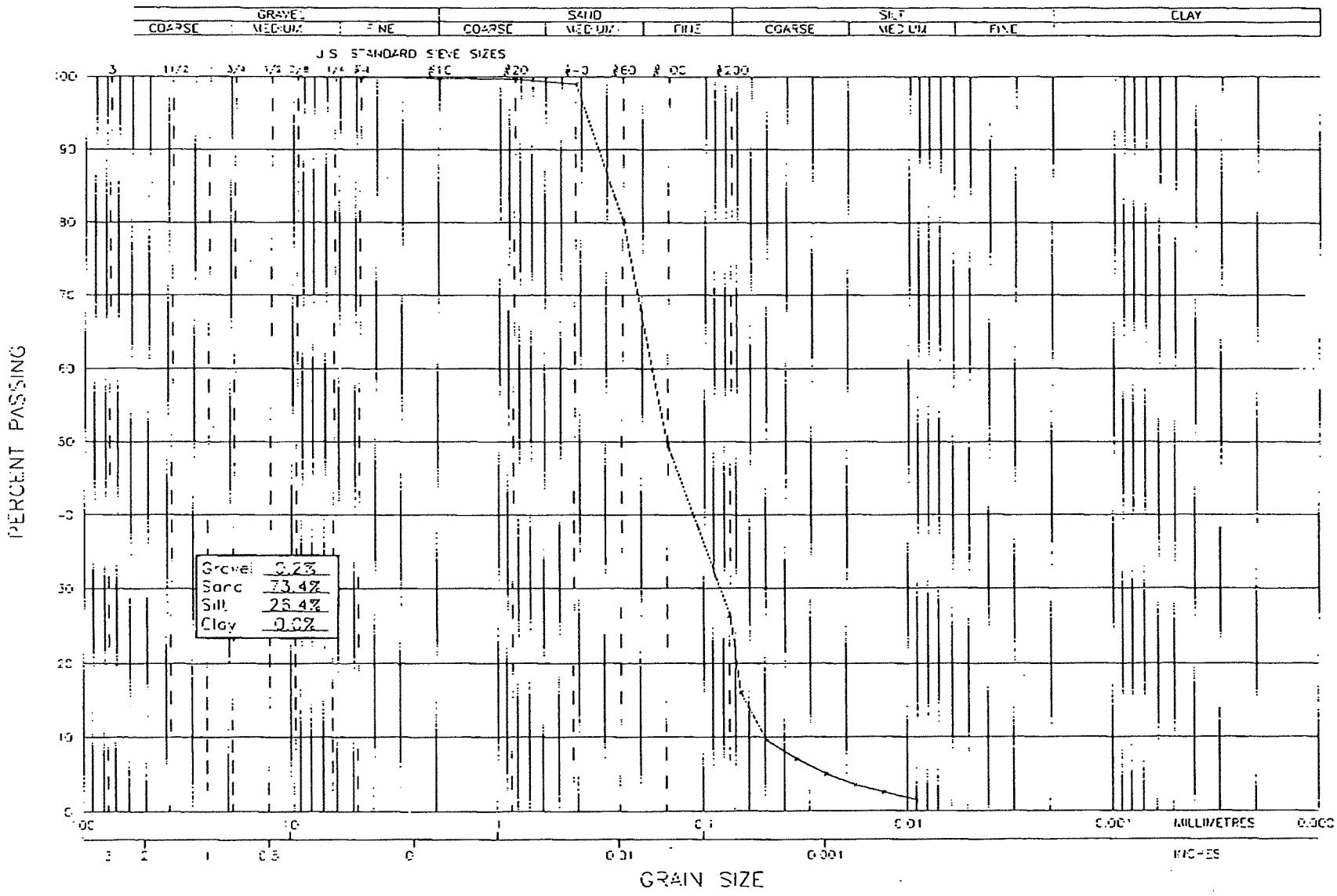
Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**99.8**
20	0.1		99.9	**99.7**
40	0.7		99.2	**99.0**
60	18.6		80.6	**80.4**
100	31.1		49 5	**49.4**
200	23.0		26.5	**26.4**
Pan	26.5			
Total	100.0			
Unwashed Wt. =				
Tare = _____		Wt. Passing #200 = _____		

Sieve Analysis			
Seive No	Weight Retained	Total Wt Passing	% Finer Than Orig Samp
38.1			
25.4			
19 0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content	
Tare No	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

Nicelco

A3-39



A3 - 40

GeoNorth Engineering Ltd. 1301 Kelther Road Prince George, B.C. V2L 5S8 Tel (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-SS-ZU-11/07	SCALE: N.T.S.	DATE: 2007/06/07
		PROJECT NO: K-2036	PLATE NO. 2036-322

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

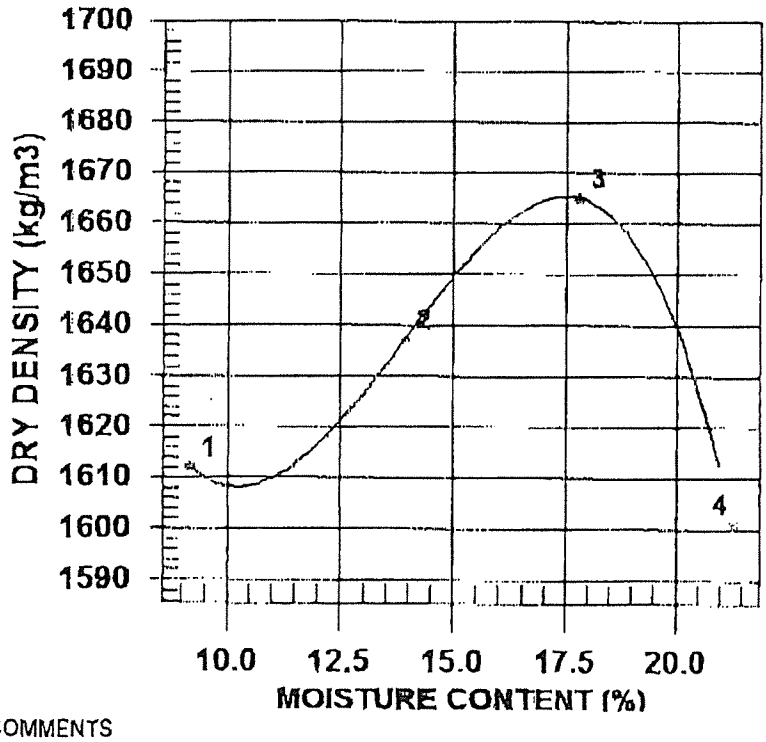
PROJECT M.P. Construction Program Stage 4/5
Materials Testing

Mount Polley Mining Corp.
Likely

CONTRACTOR

PROCTOR NO. 26 DATE TESTED 2007.May.30 DATE RECEIVED 2007.May.25 DATE SAMPLED 2007.May.17

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client - AG		
TESTED BY	HJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-S5-ZU-11/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	SAND	OVERSIZE CORRECTION METHOD	None
SIZE		RETAINED 4.75mm SCREEN	%
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1760	1612	9.2
2	1865	1637	13.9
3	1961	1665	17.8
4	1942	1601	21.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1670	17.5

COMMENTS

 PER

A3-41

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

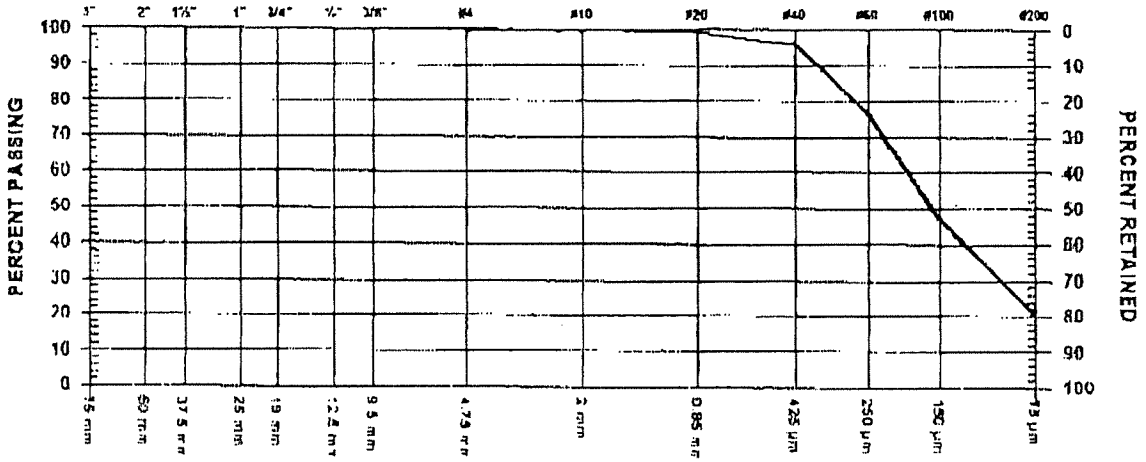
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

SIEVE TEST NO 29 DATE RECEIVED 2007.May.25 DATE TESTED 2007.Jun.01 DATE SAMPLED 2007.May.1/

SUPPLIER
SOURCE R-S5-ZU-12/07
SPECIFICATION
MATERIAL TYPE Sand

SAMPLED BY Client- AG
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm	100.0	
3/8"	9.5 mm	99.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	99.6	
No. 10	2.00 mm	99.4	
No. 20	850 µm	99.1	
No. 40	425 µm	95.7	
No. 60	250 µm	76.1	
No. 100	150 µm	47.0	
No. 200	75 µm	20.3	

MOISTURE CONTENT 21.3%

COMMENTS
CHAINAGE: 24150
SPECIFIC GRAVITY OF FINES = 2.639

Page 1 of 1 2007.Jun.07 GeoNorth Engineering Ltd. PER

A3-42

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. Attn: Knight Piesold Consulting				Date. June 7, 2007
Project Name: MPCP Stage 4/5				**Project #: K-2036**
Source/Location: R-S5-ZU-12/07				Type: Sand
Sample #.	Test #.	**Hole #:**	**Depth:**	Time:
Sampled By: Client - AG	Tested By: DJ			Checked By: NK
Date Sampled: 05.17.07	Date Received: 05.25 07			Date Tested: 06.05.07

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R`	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
100.0	0.994	0.5	14.5	25.0	0.01286				0.068	14.5	**14.4**
100.0	0.994	1	8.5	25.0	0.01286				0.050	8.5	**8.4**
100.0	0.994	2	7.0	25.0	0.01286				0 035	7.0	**7.0**
100.0	0.994	4	5 0	25.0	0.01286				0.025	5.0	**5.0**
100.0	0.994	8	4.5	25.0	0.01286				0 018	4.5	**4.5**
100 0	0.994	15	4.0	25.0	0 01286				0.013	4 0	**4.0**
100.0	0.994	30	2 5	25.0	0 01286				0.009	2.5	**2.5**
100.0	0.994	60	1.5	23.0	0.01317				0 007	1.5	**1.5**
100.0	0.994	120	0 0	0 0							
100 0	0.994	240	0.0	0.0							
100.0	0.994	480	0.0	0.0							
100.0	0.994	1440	0 0	0.0							

Hydrometer #: 794968	Graduate #: 3	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids:			
Description of Sample:			

Hydrometer Sieve Analysis

Seive No.	Weight Retained	Total Wt Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**99.4**
20	0.2		99.8	**99.2**
40	4.6		95.2	**94.6**
60	24.4		70.8	**70.4**
100	33.4		37.4	**37.2**
200	16.9		20 5	**20.4**
Pan	20.5			
Total	100.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

Sieve Analysis

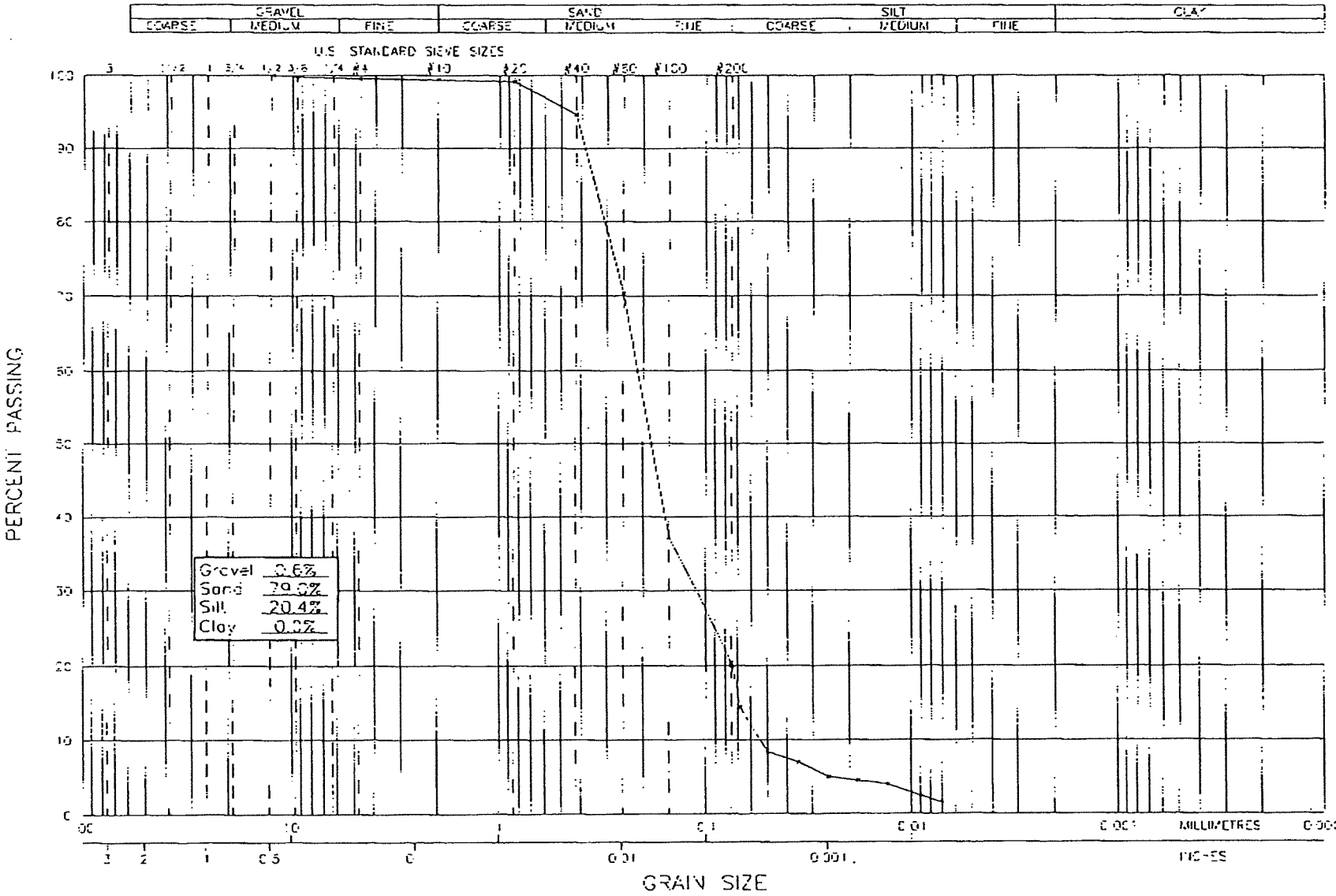
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig Samp
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total =			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Accelco

A3 - 43



A3-44

GEONORTH ENGINEERING LTD.
1301 Kelliher Road
Prince George, B.C. V2L 5S8
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4/5
GRAIN SIZE ANALYSIS OF R-S5-ZU-12/07

SCALE:	DATE:
N.T.S	2007/06/07
PROJECT NO:	PLATE NO
K-2036	2036-B23

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1NO

ATTN: Ron Martel @ 250-790-2268

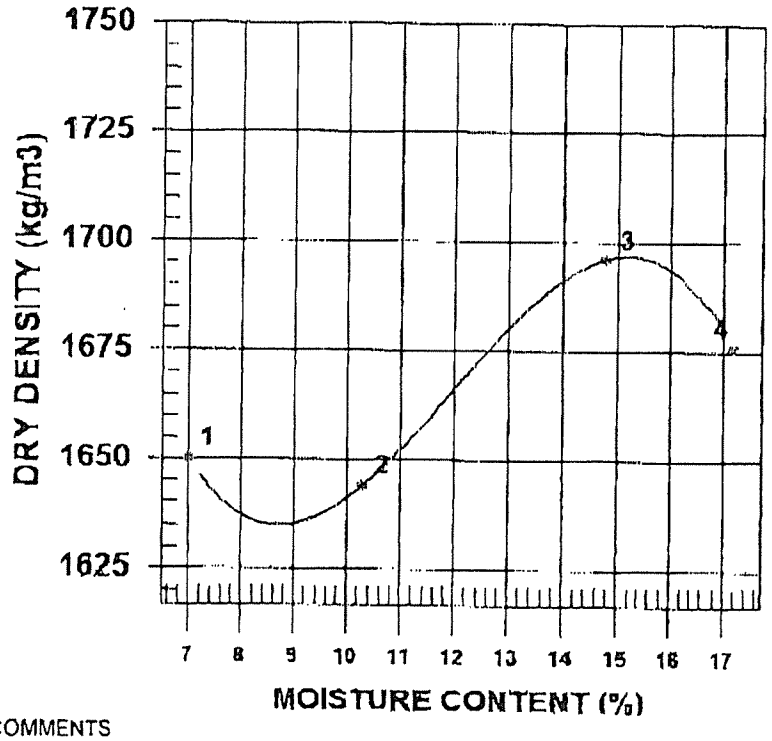
PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

PROCTOR NO. 27 DATE TESTED 2007.Jun.06 DATE RECEIVED 2007.May.25 DATE SAMPLED 2007.May.17

INSITU MOISTURE N/A %
SAMPLED BY Client - AG
TESTED BY CP
SUPPLIER
SOURCE R-85-ZU-12/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1766	1650	7.0
2	1813	1644	10.3
3	1947	1696	14.8
4	1964	1676	17.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1700	15.0

COMMENTS

A3-45

1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

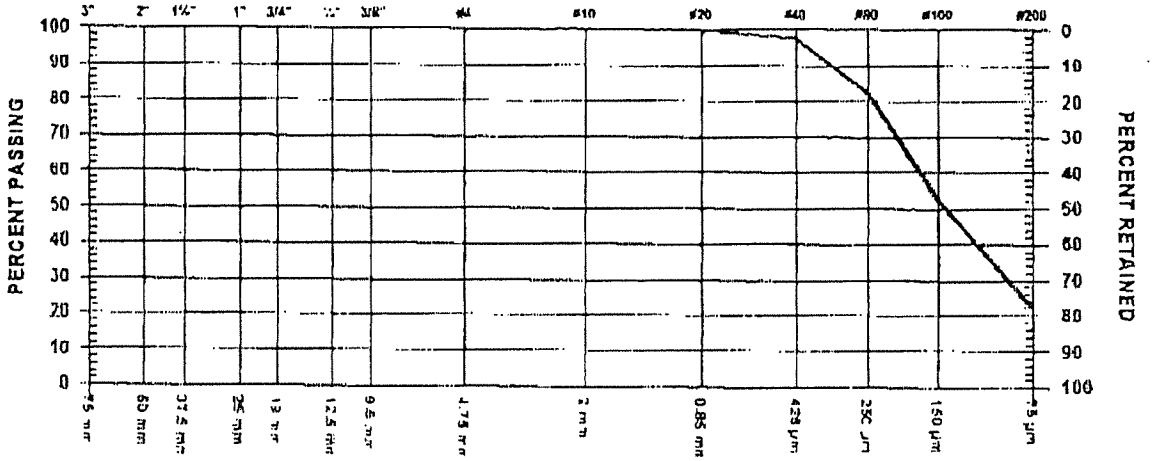
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

SIEVE TEST NO. 30 DATE RECEIVED 2007.May.25 DATE TESTED 2007.Jun.05 DATE SAMPLED 2007.May.17

SUPPLIER
SOURCE R-S5-20-13/07
SPECIFICATION
MATERIAL TYPE Sand

SAMPLED BY Client - AG
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm	100.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	100.0	
No. 10	2.00 mm	99.8	
No. 20	850 µm	99.6	
No. 40	425 µm	97.3	
No. 60	250 µm	82.0	
No. 100	150 µm	52.3	
No. 200	75 µm	22.0	

MOISTURE CONTENT 21.5%

COMMENTS
ZONE ME, 23450, 948.5m
SPECIFIC GRAVITY OF FINES = 2.607

 2007.Jun.07 GeoNorth Engineering Ltd. PER.

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. Attn: Knight Piesold Consulting										Date. June 7, 2007	
Project Name: MPCP Stage 4/5										**Project #: K-2036**	
Source/Location: R-S5-ZU-13/07										Type: Sand	
Sample #:		Test #:		**Hole #:**		**Depth:**				Time:	
Sampled By: Client - AG			Tested By: DJ							Checked By: NK	
Date Sampled: 05.17.07			Date Received: 05 25.07							Date Tested: 06.05 07	
Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R'**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
100.0	0.998	0.5	17.0	25 0	0.01306				0.068	17.0	**17.0**
100.0	0.998	1	12 0	25.0	0.01306				0.049	12.0	**12.0**
100.0	0.998	2	10.5	25 0	0 01306				0.035	10.5	**10.5**
100.0	0.998	4	9 5	25.0	0.01306				0.025	9 5	**9.5**
100.0	0.998	8	7.5	25 0	0.01306				0.018	7.5	**7.5**
100.0	0.998	15	6 5	25.0	0.01306				0.013	6.5	**6.5**
100.0	0 998	30	5 5	25 0	0 01306				0.009	5.5	**5.5**
100.0	0.998	60	4.5	25.0	0.01306				0.007	4.5	**4.5**
100.0	0.998	120	3.0	23.0	0.01337				0 005	3 0	**3.0**
100.0	0.998	240	3.0	23.0	0.01337				0.003	3.0	**3.0**
100.0	0.998	480	2 5	23.0	0.01337				0.002	2 5	**2.5**
100.0	0.998	1440	2.0	23.0	0.01337				0.001	2.0	**2.0**
Hydrometer #: 794968			Graduate #: 2			Dispersing Agent. Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

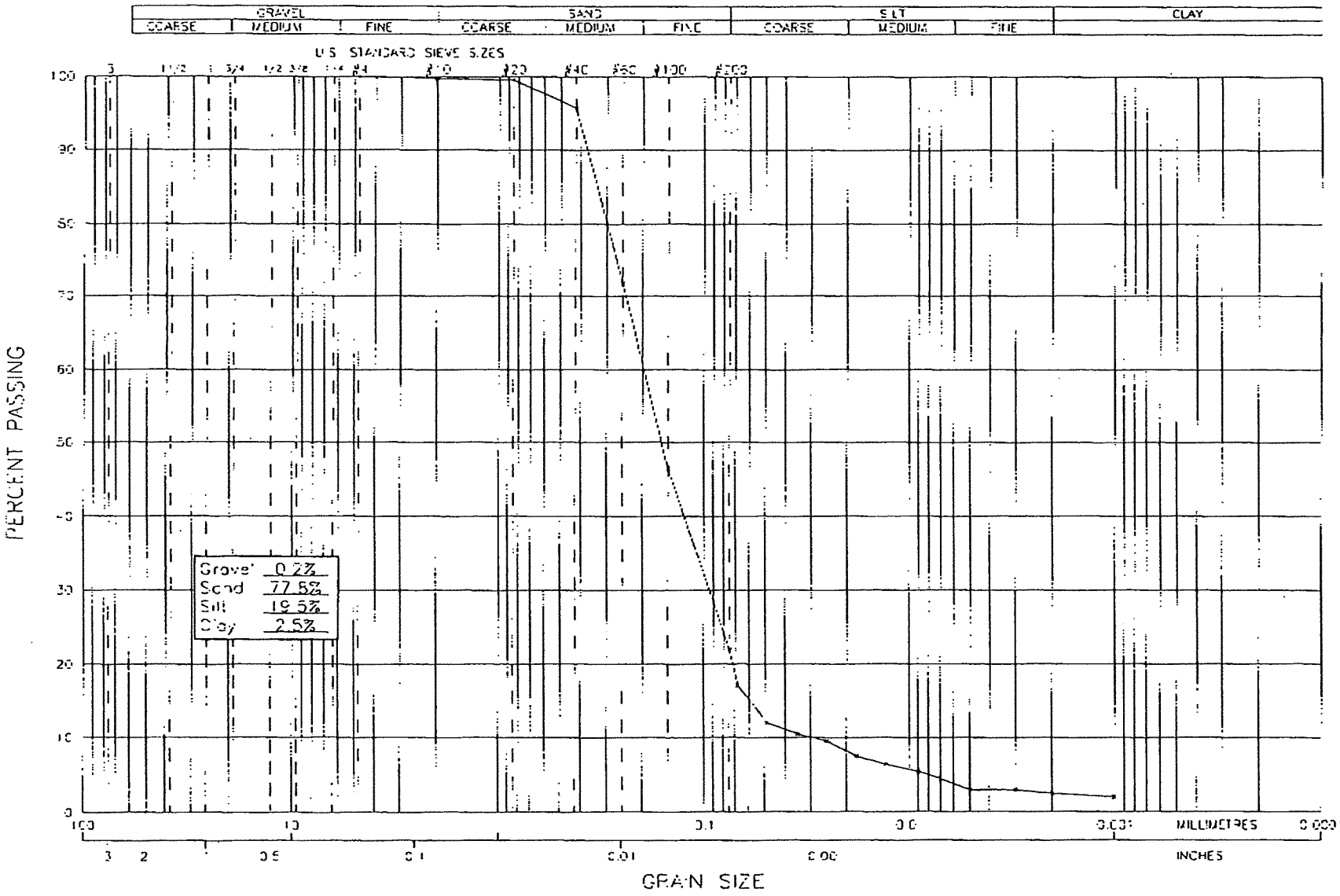
Hydrometer Sieve Analysis				
Seive No	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		100.0	100.0	**99.8**
20	0.2		99.8	**99.6**
40	3.8		96.0	**95.8**
60	24.2		71.8	**71.7**
100	25.3		46.5	**46.4**
200	24.5		22.0	**22.0**
Pan	22.0			
Total	100.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

Sieve Analysis			
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25 4			
19 0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total =			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Nos 00

A3-47



A3-48

GEONORTH ENGINEERING LTD.
1301 Kelther Road
Prince George, B.C. V2L 5S8
Ph (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4/5
GRAIN SIZE ANALYSIS OF R-S5-ZU-13/07

SCALE:	DATE:
N.T.S	2007/05/07
PROJECT NO:	PLATE NO.
K-2036	2036-B24

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

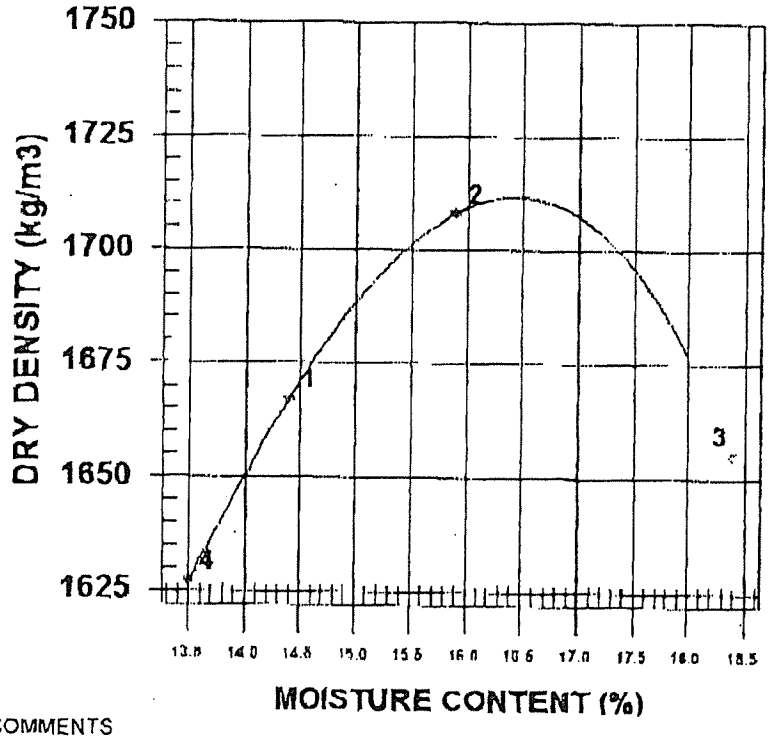
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

PROCTOR NO. 28 DATE TESTED 2007.Jun.05 DATE RECEIVED 2007.May.25 DATE SAMPLED 2007.May.17

INSITU MOISTURE N/A %
SAMPLED BY Client - AG
TESTED BY CP
SUPPLIER
SOURCE R-85-ZU-13/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1907	1667	14.4
2	1980	1708	15.9
3	1959	1655	18.4
4	1847	1627	13.5

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1710	16.5

COMMENTS

 2007.Jun.07 GeoNorth Engineering Ltd PER

A3 - 49

Geotechnical Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
CC Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

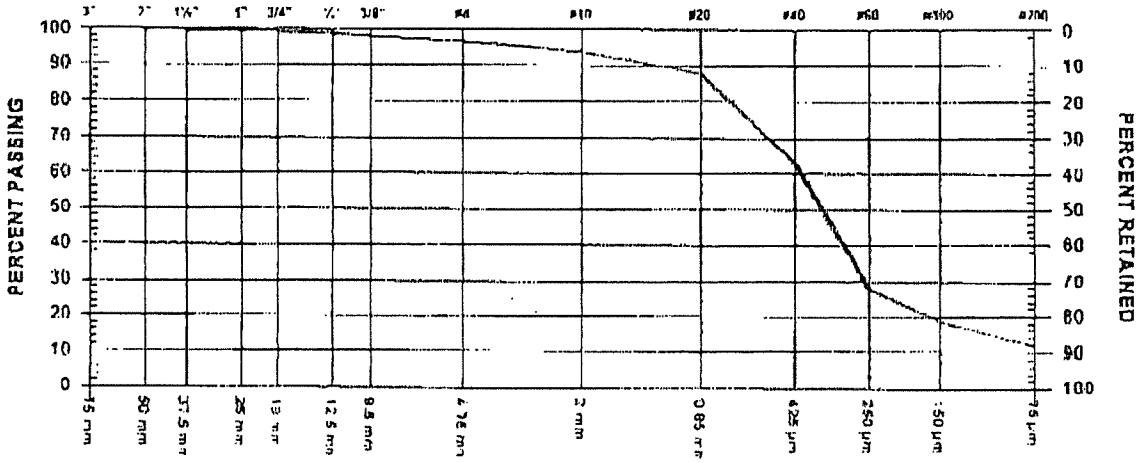
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

SIEVE TEST NO 32 DATE RECEIVED 2007.Jun.06 DATE TESTED 2007.Jun.08 DATE SAMPLED 2007.Jun.01

SUPPLIER
SOURCE R-S5-ZU-14/07
SPECIFICATION
MATERIAL TYPE TILL, sandy, gravelley

SAMPLED BY Client
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	99.5	
1"	25 mm		
3/4"	19 mm	99.3	
1/2"	12.5 mm	98.8	
3/8"	9.5 mm	98.1	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	96.5	
No. 10	2.00 mm	93.6	
No. 20	850 µm	87.5	
No. 40	425 µm	62.8	
No. 60	250 µm	27.8	
No. 100	150 µm	18.8	
No. 200	75 µm	12.1	

MOISTURE CONTENT 2.5%

COMMENTS
LOCATION: SE, CHAINAGE: 7+50, ELEVATION: 948.5m

Page 1 of 1 2007.Jun.14 GeoNorth Engineering Ltd PER

A3 - 50

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. Attn: Knight Piesold			Date: June 14. 2007
Project Name: MPCP - Stage 4/5			**Project #: K-2036**
Source/Location: R-S5-ZU-14/07			Type: Till, Sandy
Sample #:	Test #:	Hole #:	**Depth: 948.5m**
Sampled By Client - CG	Tested By: DJ		Time:
Date Sampled 05.30.07	Date Received 06 06 07		Checked By: NK
			Date Tested: 06.12.07

Starting Wt. (g)	**% - #10**	**Elapsed Time (min)**	**Reading R**	**Temp (0C)**	**K**	**Corr. Reading R`**	**Zr (cm)**	**SQRT(Zr)/T (min)**	**D (mm)**	**N (%)**	**N*(%-#10)**
60.0	0.936	0.5	7.5	22.0	0.01332				0.073	12.5	**11.7**
60.0	0.936	1	5.5	22.0	0.01332				0.052	9.2	**8.6**
60.0	0.936	2	5.0	22.0	0.01332				0.037	8.3	**7.8**
60.0	0.936	4	4.0	22.0	0.01332				0.026	6.7	**6.3**
60.0	0.936	8	3.5	22.0	0.01332				0.019	5.8	**5.4**
60.0	0.936	15	3.0	22.0	0.01332				0.014	5.0	**4.7**
60.0	0.936	30	2.5	22.0	0.01332				0.010	4.2	**3.9**
60.0	0.936	60	1.5	22.0	0.01332				0.007	2.5	**2.3**
60.0	0.936	120	1.5	22.0	0.01332				0.005	2.5	**2.3**
60.0	0.936	240	1.5	22.0	0.01332				0.003	2.5	**2.3**
60.0	0.936	480	0.5	22.0	0.01332				0.002	0.8	**0.7**
60.0	0.936	1440	0.5	22.0	0.01332				0.001	0.8	**0.7**

Hydrometer # 794968 | Graduate #: 6 | Dispersing Agent: Sodium Hex | Amount 125ml

Density of Solids:

Description of Sample

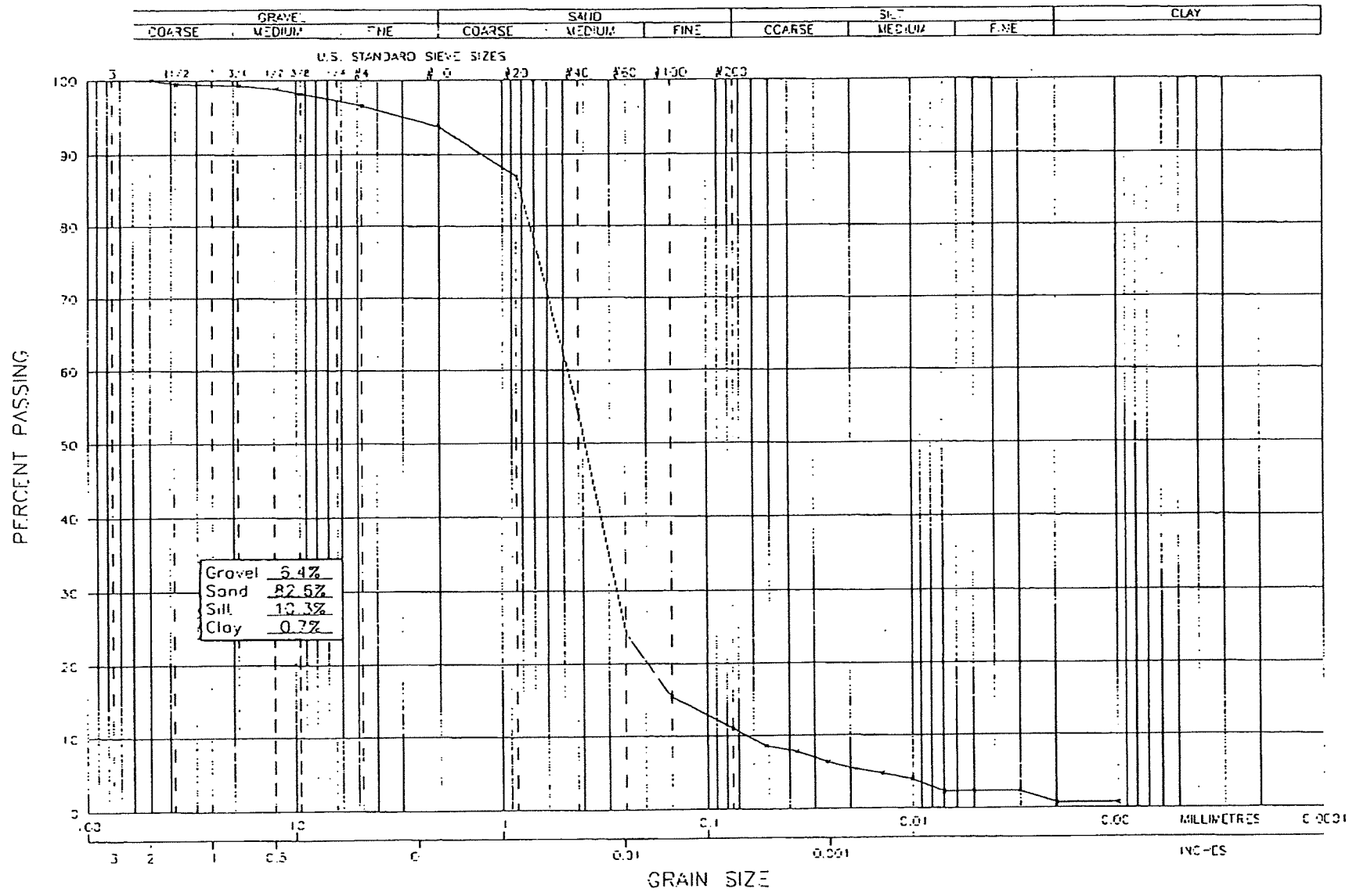
Hydrometer Sieve Analysis				
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp
10		60.0	100.0	**93.6**
20	4.2		93.0	**87.0**
40	20.8		58.3	**54.6**
60	19.6		25.7	**24.1**
100	5.5		16.5	**15.4**
200	2.8		11.8	**11.0**
Pan	7.1			
Total	60.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

Sieve Analysis			
Seive No	Weight Retained	Total Wt. Passing	% Finer Than Orig Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10	**SEE WASHED SIEVE**		
Total =			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt & Tare	
Water Wt.	
Tare Wt	
Wt. of Dry Soil	=W
Moisture Content	**2.5%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Nicelco

A3-51



A3-52

GeoNorth Engineering Ltd. 1001 Kelliher Road Prince George, BC V2L 5S6 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZU-14/07	SCALE: N.T.S.	DATE: 2007/06/14
		PROJECT NO: K-2036	PLATE NO. 2036-B27

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

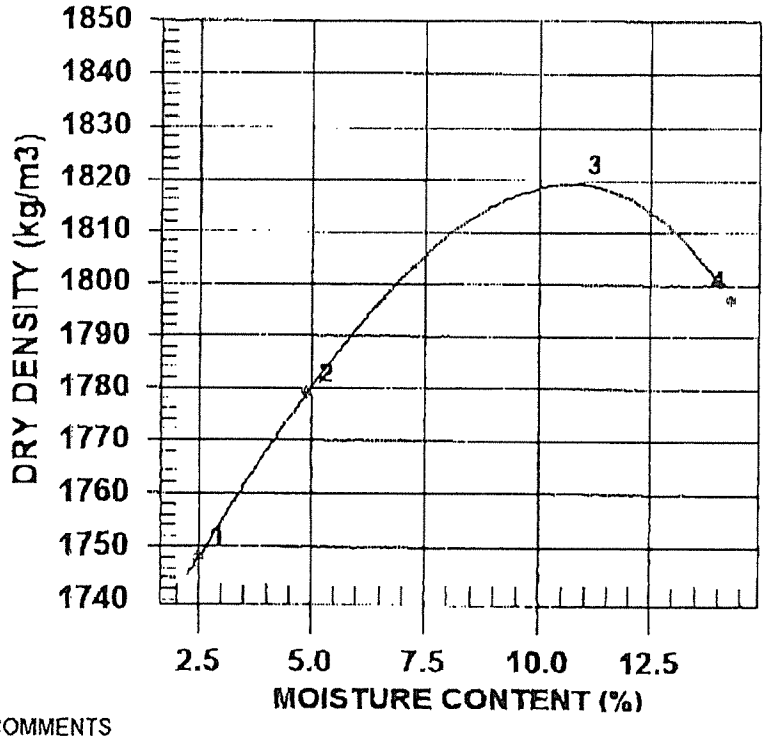
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing
CONTRACTOR Mount Polley Mining Corp. Likely

PROCTOR NO 30 DATE TESTED 2007.Jun.11 DATE RECEIVED 2007.Jun.06 DATE SAMPLED 2007.May.30

INSITU MOISTURE N/A %
SAMPLED BY CG - Client
TESTED BY CP
SUPPLIER
SOURCE R-S5-ZU-14/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT TILL
SIZE 50MM
DESCRIPTION SANDY/GRAVELLY
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 4.0 %
OVERSIZE SPECIFIC GRAVITY 2.64
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1792	1748	2.5
2	1866	1779	4.9
3	2015	1819	10.8
4	2054	1797	14.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1820	10.5
OVERSIZE CORRECTED	1840	10.0

COMMENTS
SPECIFIC GRAVITY OF ROCK - 2.635

SPECIFIC GRAVITY OF FINES - 2.642

 2007.Jun.14 GeoNorth Engineering Ltd. PER

A3-53

1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

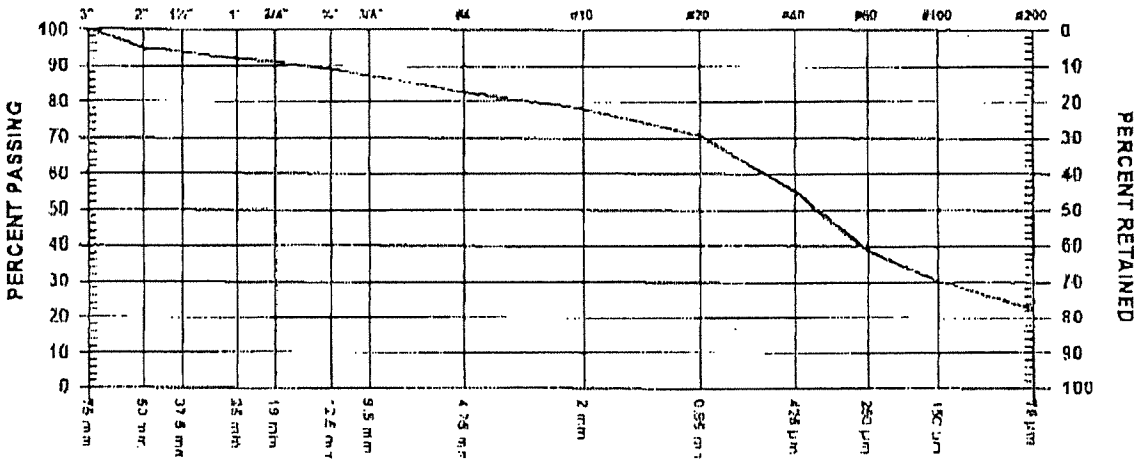
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing
CONTRACTOR Mount Polley Mining Corp.
Likely

SIEVE TEST NO 33 DATE RECEIVED 2007.Jun.06 DATE TESTED 2007.Jun.08 DATE SAMPLED 2007.Jun.01

SUPPLIER
SOURCE R-S5-ZU-15/07
SPECIFICATION
MATERIAL TYPE TILL, sandy

SAMPLED BY Client
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	95.0	
1 1/2"	37.5 mm	93.5	
1"	25 mm	91.8	
3/4"	19 mm	91.0	
1/2"	12.5 mm	88.9	
3/8"	9.5 mm	87.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	82.8	
No. 10	2.00 mm	77.7	
No. 20	850 µm	70.5	
No. 40	425 µm	55.1	
No. 60	250 µm	38.8	
No. 100	150 µm	30.1	
No. 200	75 µm	22.4	

MOISTURE CONTENT 2.6%

COMMENTS
LOCATION: SE, CHAINAGE: 10+50, ELEVATION: 949.4m

 2007.Jun.14 GeoNorth Engineering Ltd. PER.

A3-54

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. Attn: Knight Piesold					Date: June 14, 2007
Project Name: MPCP - Stage 4/5					**Project #: K-2036**
Source/Location: R-S5-ZU-15/07					Type: Till, Sandy
Sample #:	Test #:	**Hole #:**	**Depth: 949.4m**		Time:
Sampled By: Client - CG	Tested By: DJ				Checked By: NK
Date Sampled: 05.30.07	Date Received: 06.06.07				Date Tested: 06.12.07

Starting Wt. (g)	% - #10	Elapsed Time (min)	Reading R	Temp (0C)	K	Corr. Reading R`	Zr (cm)	SQRT(Zr)/T (min)	D (mm)	N (%)	N*(%-#10)
60.0	0.777	0.5	15 5	22.0	0.01332				0.070	25.8	**20.0**
60.0	0.777	1	12 5	22.0	0 01332				0.050	20 8	**16.2**
60.0	0.777	2	11.5	22 0	0 01332				0.036	19.2	**14.9**
60.0	0.777	4	11.0	22.0	0.01332				0.025	18 3	**14.2**
60.0	0.777	8	10 0	22.0	0.01332				0.018	16.7	**13.0**
60.0	0.777	15	9.0	22 0	0.01332				0.013	15.0	**11.7**
60 0	0.777	30	8.5	22 0	0.01332				0.009	14.2	**11.0**
60.0	0.777	60	6.5	22 0	0.01332				0.007	10 8	**8.4**
60.0	0.777	120	5 5	22.0	0.01332				0.005	9.2	**7.1**
60.0	0 777	240	4 5	22.0	0.01332				0.003	7.5	**5.8**
60.0	0.777	480	3.5	22.0	0.01332				0.002	5.8	**4.5**
60.0	0.777	1440	3.0	22.0	0.01332				0 001	5 0	**3.9**

Hydrometer #. 794968	Graduate #: 8	Dispersing Agent: Sodium Hex	Amount: 125ml
Density of Solids.			
Description of Sample.			

Hydrometer Sieve Analysis

Seive No	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		60 0	100.0	**77.7**
20	4.2		93.0	**72.3**
40	12.4		72.3	**56.2**
60	14.2		48.7	**37.8**
100	8.0		35.3	**27.4**
200	5 5		26.2	**20.4**
Pan	15.7			
Total	60.0			
Unwashed Wt. =				
Tare = _____	Wt. Passing #200 = _____			

Sieve Analysis

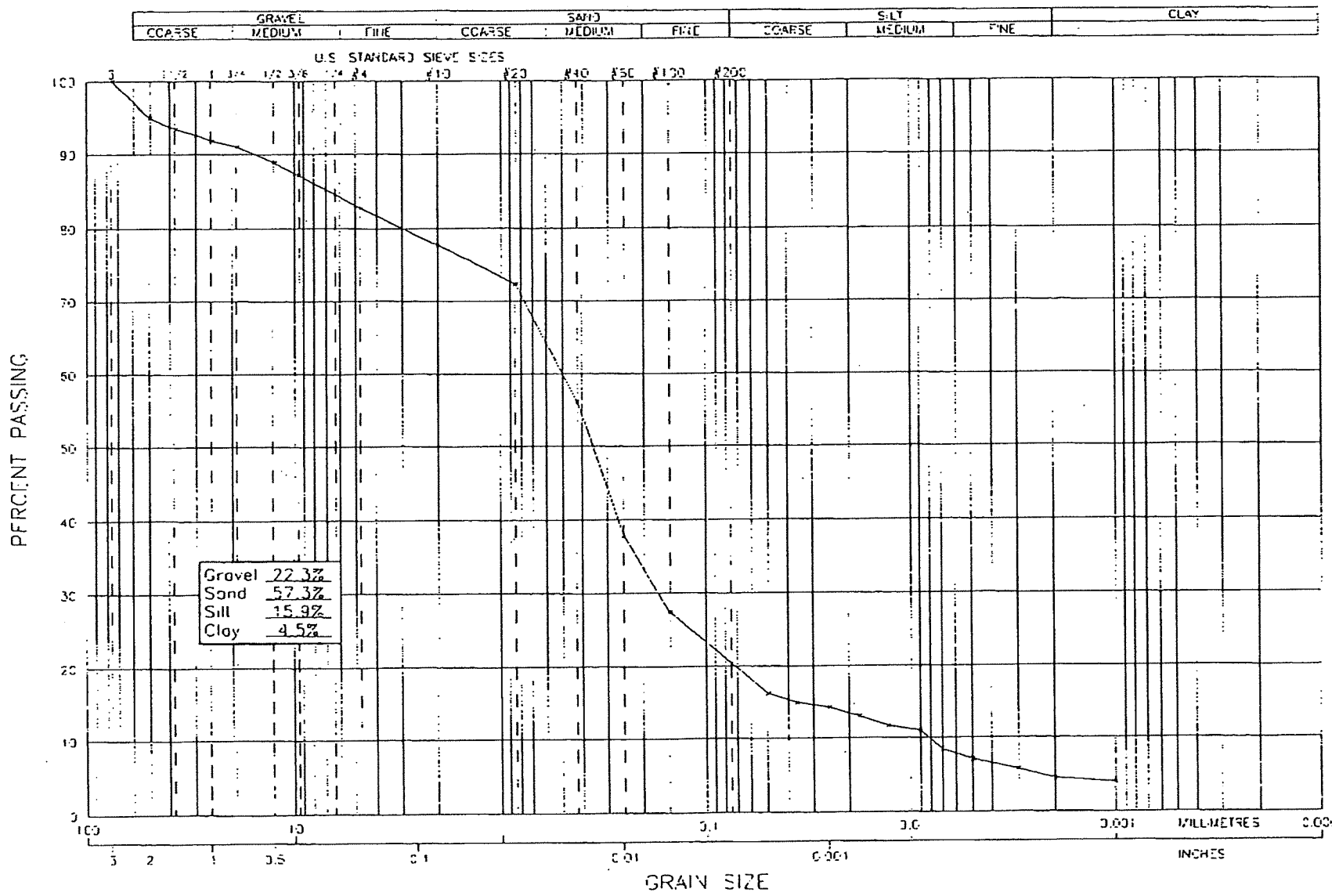
Seive No.	Weight Retained	Total Wt Passing	% Finer Than Orig. Samp.
38 1			
25.4			
19.0			
12 5			
9 5			
4.75			
10	**SEE WASHED SIEVE**		
Total = _____			

Initial Moisture Content

Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**2.6%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt)/(100 + Initial Moisture) =	

Nselco

A3 - 55



A3-56

GEONORTH ENGINEERING LTD. 1301 Kelliher Road Prince George, B.C. V2L 5S8 Tel. (250) 564-4304 Fax (250) 564-9323	MOUNT POLLEY MINING CORP. M.P. CONSTRUCTION PROGRAM STAGE 4/5 GRAIN SIZE ANALYSIS OF R-S5-ZU-15/07	SCALE: N.T.S.	DATE: 2007/06/14
		PROJECT NO: 7-2036	PLATE NO. 2036-B28

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn: CC Knight Piesold Consulting

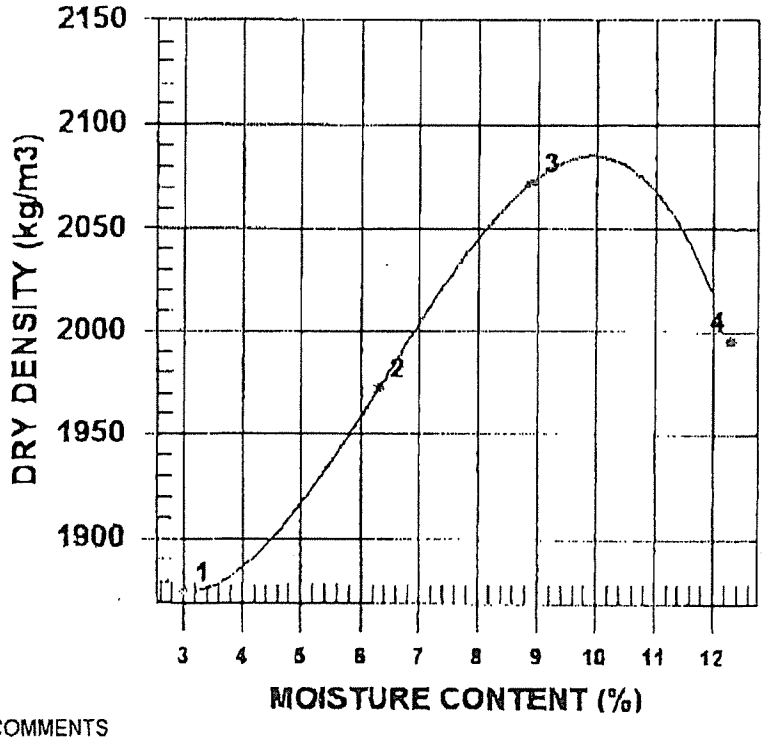
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Marlet @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

PROCTOR NO 31 DATE TESTED 2007.Jun.12 DATE RECEIVED 2007.Jun.06 DATE SAMPLED 2007.May.30

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CC - Client		
TESTED BY	CP	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-S5-X0-15/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	50MM	RETAINED 4 75mm SCREEN	17.0 %
DESCRIPTION	SANDY/GRAVELLEY	OVERSIZE SPECIFIC GRAVITY	2.67
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1930	1874	3.0
2	2096	1972	6.3
3	2256	2072	8.9
4	2240	1995	12.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2080	10.0
OVERSIZE CORRECTED	2160	8.5

COMMENTS
SPECIFIC GRAVITY OF ROCK - 2.671

SPECIFIC GRAVITY OF FINES - 2.653

 2007.Jun.14 GeoNorth Engineering Ltd. PER

A3-57

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

1.LJG

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Marlel @ 250-790-2268

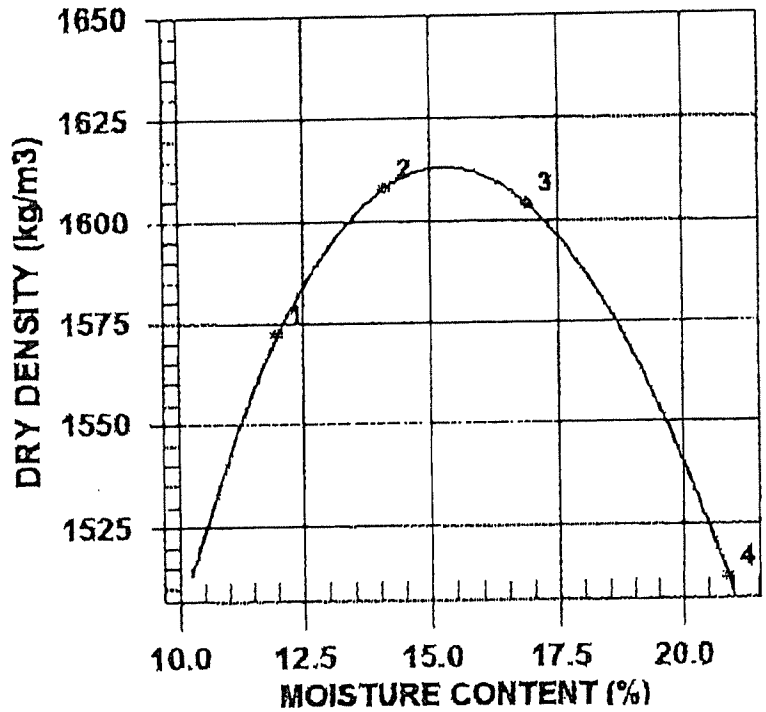
PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely

CONTRACTOR

PROCTOR NO. 39 DATE TESTED 2007.Aug.30 DATE RECEIVED 2007.Aug.28 DATE SAMPLED 2007.Aug.21

INSITU MOISTURE N/A %
SAMPLED BY Client
TESTED BY AC
SUPPLIER
SOURCE R-S5-XU-17/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE
DESCRIPTION
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1761	1572	12.0
2	1835	1608	14.1
3	1875	1604	16.9
4	1828	1512	20.9

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1610	15.5

COMMENTS
SAND CELL #1, SPECIFIC GRAVITY = 2.625

PER.

A3-58

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 1/5
Materials Testing

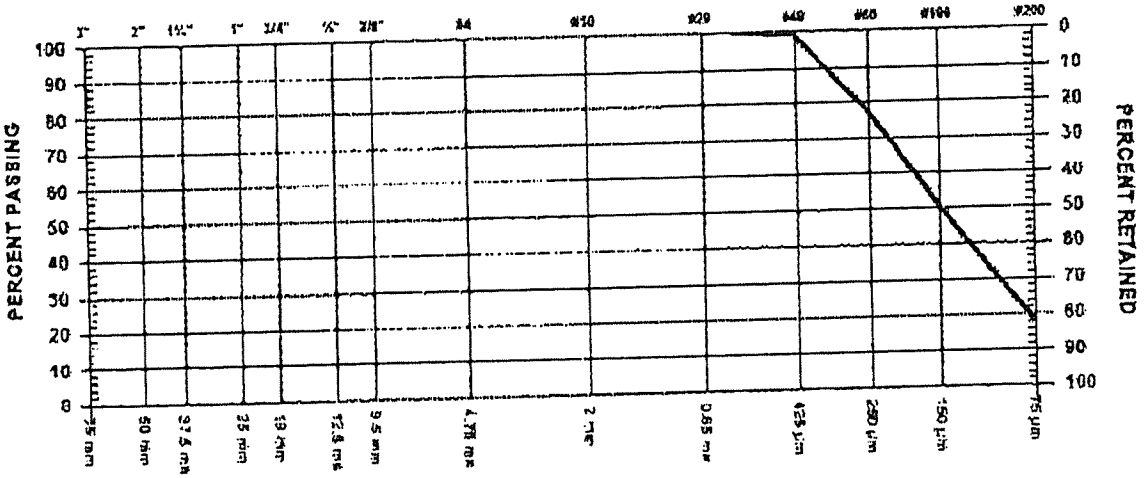
Mount Polley Mining Corp.
Likely

CONTRACTOR

SIEVE TEST NO 41 DATE RECEIVED 2007.Aug.27 DATE TESTED 2007.Aug.30 DATE SAMPLED 2007.Aug.21

SUPPLIER
SOURCE R-Sb-ZU-17/07
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY Client
TESTED BY AG
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm		

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm		
No. 10	2.00 mm	100.0	
No. 20	850 µm	100.0	
No. 40	425 µm	98.6	
No. 60	250 µm	76.9	
No. 100	150 µm	50.1	
No. 200	75 µm	18.0	

COMMENTS
SAND CELL #1
950m

PER.

A3-59

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

1.456

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

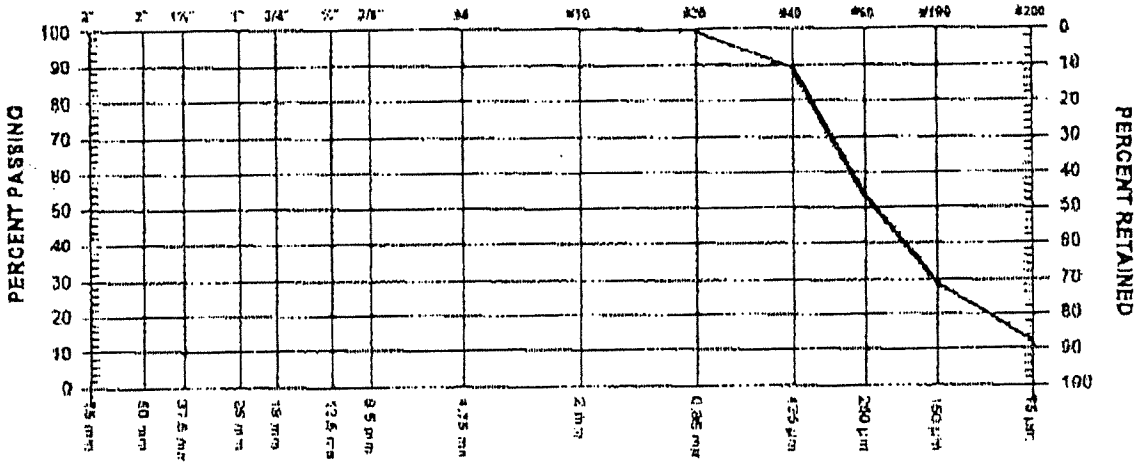
ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely
CONTRACTOR

SIEVE TEST NO. 43 DATE RECEIVED 2007.Sep.27 DATE TESTED 2007.Oct.01 DATE SAMPLED 2007.Sep.23

SUPPLIER
SOURCE R-S5-ZU-18/07
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY CLIENT
TESTED BY DJ/NK
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm		

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	100.0	
No. 10	2.00 mm	100.0	
No. 20	850 µm	99.4	
No. 40	425 µm	89.0	
No. 60	250 µm	53.3	
No. 100	150 µm	28.5	
No. 200	75 µm	12.5	

MOISTURE CONTENT 17.1%

COMMENTS
LOCATION: PE, CHAINAGE: 45+00, ELEVATION: 451.0m, OFFSET: -5.0m

 2007.Oct.02 GeoNorth Engineering Ltd. PER.

A3 - 60

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

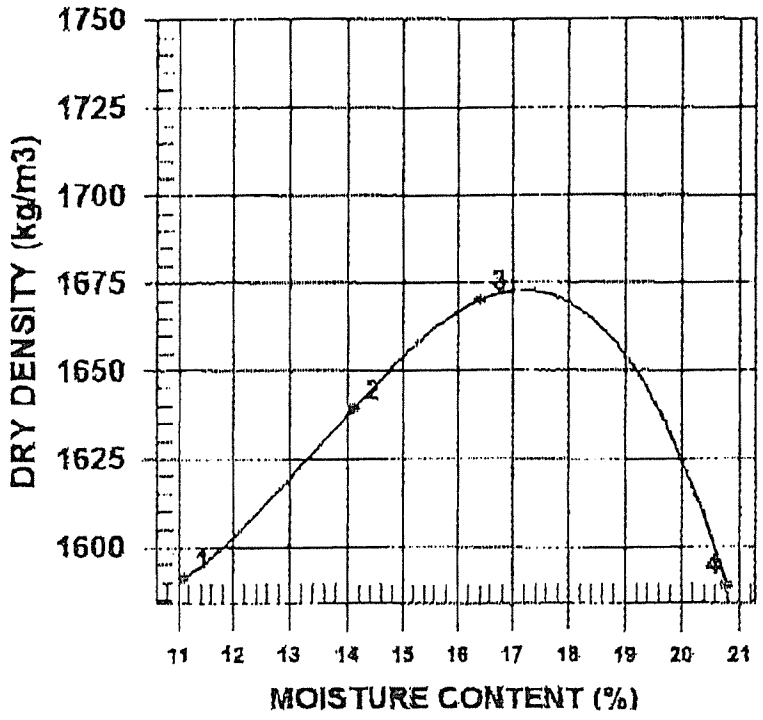
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Mount Polley Mining Corp.
Materials Testing Likely
CONTRACTOR

PROCTOR NO 41 DATE TESTED 2007.Oct.01 DATE RECEIVED 2007.Sep.27 DATE SAMPLED 2007.Sep.23

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client		
TESTED BY	PN	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	R-S5-ZU-18/07	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	SAND	OVERSIZE CORRECTION METHOD	None
SIZE		RETAINED 4.75mm SCREEN	%
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1768	1591	11.1
2	1870	1639	14.1
3	1944	1670	16.4
4	1920	1589	20.8

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1670	17.0
OVERSIZE CORRECTED		

COMMENTS

 PER. _____

A3 - 61

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

EVE ANALYSIS REPORT
10 20 40 60 SERIES

1. CJG

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

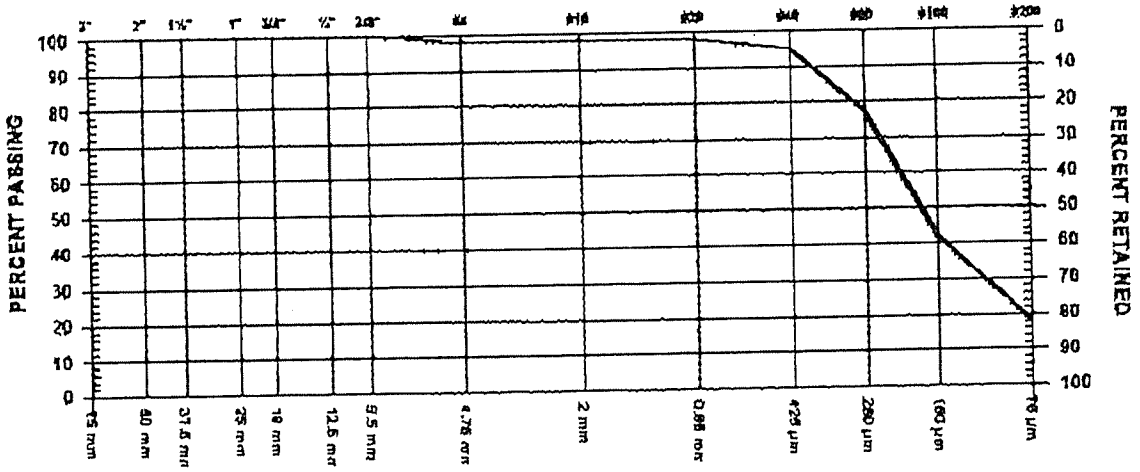
Mount Polley Mining Corp.
Likely

CONTRACTOR

SIEVE TEST NO. 47 DATE RECEIVED 2007.Oct.12 DATE TESTED 2007.Oct.26 DATE SAMPLED 2007.Oct.04

SUPPLIER
SOURCE R-S5-ZU-19/07
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY Client
TESTED BY SR
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm	100.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	98.1	
No. 10	2.00 mm	97.9	
No. 20	850 µm	97.8	
No. 40	425 µm	94.8	
No. 60	250 µm	77.0	
No. 100	150 µm	41.7	
No. 200	75 µm	18.3	

MOISTURE CONTENT 17.0%

COMMENTS
SAND CELL PE, CHAINAGE: 43+50, ELEVATION: 951.0m

PER

A3 - 62

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

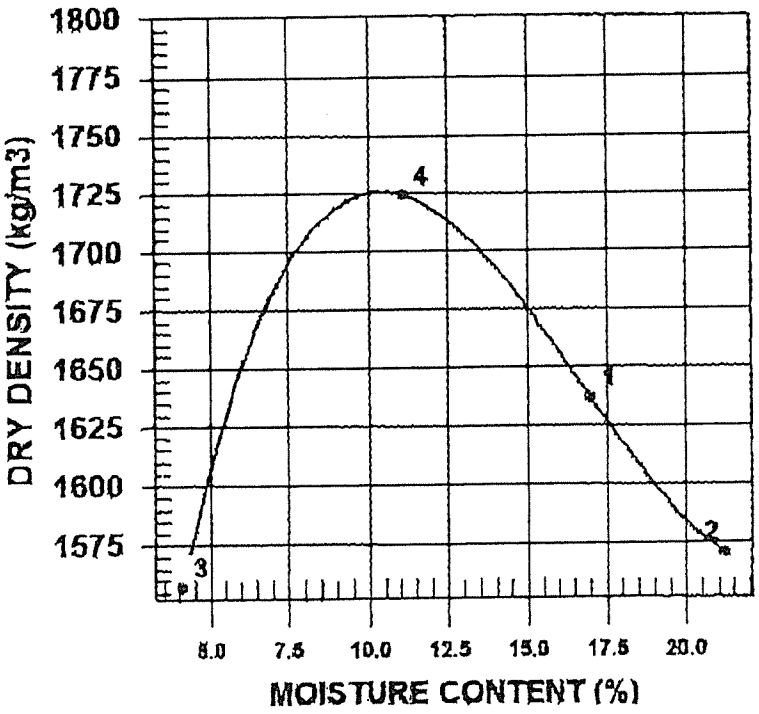
Mount Polley Mining Corp.
Likely

CONTRACTOR

PROCTOR NO 45 DATE TESTED 2007.Oct.29 DATE RECEIVED 2007.Oct.12 DATE SAMPLED 2007.Oct.04

INSITU MOISTURE N/A %
SAMPLED BY Client
TESTED BY SR
SUPPLIER
SOURCE R-S5-ZU-19/07
MATERIAL IDENTIFICATION
MAJOR COMPONENT SAND
SIZE 4.75mm
DESCRIPTION SILTY
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE Automatic
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1915	1637	17.0
2	1904	1571	21.2
3	1621	1557	4.1
4	1915	1724	11.1

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1730	10.5

COMMENTS
SPECIFIC GRAVITY = 2.585

PER.

A3-63

Knight Piésold
CONSULTING

APPENDIX A4

PERIMETER EMBANKMENT CONCRETE ENCASEMENT - CONCRETE STRENGTH TEST RESULTS

(Page A4-1 TO A4-5)

101-1/14.03

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

L56

CONCRETE TEST REPORT

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

Mount Polley Mining Corp.
Likely

SET NO. 1 NO OF SPECIMENS 2 DATE RECEIVED 2006.Oct.16 DATE CAST 2006.Oct.12

SPECIMEN NUMBER	DATE TESTED	AGE AT TEST (DAYS)	AVERAGE DIAMETER (mm) OR SIDE (mm x mm)	AVERAGE LENGTH OR SPAN (mm)	MAXIMUM LOAD (kN)	AVERAGE CROSS-SECTIONAL AREA (mm^2)	COMPRESSIVE OR FLEXURAL STRENGTH (MPa)	FAILURE TYPE
A	Oct.19	7	102.0	204.0	179	8171	21.9	A
B	Nov.09	28	102.0	204.0		8171		B
								C
								D
								E
								F

SPECIFIED STRENGTH 30 MPa @ 28 DAYS
CEMENT CONTENT kg/m³ TYPE 10
POZZOLAN CONTENT kg/m³ TYPE
MAXIMUM SIZE AGGREGATE 20 mm
BATCH TIME
ADMIXTURES

CONCRETE TEMPERATURE °C
MEASURED SLUMP mm
MEASURED AIR %
PLASTIC DENSITY kg/m³
CAST TIME

AIR TEMPERATURE °C
SPECIFIED SLUMP ± mm
SPECIFIED AIR ± %
HARDENED DENSITY 2341 kg/m³
CAST BY CLIENT

CURING CONDITIONS
MOULD TYPE PLASTIC
INITIAL CURING TEMP:MAXIMUM °C MINIMUM °C

SUPPLIER
MIX NO 30MPA-20MM
TRUCK NO. TICKET NO.
LOAD VOL m³ CUM. VOL. m³
WATER ADDED | AUTH. BY

LOCATION
NON GIVEN

COMMENTS
SPECIMENS RECEIVED IN LABORATORY FOR CURING 4 DAYS AFTER CAST DATE.

2006.Oct.19
GeoNorth Engineering Ltd. PER.

A4-1

101-1/14.4

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

CONCRETE TEST REPORT

TO
Knight Piesold Consulting
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5 Materials Testing

Mount Polley Mining Corp.
Likely

SET NO 2 NO. OF SPECIMENS 4 DATE RECEIVED 2006.Oct.25 DATE CAST 2006.Oct.20

SPECIMEN NUMBER	DATE TESTED	AGE AT TEST (DAYS)	AVERAGE DIAMETER (mm) OR SIDE (mm x mm)	AVERAGE LENGTH OR SPAN (mm)	MAXIMUM LOAD (kN)	AVERAGE CROSS-SECTIONAL AREA (mm^2)	COMPRESSIVE OR FLEXURAL STRENGTH (MPa)	FAILURE TYPE
A	Oct.26	6	102.0	204.0	190	8171	23.3	A
B	Oct.27	7	102.0	204.0		8171		B
C	Nov.17	28	102.0	204.0		8171		C
D	Nov.17	28	102.0	204.0		8171		D
								E
								F

SPECIFIED STRENGTH 30 MPa @ 28 DAYS

CEMENT CONTENT kg/m³ TYPE 10

POZZOLAN CONTENT kg/m³ TYPE

MAXIMUM SIZE AGGREGATE 20 mm

BATCH TIME

ADMIXTURES

SUPPLIER

MIX NO 30MPA-20MM

TRUCK NO TICKET NO.

LOAD VOL m³ CUM VOL. m³

WATER ADDED l AUTH. BY

CONCRETE TEMPERATURE °C

MEASURED SLUMP mm

MEASURED AIR %

PLASTIC DENSITY kg/m³

CAST TIME

CURING CONDITIONS

INITIAL CURING TEMP:MAXIMUM °C MINIMUM °C

AIR TEMPERATURE °C

SPECIFIED SLUMP ± mm

SPECIFIED AIR ± %

HARDENED DENSITY 2401 kg/m³

CAST BY CLT

MOULD TYPE PLASTIC

LOCATION

Toe Drain Encasement

COMMENTS

SPECIMENS WERE CAST BY CLIENT.

Page 1 of 1 2006.Oct.26

GeoNorth Engineering Ltd. PER.

A4-2

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

CONCRETE TEST REPORT

KNIGHT PIESOLD LTD. IN / OUT Oct 30 2006

	JPH	KJB						SEP	WJ	EG	YP	RD	FILE
Name													
Routing													
Date Read													
Reply By													
Reply Date													

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn: Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

Mount Polley Mining Corp.
Likely

SET NO 2 NO. OF SPECIMENS 4 DATE RECEIVED 2006.Oct.25 DATE CAST 2006.Oct.20

SPECIMEN NUMBER	DATE TESTED	AGE AT TEST (DAYS)	AVERAGE DIAMETER (mm) OR SIDE (mm x mm)	AVERAGE LENGTH OR SPAN (mm)	MAXIMUM LOAD (kN)	AVERAGE CROSS-SECTIONAL AREA (mm²)	COMPRESSIVE OR FLEXURAL STRENGTH (MPa)	FAILURE TYPE
A	Oct.26	6	102.0	204.0	190	8171	23.3	A X
B	Oct.27	7	102.0	204.0	210	8171	25.7	B
C	Nov.17	28	102.0	204.0		8171		C
D	Nov.17	28	102.0	204.0		8171		D
								E
								F

SPECIFIED STRENGTH 30 MPa @ 28 DAYS

CEMENT CONTENT kg/m³ TYPE 10

POZZOLAN CONTENT kg/m³ TYPE

MAXIMUM SIZE AGGREGATE 20 mm

BATCH TIME

ADMIXTURES

SUPPLIER

MIX NO 30MPA-20MM

TRUCK NO. TICKET NO.

LOAD VOL. m³ CUM. VOL. m³

WATER ADDED l AUTH BY

CONCRETE TEMPERATURE °C AIR TEMPERATURE °C

MEASURED SLUMP mm SPECIFIED SLUMP ± mm

MEASURED AIR % SPECIFIED AIR ± %

PLASTIC DENSITY kg/m³ HARDENED DENSITY 2401 kg/m³

CAST TIME CAST BY CLT

CURING CONDITIONS MOULD TYPE PLASTIC

INITIAL CURING TEMP:MAXIMUM °C MINIMUM °C

LOCATION
Toe Drain Encasement

COMMENTS
SPECIMENS WERE CAST BY CLIENT.

Page 1 of 1 2006.Oct.30

GeoNorth Engineering Ltd. PER.

A4-3

101-1/14.3

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

LJG

CONCRETE TEST REPORT

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT M.P. Construction Program Stage 4/5 Materials Testing — Mount Polley Mining Corp. Likely

SET NO. 1 NO. OF SPECIMENS 2 DATE RECEIVED 2006.Oct.16 DATE CAST 2006.Oct.12

SPECIMEN NUMBER	DATE TESTED	AGE AT TEST (DAYS)	AVERAGE DIAMETER (mm) OR SIDE (mm x mm)	AVERAGE LENGTH OR SPAN (mm)	MAXIMUM LOAD (kN)	AVERAGE CROSS-SECTIONAL AREA (mm^2)	COMPRESSIVE OR FLEXURAL STRENGTH (MPa)	FAILURE TYPE
A	Oct.19	7	102.0	204.0	179	8171	21.9	A
B	Nov.09	28	102.0	204.0	261	8171	31.9	B
								C
								D
								E
								F

SPECIFIED STRENGTH 30 MPa @ 28 DAYS
CEMENT CONTENT kg/m^3 TYPE 10
POZZOLAN CONTENT kg/m^3 TYPE
MAXIMUM SIZE AGGREGATE 20 mm
BATCH TIME
ADMIXTURES

CONCRETE TEMPERATURE °C
MEASURED SLUMP mm
MEASURED AIR %
PLASTIC DENSITY kg/m^3
CAST TIME

AIR TEMPERATURE °C
SPECIFIED SLUMP ± mm
SPECIFIED AIR ± %
HARDENED DENSITY 2341 kg/m^3
CAST BY CLIENT

CURING CONDITIONS
MOULD TYPE PLASTIC
INITIAL CURING TEMP:MAXIMUM °C MINIMUM °C

SUPPLIER
MIX NO. 30MPA-20MM
TRUCK NO. TICKET NO.
LOAD VOL m^3 CUM VOL m^3
WATER ADDED I AUTH. BY

LOCATION
NON GIVEN

COMMENTS
SPECIMENS RECEIVED IN LABORATORY FOR CURING 4 DAYS AFTER CAST DATE.

Page 1 of 1 2006.Nov.09 GeoNorth Engineering Ltd. PER

A4-4

1301 Kelliher Road Prince George, B.C. V2L5S8
Phone (250)564-4304; fax (250)564-9323

CONCRETE TEST REPORT

TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Ron Martel @ 250-790-2268

PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold Consulting

PROJECT M.P. Construction Program Stage 4/5
Materials Testing

Mount Polley Mining Corp.
Likely

SET NO 2 NO. OF SPECIMENS 4 DATE RECEIVED 2006.Oct.25 DATE CAST 2006.Oct.20

SPECIMEN NUMBER	DATE TESTED	AGE AT TEST (DAYS)	AVERAGE DIAMETER (mm) OR SIDE (mm x mm)	AVERAGE LENGTH OR SPAN (mm)	MAXIMUM LOAD (kN)	AVERAGE CROSS-SECTIONAL AREA (mm^2)	COMPRESSIVE OR FLEXURAL STRENGTH (MPa)	FAILURE TYPE
A	Oct.26	6	102.0	204.0	190	8171	23.3	A
B	Oct.27	7	102.0	204.0	210	8171	25.7	B
C	Nov.17	28	102.0	204.0	312	8171	38.2	C
D	Nov.17	28	102.0	204.0	324	8171	39.7	D
								E
								F

SPECIFIED STRENGTH 30 MPa @ 28 DAYS
CEMENT CONTENT kg/m³ TYPE 10
POZZOLAN CONTENT kg/m³ TYPE
MAXIMUM SIZE AGGREGATE 20 mm
BATCH TIME
ADMIXTURES

CONCRETE TEMPERATURE °C
MEASURED SLUMP mm
MEASURED AIR %
PLASTIC DENSITY kg/m³
CAST TIME

AIR TEMPERATURE °C
SPECIFIED SLUMP ± mm
SPECIFIED AIR ± %
HARDENED DENSITY 2401 kg/m³
CAST BY CLT

CURING CONDITIONS MOULD TYPE PLASTIC
INITIAL CURING TEMP:MAXIMUM °C MINIMUM °C

SUPPLIER
MIX NO 30MPA-20MM
TRUCK NO. TICKET NO.
LOAD VOL. m³ CUM. VOL. m³
WATER ADDED l AUTH. BY

LOCATION
Toe Drain Encasement

COMMENTS
SPECIMENS WERE CAST BY CLIENT.

Page 1 of 1 2006.Nov.17

GeoNorth Engineering Ltd. PER

A4-5

Knight Piésold
CONSULTING

APPENDIX B

NUCLEAR DENSOMETER RESULTS

(Page B1 to B10)

Knight Piésold CONSULTING

FIELD COMPACTION TESTS (Metric) NUCLEAR GAUGE

PROJECT NO.: 101-1/14

DATE: June 2006 to Sept 2007

TEST NO.	LOCATION	Elevation (m)	Test Depth (m)	LABORATORY		FIELD DESIGN				
				Max. Dry Density (kg/m^3)	Optimum Moisture (%)	Dry Density (kg/m^3)	Moisture Content (%)	Compaction (%)	Compaction Specification (%)	Pass or Fail
1	ME 27+00	948.2	0.2	2050.0	10.5	2095.0	6.4	102.2	95.0	Pass
2	ME 27+00	948.7	0.2	2050.0	10.5	1993.0	8.9	97.2	95.0	Pass
3	ME 26+00	948.7	0.2	2050.0	10.5	2052.0	8.4	100.1	95.0	Pass
4	ME 25+00	949.0	0.2	2050.0	10.5	2041.0	10.0	99.6	95.0	Pass
5	ME 24+50	948.7	0.2	2050.0	10.5	2144.0	9.4	104.6	95.0	Pass
6	ME 23+50	948.7	0.2	2050.0	10.5	2072.0	11.2	101.1	95.0	Pass
7	ME 23+00	948.7	0.2	2070.0	10.5	2026.0	12.5	97.9	95.0	Pass
8	ME 22+00	948.7	0.2	2070.0	10.5	2016.0	10.2	97.4	95.0	Pass
9	ME 22+00	949.0	0.2	2070.0	10.5	2067.0	10.3	99.9	95.0	Pass
10	ME 21+50	949.0	0.2	2070.0	10.5	1996.0	8.6	96.4	95.0	Pass
11	ME 20+00	949.3	0.2	2070.0	10.5	2064.0	10.6	99.7	95.0	Pass
12	ME 21+00	949.0	0.2	2070.0	10.5	2021.0	10.7	97.6	95.0	Pass
13	ME 20+50	949.0	0.2	2070.0	10.5	2077.0	10.4	100.3	95.0	Pass
14	ME 19+50	949.3	0.2	2070.0	10.5	2025.0	9.0	97.8	95.0	Pass
15	ME 18+50	949.0	0.2	2070.0	10.5	2092.0	9.0	101.1	95.0	Pass
16	ME 19+00	949.0	0.2	2070.0	10.5	2078.0	8.3	100.4	95.0	Pass
17	SE 1+025	947.7	0.2	2060.0	10.5	2105.0	7.2	102.2	95.0	Pass
18	SE 0+975	947.7	0.2	2060.0	10.5	2152.0	7.6	104.5	95.0	Pass
19	SE 0+925	947.7	0.2	2060.0	10.5	2038.0	8.4	98.9	95.0	Pass
20	SE 0+850	947.4	0.2	2060.0	10.5	2026.0	8.5	98.3	95.0	Pass
21	SE 0+800	947.4	0.2	2060.0	10.5	2150.0	8.8	104.4	95.0	Pass
22	SE 0+750	948.0	0.2	2060.0	10.5	2029.0	8.4	98.5	95.0	Pass
23	SE 0+700	947.7	0.2	2060.0	10.5	2053.0	8.4	99.7	95.0	Pass
24	SE 06+75	947.0	0.2	2060.0	10.5	2132.0	9.7	103.5	95.0	Pass
25	SE 6+50	947.0	0.2	2060.0	10.5	2062.0	10.9	100.1	95.0	Pass
26	SE 6+25	947.0	0.2	2060.0	10.5	2090.0	10.9	101.5	95.0	Pass
27	SE 7+25	948.0	0.2	2060.0	10.5	2016.0	8.7	97.9	95.0	Pass
28	SE 6+75	947.5	0.2	2060.0	10.5	2079.0	11.5	100.9	95.0	Pass
29	SE 6+25	947.3	0.2	2060.0	10.5	2045.0	11.0	99.3	95.0	Pass
30	SE 6+50	947.5	0.2	2060.0	10.5	2057.0	10.5	99.9	95.0	Pass
31	SE 7+00	948.0	0.2	2060.0	10.5	2035.0	11.8	98.8	95.0	Pass
32	SE 6+75	948.0	0.2	2060.0	10.5	2051.0	12.0	99.6	95.0	Pass
33	SE 6+25	947.7	0.2	2060.0	10.5	2046.0	10.8	99.3	95.0	Pass
34	SE 7+25	948.0	0.2	2060.0	10.5	2112.0	10.5	102.5	95.0	Pass
35	SE 7+75	948.0	0.2	2060.0	10.5	2026.0	11.7	98.3	95.0	Pass
36	SE 8+25	948.0	0.2	2060.0	10.5	2121.0	10.2	103.0	95.0	Pass
37	SE 6+25	948.0	0.2	2060.0	10.5	2062.0	11.0	100.1	95.0	Pass
38	SE 11+25	948.5	0.2	2060.0	10.5	2071.0	10.1	100.5	95.0	Pass
39	SE 10+75	948.5	0.2	2060.0	10.5	2063.0	10.5	100.1	95.0	Pass
40	SE 10+25	948.3	0.2	2060.0	10.5	2074.0	10.8	100.7	95.0	Pass
41	SE 9+75	948.5	0.2	2060.0	10.5	2081.0	11.8	101.0	95.0	Pass
42	SE 9+25	948.5	0.2	2060.0	10.5	2005.0	11.5	97.3	95.0	Pass
43	SE 8+75	948.5	0.2	2060.0	10.5	2061.0	12.4	100.0	95.0	Pass
44	SE 8+25	948.5	0.2	2060.0	10.5	2153.0	9.9	104.5	95.0	Pass
45	SE 7+75	948.5	0.2	2060.0	10.5	2127.0	10.9	103.3	95.0	Pass
46	SE 7+25	948.5	0.2	2060.0	10.5	2056.0	11.2	99.8	95.0	Pass
47	SE 6+75	948.5	0.2	2060.0	10.5	2140.0	11.4	103.9	95.0	Pass
48	ME 26+50	949.2	0.2	2050.0	10.5	2045.0	11.9	99.8	95.0	Pass
49	ME 26+00	949.2	0.2	2050.0	10.5	2058.0	11.5	100.4	95.0	Pass
50	ME 25+50	949.0	0.2	2050.0	10.5	2096.0	11.2	102.2	95.0	Pass
51	ME 25+00	949.3	0.2	2050.0	10.5	2076.0	10.9	101.3	95.0	Pass
52	ME 27+25	949.5	0.2	2050.0	10.5	2048.0	10.9	99.9	95.0	Pass
53	ME 26+75	949.5	0.2	2050.0	10.5	2105.0	11.6	102.7	95.0	Pass
54	ME 26+25	949.5	0.2	2050.0	10.5	2095.0	11.8	102.2	95.0	Pass
55	ME 25+75	949.5	0.2	2050.0	10.5	2038.0	11.8	99.4	95.0	Pass
56	ME 27+25	949.8	0.2	2050.0	10.5	2120.0	10.6	103.4	95.0	Pass
57	ME 26+75	949.8	0.2	2050.0	10.5	2077.0	11.6	101.3	95.0	Pass
58	ME 26+25	949.8	0.2	2050.0	10.5	2143.0	10.5	104.5	95.0	Pass
59	ME 25+75	949.8	0.2	2050.0	10.5	2102.0	11.3	102.5	95.0	Pass
60	ME 25+25	949.8	0.2	2050.0	10.5	2067.0	12.2	100.8	95.0	Pass
61	ME 24+75	949.4	0.2	2050.0	10.5	2014.0	11.2	98.2	95.0	Pass
62	ME 24+24	949.3	0.2	2050.0	10.5	2077.0	11.8	101.3	95.0	Pass
63	ME 23+75	949.4	0.2	2050.0	10.5	2068.0	12.0	100.9	95.0	Pass
64	ME 24+00	949.8	0.2	2070.0	10.5	2020.1	11.2	97.6	95.0	Pass
65	ME 23+50	950.0	0.2	2070.0	10.5	2110.0	11.7	101.9	95.0	Pass
66	ME 23+00	949.8	0.2	2070.0	10.5	2067.0	12.6	99.9	95.0	Pass
67	ME 22+75	949.4	0.2	2070.0	10.5	2128.0	10.3	102.8	95.0	Pass
68	ME 22+25	949.4	0.2	2070.0	10.5	2070.0	12.7	100.0	95.0	Pass
69	ME 21+75	949.3	0.2	2070.0	10.5	2047.0	12.2	98.9	95.0	Pass
70	ME 21+25	949.3	0.2	2070.0	10.5	2065.0	12.3	99.8	95.0	Pass
71	ME 20+75	949.3	0.2	2070.0	10.5	2005.0	10.9	96.9	95.0	Pass
72	ME 23+00	949.5	0.2	2070.0	10.5	2096.0	10.3	101.3	95.0	Pass

73	ME 22+50	949.6	0.2	2070.0	10.5	2011.0	10.7	97.1	95.0	Pass
74	ME 22+00	949.6	0.2	2070.0	10.5	2046.0	9.9	98.8	95.0	Pass
75	ME 21+50	949.6	0.2	2070.0	10.5	2120.0	10.4	102.4	95.0	Pass
76	ME 21+00	949.6	0.2	2070.0	10.5	2089.0	10.0	100.9	95.0	Pass
77	SE 12+75	949.9	0.2	2060.0	10.5	2087.0	11.6	101.3	95.0	Pass
78	SE 12+25	950.0	0.2	2060.0	10.5	2015.0	12.3	97.8	95.0	Pass
79	SE 14+00	948.5	0.2	2060.0	10.5	2128.0	10.3	103.3	95.0	Pass
80	SE 12+25	949.9	0.2	2060.0	10.5	2012.0	10.4	97.7	95.0	Pass
81	SE 12+75	950.0	0.2	2060.0	10.5	2057.0	9.7	99.9	95.0	Pass
82	SE 13+25	950.0	0.2	2060.0	10.5	2127.0	10.9	103.3	95.0	Pass
83	Toe Drain Encasement		0.2	2060.0	10.5	2066.0	11.4	100.3	95.0	Pass
84	Toe Drain Encasement		0.2	2060.0	10.5	2046.0	11.7	99.3	95.0	Pass
85	Toe Drain Encasement		0.2	2060.0	10.5	2057.0	11.7	99.9	95.0	Pass
86	Toe Drain Encasement		0.2	2060.0	10.5	2031.0	11.6	98.6	95.0	Pass
87	Toe Drain Encasement		0.2	2060.0	10.5	2085.0	11.7	101.2	95.0	Pass
88	Toe Drain Encasement		0.2	2060.0	10.5	2080.0	12.0	101.0	95.0	Pass
89	Toe Drain Encasement		0.2	2060.0	10.5	1989.0	12.4	96.6	95.0	Pass
90	Toe Drain Encasement		0.2	2060.0	10.5	2045.0	12.1	99.3	95.0	Pass
91	Toe Drain Encasement		0.2	2060.0	10.5	2111.0	10.4	102.5	95.0	Pass
92	Toe Drain Encasement		0.2	2060.0	10.5	2030.0	11.3	98.5	95.0	Pass
93	Toe Drain Encasement		0.2	2060.0	10.5	1997.0	10.3	96.9	95.0	Pass
94	Toe Drain Encasement		0.2	2060.0	10.5	1991.0	12.0	96.7	95.0	Pass
95	Toe Drain Encasement		0.2	2060.0	10.5	2135.0	10.3	103.6	95.0	Pass
96	Toe Drain Encasement		0.2	2060.0	10.5	2135.0	11.3	103.6	95.0	Pass
97	Toe Drain Encasement		0.2	2060.0	10.5	2133.0	9.8	103.5	95.0	Pass
98	Toe Drain Encasement		0.2	2060.0	10.5	2088.0	11.4	101.4	95.0	Pass
99	Toe Drain Encasement		0.2	2060.0	10.5	2017.0	11.7	97.9	95.0	Pass
100	Toe Drain Encasement		0.2	2060.0	10.5	2024.0	11.5	98.3	95.0	Pass
101	Toe Drain Encasement		0.2	2060.0	10.5	2131.0	11.0	103.4	95.0	Pass
102	Toe Drain Encasement		0.2	2060.0	10.5	1994.0	11.2	96.8	95.0	Pass
103	Toe Drain Encasement		0.2	2060.0	10.5	2081.0	10.7	101.0	95.0	Pass
104	Toe Drain Encasement		0.2	2060.0	10.5	2071.0	11.0	100.5	95.0	Pass
105	Toe Drain Encasement		0.2	2060.0	10.5	2106.0	10.8	102.2	95.0	Pass
					2007					
106	PE/ME corner - d/s till wedge	948.0	0.15	2000.0	10.0	2002.0	8.8	100.1	95.0	Pass
107	PE CH 28+50 - d/s till wedge	948.0	0.2	2000.0	10.0	2002.0	8.0	100.1	95.0	Pass
108	PE CH 29+00	948.3	0.2	2000.0	10.0	2082.0	8.7	104.1	95.0	Pass
109	PE CH 29+50	948.3	0.2	2000.0	10.0	2071.0	9.0	103.6	95.0	Pass
110	PE CH 30+25	948.3	0.2	2000.0	10.0	2032.0	9.1	101.6	95.0	Pass
111	PE CH 31+25	948.3	0.2	2000.0	10.0	2035.0	9.2	101.8	95.0	Pass
112	PE CH 31+75	948.3	0.2	2000.0	10.0	1989.0	9.6	99.5	95.0	Pass
113	PE CH 29+00 - d/s till wedge	948.3	0.2	2000.0	10.0	1953.0	11.3	97.7	95.0	Pass
114	PE CH 29+00 - d/s till wedge	948.3	0.2	2000.0	10.0	2050.0	9.8	102.5	95.0	Pass
115	PE/ME corner	948.5	0.2	2000.0	10.0	2060.0	12.0	103.0	95.0	Pass
116	PE/ME corner	948.5	0.2	2000.0	10.0	2025.0	10.9	101.3	95.0	Pass
117	CH 28+30	948.5	0.2	2000.0	10.0	2045.0	11.9	102.3	95.0	Pass
118	PE CH 28+50	948.3	0.2	2000.0	10.0	2056.0	11.2	102.8	95.0	Pass
119	PE CH 28+65	948.3	0.2	2000.0	10.0	2057.0	11.7	102.9	95.0	Pass
120	PE CH 28+75	948.3	0.2	2000.0	10.0	1992.0	12.6	99.6	95.0	Pass
121	ME/PE corner	948.5	0.2	2000.0	10.0	2082.0	10.0	104.1	95.0	Pass
122	PE CH 29+50	948.5	0.2	2000.0	10.0	2014.0	10.7	100.7	95.0	Pass
123	PE CH 29+50	948.5	0.2	2000.0	10.0	2058.0	10.9	102.9	95.0	Pass
124	PE CH 30+00	948.5	0.2	2000.0	10.0	1978.0	11.4	98.9	95.0	Pass
125	PE CH 30+00	948.5	0.2	2000.0	10.0	2042.0	10.4	102.1	95.0	Pass
126	PE CH 33+00	948.0	0.2	2000.0	10.0	2090.0	11.3	104.5	95.0	Pass
127	PE CH 33+00	948.0	0.2	2000.0	10.0	2029.0	10.9	101.5	95.0	Pass
128	PE CH 32+40	948.0	0.2	2000.0	10.0	2018.0	11.1	100.9	95.0	Pass
129	PE CH 32+40	948.0	0.2	2000.0	10.0	2028.0	11.0	101.4	95.0	Pass
130	PE/ME corner	948.9	0.2	2000.0	10.0	2060.0	9.8	103.0	95.0	Pass
131	PE CH 28+50	948.9	0.2	2000.0	10.0	2093.0	9.5	104.7	95.0	Pass
132	PE CH 29+25	948.9	0.2	2000.0	10.0	2029.0	10.2	101.5	95.0	Pass
133	PE CH 29+75	948.9	0.2	2000.0	10.0	2040.0	10.8	102.0	95.0	Pass
134	PE CH 30+50	948.9	0.2	2000.0	10.0	2028.0	10.2	101.4	95.0	Pass
135	PE CH 31+00	948.9	0.2	2000.0	10.0	2048.0	10.2	102.4	95.0	Pass
136	PE CH 31+25	948.9	0.2	2000.0	10.0	2017.0	10.5	100.9	95.0	Pass
137	PE CH 32+25	948.9	0.2	2000.0	10.0	2058.0	10.9	102.9	95.0	Pass
138	PE CH 32+50	948.9	0.2	2000.0	10.0	2045.0	11.1	102.3	95.0	Pass
139	PE CH 32+75	948.9	0.2	2000.0	10.0	2037.0	10.5	101.9	95.0	Pass
140	PE CH 22+75	948.3	0.2	2000.0	10.0	1997.0	11.1	99.9	95.0	Pass
141	PE CH 34+00	948.3	0.2	2000.0	10.0	2045.0	11.2	102.3	95.0	Pass
142	PE CH 34+50	948.3	0.2	2000.0	10.0	2072.0	11.0	103.6	95.0	Pass
143	PE CH 35+00	948.3	0.2	2000.0	10.0	2021.0	11.1	101.1	95.0	Pass
144	PE CH 35+50	948.3	0.2	2000.0	10.0	2052.0	11.6	102.6	95.0	Pass
145	PE CH 36+00	948.4	0.2	2000.0	10.0	2041.0	11.1	102.1	95.0	Pass
146	PE CH 35+50	948.4	0.2	2000.0	10.0	2034.0	12.9	101.7	95.0	Pass
147	PE CH 34+75	948.4	0.2	2000.0	10.0	2006.0	10.8	100.3	95.0	Pass
148	PE CH 34+25	948.4	0.2	2000.0	10.0	2015.0	11.2	100.8	95.0	Pass
149	PE CH 35+50	948.6	0.2	2000.0	10.0	2041.0	10.9	102.1	95.0	Pass
150	PE CH 36+00	948.3	0.2	2000.0	10.0	2049.0	10.4	102.5	95.0	Pass

151	PE CH 36+50	948.3	0.2	2000.0	10.0	2005.0	12.0	100.3	95.0	Pass
152	PE CH 37+00	948.3	0.2	2000.0	10.0	2063.0	10.7	103.2	95.0	Pass
153	PE CH 37+40	948.4	0.2	2000.0	10.0	2091.0	9.9	104.6	95.0	Pass
154	PE CH 38+75	948.3	0.2	2000.0	10.0	1987.0	11.5	99.4	95.0	Pass
155	PE CH 39+00	948.3	0.2	2000.0	10.0	2063.0	11.1	103.2	95.0	Pass
156	PE CH 39+75	948.3	0.2	2000.0	10.0	2038.0	11.6	101.9	95.0	Pass
157	PE CH 40+25	948.3	0.2	2080.0	10.6	2064.0	10.7	99.2	95.0	Pass
158	PE CH 40+75	948.3	0.2	2080.0	10.6	2097.0	11.3	100.8	95.0	Pass
159	PE CH 41+75	948.3	0.2	2190.0	10.5	2120.0	10.3	96.8	95.0	Pass
160	PE CH 41+00	948.6	0.2	2080.0	10.6	2048.0	11.9	98.5	95.0	Pass
161	PE CH 41+50	948.6	0.2	2080.0	10.6	2035.0	12.6	97.8	95.0	Pass
162	PE CH 42+00	948.6	0.2	2080.0	10.6	2050.0	11.7	98.6	95.0	Pass
163	PE CH 42+50	948.3	0.2	2080.0	10.6	2050.0	10.7	98.6	95.0	Pass
164	PE CH 43+00	948.3	0.2	2080.0	10.6	2052.0	11.0	98.7	95.0	Pass
165	PE CH 43+50	948.3	0.2	2080.0	10.6	1993.0	12.3	95.8	95.0	Pass
166	PE CH 44+00	948.3	0.2	2080.0	10.6	2010.0	12.2	96.6	95.0	Pass
167	PE CH 44+50	948.3	0.2	2080.0	10.6	2010.0	12.4	96.6	95.0	Pass
168	PE CH 45+00	948.3	0.2	2080.0	10.6	2057.0	11.6	98.9	95.0	Pass
169	PE CH 45+50	948.3	0.2	2080.0	10.6	2089.0	10.3	100.4	95.0	Pass
170	PE CH 46+00	948.3	0.2	2080.0	10.6	2036.0	11.7	97.9	95.0	Pass
171	PE CH 46+25	949.5	0.2	2080.0	10.6	1989.0	12.0	95.6	95.0	Pass
172	PE CH 46+00	948.6	0.2	2080.0	10.6	2044.0	11.4	98.3	95.0	Pass
173	PE CH 46+25	950.0	0.2	2080.0	10.6	2025.0	12.2	97.4	95.0	Pass
174	PE CH 45+75	948.3	0.2	2080.0	10.6	2037.0	11.6	97.9	95.0	Pass
175	PE CH 45+75	948.9	0.2	2080.0	10.6	2017.0	11.7	97.0	95.0	Pass
176	PE CH 45+50	948.7	0.2	2080.0	10.6	2048.0	11.1	98.5	95.0	Pass
177	PE CH 46+00	949.2	0.2	2080.0	10.6	2018.0	11.5	97.0	95.0	Pass
178	PE CH 46+25	950.0	0.2	2080.0	10.6	2015.0	11.4	96.9	95.0	Pass
179	PE CH 46+00	949.7	0.2	2080.0	10.6	2031.0	10.6	97.6	95.0	Pass
180	PE CH 45+75	949.2	0.2	2080.0	10.6	2013.0	11.9	96.8	95.0	Pass
181	PE CH 45+50	949.0	0.2	2080.0	10.6	2045.0	10.5	98.3	95.0	Pass
182	PE CH 45+25	948.9	0.2	2080.0	10.6	1999.0	11.5	96.1	95.0	Pass
183	PE CH 46+00	949.8	0.2	2080.0	10.6	2033.0	11.8	97.7	95.0	Pass
184	PE CH 45+75 Repeat	949.4	0.2	2080.0	10.6	2035.0	11.7	97.8	95.0	Pass
185	PE CH 45+50	949.4	0.2	2080.0	10.6	1986.0	11.8	95.5	95.0	Pass
186	PE CH 45+25	949.1	0.2	2080.0	10.6	1985.0	12.5	95.4	95.0	Pass
187	PE CH 45+75 Repeat	949.8	0.2	2080.0	10.6	2017.0	11.3	97.0	95.0	Pass
188	PE CH 42+50	948.6	0.2	2080.0	10.6	2091.0	10.2	100.5	95.0	Pass
189	PE CH 43+00	948.7	0.2	2080.0	10.6	2080.0	11.1	100.0	95.0	Pass
190	PE CH 43+50	948.6	0.2	2080.0	10.6	2073.0	10.7	99.7	95.0	Pass
191	PE CH 44+00	948.6	0.2	2080.0	10.6	2106.0	10.0	101.3	95.0	Pass
192	PE CH 44+50	948.6	0.2	2080.0	10.6	2045.0	11.7	98.3	95.0	Pass
193	PE CH 45+00	949.2	0.2	2080.0	10.6	2022.0	10.4	97.2	95.0	Pass
194	PE CH 42+00	948.3	0.2	2080.0	10.6	2063.0	10.1	99.2	95.0	Pass
195	PE CH 41+50	949.0	0.2	2080.0	10.6	2080.0	10.4	100.0	95.0	Pass
196	PE CH 41+00	948.9	0.2	2080.0	10.6	1981.0	12.3	95.2	95.0	Pass
197	PE CH 40+50	949.0	0.2	2080.0	10.6	1994.0	13.1	95.9	95.0	Pass
198	PE CH 40+00	949.0	0.2	2080.0	10.6	2017.0	12.0	97.0	95.0	Pass
199	PE CH 39+50	949.0	0.2	2080.0	10.6	2103.0	11.5	101.1	95.0	Pass
200	PE CH 39+00	948.7	0.2	2080.0	10.6	1996.0	12.2	96.0	95.0	Pass
201	PE CH 45+50	950.2	0.2	2080.0	10.6	2044.0	11.3	98.3	95.0	Pass
202	PE CH 45+00	949.2	0.2	2080.0	10.6	2036.0	11.5	97.9	95.0	Pass
203	PE CH 42+50	948.9	0.2	2080.0	10.6	2007.0	12.5	96.5	95.0	Pass
204	PE CH 42+00	949.0	0.2	2080.0	10.6	2094.0	10.6	100.7	95.0	Pass
205	PE CH 41+50	949.2	0.2	2080.0	10.6	1984.0	13.6	95.4	95.0	Pass
206	PE CH 41+00 Repeat	949.2	0.2	2080.0	10.6	1979.0	13.6	95.1	95.0	Pass
207	PE CH 40+50 Repeat	949.2	0.2	2080.0	10.6	2030.0	11.3	97.6	95.0	Pass
208	PE CH 40+00	949.3	0.2	2080.0	10.6	2045.0	10.6	98.3	95.0	Pass
209	PE CH 39+50	949.3	0.2	2080.0	10.6	2139.0	8.9	102.8	95.0	Pass
210	PE CH 39+00	949.0	0.2	2080.0	10.6	2045.0	10.3	98.3	95.0	Pass
211	PE CH 38+50	949.1	0.2	2080.0	10.6	2073.0	9.6	99.7	95.0	Pass
212	PE CH 38+00	948.6	0.2	2080.0	10.6	2028.0	9.8	97.5	95.0	Pass
213	PE CH 37+50	949.0	0.2	2080.0	10.6	2066.0	10.3	99.3	95.0	Pass
214	PE CH 37+00	949.1	0.2	2080.0	10.6	2114.0	9.5	101.6	95.0	Pass
215	PE CH 36+50	949.1	0.2	2080.0	10.6	2112.0	9.2	101.5	95.0	Pass
216	PE CH 36+00	949.0	0.2	2080.0	10.6	2022.0	11.5	97.2	95.0	Pass
217	PE CH 35+50	949.1	0.2	2080.0	10.6	1999.0	12.2	96.1	95.0	Pass
218	PE CH 35+00	949.4	0.2	2080.0	10.6	1993.0	11.0	95.8	95.0	Pass
219	PE CH 34+50	949.0	0.2	2080.0	10.6	2042.0	11.1	98.2	95.0	Pass
220	PE CH 34+00	949.0	0.2	2080.0	10.6	2007.0	11.7	96.5	95.0	Pass
221	PE CH 33+50	949.2	0.2	2080.0	10.6	2011.0	10.9	96.7	95.0	Pass
222	PE CH 33+00	949.4	0.2	2080.0	10.6	2044.0	10.9	98.3	95.0	Pass
223	PE CH 32+50	949.3	0.2	2080.0	10.6	2006.0	11.1	96.4	95.0	Pass
224	PE CH 31+50	949.0	0.2	2080.0	10.6	2035.0	10.9	97.8	95.0	Pass
225	PE CH 31+00	949.3	0.2	2080.0	10.6	2058.0	10.3	98.9	95.0	Pass
226	PE CH 30+50	949.3	0.2	2080.0	10.6	2064.0	9.7	99.2	95.0	Pass
227	PE CH 30+00	949.1	0.2	2080.0	10.6	2032.0	10.3	97.7	95.0	Pass
228	PE CH 29+50	949.2	0.2	2080.0	10.6	2109.0	9.5	101.4	95.0	Pass
229	PE CH 29+00	949.7	0.2	2080.0	10.6	2031.0	10.3	97.6	95.0	Pass

230	PE CH 28+50	949.6	0.2	2080.0	10.6	1980.0	10.7	95.2	95.0	Pass
231	PE CH 28+00	949.5	0.2	2080.0	10.6	2043.0	10.3	98.2	95.0	Pass
232	PE CH 32+00	948.9	0.2	2080.0	10.6	2135.0	9.0	102.6	95.0	Pass
233	PE CH 32+50	949.5	0.2	2080.0	10.6	2115.0	8.4	101.7	95.0	Pass
234	PE CH 33+00	949.5	0.2	2080.0	10.6	2134.0	8.6	102.6	95.0	Pass
235	PE CH 33+50	949.5	0.2	2080.0	10.6	2045.0	9.6	98.3	95.0	Pass
236	PE CH 34+00	949.3	0.2	2080.0	10.6	2098.0	9.7	100.9	95.0	Pass
237	PE CH 34+50	949.3	0.2	2080.0	10.6	2021.0	10.0	97.2	95.0	Pass
238	PE CH 35+00	949.5	0.2	2080.0	10.6	2010.0	10.1	96.6	95.0	Pass
239	PE CH 35+50	949.3	0.2	2080.0	10.6	2045.0	9.7	98.3	95.0	Pass
240	PE CH 36+00	949.2	0.2	2080.0	10.6	2106.0	9.6	101.3	95.0	Pass
241	PE CH 33+50	947.2	0.2	2080.0	10.6	2021.0	5.9	97.2	95.0	Pass
242	PE CH 32+50	949.8	0.2	2080.0	10.6	1986.0	10.4	95.5	95.0	Pass
243	PE CH 32+00	949.3	0.2	2080.0	10.6	2095.0	10.3	100.7	95.0	Pass
244	PE CH 31+50	949.4	0.2	2080.0	10.6	1990.0	10.7	95.7	95.0	Pass
245	PE CH 31+00	949.5	0.2	2080.0	10.6	2020.0	11.9	97.1	95.0	Pass
246	PE CH 30+50 Repeat	949.7	0.2	2080.0	10.6	2026.0	10.8	97.4	95.0	Pass
247	PE CH 34+00	947.3	0.2	2080.0	10.6	2020.0	12.5	97.1	95.0	Pass
248	PE CH 33+50	947.5	0.2	2080.0	10.6	2026.0	11.6	97.4	95.0	Pass
249	PE CH 32+00 Repeat	947.3	0.2	2080.0	10.6	2027.0	11.2	97.5	95.0	Pass
250	PE CH 32+50 Repeat	947.0	0.2	2080.0	10.6	2071.0	8.9	99.6	95.0	Pass
251	PE CH 33+50	947.7	0.2	2080.0	10.6	2000.0	11.4	96.2	95.0	Pass
252	PE CH 34+00	947.6	0.2	2080.0	10.6	2026.0	11.1	97.4	95.0	Pass
253	PE CH 30+00	948.9	0.2	2080.0	10.6	2015.0	7.0	96.9	95.0	Pass
254	PE CH 29+50	949.3	0.2	2080.0	10.6	2075.0	7.6	99.8	95.0	Pass
255	PE CH 28+50	949.8	0.2	2080.0	10.6	2001.0	8.8	96.2	95.0	Pass
256	PE CH 32+00 Repeat	947.6	0.2	2080.0	10.6	2065.0	7.9	99.3	95.0	Pass
257	PE CH 32+50 Repeat	947.2	0.2	2080.0	10.6	2104.0	10.4	101.2	95.0	Pass
258	PE CH 33+50	947.9	0.2	2080.0	10.6	2059.0	11.5	99.0	95.0	Pass
259	PE CH 34+00	947.9	0.2	2080.0	10.6	2079.0	11.0	100.0	95.0	Pass
260	PE CH 32+00	947.9	0.2	2080.0	10.6	2032.0	10.8	97.7	95.0	Pass
261	PE CH 32+50	947.5	0.2	2080.0	10.6	2118.0	10.4	101.8	95.0	Pass
262	PE CH 33+00	947.2	0.2	2080.0	10.6	2055.0	12.1	98.8	95.0	Pass
263	PE CH 33+00	947.5	0.2	2080.0	10.6	2057.0	10.8	98.9	95.0	Pass
264	PE CH 33+00	947.7	0.2	2080.0	10.6	2059.0	10.6	99.0	95.0	Pass
265	PE CH 33+00	948.1	0.2	2080.0	10.6	2106.0	9.2	101.3	95.0	Pass
266	PE CH 29+75	947.8	0.2	2080.0	10.6	1994.0	9.5	95.9	95.0	Pass
267	PE CH 30+25 Repeat	948.0	0.2	2080.0	10.6	2167.0	8.5	104.2	95.0	Pass
268	PE CH 30+75 Repeat	948.0	0.2	2080.0	10.6	1985.0	10.7	95.4	95.0	Pass
269	PE CH 31+25 Repeat	948.0	0.2	2080.0	10.6	2049.0	10.9	98.5	95.0	Pass
270	PE CH 30+75	948.2	0.2	2080.0	10.6	2044.0	8.6	98.3	95.0	Pass
271	PE CH 30+75	948.2	0.2	2080.0	10.6	2005.0	11.2	96.4	95.0	Pass
272	PE CH 30+25	948.2	0.2	2080.0	10.6	2074.0	9.7	99.7	95.0	Pass
273	PE CH 29+75	948.1	0.2	2080.0	10.6	2069.0	8.6	99.5	95.0	Pass
274	PE CH 31+25 Repeat	948.2	0.2	2080.0	10.6	2042.0	8.9	98.2	95.0	Pass
275	PE CH 29+75 Repeat	947.8	0.2	2080.0	10.6	2130.0	8.2	102.4	95.0	Pass
276	PE CH 30+25	948.3	0.2	2080.0	10.6	2088.0	9.0	100.4	95.0	Pass
277	PE CH 30+75	948.4	0.2	2080.0	10.6	2048.0	9.9	98.5	95.0	Pass
278	SE CH 11+50	949.6	0.2	2080.0	10.6	2141.0	8.0	102.9	95.0	Pass
279	SE CH 11+00	948.9	0.2	2080.0	10.6	2146.0	7.9	103.2	95.0	Pass
280	SE CH 10+50	949.2	0.2	2080.0	10.6	2163.0	7.7	104.0	95.0	Pass
281	SE CH 10+00	947.8	0.2	2080.0	10.6	2040.0	9.0	98.1	95.0	Pass
282	SE CH 9+50	948.5	0.2	2080.0	10.6	2098.0	9.2	100.9	95.0	Pass
283	SE CH 9+00	948.5	0.2	2080.0	10.6	2113.0	9.3	101.6	95.0	Pass
284	PE CH 29+75	948.1	0.2	2080.0	10.6	2046.0	9.6	98.4	95.0	Pass
285	PE CH 31+75	948.5	0.2	2080.0	10.6	2040.0	8.3	98.1	95.0	Pass
286	PE CH 30+50	948.5	0.2	2080.0	10.6	2045.0	9.3	98.3	95.0	Pass
287	PE CH 30+25 Repeat	948.4	0.2	2080.0	10.6	2069.0	9.2	99.5	95.0	Pass
288	PE CH 31+25	948.8	0.2	2080.0	10.6	2093.0	8.7	100.6	95.0	Pass
289	PE CH 30+75	949.1	0.2	2080.0	10.6	2061.0	8.6	99.1	95.0	Pass
290	PE CH 31+75 Repeat	948.8	0.2	2080.0	10.6	2043.0	8.6	98.2	95.0	Pass
291	PE CH 40+25	948.8	0.2	2080.0	10.6	2076.0	8.2	99.8	95.0	Pass
292	PE CH 40+75	948.4	0.2	2080.0	10.6	2080.0	10.1	100.0	95.0	Pass
293	PE CH 41+25 Repeat	948.5	0.2	2080.0	10.6	2118.0	10.3	101.8	95.0	Pass
294	PE CH 29+75	948.0	0.2	2080.0	10.6	1994.0	10.0	95.9	95.0	Pass
295	PE CH 30+75	949.4	0.2	2080.0	10.6	2108.0	8.2	101.3	95.0	Pass
296	PE CH 31+25	949.0	0.2	2080.0	10.6	2171.0	8.3	104.4	95.0	Pass
297	PE CH 29+25 Repeat	947.4	0.2	2080.0	10.6	2018.0	9.6	97.0	95.0	Pass
298	PE CH 29+25	947.7	0.2	2080.0	10.6	2044.0	10.3	98.3	95.0	Pass
299	PE CH 29+75	948.4	0.2	2080.0	10.6	2125.0	9.3	102.2	95.0	Pass
300	PE CH 30+10	948.5	0.2	2080.0	10.6	2049.0	9.7	98.5	95.0	Pass
301	PE CH 30+25	949.0	0.2	2080.0	10.6	2028.0	7.5	97.5	95.0	Pass
302	PE CH 30+75	949.0	0.2	2080.0	10.6	2165.0	7.7	104.1	95.0	Pass
303	PE CH 31+25	949.1	0.2	2080.0	10.6	2151.0	7.6	103.4	95.0	Pass
304	PE CH 35+00 Repeat	947.2	0.2	2080.0	10.6	2120.0	7.6	101.9	95.0	Pass
305	PE CH 35+50	947.7	0.2	2080.0	10.6	2025.0	9.6	97.4	95.0	Pass
306	PE CH 34+25 Repeat	947.6	0.2	2080.0	10.6	2061.0	10.3	99.1	95.0	Pass
307	PE CH 33+80	948.3	0.2	2080.0	10.6	2147.0	8.7	103.2	95.0	Pass
308	PE CH 35+00	947.7	0.2	2080.0	10.6	2055.0	11.1	98.8	95.0	Pass

309	PE CH 36+00	947.5	0.2	2080.0	10.6	2079.0	10.9	100.0	95.0	Pass
310	PE CH 35+50	948.2	0.2	2080.0	10.6	1989.0	9.1	95.6	95.0	Pass
311	PE CH 35+50	948.3	0.2	2080.0	10.6	2103.0	10.3	101.1	95.0	Pass
312	PE CH 34+50	947.9	0.2	2080.0	10.6	2100.0	10.1	101.0	95.0	Pass
313	PE CH 35+00	947.5	0.2	2080.0	10.6	2035.0	9.3	97.8	95.0	Pass
314	PE CH 33+25	948.5	0.2	2080.0	10.6	2064.0	7.9	99.2	95.0	Pass
315	PE CH 33+75 Repeat	948.5	0.2	2080.0	10.6	2039.0	8.0	98.0	95.0	Pass
316	PE CH 34+25	948.3	0.2	2080.0	10.6	2105.0	7.8	101.2	95.0	Pass
317	PE CH 34+75	948.1	0.2	2080.0	10.6	2062.0	9.6	99.1	95.0	Pass
318	PE CH 35+25	947.8	0.2	2080.0	10.6	2165.0	9.1	104.1	95.0	Pass
319	PE CH 35+75	947.6	0.2	2080.0	10.6	2120.0	8.3	101.9	95.0	Pass
320	PE CH 36+25	947.8	0.2	2080.0	10.6	2086.0	9.4	100.3	95.0	Pass
321	PE CH 37+25	948.0	0.2	2080.0	10.6	2007.0	8.8	96.5	95.0	Pass
322	PE CH 33+75	948.9	0.2	2220.0	12.5	2172.0	10.0	97.8	95.0	Pass
323	PE CH 34+75	948.5	0.2	2220.0	12.5	2144.0	7.8	96.6	95.0	Pass
324	SE CH 8+50	949.3	0.2	2220.0	12.5	2138.0	7.0	96.3	95.0	Pass
325	PE CH 35+00	948.6	0.2	2220.0	12.5	2130.0	9.0	95.9	95.0	Pass
326	PE CH 35+50	948.4	0.2	2220.0	12.5	2135.0	8.6	96.2	95.0	Pass
327	PE CH 37+00 Repeat	947.2	0.2	2120.0	8.5	2057.0	9.6	97.0	95.0	Pass
328	PE CH 37+50	947.2	0.2	2120.0	8.5	2142.0	9.0	101.0	95.0	Pass
329	PE CH 38+00	947.4	0.2	2120.0	8.5	2116.0	10.0	99.8	95.0	Pass
330	PE CH 34+50	949.2	0.2	2120.0	8.5	2146.0	9.4	101.2	95.0	Pass
331	PE CH 35+00	949.0	0.2	2120.0	8.5	2093.0	9.6	98.7	95.0	Pass
332	PE CH 35+75	948.7	0.2	2120.0	8.5	2055.0	10.1	96.9	95.0	Pass
333	PE CH 36+25	948.5	0.2	2120.0	8.5	2134.0	9.4	100.7	95.0	Pass
334	PE CH 36+75	948.5	0.2	2120.0	8.5	2114.0	9.8	99.7	95.0	Pass
335	PE CH 37+25	948.3	0.2	2120.0	8.5	2035.0	9.0	96.0	95.0	Pass
336	PE CH 38+25	947.3	0.2	2120.0	8.5	2054.0	8.2	96.9	95.0	Pass
337	PE CH 38+75	947.0	0.2	2120.0	8.5	2057.0	7.7	97.0	95.0	Pass
338	PE CH 39+25	946.9	0.2	2120.0	8.5	2126.0	9.9	100.3	95.0	Pass
339	35+50	949.3	0.2	2120.0	8.5	2099.0	10.9	99.0	95.0	Pass
340	36+25	949.0	0.2	2120.0	8.5	2062.0	11.2	97.3	95.0	Pass
341	37+00	948.5	0.2	2120.0	8.5	2120.0	9.9	100.0	95.0	Pass
342	37+75	947.4	0.2	2120.0	8.5	2168.0	9.1	102.3	95.0	Pass
343	39+75	946.7	0.2	2120.0	8.5	2123.0	8.2	100.1	95.0	Pass
344	28+00	949.1	0.2	2120.0	8.5	2104.0	9.6	99.2	95.0	Pass
345	28+50	948.6	0.2	2120.0	8.5	2059.0	11.8	97.1	95.0	Pass
346	37+50	947.7	0.2	2120.0	8.5	2066.0	10.6	97.5	95.0	Pass
347	38+50	947.3	0.2	2120.0	8.5	2070.0	10.9	97.6	95.0	Pass
348	27+50	949.0	0.2	2120.0	8.5	2043.0	11.0	96.4	95.0	Pass
349	28+50	949.2	0.2	2120.0	8.5	2108.0	9.6	99.4	95.0	Pass
350	29+00	949.0	0.2	2120.0	8.5	2095.0	10.0	98.8	95.0	Pass
351	29+50	949.0	0.2	2120.0	8.5	2087.0	10.4	98.4	95.0	Pass
352	30+00	949.0	0.2	2120.0	8.5	2038.0	9.4	96.1	95.0	Pass
353	28+50	949.5	0.2	2120.0	8.5	2035.0	11.1	96.0	95.0	Pass
354	29+00	949.3	0.2	2120.0	8.5	2084.0	10.9	98.3	95.0	Pass
355	42+25	947.1	0.2	2120.0	8.5	2176.0	7.1	102.6	95.0	Pass
356	32+25	949.1	0.2	2060.0	10.5	2041.0	11.2	99.1	95.0	Pass
357	32+75	948.9	0.2	2060.0	10.5	2079.0	11.2	100.9	95.0	Pass
358	33+25	949.4	0.2	2060.0	10.5	2005.0	11.9	97.3	95.0	Pass
359	32+50	949.4	0.2	2060.0	10.5	2082.0	10.0	101.1	95.0	Pass
360	33+00	949.4	0.2	2060.0	10.5	2018.0	11.4	98.0	95.0	Pass
361	32+75	949.8	0.2	2060.0	10.5	2066.0	11.2	100.3	95.0	Pass
362	33+00	949.8	0.2	2060.0	10.5	2056.0	11.3	99.8	95.0	Pass
363	37+75	948.5	0.2	2060.0	10.5	2099.0	9.9	101.9	95.0	Pass
364	38+25	948.4	0.2	2060.0	10.5	2051.0	11.1	99.6	95.0	Pass
365	37+75	948.9	0.2	2060.0	10.5	2021.0	12.8	98.1	95.0	Pass
366	38+25	948.8	0.2	2060.0	10.5	2055.0	11.6	99.8	95.0	Pass
367	37+75	948.7	0.2	2060.0	10.5	1987.0	11.6	96.5	95.0	Pass
368	38+25	949.0	0.2	2060.0	10.5	1997.0	12.7	96.9	95.0	Pass
369	39+00	947.7	0.2	2060.0	10.5	2038.0	11.6	98.9	95.0	Pass
370	39+50	947.7	0.2	2060.0	10.5	2025.0	11.7	98.3	95.0	Pass
371	39+00	949.2	0.2	2060.0	10.5	2033.0	11.9	98.7	95.0	Pass
372	39+50	948.7	0.2	2060.0	10.5	2100.0	10.6	101.9	95.0	Pass
373	40+00	948.5	0.2	2060.0	10.5	2055.0	11.1	99.8	95.0	Pass
374	40+25	948.5	0.2	2060.0	10.5	2032.0	10.8	98.6	95.0	Pass
375	40+75	948.6	0.2	2060.0	10.5	2007.0	10.2	97.4	95.0	Pass
376	41+25	948.0	0.2	2060.0	10.5	2080.0	10.4	101.0	95.0	Pass
377	41+50	948.0	0.2	2060.0	10.5	2059.0	9.8	100.0	95.0	Pass
378	40+25	948.2	0.2	2060.0	10.5	1992.0	9.8	96.7	95.0	Pass
379	40+75	948.1	0.2	2060.0	10.5	1972.0	10.0	95.7	95.0	Pass
380	40+75 Repeat	948.1	0.2	2060.0	10.5	1985.0	10.4	96.4	95.0	Pass
381	41+25	948.0	0.2	2060.0	10.5	2046.0	10.8	99.3	95.0	Pass
382	39+50	949.5	0.2	2060.0	10.5	2086.0	11.2	101.3	95.0	Pass
383	40+00	949.3	0.2	2060.0	10.5	2071.0	11.3	100.5	95.0	Pass
384	40+25	948.2	0.2	2060.0	10.5	2053.0	11.4	99.7	95.0	Pass
385	40+50	948.8	0.2	2060.0	10.5	2130.0	9.5	103.4	95.0	Pass
386	41+00	948.7	0.2	2060.0	10.5	1997.0	8.7	96.9	95.0	Pass
387	41+50	948.8	0.2	2060.0	10.5	2088.0	9.2	101.4	95.0	Pass

388	39+00	949.8	0.2	2060.0	10.5	2017.0	11.5	97.9	95.0	Pass
389	42+00	949.2	0.2	2060.0	10.5	2094.0	9.2	101.7	95.0	Pass
390	42+50	949.4	0.2	2060.0	10.5	2077.0	8.4	100.8	95.0	Pass
391	40+25	948.5	0.2	2060.0	10.5	2026.0	10.1	98.3	95.0	Pass
392	37+25	948.9	0.2	2060.0	10.5	2115.0	10.4	102.7	95.0	Pass
393	15+00	948.4	0.2	2060.0	10.5	2087.0	10.2	101.3	95.0	Pass
394	15+25	948.5	0.2	2060.0	10.5	2036.0	10.1	98.8	95.0	Pass
395	15+75	948.6	0.2	2060.0	10.5	2095.0	10.6	101.7	95.0	Pass
396	16+25	948.6	0.2	2060.0	10.5	2082.0	11.0	101.1	95.0	Pass
397	16+40	948.7	0.2	2060.0	10.5	2057.0	10.4	99.9	95.0	Pass
398	16+00	948.6	0.2	2060.0	10.5	1969.0	10.0	95.6	95.0	Pass
399	16+00 Repeat	948.6	0.2	2060.0	10.5	1967.0	10.4	95.5	95.0	Pass
400	16+00 Repeat	948.6	0.2	2060.0	10.5	2021.0	9.6	98.1	95.0	Pass
401	15+25	948.6	0.2	2060.0	10.5	2035.0	10.8	98.8	95.0	Pass
402	15+75	948.7	0.2	2060.0	10.5	2001.0	12.3	97.1	95.0	Pass
403	15+25	948.7	0.2	2060.0	10.5	2091.0	9.7	101.5	95.0	Pass
404	39+85	949.3	0.2	2060.0	10.5	2075.0	11.0	100.7	95.0	Pass
405	40+00	949.2	0.2	2060.0	10.5	2053.0	11.5	99.7	95.0	Pass
406	40+25	948.7	0.2	2060.0	10.5	2116.0	9.3	102.7	95.0	Pass
407	40+40	948.6	0.2	2060.0	10.5	2097.0	10.2	101.8	95.0	Pass
408	40+50	948.6	0.2	2060.0	10.5	2084.0	10.8	101.2	95.0	Pass
409	13+50	948.5	0.2	2060.0	10.5	2119.0	9.5	102.9	95.0	Pass
410	13+60	948.5	0.2	2060.0	10.5	2119.0	9.3	102.9	95.0	Pass
411	14+00	948.5	0.2	2060.0	10.5	2089.0	10.4	101.4	95.0	Pass
412	14+15	948.5	0.2	2060.0	10.5	2006.0	9.7	97.4	95.0	Pass
413	40+55	948.6	0.2	2060.0	10.5	2126.0	10.4	103.2	95.0	Pass
414	42+80	947.0	0.2	2060.0	10.5	1983.0	9.9	96.3	95.0	Pass
415	16+50	948.5	0.2	2060.0	10.5	2159.0	9.1	104.8	95.0	Pass
416	16+60	948.6	0.2	2060.0	10.5	2092.0	7.7	101.6	95.0	Pass
417	16+25	948.6	0.2	2060.0	10.5	2153.0	7.9	104.5	95.0	Pass
418	43+20	947.0	0.2	2060.0	10.5	2048.0	10.2	99.4	95.0	Pass
419	43+40	947.1	0.2	2060.0	10.5	2012.0	10.4	97.7	95.0	Pass
420	43+50	947.1	0.2	2060.0	10.5	2000.0	7.7	97.1	95.0	Pass
421	43+80	947.2	0.2	2060.0	10.5	1966.0	9.0	95.4	95.0	Pass
422	42+50	948.5	0.2	2060.0	10.5	2112.0	9.8	102.5	95.0	Pass
423	42+75	947.4	0.2	2060.0	10.5	2023.0	11.0	98.2	95.0	Pass
424	13+50	949.0	0.2	2060.0	10.5	2075.0	8.6	100.7	95.0	Pass
425	13+75	949.0	0.2	2060.0	10.5	2006.0	9.2	97.4	95.0	Pass
426	14+00	949.0	0.2	2060.0	10.5	2051.0	10.3	99.6	95.0	Pass
427	14+25	949.0	0.2	2060.0	10.5	2068.0	9.2	100.4	95.0	Pass
428	14+50	949.0	0.2	2060.0	10.5	2000.0	9.6	97.1	95.0	Pass
429	15+30	949.0	0.2	2060.0	10.5	1959.0	9.5	95.1	95.0	Pass
430	15+30 Repeat	949.0	0.2	2060.0	10.5	2003.0	10.6	97.2	95.0	Pass
431	15+75	949.0	0.2	2060.0	10.5	1976.0	10.5	95.9	95.0	Pass
432	16+25	949.0	0.2	2060.0	10.5	2017.0	11.1	97.9	95.0	Pass
433	16+75 Repeat	949.0	0.2	2060.0	10.5	1989.0	10.6	96.6	95.0	Pass
434	13+50	950.1	0.2	2060.0	10.5	1989.0	11.0	96.6	95.0	Pass
435	13+25	950.1	0.2	2060.0	10.5	1967.0	11.8	95.5	95.0	Pass
436	12+75	950.1	0.2	2060.0	10.5	2014.0	10.6	97.8	95.0	Pass
437	12+25	950.7	0.2	2060.0	10.5	2029.0	10.5	98.5	95.0	Pass
438	11+75	950.4	0.2	2060.0	10.5	2087.0	8.8	101.3	95.0	Pass
439	11+25	950.0	0.2	2060.0	10.5	2047.0	10.6	99.4	95.0	Pass
440	11+00	950.0	0.2	2060.0	10.5	2031.0	11.2	98.6	95.0	Pass
441	12+50	950.0	0.2	2060.0	10.5	2114.0	8.8	102.6	95.0	Pass
442	43+20 Repeat	947.2	0.2	2060.0	10.5	2125.0	8.2	103.2	95.0	Pass
443	42+75 Repeat	948.1	0.2	2060.0	10.5	2012.0	7.8	97.7	95.0	Pass
444	43+10	948.1	0.2	2060.0	10.5	2044.0	7.3	99.2	95.0	Pass
445	10+75	950.1	0.2	2060.0	10.5	1999.0	9.8	97.0	95.0	Pass
446	10+25	950.2	0.2	2060.0	10.5	2034.0	9.5	98.7	95.0	Pass
447	9+75	950.1	0.2	2060.0	10.5	2046.0	10.1	99.3	95.0	Pass
448	9+25	950.2	0.2	2060.0	10.5	2106.0	9.8	102.2	95.0	Pass
449	8+75	950.1	0.2	2060.0	10.5	1998.0	9.1	97.0	95.0	Pass
450	8+25	950.0	0.2	2060.0	10.5	2031.0	9.3	98.6	95.0	Pass
451	8+15	950.0	0.2	2060.0	10.5	2050.0	9.5	99.5	95.0	Pass
452	42+80	947.9	0.2	2060.0	10.5	2078.0	9.5	100.9	95.0	Pass
453	42+90	947.9	0.2	2060.0	10.5	2029.0	10.9	98.5	95.0	Pass
454	42+75	948.6	0.2	2060.0	10.5	2106.0	9.0	102.2	95.0	Pass
455	42+90	948.4	0.2	2060.0	10.5	2032.0	11.6	98.6	95.0	Pass
456	42+80	948.5	0.2	2060.0	10.5	2062.0	8.8	100.1	95.0	Pass
457	43+15	947.4	0.2	2060.0	10.5	2148.0	8.2	104.3	95.0	Pass
458	43+40	947.0	0.2	2060.0	10.5	2017.0	9.0	97.9	95.0	Pass
459	10+50	950.4	0.2	2060.0	10.5	2006.0	9.7	97.4	95.0	Pass
460	11+00	950.4	0.2	2060.0	10.5	2046.0	11.0	99.3	95.0	Pass
461	11+50	950.3	0.2	2060.0	10.5	2052.0	11.2	99.6	95.0	Pass
462	10+25	949.7	0.2	2060.0	10.5	2130.0	6.9	103.4	95.0	Pass
463	9+75	949.6	0.2	2060.0	10.5	2056.0	8.6	99.8	95.0	Pass
464	9+25	949.5	0.2	2060.0	10.5	2043.0	8.3	99.2	95.0	Pass
465	7+00	949.8	0.2	2060.0	10.5	1965.0	9.2	95.4	95.0	Pass
466	7+25	949.8	0.2	2060.0	10.5	1965.0	9.0	95.4	95.0	Pass

467	43+75	947.4	0.2	2060.0	10.5	2050.0	10.3	99.5	95.0	Pass
468	43+70	947.4	0.2	2060.0	10.5	2030.0	6.9	98.5	95.0	Pass
469	43+00	949.1	0.2	2060.0	10.5	2001.0	10.8	97.1	95.0	Pass
470	43+00	948.6	0.2	2060.0	10.5	2120.0	9.9	102.9	95.0	Pass
471	43+10 Repeat	947.9	0.2	2060.0	10.5	2106.0	10.1	102.2	95.0	Pass
472	8+80	949.0	0.2	2060.0	10.5	2002.0	8.5	97.2	95.0	Pass
473	8+25 Repeat	949.1	0.2	2060.0	10.5	2068.0	8.7	100.4	95.0	Pass
474	7+75	949.5	0.2	2060.0	10.5	2079.0	8.6	100.9	95.0	Pass
475	43+25	947.8	0.2	2060.0	10.5	1995.0	8.9	96.8	95.0	Pass
476	43+75	948.1	0.2	2060.0	10.5	2090.0	8.6	101.5	95.0	Pass
477	44+00	948.2	0.2	2060.0	10.5	2002.0	8.7	97.2	95.0	Pass
478	43+10	948.3	0.2	2060.0	10.5	2053.0	10.3	99.7	95.0	Pass
479	43+30	948.2	0.2	2060.0	10.5	2062.0	9.2	100.1	95.0	Pass
480	43+80	948.5	0.2	2060.0	10.5	1984.0	9.9	96.3	95.0	Pass
481	7+25	948.6	0.2	2060.0	10.5	2088.0	9.9	101.4	95.0	Pass
482	44+20	948.1	0.2	2060.0	10.5	2105.0	9.6	102.2	95.0	Pass
483	43+70	948.6	0.2	2060.0	10.5	2051.0	6.8	99.6	95.0	Pass
484	43+25	949.2	0.2	2060.0	10.5	2055.0	8.6	99.8	95.0	Pass
485	6+40	948.8	0.2	2060.0	10.5	2114.0	9.0	102.6	95.0	Pass
486	6+80	948.8	0.2	2060.0	10.5	2038.0	9.7	98.9	95.0	Pass
487	7+25	948.8	0.2	2060.0	10.5	2101.0	8.3	102.0	95.0	Pass
488	5+80 (ditch)	948.3	0.2	2060.0	10.5	2140.0	8.2	103.9	95.0	Pass
489	5+80	948.6	0.2	2060.0	10.5	2071.0	10.2	100.5	95.0	Pass
490	44+10	948.7	0.2	2060.0	10.5	2134.0	8.3	103.6	95.0	Pass
491	5+80	949.0	0.2	2060.0	10.5	1973.0	11.6	95.8	95.0	Pass
492	8+25	949.6	0.2	2060.0	10.5	2106.0	9.7	102.2	95.0	Pass
493	5+80	949.1	0.2	2060.0	10.5	2030.0	10.2	98.5	95.0	Pass
494	8+00	949.2	0.2	2060.0	10.5	2150.0	8.6	104.4	95.0	Pass
495	7+50	949.3	0.2	2060.0	10.5	2070.0	10.9	100.5	95.0	Pass
496	5+80	950.1	0.2	2060.0	10.5	2019.0	10.5	98.0	95.0	Pass
497	9+50	949.8	0.2	2060.0	10.5	2030.0	9.4	98.5	95.0	Pass
498	9+00	949.8	0.2	2060.0	10.5	2076.0	10.0	100.8	95.0	Pass
499	8+50	949.8	0.2	2060.0	10.5	2074.0	9.9	100.7	95.0	Pass
500	46+00	950.0	0.2	2060.0	10.5	2028.0	10.8	98.4	95.0	Pass
501	46+75	950.3	0.2	2060.0	10.5	2058.0	10.1	99.9	95.0	Pass
502	47+00	950.3	0.2	2060.0	10.5	2083.0	9.3	101.1	95.0	Pass
503	47+50	950.5	0.2	2060.0	10.5	2046.0	9.8	99.3	95.0	Pass
504	10+50	950.2	0.2	2060.0	10.5	1989.0	12.6	96.6	95.0	Pass
505	11+00	950.1	0.2	2060.0	10.5	2010.0	10.4	97.6	95.0	Pass
506	8+00	950.3	0.2	2060.0	10.5	2015.0	9.6	97.8	95.0	Pass
507	8+50	950.1	0.2	2060.0	10.5	2053.0	10.7	99.7	95.0	Pass
508	9+00	949.8	0.2	2060.0	10.5	2048.0	10.1	99.4	95.0	Pass
509	12+50	951.2	0.2	2060.0	10.5	2118.0	10.0	102.8	95.0	Pass
510	12+00	951.2	0.2	2060.0	10.5	2013.0	11.8	97.7	95.0	Pass
511	11+00	950.5	0.2	2060.0	10.5	2148.0	9.6	104.3	95.0	Pass
512	9+75	950.0	0.2	2060.0	10.5	2107.0	9.0	102.3	95.0	Pass
513	8+00	950.5	0.2	2060.0	10.5	1998.0	11.8	97.0	95.0	Pass
514	8+75	950.4	0.2	2060.0	10.5	2154.0	9.1	104.6	95.0	Pass
515	9+50	950.6	0.2	2060.0	10.5	2076.0	11.4	100.8	95.0	Pass
516	10+50	950.8	0.2	2060.0	10.5	2050.0	12.6	99.5	95.0	Pass
517	9+00	950.4	0.2	2060.0	10.5	1987.0	13.2	96.5	95.0	Pass
518	8+50	950.5	0.2	2060.0	10.5	1983.0	12.4	96.3	95.0	Pass
519	9+50	950.5	0.2	2060.0	10.5	1996.0	12.1	96.9	95.0	Pass
520	8+00	950.7	0.2	2060.0	10.5	2066.0	11.6	100.3	95.0	Pass
521	8+50	950.7	0.2	2060.0	10.5	1983.0	12.5	96.3	95.0	Pass
522	9+00	950.8	0.2	2060.0	10.5	2011.0	12.3	97.6	95.0	Pass
523	28+00	950.3	0.2	2060.0	10.5	1988.0	10.5	96.5	95.0	Pass
524	28+50	950.3	0.2	2060.0	10.5	2133.0	8.7	103.5	95.0	Pass
525	29+00	950.0	0.2	2060.0	10.5	2120.0	8.4	102.9	95.0	Pass
526	29+50	950.0	0.2	2060.0	10.5	2081.0	10.7	101.0	95.0	Pass
527	30+00	950.0	0.2	2060.0	10.5	2095.0	10.5	101.7	95.0	Pass
528	27+50	949.9	0.2	2060.0	10.5	2031.0	9.5	98.6	95.0	Pass
529	28+00	950.4	0.2	2060.0	10.5	2116.0	9.2	102.7	95.0	Pass
530	28+50	950.4	0.2	2060.0	10.5	2019.0	10.7	98.0	95.0	Pass
531	29+00	950.4	0.2	2060.0	10.5	2100.0	10.8	101.9	95.0	Pass
532	29+50	950.0	0.2	2060.0	10.5	2106.0	10.3	102.2	95.0	Pass
533	30+50	950.0	0.2	2060.0	10.5	2092.0	10.9	101.6	95.0	Pass
534	31+00	950.0	0.2	2060.0	10.5	2121.0	10.0	103.0	95.0	Pass
535	28+50	950.6	0.2	2060.0	10.5	2108.0	10.2	102.3	95.0	Pass
536	29+00	950.7	0.2	2060.0	10.5	2036.0	10.7	98.8	95.0	Pass
537	29+50	950.4	0.2	2060.0	10.5	2043.0	11.3	99.2	95.0	Pass
538	30+00	950.1	0.2	2060.0	10.5	2065.0	10.9	100.2	95.0	Pass
539	33+00	949.3	0.2	2060.0	10.5	2013.0	11.6	97.7	95.0	Pass
540	32+50	949.3	0.2	2060.0	10.5	2044.0	11.6	99.2	95.0	Pass
541	32+00	949.3	0.2	2060.0	10.5	2099.0	9.8	101.9	95.0	Pass
542	32+00	949.5	0.2	2060.0	10.5	2022.0	11.7	98.2	95.0	Pass
543	33+50	949.8	0.2	2060.0	10.5	2022.0	11.0	98.2	95.0	Pass
544	34+25	949.7	0.2	2060.0	10.5	2065.0	10.6	100.2	95.0	Pass
545	35+50	949.9	0.2	2060.0	10.5	2058.0	10.6	99.9	95.0	Pass

546	35+00	949.8	0.2	2060.0	10.5	2049.0	8.9	99.5	95.0	Pass
547	33+75	949.9	0.2	2060.0	10.5	2016.0	10.3	97.9	95.0	Pass
548	35+25	950.3	0.2	2060.0	10.5	2141.0	8.8	103.9	95.0	Pass
549	34+50	950.0	0.2	2060.0	10.5	2058.0	9.4	99.9	95.0	Pass
550	35+75	949.6	0.2	2060.0	10.5	2097.0	8.9	101.8	95.0	Pass
551	35+25	950.2	0.2	2060.0	10.5	2117.0	8.7	102.8	95.0	Pass
552	34+75	950.2	0.2	2060.0	10.5	2082.0	9.7	101.1	95.0	Pass
553	34+00	950.2	0.2	2060.0	10.5	2151.0	7.7	104.4	95.0	Pass
554	36+50	949.4	0.2	2060.0	10.5	2038.0	10.6	98.9	95.0	Pass
555	37+00	949.4	0.2	2060.0	10.5	2066.0	10.7	100.3	95.0	Pass
556	36+00	949.8	0.2	2060.0	10.5	2041.0	10.1	99.1	95.0	Pass
557	36+50	949.7	0.2	2060.0	10.5	2113.0	9.8	102.6	95.0	Pass
558	37+00	949.7	0.2	2060.0	10.5	2018.0	9.8	98.0	95.0	Pass
559	6+25	950.5	0.2	2060.0	10.5	2112.0	9.8	102.5	95.0	Pass
560	36+00	949.9	0.2	2190.0	8.5	2128.0	8.0	97.2	95.0	Pass
561	36+50	950.0	0.2	2190.0	8.5	2101.0	8.7	95.9	95.0	Pass
562	38+50	949.7	0.2	2190.0	8.5	2082.0	9.8	95.1	95.0	Pass
563	40+00	949.4	0.2	2190.0	8.5	2090.0	10.5	95.4	95.0	Pass
564	40+50	949.4	0.2	2190.0	8.5	2087.0	10.4	95.3	95.0	Pass
565	41+00	949.4	0.2	2080.0	10.6	1993.0	12.1	95.8	95.0	Pass
566	41+50 Repeat	949.4	0.2	2080.0	10.6	2009.0	10.7	96.6	95.0	Pass
567	39+50	949.7	0.2	2080.0	10.6	2029.0	11.6	97.5	95.0	Pass
568	40+00	949.7	0.2	2080.0	10.6	1995.0	11.0	95.9	95.0	Pass
569	40+50	949.7	0.2	2080.0	10.6	2001.0	11.0	96.2	95.0	Pass
570	39+90 Repeat	949.7	0.2	2080.0	10.6	2017.0	10.8	97.0	95.0	Pass
571	39+50	950.0	0.2	2080.0	10.6	1977.0	9.9	95.0	95.0	Pass
572	40+00	950.0	0.2	2080.0	10.6	2003.0	10.3	96.3	95.0	Pass
573	40+75	950.0	0.2	2080.0	10.6	2034.0	10.4	97.8	95.0	Pass
574	41+25	950.0	0.2	2080.0	10.6	2025.0	10.8	97.4	95.0	Pass
575	41+50	949.9	0.2	2080.0	10.6	2011.0	11.4	96.7	95.0	Pass
576	42+00	949.9	0.2	2080.0	10.6	2070.0	9.5	99.5	95.0	Pass
577	42+50	949.2	0.2	2080.0	10.6	2033.0	11.1	97.7	95.0	Pass
578	43+00	948.9	0.2	2080.0	10.6	1991.0	11.1	95.7	95.0	Pass
579	41+30	950.3	0.2	2080.0	10.6	1996.0	10.2	96.0	95.0	Pass
580	42+00	949.6	0.2	2080.0	10.6	2031.0	11.3	97.6	95.0	Pass
581	42+25	949.7	0.2	2080.0	10.6	2007.0	11.5	96.5	95.0	Pass
582	42+75	949.6	0.2	2080.0	10.6	2078.0	10.8	99.9	95.0	Pass
583	43+50	949.2	0.2	2080.0	10.6	2062.0	8.4	99.1	95.0	Pass
584	44+20	948.9	0.2	2080.0	10.6	2000.0	7.8	96.2	95.0	Pass
585	42+00	949.9	0.2	2080.0	10.6	1989.0	10.2	95.6	95.0	Pass
586	42+50	949.8	0.2	2080.0	10.6	2019.0	8.2	97.1	95.0	Pass
587	43+00	949.7	0.2	2080.0	10.6	2009.0	8.3	96.6	95.0	Pass
588	43+60 Repeat	949.6	0.2	2080.0	10.6	2028.0	10.0	97.5	95.0	Pass
589	44+25	949.7	0.2	2080.0	10.6	1991.0	11.2	95.7	95.0	Pass
590	44+75	949.4	0.2	2080.0	10.6	2010.0	11.2	96.6	95.0	Pass
591	45+25	950.3	0.2	2080.0	10.6	2022.0	10.5	97.2	95.0	Pass
592	45+75	949.7	0.2	2080.0	10.6	1981.0	10.4	95.2	95.0	Pass
593	27+00	949.9	0.2	2080.0	10.6	2006.0	11.0	96.4	95.0	Pass
594	26+50	949.9	0.2	2080.0	10.6	2068.0	10.4	99.4	95.0	Pass
595	42+50	950.1	0.2	2080.0	10.6	2012.0	10.3	96.7	95.0	Pass
596	43+00	949.9	0.2	2080.0	10.6	2057.0	11.0	98.9	95.0	Pass
597	26+00	949.9	0.2	2080.0	10.6	1985.0	10.9	95.4	95.0	Pass
598	44+10	949.9	0.2	2080.0	10.6	2051.0	10.9	98.6	95.0	Pass
599	26+00	949.9	0.2	2080.0	10.6	1980.0	10.9	95.2	95.0	Pass
600	25+50	949.8	0.2	2080.0	10.6	2018.0	10.8	97.0	95.0	Pass
601	25+00	949.8	0.2	2080.0	10.6	2001.0	10.6	96.2	95.0	Pass
602	24+50	950.0	0.2	2080.0	10.6	1989.0	11.3	95.6	95.0	Pass
603	44+25	949.8	0.2	2080.0	10.6	2008.0	10.8	96.5	95.0	Pass
604	44+75	949.7	0.2	2080.0	10.6	2078.0	11.1	99.9	95.0	Pass
605	27+25 Repeat	950.0	0.2	2080.0	10.6	2009.0	10.3	96.6	95.0	Pass
606	26+75 Repeat	950.2	0.2	2080.0	10.6	2031.0	10.6	97.6	95.0	Pass
607	26+25	950.6	0.2	2080.0	10.6	2054.0	10.4	98.8	95.0	Pass
608	25+75 Repeat	950.6	0.2	2080.0	10.6	2001.0	11.8	96.2	95.0	Pass
609	25+25	950.6	0.2	2080.0	10.6	2067.0	11.3	99.4	95.0	Pass
610	45+75	950.0	0.2	2080.0	10.6	2019.0	10.9	97.1	95.0	Pass
611	24+75	950.6	0.2	2080.0	10.6	2031.0	11.2	97.6	95.0	Pass
612	24+25 Repeat	950.6	0.2	2080.0	10.6	2038.0	11.2	98.0	95.0	Pass
613	43+00	950.3	0.2	2080.0	10.6	2021.0	10.8	97.2	95.0	Pass
614	45+50	50.5	0.2	2080.0	10.6	2050.0	11.2	98.6	95.0	Pass
615	44+75 Repeat	950.4	0.2	2080.0	10.6	2041.0	9.6	98.1	95.0	Pass
616	27+25	950.8	0.2	2080.0	10.6	2045.0	9.6	98.3	95.0	Pass
617	26+00 Repeat	950.8	0.2	2080.0	10.6	2007.0	10.5	96.5	95.0	Pass
618	25+50	950.7	0.2	2080.0	10.6	2029.0	9.5	97.5	95.0	Pass
619	25+00 Repeat	950.7	0.2	2080.0	10.6	1989.0	12.0	95.6	95.0	Pass
620	24+50	950.7	0.2	2080.0	10.6	2002.0	10.4	96.3	95.0	Pass
621	24+25 Repeat	949.9	0.2	2080.0	10.6	1985.0	11.7	95.4	95.0	Pass
622	24+00	950.2	0.2	2080.0	10.6	2061.0	10.1	99.1	95.0	Pass
623	23+50	950.2	0.2	2080.0	10.6	2105.0	9.4	101.2	95.0	Pass
624	23+00	950.2	0.2	2080.0	10.6	2067.0	10.4	99.4	95.0	Pass

625	21+75	950.1	0.2	2060.0	10.5	1977.0	12.0	96.0	95.0	Pass
626	22+00	950.5	0.2	2060.0	10.5	2011.0	11.7	97.6	95.0	Pass
627	21+50	950.5	0.2	2060.0	10.5	2023.0	10.1	98.2	95.0	Pass
628	24+00	951.1	0.2	2060.0	10.5	2016.0	11.4	97.9	95.0	Pass
629	28+00	950.7	0.2	2060.0	10.5	2007.0	10.1	97.4	95.0	Pass
630	28+50	950.9	0.2	2060.0	10.5	2012.0	11.1	97.7	95.0	Pass
631	29+00	950.9	0.2	2060.0	10.5	2027.0	9.9	98.4	95.0	Pass
632	29+50	950.6	0.2	2060.0	10.5	1983.0	10.5	96.3	95.0	Pass
633	30+00	950.4	0.2	2060.0	10.5	2072.0	10.6	100.6	95.0	Pass
634	30+50	950.9	0.2	2060.0	10.5	1991.0	11.3	96.7	95.0	Pass
635	31+00	950.7	0.2	2060.0	10.5	2055.0	10.7	99.8	95.0	Pass
636	31+60	950.5	0.2	2060.0	10.5	1984.0	12.4	96.3	95.0	Pass
637	21+50	950.7	0.2	2000.0	11.0	2044.0	11.1	102.2	95.0	Pass
638	20+50	949.5	0.2	2000.0	11.0	1992.0	11.5	99.6	95.0	Pass
639	18+75	949.4	0.2	2000.0	11.0	2000.0	11.0	100.0	95.0	Pass
640	21+25	951.0	0.2	2000.0	11.0	1988.0	11.9	99.4	95.0	Pass
641	20+75	950.6	0.2	2000.0	11.0	2033.0	11.7	101.7	95.0	Pass
642	20+00	949.5	0.2	2000.0	11.0	2002.0	12.2	100.1	95.0	Pass
643	19+50	949.4	0.2	2000.0	11.0	2011.0	10.9	100.6	95.0	Pass
644	18+75	949.2	0.2	2000.0	11.0	1981.0	11.9	99.1	95.0	Pass
645	21+00	950.9	0.2	2000.0	11.0	1996.0	10.1	99.8	95.0	Pass
646	20+75	951.0	0.2	2000.0	11.0	1947.0	12.4	97.4	95.0	Pass
647	20+75 Repeat	951.0	0.2	2000.0	11.0	2083.0	10.7	104.2	95.0	Pass
648	20+25	950.8	0.2	2000.0	11.0	2014.0	11.4	100.7	95.0	Pass
649	19+75	950.7	0.2	2000.0	11.0	2020.0	11.9	101.0	95.0	Pass
650	19+25	949.4	0.2	2000.0	11.0	1921.0	10.8	96.1	95.0	Pass
651	19+25 Repeat	949.4	0.2	2000.0	11.0	2023.0	11.4	101.2	95.0	Pass
652	18+50	949.5	0.2	2000.0	11.0	2046.0	10.2	102.3	95.0	Pass
653	18+00	949.4	0.2	2000.0	11.0	1993.0	12.2	99.7	95.0	Pass
654	17+50	949.1	0.2	2000.0	11.0	1998.0	12.9	99.9	95.0	Pass
655	20+75	951.0	0.2	2000.0	11.0	1991.0	11.4	99.6	95.0	Pass
656	20+25	950.7	0.2	2000.0	11.0	2061.0	11.0	103.1	95.0	Pass
657	19+25	950.6	0.2	2000.0	11.0	2063.0	11.1	103.2	95.0	Pass
658	18+50	950.3	0.2	2000.0	11.0	2041.0	11.1	102.1	95.0	Pass
659	17+75	949.8	0.2	2000.0	11.0	2056.0	9.8	102.8	95.0	Pass
660	20+00	951.1	0.2	2000.0	11.0	2014.0	12.3	100.7	95.0	Pass
661	19+25	951.0	0.2	2000.0	11.0	2026.0	11.8	101.3	95.0	Pass
662	18+50	950.6	0.2	2000.0	11.0	2064.0	10.2	103.2	95.0	Pass
663	17+00	950.0	0.2	2000.0	11.0	2019.0	10.1	101.0	95.0	Pass
664	17+75	949.6	0.2	2000.0	11.0	2056.0	9.3	102.8	95.0	Pass
665	27+70	951.0	0.2	2000.0	11.0	2071.0	10.1	103.6	95.0	Pass
666	28+50	951.1	0.2	2000.0	11.0	2051.0	11.6	102.6	95.0	Pass
667	30+00	950.8	0.2	2000.0	11.0	2088.0	9.9	104.4	95.0	Pass
668	31+00	951.0	0.2	2000.0	11.0	2088.0	11.4	104.4	95.0	Pass
669	31+75	950.8	0.2	2000.0	11.0	2039.0	10.8	102.0	95.0	Pass
670	19+75	951.1	0.2	2000.0	11.0	2050.0	11.1	102.5	95.0	Pass
671	19+00	951.1	0.2	2000.0	11.0	1988.0	12.3	99.4	95.0	Pass
672	34+00	951.1	0.2	2000.0	11.0	2044.0	10.7	102.2	95.0	Pass
673	34+75	950.8	0.2	2000.0	11.0	2037.0	11.0	101.9	95.0	Pass
674	37+50	950.5	0.2	2000.0	11.0	2039.0	10.4	102.0	95.0	Pass
675	35+50	951.1	0.2	2000.0	11.0	2020.0	9.3	101.0	95.0	Pass
676	37+25	951.2	0.2	2000.0	11.0	2043.0	9.7	102.2	95.0	Pass
677	38+75	951.0	0.2	2000.0	11.0	2066.0	9.7	103.3	95.0	Pass
678	40+75	950.6	0.2	2000.0	11.0	1974.0	13.3	98.7	95.0	Pass
679	41+25	950.6	0.2	2000.0	11.0	1986.0	11.2	99.3	95.0	Pass
680	39+75	950.5	0.2	2000.0	11.0	2079.0	10.8	104.0	95.0	Pass
681	41+25	950.2	0.2	2000.0	11.0	2025.0	9.5	101.3	95.0	Pass
682	42+25	950.1	0.2	2000.0	11.0	2042.0	9.1	102.1	95.0	Pass
683	43+00	950.2	0.2	2000.0	11.0	2023.0	10.9	101.2	95.0	Pass
684	44+50	950.4	0.2	2000.0	11.0	2064.0	11.1	103.2	95.0	Pass
685	44+00	950.4	0.2	2000.0	11.0	1906.0	12.9	95.3	95.0	Pass
686	44+00	950.4	0.2	2000.0	11.0	2007.0	11.8	100.4	95.0	Pass
687	44+50	950.4	0.2	2000.0	11.0	1997.0	12.8	99.9	95.0	Pass
688	42+25	950.7	0.2	2000.0	11.0	2046.0	11.2	102.3	95.0	Pass
689	42+75	950.7	0.2	2000.0	11.0	1996.0	11.4	99.8	95.0	Pass
690	43+25	950.7	0.2	2000.0	11.0	1955.0	11.8	97.8	95.0	Pass
691	43+25	950.7	0.2	2000.0	11.0	2011.0	11.2	100.6	95.0	Pass
692	43+50	950.7	0.2	2000.0	11.0	2043.0	9.7	102.2	95.0	Pass
693	43+75	950.7	0.2	2000.0	11.0	2074.0	9.9	103.7	95.0	Pass
694	44+25	950.4	0.2	2000.0	11.0	2037.0	10.1	101.9	95.0	Pass
695	16+00	950.5	0.2	2150.0	8.5	2095.0	9.7	97.4	95.0	Pass
696	45+75	950.8	0.2	2080.0	10.6	2156.0	8.9	103.7	95.0	Pass
697	45+25	950.9	0.2	2080.0	10.6	2081.0	9.4	100.0	95.0	Pass
698	44+75	951.0	0.2	2080.0	10.6	2089.0	9.2	100.4	95.0	Pass
699	16+00	950.1	0.2	2140.0	8.5	2046.0	10.5	95.6	95.0	Pass
700	15+00	950.1	0.2	2140.0	8.5	2101.0	9.8	98.2	95.0	Pass
701	14+25	950.1	0.2	2140.0	8.5	2055.0	10.3	96.0	95.0	Pass
702	17+50	951.2	0.2	2140.0	8.5	2049.0	11.1	95.7	95.0	Pass
703	16+50	950.7	0.2	2140.0	8.5	2054.0	10.3	96.0	95.0	Pass

704	14+50	950.1	0.2	2140.0	8.5	2109.0	10.4	98.6	95.0	Pass
705	14+75	950.1	0.2	2140.0	8.5	2094.0	9.7	97.9	95.0	Pass
706	13+50	950.4	0.2	2140.0	8.5	2056.0	10.1	96.1	95.0	Pass
707	14+75	950.4	0.2	2140.0	8.5	2047.0	9.6	95.7	95.0	Pass
708	14+00	950.5	0.2	2140.0	8.5	2070.0	9.6	96.7	95.0	Pass
709	13+50	950.7	0.2	2140.0	8.5	2040.0	11.1	95.3	95.0	Pass
710	16+50	951.0	0.2	2140.0	8.5	2057.0	9.9	96.1	95.0	Pass
711	11+75	951.2	0.2	2160.0	8.5	2112.0	9.8	97.8	95.0	Pass
712	11+25	951.2	0.2	2160.0	8.5	2053.0	10.3	95.0	95.0	Pass
713	10+25	951.1	0.2	2160.0	8.5	2082.0	10.1	96.4	95.0	Pass
714	9+75	951.0	0.2	2160.0	8.5	2069.0	9.0	95.8	95.0	Pass
715	9+00	951.0	0.2	2160.0	8.5	2065.0	8.4	95.6	95.0	Pass
716	6+50	950.8	0.2	2160.0	8.5	2104.0	9.4	97.4	95.0	Pass
717	7+00	950.9	0.2	2160.0	8.5	2077.0	9.9	96.2	95.0	Pass
718	8+25	951.3	0.2	2160.0	8.5	2110.0	9.6	97.7	95.0	Pass
719	8+75	951.3	0.2	2160.0	8.5	2071.0	10.0	95.9	95.0	Pass
720	7+25	951.2	0.2	2160.0	8.5	2086.0	8.9	96.6	95.0	Pass
721	6+25	951.2	0.2	2160.0	8.5	2071.0	10.3	95.9	95.0	Pass
722	10+00	951.4	0.2	2160.0	8.5	2108.0	8.0	97.6	95.0	Pass
723	9+40	951.3	0.2	2160.0	8.5	2093.0	8.6	96.9	95.0	Pass
724	7+50 (low spot by piezometers)	950.7	0.2	1970.0	12.0	1995.0	12.8	101.3	95.0	Pass
725	7+50	951.0	0.2	1970.0	12.0	1988.0	12.9	100.9	95.0	Pass
726	12+60 (concrete encasement)	949.8	0.2	1970.0	12.0	1970.0	13.1	100.0	95.0	Pass
727	12+60 (core section)	949.6	0.2	1970.0	12.0	2062.0	12.5	104.7	95.0	Pass
728	12+60	949.9	0.2	1970.0	12.0	2019.0	12.6	102.5	95.0	Pass
729	12+60	950.7	0.2	1970.0	12.0	2006.0	12.2	101.8	95.0	Pass
730	12+60	951.0	0.2	1970.0	12.0	1993.0	13.1	101.2	95.0	Pass
	MIN					1906.0	5.9	95.0		
	MAX					2176.0	13.6	104.8		
	MEDIAN					2048.0	10.4	99.4		
	STD DEV.					46.3	1.3	2.4		
	AVERAGE					2052.2	10.4	99.4		

	Comments:	Proctor No.	Proctor Description:		
			Kg/m3	M.C.	95%
	1	R-S5-ZS-01/06	2050	10.5	1948
	2	R-S5-ZS-02/06	2070	10.5	1967
	3	R-S5-ZS-03/06	2060	10.5	1957
	4	R-S5-ZS-02/07	2190	10.5	2081
	5	R-S5-ZS-03/07	2000	10.0	1900
	6	R-S5-ZS-04/07	2220	12.5	2109
	7	R-S5-ZS-05/07	2120	8.5	2014
	8	R-S5-ZS-06/07	2060	10.5	1957
	9	R-S5-ZS-07/07	2190	8.5	2081
	10	R-S5-ZS-08/07	2000	11.0	1900
	11	R-S5-ZS-09/07	2140	8.5	2033
	12	R-S5-ZS-10/07	2160	8.5	2052
	13	R-S5-ZS-11/07	2150	8.5	2043

Knight Piésold
CONSULTING

APPENDIX C

PIEZOMETER FIGURES

Appendix C1 Tailings Piezometers

Appendix C2 Foundation Piezometers

Appendix C3 Fill Piezometers

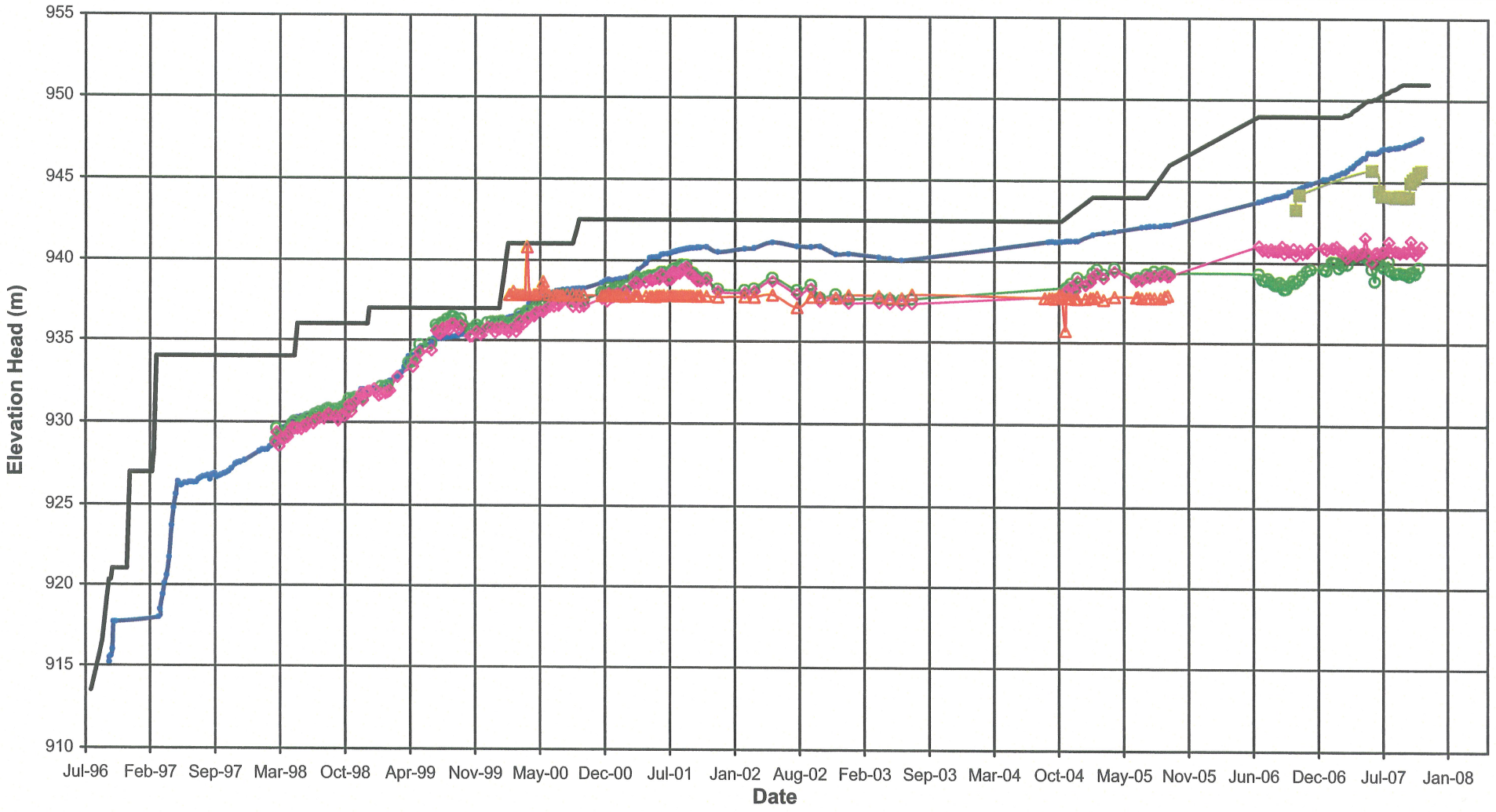
Appendix C4 Drain Piezometers

Knight Piésold
CONSULTING

APPENDIX C1

TAILINGS PIEZOMETERS

(C1-1 to C1-7)



Note:
Piezometers in parentheses no longer functioning

Rev 0- Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A TAILINGS PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

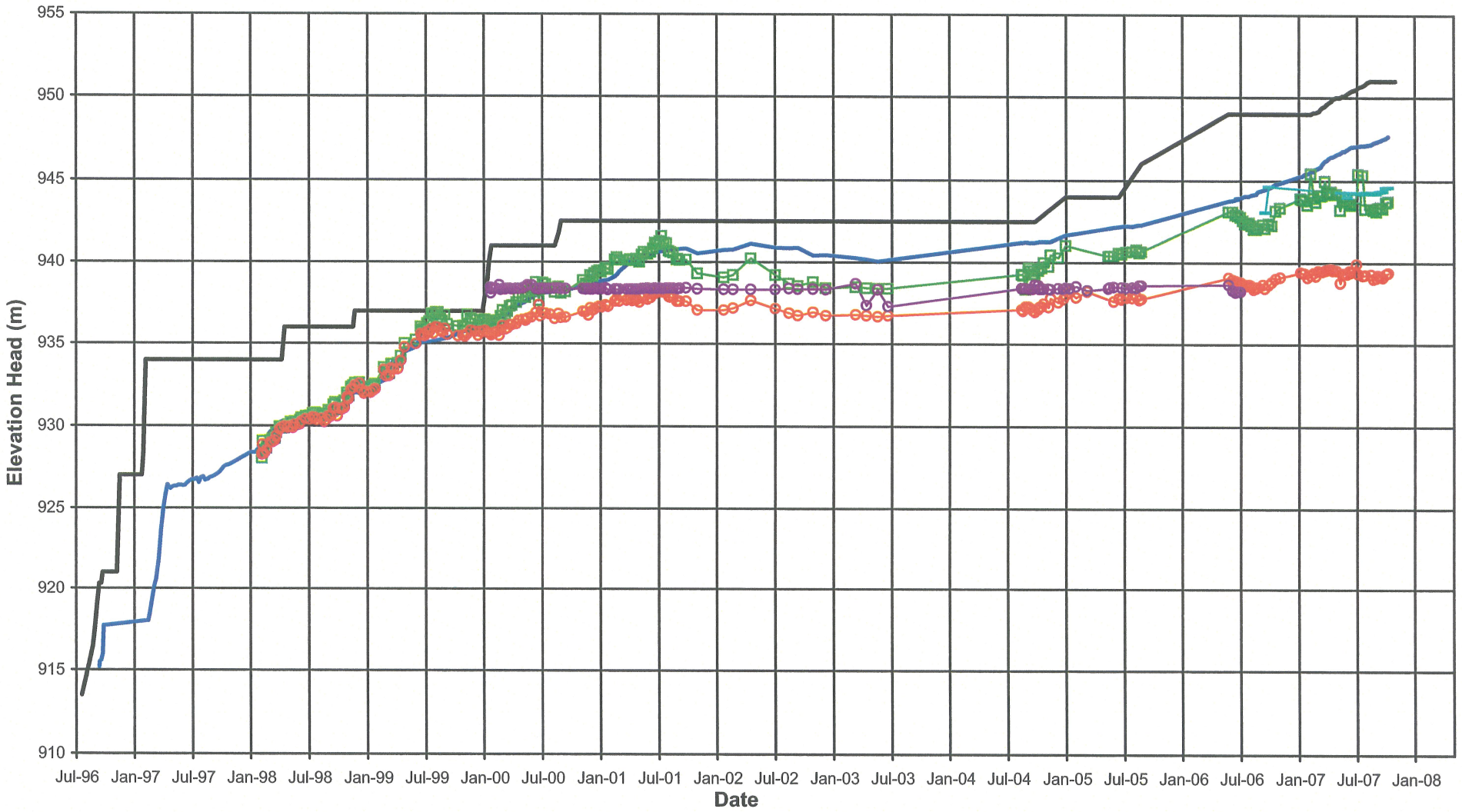
REF NO. 1

FIGURE C1-1

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane B 2007Plane B Tailings

Print 4/2/2008 3:33 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE B TAILINGS PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

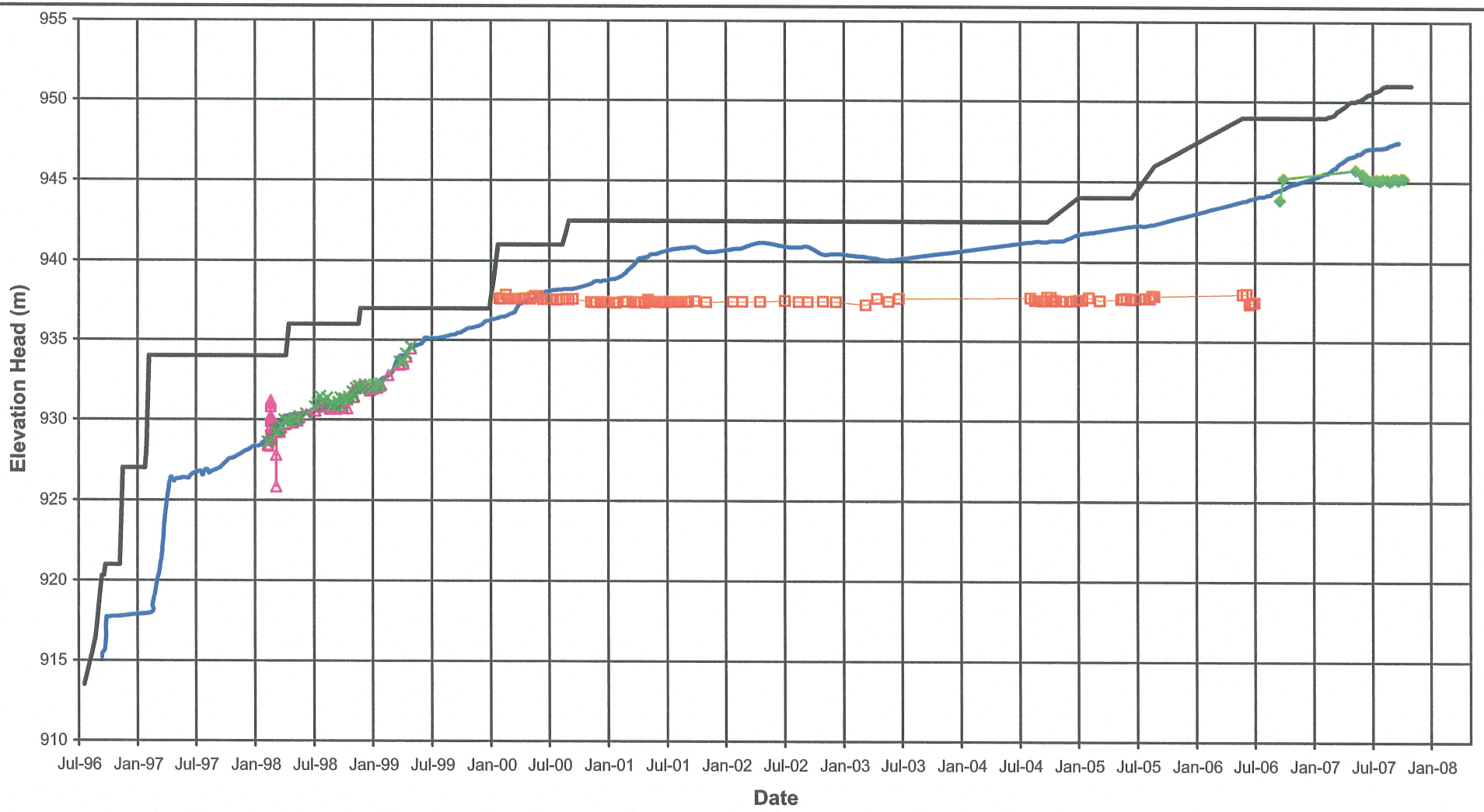
PROJECT/ ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE C1-2

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane C 2007Plane C Tailings

Print 4/2/2008 3:37 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C TAILINGS PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

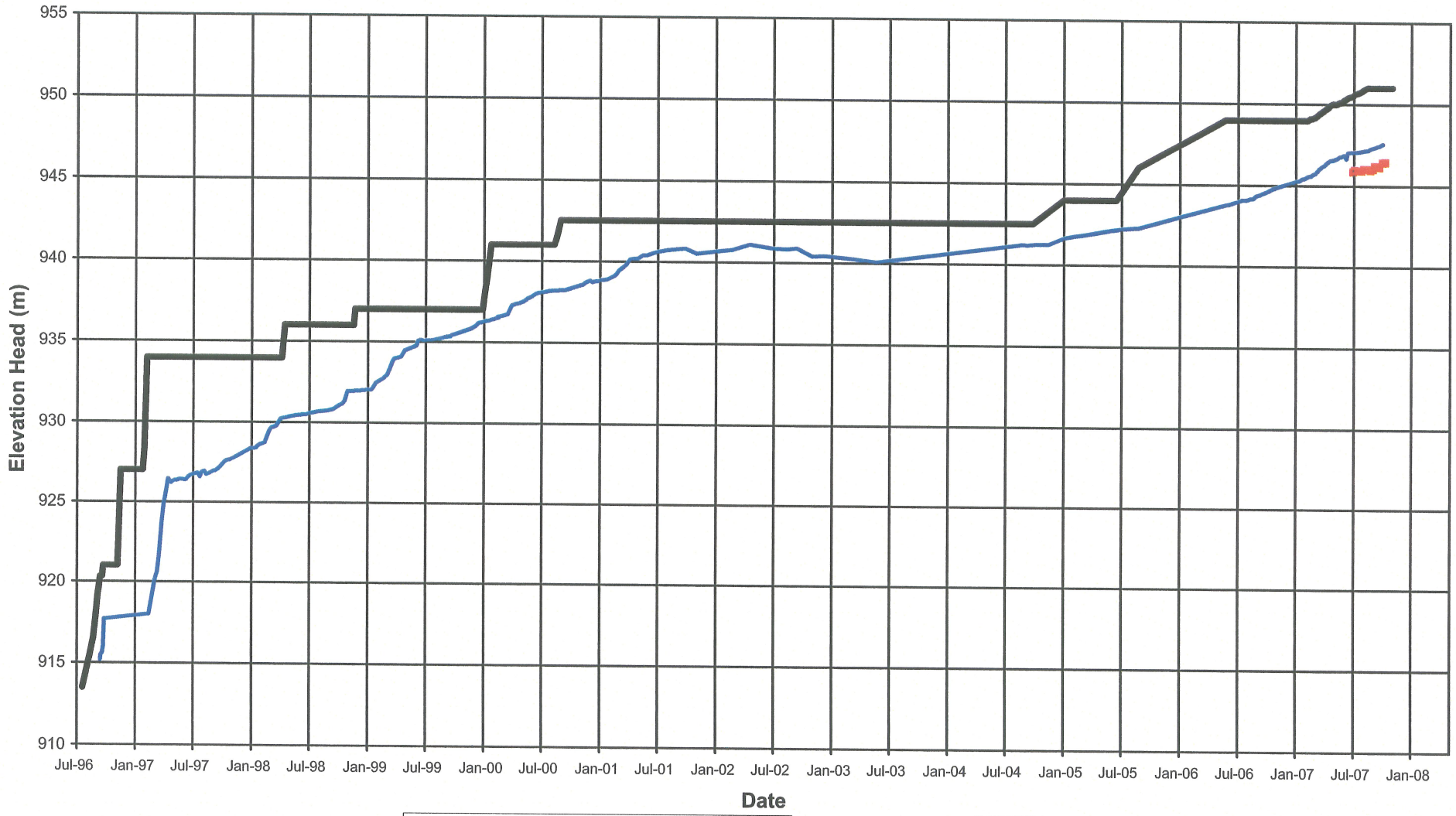
REF NO. 1

FIGURE C1-3

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane D 2007Plane D Tailings

Print 4/2/2008 3:39 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE D TAILINGS PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

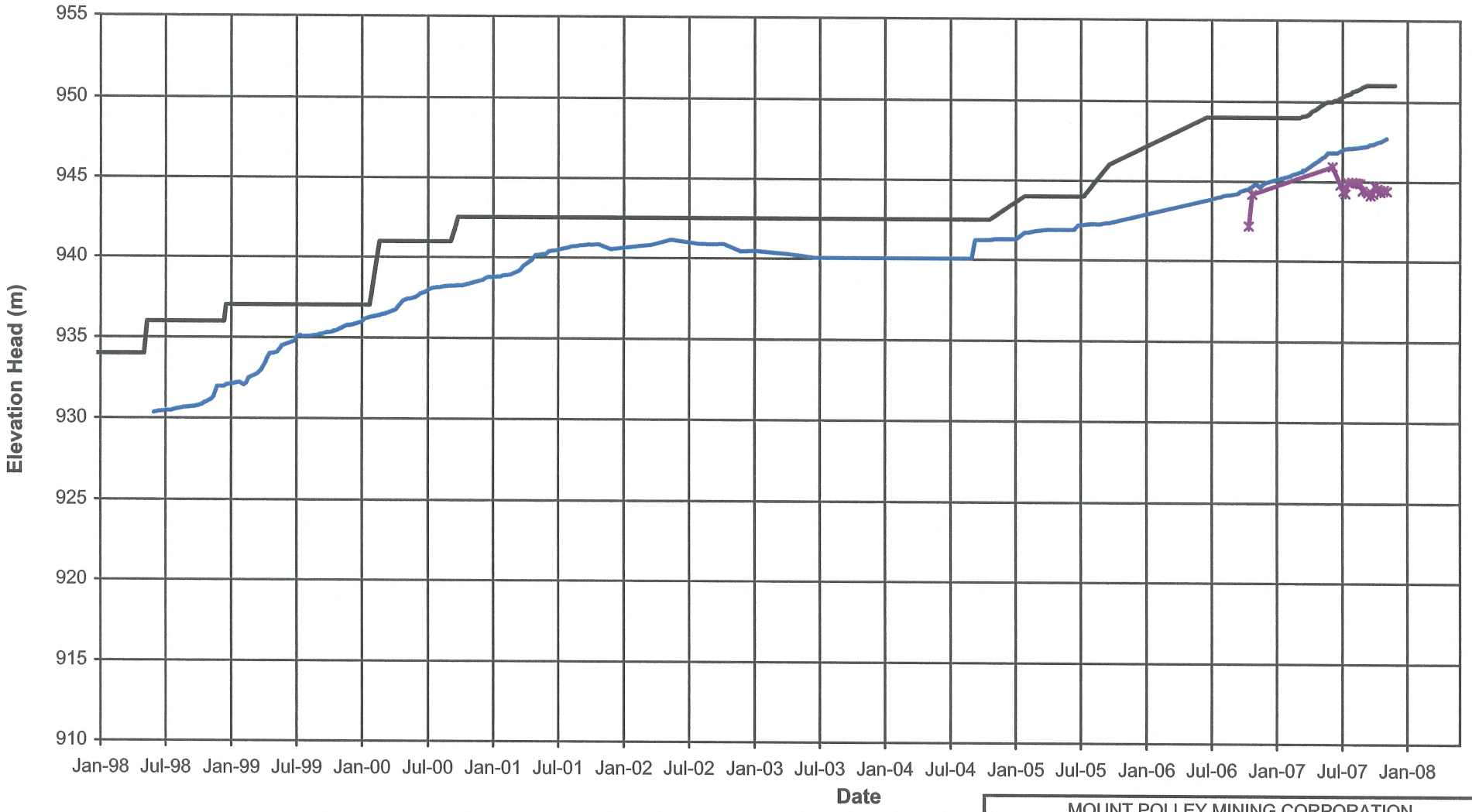
REF NO. 1

FIGURE C1-4

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane E 2007Plane E Tailings

Print 4/2/2008 3:40 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE E TAILINGS PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

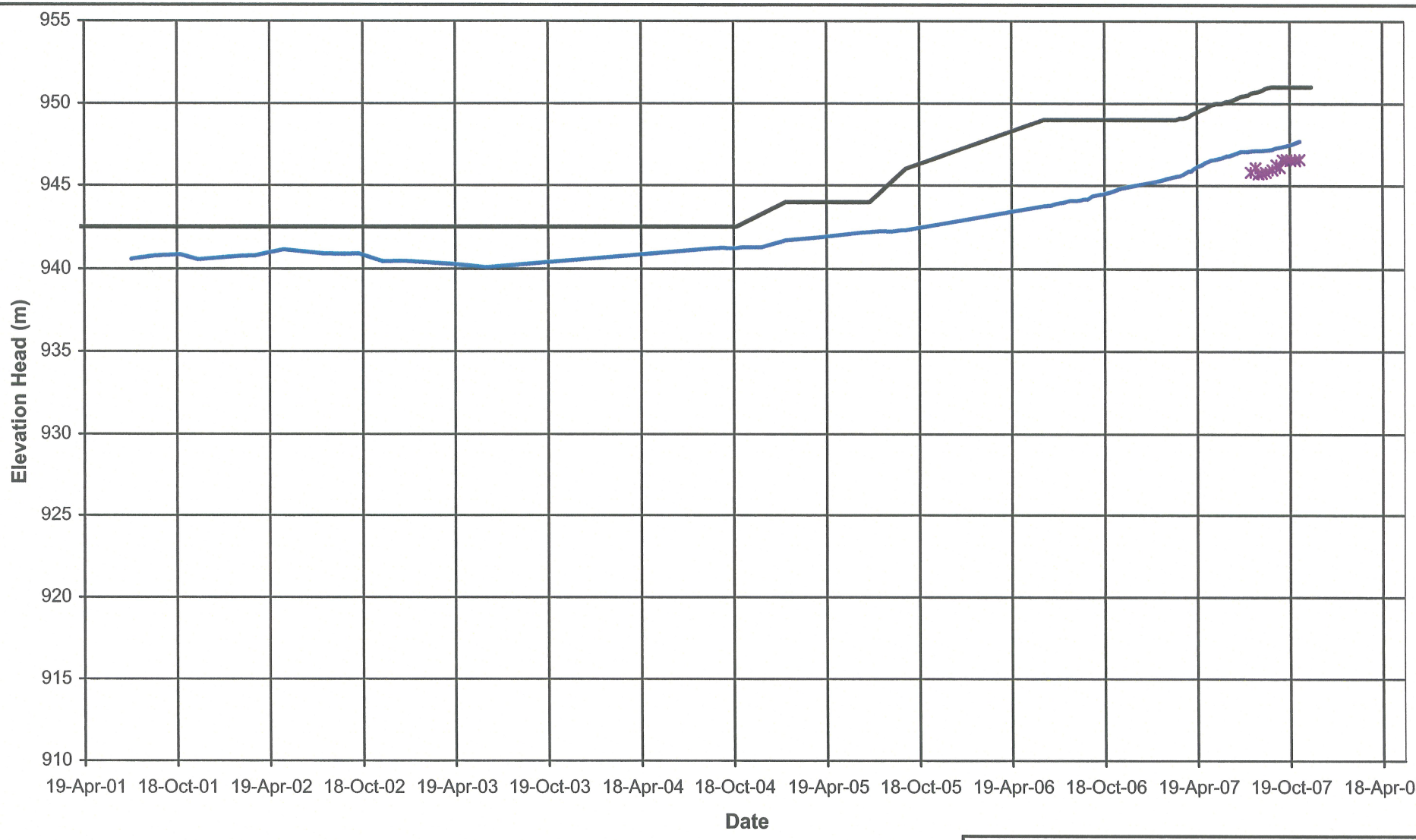
REF NO. 1

FIGURE C1-5

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane G 2007Plane G Tailings

Print: 4/2/20083:41 PM
Rev'd: 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE G TAILINGS PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

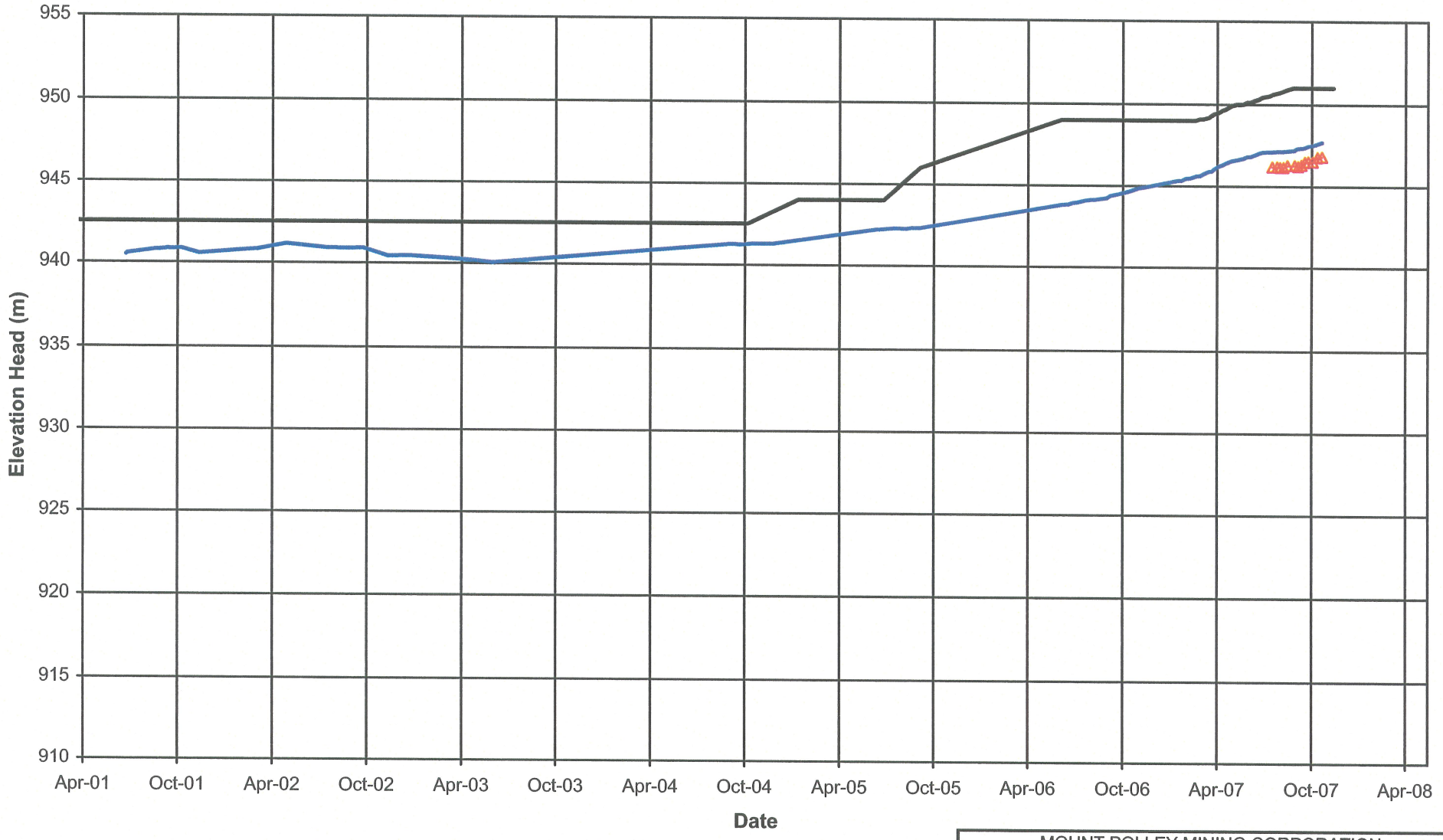
PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE C1-6

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane H 2007Plane H Tailings

Print: 4/2/20083:41 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE H TAILINGS PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE C1-7

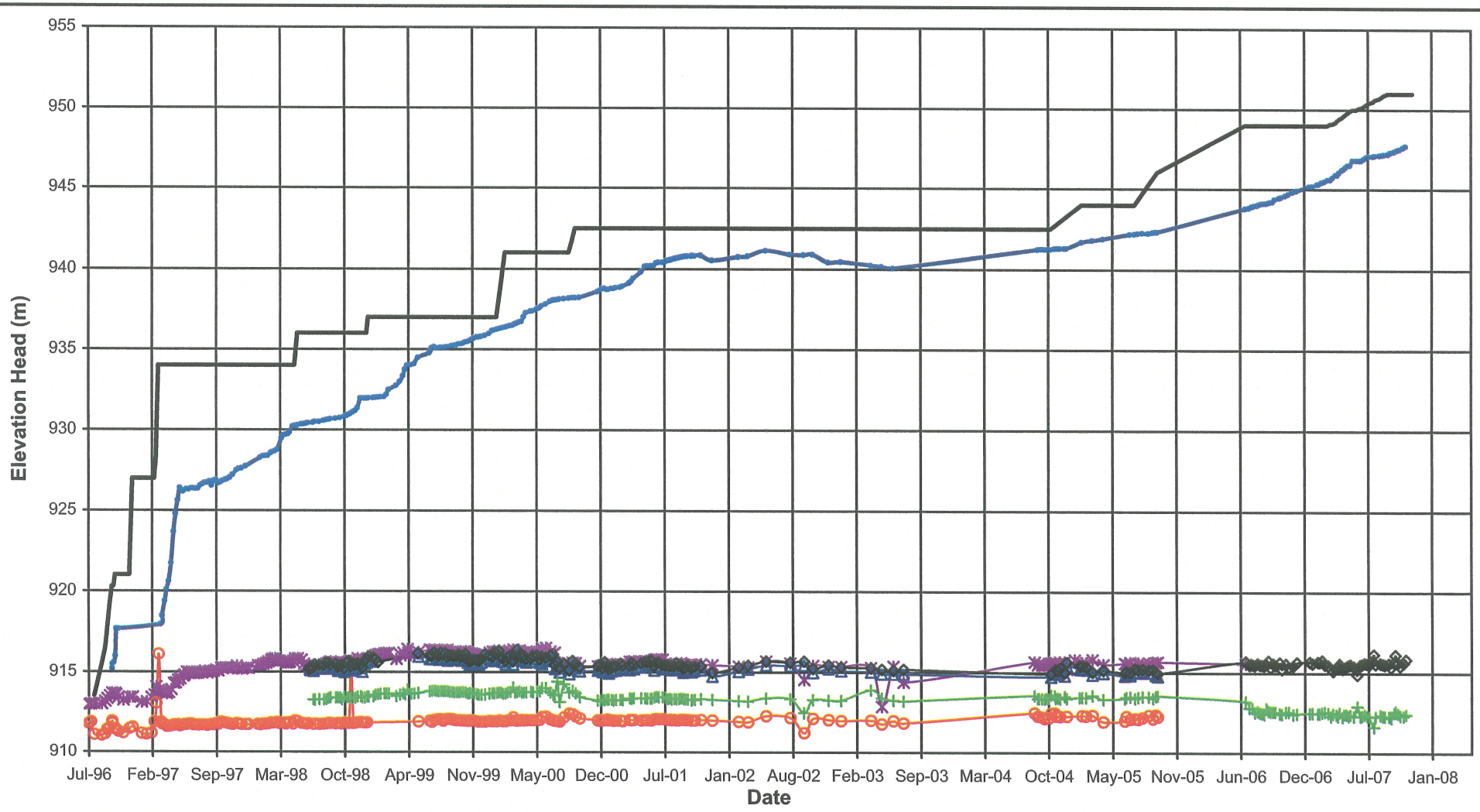
REV. 0

Knight Piésold
CONSULTING

APPENDIX C2

FOUNDATION PIEZOMETERS

(C2-1 to C2-7)



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A FOUNDATION PIEZOMETERS
ELEVATION HEAD VS. TIME

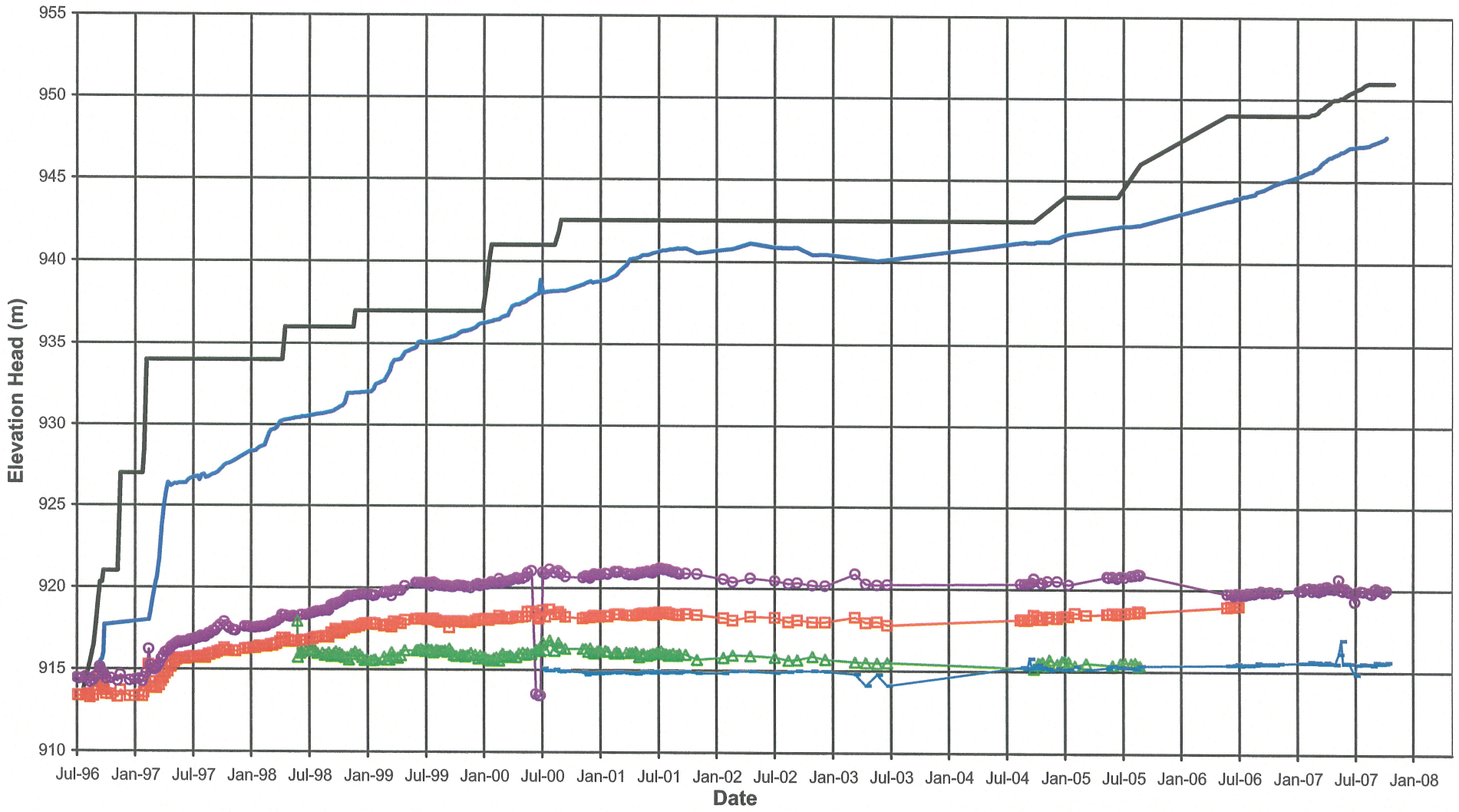
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE C2-1

REV. 0



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE B FOUNDATION PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT/ ASSIGNMENT NO. VA101-1/14

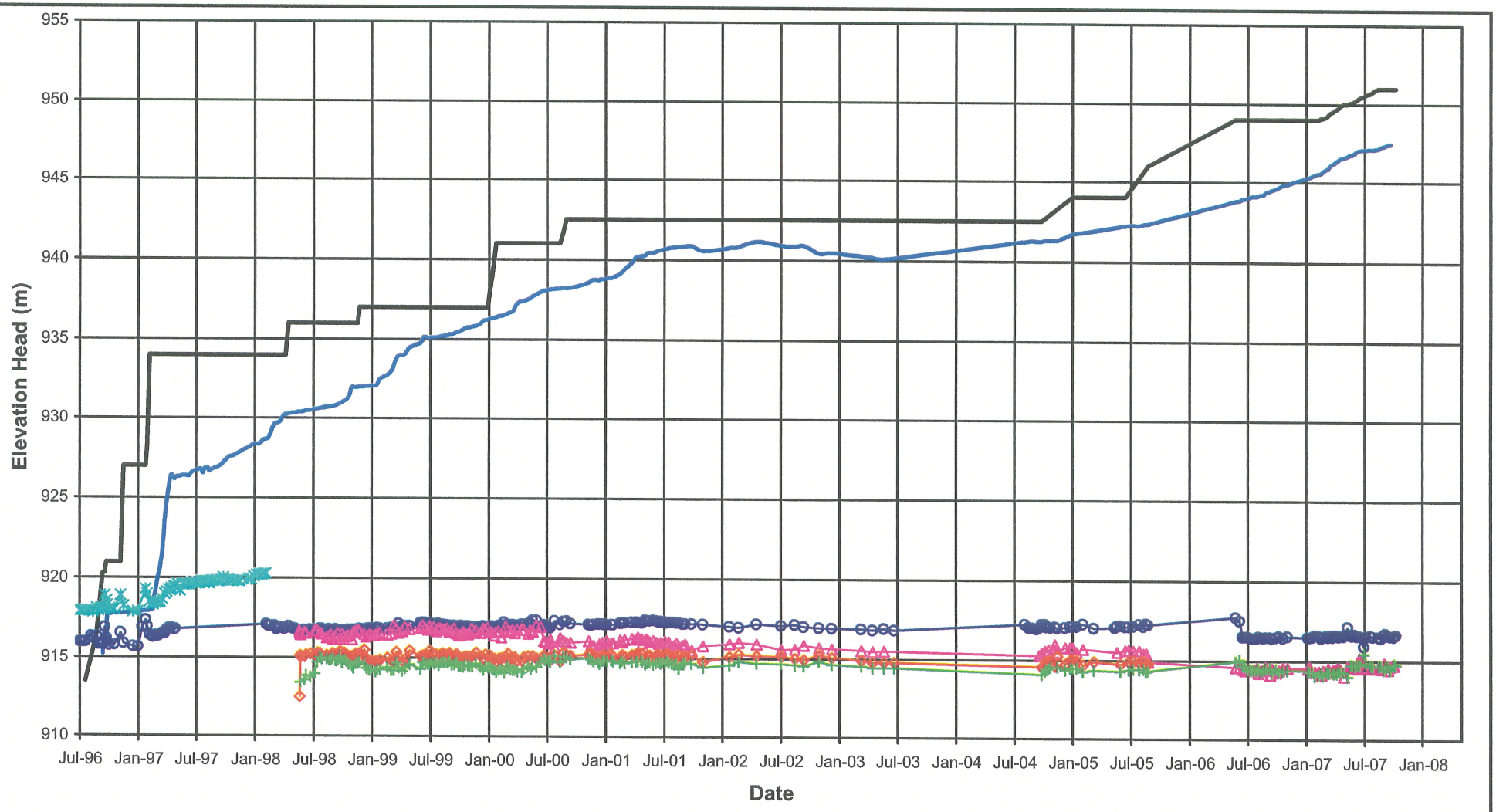
REF NO. 1

FIGURE C2-2

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane C 2007Plane C Foundation

Print 4/2/2008 3:45 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C FOUNDATION PIEZOMETERS
ELEVATION HEAD VS. TIME

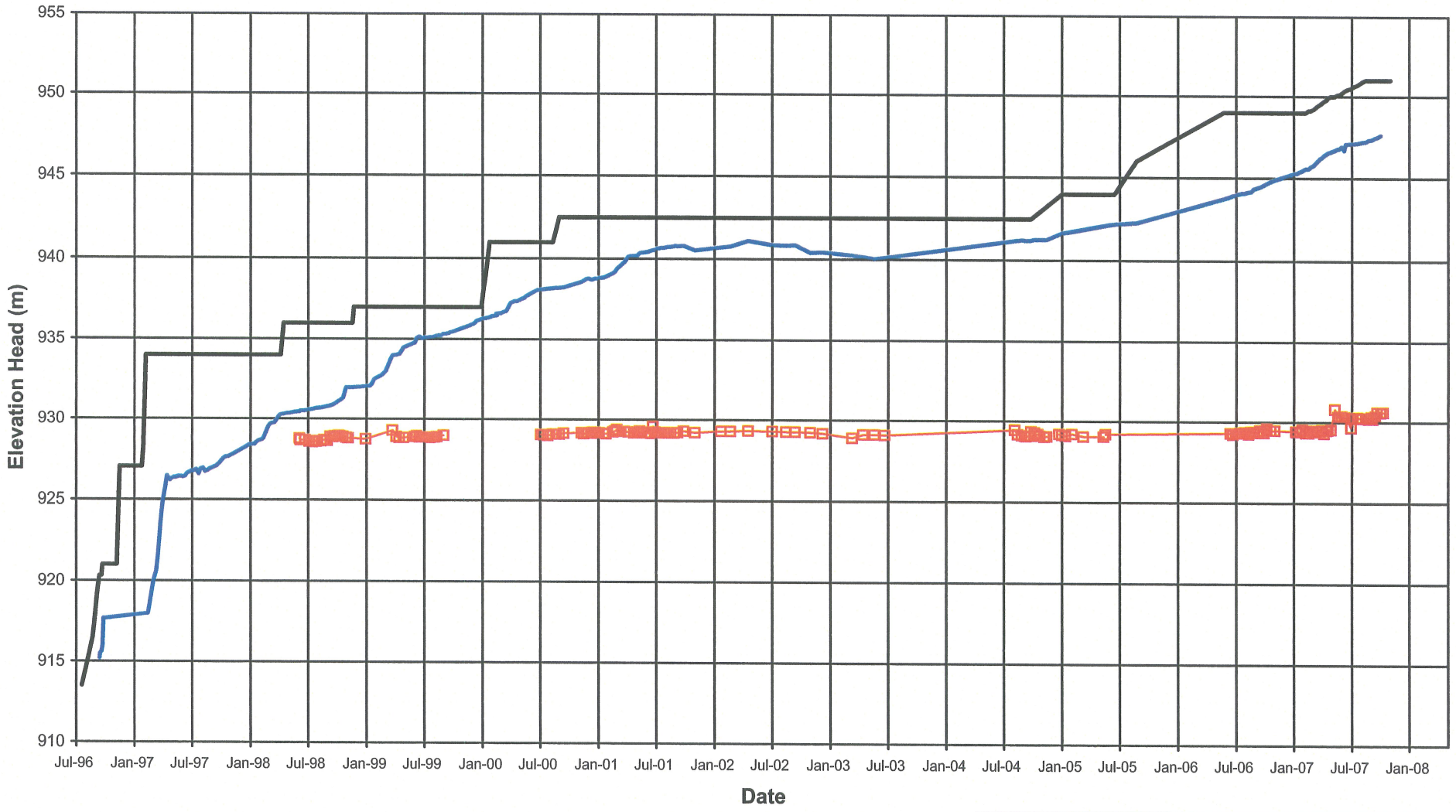
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE C2-3

REV. 0



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE D FOUNDATION PIEZOMETERS
ELEVATION HEAD VS. TIME

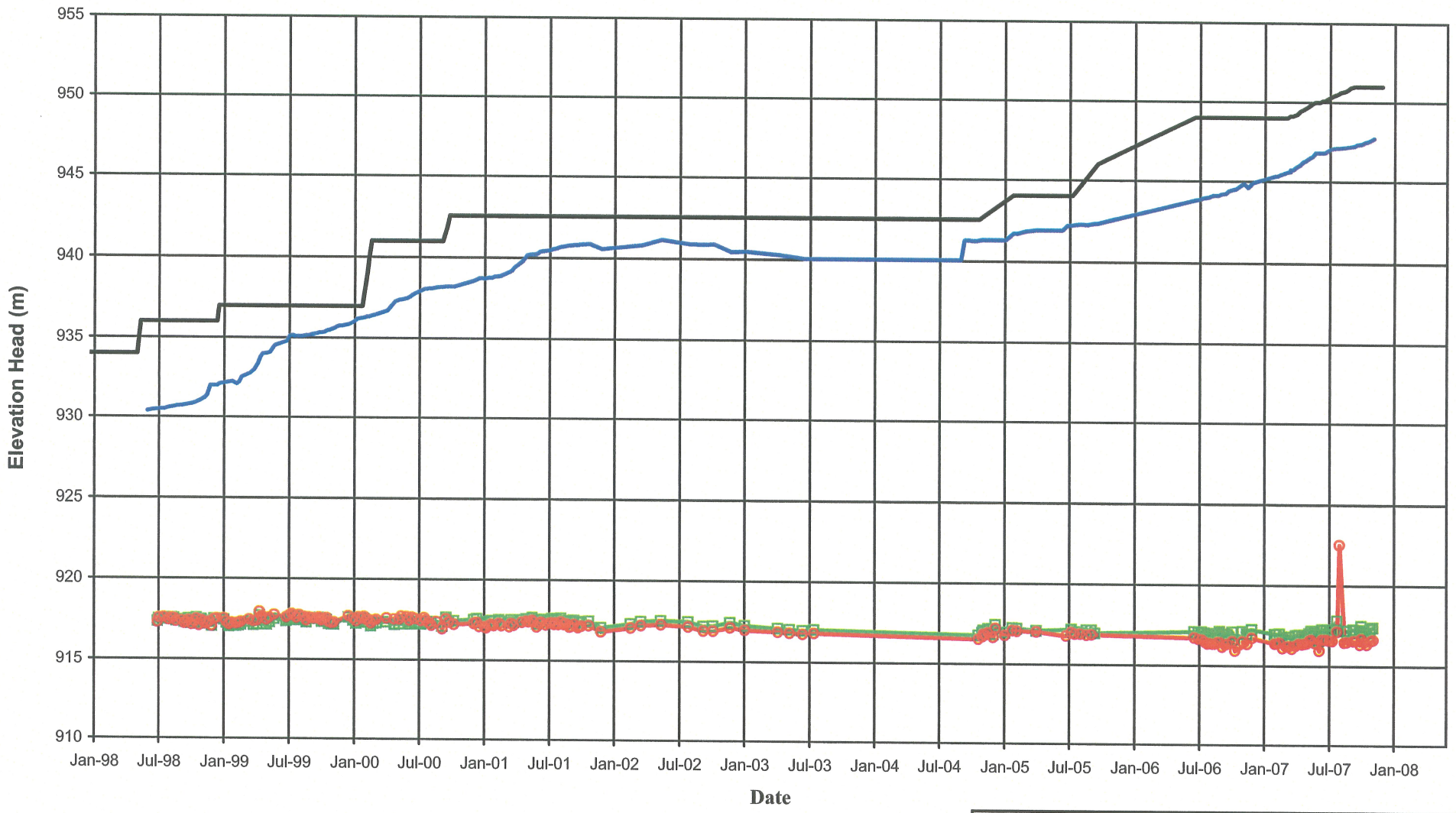
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE C2-4

REV. 0



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE E FOUNDATION PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

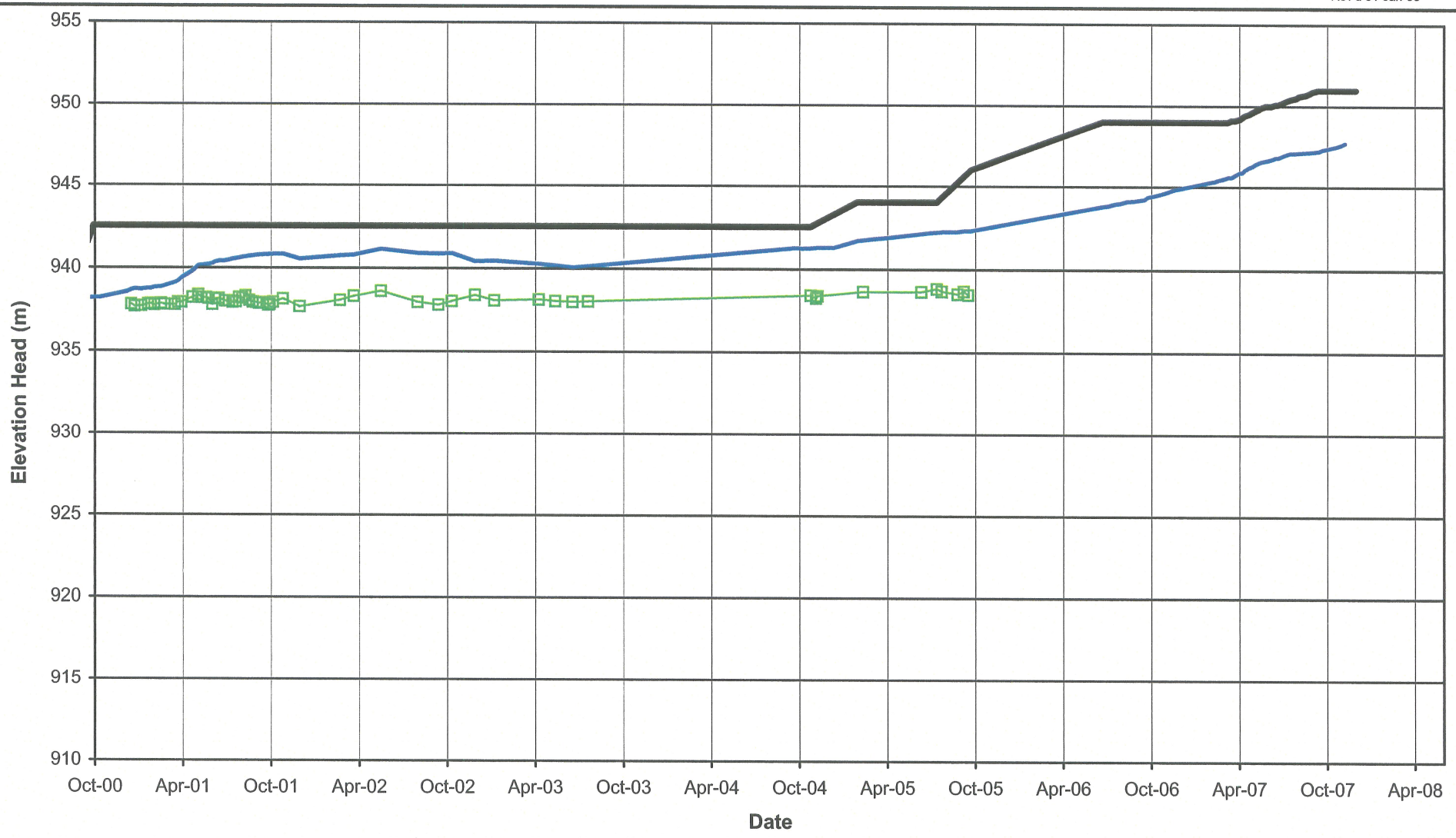
REF NO. 1

FIGURE C2-5

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane F 2007Plane F Foundation

Print 4/2/20083:46 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE F FOUNDATION PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

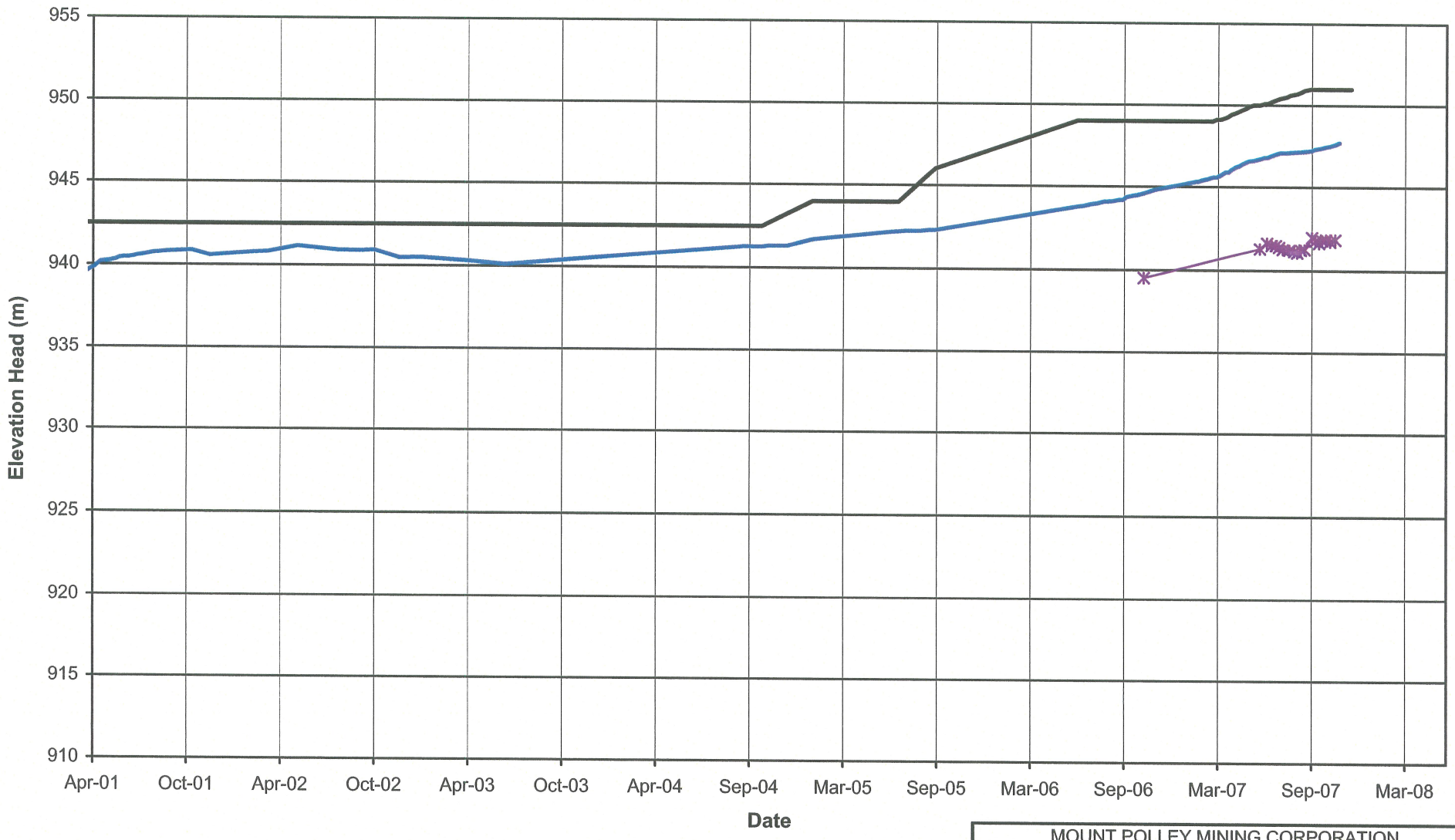
REF NO. 1

FIGURE C2-6

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane I 2007Plane I Foundation

Print: 4/2/20083:47 PM
Rev'd: 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE I FOUNDATION PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE C2-7

REV. 0

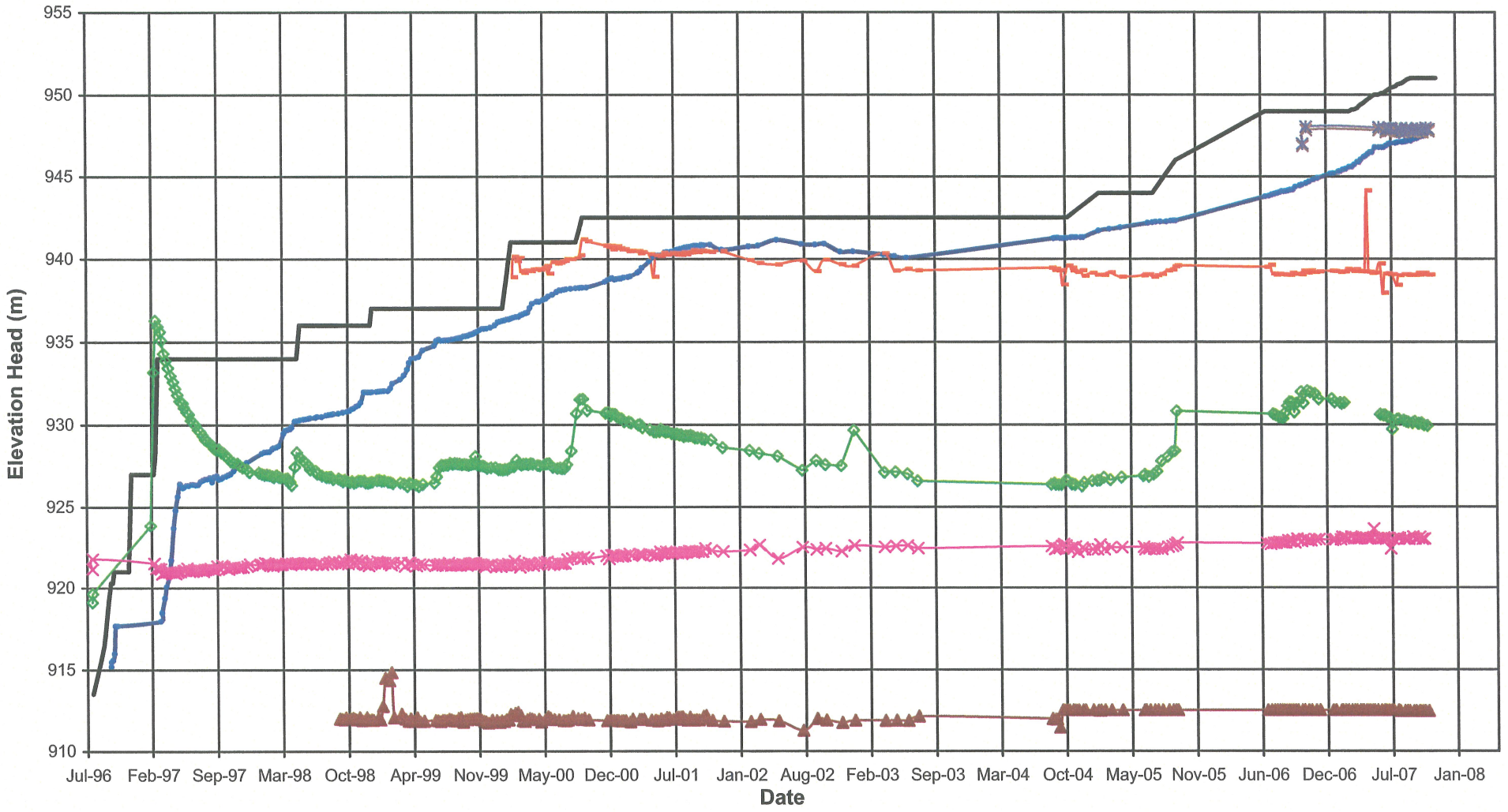
Rev 0 - Issued for VA101-1/14-1

Knight Piésold
CONSULTING

APPENDIX C3

FILL PIEZOMETERS

(C3-1 to C3-9)



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

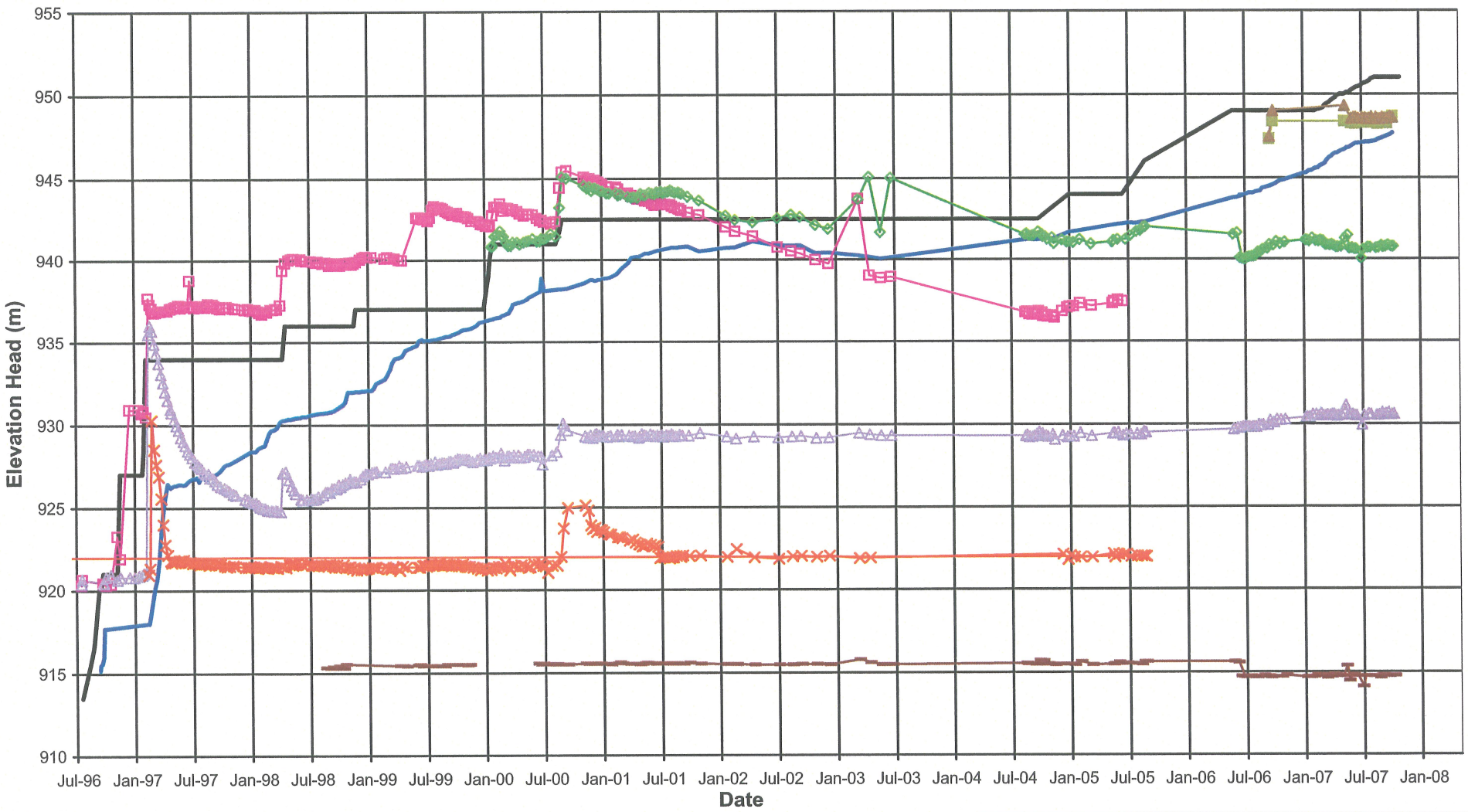
REF NO. 1

FIGURE C3-1

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane B 2007Plane B Fill

Print 4/2/2008 3:49 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE B FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT/ ASSIGNMENT NO. VA101-1/14

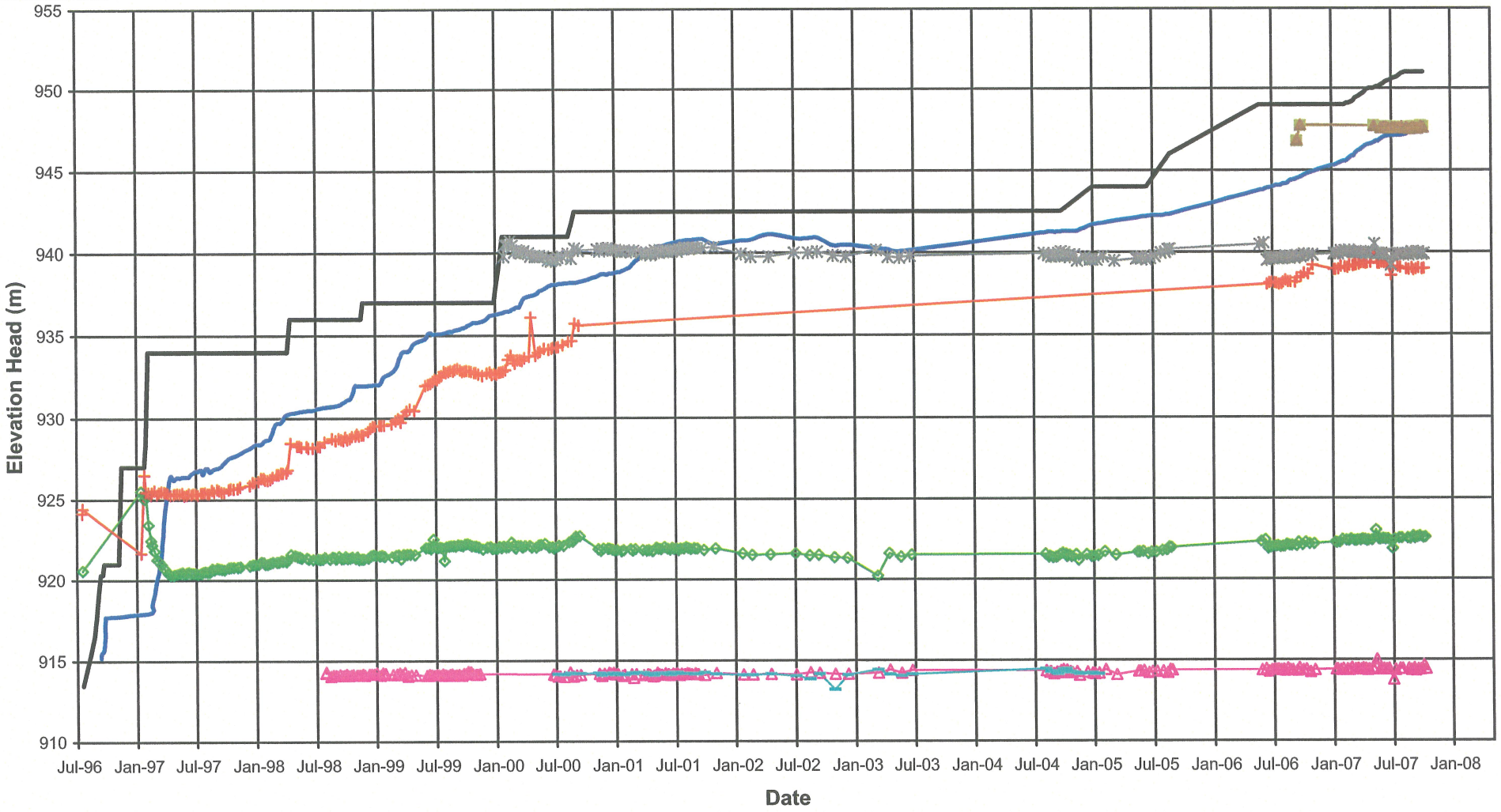
REF NO. 1

FIGURE C3-2

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane C 2007Plane C Fill

Print 4/2/2008 3:50 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

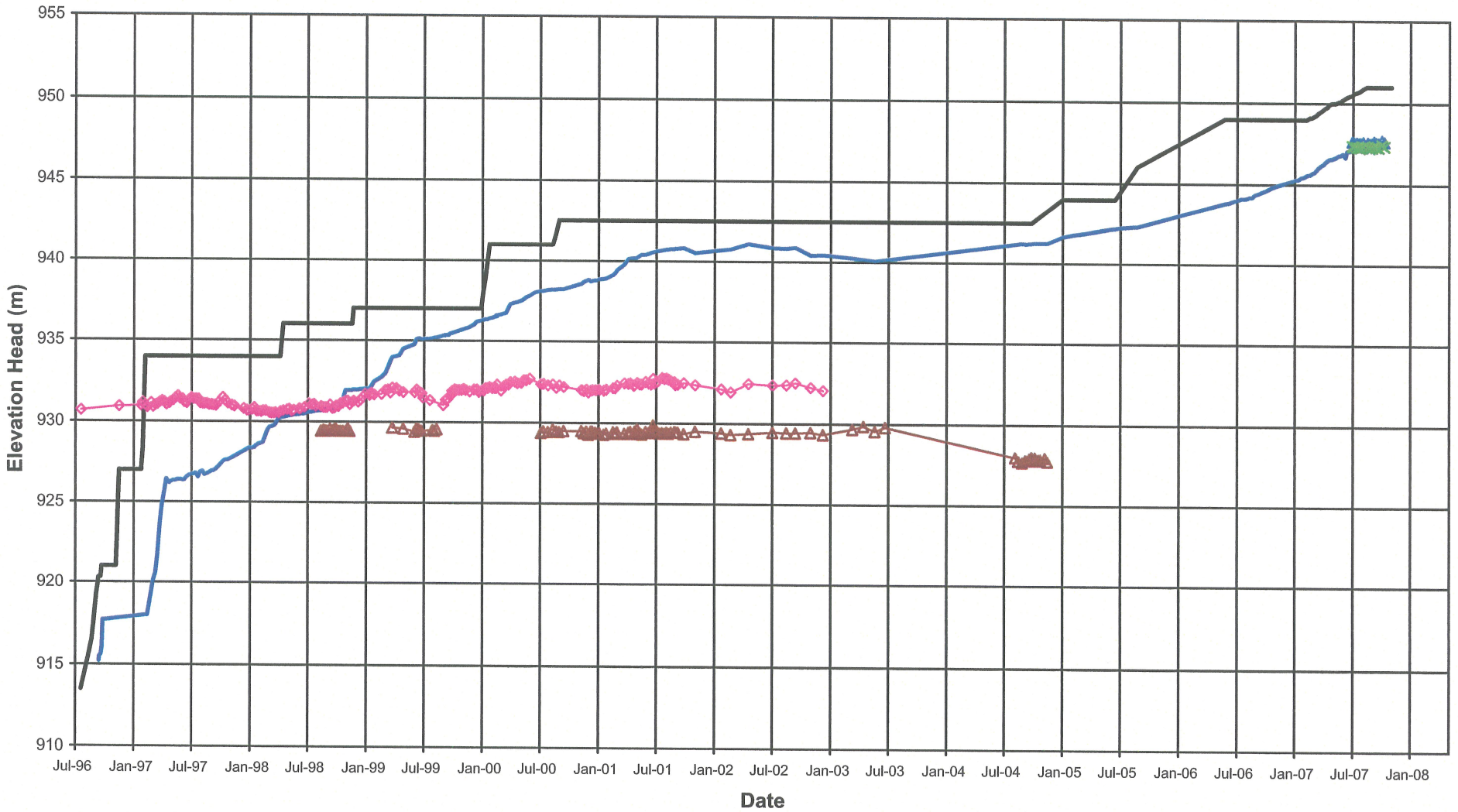
REF NO. 1

FIGURE C3-3

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane D 2007Plane D Fill

Print 4/2/2008 3:50 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE D FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

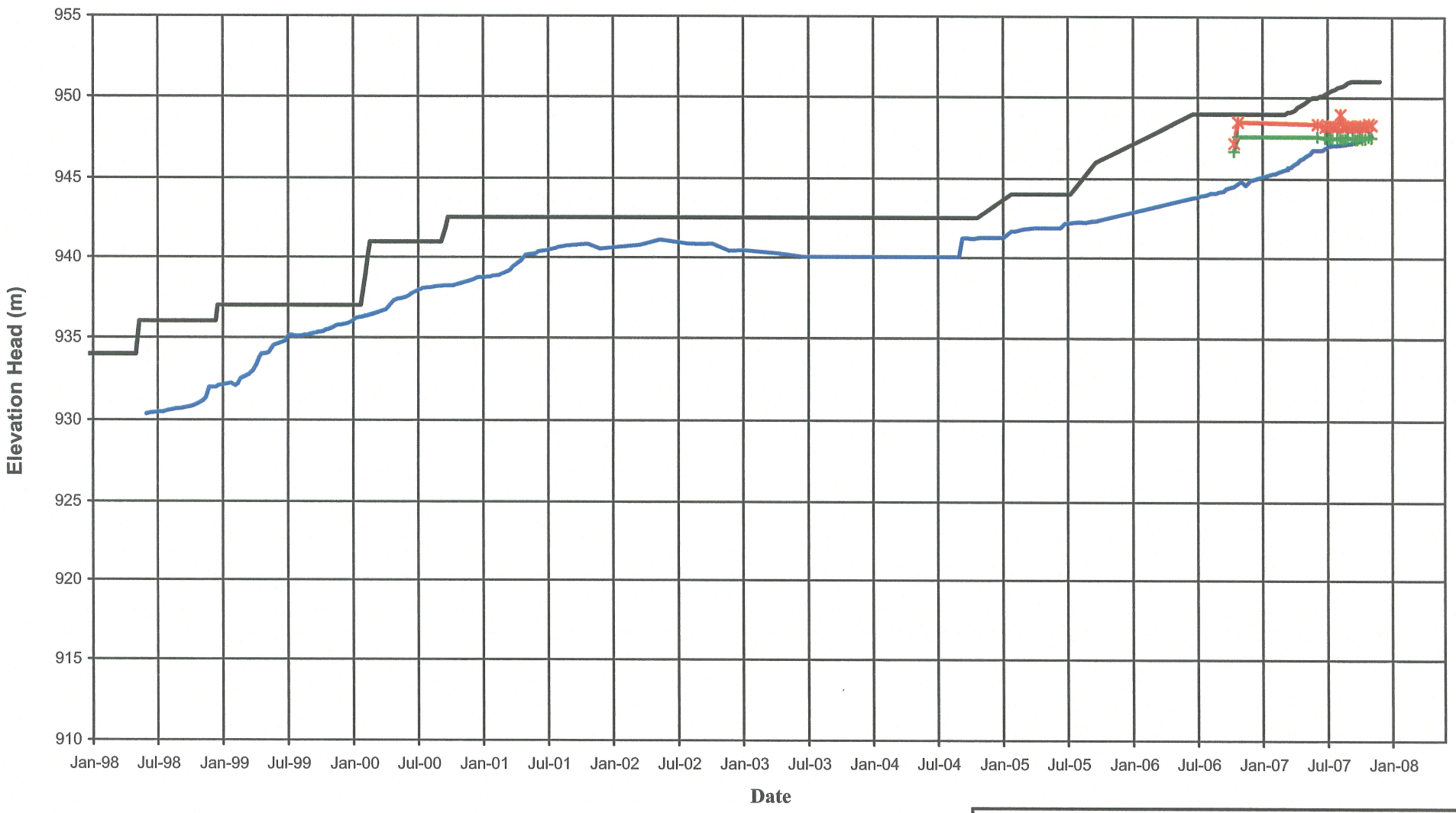
PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE C3-4

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane E 2007Plane E Fill

Print 4/2/2008 3:51 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE E FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

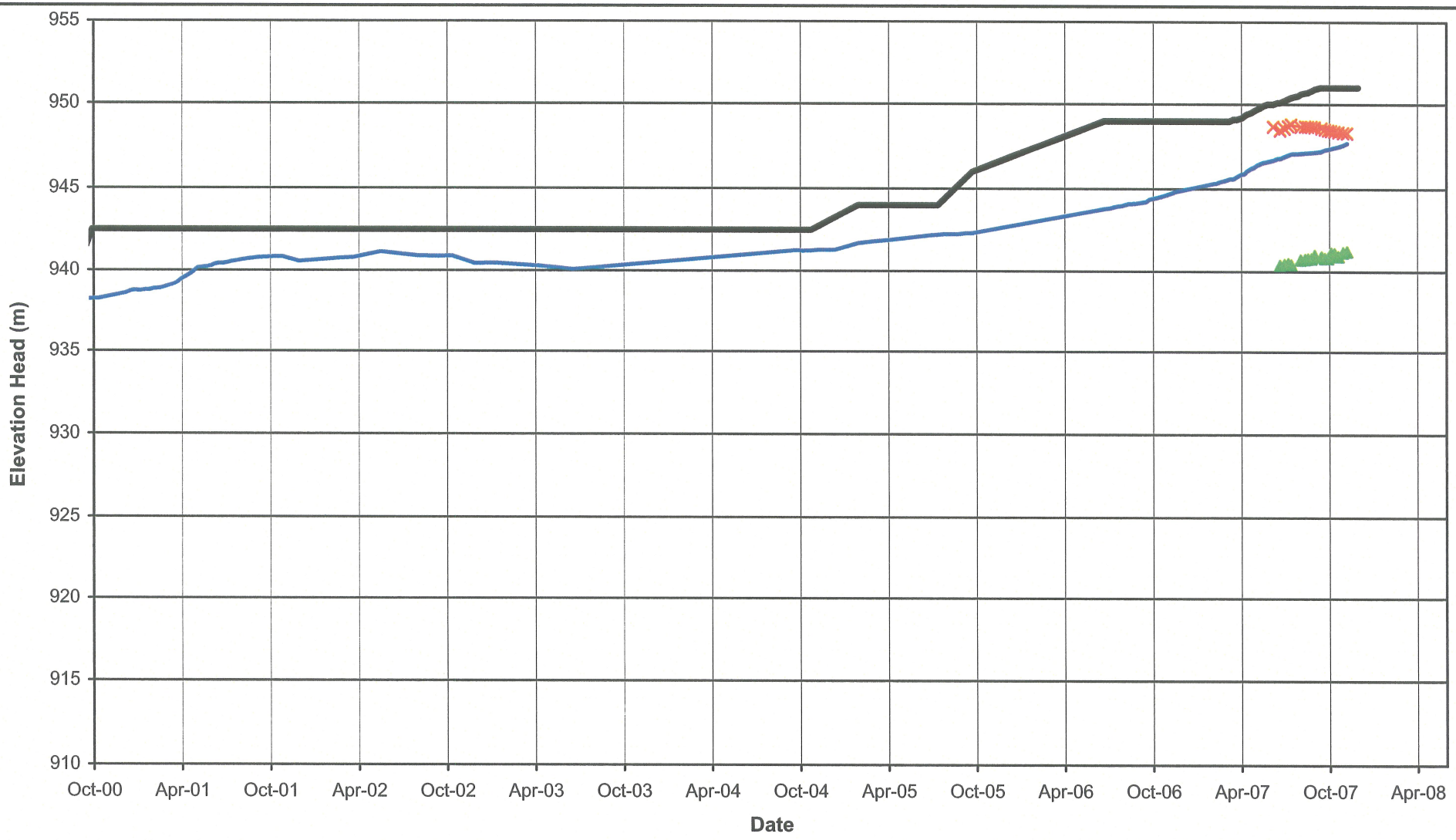
REF NO. 1

FIGURE C3-5

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane F 2007Plane F Fill

Print 4/2/20083:52 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE F FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

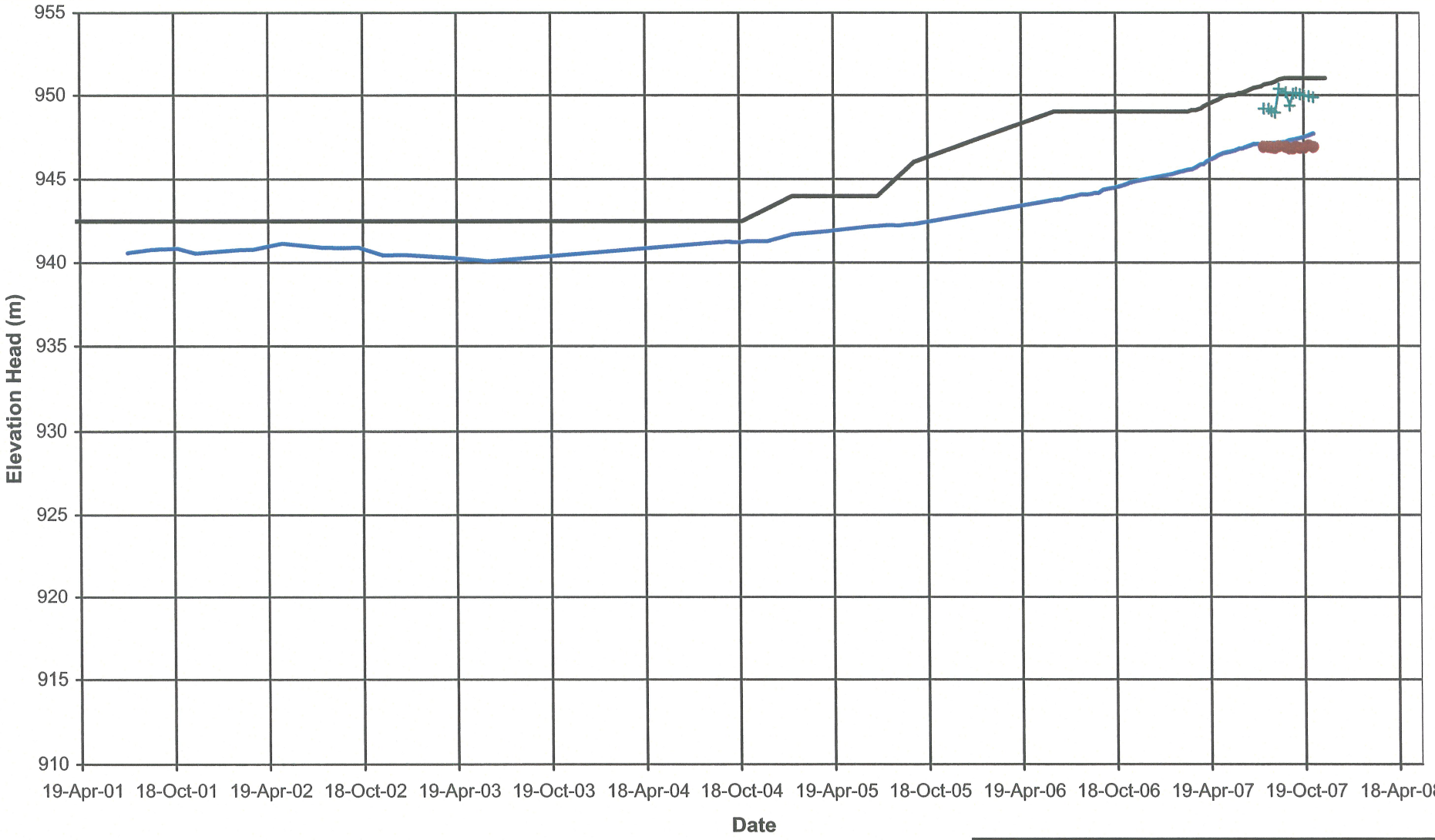
REF NO. 1

FIGURE C3-6

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane G 2007Plane G Fill

Print: 4/2/20083:53 PM
Rev'd: 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE G FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

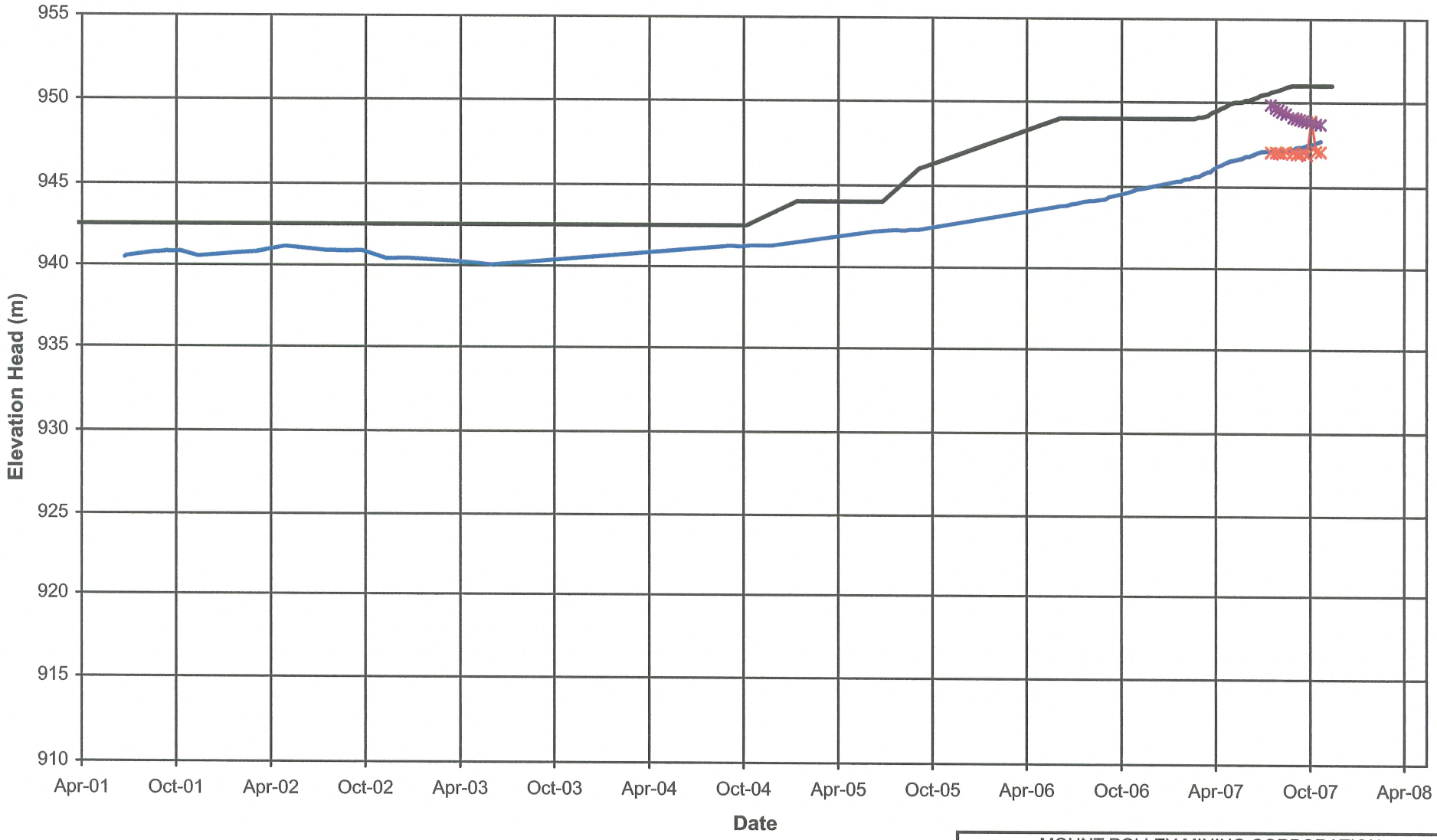
PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE C3-7

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane H 2007Plane H Fill

Print: 4/2/20083:54 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE H FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

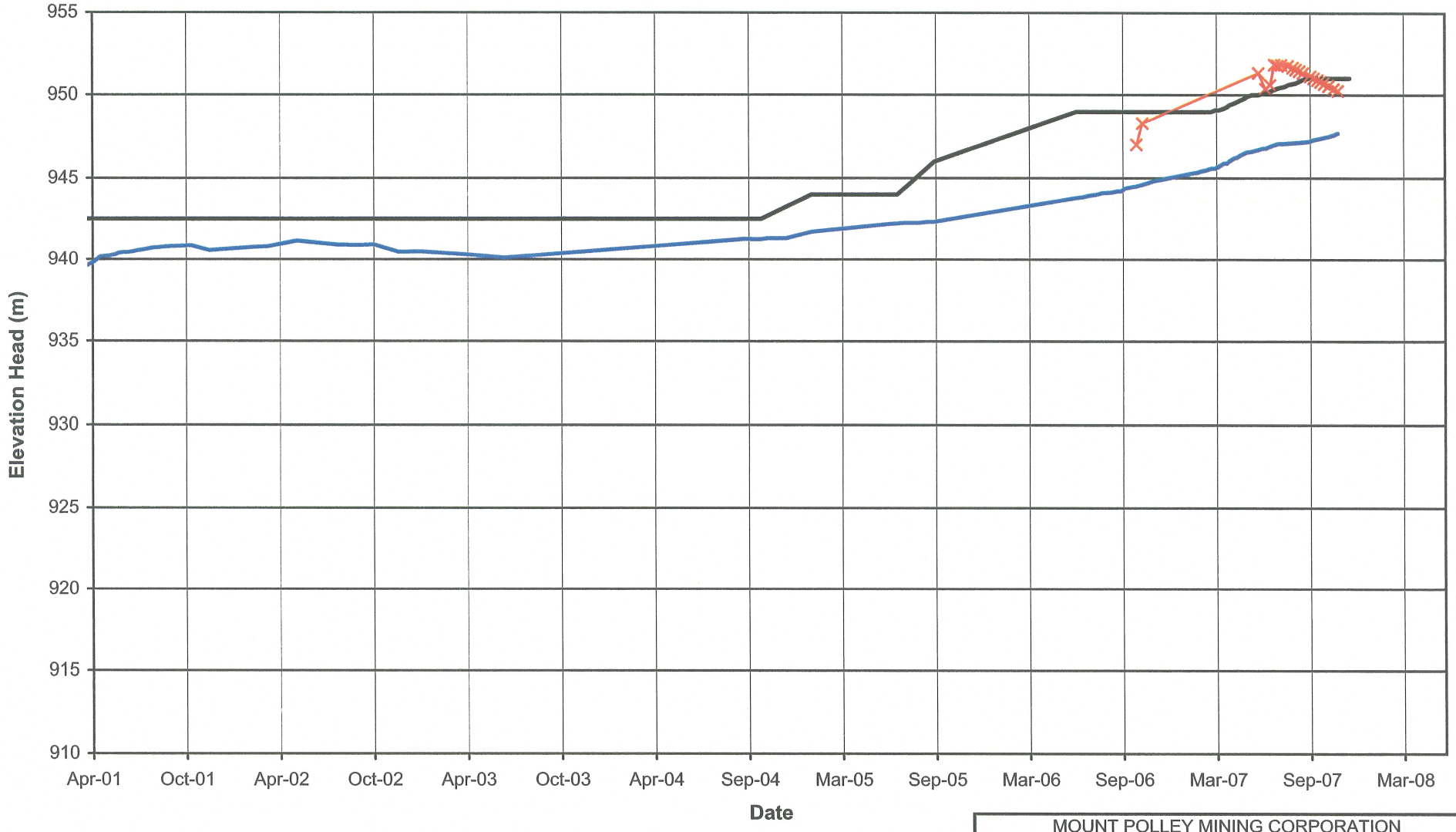
REF NO. 1

FIGURE C3-8

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane I 2007Plane I Fill

Print: 4/2/20083:54 PM
Rev'd: 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE I FILL PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE C3-9

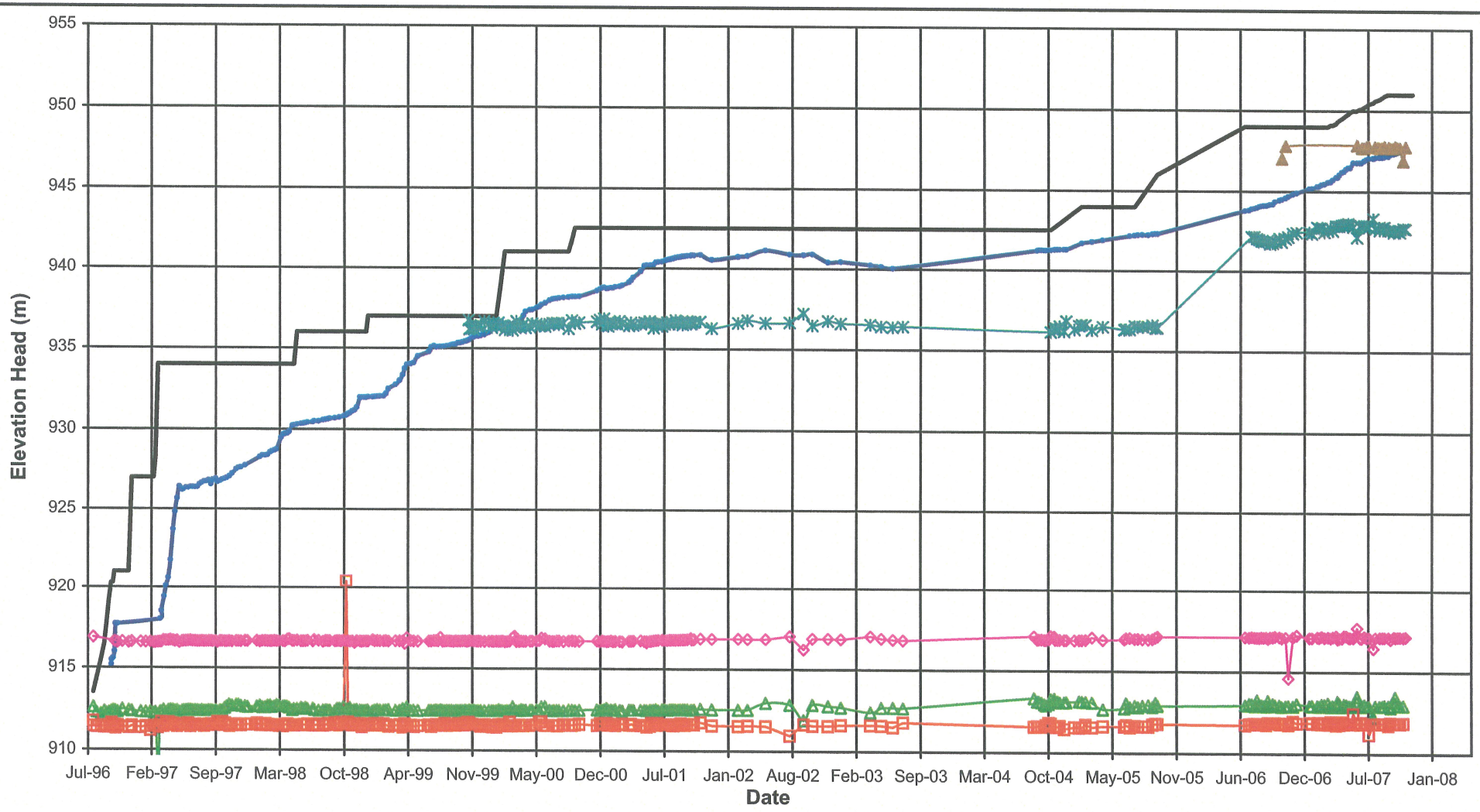
REV. 0

Knight Piésold
CONSULTING

APPENDIX C4

DRAIN PIEZOMETERS

(C4-1 to C4-7)



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A DRAIN PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

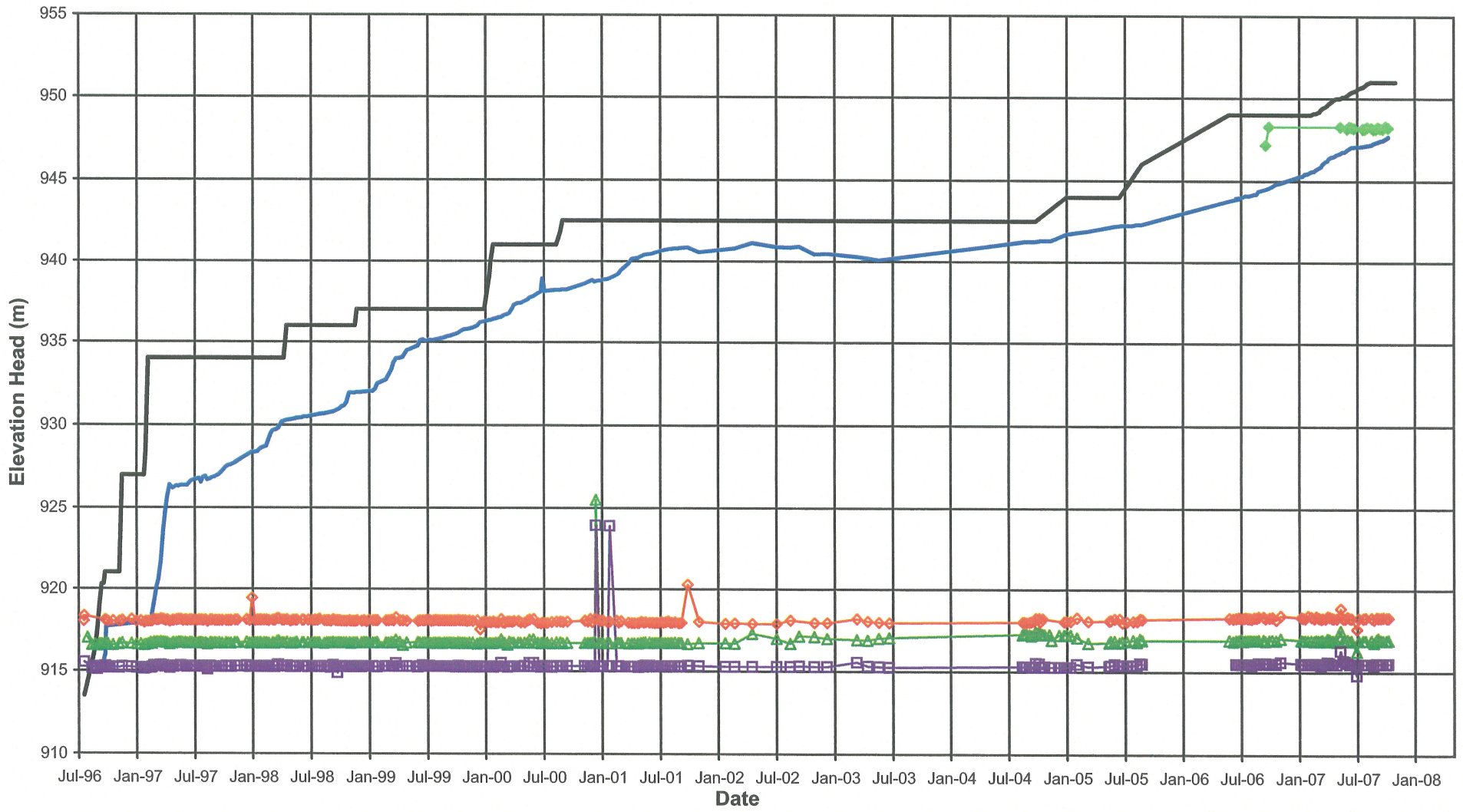
REF NO. 1

FIGURE C4-1

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane B 2007Plane B Drain

Print 4/2/2008 3:57 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE B DRAIN PIEZOMETERS
ELEVATION HEAD VS. TIME

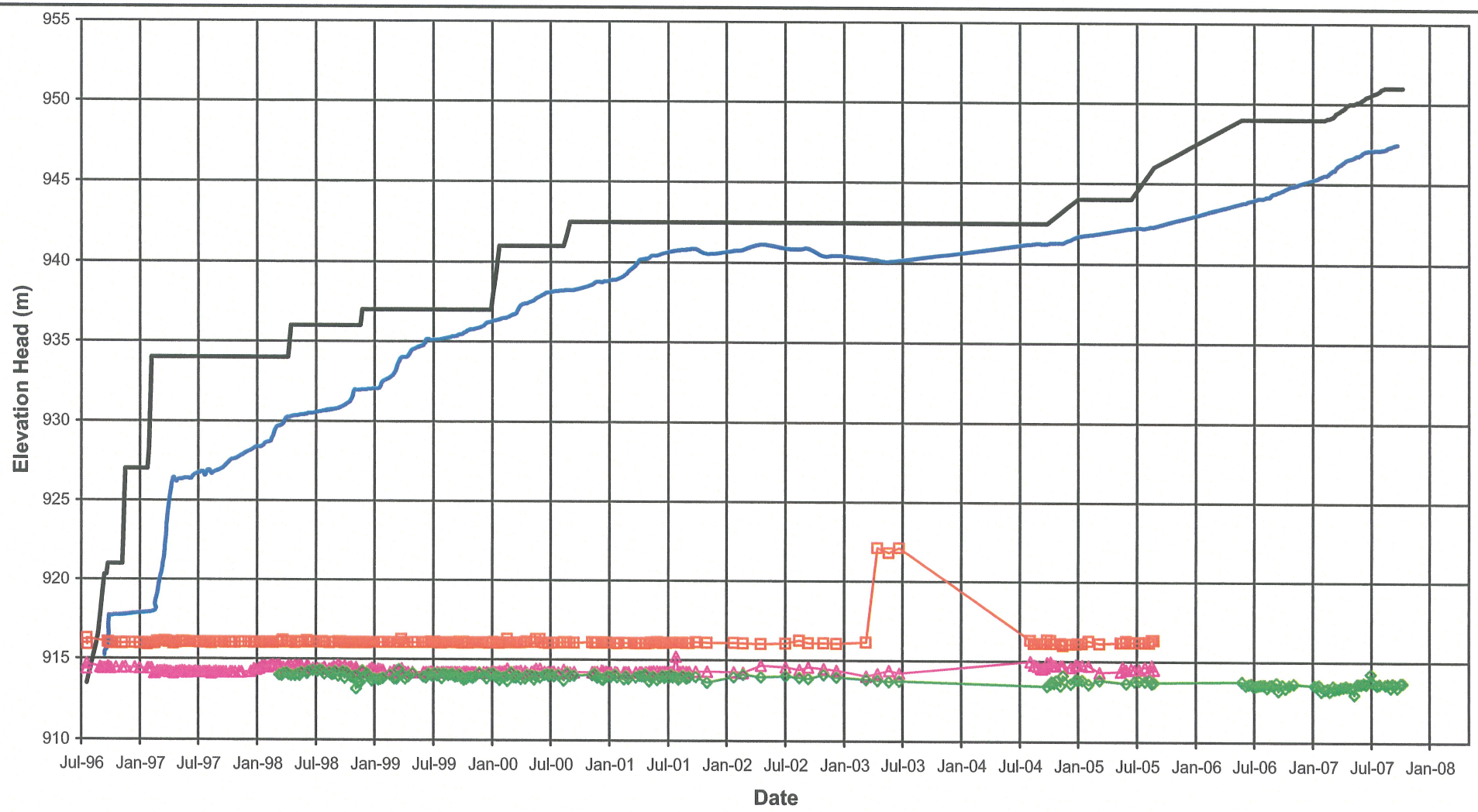
Knight Piésold CONSULTING

PROJECT/ ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE C4-2

REV. 0



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C DRAIN PIEZOMETERS
ELEVATION HEAD VS. TIME

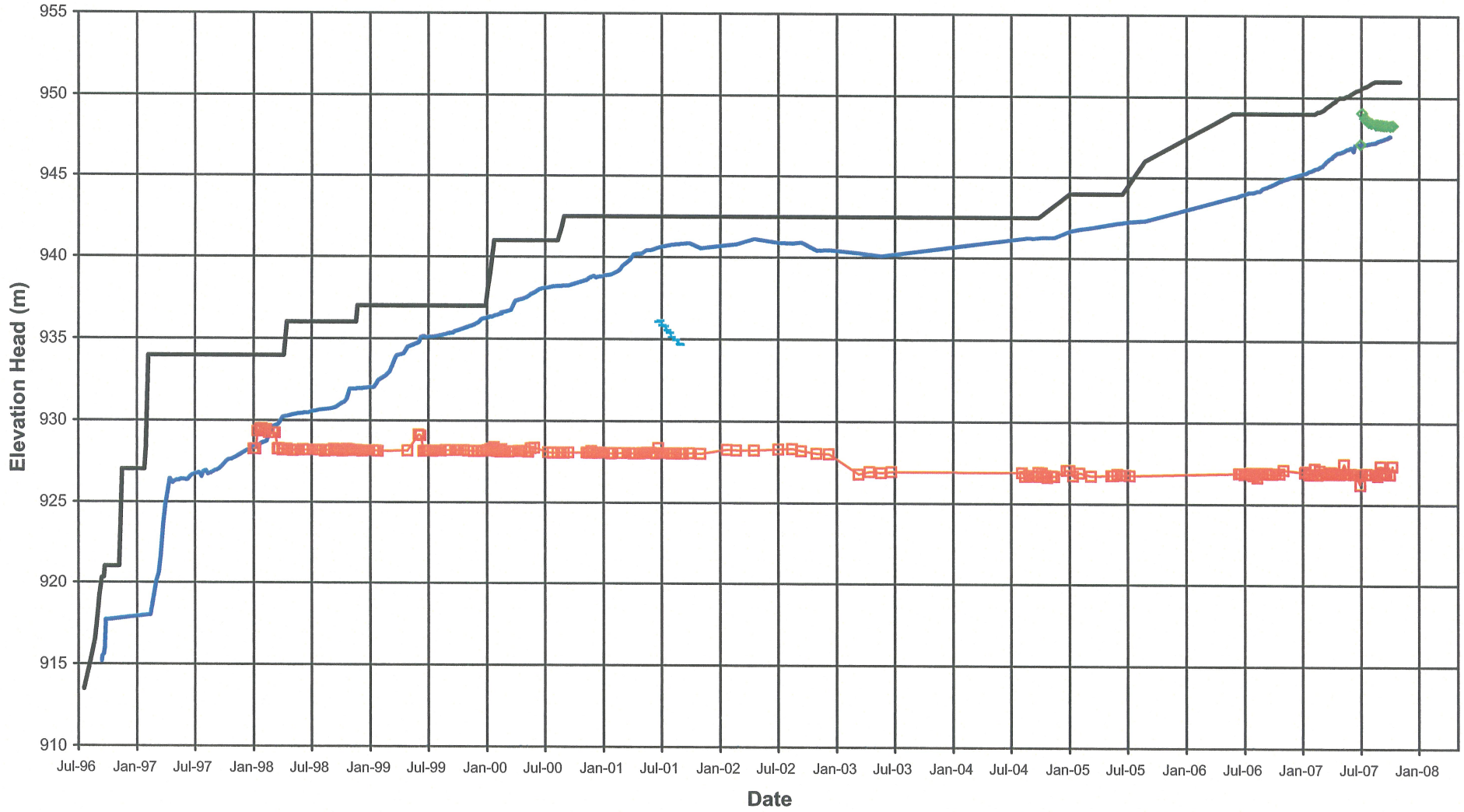
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE C4-3

REV. 0



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE D DRAIN PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

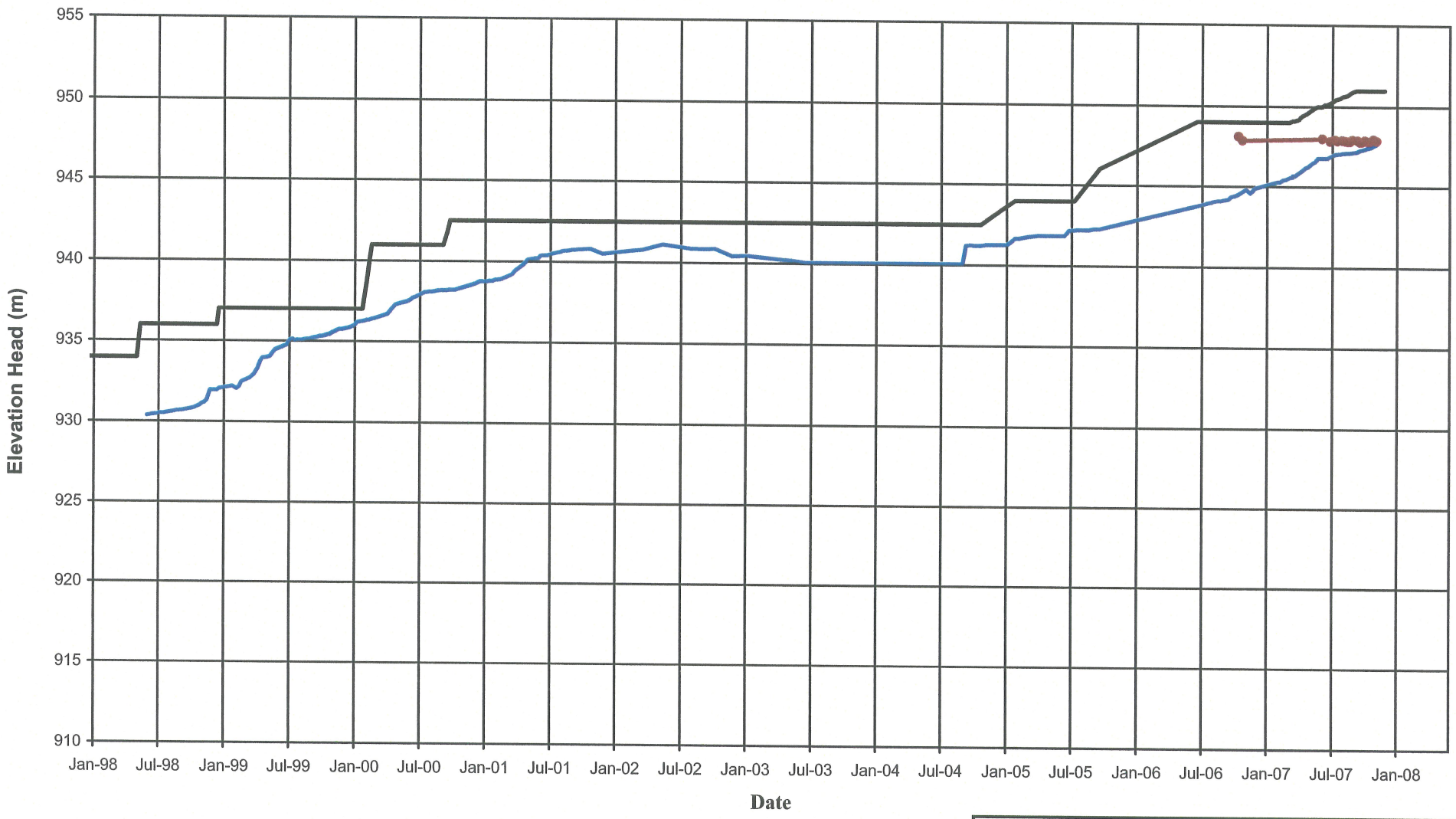
REF NO. 1

FIGURE C4-4

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane E 2007Plane E Drain

Print 4/2/2008 4:05 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE E DRAIN PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

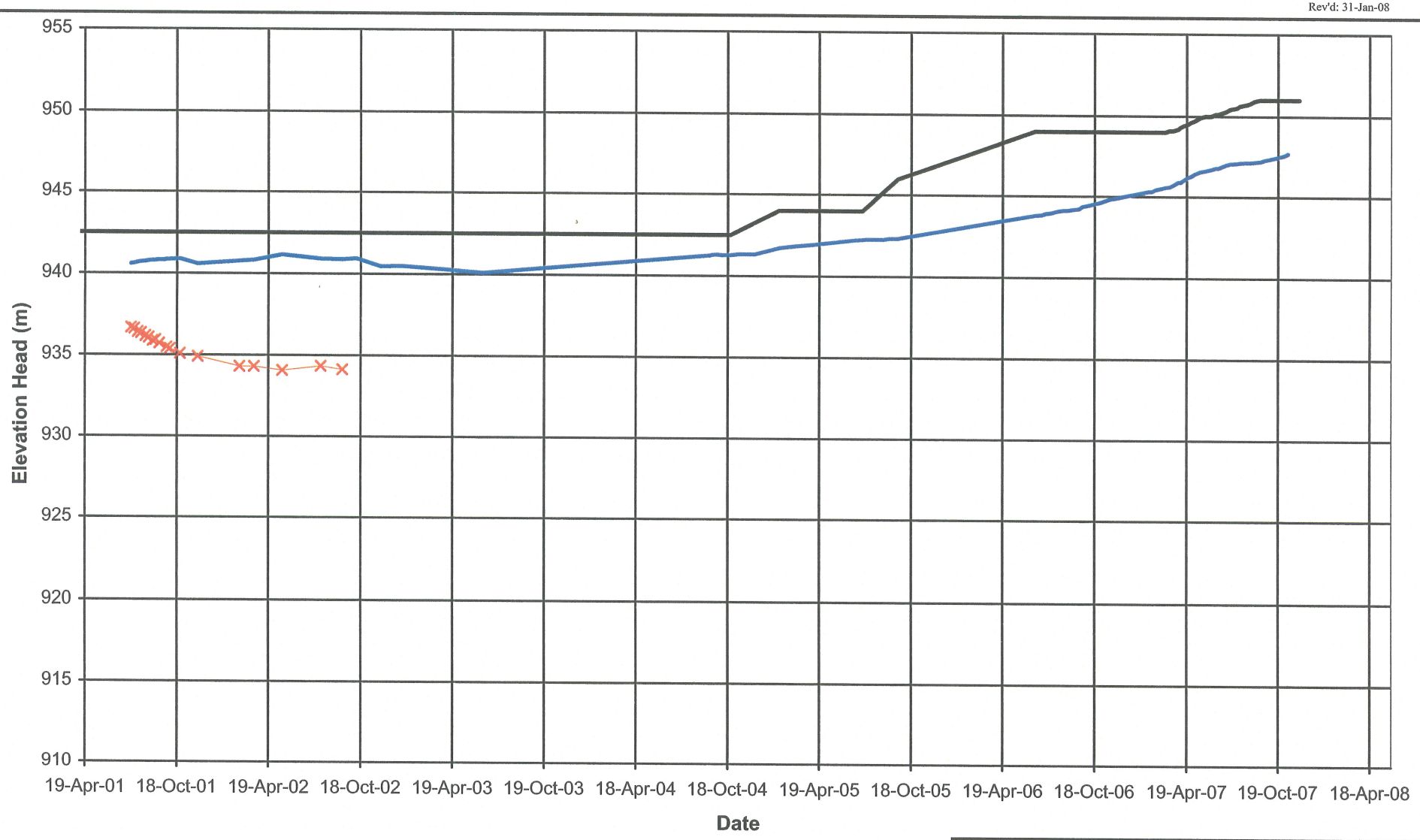
REF NO. 1

FIGURE C4-5

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane G 2007Plane G Drain

Print: 4/2/20084:06 PM
Rev'd: 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE G DRAIN PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

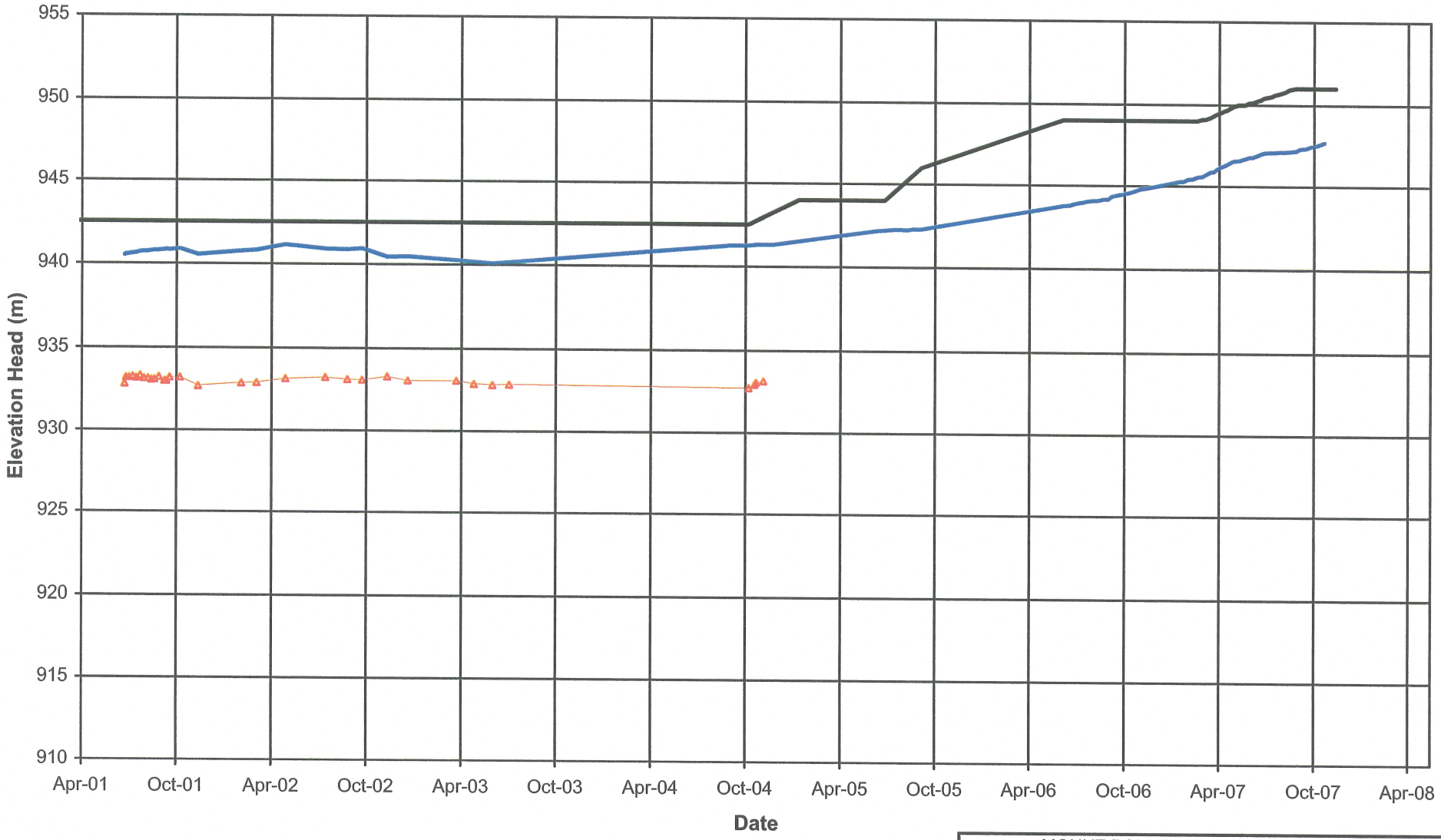
PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE C4-6

REV. 0

M:\1\01\00001\14\A\Report\1-Report on Stage 5 Construction\Appendices\Appendix C- Piezometers\Plane H 2007Plane H Drain

Print: 4/2/20084:07 PM
Rev'd 31-Jan-08



Note:
Piezometers in parentheses no longer functioning

Rev 0 - Issued for VA101-1/14-1

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE H DRAIN PIEZOMETERS
ELEVATION HEAD VS. TIME

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE C4-7

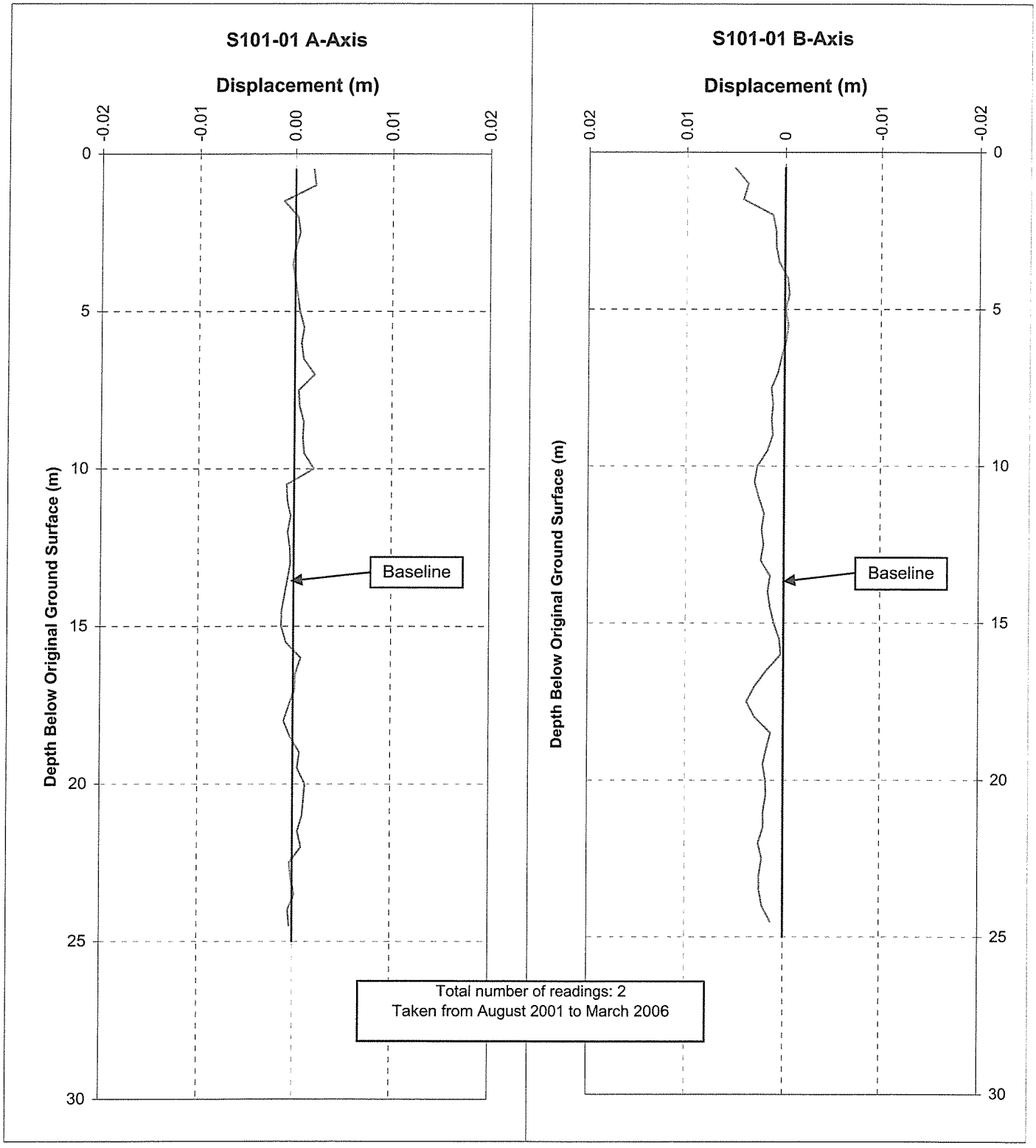
REV. 0

Knight Piésold
CONSULTING

APPENDIX D

INCLINOMETER DATA

(Figures D-1 to D-5)



Notes:

1.) Displacement is relative to the baseline reading taking in August 2001.

2.) SI01-01 damaged furing Stage 4 construction and is no longer functioning

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

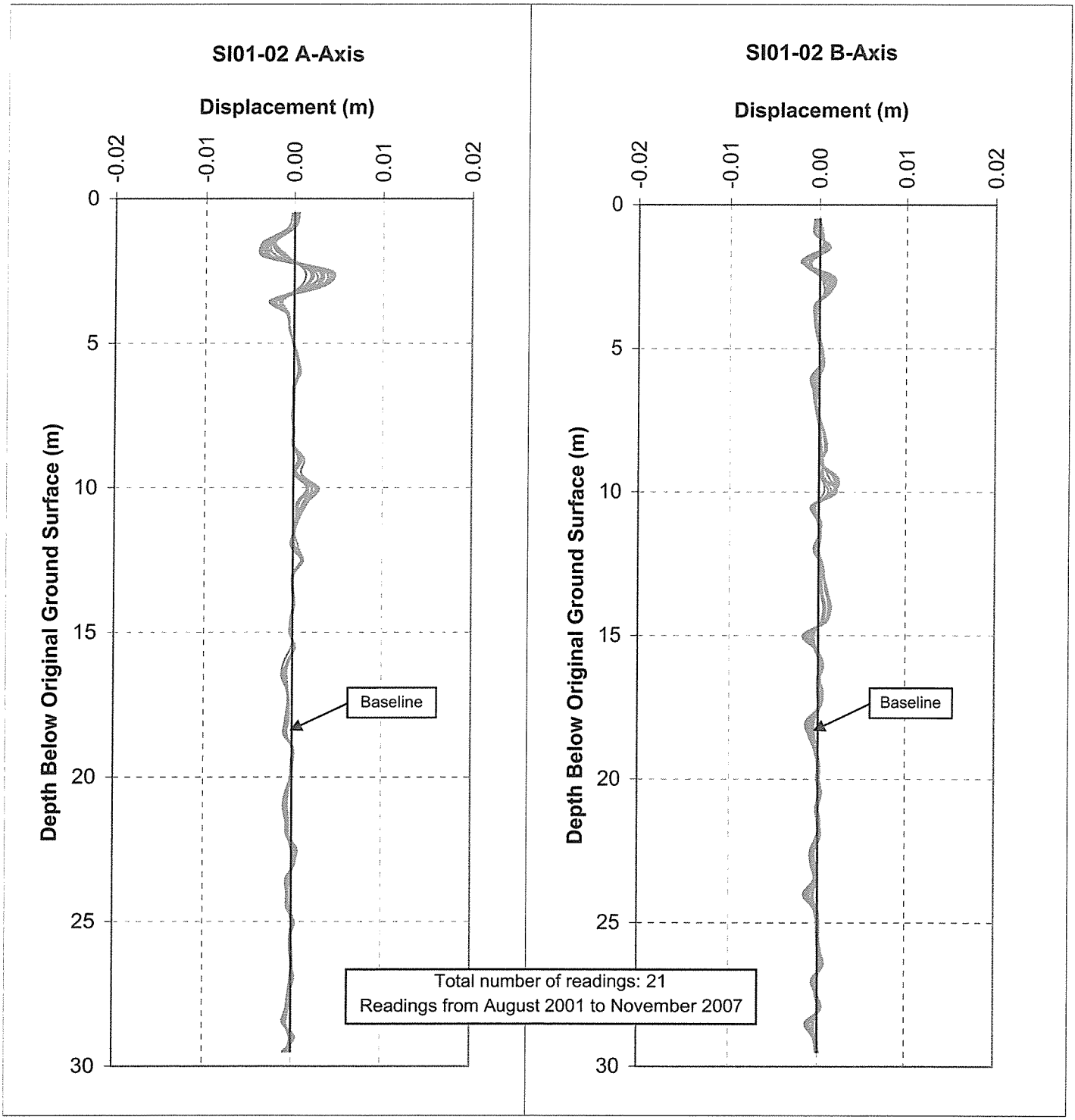
TAILINGS STORAGE FACILITY
INCLINOMETER SI01-01
DISPLACEMENT VS. DEPTH

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/14	1

FIGURE D-1 REV. 0

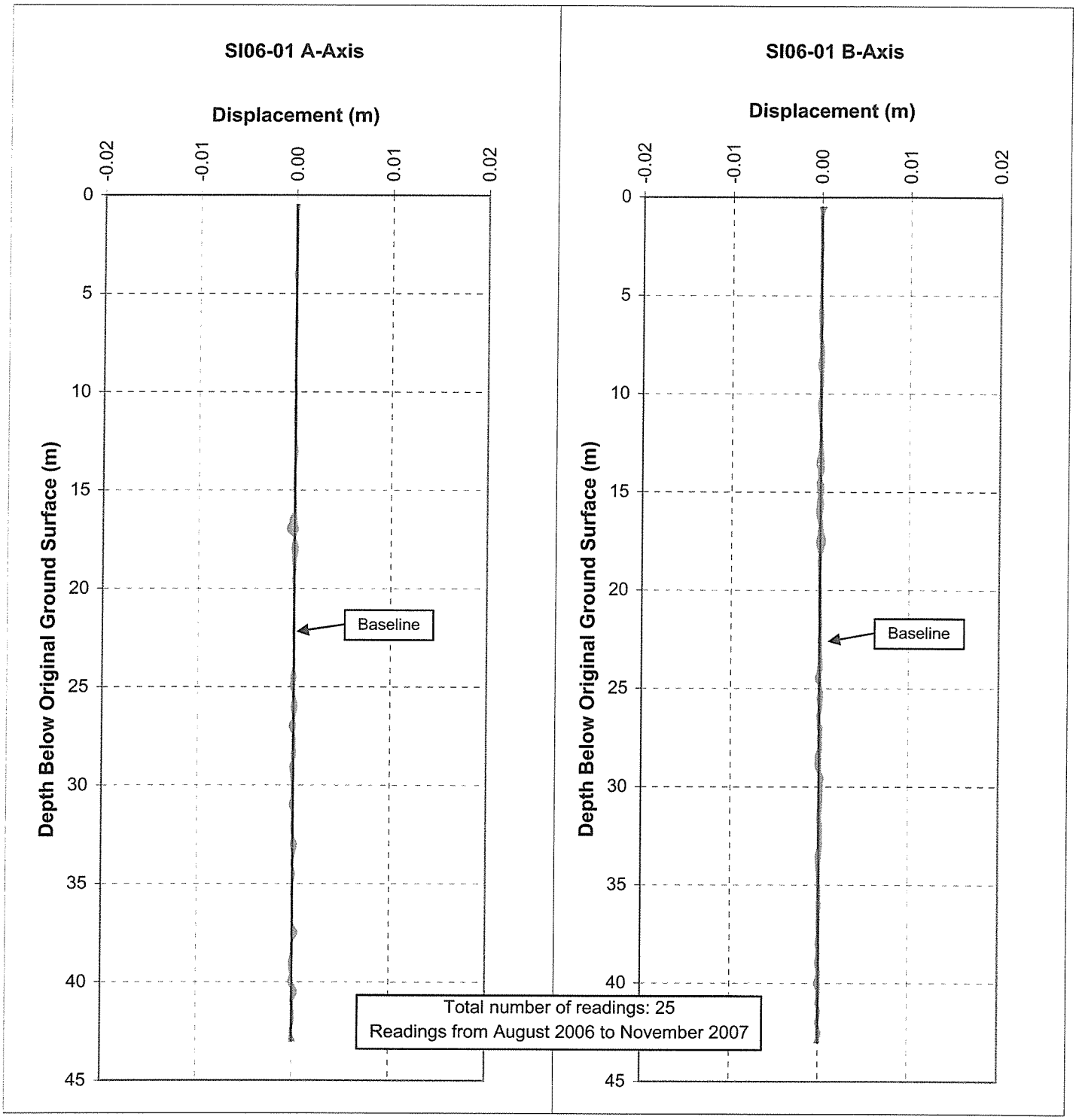
Rev 0 - Issued for VA101-1/14-1



Notes:
1) Displacement is calculated relative to the initial data set, recorded in August 2001.

MOUNT POLLEY MINING CORPORATION		
MOUNT POLLEY MINE		
TAILINGS STORAGE FACILITY INCLINOMETER SI01-02 DISPLACEMENT VS. DEPTH		
Knight Piésold CONSULTING	PROJECT / ASSIGNMENT NO. VA101-1/14	REF NO. 1
	FIGURE D-2	REV. 0

Rev 0 - Issued for VA101-1/14-1



Notes:
1) Displacement is calculated relative to the initial data set, recorded in August 2006.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
INCLINOMETER SI06-01
DISPLACEMENT VS. DEPTH

Knight Piésold CONSULTING

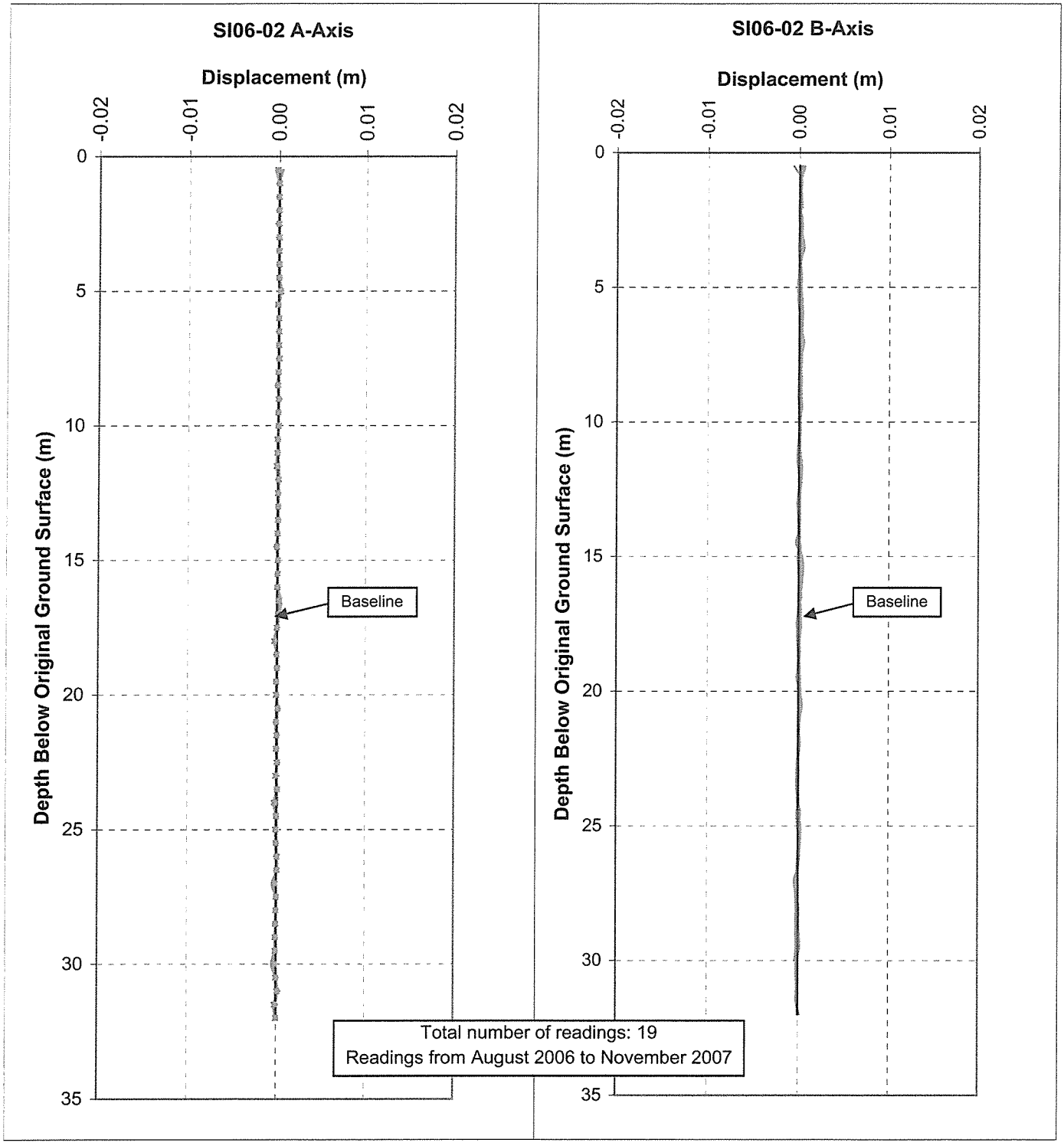
PROJECT / ASSIGNMENT NO. VA101-1/14

REF NO. 1

FIGURE D-3

REV. 0

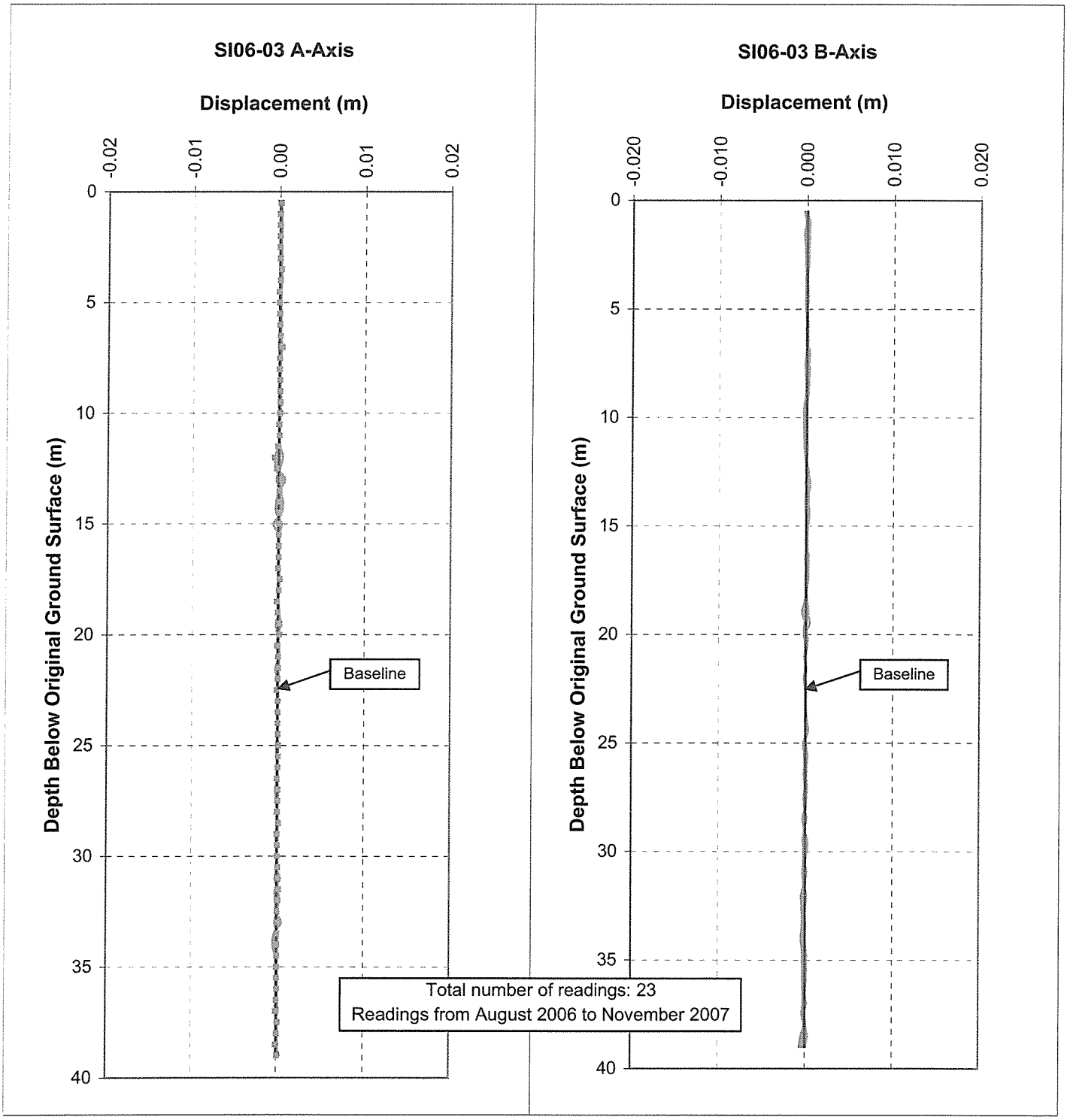
Rev 0 - Issued for VA101-1/14-1



Notes:
1) Displacement is calculated relative to the initial data set, recorded in August 2006.
2.) SI06-02 was was blocked by ice burinf the winter 06 06/07, therefore, no data was recorded.

MOUNT POLLEY MINING CORPORATION		
MOUNT POLLEY MINE		
TAILINGS STORAGE FACILITY INCLINOMETER SI06-02 DISPLACEMENT VS. DEPTH		
Knight Piésold CONSULTING	PROJECT / ASSIGNMENT NO. VA101-1/14	REF NO. 1
	FIGURE D-4	REV. 0

Rev 0 - Issued for VA101-1/14-1



Notes:
1) Displacement is calculated relative to the initial data set, recorded in August 2006.

MOUNT POLLEY MINING CORPORATION		
MOUNT POLLEY MINE		
TAILINGS STORAGE FACILITY INCLINOMETER SI06-03 DISPLACEMENT VS. DEPTH		
Knight Piésold CONSULTING	PROJECT / ASSIGNMENT NO. VA101-1/14	REF NO. 1
	FIGURE D-5	REV. 0

Rev 0 - Issued for VA101-1/14-1

Knight Piésold
CONSULTING

APPENDIX E

PHOTOGRAPHS

(Pages E1 to E27)

PHOTO 1 – Mount Polley Mine Site. Tailings Storage Facility in the background.

PHOTO 2 – Mount Polley Mine Site. Tailings Storage Facility in the foreground.

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

PHOTO 3 – Performing a weekly water elevation reading at the reclaim barge.

PHOTO 4 – Sand cell production along the Perimeter Embankment

PHOTO 5 – Sand cell production along the Perimeter Embankment

PHOTO 6 –Piezometer Installation

PHOTO 7 – Tailings Piezometer Installation in the Perimeter Embankment

PHOTO 8 – Piezometer Installation in the South Embankment

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

PHOTO 9 – Wrapping a vibrating wire piezometer in geotextile for protection

PHOTO 10 – Buckets and fluorescent poles act as protective measures to prevent damage to the new piezometers

PHOTO 11 – Protective covers for the piezometers located at the Main Embankment toe, to shield them from loose Zone C material

PHOTO 12 – Placing the piezometers in a read-out box for more efficient data collection

PHOTO 13 – Contractors leveling the Zone F material prior to placement of the Perimeter Embankment Upstream Toe Drain

PHOTO 14 – Zone F backfill around the upstream toe drain

PHOTO 15 – Placement of geotextile cloth overtop of the original ground (competent till) prior to placement of Zone F material along the Perimeter Embankment

PHOTO 16 – Steel pipe to be joined to the Perimeter Embankment upstream toe drain

PHOTO 17 – Completed formwork with rebar, ready for concrete pour

PHOTO 18 – Pouring the concrete to form the encasement

PHOTO 19 – Using the smaller packer to compact the Zone S right up against the encasement, and the 10-tonne vibrating drum roller for the remaining area

PHOTO 20 – The upstream toe drain and steel pipe prior to connection

PHOTO 21 – The discharge point of the steel pipe

PHOTO 22 – Using the 'Grizzly' to filter the Zone T material, removing rocks greater than six inches in diameter

PHOTO 23 – Improved 'Grizzly' with sides to prevent Zone T material from spilling over

PHOTO 24 – South Embankment sump, collecting water from the downstream slope and subsequently released to the environment.

PHOTO 25 – Installing the longitudinal drain to be connected to the South Embankment toe drain

PHOTO 26 – Compacting Zone F material around the longitudinal drain

PHOTO 27 – Section connecting the South Embankment longitudinal drain to the toe drain

PHOTO 28 – Larger view of South Embankment sump.

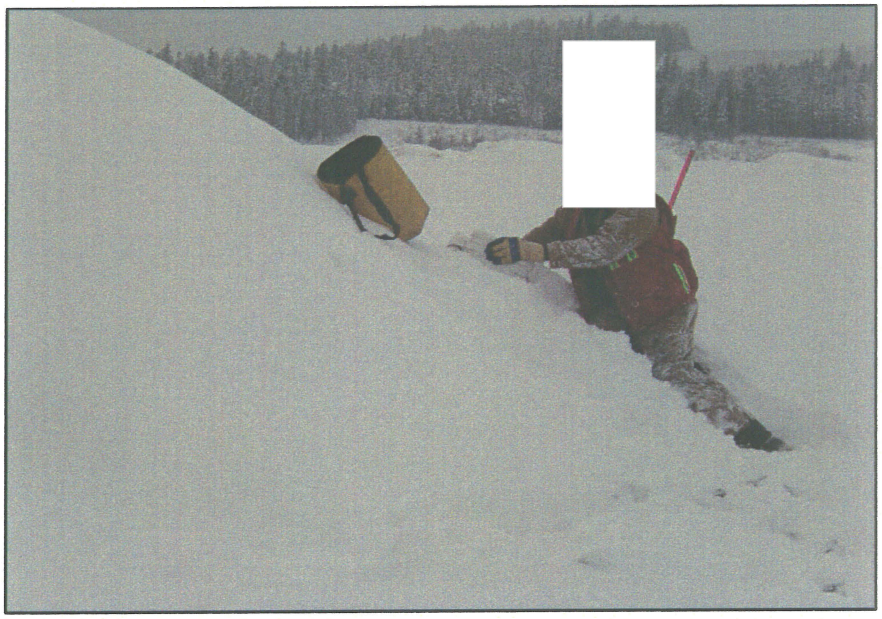


PHOTO 29 – Collecting piezometer data during the winter months

PHOTO 30 – Uncovering an inclinometer

PHOTO 31 – Heating the tailings pipeline valves during the winter months to prevent them from freezing

PHOTO 32 – Base of contractor Lake Excavating Ltd.

PHOTO 33 – V- notch weir used to measure flows at the corner downstream of the Main and South Embankments.

PHOTO 34 – Tape measures installed at the Main-South Embankment corner weir to provide an efficient means of determining the height above the V-notch.

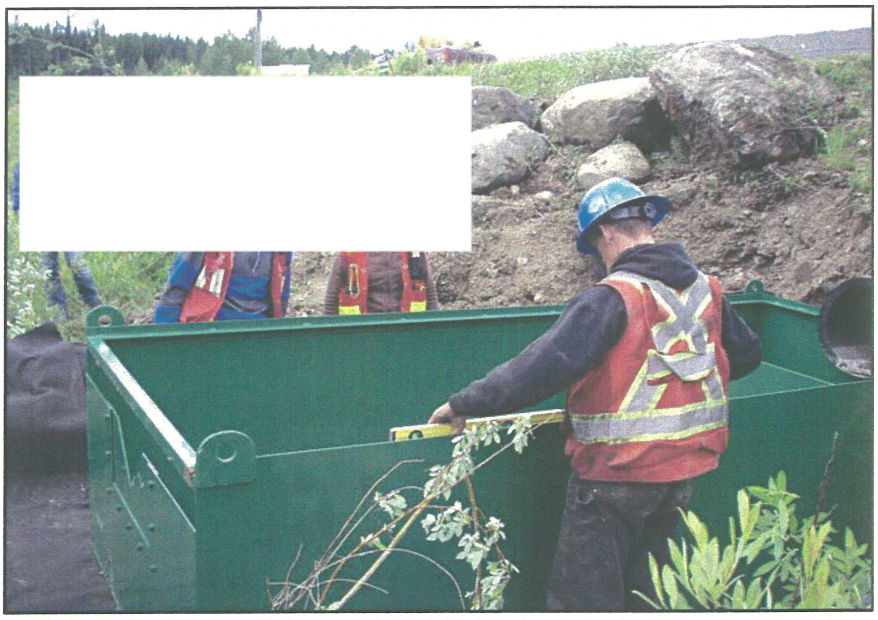


PHOTO 35 – Leveling the weir box, which will be used to measure flows exiting the Main Seepage Pond once a permit is received.

PHOTO 36 – The level weir box backfilled with Zone F and Zone S.

PHOTO 37 – Taking till from Borrow Area No. 3

PHOTO 38 – Loading till from Borrow Area No. 4

PHOTO 39 – Placing Zone T material overtop the Zone FT material, prior to placement of Zone C along the South Embankment.

PHOTO 40 – Excavating a ditch for the South Embankment foundation drain

PHOTO 41 – Compacting the Zone F material around the South Embankment foundation drain

PHOTO 42 – The foundation drain in place and backfilled with Zone F material. The area downstream of it was excavated to original ground, and covered with Zones FT, T, and C.

PHOTO 43 – Keying in to the till in the underbuilt sections, to sufficiently blend the new and existing tills.

PHOTO 44 – Excavating to competent till for Zone F to be placed against.

PHOTO 45 – Placing Zone T material along the South Embankment, leaving a one meter section for the Zone F.

PHOTO 46 – Preparing the north end of the South Embankment for placement of Zone S material.

PHOTO 47 – Placement of Zone S material on the South Embankment, the last section to be brought up to elevation 951 m with Zone S.

PHOTO 48 – Looking eastward along the Main Embankment with Zone S up to 951 m.

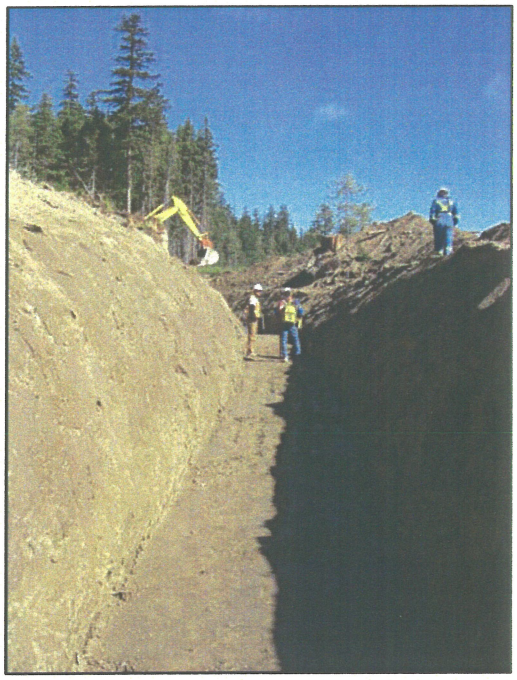


PHOTO 49 – Checking the grade for the diversion ditch extending from the Perimeter to the South Embankment.

PHOTO 50 – Placement of Zone C in three meter lifts along the Perimeter Embankment.

PHOTO 51 – Excavating to 'competent till' north end of the Perimeter Embankment. The area downstream of the Zone F region was excavated to original ground, and Zone FT was placed overtop, after which Zone T was placed.

PHOTO 52 – Markings showing the 'hoe' operator exactly where to place the Zone F material against the Perimeter Embankment

PHOTO 53- Performing a compaction test on the Main Embankment U zone with the nuclear densometer.

PHOTO 54 – The Mount Polley Tailings Storage Facility.