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MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
TAILINGS STORAGE FACILITY

REPORT ON STAGE 4 CONSTRUCTION
(REF.NO. VA101-1/10-1)

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EXECUTIVE SUMMARY

The Mount Polley gold and copper mine is owned by Mount Polley Mining Corporation (MPMC). It is located 56 kilometres northeast of Williams Lake, in central British Columbia. Mount Polley Mine 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 has since been mining at an approximate rate of 18,000 tpd and received a permit on May 25, 2005 approving the Stage 4 construction of the Tailings Storage Facility, which involved raising the elevation of the Tailings Storage Facility embankments to an elevation of 948 m.

The Stage 4 construction program involved constructing an upstream cap on the Stage 3C embankment crests thereby raising the TSF embankments to an elevation of 948 m. The Stage 4 TSF construction program at Mount Polley Mine commenced in May 2005 and was completed in the first week of October 2006. Earthworks for the Stage 4 Tailings Storage Facility construction program comprised the following zones and materials:

- Zone S Fine grained glacial till.
- Zone U Upstream shell zone.
- Zone CBL Coarse Bearing Layer – rockfill.

Placement of Zone C material in the downstream Shell Zone commenced in April 2006. The shell zone construction is officially part of the Stage 5 construction and will be discussed in the Stage 5 construction report.

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 4 design of the TSF.

A total of 22 of the functioning piezometers were accidentally damaged during Stage 4. MPMC and Knight Piésold attempted to locate and splice the damaged piezometers and successfully repaired five of them, leaving the total of functioning piezometers at 34. The results of the instrumentation monitoring show that no unexpected or anomalous pore pressures have developed. Additional piezometers will be installed during the Stage 5 construction program to compensate for those accidentally damaged during Stage 4. Details of the number and locations of the additional piezometers will be presented in the Stage 5 construction report.

Three new inclinometers were installed downstream of the Main Embankment through the Lacustrine unit during Stage 4. This brings the total number of inclinometers to four at the Main Embankment, as inclinometer SI01-01 was damaged during the placement of shell zone material and is no longer functioning. The new inclinometers were read with an inclinometer probe to establish baseline data and a schedule for on-going monitoring was established. There have been no significant deviations in the two inclinometer casings installed in 2001.

The monitoring frequency of the vibrating wire piezometers and inclinometers following the Stage 4 construction program should be 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.

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SECTION 1.0 - INTRODUCTION

1.1 PROJECT DESCRIPTION

The Mount Polley gold and copper mine is owned by Mount Polley Mining Corporation (MPMC). It is located 56 kilometres northeast of Williams Lake, in central British Columbia. 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 has since been mining at an approximate rate of 18,000 tpd and received a permit on May 25, 2005 approving the Stage 4 construction of the Tailings Storage Facility, which involved raising the elevation of the Tailings Storage Facility embankments to an elevation of 948 m. An overall site plan of the Mount Polley Mine is shown on Drawing 100.

1.2 SCOPE OF REPORT

This report documents the Stage 4 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 review of the instrumentation monitoring results. The report also includes a set of "As -Built" drawings corresponding to the Stage 4 construction program.

SECTION 2.0 - STAGE 4 CONSTRUCTION PROGRAM

2.1 GENERAL

The Stage 4 TSF construction program at Mount Polley Mine commenced in May 2005 and was completed in the first week of October 2006. The construction program involved constructing a cap on the Stage 3C embankment crests thereby raising the TSF embankments to an elevation of 948 m. The construction of the tailings embankments has been an ongoing activity, and the Stage 4 construction program evolved into the Stage 5 construction program in October 2006 with a minimal break in the construction activities or construction supervision provided by Knight Piésold Ltd.

The general arrangement of the TSF is shown on Drawing 102. The material specifications are shown on Drawing 104. The Stage 4 Main Embankment Plan and Sections and Details are shown on Drawings 210 and 215 respectively. The Stage 4 Perimeter Embankment Plan and Section and Details are shown on Drawings 220 and 225 respectively. The Stage 4 South Embankment Plan and Section and Details are shown on Drawings 230 and 235 respectively. Select photographs of the construction program are included in Appendix D.

The main components of the TSF are as follows:

- The TSF embankments, which incorporate the following zones and materials:
  - Zone S Core zone - fine grained glacial till.
  - Zone CS Upstream shell - cycloned or spigotted tailings sand.
  - Zone B Embankment shell zones - fine grained glacial till.
  - Zone F Filter, drainage zones, and chimney drain - processed gravel and sand.
  - Zone T Transition filter zone - select well-graded fine-grained rockfill.
  - Zone C Downstream shell zone – rockfill.
  - Zone U Upstream shell zone – parameters vary depending on material availability.
  - Zone CBL Coarse Bearing Layer – rockfill.
- 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 embankments 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 and embankment foundations. This includes vibrating wire piezometers, and slope inclinometers.

- A system of groundwater quality monitoring wells installed around the TSF.

The Stage 4 construction program involved raising the TSF embankments to an elevation of 948 m by constructing a 4.0 m cap on the Stage 3C crest elevation of 944 m. This involved placing Zone S and Zone U materials, and also included the placement of a coarse bearing layer on the tailings surface to create a suitable bearing surface to support the construction of the Zone U material. There was no placement of Zone F, Zone T, or Zone C materials during the Stage 4 construction program.

The Stage 4 program also involved installing three new inclinometers in the Lacustrine unit at the Main Embankment and the installation of piezometers in the tailings beaches beneath the coarse bearing layer.

Zone S material was also placed on the knoll between the South and Main Embankments to ensure that the basin liner in this area had a minimum thickness of 2.0 m.

2.2 QUALITY ASSURANCE/QUALITY CONTROL

Knight Piésold provided the Stage 4 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 Ltd. 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 Excavation and MPMC completed 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 work. 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 test results are presented in Appendix A.

The Stage 4 construction program extended through the winter months of 2005/2006. The portion of the construction program that was completed during freezing conditions was monitored carefully by Knight Piésold to ensure that the work was carried out in accordance with the Technical Specifications.

2.3 STAGE 4 EARTHWORKS

2.3.1 General

Earthworks for the Stage 4 Tailings Storage Facility construction program comprised the following zones and materials:

- Zone S Fine grained glacial till.
- Zone U Upstream shell zone.
- Zone CBL Coarse Bearing Layer – rockfill.

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

2.3.2 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 No. 2, which is located downstream of the left (East) abutment of the Main Embankment. The Control test results for the Zone S material are presented in Appendix A and summarized on Table 2.1. The results of the Control particle size analyses on the Zone S material are shown on Figure 2.1.

The Specification for Zone S material 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 typically too wet for use as construction material and was removed by pushing upstream of the crest onto the tailings beach.

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 23 Zone S Record samples were collected and tested in a soils laboratory during the Stage 4 construction program. A total of 15 of these samples were tested for atterberg limits, laboratory compaction, and moisture content, while all 23 of the record samples were tested for particle size distribution. 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 on 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 6.7 to 15.1 percent, with an average of 10.8 percent. The Standard Proctor Maximum Dry Density ranged from 1,950 to 2,100 kg/m^3, with an average of 2,032 kg/m^3. The plastic limits ranged from 13.7 to 19.1 percent, with an average of 16.2 percent. The liquid limits ranged from 21.6 to 29.1 percent, with an average of 24.7 percent. The plasticity index ranged from 5.6 to 11.4 percent, with an average of 8.6 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 4 construction program was consistent with the Zone S materials used in previous construction programs.

An additional 248 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 1,695 to 2,313 kg/m^3, with an average of 2,038 kg/m^3, with the compacted moisture content ranging from 6.5 to 20.0%, with an average of 10.9%. The percent compaction as compared to the Standard Proctor maximum dry density ranged from 83.5 to 106.9%, with an average of 99.7%. Compacted materials that failed to meet the compaction requirements were 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 C.

2.3.3 Zone U

Zone U forms the upstream shell zone immediately adjacent to Zone S and is required to provide 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 Perimeter and South Embankments. The sand cells involved discharging tailings into constructed cells upstream of the embankment. The confining berms had culverts installed into them 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 if the required man-power was 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 the Perimeter Embankment as well as on the South Embankment between Ch. 6+50 and 9+75.

Lab testing was performed on 11 Zone U record samples to determine particle size distributions (ASTM D422). The Record Tests indicate that the Zone U material from Borrow Area No. 3 generally consisted of gravelly sand, with the fines content ranging

from 3 to 61%. The Zone U gradations from the sand cells indicate that this material generally consisted of fine sand. The gradation curves of the Zone U Record Tests are shown on Figure 2.7. The Photographs showing the construction of the sand cells are included in Appendix D.

2.3.4 Coarse Bearing Layer

A Coarse Bearing Layer (CBL) was placed on top of the tailings beach adjacent to the embankments to provide a suitable 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 INSTRUMENTATION MONITORING

2.4.1 Vibrating Wire Piezometers

A total of 57 vibrating wire piezometers have been installed at the TSF along eight planes designated as Monitoring Plans A to H. The monitoring planes for the Main Embankment, the Perimeter Embankment, and the South embankment are shown on Drawings 251, 252, and 254 respectively. The piezometer locations for the monitoring planes are shown in section on Drawings 256 to 259. The piezometers are grouped into tailings, foundation, embankment fill and drain piezometers. The piezometers were discussed in detail in the Knight Piésold Ltd. "Report on 2005 Annual Inspection, (Ref. No. VA101-01/11-1).

Thirteen months of piezometer data is missing from July 30, 2003 to September 2, 2004, and no piezometer data was collected from Sept 22, 2005 to April 30 2006. The current gap in missing piezometer data was due to a malfunctioning readout box connecter cable and the accidental destruction or burying of piezometer cables during the Stage 4 construction program.

There were 51 piezometers still functioning at the start of 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 piezometer readings were resumed for the piezometers that were damaged once the cables were repaired and the timeline plots updated. The pieziometers that were not damaged during the construction program were read on a weekly basis. The number of functioning piezometers has now been reduced to 34. Additional piezometers will be installed during the Stage 5 construction program to compensate for those accidentally damaged during Stage 4.

No unexpected or anomalous pore pressures were observed while monitoring the vibrating wire piezometers during the construction program. The timeline plots for the

piezometers on planes A through H are shown on Figures 2.8 to 2.15 respectively. The timeline plots indicate that the pore pressures increased slightly in piezometers A2-PE2-03, B2-PE2-03, and B2-PE1-02, which are fill piezometers installed in the Zone S glacial till. These pore pressure increases were expected as these piezometers have shown similar trends in previous construction programs where the pore pressures have increased during fill placement activities and subsequently decreased following the construction programs as the pore pressures dissipate.

2.4.2 Slope Inclinometers

A total of three new slope inclinometers were installed downstream of the toe of the Main Embankment during the Stage 4 construction program. One of the inclinometers installed in 2001 (SI01-01) was damaged during the placement of the shell zone material and is no longer functioning. The last reading for SI01-01 was March 2006. There are four functioning inclinometers installed at the Main Embankment. The drill logs, installation details, and lab results for the three new inclinometers are included in Appendix B.

A 'poor-boy' monitoring rod was also used twice a month during the construction program to ensure that casing deformation due to soil movement associated with settlement or instability could be identified. MPMC purchased an inclinometer probe in August 2006 and the slope inclinometers are now being read once per month with the new probe to monitor any movement in the Main Embankment and the underlying lacustrine unit.

The results of the inclinometer readings and 'poor-boy' measurements 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 4 construction program. The results of the readings for inclinometers SI01 to SI05 are shown on Figures 2.16 to 2.20 respectively.

2.4.3 Drain Flow Data

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 were taken. The flow rates for the Main Embankment upstream toe drain are shown on Figure 2.1, which illustrates that the flows have increased since 2005, with the current flows ranging from 9 to over 13 l/s. The flow rates for the Main Embankment foundation drains are shown on Figure 2.22, which shows that flows have remained fairly constant since the flow measurements resumed in December 2005, and range from near 0 zero to about 1.8 l/s.

Samples from the Foundation Drains and the Upstream Toe Drain are collected by MPMC for water quality testing. The results are available from MPMC and are reported in the Annual Environmental Reports.

A new foundation drain was added at the South and Main Embankment junction between chainages 14+00 and 16+00 to intercept seepage in underlying fractured bedrock in this area and route it to the Main Embankment Seepage Collection and Recycle Pond.

2.4.4 Survey Monuments

Six survey monuments were installed on the Stage 3B embankment crest following the 2001 construction. These have since been covered during subsequent construction programs. The initial plan was to install additional survey monuments on the embankment crests following the completion of the Stage 4 construction program; however, this was not practical due to the ongoing construction of the TSF embankments. Monuments will be established in the summer of 2006.

2.5 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 4 construction program were as follows:

- The fine limit of the Zone U material was adjusted to allow for the use of the coarse tailings sand as a construction material.
- A foundation drain was added at the approximate chainages of 14+00 and 16+00 to intercept seepage encountered at this area. The flows were routed to the Main Embankment Seepage Collection Pond.

SECTION 3.0 - SUMMARY AND RECOMMENDATIONS

Stage 4 of the Mount Polley Mine Tailings Storage Facility was constructed between May 2005 and October 2006. The Stage 4 construction program involved raising the TSF embankments to an elevation of 948 m, which involved placing a 4 m cap on the existing Stage 3C crest of 944 m. This involved placing Zones S and Zone U materials within an upstream raise that extended partially on top of the sandy tailings beaches.

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 a full time dozer to segregate the full tailings stream, otherwise the material had to be wasted into the TSF as it did not drain properly.

Low permeability glacial till or "Zone S material" was also placed on the knoll between the South and Main Embankments to ensure that the basin liner in this area had a minimum thickness of 2.0 m.

The results of the Stage 4 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 4 design of the TSF.

Three new inclinometers were installed at the Main Embankment downstream of the ultimate toe to provide a means of measuring potential deflections in the Lacustrine unit. Inclinometer SI01-01, which was installed in 2001 was damaged during placement of the shell zone material and is no longer functioning. The total number of inclinometers at the Main Embankment is now four. There have been no significant deflections measured in any of the inclinometers.

Technical supervision of the work by Knight Piésold included QA/QC testing and monitoring the existing vibrating wire piezometers and inclinometers. The QA/QC testing included collecting and testing Record samples, and 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 4 design of the TSF.

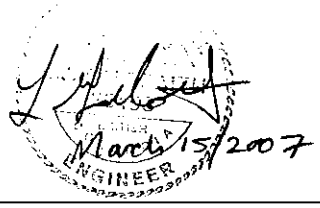
The piezometers were measured on a weekly basis using a VWP Indicator readout box and the inclinometers were measured twice a month using a "poor boy" probe. The inclinometers were also read using a SINCO inclinometer probe to provide a more detailed assessment of any significant deviations in the inclinometer casing since their installation in 2001. 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. MPMC has purchased an inclinometer probe and measurements are now completed on a monthly basis.

The vibrating wire piezometers, inclinometers, and survey monuments 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 runoff from the 24-hour PMP, in addition to regular inflows from other precipitation runoff, including the spring freshet, while maintaining the minimum freeboard requirements. The tailings pond elevation should be monitored on a regular basis to ensure that the stormwater and freeboard requirements are maintained during operations.

SECTION 4.0 - CERTIFICATION

This report was prepared and approved by the undersigned.



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Approved by: Mar 15, 2007

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TABLE 2.1

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
STAGE 4 CONSTRUCTION PROGRAM

ZONE S CONTROL SAMPLES - SUMMARY

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Revised: 05-Mar-07

Sample No.	Atterberg Limits			MC	Grain Size Analysis				Standard Proctor				MC
					Gravel	Sand	Silt	Clay	Uncorrected		Corrected		Deviation From Optimum (%)
	L.L. (%)	P.L. (%)	P.I. (%)	M.C. (%)	> #4 (%)	#4 to #200 (%)	#200 to .002 (%)	< .002 (%)	Max D.D. (kg/m³)	Opt. M.C. (%)	Max D.D. (kg/m³)	Opt. M.C. (%)	
KP06-ZS-04C	18.9	18.0	2.9	14.2	10	19	58	13	1980	11.5	2030	10.5	3.7
KP06-ZS-05C	23.5	14.2	9.3	11.2	20	32	35	13	2040	10.5	2140	8.5	2.7
KP06-ZS-06C	23.3	14.2	9.1	10.4	18	30	39	13	2020	10.5	2090	9.5	0.9
KP06-01-C	25.0	15.7	9.3	13.2	16	40	27	17	2012	11.3	2092	9.7	3.5
KP06-02-C	31.9	20.0	11.9	15.8	18	34	31	18	1970	12.5	2059	10.6	5.2
KP05-88	25.2	16.9	8.3	11.3	8	34	58		2040	12.0	2085	11.0	0.3
KP05-93	23.4	14.6	8.8	7.6	19	34	47		2030	11.0	2131	9.1	-1.5
KP05-79	*N/A*	*N/A*	*N/A*	*N/A*	6	36	58		1900	15.5	1930	14.7	*N/A*
KP05-74	*N/A*	*N/A*	*N/A*	*N/A*	16	38	46		1990	12.5	2068	10.8	*N/A*
KP05-60	25.1	18.6	6.5	12.9	18	34	48		2080	10.5	2162	8.8	4.1
KP05-61	23.3	15.7	7.6	10.9	20	34	46		2080	10.5	2174	8.6	2.3
KP05-58	*N/A*	*N/A*	*N/A*	*N/A*	13	36	51		1970	13.0	2039	11.4	*N/A*
AVERAGE	24.4	16.4	8.2	11.9	15	33	42	15	2009	12	2083	10.3	2.4
MAXIMUM	31.9	20.0	11.9	15.8	20	40	58	18	2080	15.5	2174	14.7	5.2
MINIMUM	18.9	14.2	2.9	7.6	6	19	27	13	1900	10.5	1930	8.5	-1.5

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TABLE 2.2

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE
STAGE 4 CONSTRUCTION PROGRAM

ZONE S RECORD SAMPLES - SUMMARY

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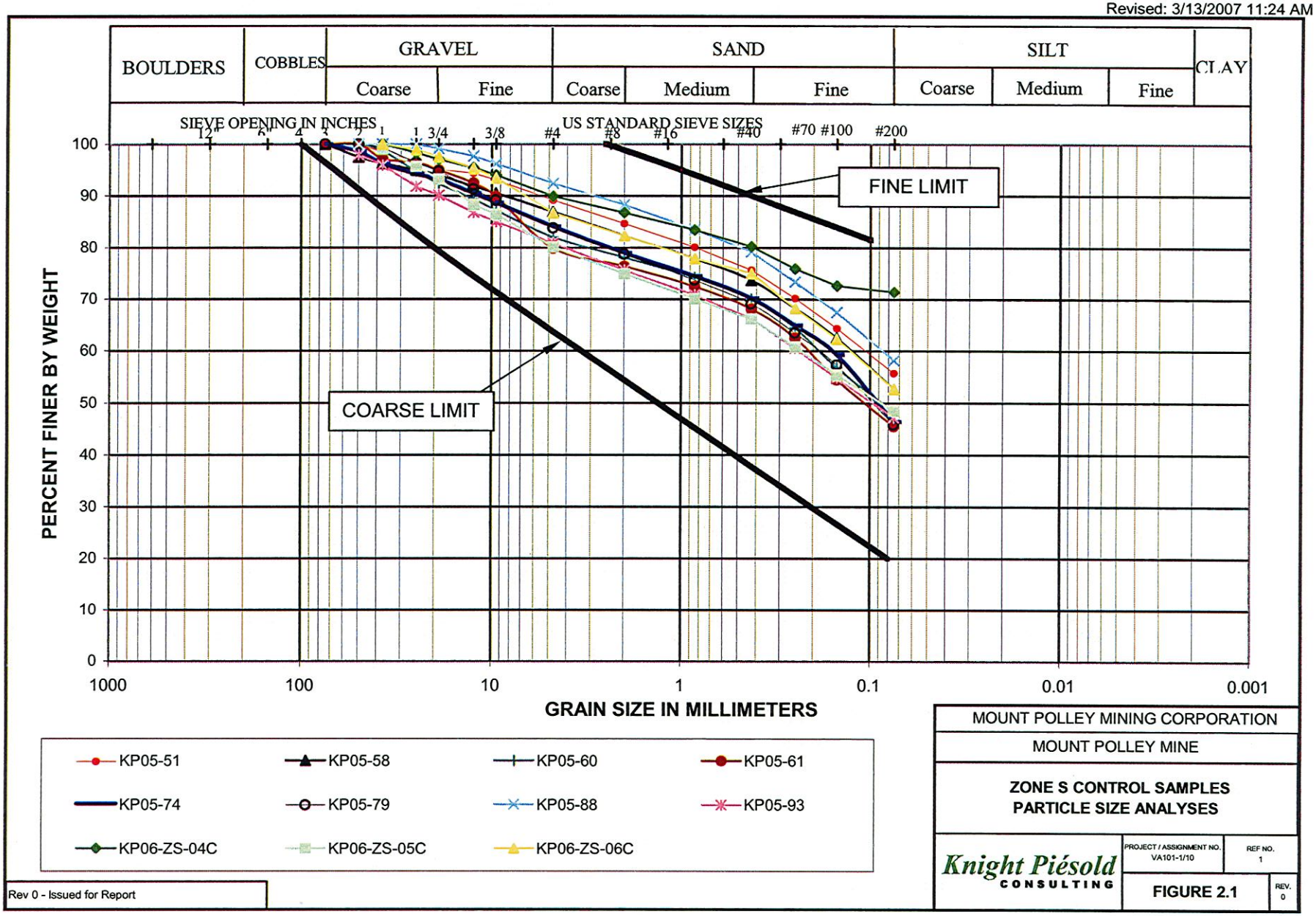
Revised: 05-Mar-07

Sample No.	Atterberg Limits			MC	Grain Size Analysis				Standard Proctor				MC
					Gravel	Sand	Silt	Clay	Uncorrected		Corrected		Deviation From Optimum (%)
	L.L. (%)	P.L. (%)	P.I. (%)	M.C. (%)	> #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. (%)	
KP-05-57	*N/A*	*N/A*	*N/A*	11.3	24	34	42		2100	10.5	2211	8.2	3.1
KP05-59	*N/A*	*N/A*	*N/A*	14.1	5	20	75		1960	12.0	1984	11.5	2.6
KP-05-62	23.6	15.6	8.0	12.3	22	30	48		2040	11.0	2145	8.9	3.4
KP05-63	26.3	14.9	11.4	11.4	18	30	52		2050	11.0	2133	9.3	2.1
KP05-64	24.3	13.7	10.6	11.9	14	34	52		2090	9.5	2153	8.3	3.6
KP05-65	25.9	15.9	10.6	10.7	18	32	50		2060	11.5	2142	9.7	1.0
KP05-66	22.0	15.8	6.2	10.4	20	32	48		2050	11.5	2139	9.6	0.8
KP05-67	25.7	17.9	7.8	10.3	15	33	52		2070	10.5	2141	9.1	1.2
KP05-68	21.6	16.0	5.6	9.6	19	34	47		2050	11.0	2140	9.1	0.5
KP-05-76	*N/A*	*N/A*	*N/A*	*N/A*	12	38	50		2010	12.0	2066	10.8	*N/A*
KP-05-77	*N/A*	*N/A*	*N/A*	*N/A*	12	39	49		2000	11.5	2056	10.3	*N/A*
KP-05-78	*N/A*	*N/A*	*N/A*	*N/A*	16	38	46		2040	11.0	N/A	N/A	*N/A*
KP05-80	*N/A*	*N/A*	*N/A*	*N/A*	12	36	52		2010	12	2069	10.7	*N/A*
KP-05-83	*N/A*	*N/A*	*N/A*	*N/A*	13	33	54		1990	11.5	2055	10.2	*N/A*
KP-05-84	*N/A*	*N/A*	*N/A*	*N/A*	10	32	58		1970	13.0	2024	11.8	*N/A*
KP05-85	26.8	17.3	9.5	11.1	11	32	57		2000	13.0	2054	11.7	-0.6
KP05-86	23.8	15.4	8.4	6.7	12	38	50		2060	10.5	2114	9.4	-2.7
KP05-87	26.6	17.8	8.8	8	10	33	57		2020	11.5	2070	10.4	-2.4
KP05-91	25.4	15.7	9.7	10.9	10	35	55		2010	12.5	2059	11.4	-0.5
KP05-92	23	15.7	7.4	8.7	24	31	45		2040	11.5	2078	10.7	-2.0
KP05-94	23.4	17.3	6.1	11.1	22	34	44		2080	9.5	2186	7.7	3.4
KP05-95	29.1	19.1	10	15.1	19	37	44		1950	13.0	2052	10.8	4.3
KP06-ZS-01R	23.7	14.3	9.4	10.1	19	33.9	47		2080	9.5	2170	8.0	2.1
AVERAGE	24.7	16.2	8.6	10.8	16	33	51		2032	11.3	2102	9.9	1.2
MAXIMUM	29.1	19.1	11.4	15.1	24	39	75		2100	13.0	2211	11.8	4.3
MINIMUM	21.6	13.7	5.6	6.7	5	20	42		1950	9.5	1984	7.7	-2.7

M:\1\01\00001\10\A\Report\1-Report on Stage 4 Construction\Figures\[Zone S,F,U,T and C.xls]Zone S Control_Fig2.1

Print: 3/13/2007 11:24 AM
Revised: 3/13/2007 11:24 AM



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MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S CONTROL SAMPLES
PARTICLE SIZE ANALYSES

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/10

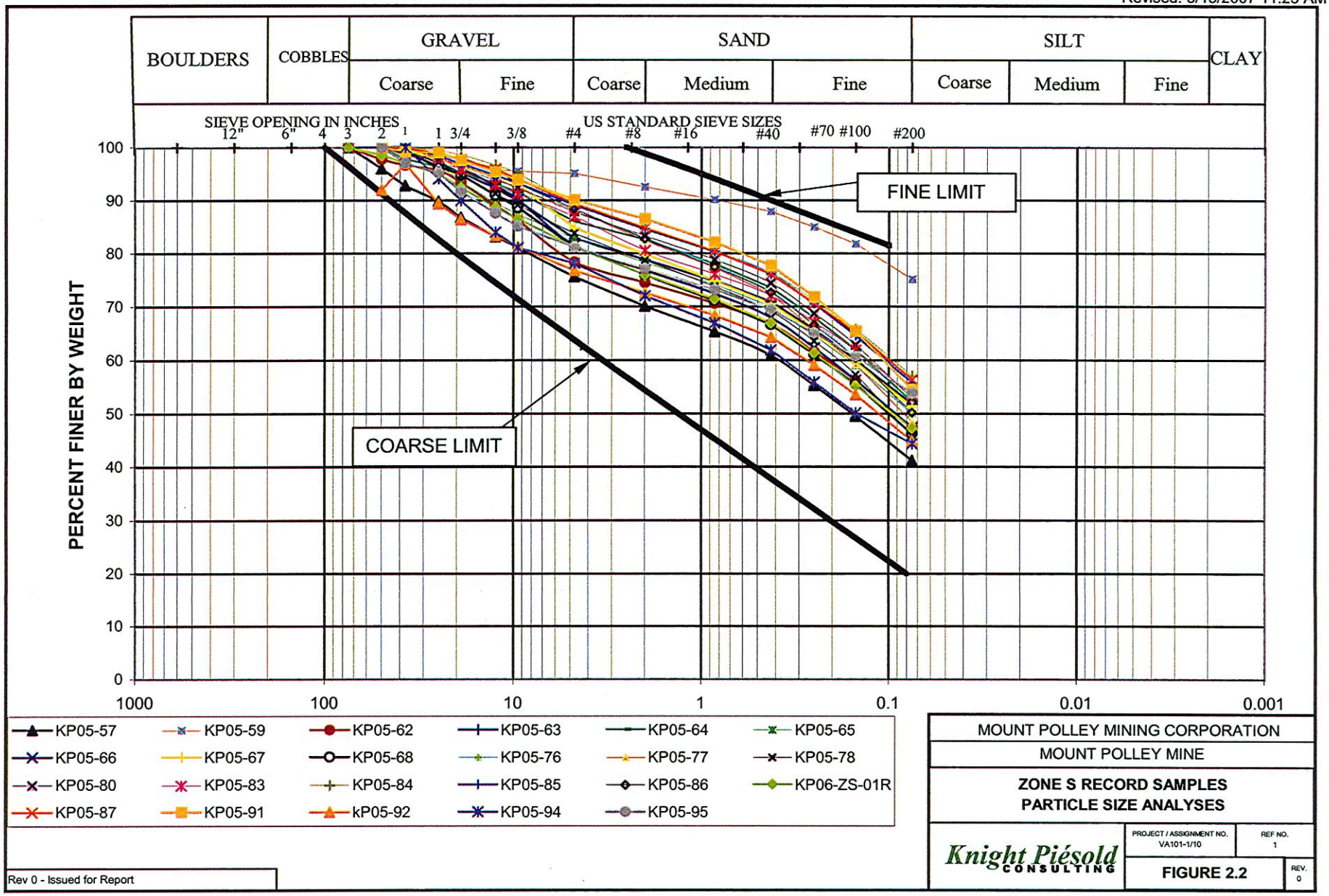
REF NO. 1

FIGURE 2.1

REV. 0

M:\1\01\00001\10\A\Report\1-Report on Stage 4 Construction\Figures\[Zone S,F,U,T and C.xls]Zone S Record_Fig2.2

Print: 3/13/2007 11:23 AM
Revised: 3/13/2007 11:23 AM



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MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD SAMPLES
PARTICLE SIZE ANALYSES

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/10

REF NO. 1

FIGURE 2.2

REV. 0

M:\1\01\00001\10\A\Report\1-Report on Stage 4 Construction\Figures\[Fig 2.3 to 2.6.xls]FIG 2.3

Print: 3/13/2007 11:30 AM
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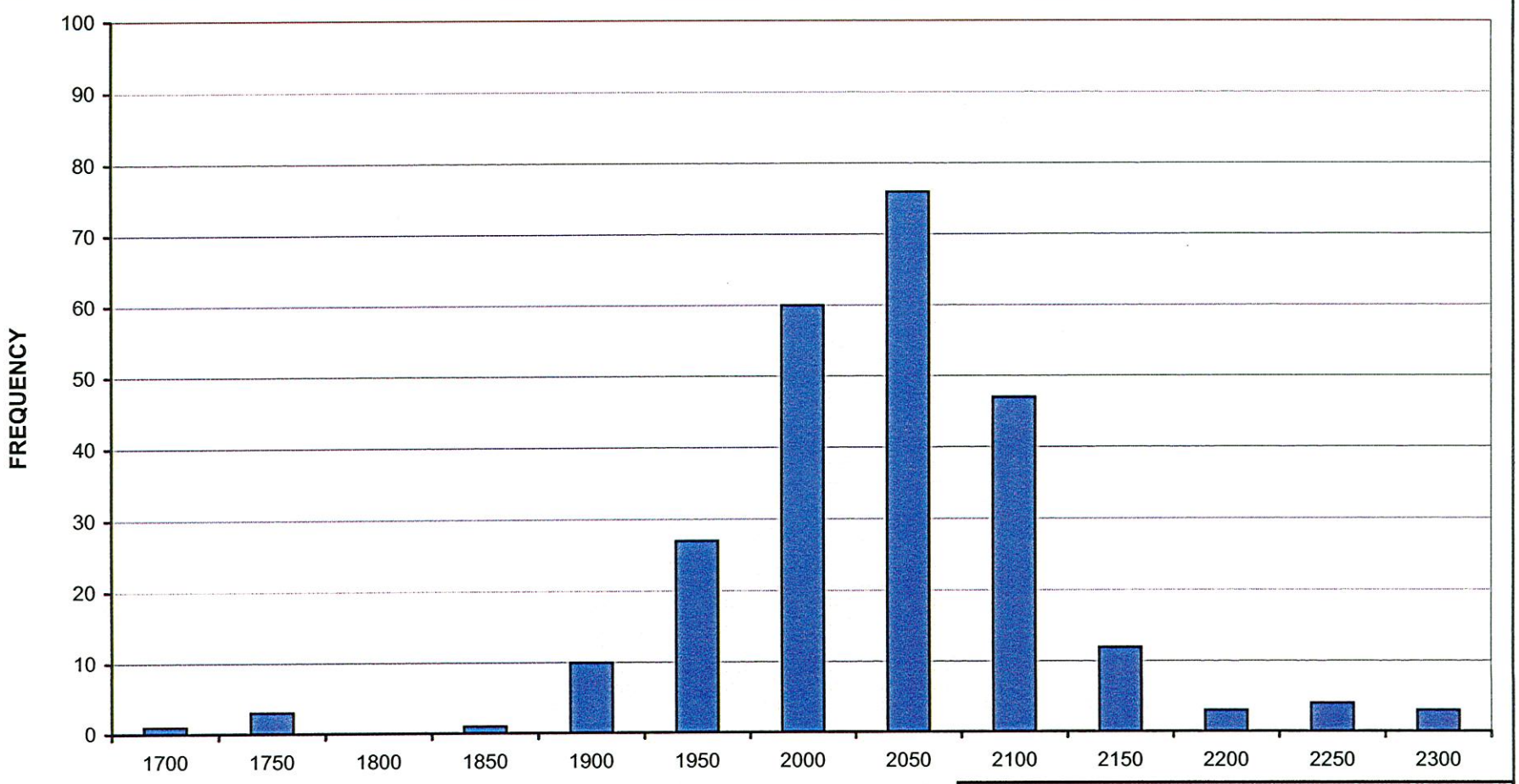

Notes:
1. The compacted dry density was measured using a nuclear densometer.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD TESTS
DRY DENSITY

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/10	1

FIGURE 2.3

REV. 0

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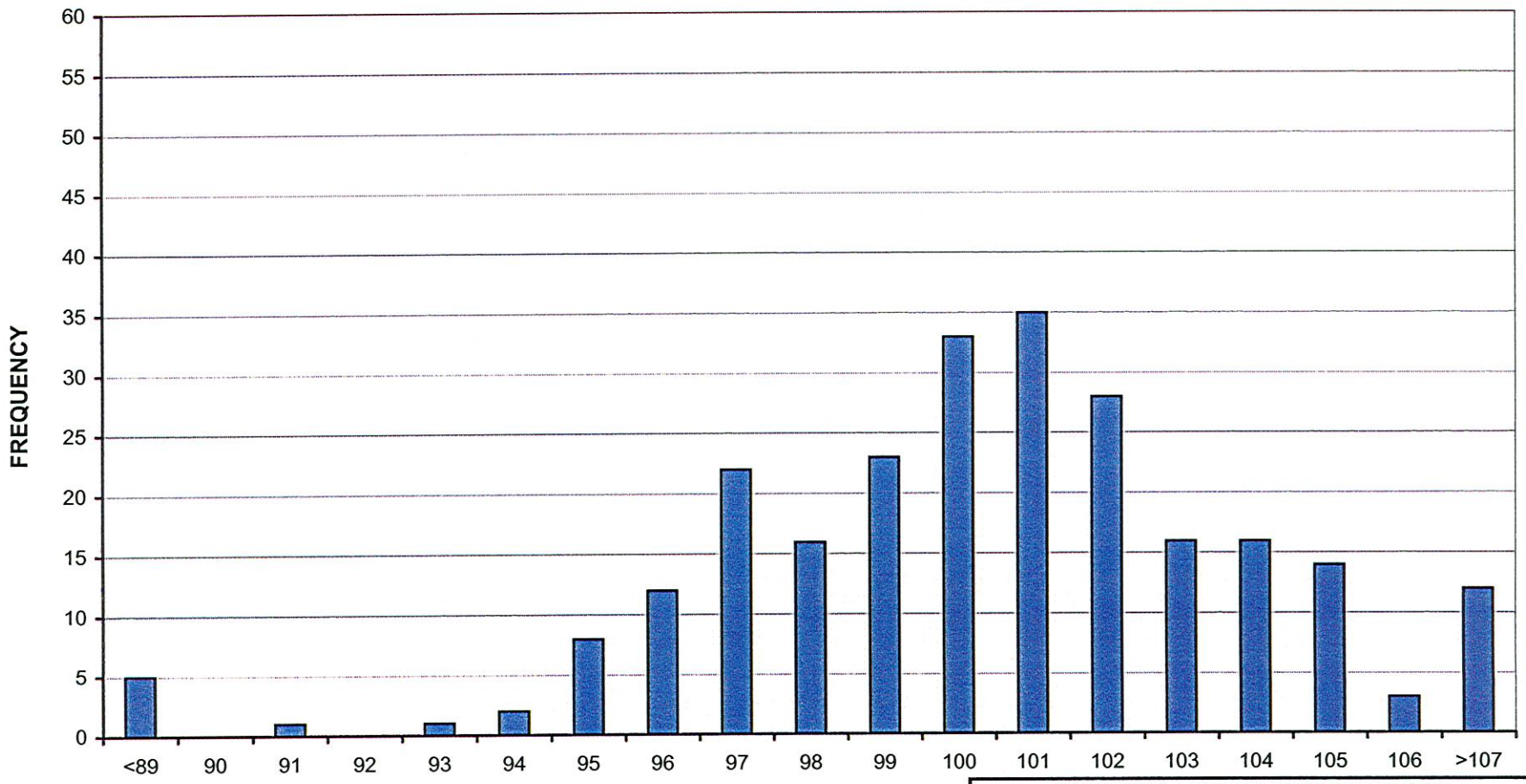

Notes:
1. The field dry density was measured using a nuclear densometer. The nuclear densometer test results compared to Zone S control and record tests for comparison.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD TESTS
PERCENT COMPACTION

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PROJECT / ASSIGNMENT NO. VA101-1/10

REF NO. 1

FIGURE 2.4

REV. 0

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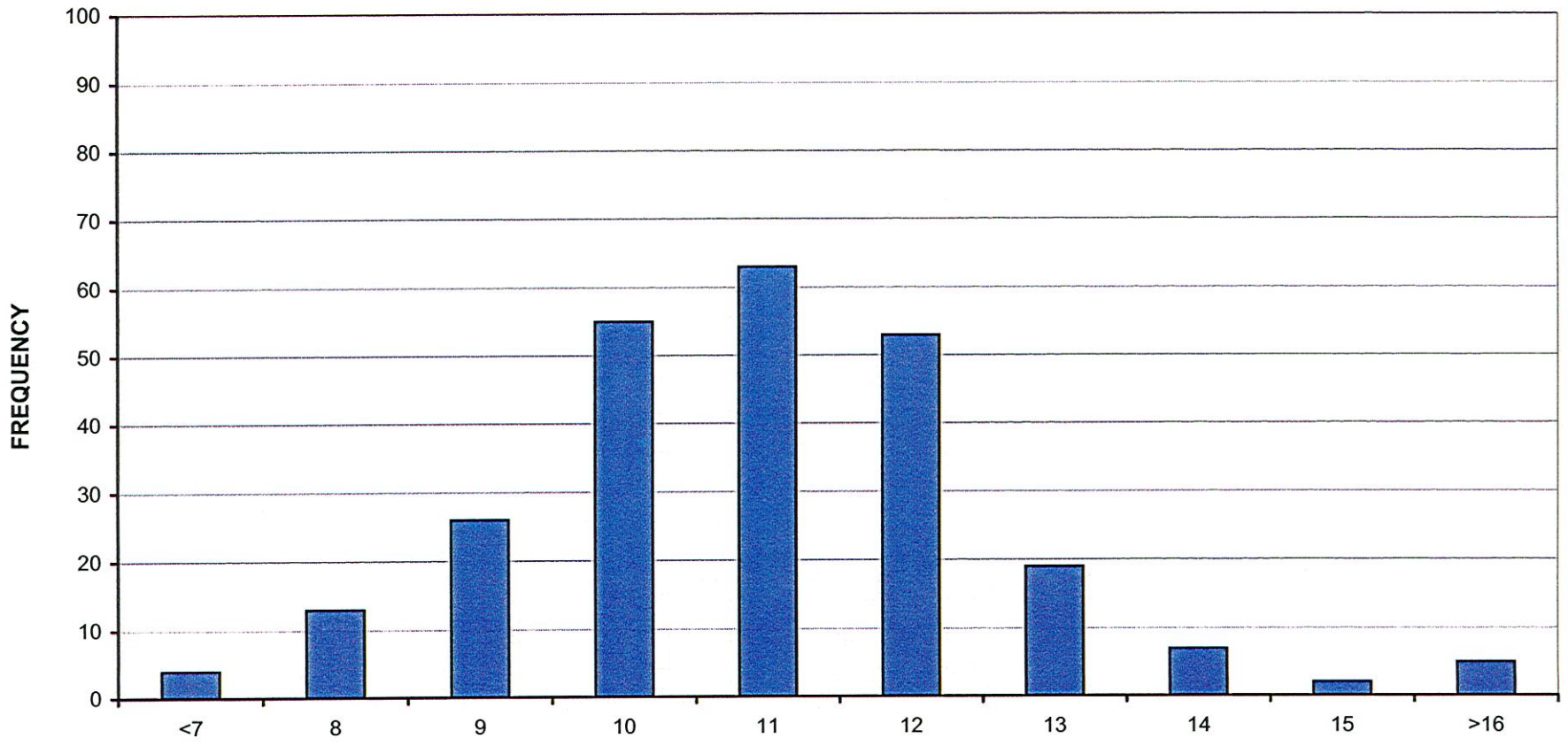

Notes:
1. The compacted moisture content was measured using a nuclear densometer.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD TESTS
MOISTURE CONTENT

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/10

REF NO. 1

FIGURE 2.5

REV. 0

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M:\1\01\00001\10\A\Report\1-Report on Stage 4 Construction\Figures\[Fig 2.3 to 2.6.xls]FIG 2.6

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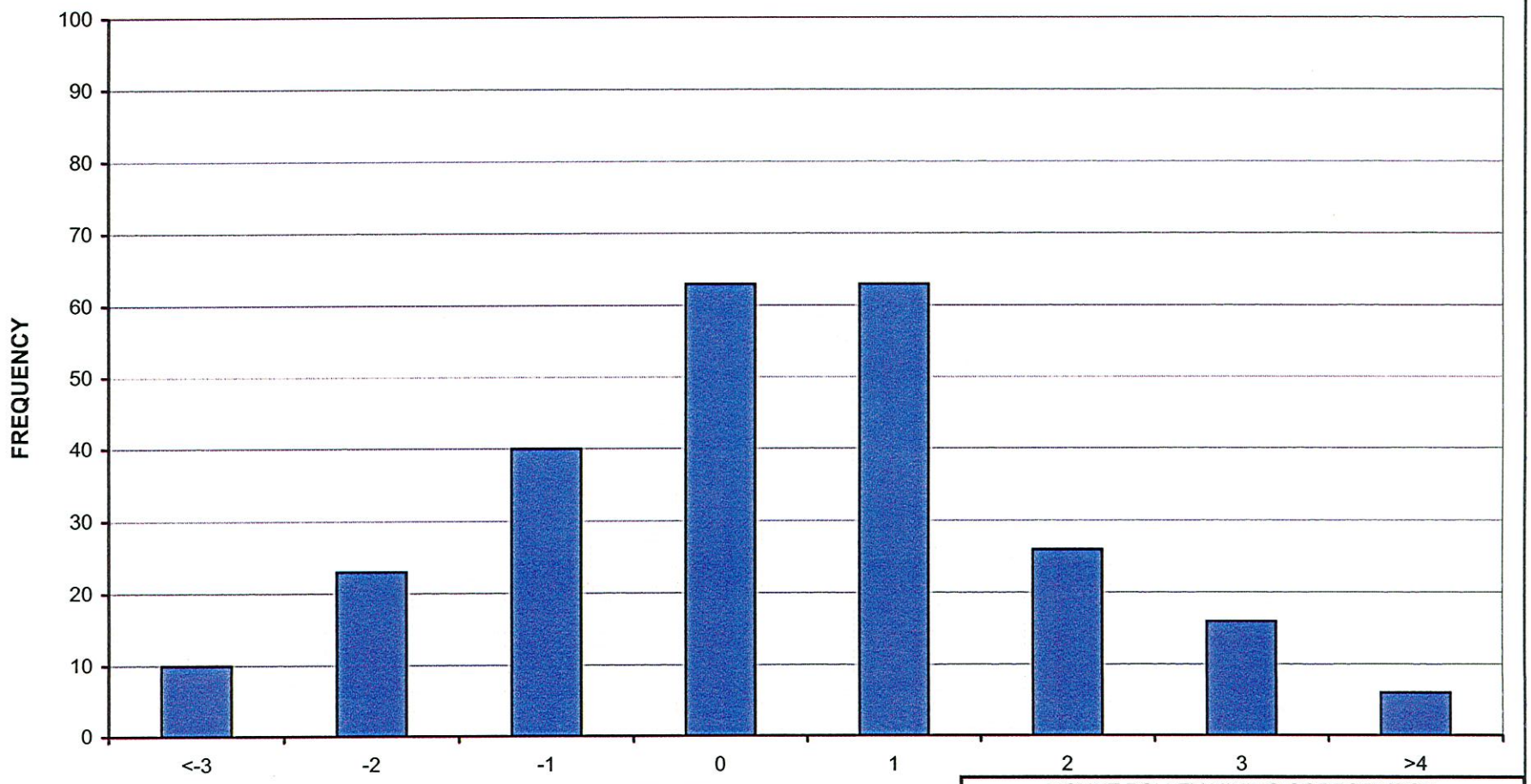

Notes:
1. The Optimum Moisture Content refers to the Standard Proctor Optimum Moisture Content.
2. The compacted moisture content was measured using a nuclear densometer. The nuclear densometer test results compared to Standard Proctor Optimum Moisture Content for comparison.

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MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE S RECORD TESTS
DEVIATION FROM OPTIMUM MOISTURE CONTENT

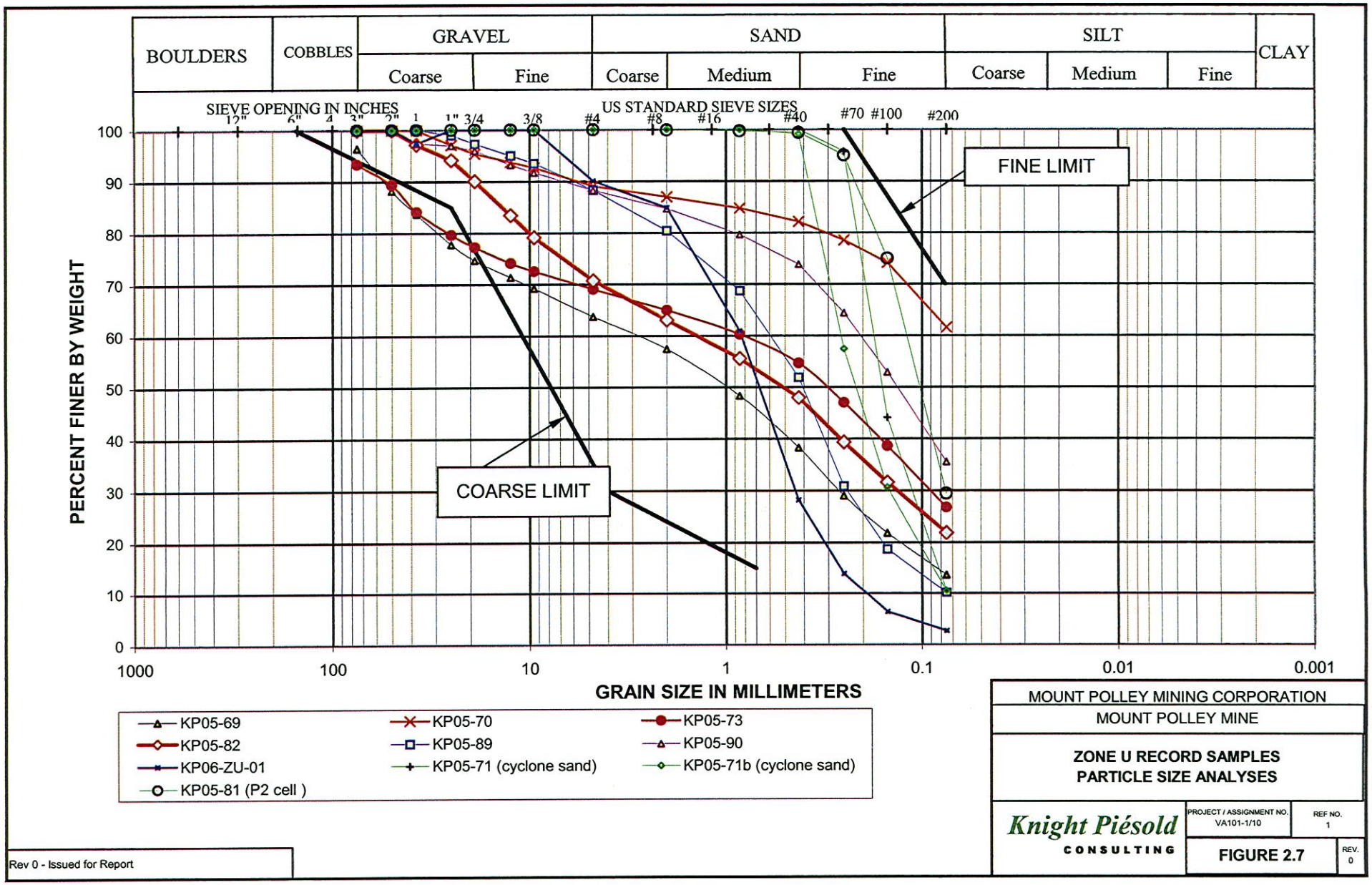
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/10

REF NO. 1

FIGURE 2.6

REV. 0



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

ZONE U RECORD SAMPLES
PARTICLE SIZE ANALYSES

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/10 | REF NO. 1

FIGURE 2.7 | REV. 0

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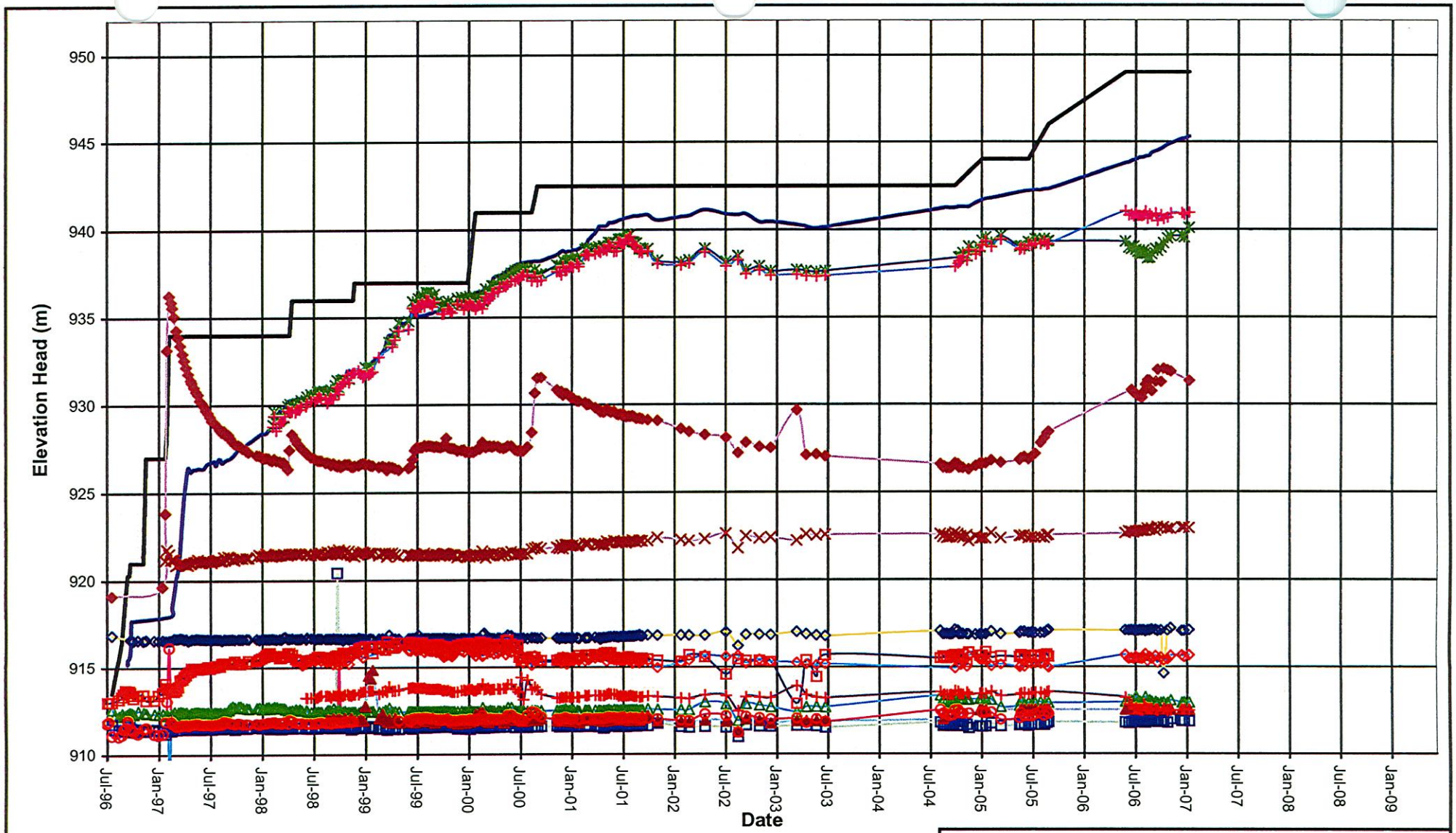

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE A PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA101-1/10	1	0

FIGURE 2.8

Rev 0 - Issued for Report

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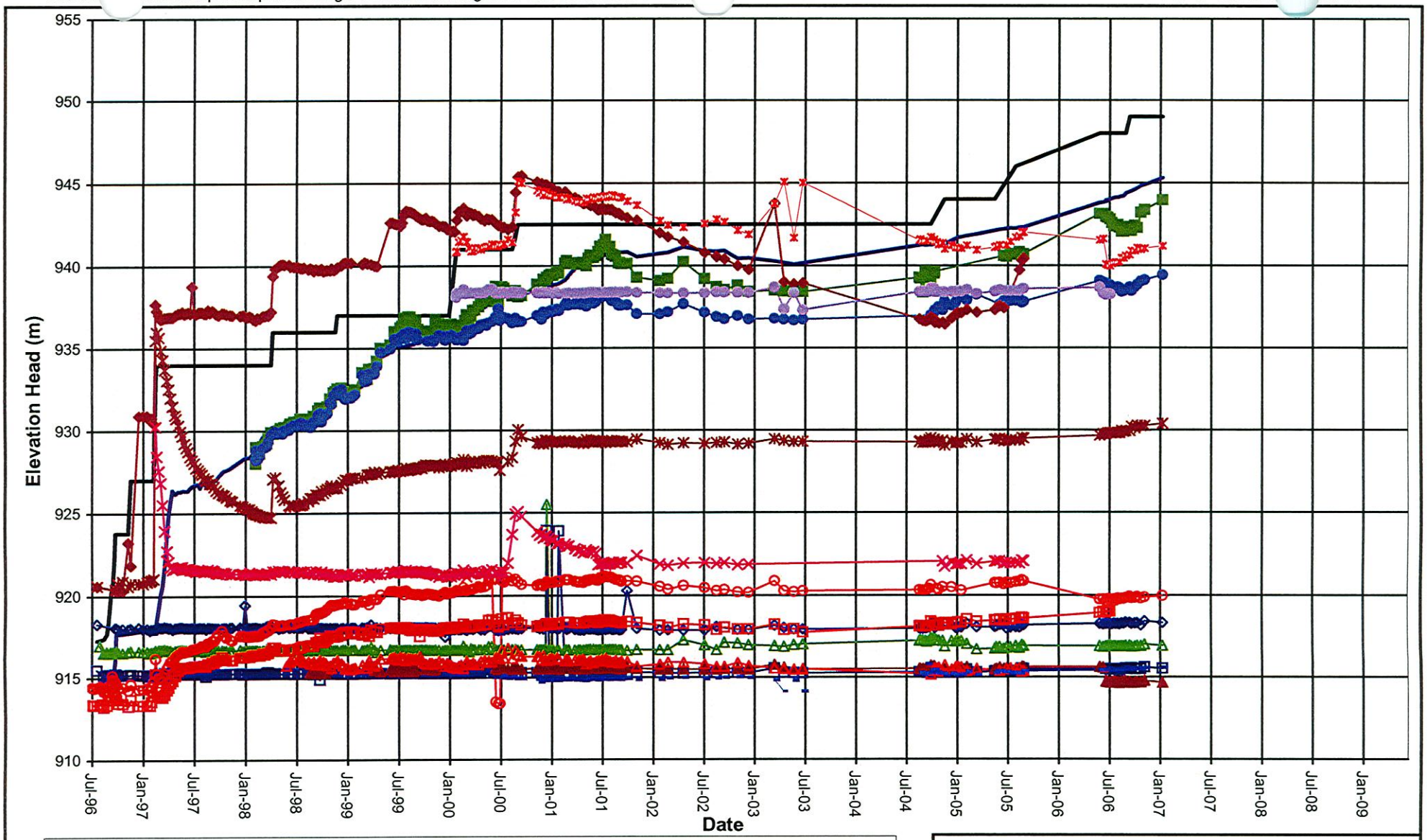

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MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

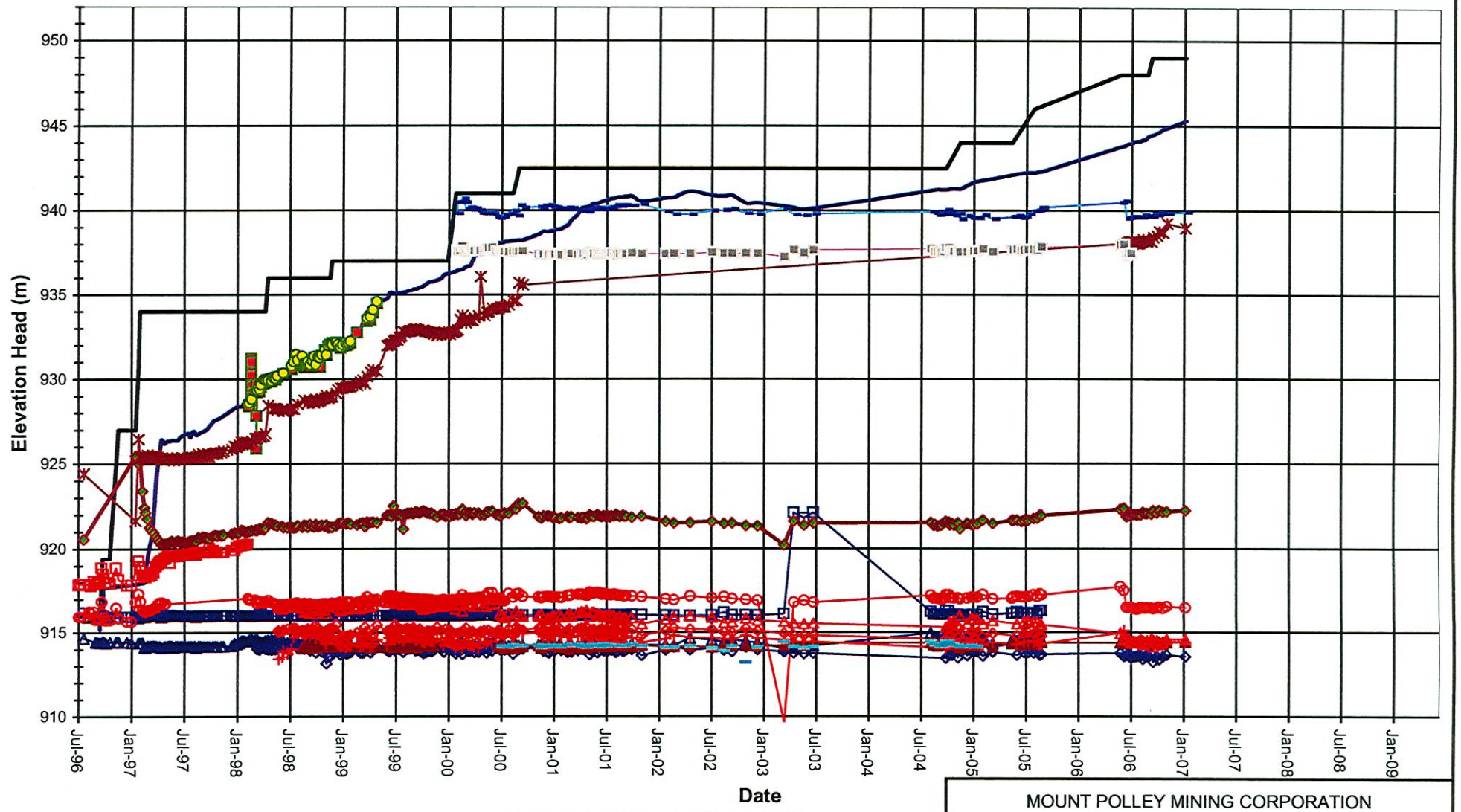
PLANE B PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/10	1	0

FIGURE 2.9

M:\1\01\10\A\Report\Report on Stage 4 Construction\Figures\Plane C 2006.xls Fig 2.10 Rev'd: 03/07/200 52 AM



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE C PIEZOMETERS
ELEVATION HEAD vs. TIME

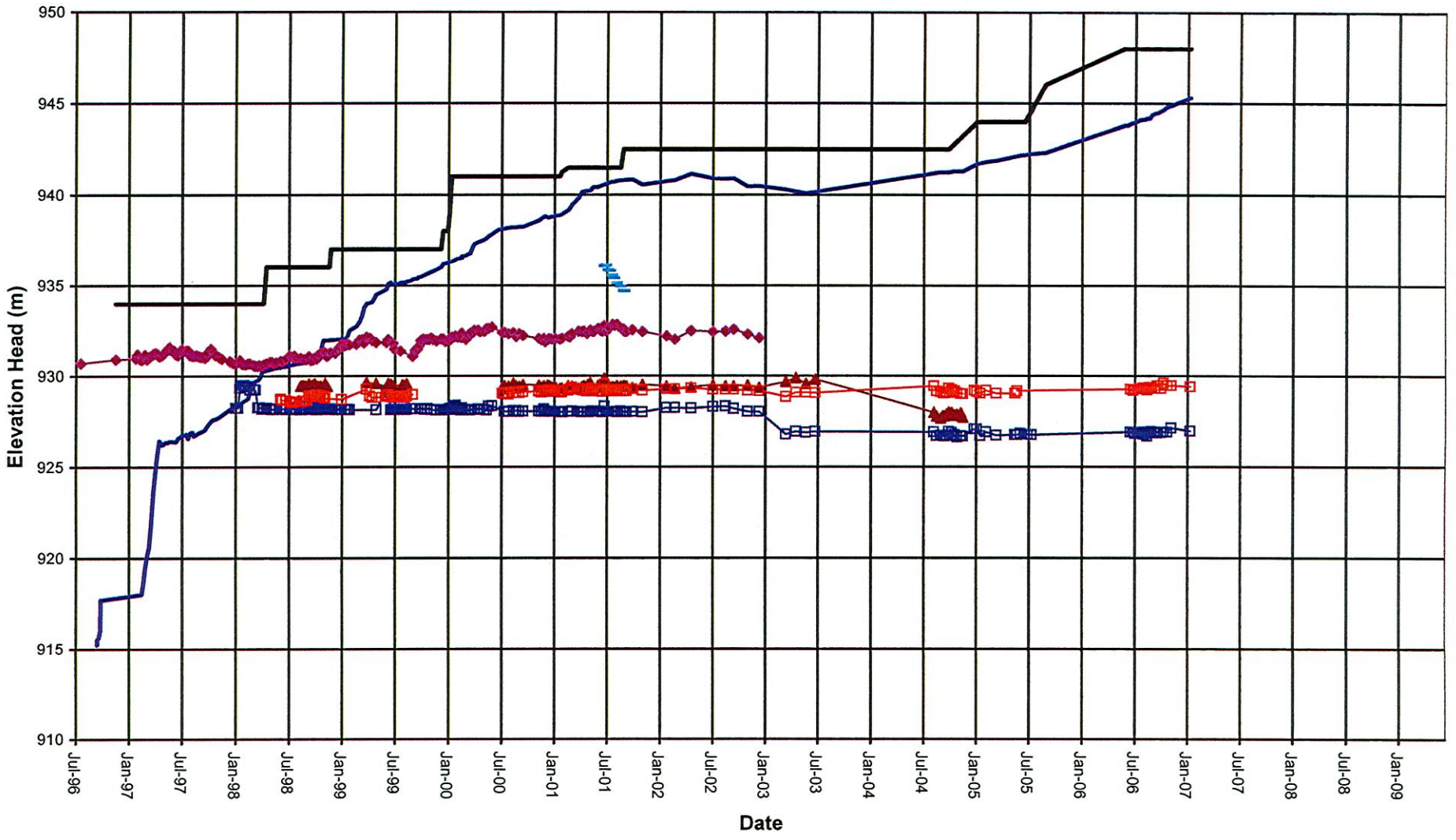
Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV
VA 101-1/10	1	0

FIGURE 2.10

Rev 0 - Issued for Report

M:\1\01\00001\14\A\Data\Piezos\Piezo Planes\[Plane C 2005.xls]All Piezos



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE D PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA 101-1/10	1	0

FIGURE 2.11

Rev 0 - Issued for Report

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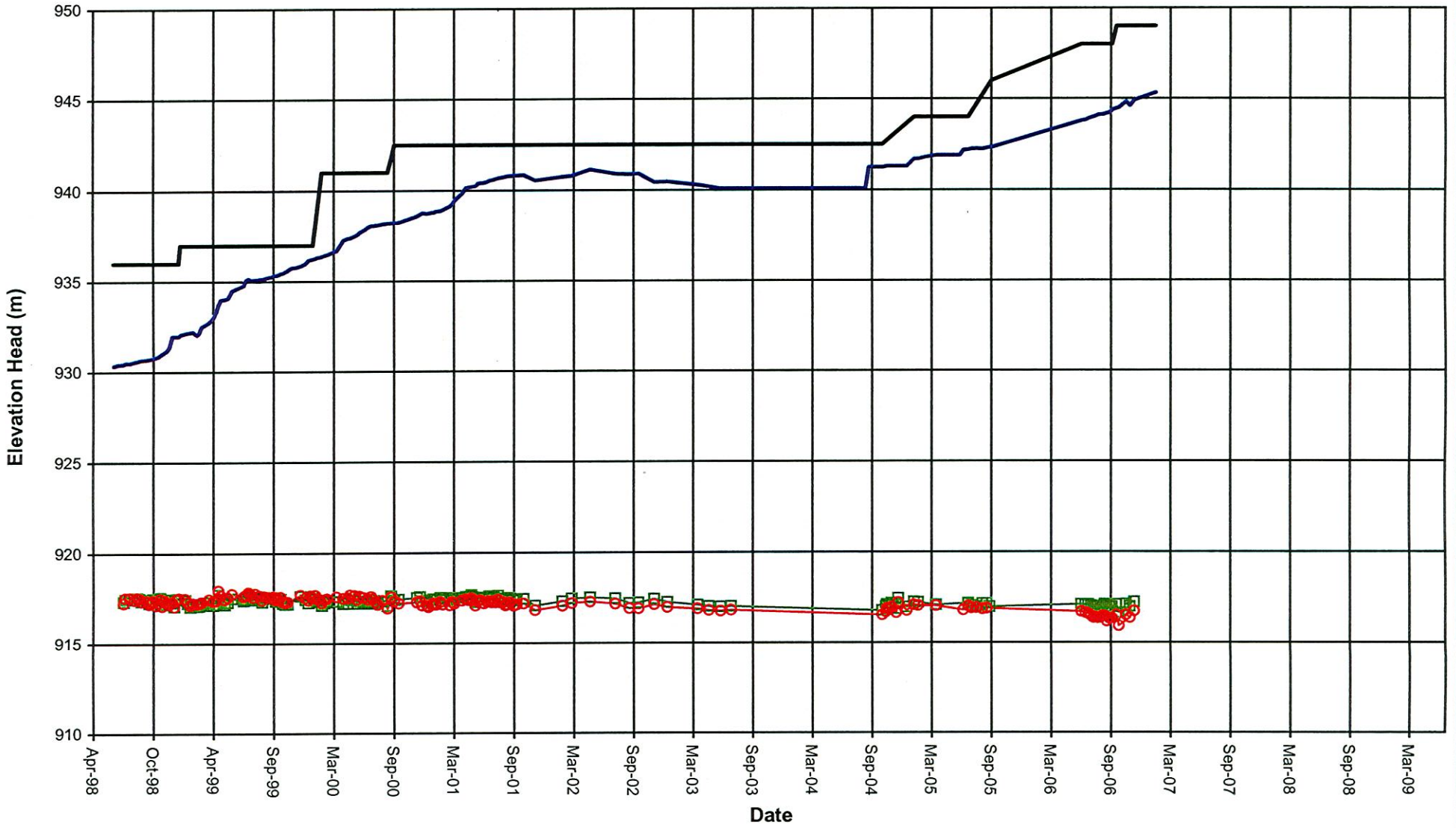

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE E PIEZOMETERS
ELEVATION HEAD vs. TIME

Knight Piésold CONSULTING

PROJECT NO.	REF. NO.	REV.
VA101 - /10	1	0

FIGURE 2.12

Rev 0 - Issued for Report

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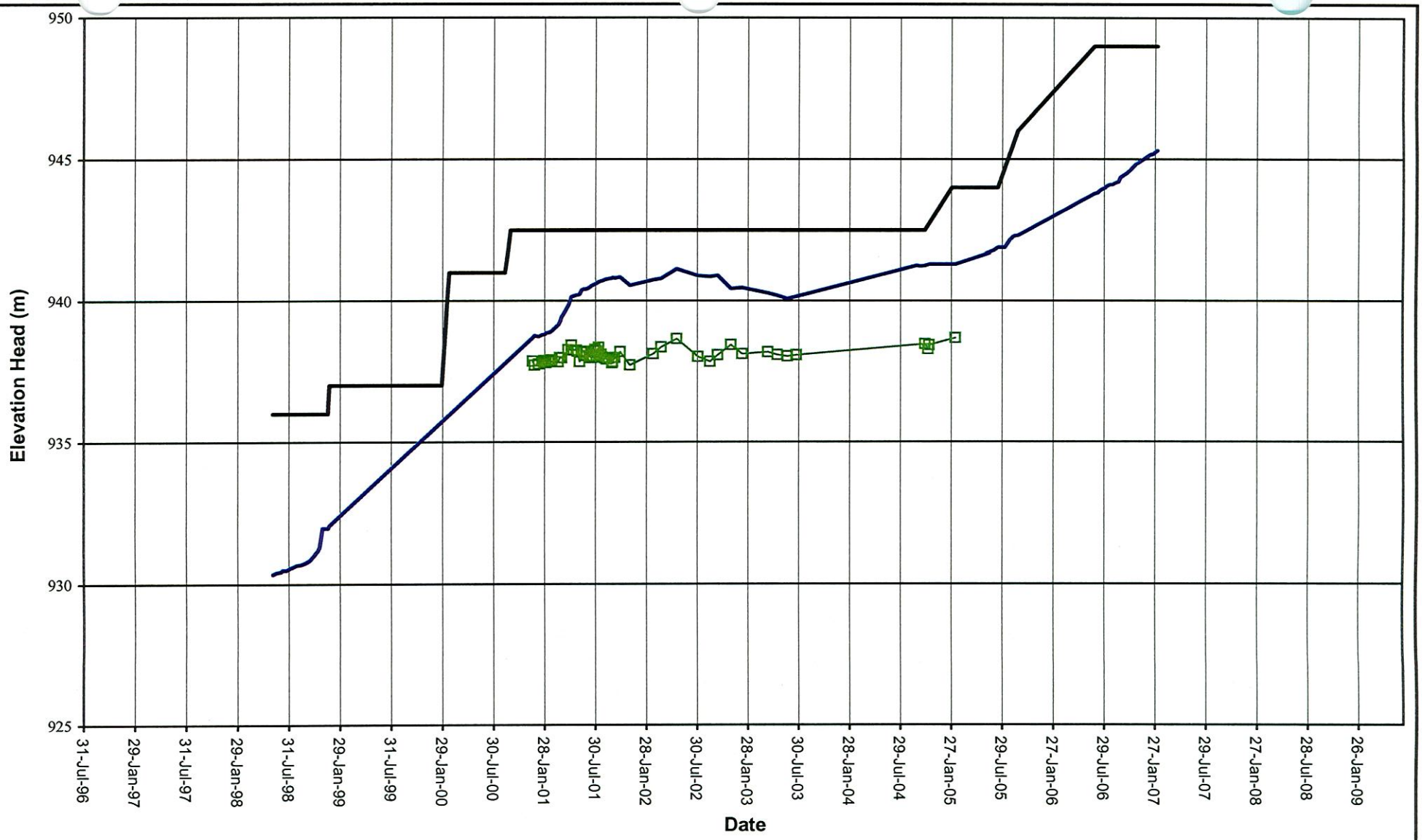
Rev 7/2007



MOUNT POLLEY MINING CORPORATION			
MOUNT POLLEY MINE			
PLANE F PIEZOMETERS ELEVATION HEAD vs. TIME			
Knight Piésold CONSULTING	PROJECT VA 101-1/10	REF. 1	RE 0
	FIGURE 2.13		

Rev 0 - Issued for Report

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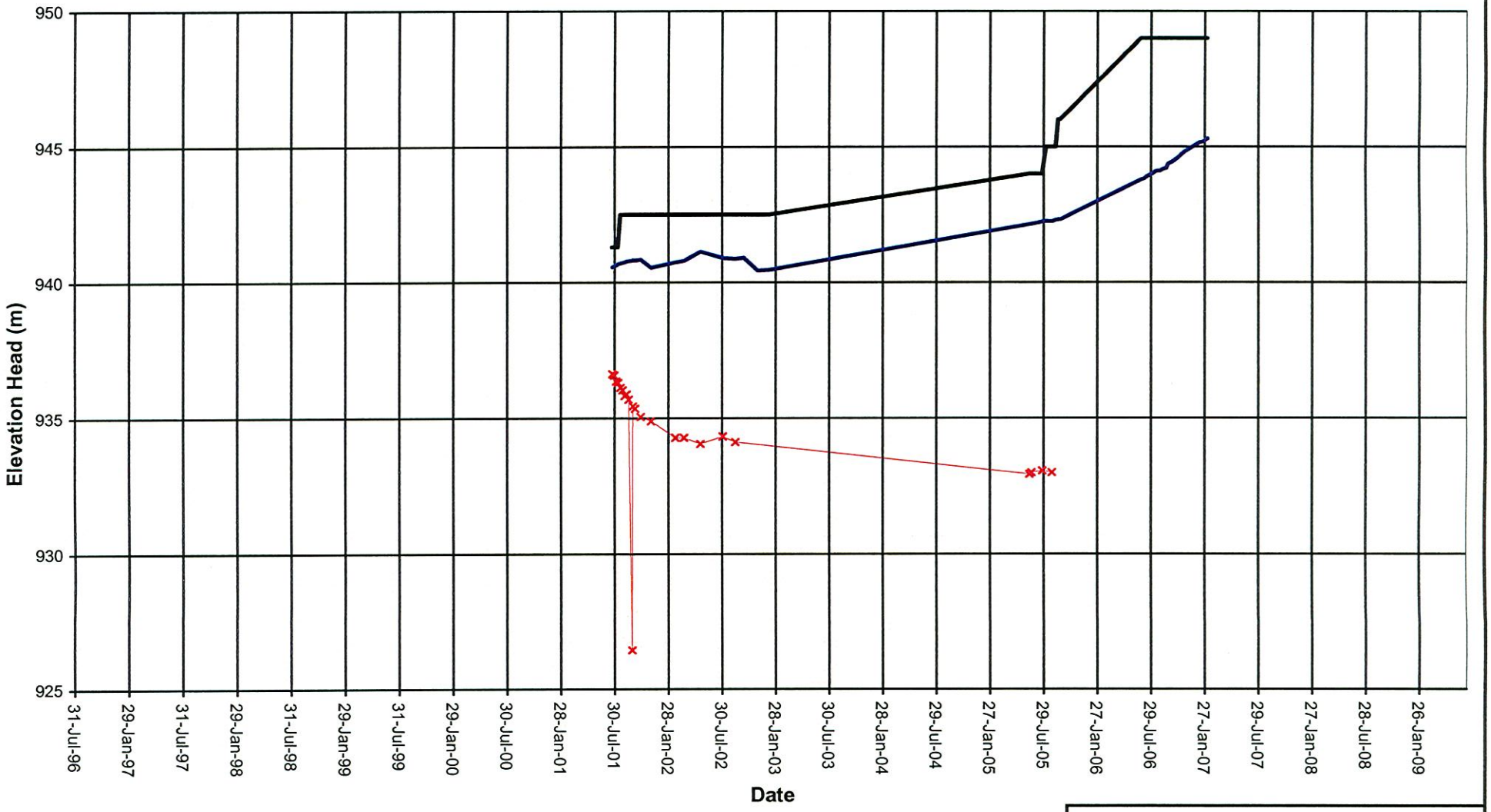

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

PLANE G PIEZOMETERS
ELEVATION HEAD vs. TIME

PROJECT	REF.	REV.
VA101-1/10	1	0

Knight Piésold CONSULTING

FIGURE 2.14

Rev 0 - Issued for Report

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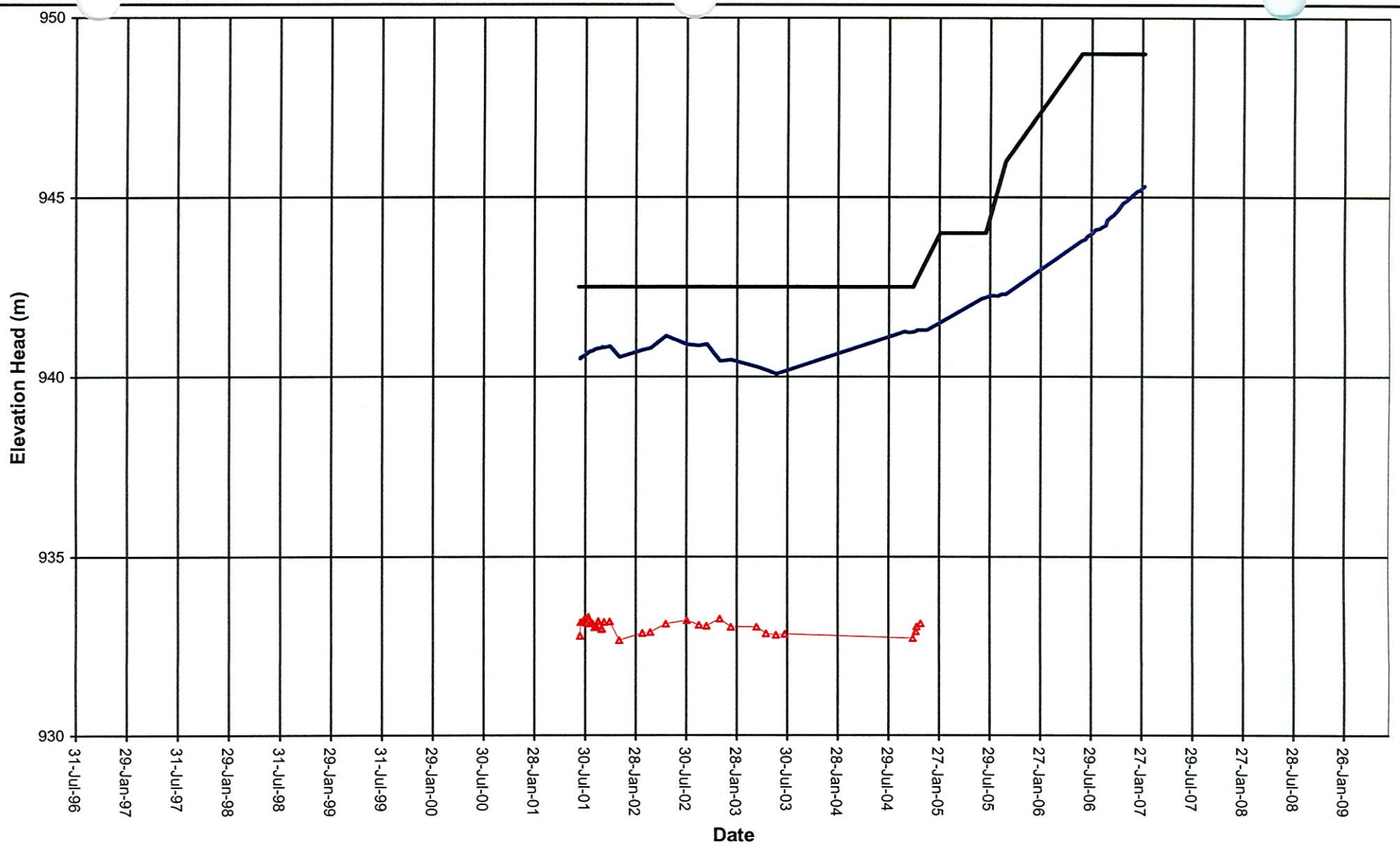
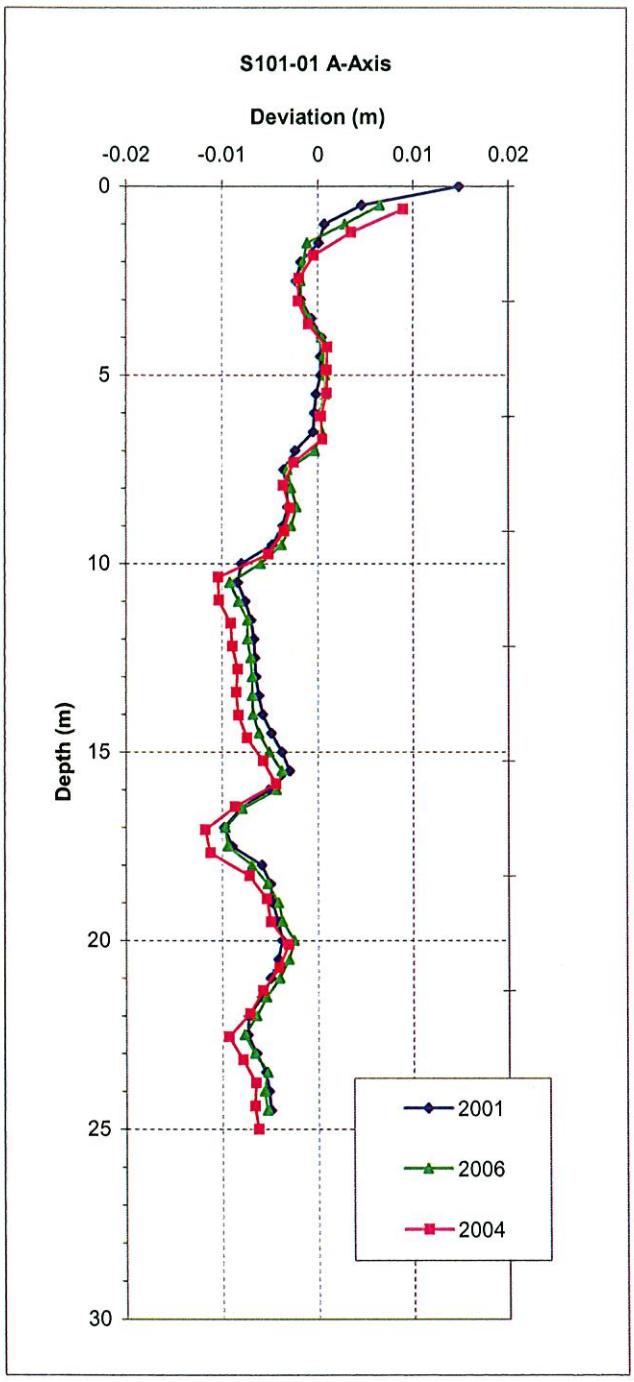
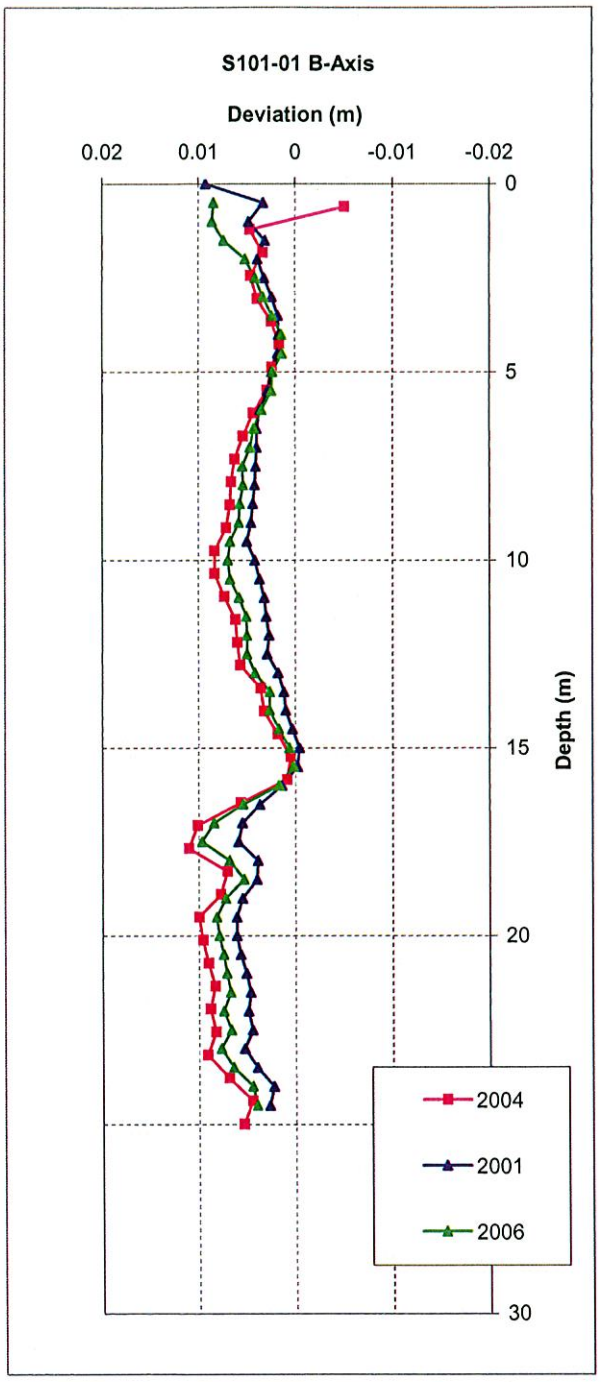
Revise 7, 2007



MOUNT POLLEY MINING CORPORATION		
MOUNT POLLEY MINE		
PLANE H PIEZOMETERS ELEVATION HEAD vs. TIME		
Knight Piésold CONSULTING	PROJECT / ASSIGNMENT NO. VA101-1/10	REF NO. 1
	FIGURE 2.15	REV. 0

Rev 0 - Issued for Report





SI01-01 no longer functioning.

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

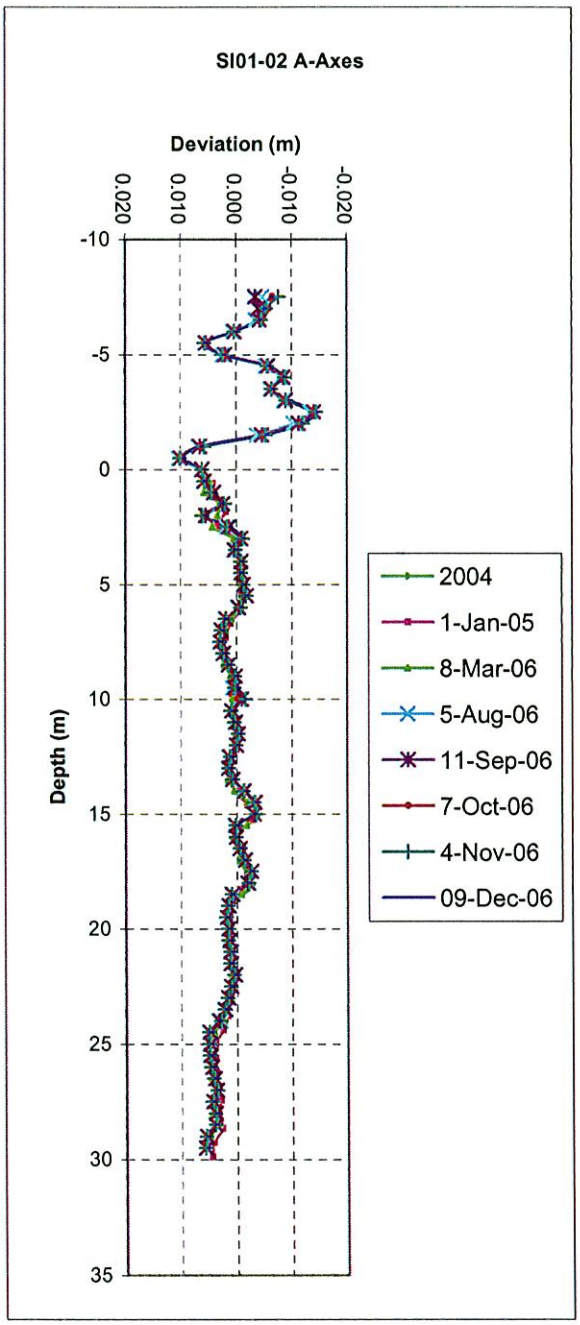
DOWN HOLE INCLINOMETER DISPLACEMENT SI01-01

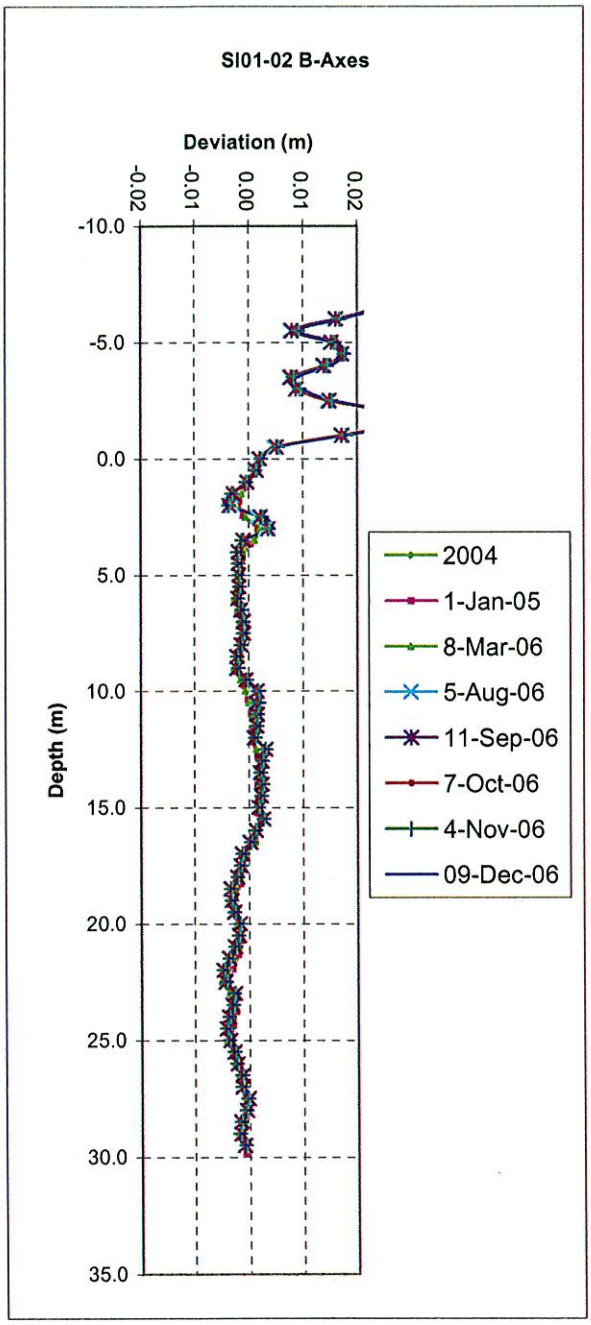
Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/10	1

FIGURE 2.16 REV. 0

Rev 0 - Issued for Report





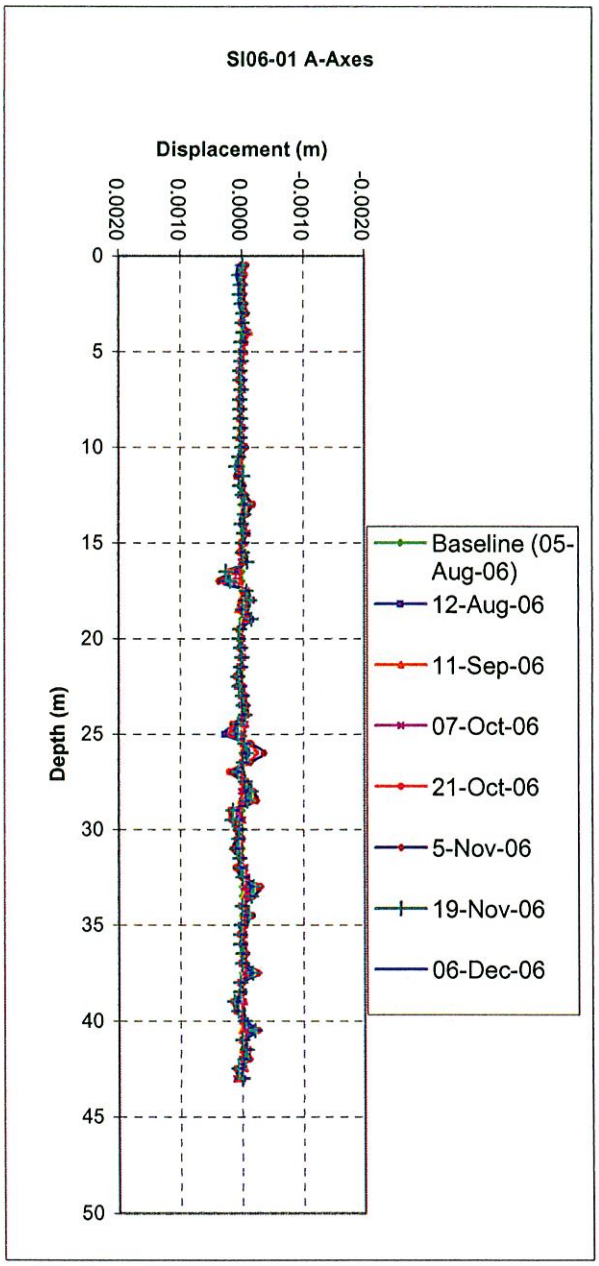
MOUNT POLLEY MINING CORPORATION

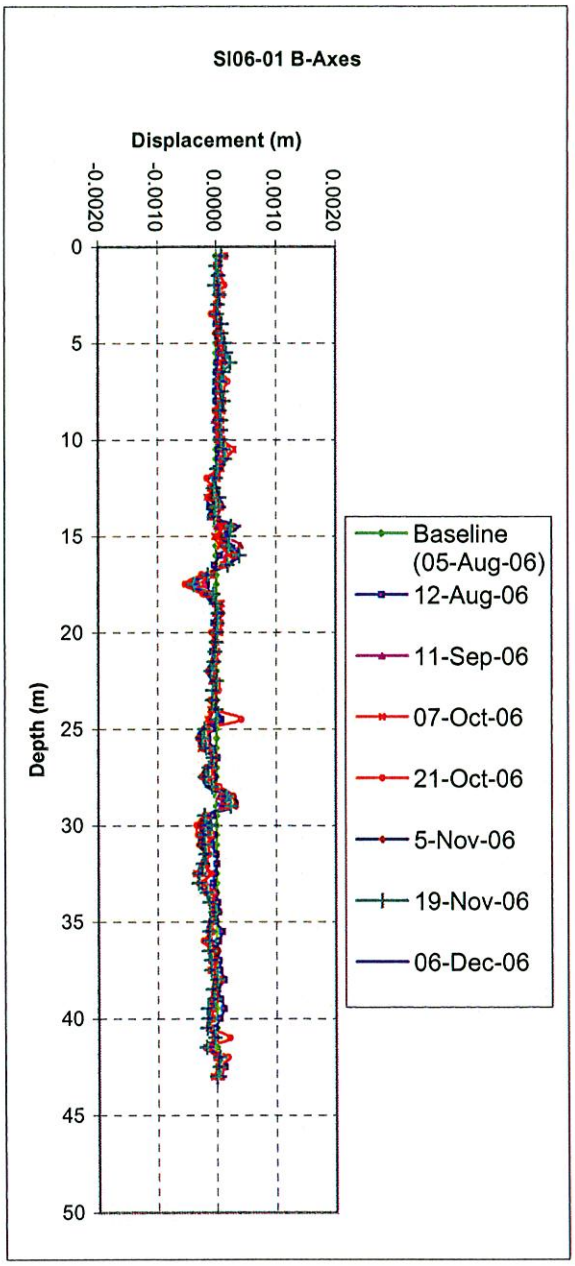
MOUNT POLLEY MINE

DOWN HOLE INCLINOMETER DISPLACEMENT
SI01-02

	PROJECT / ASSIGNMENT NO.	REF NO.
Knight Piésold CONSULTING	VA101-1/10	1
	FIGURE 2.17	REV. 0

Rev 0 - Issued for Report





MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

DOWN HOLE INCLINOMETER DISPLACEMENT
SI06-01

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO.	REF NO.
VA101-1/10	1

FIGURE 2.18

REV. 0

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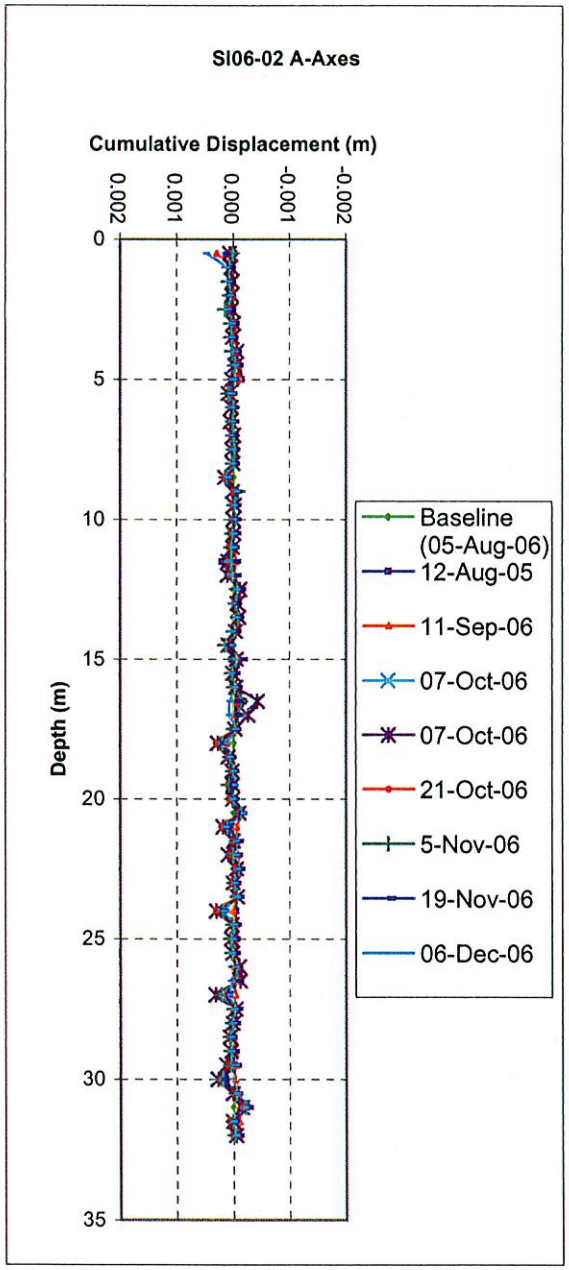
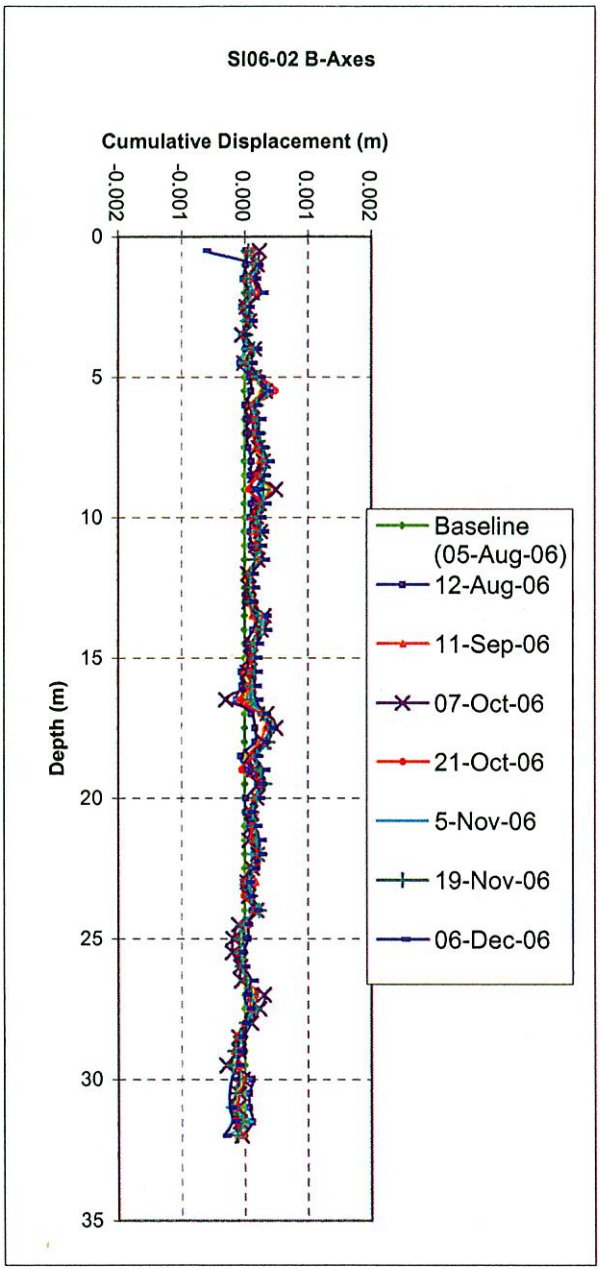




MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

DOWN HOLE INCLINOMETER DISPLACEMENT SI06-02

Knight Piésold CONSULTING

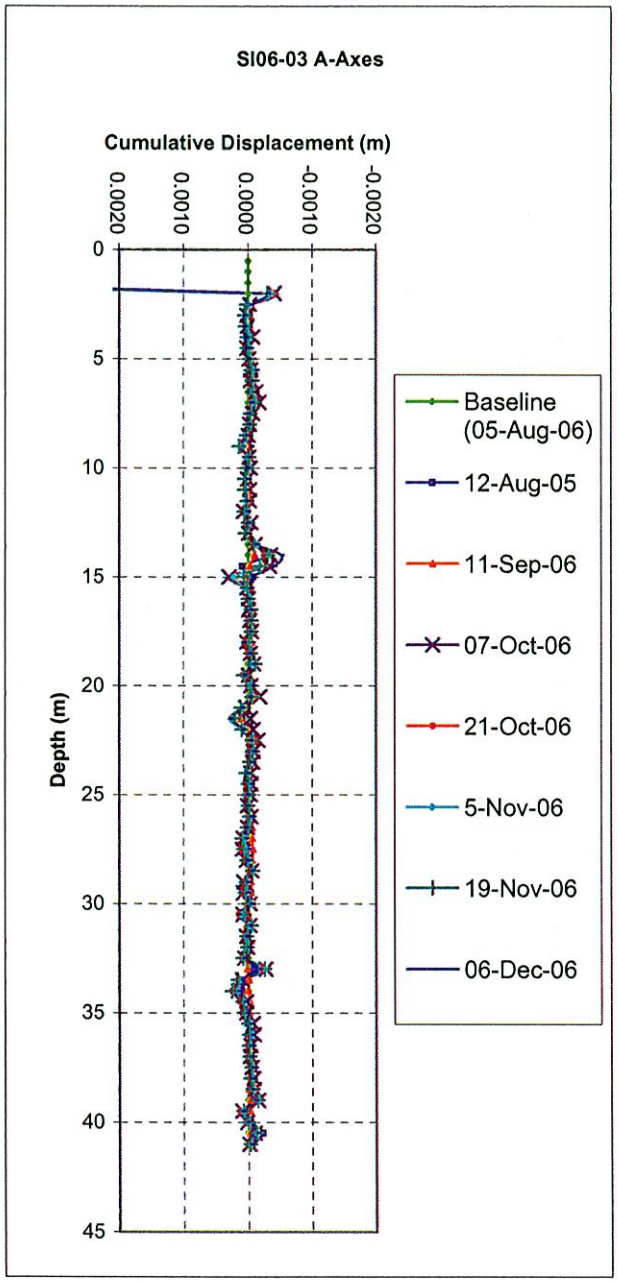
PROJECT/ASSIGNMENT NO. VA101-1/10

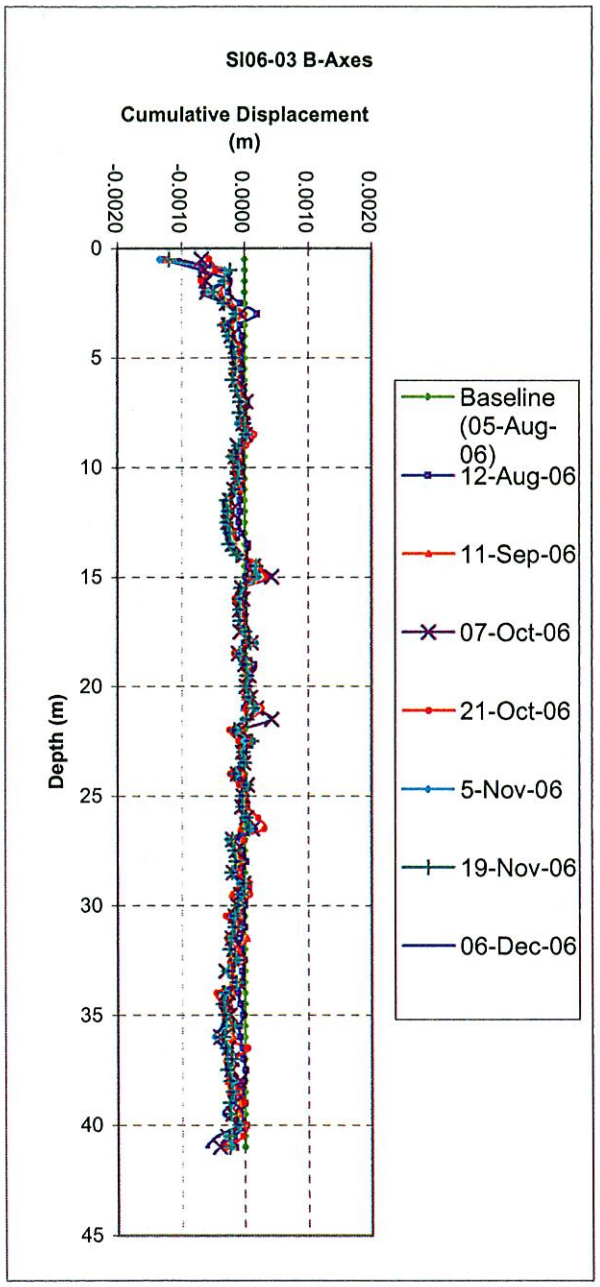
REF NO. 1

FIGURE 2.19

REV. 0

Rev 0 - Issued for Report





MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

DOWN HOLE INCLINOMETER DISPLACEMENT
SI06-03

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
VA101-1/10	1

FIGURE 2.20 REV. 0

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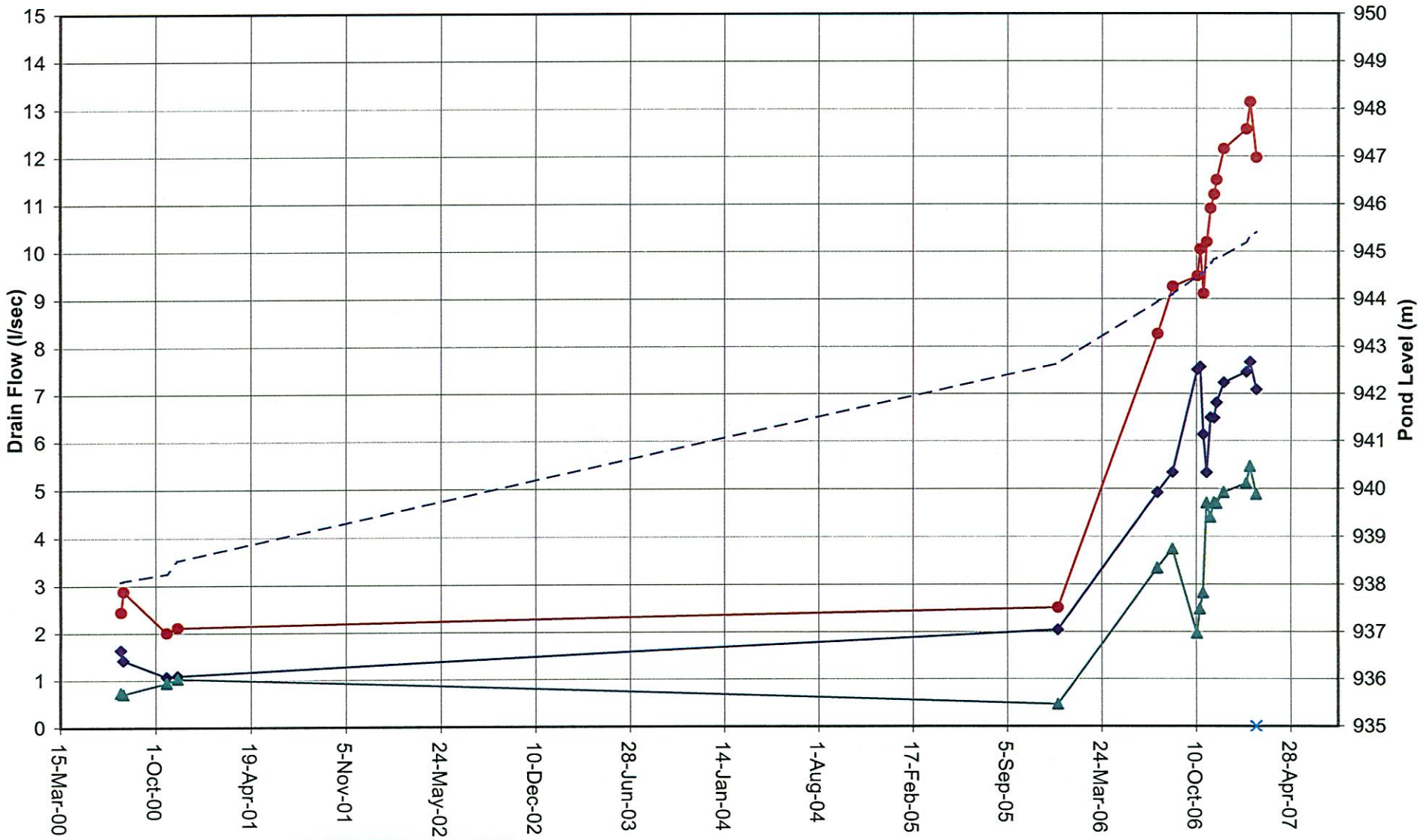

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

UPSTREAM TOE DRAIN FLOWS

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PROJECT / ASSIGNMENT NO. VA101-1/10

REF NO. 1

FIGURE 2.21

REV. 0

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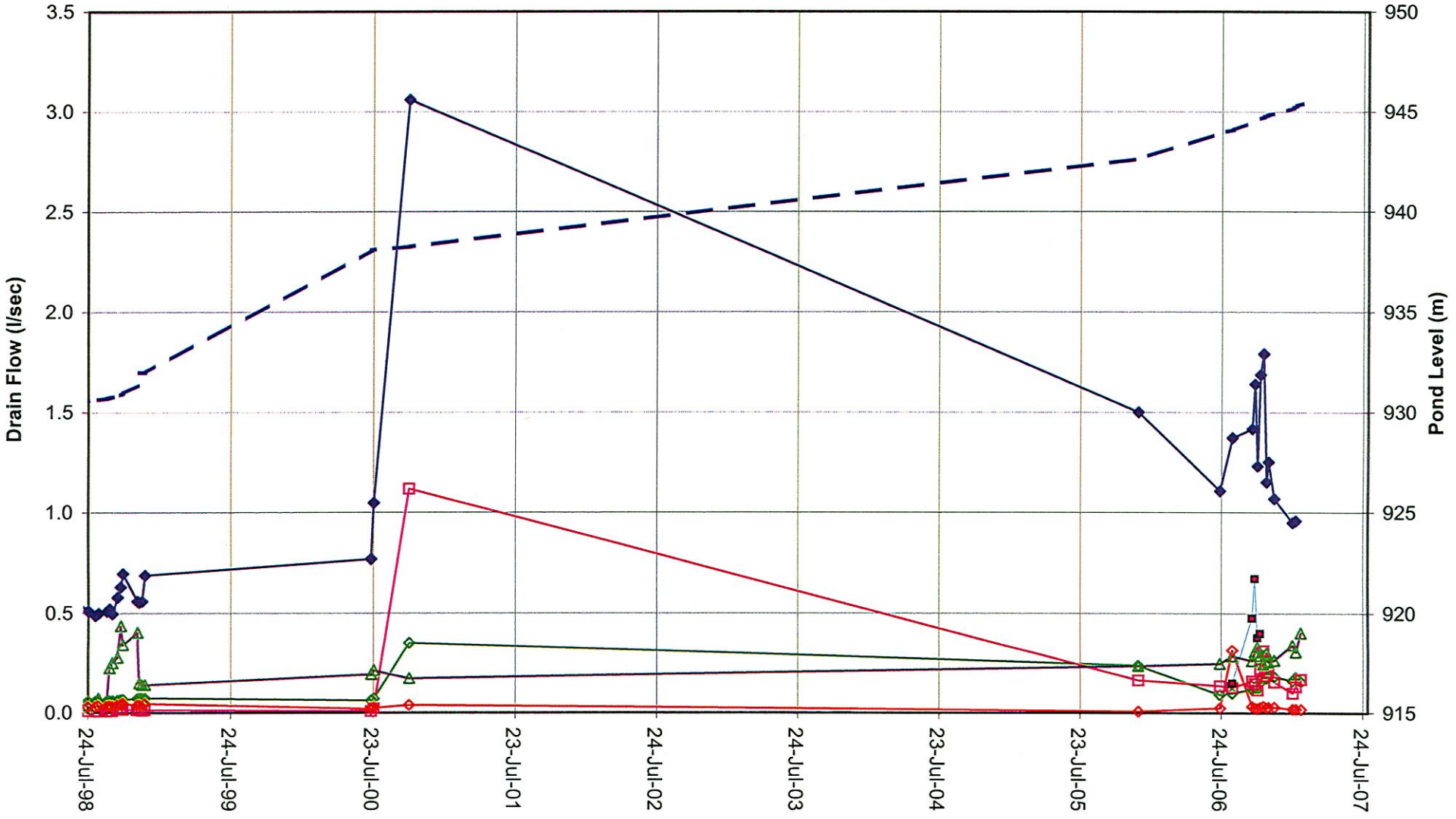

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

FOUNDATION FLOW DRAINS

Knight Piésold CONSULTING

PROJECT / ASSIGNMENT NO. VA101-1/10

REF NO. 1

FIGURE 2.22

REV. 0

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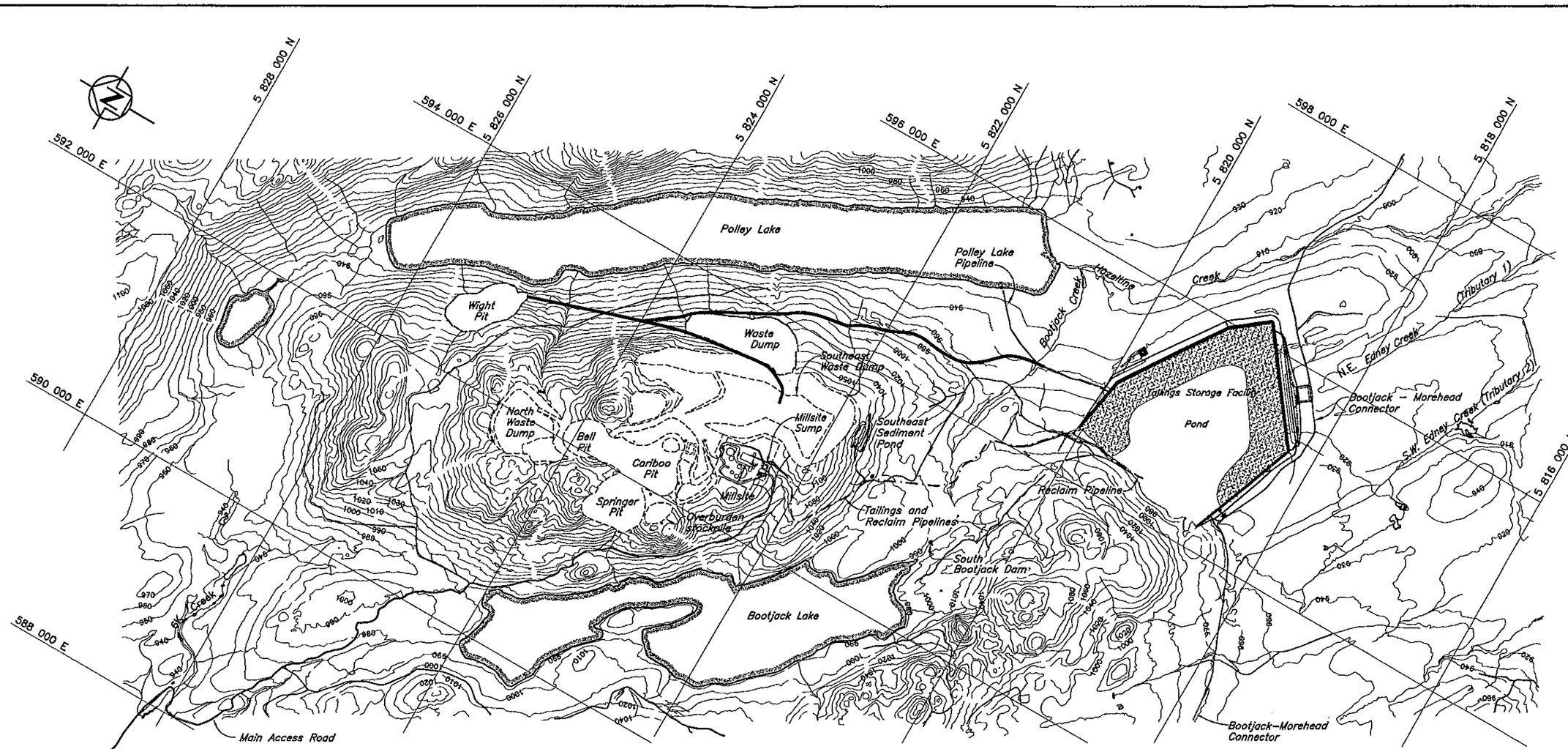


Scale 400 0 400 800 1200 1600 2000 m

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.

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	09MAR'07	STAGE 4 AS-BUILT	LJG	WAL	KJB	KJB
0	13MAY'05	ISSUED FOR STAGE 4 CONSTRUCTION	AT	NSD	GJ	KJB

REVISIONS

DRG. NO.	DESCRIPTION

REFERENCE DRAWINGS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.J. GALBRAITH 25493 Feb 19 '07

Knight Piésold CONSULTING

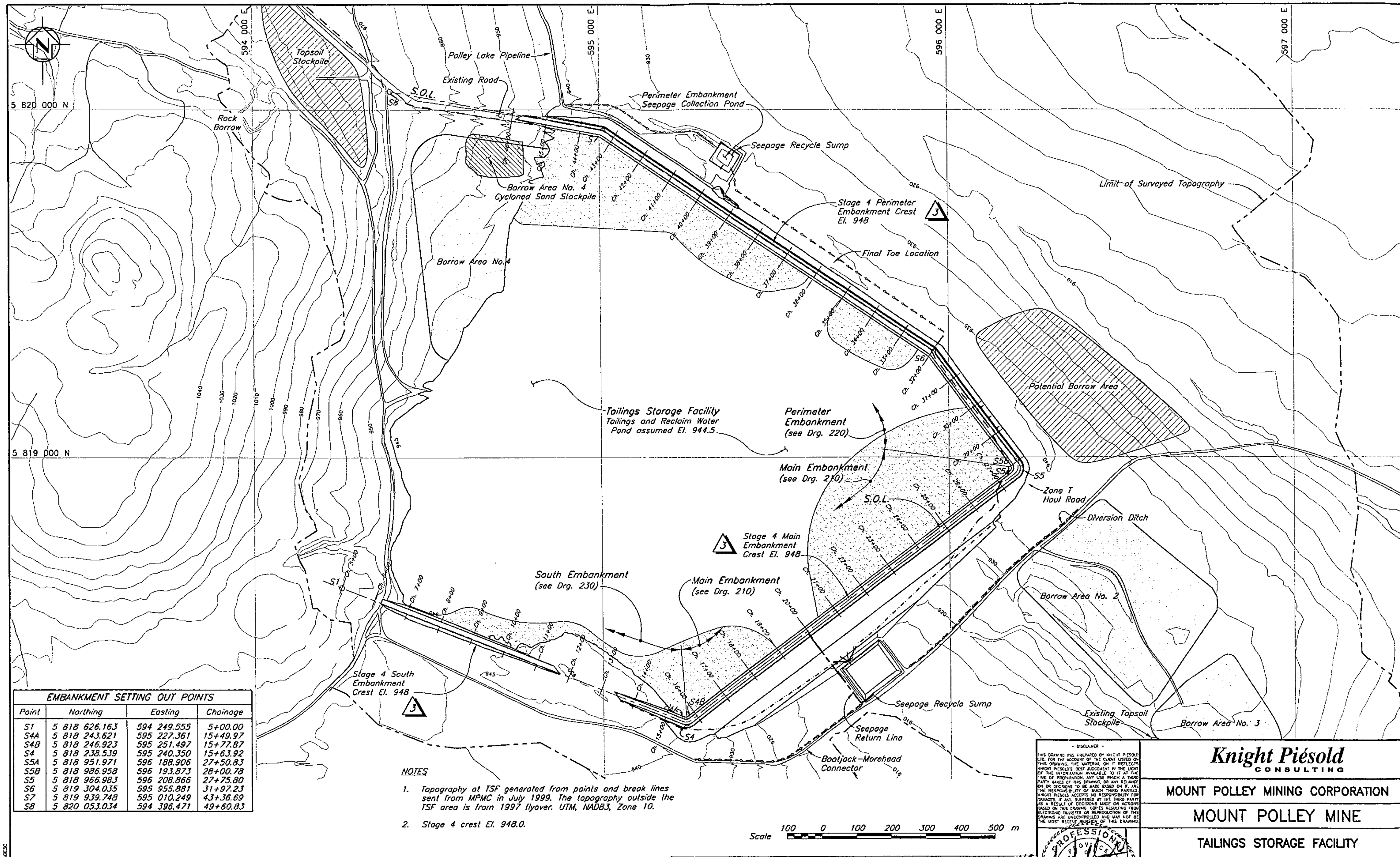
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
ULTIMATE TAILINGS EMBANKMENT
OVERALL SITE PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	100	1

XREF FILE : TOPO99, Ultimate_Plan
CAD FILE: M:\101\00001\10\A\Acad\Dwg\100.dwg 1=20000 PLOT 1=1(PS) Feb 23 2007 bcjbong Time @ 14:23
VANCOUVER B.C.



EMBANKMENT SETTING OUT POINTS

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

NOTES

1. Topography at TSF generated from points and break lines sent from MPMC in July 1999. The topography outside the TSF area is from 1997 flyover. UTM, NAD83, Zone 10.
2. Stage 4 crest El. 948.0.

Scale 100 0 100 200 300 400 500 m

DRG. NO.	DESCRIPTION
220	T.S.F. – STAGE 4 PERIMETER EMBANKMENT – PLAN
210	T.S.F. – STAGE 4 MAIN EMBANKMENT – PLAN
230	T.S.F. – STAGE 4 SOUTH EMBANKMENT – PLAN AND SECTION

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
3	15MAR'07	STAGE 4 AS BUILT	LJG	TAM	KJB	KJB
2	15AUG'05	AS-BUILT	FE	NSD		
1	27AUG'04	ISSUED FOR CONSTRUCTION	FE	WAL	MW	KJB
0	31MAY'04	ISSUED FOR STAGE 3C TENDER	FE	TAM	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – L. J. GALBRAITH 25493 – March 19/07

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 TAILINGS EMBANKMENT
GENERAL ARRANGEMENT

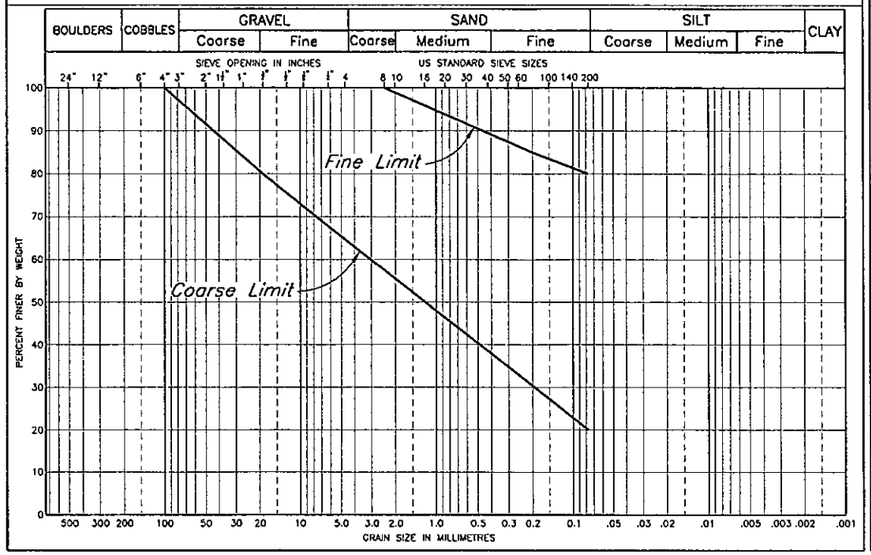
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	102	3

XREF FILE : TOPO99, STAGE3C

VANCOUVER B.C. CAD FILE: M:\1\01\00001\10\A\Acad\Dwgs\102\102 1=5000 Plot 1=1(PS) Mar 15, 2007 lam

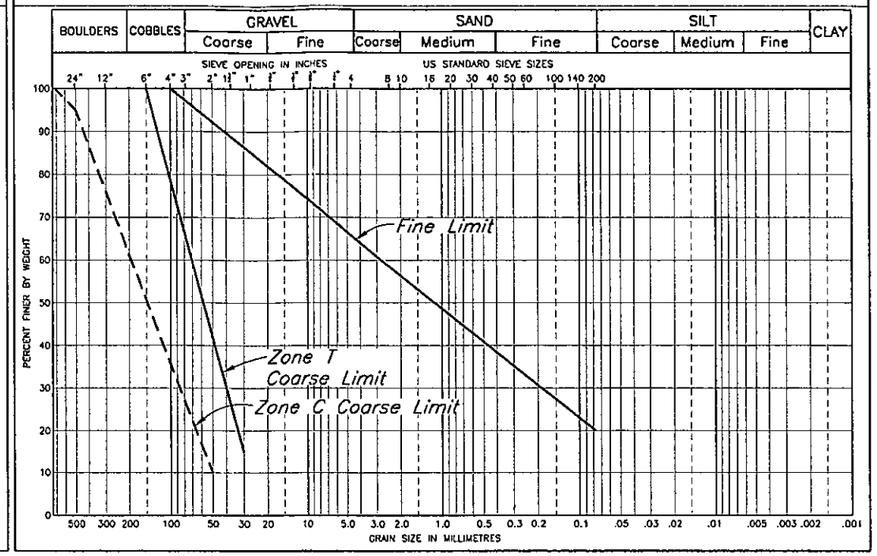
UNIFIED SOIL CLASSIFICATION SYSTEM

ZONE S



UNIFIED SOIL CLASSIFICATION SYSTEM

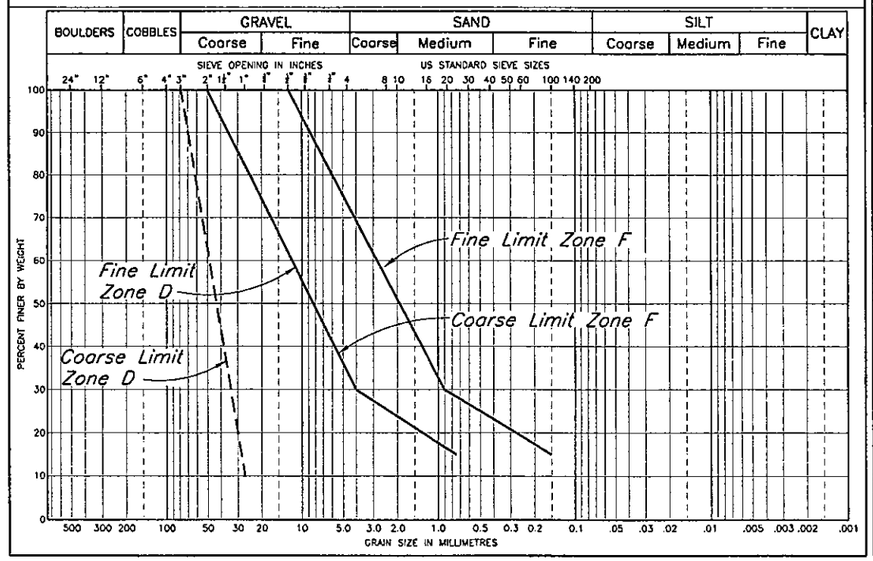
ZONE T and ZONE C



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.*
S	*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.*
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.*
D	*Drainage Gravel*	*Drains*	*Placed around drainage pipes and wrapped with geotextile.*

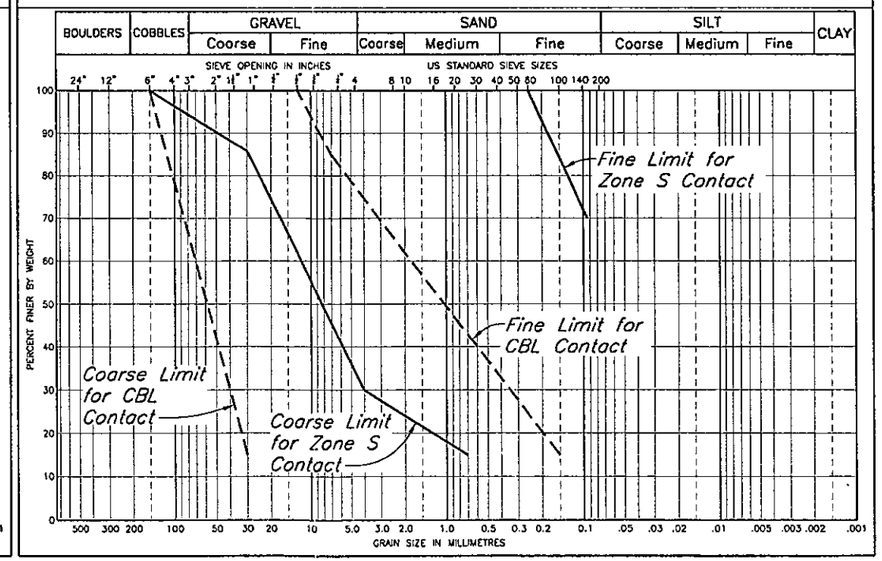
UNIFIED SOIL CLASSIFICATION SYSTEM

ZONE F



UNIFIED SOIL CLASSIFICATION SYSTEM

ZONE U



DRG. NO.	DESCRIPTION
250	INCLINOMETER EXTENSION – SECTIONS AND DETAILS
235	STAGE 4 – SOUTH EMBANKMENT – SECTIONS
225	STAGE 4 – PERIMETER EMBANKMENT – SECTIONS
215	STAGE 4 – MAIN EMBANKMENT – SECTIONS AND DETAILS
140	STAGE 4 – SOUTH EMBANKMENT – DRAIN – SECTIONS AND DETAILS

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	09MAR'07	STAGE 4 AS-BUILT	LJG	WAL	KJB	KJB
0	13MAY'05	ISSUED FOR STAGE 4 CONSTRUCTION	AT	NSD	GJ	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA LYNDEN J. GALBRAITH 25493 9/07

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
ULTIMATE TAILINGS EMBANKMENT
MATERIAL SPECIFICATIONS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	104	1

VANCOUVER B.C. CAD FILE: m:\1\01\00001\10\A\acad\dwgs\104\104.dwg 1=1 PLOT 1-(PS) Mar 05 2007 by MNL

XREF FILE : -

595 000 E

595 500 E

596 000 E

5 819 000 N

5 818 500 N

5 818 000 N

Perimeter Embankment (see Dwg. 220)

Main Embankment

South Embankment (see Dwg. 230)

Pond El. 944.5

Slope 4 Embankment Crest El. 948.0

Ch. 27+00

Ch. 26+00

Ch. 25+00

Ch. 24+00

Ch. 23+00

Ch. 22+00

Ch. 21+00

Ch. 20+00

Ch. 19+00

Ch. 18+00

Ch. 17+00

Ch. 16+00

Ch. 15+00

S5B

S5A

S5

S4A

S4

S4B

S.O.L.

Final Toe

Existing U/S Toe Drain Outlet Pipe

Existing Diversion Ditch

Existing U/S Toe Drain Conveyance Pipe

Bootjack–Morehead Connector Relocation

Foundation Drains

Basin liner thickness increased to minimum of 2.0 m

2H:1V

2.5H:1V

1/215

SI06–3

SI06–2

SI06–1

SI01–1

SI01–2

NOTE 3

Drain Monitoring Sump

Main Embankment Seepage Collection Pond

Seepage Recycle Sump

Seepage Return Line

935

930

925

920

915

940

926

916

VA101–1/10–220

VA101–1/10–230

THIS DRAWING

KEY PLAN

LEGEND

SI01–1 Existing Inclinometers

SI06–1 Stage 4 Inclinometers

NOTES

1. Topography from 2004 flyover
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Existing inclinometer destroyed during Stage 4 construction.

Scale 50 0 50 100 150 200 250 Metres

DRG. NO.	DESCRIPTION
230	STAGE 4 SOUTH EMBANKMENT – PLAN
220	STAGE 4 PERIMETER EMBANKMENT – PLAN
215	STAGE 4 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
1	09MAR'07	STAGE 4 AS–BUILT	LJG	WAL	KJB	KJB
0	13MAY'05	ISSUED FOR STAGE 4 CONSTRUCTION	AT	NSD	GJ	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.A. GALBRAITH 25493 9/07

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MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 MAIN EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101–1/10	210	1

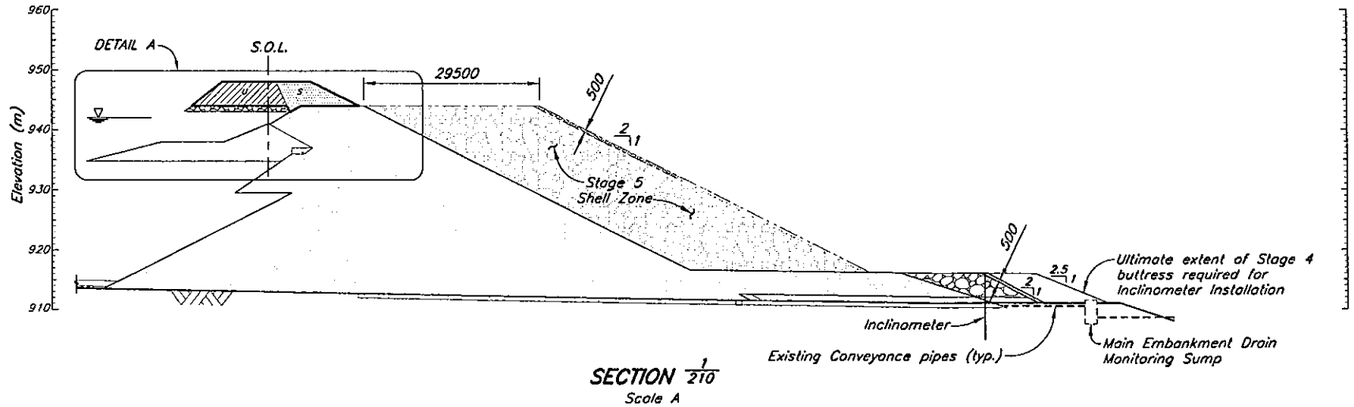
XREF FILE: Topo2004_DA, Stage4_Plan

CAD FILE: M:\1\01\00001\10\VA\cad\Dwgs\1010210.dwg 1=2500 PLOT: 1=1(PS) Mar 15 2007 hyanchar

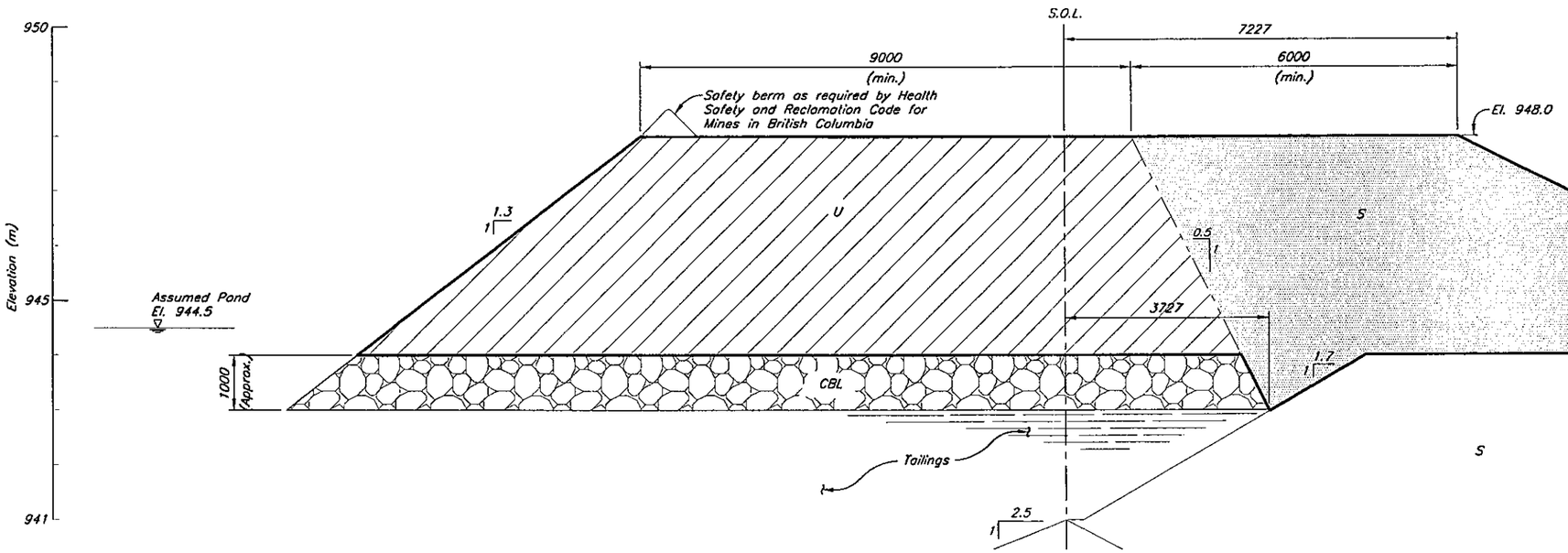
VANCOUVER B.C.

NOTES

1. For zone material specifications and legend see Drg. 104.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.



SECTION $\frac{1}{210}$
Scale A



DETAIL A
Scale B

B 1 0 1 2 3 4 5 m

A 10 0 10 20 30 40 50 m

REFERENCE DRAWINGS	
210	STAGE 4 – MAIN EMBANKMENT – PLAN
104	ULTIMATE TAILINGS EMBANKMENT – MATERIAL SPECIFICATIONS
ORG. NO.	DESCRIPTION

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	09MAR'07	STAGE 4 AS-BUILT	EC	JY	KJB	KJB
0	13MAY'05	ISSUED FOR STAGE 4 CONSTRUCTION	AT	NSD		

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.J. GALBRAITH 25800 March 19, 07

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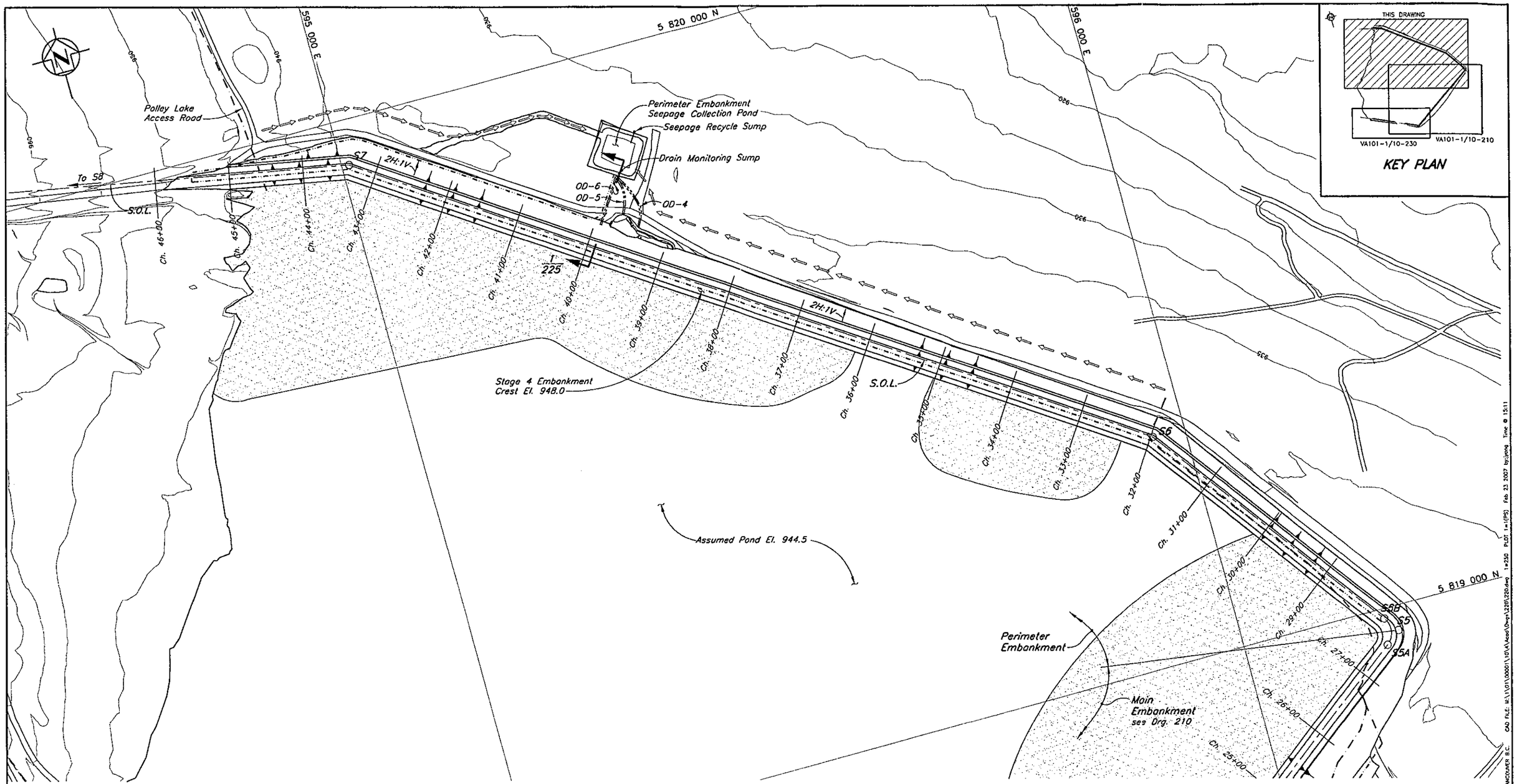
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 MAIN EMBANKMENT
SECTIONS AND DETAILS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	215	1

XREF FILE : –

VANCOUVER B.C. CAD FILE: VA1\101\10001\10\A\AutoCAD\vap\215\215.dwg 1=500 PLOT 1-1(PC) Feb 23 2007 by:jcong Time @ 14:56



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

DRG. NO.	DESCRIPTION
230	STAGE 4 SOUTH EMBANKMENT – PLAN
225	STAGE 4 PERIMETER EMBANKMENT – SECTIONS
210	STAGE 4 MAIN EMBANKMENT – PLAN

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	14MAR'07	STAGE 4 AS-BUILT	EC	JY		
0	13MAY'05	ISSUED FOR STAGE 4 CONSTRUCTION	AT	NSD		

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. J. GALBRAITH 25493 March 29/07

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MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 PERIMETER EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	220	1

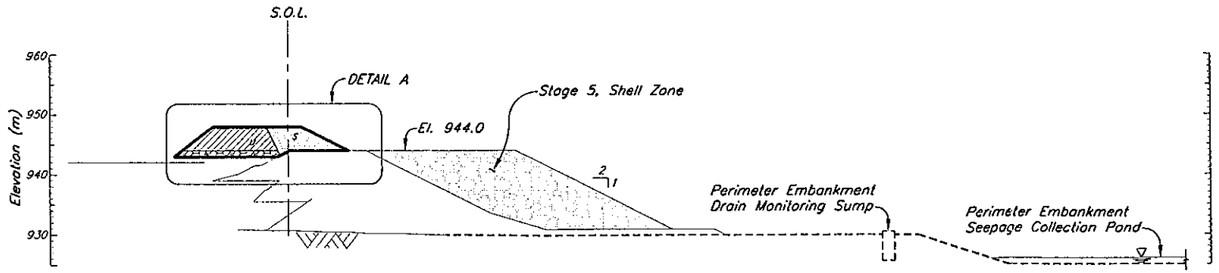
XREF FILE : Toca2004_CA_Stage4_Plan

CAD FILE: M:\1\01\0000\1\01\A\cad\Dwg\1220\220.dwg PLOT: 1=1(PS) Feb 23 2007 brijona Time @ 15:11

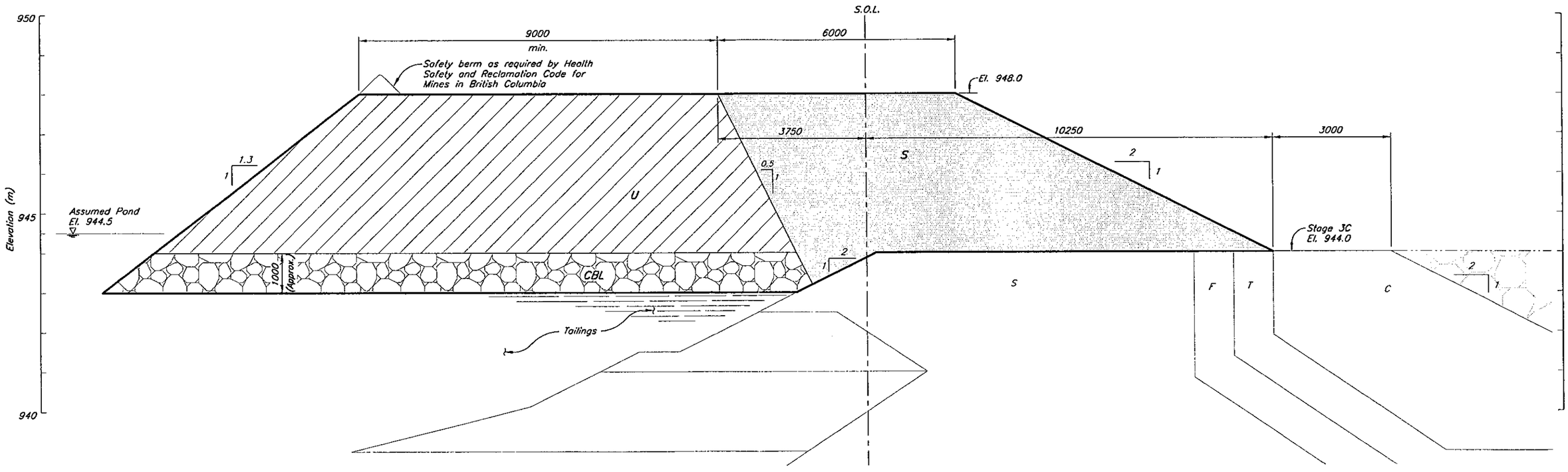
VANCOUVER B.C.

NOTES

1. For zone material specifications and legend see Drg. 104.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.



SECTION $\frac{1}{220}$
Scale A



DETAIL A
Scale B

B 1 0 1 2 3 4 5 m

A 10 0 10 20 30 40 50 m

PROFESSIONAL ENGINEER
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GALBRAITH
25493
March 19/07

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MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 PERIMETER EMBANKMENT
SECTIONS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	225	1

ORG. NO.	DESCRIPTION
220	STAGE 4 – PERIMETER EMBANKMENT – PLAN
104	STAGE 4 – MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

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

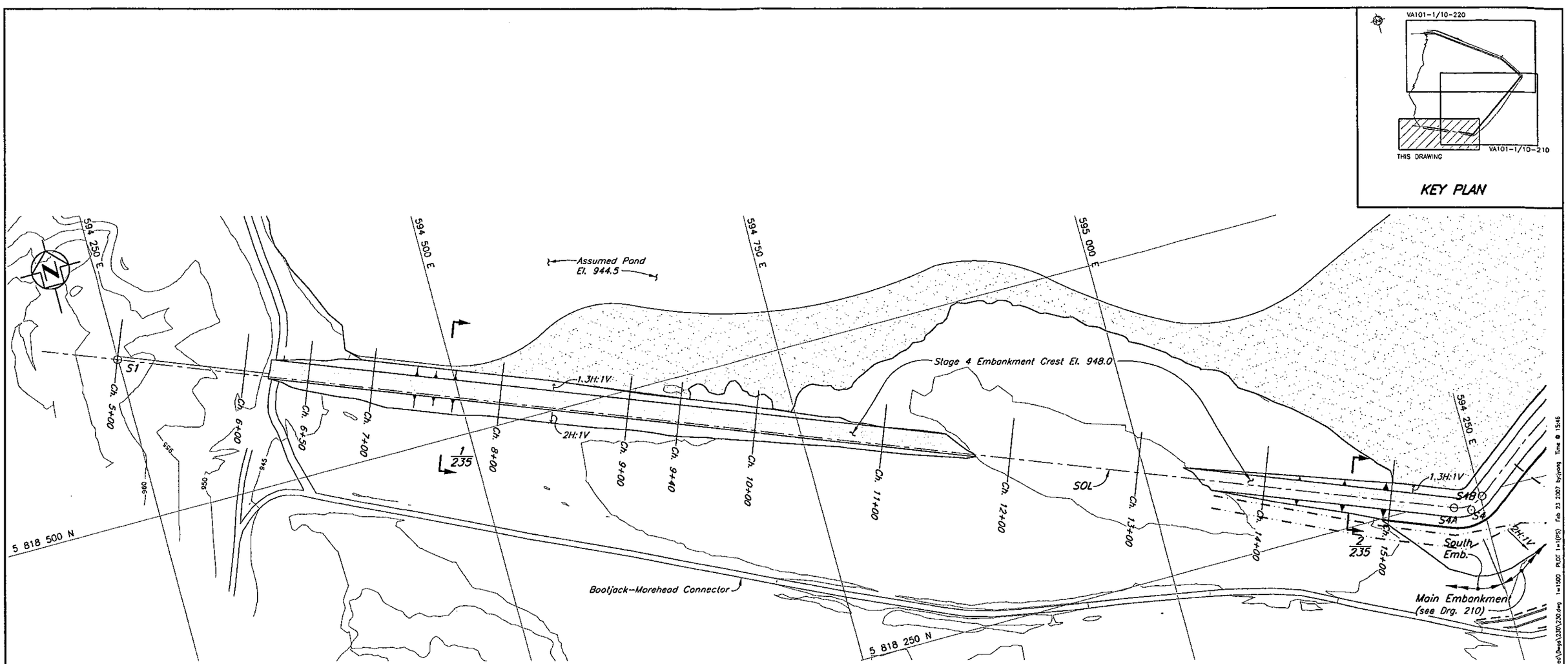
REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
1	09MAR'07	STAGE 4 AS-BUILT	EC	WAL	GJ	KJB
0	13MAY'05	ISSUED FOR STAGE 4 CONSTRUCTION	AT	NSD		

REVISIONS

XREF FILE : -

VANCOUVER B.C. CAD FILE: M:\1\101\00001\101A\Acad\Dwgs\225\225.dwg 1=500 PLOT: 1=1(PS) Mar 15 2007 hyatchinor Time @ 15:26



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.

ORG. NO.	DESCRIPTION
235	STAGE 4 SOUTH EMBANKMENT - SECTIONS
220	STAGE 4 PERIMETER EMBANKMENT - PLAN
210	STAGE 4 MAIN EMBANKMENT - PLAN
104	ULTIMATE 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
1	09MAR'07	STAGE 4 AS-BUILT	EC	JY	KJB	KJB
0	13MAY'05	ISSUED FOR STAGE 4 CONSTRUCTION	AT	NSD	GJ	KJB

REVISIONS

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
GREGORY JAMES
25493
March 19/07

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MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 SOUTH EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	230	1

XREF FILE: Topo2004_QA, Stage4_Plan
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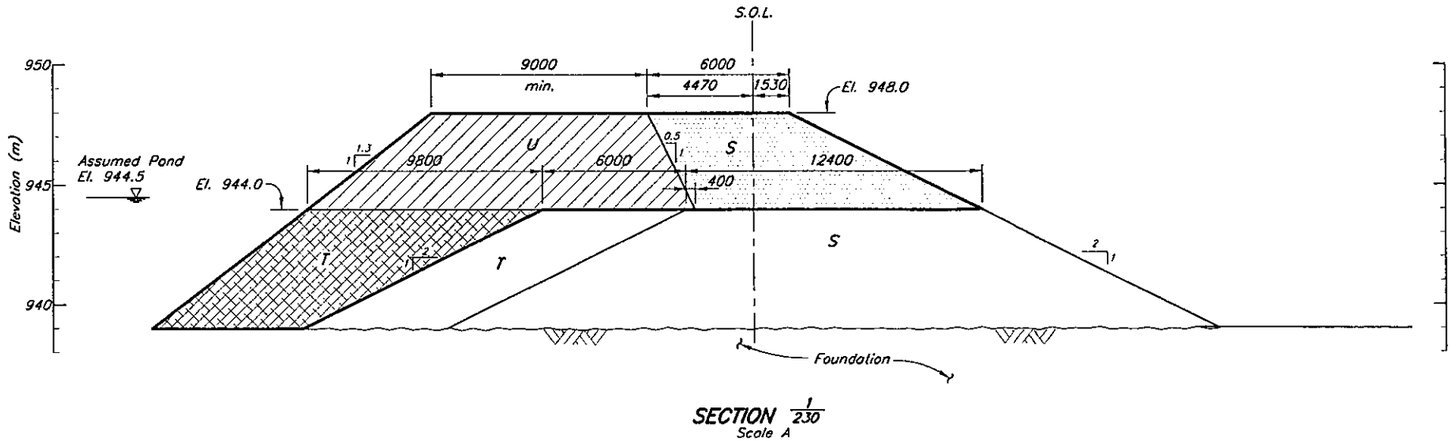
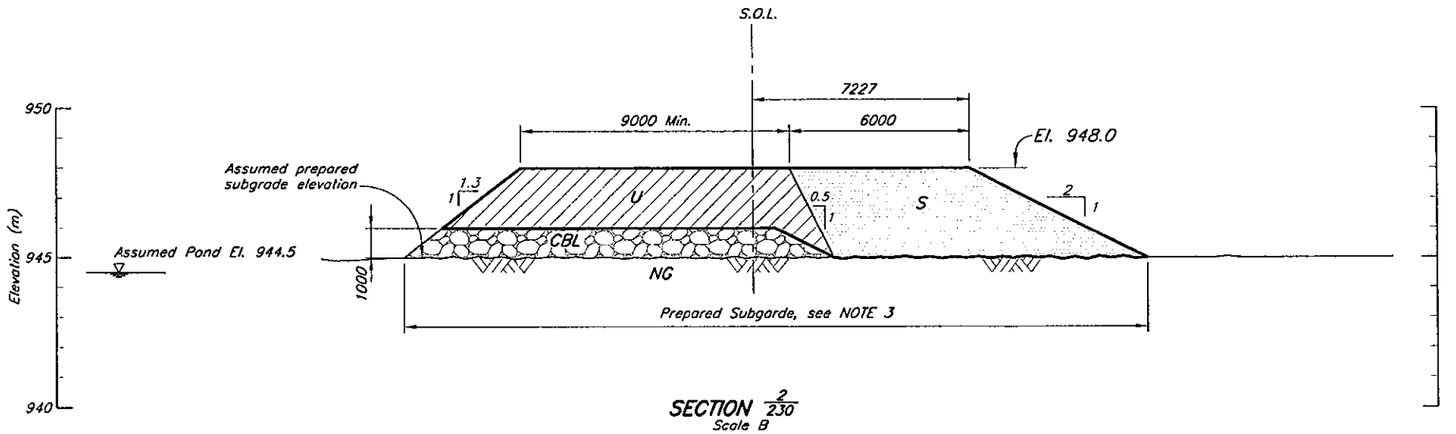
VANCOUVER B.C.



SECTION 1/230
Scale A



SECTION 2/230
Scale B

NOTES

1. For zone material specifications and legend see Drg. 104.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Subgrade preparation comprised stripping of topsoil and organics, removal of saturated materials and proof rolling to establish a competent. Bearing surface for fill placement.

B 2 0 2 4 6 8 10 m

A 2.5 0 2.5 5 7.5 10 12.5 m

CAD FILE: M:\1\01\00001\10\A\xcad\Dwgs\235\235.dwg 1=100 PLOT 1=1(PS) Mar 15 2007 bpeichler VANCOUVER B.C.

DRG. NO.	DESCRIPTION
230	STAGE 4 SOUTH EMBANKMENT - PLAN
104	ULTIMATE 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
1	09MAR'07	STAGE 4 AS-BUILT	LJG	JY	KJB	KJB
0	13MAY'05	ISSUED FOR STAGE 4 CONSTRUCTION	AT	NSD	GJ	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA G. JAMES SMITH 25493 March 19/07

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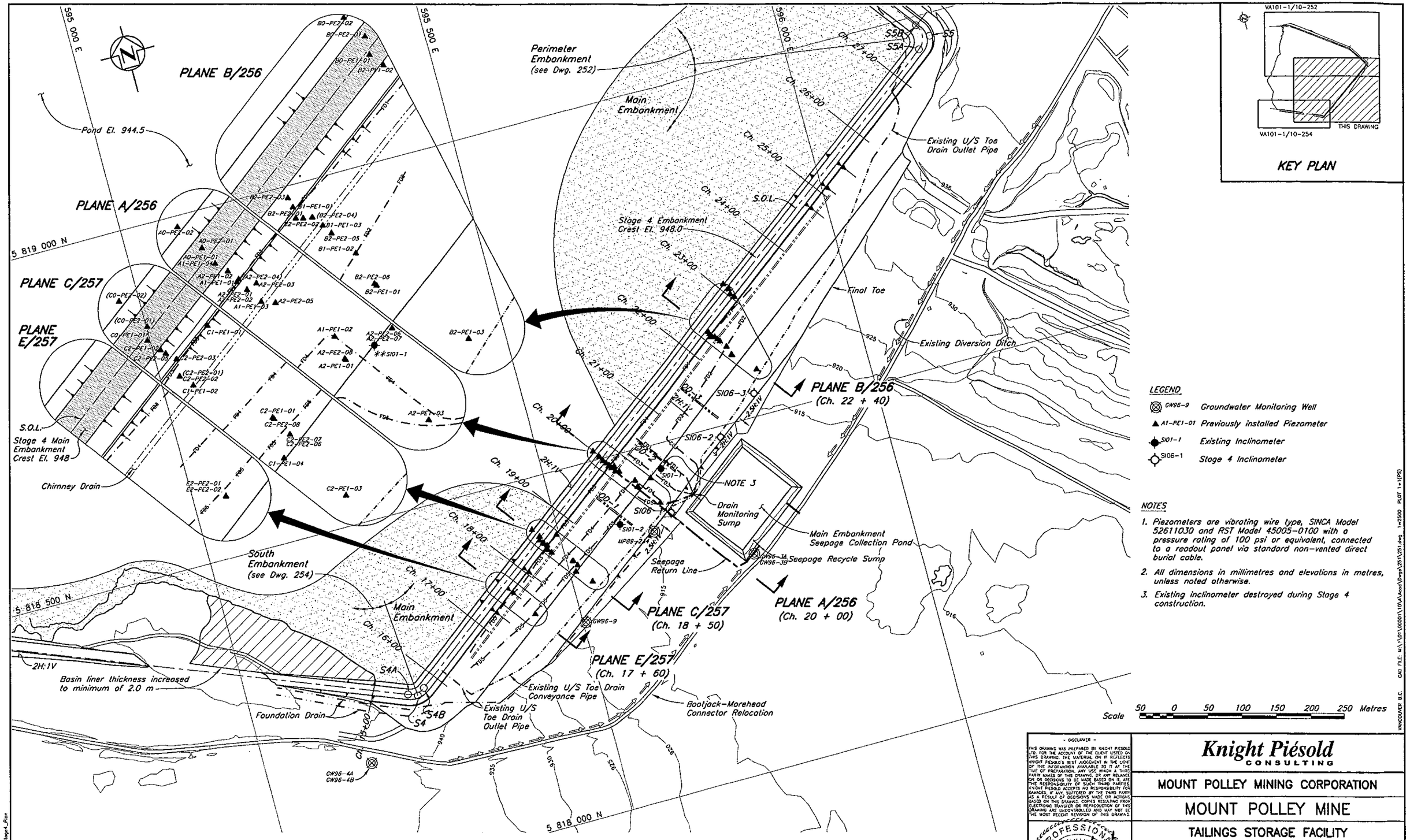
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 SOUTH EMBANKMENT
SECTIONS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	235	1

XREF FILE: -



LEGEND

- GW96-9 Groundwater Monitoring Well
- A1-PE1-01 Previously installed Piezometer
- SI01-1 Existing Inclinometer
- SI06-1 Stage 4 Inclinometer

NOTES

1. Piezometers are vibrating wire type, SINCA Model 52611030 and RST Model 45005-0100 with a pressure rating of 100 psi or equivalent, connected to a readout panel via standard non-vented direct burial cable.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Existing inclinometer destroyed during Stage 4 construction.

ORG. NO.	DESCRIPTION
257	STAGE 4 INSTRUMENTATION – MAIN EMBANKMENT – PLANES C & E
256	STAGE 4 INSTRUMENTATION – MAIN EMBANKMENT – PLANES A & B
254	STAGE 4 INSTRUMENTATION – SOUTH EMBANKMENT – PLAN
252	STAGE 4 INSTRUMENTATION – PERIMETER EMBANKMENT – PLAN

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	15MAR'07	STAGE 4 AS BUILT	EC	WAL		

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.J. SMITH 25493 Mar 15 '07

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4
MAIN EMBANKMENT– INSTRUMENTATION PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	251	0

XREF FILE : Topo2004_CA_Stage4_Plan

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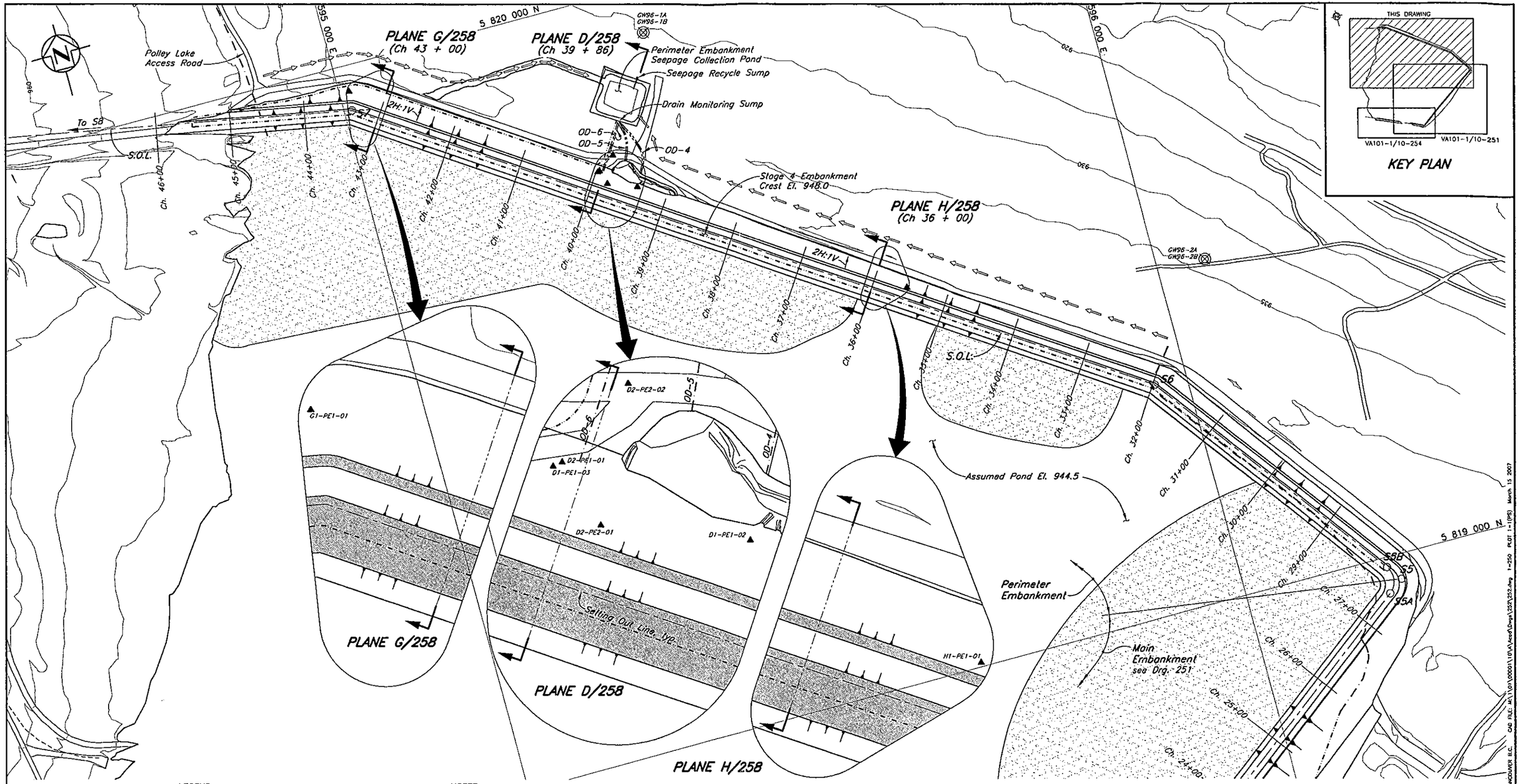
VANCOUVER B.C.



LEGEND

GW96-9 Groundwater Monitoring Well

▲ A1-PE1-01 Previously installed Piezometer

NOTES

1. Chainage defined by Setting Out Point S1 at Ch. 5+00.
2. Topography generated from points and break lines provided by MPMC on July 20, 1999. Topography outside the TSF area is from 1997 flyover.
3. Piezometers are vibrating wire type, SINCA Model 52611030 and RST Model 45005-0100 with a pressure rating of 100 psi or equivalent, connected to a readout panel via standard non-vented direct burial cable.

Scale 50 0 50 100 150 200 250 m

DRG. NO.	DESCRIPTION
258	STAGE 4 INSTRUMENTATION – PERIMETER EMBANKMENT – PLANES D, G AND H
257	STAGE 4 INSTRUMENTATION – MAIN EMBANKMENT – PLANES C & E
254	STAGE 4 INSTRUMENTATION – SOUTH EMBANKMENT – PLAN
251	STAGE 4 INSTRUMENTATION – MAIN EMBANKMENT – PLAN

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D
0	15MAR'07	STAGE 4 AS-BUILT	EC	WAL	

REVISIONS

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
W.J. WALLBRIDGE
25493
March 19/07

Knight Piésold
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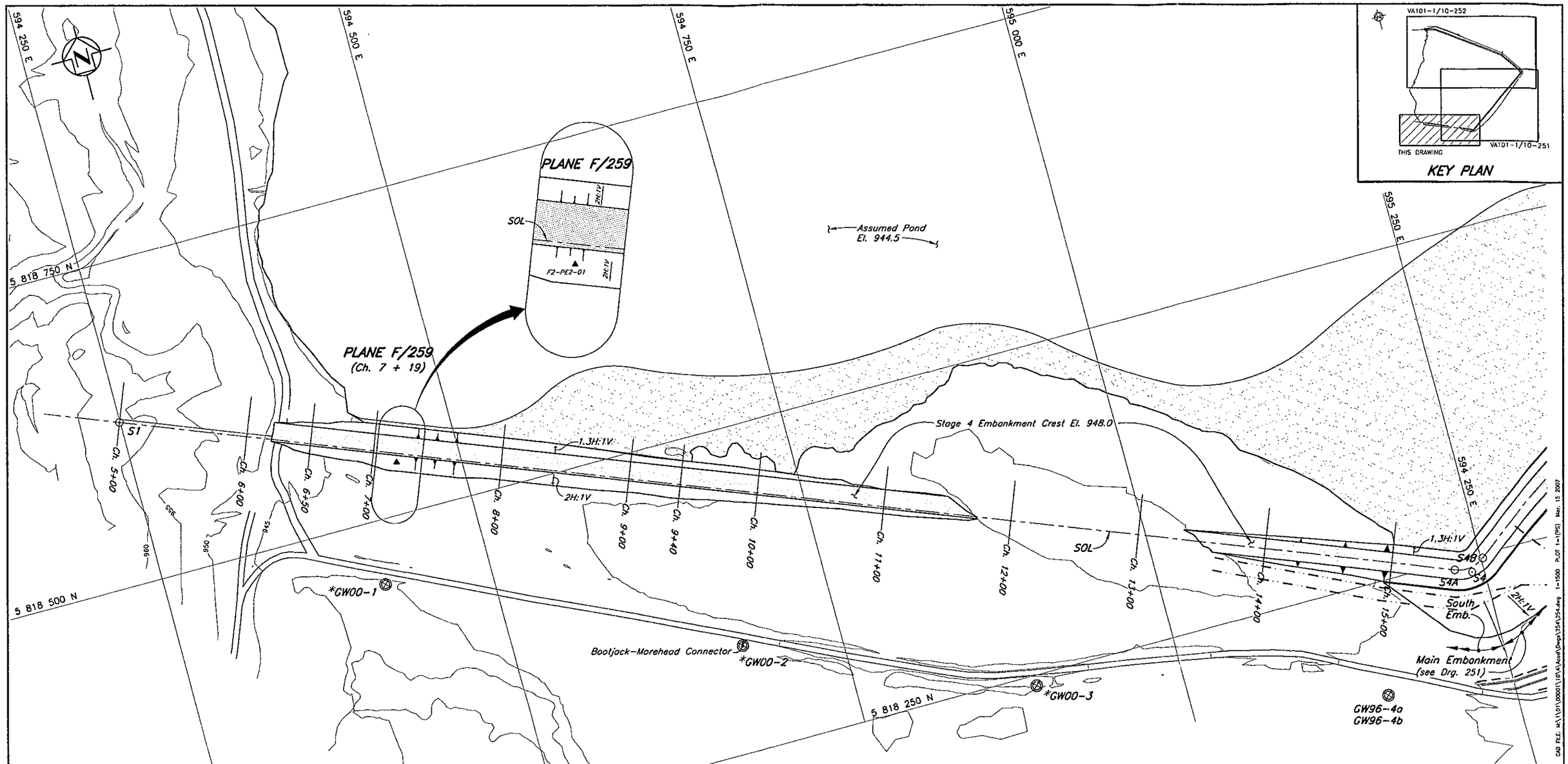
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4
PERIMETER EMBANKMENT– INSTRUMENTATION PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	252	0

XREF File : Topo2004_GA_Stage4_Plan

CAD FILE: VA101\0000\110\A\Acad\Dwgs\1255\1253.dwg 1=250 PLOT 1-1(PS) March 15 2007
VANCOUVER B.C.



LEGEND

- GW96-9 — Groundwater Monitoring Well
- ▲ A1-PE1-01 — Previously installed Piezometer

NOTES

1. All dimensions in millimetres with elevations in metres, unless noted otherwise.
2. Piezometers are vibrating wire type, SINCA Model 52611030 and RST Model 45005-0100 with a pressure rating of 100 psi or equivalent, connnected to a readout panel via standard non-vented direct burial cable.

DRG. NO.	DESCRIPTION
259	STAGE 4 INSTRUMENTATION - SOUTH EMBANKMENT - PLANE F
252	STAGE 4 INSTRUMENTATION - PERIMETER EMBANKMENT - PLAN
251	STAGE 4 INSTRUMENTATION - MAIN EMBANKMENT - PLAN

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	15MAR'07	STAGE 4 AS-BUILT	EC	WAL		

REVISIONS

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G.A. ALBRANT — 25493 — March 19/07

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

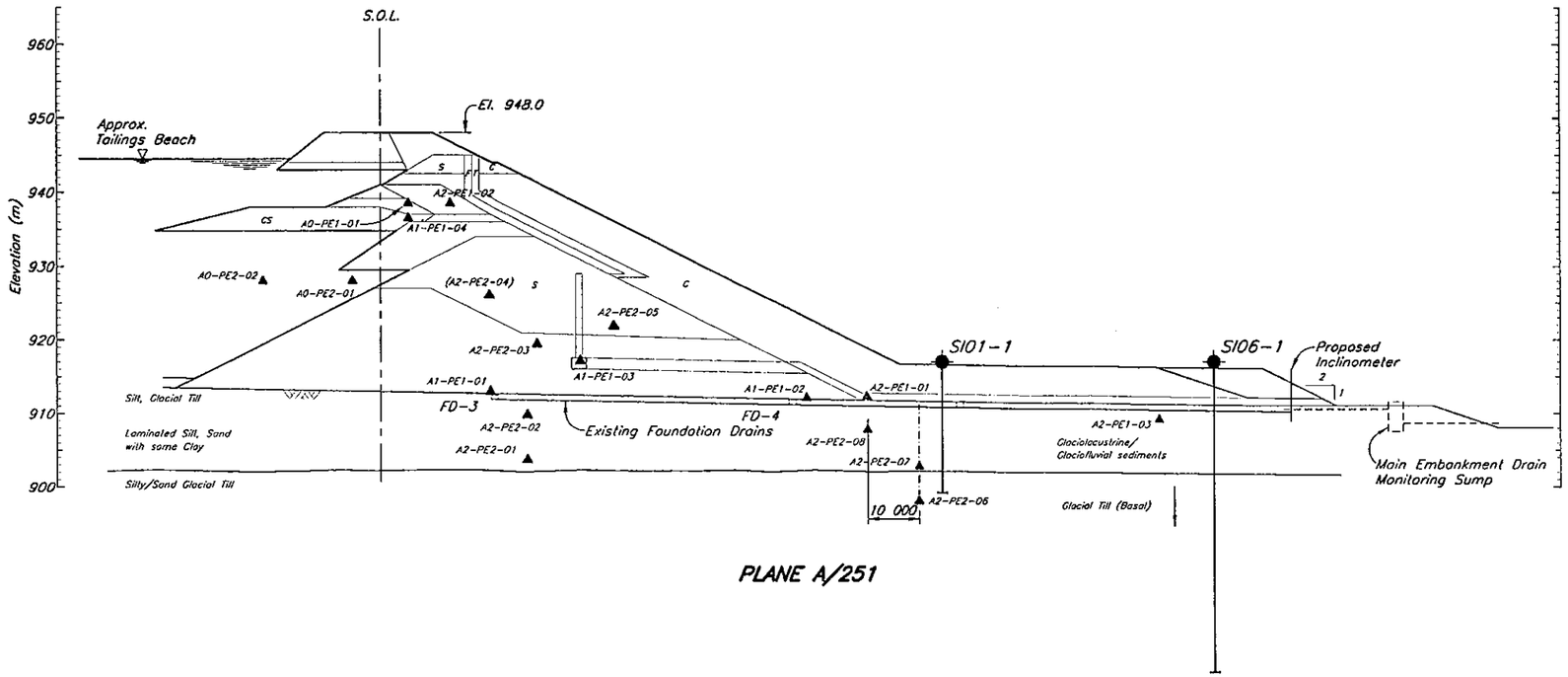
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4
SOUTH EMBANKMENT - INSTRUMENTATION PLAN

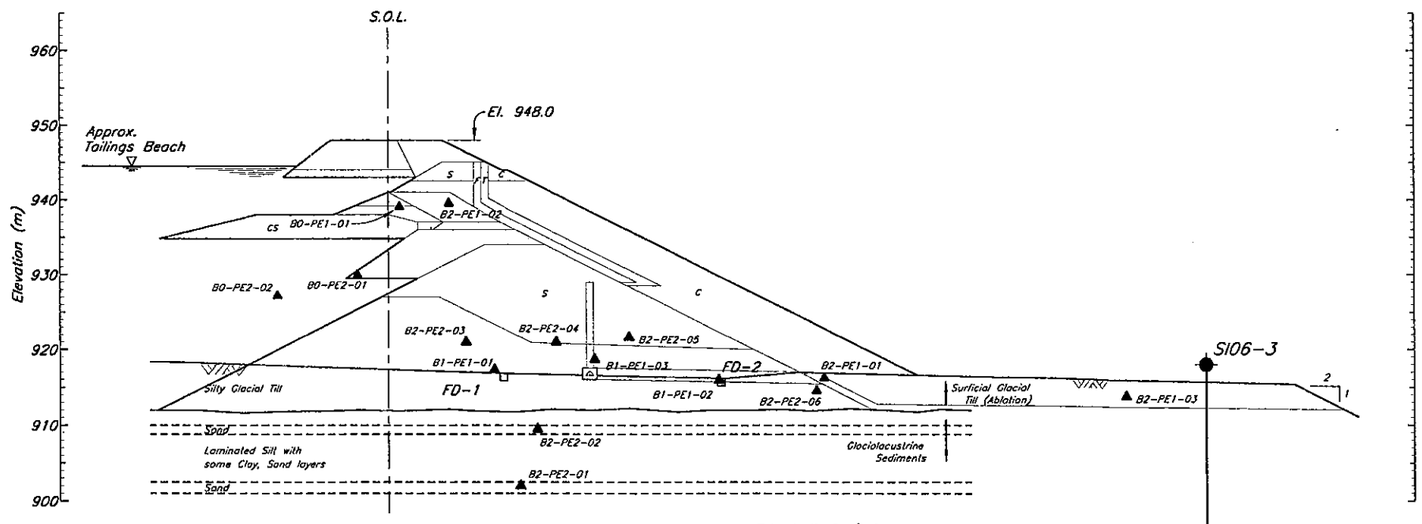
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	254	0

XREF FILE: 1oa2004_CA_Stage4_Plan

CAD FILE: M:\1\01\00001\10\A\Acad\Dwgs\254.dwg PLOT 1=1500 Mar. 15 2007 VANCOUVER B.C.



PLANE A/251



PLANE B/251

LEGEND

- 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 ▲ Vibrating Wire Piezometer

Scale 8 0 8 16 24 32 40 m

CAD FILE: M:\1\01\00001\10\A\Acad\Dwgs\256\256 1=400 Plot 1=1(PS) Aug. 9, 2006 VANCOUVER B.C.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA LJG SMITH 25493 — 19/07

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 – INSTRUMENTATION
MAIN EMBANKMENT
PLANES A AND B

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	256	0

XREF FILE: –

ORG. NO.	DESCRIPTION
257	INSTRUMENTATION – MAIN EMBANKMENT – PLANES C AND E
251	INSTRUMENTATION – MAIN EMBANKMENT – PLAN

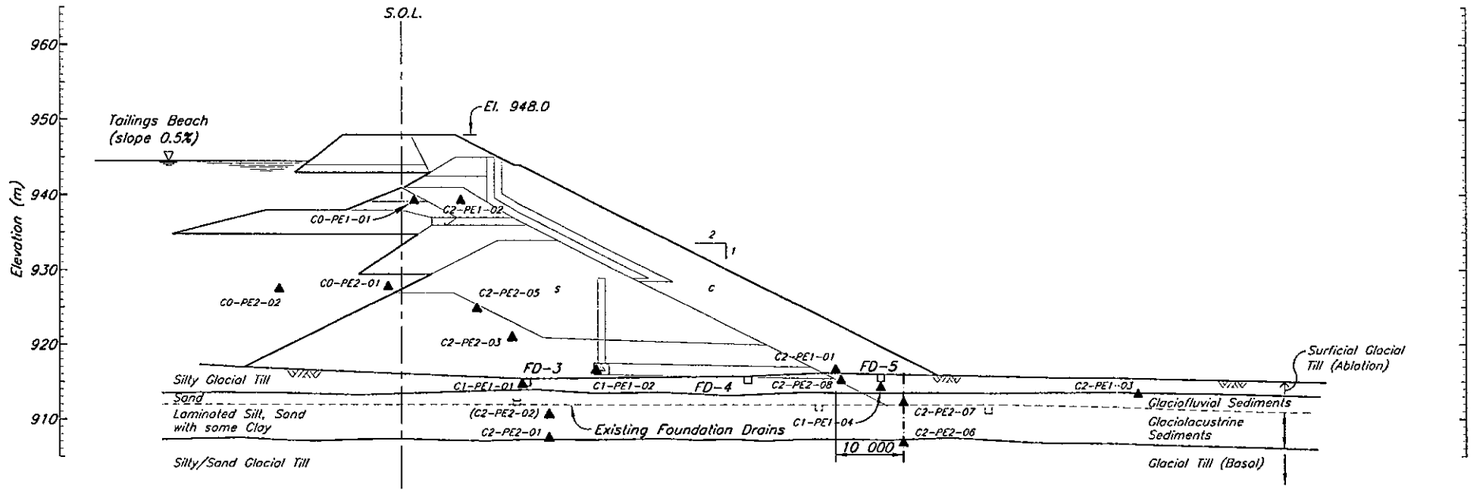
REFERENCE DRAWINGS

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

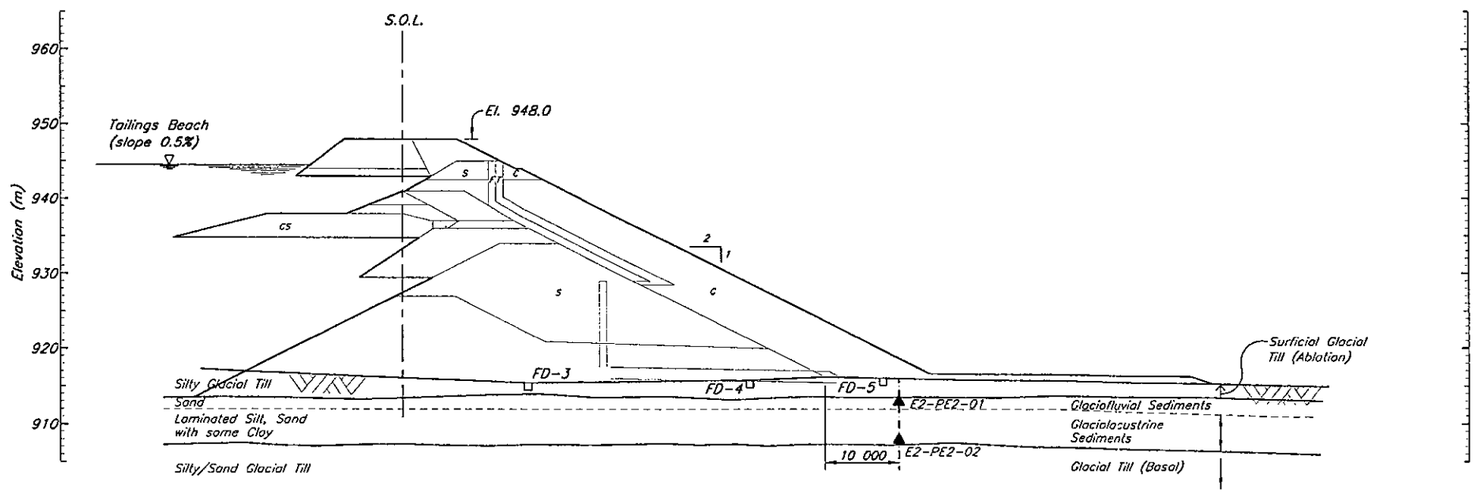
REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'07	STAGE 4 AS-BUILT	LJG	TAM	KJS	KJS

REVISIONS



PLANE C/251



PLANE E/251

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 ▲ Vibrating Wire Piezometer

Scale 8 0 8 16 24 32 40 m

CAD FILE: M:\1101\00001\10\A\xref\Dwg\257.257 1:400 Plot=1(PS) Mar. 9, 2007
VANCOUVER B.C.

REFERENCE DRAWINGS	
ORG. NO.	DESCRIPTION
256	INSTRUMENTATION - MAIN EMBANKMENT - PLANES A AND B
251	INSTRUMENTATION - MAIN EMBANKMENT - PLAN

XREF FILE: -

REVISIONS						
REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	14MAR'07	STAGE 4 AS-BUILT	LJG	TAM	KB	KDS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.J. GALLAGHER 29493 March 19/07

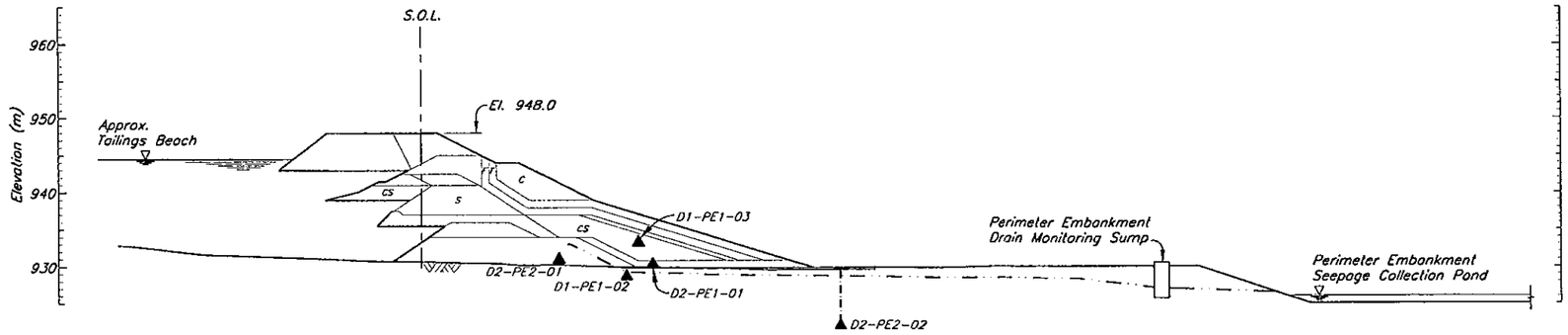
Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

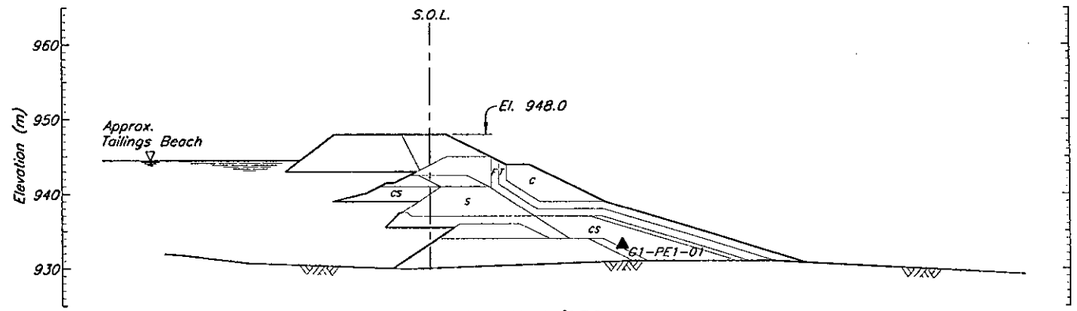
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 - INSTRUMENTATION
MAIN EMBANKMENT
PLANES C AND E

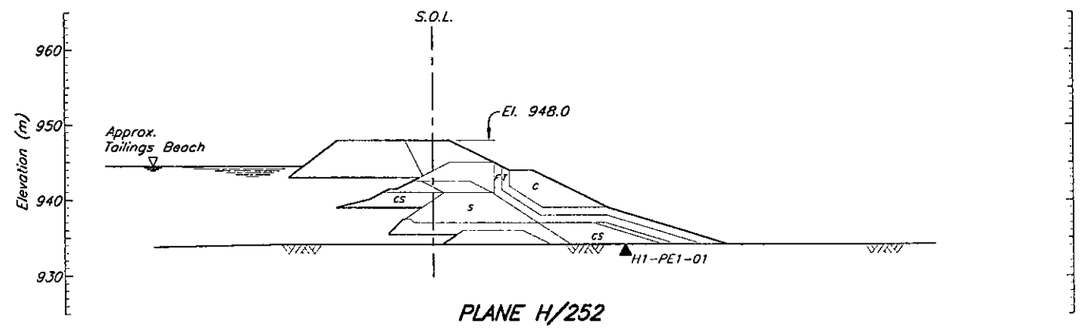
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	257	0



PLANE D/252



PLANE G/252



PLANE H/252

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 ▲ Vibrating Wire Piezometer

Scale 8 0 8 16 24 32 40 m

CAD FILE: M:\1011\00001\10\A\dwg\258\258 1=400 Plot 1=1(PS) Mar. 9, 2007 WAL
VANCOUVER B.C.

XREF FILE: -

DRG. NO.	DESCRIPTION
256	INSTRUMENTATION - MAIN EMBANKMENT - PLANES A AND B
252	INSTRUMENTATION - PERIMETER EMBANKMENT - PLAN

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'07	STAGE 4 AS-BUILT	LJG	TAM	RB/KDS	

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. J. GALBRAITH 25493 March 19/07

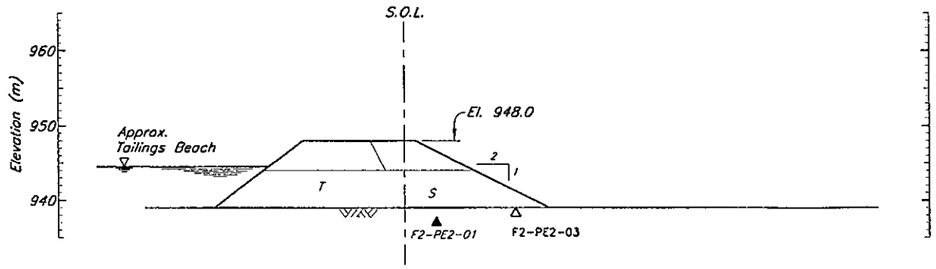
Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 - INSTRUMENTATION
PERIMETER EMBANKMENT
PLANES D, G AND H

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	258	0



PLANE F/254

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 ▲ Vibrating Wire Piezometer

Scale 8 0 8 16 24 32 40 m

CAD FILE: M:\1\01\00001\10\A\dwg\[Dwg]259.259 1=400 Plot 1=1(PS) Mar. 9, 2007 WAL
VANCOUVER B.C.

DRG. NO.	DESCRIPTION
256	INSTRUMENTATION - MAIN EMBANKMENT - PLANES A AND B
254	INSTRUMENTATION - SOUTH EMBANKMENT - PLAN

REFERENCE DRAWINGS

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

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'07	STAGE 4 AS-BUILT	LJG	TAM	KJB	KJB

REVISIONS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J.J. MALDRAIT 25493
March 19/07

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 - INSTRUMENTATION
SOUTH EMBANKMENT
PLANE F

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/10	259	0

XREF FILE : -

APPENDIX A

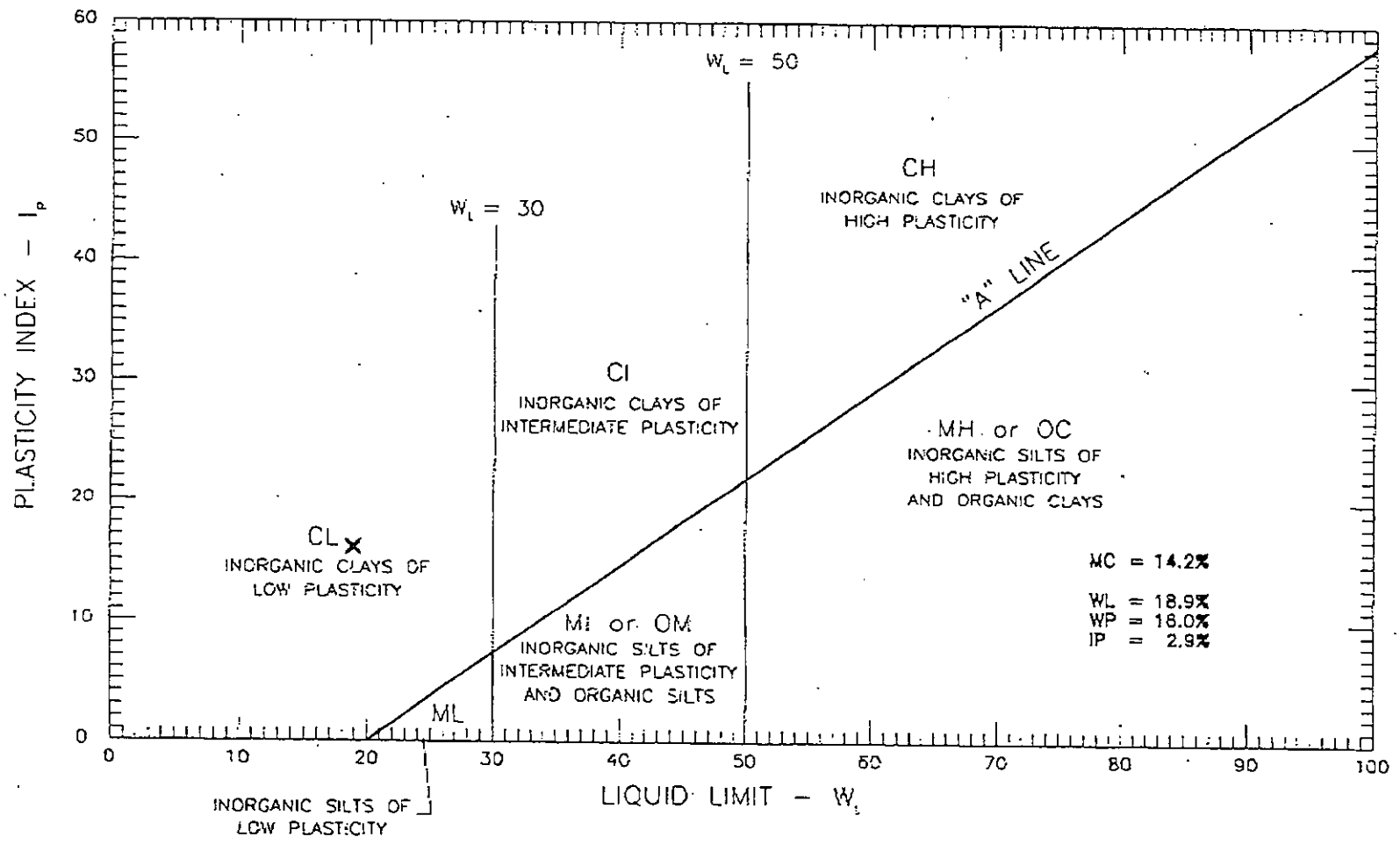
LABORATORY TEST RESULTS

Knight Piésold
CONSULTING

APPENDIX A1

ZONE S CONTROL RESULTS

(Pages A1-1 to A1-36)



GEONORTH ENGINEERING LTD. 1301 Kelliher 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 ATTERBERG LIMITS OF KP06-ZS-04C, TP06-18	SCALE: N.T.S.	DATE: 2006/07/07
		PROJECT NO: K-2036	DRAWING NO. 2036-E32

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 Martel @ 250-790-2268

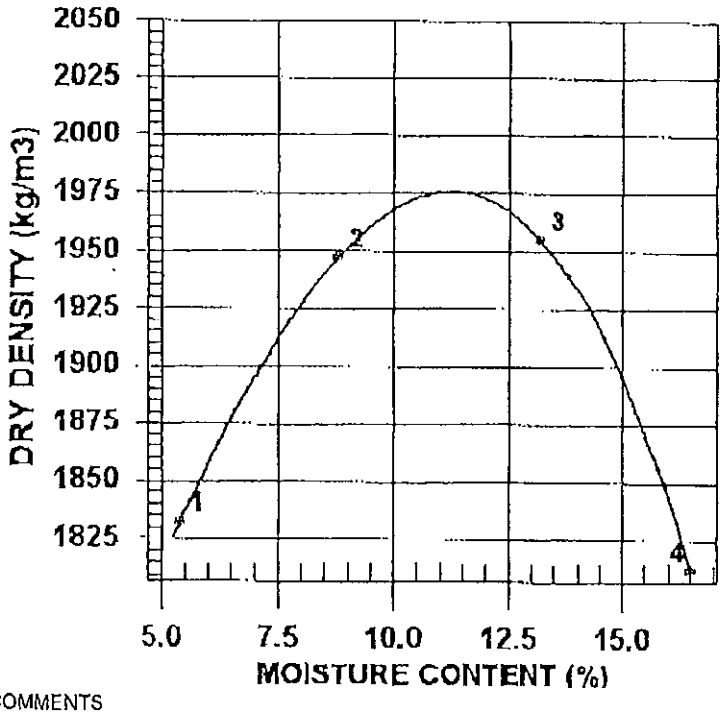
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

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

PROCTOR NO. 7 DATE TESTED 2006.Jul.05 DATE RECEIVED 2006.Jun.26 DATE SAMPLED 2006.Jun.21

INSITU MOISTURE N/A %
SAMPLED BY CLIENT
TESTED BY RO
SUPPLIER
SOURCE KP06-MS-04C, TP06-18
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 Manual
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 10.1 %
OVERSIZE SPECIFIC GRAVITY 2.67
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1931	1832	5.4
2	2118	1947	8.8
3	2213	1955	13.2
4	2111	1812	16.5

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1980	11.5
OVERSIZE CORRECTED	2030	10.5

COMMENTS

 PER.

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

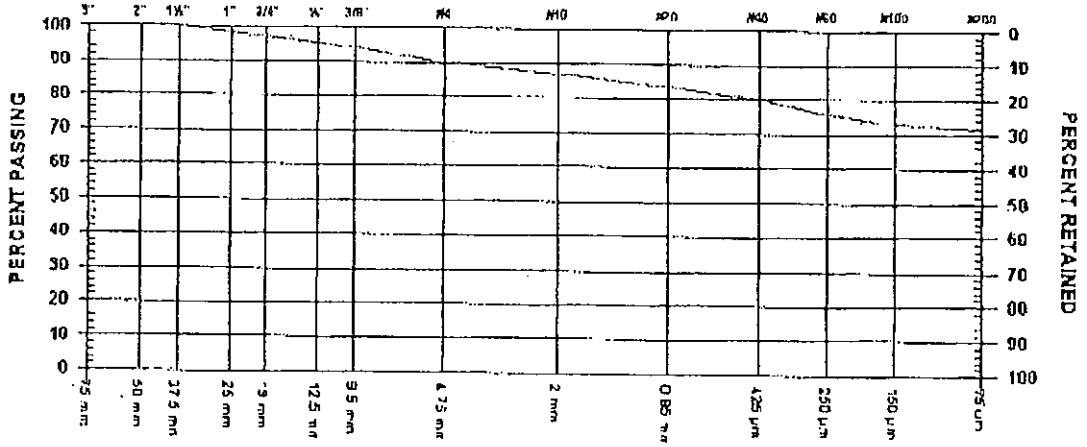
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C Knight Piesold Consulting

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

SIEVE TEST NO. 7 DATE RECEIVED 2006.Jun.26 DATE TESTED 2006.Jun.30 DATE SAMPLED 2006.Jun.26

SUPPLIER
SOURCE KP06-2S-04C, TP06-18
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CLIENT
TESTED BY RO
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	98.3	
3/4"	19 mm	97.0	
1/2"	12.5 mm	95.4	
3/8"	9.5 mm	94.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	89.9	
No. 10	2.00 mm	86.7	
No. 20	850 µm	83.4	
No. 40	425 µm	80.2	
No. 60	250 µm	75.9	
No. 100	150 µm	72.6	
No. 200	75 µm	71.4	

COMMENTS

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. (Knight Piesold)				Date: July 7, 2006
Project Name: MPCP - Stage 4				Project #: K-2036
Source/Location: KP06-ZS-04C				Type: Till
Sample #:	Test #:	Hole #: TP06-18	Depth:	Time:
Sampled By: Client	Tested By: DJ			Checked By: NK
Date Sampled: 06.21.06	Date Received: 06.26.06			Date Tested: 07.06.06

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	0.867	0.5	25.0	26.0	0.01272				0.063	62.5	54.2
40.0	0.867	1	21.0	26.0	0.01272				0.046	52.5	45.5
40.0	0.867	2	19.5	26.0	0.01272				0.033	48.8	42.3
40.0	0.867	4	18.0	26.0	0.01272				0.023	45.0	39.0
40.0	0.867	8	15.0	26.0	0.01272				0.017	37.5	32.5
40.0	0.867	15	14.5	26.0	0.01272				0.012	36.3	31.5
40.0	0.867	30	12.0	26.0	0.01272				0.009	30.0	26.0
40.0	0.867	68	10.0	24.0	0.01301				0.006	25.0	21.7
40.0	0.867	120	8.5	24.0	0.01301				0.005	21.3	18.5
40.0	0.867	240	7.5	24.0	0.01301				0.003	18.8	16.3
40.0	0.867	480	6.0	24.0	0.01301				0.002	15.0	13.0
40.0	0.867	1409	5.5	24.0	0.01301				0.001	13.8	12.0

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

Hydrometer Sieve Analysis

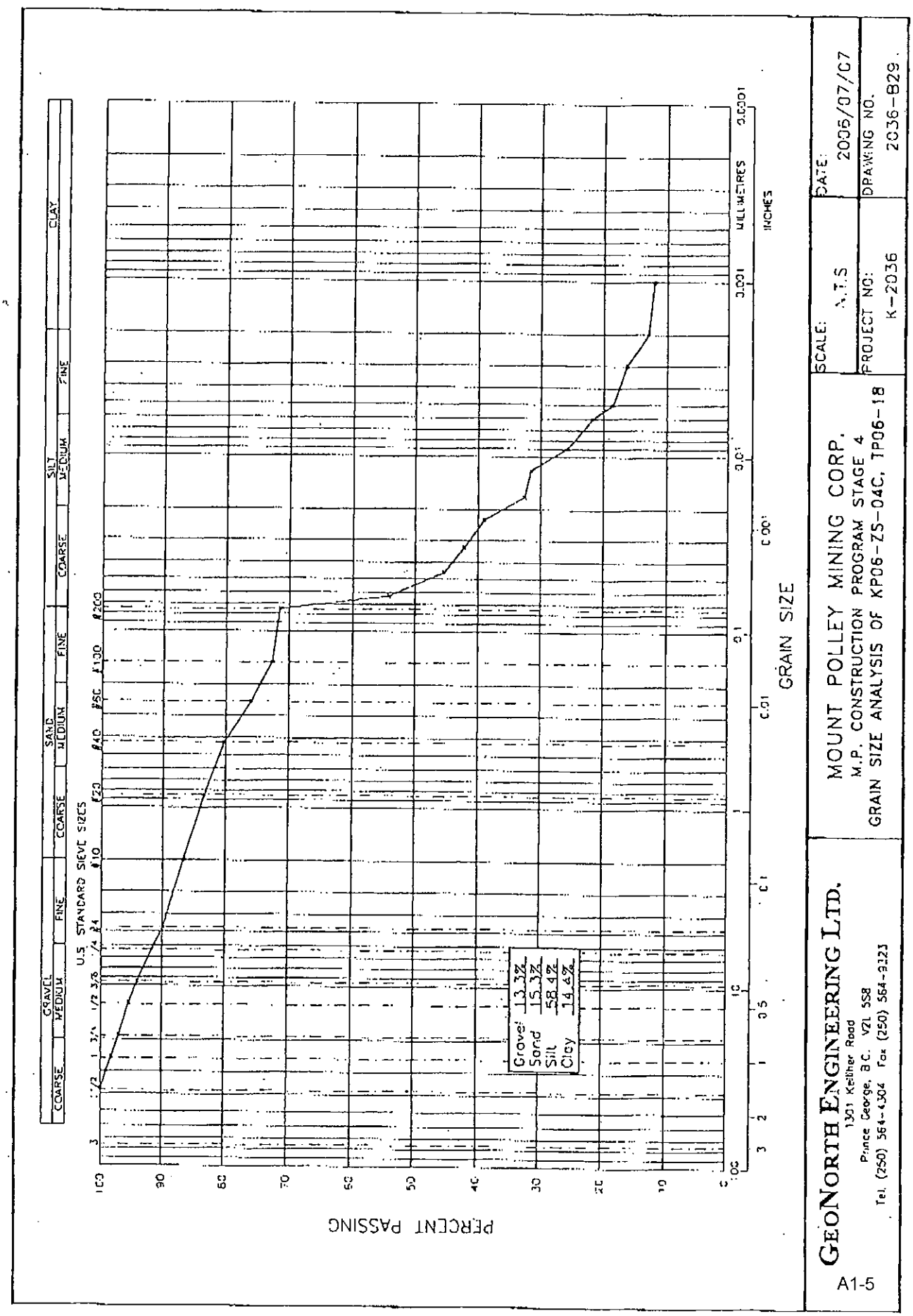
Seive No.	Weight Retained	Total Wt. Finer Than	% Finer Than	% Finer Than Orig Samp.
10		40.0	100.0	86.7
20	1.5		96.3	83.5
40	1.6		92.3	80.0
60	2.3		86.5	75.0
100	2.8		79.5	68.9
200	5.5		65.8	57.0
Pan	26.3			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

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		
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) =	



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
GRAIN SIZE ANALYSIS OF KP06-ZS-04C, TP06-18

SCALE: N.T.S
PROJECT NO: K-2036
DATE: 2006/07/07
DRAWING NO. 2036-B29

A1-5

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

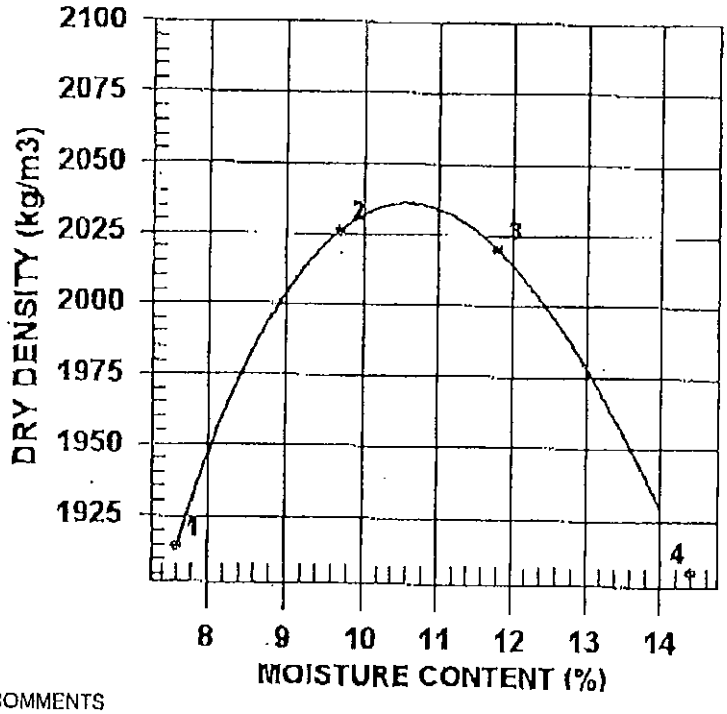
PROJECT NO K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

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

PROCTOR NO. 5 DATE TESTED 2006.Jun.30 DATE RECEIVED 2006.Jun.26 DATE SAMPLED 2006.Jun.21

INSITU MOISTURE N/A %
SAMPLED BY CLIENT
TESTED BY BO
SUPPLIER
SOURCE KP06-MS-05C, TP06-20
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 Manual
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 19.9 %
OVERSIZE SPECIFIC GRAVITY 2.67
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2059	1914	7.6
2	2223	2026	9.7
3	2258	2020	11.8
4	2182	1907	14.4

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2040	10.5
OVERSIZE CORRECTED	2140	8.5

COMMENTS

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

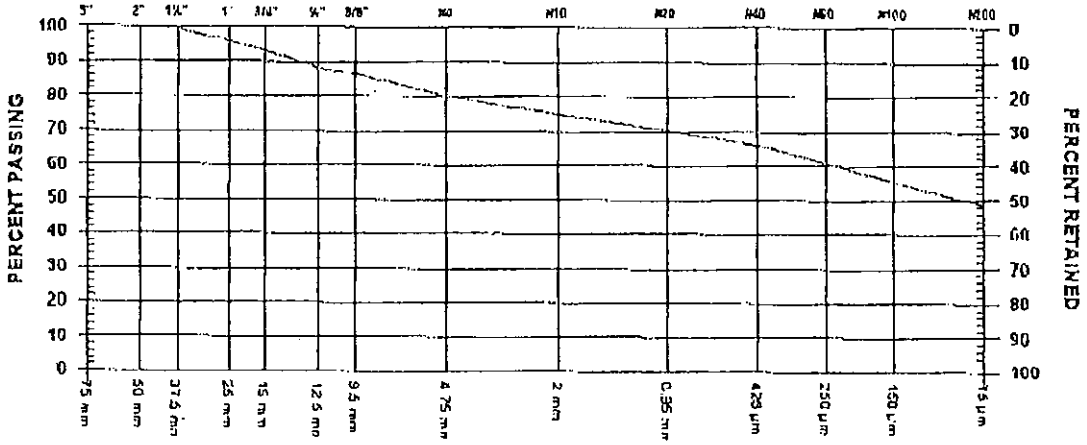
ATTN: Ron Martel @ 250-790-2268

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

SIEVE TEST NO. 6 DATE RECEIVED 2006.Jun.26 DATE TESTED 2006.Jun.30 DATE SAMPLED 2006.Jun.21

SUPPLIER
SOURCE KP06-ZS-05C, TP06-20
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	100.0	
1 1/2"	37.5 mm	99.1	
1"	25 mm	95.7	
3/4"	19 mm	93.2	
1/2"	12.5 mm	88.3	
3/8"	9.5 mm	86.4	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	80.1	
No. 10	2.00 mm	74.9	
No. 20	850 µm	70.1	
No. 40	425 µm	66.2	
No. 60	250 µm	60.8	
No. 100	150 µm	55.4	
No. 200	75 µm	48.5	

COMMENTS

GeoNorth Engineering

Test Designation: ASTM D-422

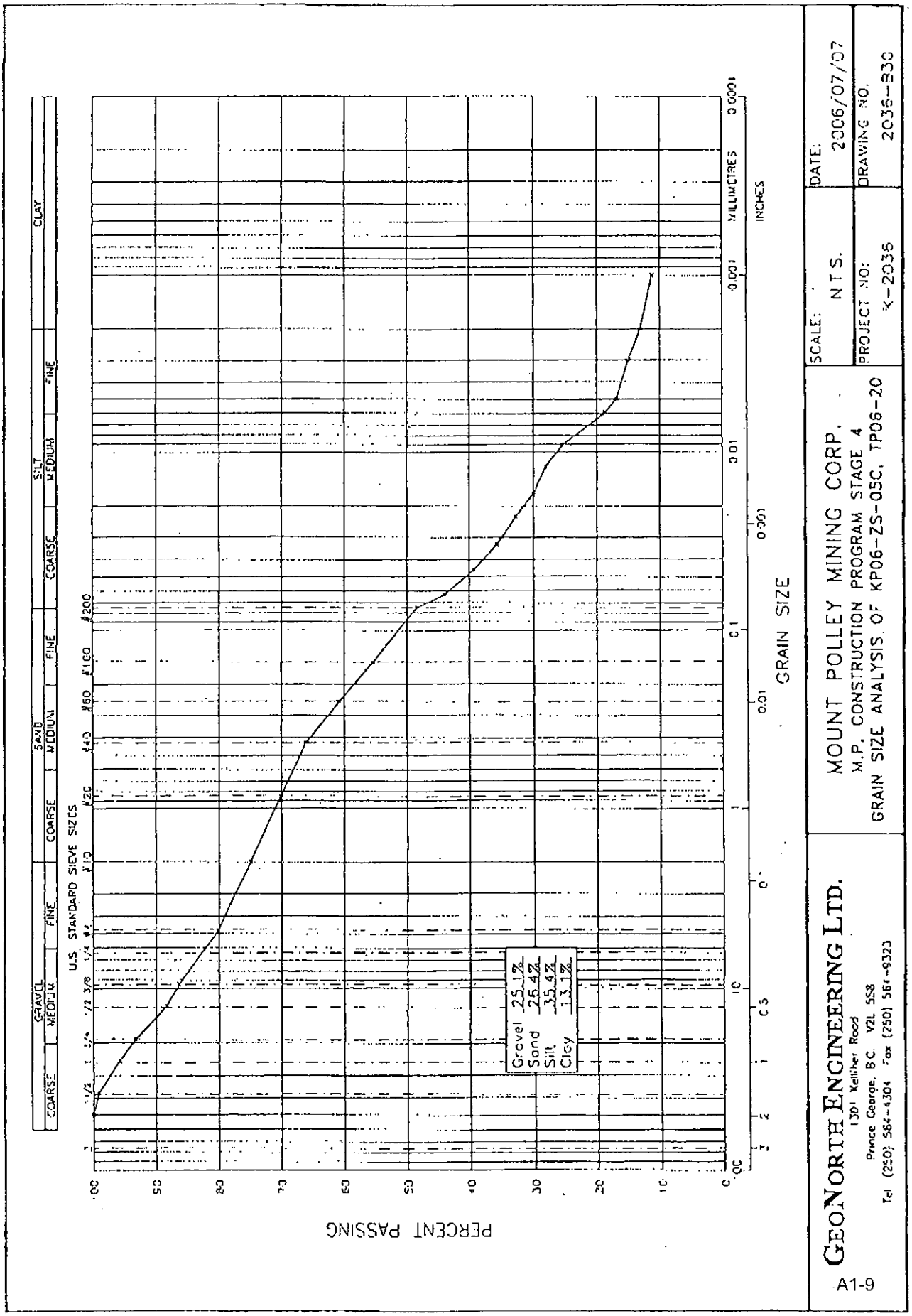
Hydrometer Analysis

Client: Mount Polley Mining Corp. (Knight Piesold)									Date: July 7, 2006		
Project Name: MPCP - Stage 4									Project #: K-2036		
Source/Location: KP06-ZS-05C									Type: Till		
Sample #:		Test #:		Hole #: TP06-20		Depth:			Time:		
Sampled By: Client			Tested By: DJ						Checked By: NK		
Date Sampled: 06.21.06			Date Received: 06.26.06						Date Tested: 07.06.06		
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	0.749	0.5	23.5	26.0	0.01272				0.063	58.8	44.0
40.0	0.749	1	21.0	26.0	0.01272				0.046	52.5	39.3
40.0	0.749	2	19.0	26.0	0.01272				0.033	47.5	35.6
40.0	0.749	4	17.5	26.0	0.01272				0.023	43.8	32.8
40.0	0.749	8	16.0	26.0	0.01272				0.017	40.0	30.0
40.0	0.749	15	15.0	26.0	0.01272				0.012	37.5	28.1
40.0	0.749	30	13.5	26.0	0.01272				0.009	33.8	25.3
40.0	0.749	68	10.0	24.0	0.01301				0.006	25.0	18.7
40.0	0.749	120	9.0	24.0	0.01301				0.005	22.5	16.9
40.0	0.749	240	8.0	24.0	0.01301				0.003	20.0	15.0
40.0	0.749	480	7.0	24.0	0.01301				0.002	17.5	13.1
40.0	0.749	1434	6.0	24.0	0.01301				0.001	15.0	11.2
Hydrometer #: 794968			Graduate #: 5			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	74.9
20	2.1		94.8	71.0
40	2.4		88.8	66.5
60	3.0		81.3	60.9
100	2.8		74.3	55.7
200	4.7		62.5	46.8
Pan	25.0			
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 =			

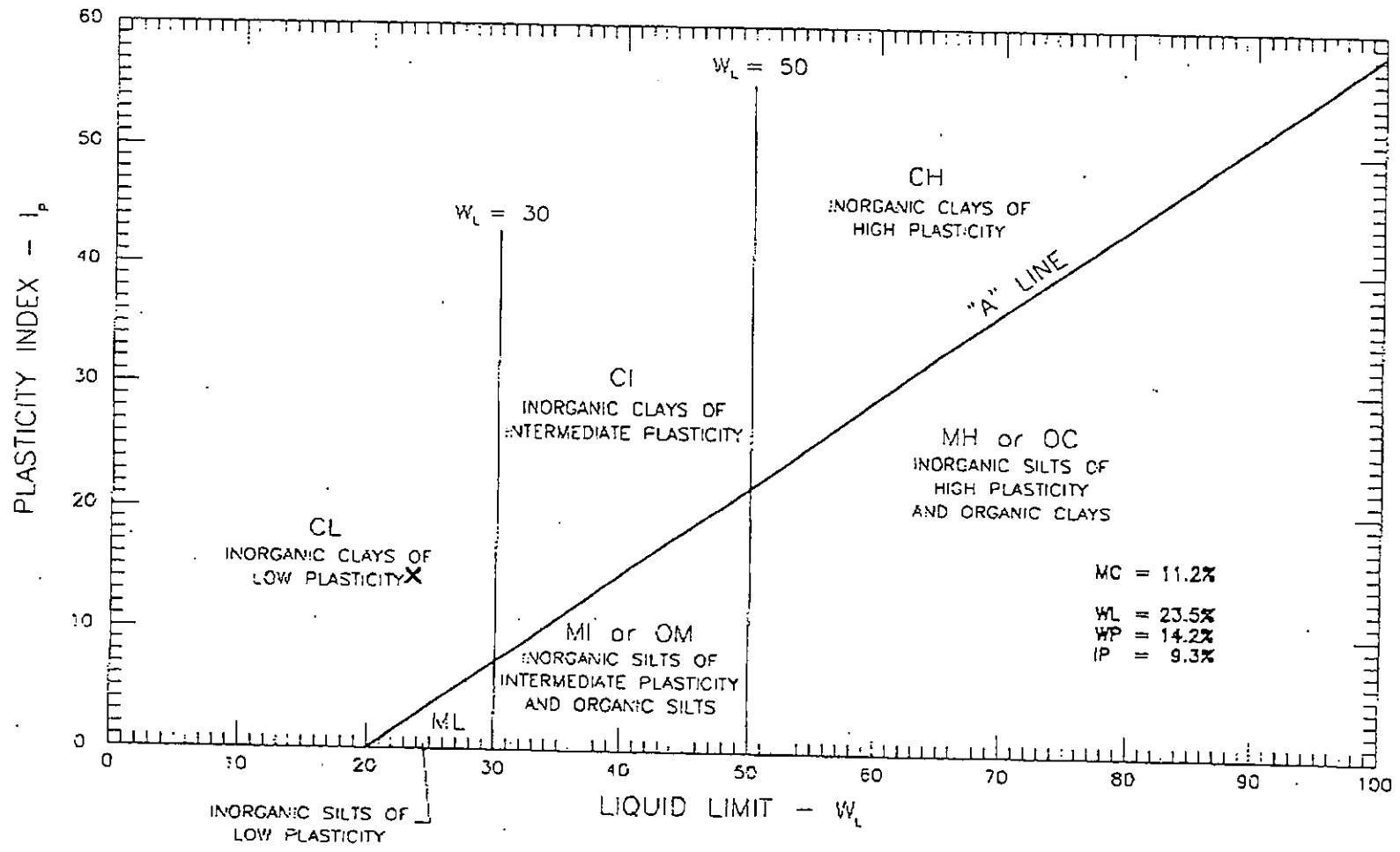
Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	



GEONORTH ENGINEERING LTD.
1301 Kelliher Road
Prince George, B.C. V2L 5S8
Tel (250) 564-4304 Fax (250) 561-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
GRAIN SIZE ANALYSIS OF KP06-ZS-05C, TP06-20

SCALE: N.T.S.
DATE: 2006/07/07
PROJECT NO: K-2036
DRAWING NO. 2036-330



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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:	DATE:
N.T.S	2006/07/07
PROJECT NO:	DRAWING NO.
K-2036	2036-B33

A1-10

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

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

ATTN: Ron Martel @ 250-790-2268

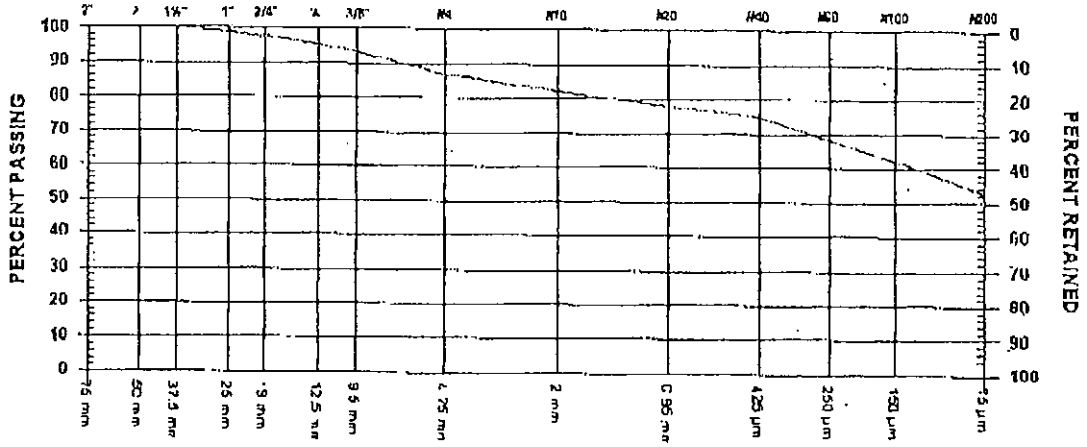
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold Consulting

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

SIEVE TEST NO. 8 DATE RECEIVED 2006.Jun.26 DATE TESTED 2006.Jun.30 DATE SAMPLED 2006.Jun.20

SUPPLIER
SOURCE KP06-ZS-06C, TP06-04
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY CLIENT
TESTED BY GW
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	98.9	
3/4"	19 mm	97.5	
1/2"	12.5 mm	95.3	
3/8"	9.5 mm	93.4	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	86.7	
No. 10	2.00 mm	82.3	
No. 20	850 µm	77.9	
No. 40	425 µm	75.0	
No. 60	250 µm	68.3	
No. 100	150 µm	62.3	
No. 200	75 µm	52.7	

COMMENTS

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 Martel @ 250-790-2268

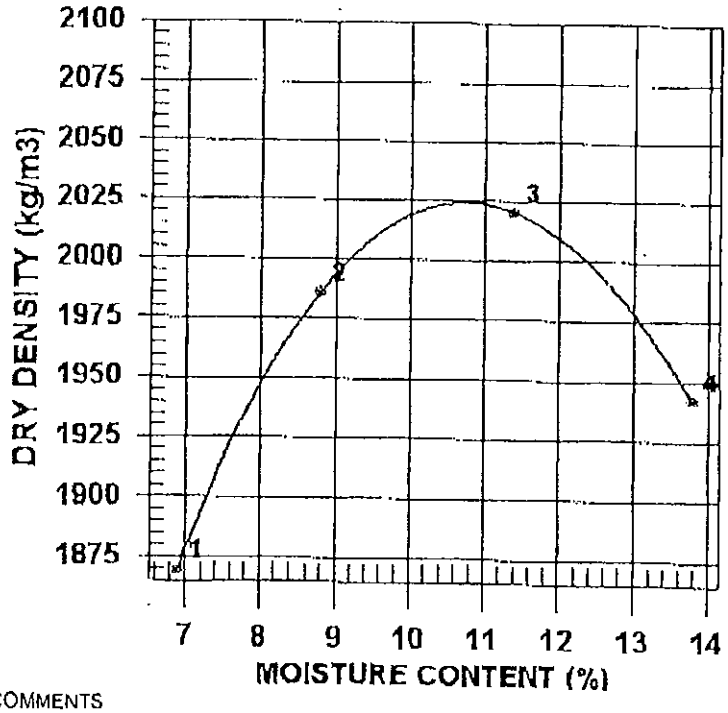
PROJECT NO. K 2036
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold Consulting

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

PROCTOR NO. 6 DATE TESTED 2006.Jun.30 DATE RECEIVED 2006.Jun.26 DATE SAMPLED 2006.Jun.20

INSITU MOISTURE N/A. %
SAMPLED BY CLIENT
TESTED BY BO
SUPPLIER
SOURCE KP06-ZS-06C, TP06-04
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 Manual
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 13.1 %
OVERSIZE SPECIFIC GRAVITY 2.67
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1999	1870	6.9
2	2161	1986	8.8
3	2250	2020	11.4
4	2210	1942	13.8

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2020	10.5
OVERSIZE CORRECTED	2090	9.5

COMMENTS

 PER.

GeoNorth Engineering

Test Designation: ASTM D-422

Hydrometer Analysis

Client: Mount Polley Mining Corp. (Knight Piesold)				Date: July 7, 2006
Project Name: MPCP - Stage 4				**Project #: K-2036**
Source/Location: KP06-ZS-06C				Type: Till
Sample #:	Test #:	**Hole #: TP06-04**	**Depth:**	Time:
Sampled By: Client	Tested By: DJ			Checked By: NK
Date Sampled: 06.20.06	Date Received: 06.26.06			Date Tested: 07.06.06

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	0.823	0.5	24.0	26.0	0.01272				0.063	60.0	**49.4**
40.0	0.823	1	21.0	26.0	0.01272				0.046	52.5	**43.2**
40.0	0.823	2	19.5	26.0	0.01272				0.033	48.8	**40.2**
40.0	0.823	4	18.0	26.0	0.01272				0.023	45.0	**37.0**
40.0	0.823	8	16.0	26.0	0.01272				0.017	40.0	**32.9**
40.0	0.823	15	14.0	26.0	0.01272				0.012	35.0	**28.8**
40 0	0.823	30	12.5	26.0	0.01272				0.009	31.3	**25.8**
40.0	0.823	68	10.0	24.0	0.01301				0.006	25.0	**20.6**
40.0	0.823	120	8.5	24.0	0.01301				0.005	21.3	**17.5**
40.0	0.823	240	7.5	24.0	0.01301				0.003	18.8	**15.5**
40.0	0.823	480	6.5	24.0	0.01301				0.002	16.3	**13.4**
40.0	0.823	1400	5.0	24.0	0.01301				0.001	12.5	**10.3**

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	**82.3**
20	1.8		95.5	**78.6**
40	2.1		90.3	**74.3**
60	2.8		83.3	**68.5**
100	2.8		76.3	**62.8**
200	4.6		64.8	**53.3**
Pan	25.9			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

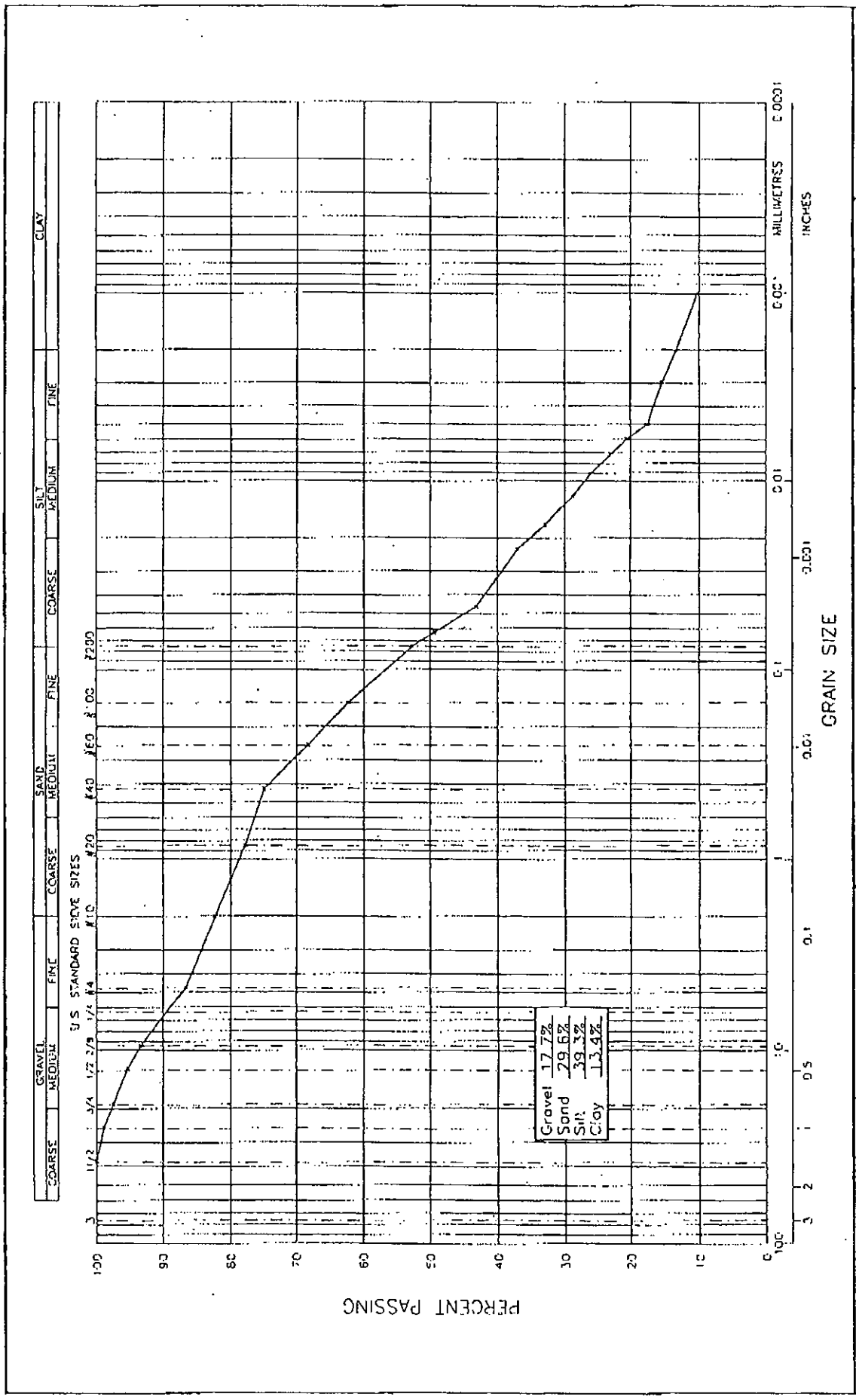
Sieve Analysis

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) =	

NBELCC

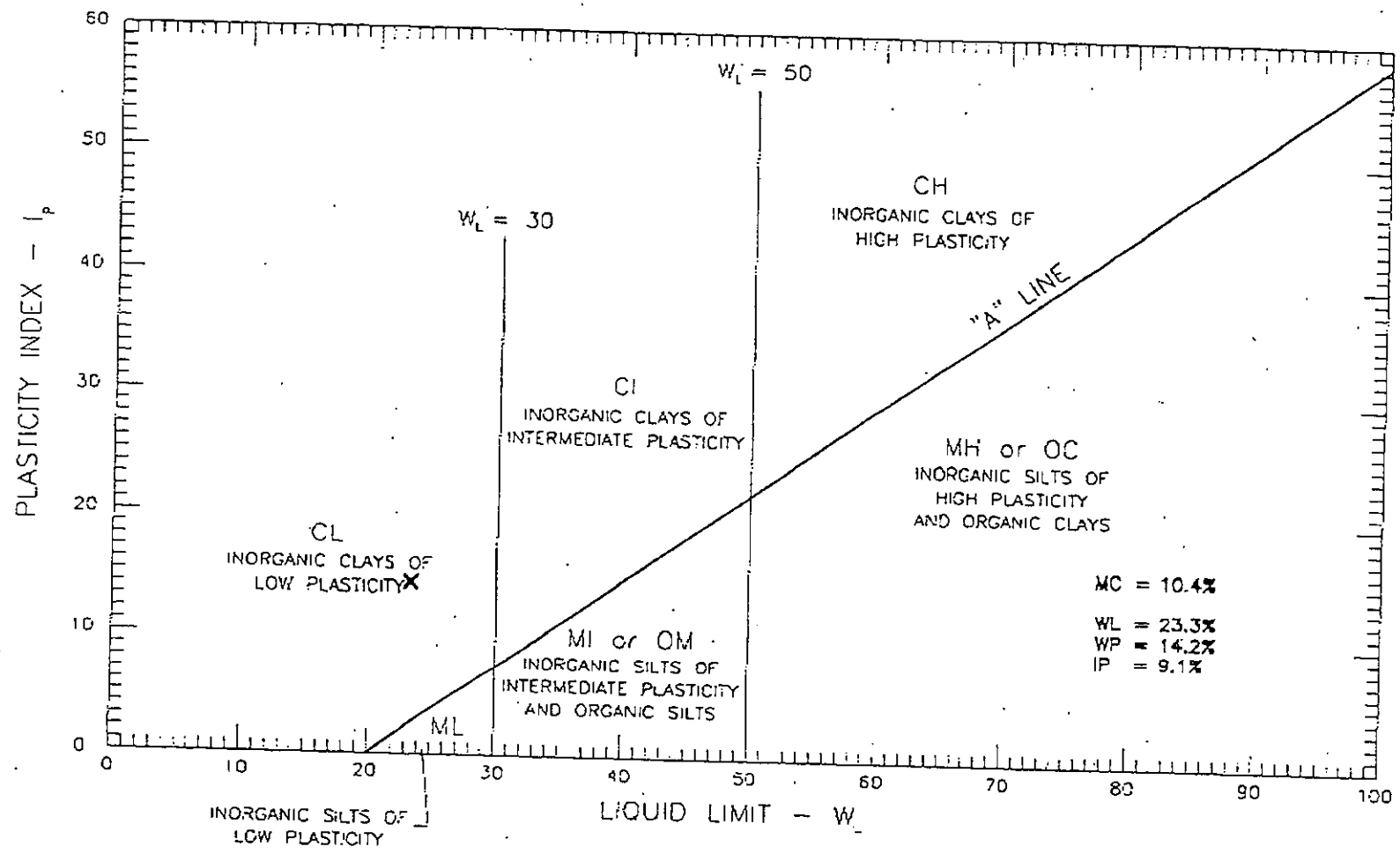


GEONORTH ENGINEERING LTD.
1301 Kelliher Road
Prince George, B.C. V2L 5S8
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
GRAIN SIZE ANALYSIS OF KP06-ZS-06C, TP06-04

SCALE: N.T.S
PROJECT NO: K-2036
DATE: 2006/07/06
DRAWING NO. 2036-B3

A1-14



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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-06C, TP06-04

SCALE:	DATE:
N.T.S.	2006/07/10
PROJECT NO:	DRAWING NO.
K-2036	2036-B34

A1-15

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

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

ATTN: Terry Isaacs @ 250-790-2268

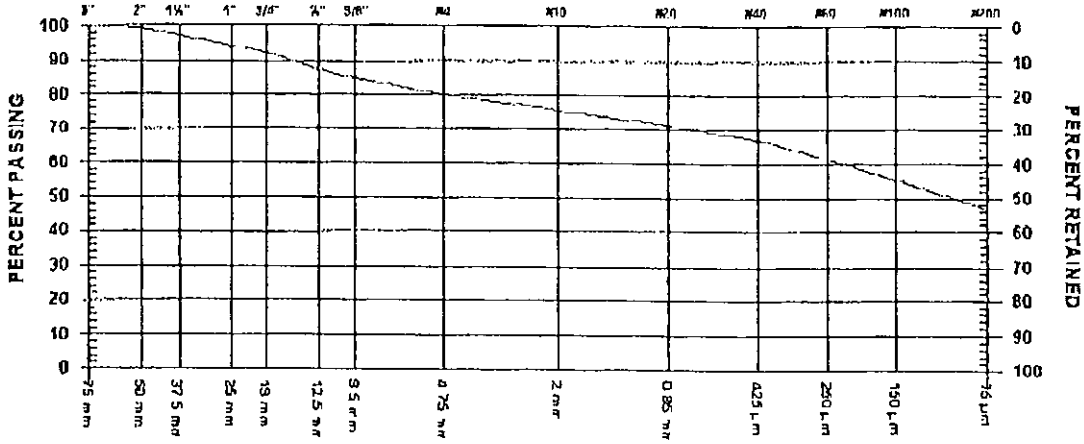
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 19 DATE RECEIVED 2005.Jun.06 DATE TESTED 2005.Jun.08 DATE SAMPLED 2005.May.27

SUPPLIER
SOURCE TP05-25, 0-5m
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client
TESTED BY DJ
TEST METHOD WASHED

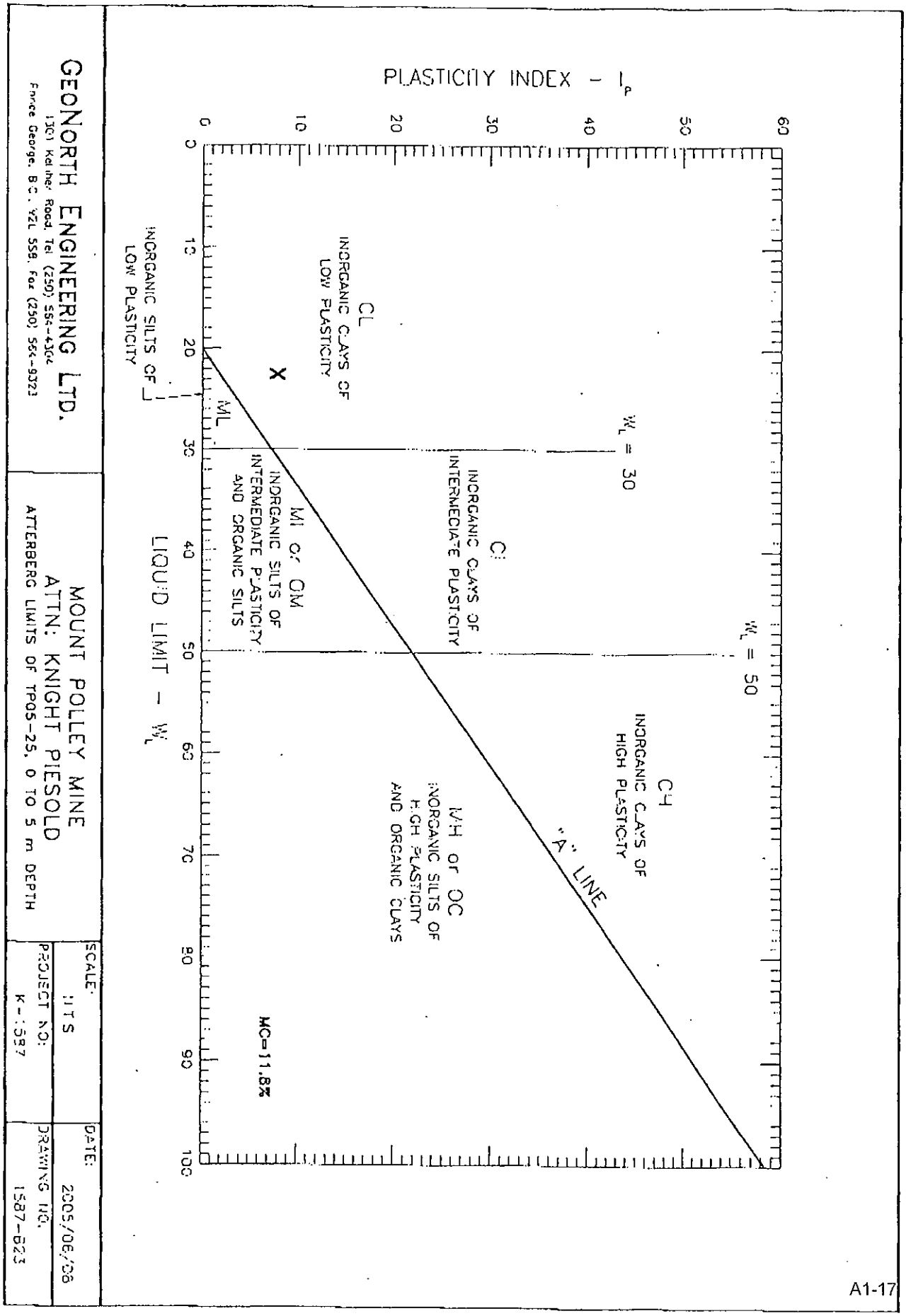


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	99.2	
1 1/2"	37.5 mm	97.2	
1"	25 mm	93.9	
3/4"	19 mm	92.4	
1/2"	12.5 mm	87.2	
3/8"	9.5 mm	84.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	80.1	
No. 10	2.00 mm	75.2	
No. 20	850 µm	71.0	
No. 40	425 µm	66.8	
No. 60	250 µm	61.2	
No. 100	150 µm	55.4	
No. 200	75 µm	46.8	

COMMENTS
ID# KP05-50

Page 1 of 1 2005.Jun.09 GeoNorth Engineering Ltd. PER.



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

MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF TP05-25, 0 TO 5 m DEPTH

SCALE:	NTS
DATE:	2005/06/28
PROJECT NO:	K-1587
DRAWING NO.	1587-523

GeoNorth Engineering Ltd.
1301 Kelliher Road Prince George, BC V2L5B8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

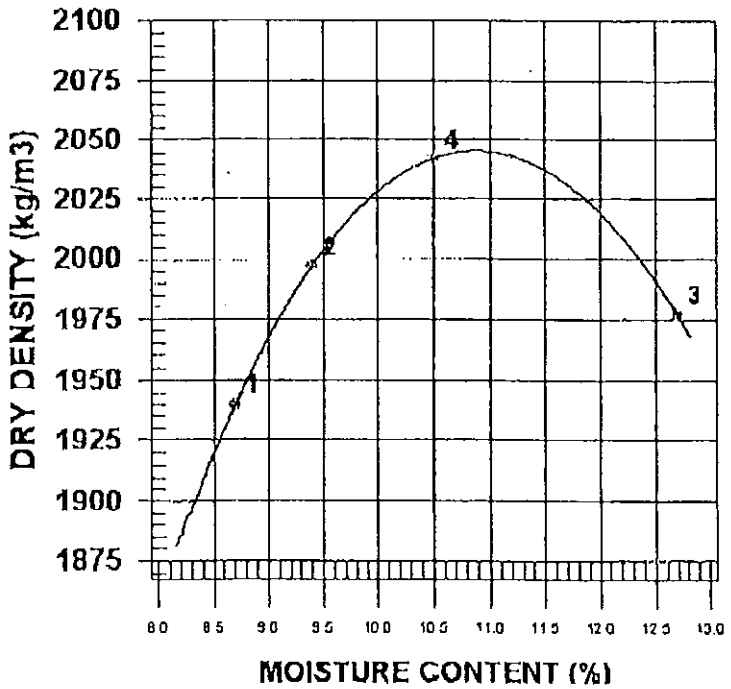
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 18 NO OF TRIALS 4 DATE RECEIVED 2005.Jun.06 DATE SAMPLED 2005.May.27

INSITU MOISTURE N/A %
SAMPLED BY Client - GJ
TESTED BY NDS
SUPPLIER
SOURCE TP05-25, 0-5m
MATERIAL IDENTIFICATION
MAJOR COMPONENT TILL
SIZE
DESCRIPTION GRAVELLY
ROCK TYPE

COMPACTION STANDARD Standard Proctor, ASTM D698
COMPACTION PROCEDURE C: 152.4mm Mold, Passing 19mm
RAMMER TYPE Manual
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 19mm SCREEN 7.5 %
OVERSIZE SPECIFIC GRAVITY 2.65

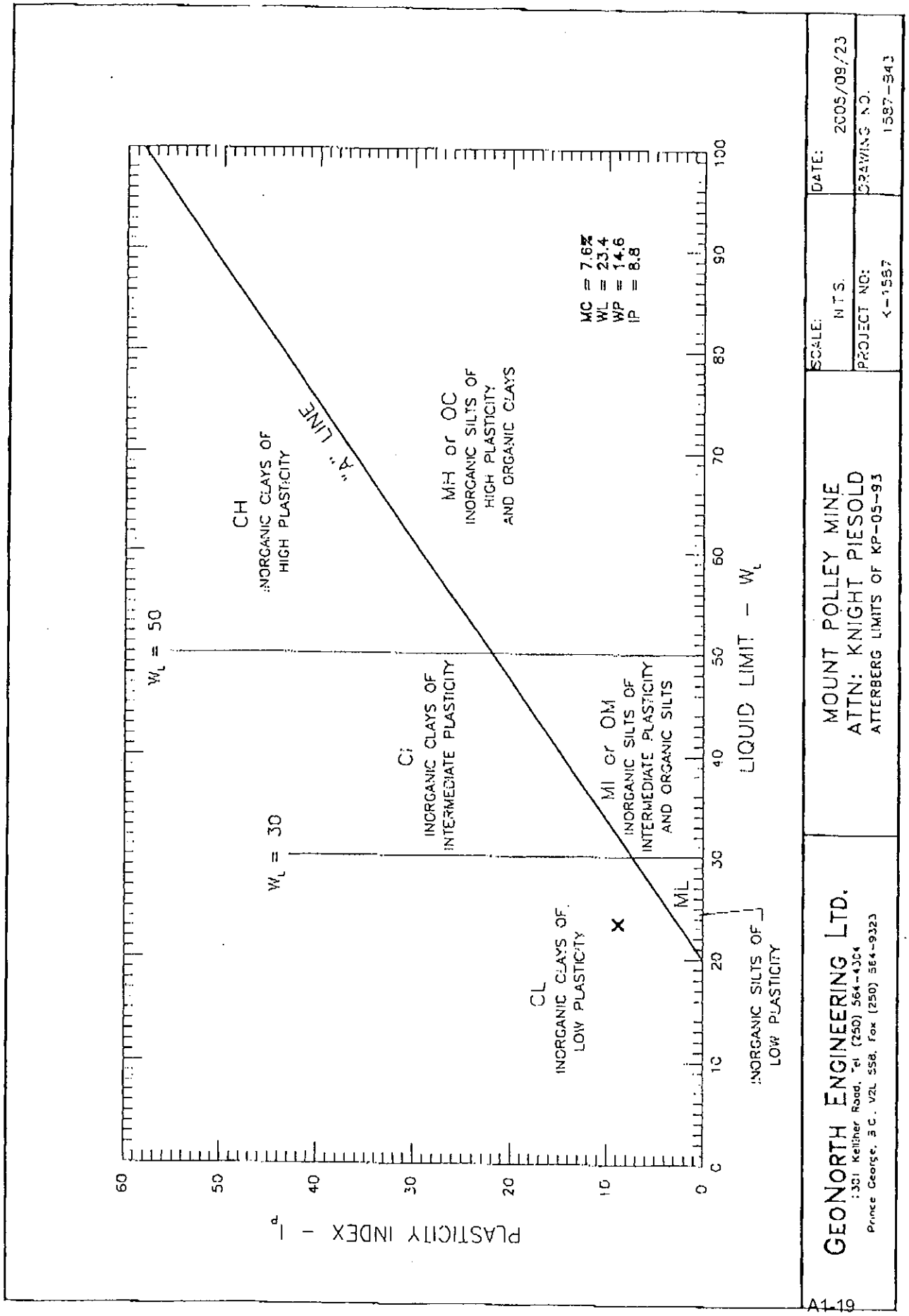


TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2109	1940	8.7
2	2185	1997	9.4
3	2228	1977	12.7
4	2256	2042	10.5

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2090	11.0
OVERSIZE CORRECTED	2124	10.3

COMMENTS
ID# KP05-50

 2005.Jun.09 GeoNorth Engineering Ltd. PER.


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
"A" LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC = 7.6%
WL = 23.4
WP = 14.6
IP = 8.8
GEONORTH ENGINEERING LTD.
#301 Kelliher Road, Tel (250) 564-4304
Prince George, B.C., V2L 5S8. Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-93
SCALE: N.T.S.
PROJECT NO: K-1587
DATE: 2005/09/23
DRAWING NO. 1587-343

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

SIEVE ANALYSIS REPORT No. 8087
10 20 40 60 SERIES

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

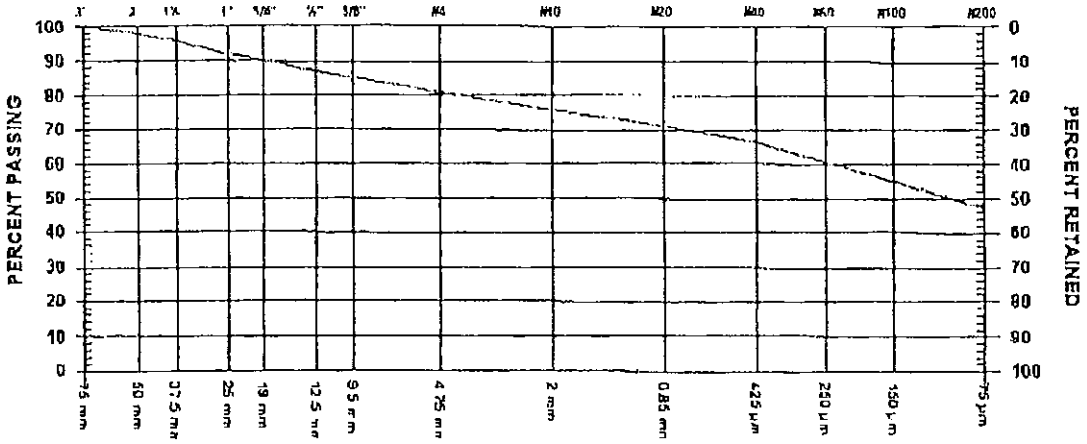
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 58 DATE RECEIVED 2005.Sep.14 DATE TESTED 2005.Sep.20 DATE SAMPLED 2005.Sep.06

SUPPLIER
SOURCE KP05-93
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	97.9	
1 1/2"	37.5 mm	96.0	
1"	25 mm	91.9	
3/4"	19 mm	90.2	
1/2"	12.5 mm	86.9	
3/8"	9.5 mm	85.1	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	80.9	
No. 10	2.00 mm	75.7	
No. 20	850 µm	70.9	
No. 40	425 µm	66.3	
No. 60	250 µm	60.6	
No. 100	150 µm	54.8	
No. 200	75 µm	47.2	

COMMENTS
LOCATION: BORROW 3
CHAINAGE: CONTROL

 2005.Sep.28 GeoNorth Engineering Ltd. PER

1301 Kelliher Road Prince George, BC V2L5B6
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

10-1/10.03

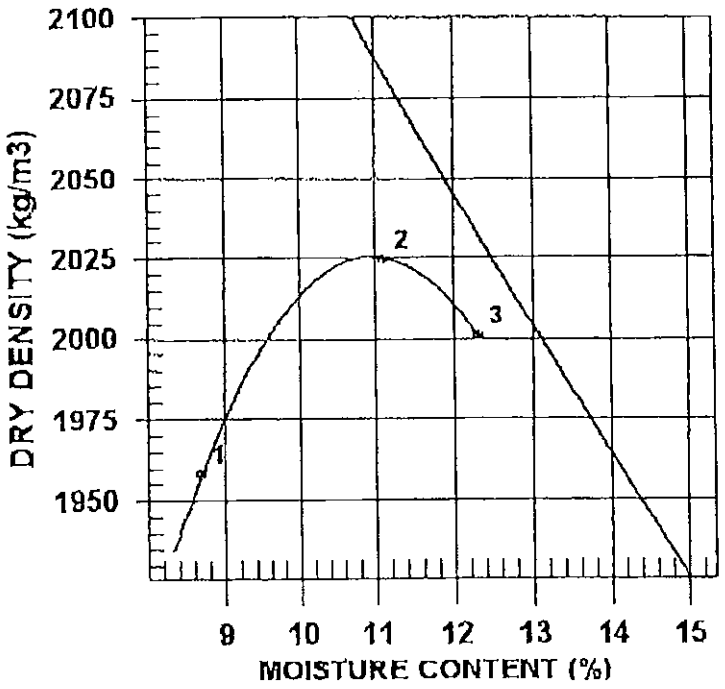
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
V0L -1N0

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 53 DATE TESTED 2005.Sep.20 DATE RECEIVED 2005.Sep.14 DATE SAMPLED 2005.Sep.06

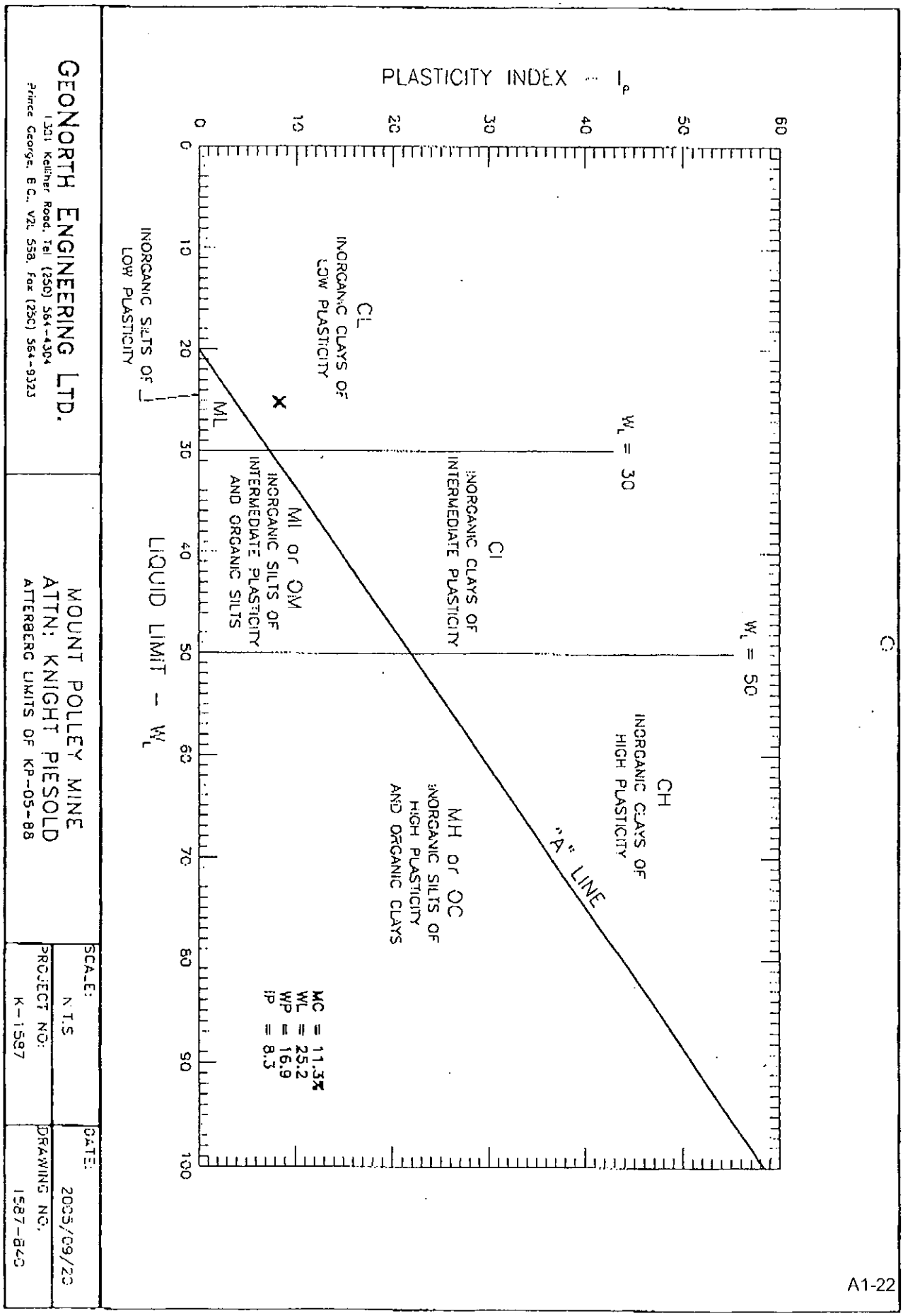
INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, Talib	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	DJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-93	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	18.9 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.71
SIZE		TOTAL NUMBER OF TRIALS	3
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2128	1958	8.7
2	2250	2025	11.1
3	2241	2001	12.3

ZERO AIR VOIDS CURVE FOR ESTIMATED SPECIFIC GRAVITY OF 2.71	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2030	11.0
OVERSIZE CORRECTED	2131	9.1

COMMENTS
SPECIFIC GRAVITY = 2.71



GEONORTH ENGINEERING LTD.
1321 Kelther Road, Tel (250) 564-4304
Prince George, B.C., V2L 5S8, Fax (250) 564-9323

MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-88

SCALE: N.T.S
PROJECT NO: K-1587
DATE: 2005/09/20
DRAWING NO. 1587-B40

A1-22

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

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

TB LG TT
101-1/10 c.

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

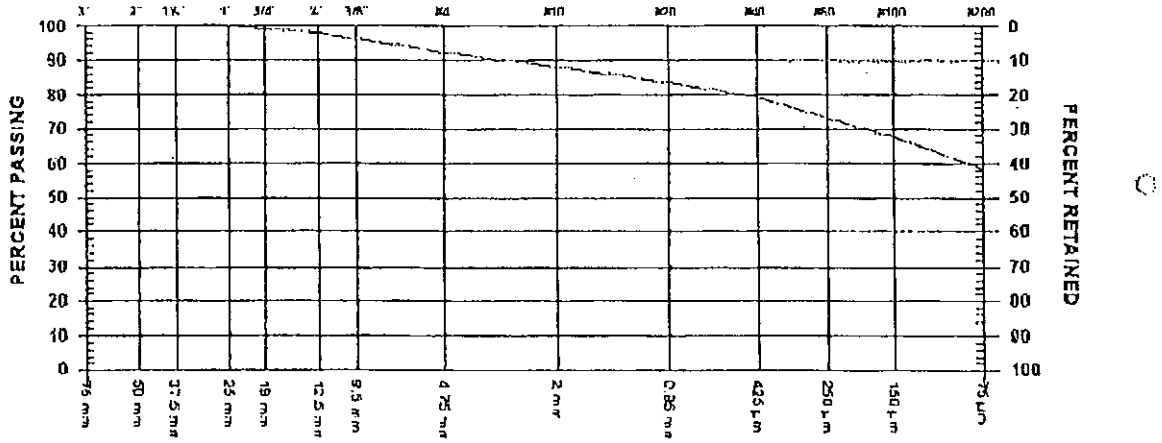
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 55 DATE RECEIVED 2005.Sep.08 DATE TESTED 2005.Sep.15 DATE SAMPLED 2005.Aug.26

SUPPLIER
SOURCE KP05-88
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
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	100.0	
3/4"	19	mm	99.1	
1/2"	12.5	mm	97.7	
3/8"	9.5	mm	96.2	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	92.4	
No. 10	2.00	mm	88.3	
No. 20	850	µm	83.5	
No. 40	425	µm	79.2	
No. 60	250	µm	73.4	
No. 100	150	µm	67.5	
No. 200	75	µm	58.2	

COMMENTS
LOCATION: BORROW RECORD

101-1/16.03

Sep.19. 2005 4:33PM GeoNorth Engineering 564 9323 No.7912 P. 1

1301 Kelliher Road Prince George, BC V2L5S6
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

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

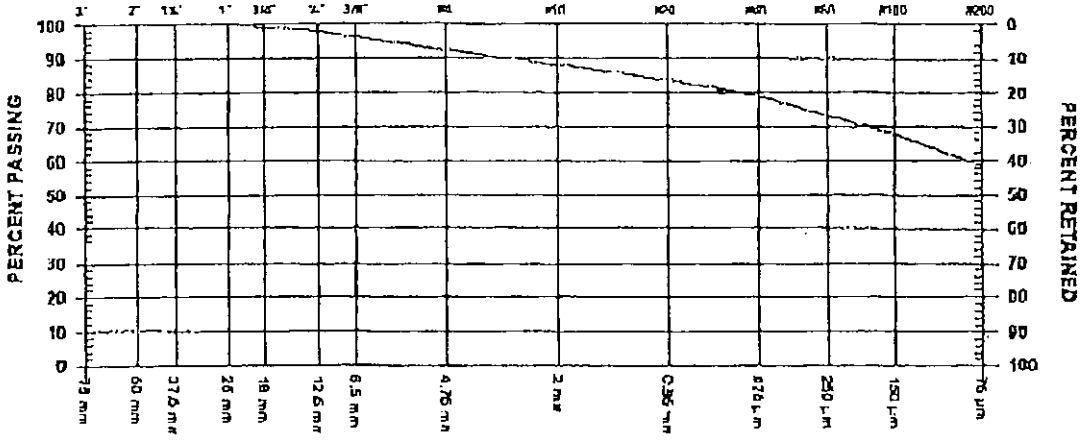
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 55 DATE RECEIVED 2005.Sep.08 DATE TESTED 2005.Sep.15 DATE SAMPLED 2005.Aug.26

SUPPLIER
SOURCE KP05-88
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
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	100.0	
3/4"	19 mm	99.1	
1/2"	12.5 mm	97.7	
3/8"	9.5 mm	96.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	92.4	
No. 10	2.00 mm	88.3	
No. 20	850 µm	83.5	
No. 40	425 µm	79.2	
No. 60	250 µm	73.4	
No. 100	150 µm	67.5	
No. 200	75 µm	58.2	

COMMENTS
LOCATION: BORROW RECORD

 2005.Sep.19 GeoNorth Engineering Ltd. PER.

NOV-02-2005 03:21PM FROM-MOUNT POLLEY MINING CORP +1 250 790 2268 T-804 P 008/013 F-663

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 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

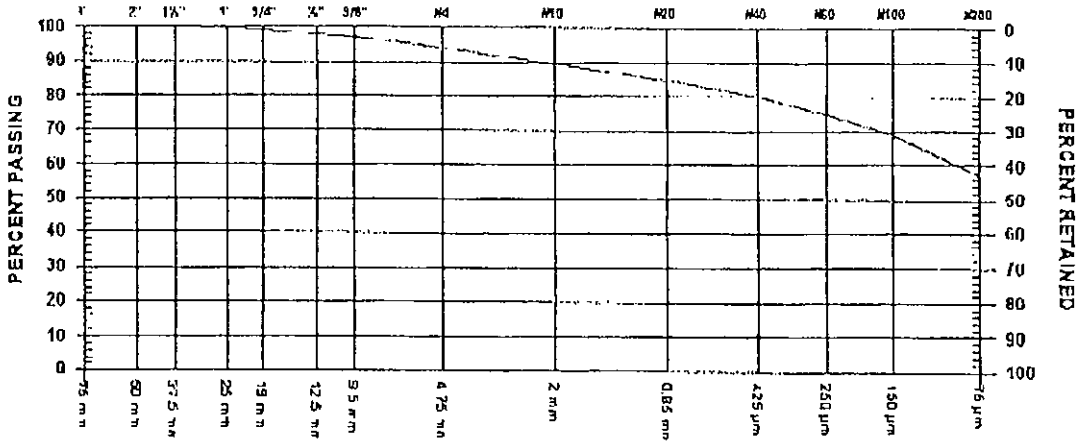
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 47 DATE RECEIVED 2005.Aug.26 DATE TESTED 2005.Aug.31 DATE SAMPLED 2005.Aug.08

SUPPLIER
SOURCE KP05-79
SPECIFICATION
MATERIAL TYPE VIRGIN TILL

SAMPLED BY MB, 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	99.7	
3/4"	19 mm	99.1	
1/2"	12.5 mm	98.0	
3/8"	9.5 mm	97.1	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	94.3	
No. 10	2.00 mm	89.5	
No. 20	850 µm	84.8	
No. 40	425 µm	80.2	
No. 60	250 µm	74.9	
No. 100	150 µm	69.0	
No. 200	75 µm	57.2	

COMMENTS
LOCATION: SOUTH
CHAINAGE: LOT 50
ELEVATION: 944m

Page 1 of 1 2005.Sep.02 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

101-110

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

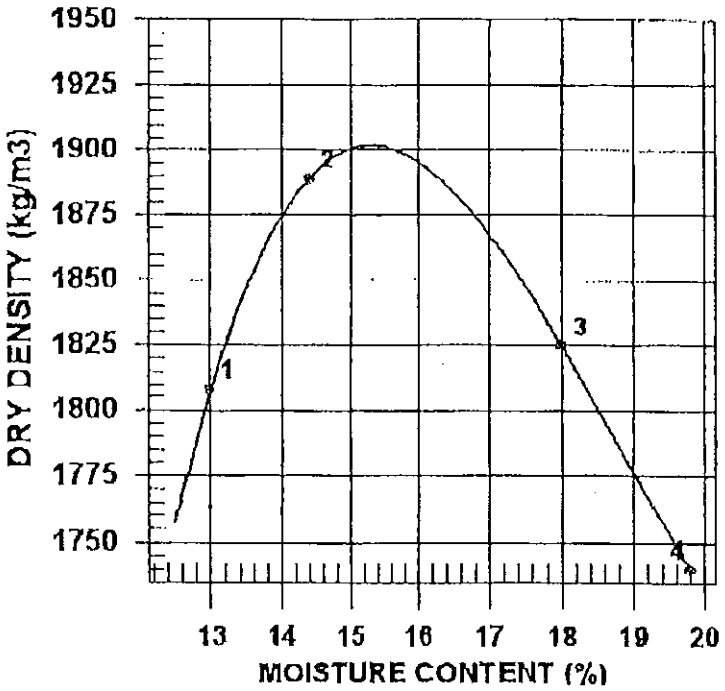
TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 44 DATE TESTED 2005.Sep.01 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.08

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	DJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-19	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	5.5 %
MAJOR COMPONENT	VIRGIN TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2043	1808	13.0
2	2161	1889	14.4
3	2153	1825	18.0
4	2085	1740	19.8

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1900	15.5
OVERSIZE CORRECTED	1930	14.7

COMMENTS
LOCATION: SOUTH, CHAINAGE: LOT 50, ELEVATION: 944m

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

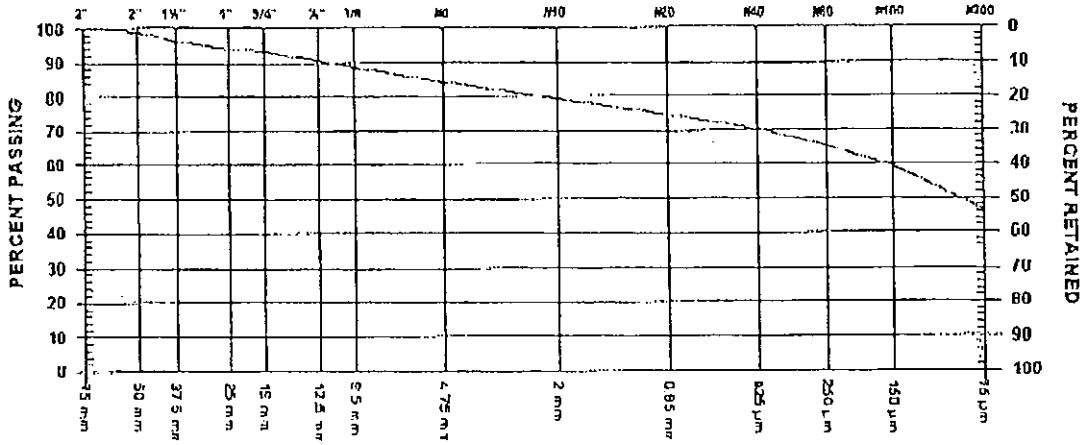
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 40 DATE RECEIVED 2005.Aug.26 DATE TESTED 2005.Aug.30 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-74
SPECIFICATION
MATERIAL TYPE SANDY TILL

SAMPLED BY MB, Client
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	98.6	
1 1/2"	37.5 mm	96.2	
1"	25 mm	94.2	
3/4"	19 mm	93.2	
1/2"	12.5 mm	90.5	
3/8"	9.5 mm	88.7	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	84.1	
No. 10	2.00 mm	79.0	
No. 20	850 µm	74.5	
No. 40	425 µm	70.2	
No. 60	250 µm	65.0	
No. 100	150 µm	59.3	
No. 200	75 µm	46.4	

COMMENTS
LOCATION: BORROW PIT 3 (lower)
ELEVATION: 946m
Sample Aug3

 2005.Aug.31 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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

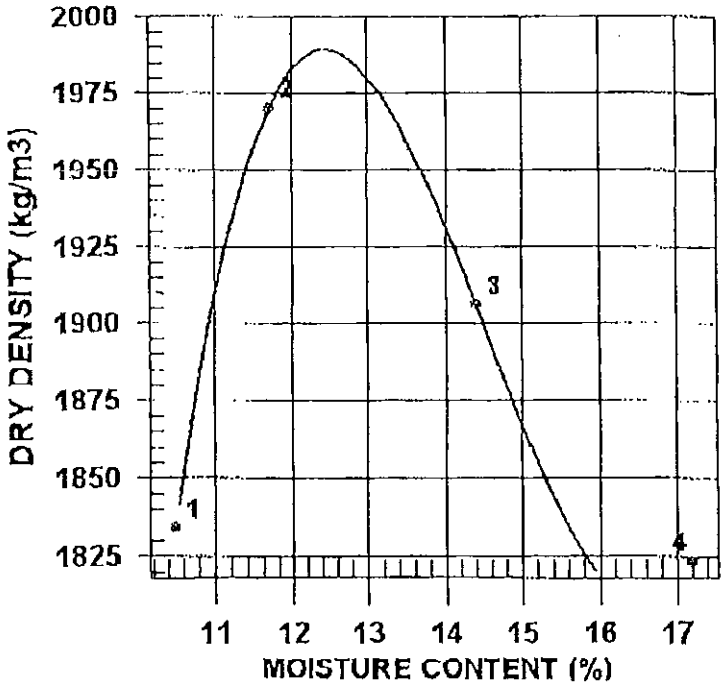
TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 38 DATE TESTED 2005.Aug.30 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	DJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-74	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	15.1 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION	SANDY		
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2027	1834	10.5
2	2200	1970	11.7
3	2180	1906	14.4
4	2137	1823	17.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1990	12.5
OVERSIZE CORRECTED	2068	10.8

COMMENTS
LOCATION: BORROW PIT 3, ELEVATION: 946m

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

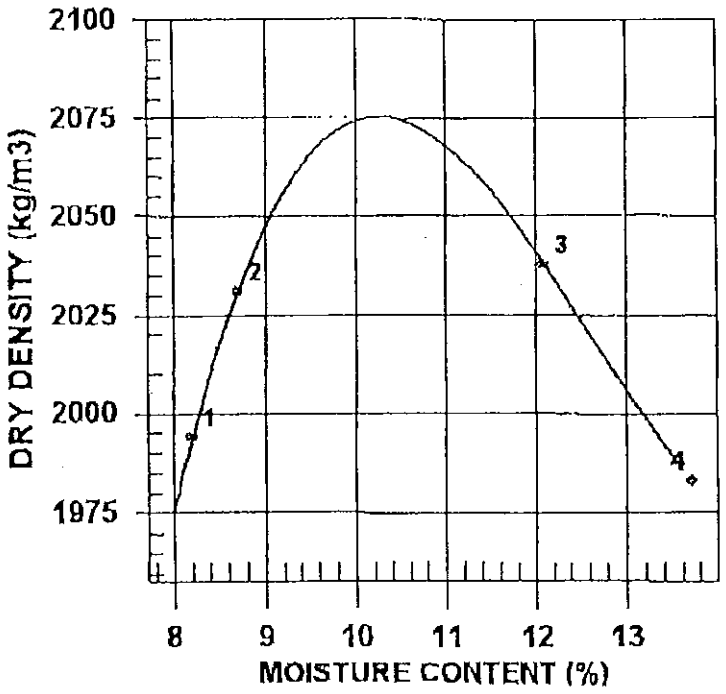
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 25 DATE TESTED 2005.Aug.18 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.04

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, MB		
TESTED BY	BO	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP-05-61	RAMMER TYPE	Automatic
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	50MM	RETAINED 4.75mm SCREEN	20.0 %
DESCRIPTION	GRAVELLY	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	2158	1994	8.2
2	2208	2031	8.7
3	2285	2038	12.1
4	2255	1983	13.7

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2080	10.5
OVERSIZE CORRECTED	2174	8.6

COMMENTS

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 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

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

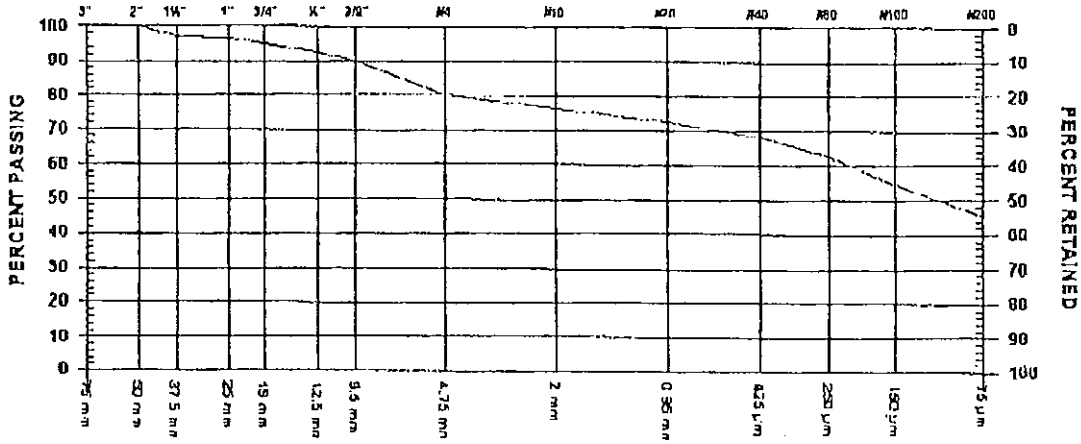
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 26 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.17 DATE SAMPLED 2005.Aug.04

SUPPLIER
SOURCE KP-05-61
SPECIFICATION
MATERIAL TYPE Till, Gravelly

SAMPLED BY Client, MB
TESTED BY BO
TEST METHOD WASHED

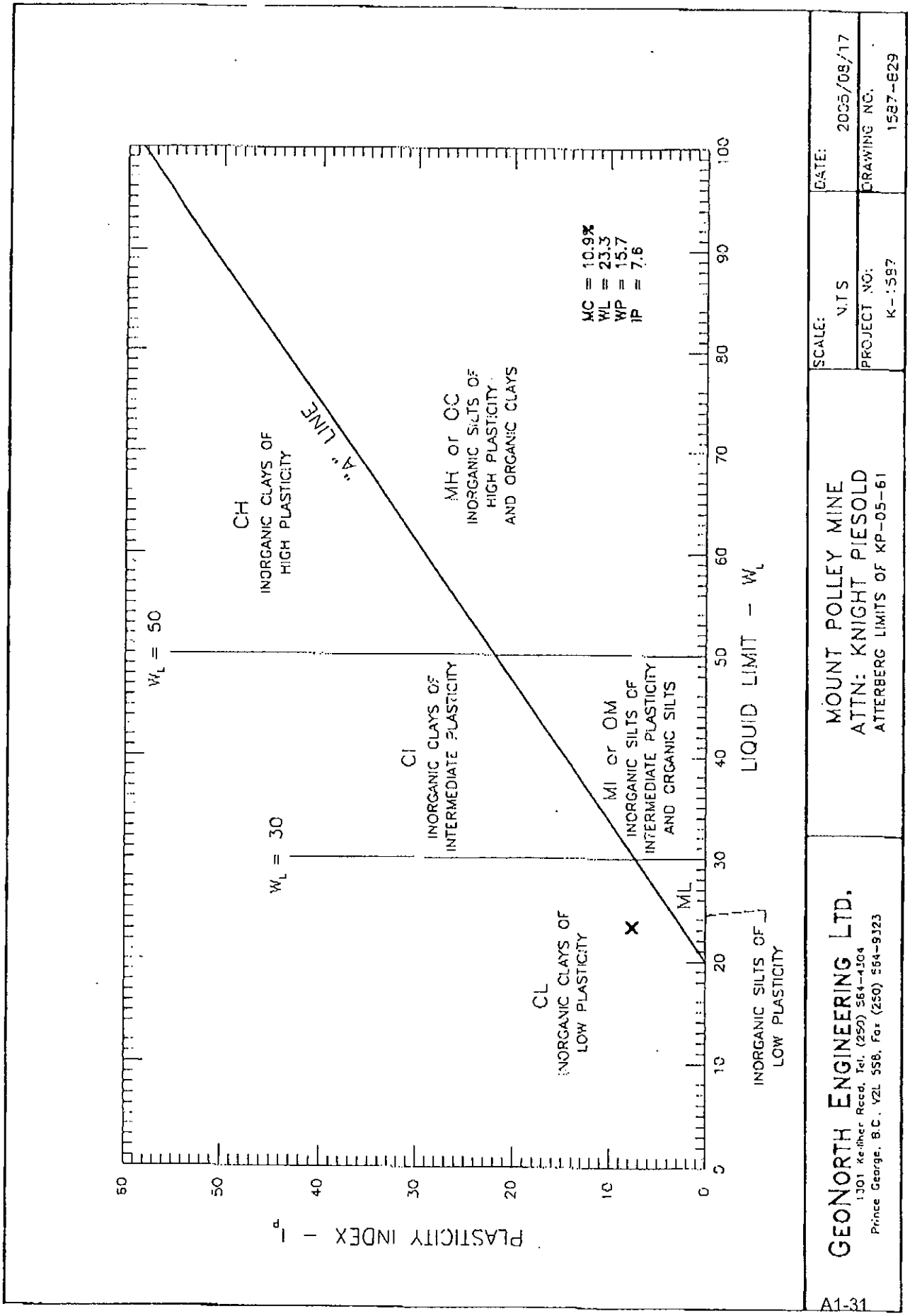


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	97.2	
1"	25 mm	96.5	
3/4"	19 mm	95.0	
1/2"	12.5 mm	92.5	
3/8"	9.5 mm	89.9	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	79.9	
No. 10	2.00 mm	76.4	
No. 20	850 µm	72.5	
No. 40	425 µm	68.2	
No. 60	250 µm	62.6	
No. 100	150 µm	54.5	
No. 200	75 µm	45.5	

COMMENTS
LOCATION: CONTROL PERIMETER
CHAINAGE: 39+00
ELEVATION: 944.3m

 2005.Aug.18 GeoNorth Engineering Ltd. PER.


PLASTICITY INDEX – I_p
LIQUID LIMIT – W_L
"A" LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC = 10.9%
WL = 23.3
WP = 15.7
IP = 7.6
GeoNorth Engineering Ltd.
1301 Kelther Road, Tel. (250) 564-4304
Prince George, B.C. V2L 5S8, Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-61
SCALE: N.T.S
PROJECT NO: K-1587
DATE: 2005/08/17
DRAWING NO. 1587-629
A1-31

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: Terry Isaacs @ 250-790-2268

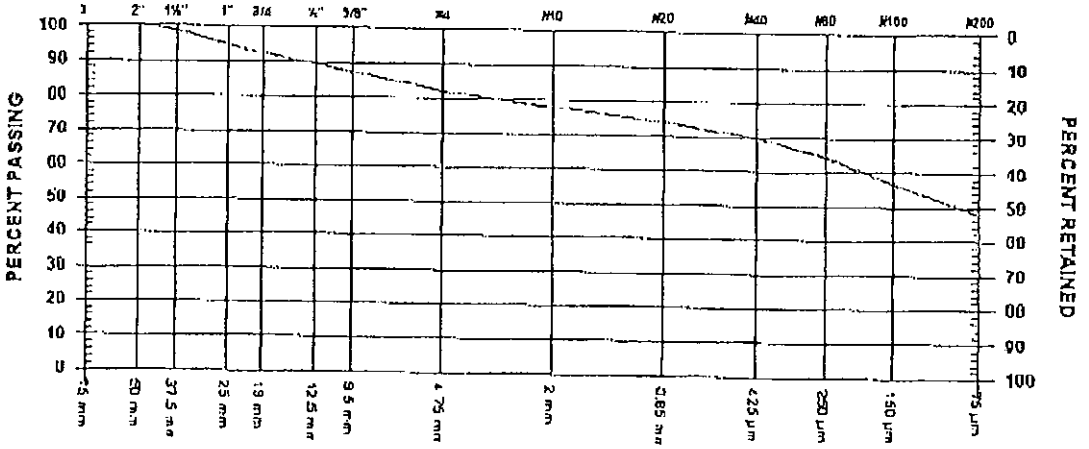
PROJECT NO K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 25 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.16 DATE SAMPLED 2005.Aug.04

SUPPLIER
SOURCE KP-05-60
SPECIFICATION
MATERIAL TYPE Till, Gravelly

SAMPLED BY Client, MB
TESTED BY BO
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	98.6	
1"	25 mm	94.7	
3/4"	19 mm	92.3	
1/2"	12.5 mm	89.4	
3/8"	9.5 mm	87.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	82.0	
No. 10	2.00 mm	78.1	
No. 20	850 µm	74.2	
No. 40	425 µm	70.0	
No. 60	250 µm	64.5	
No. 100	150 µm	56.8	
No. 200	75 µm	48.3	

COMMENTS
LOCATION: BORROW PIT 3
CHAINAGE: 17+75
ELEVATION: 944.9m

GeoNorth
1301 Kelliher Road P...ce George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

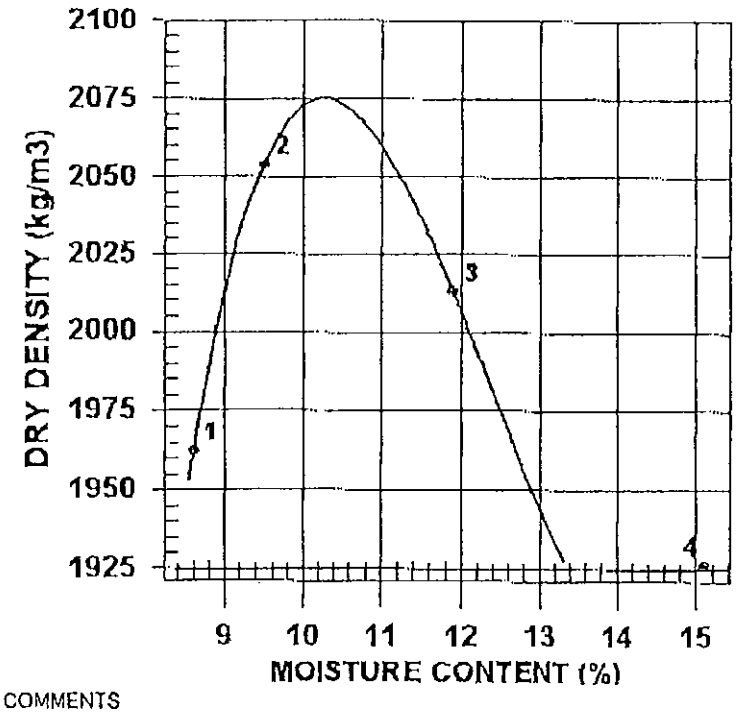
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 24 DATE TESTED 2005.Aug.17 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.04

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, MB	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	BO	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP-05-60	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	17.6 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE	50MM	TOTAL NUMBER OF TRIALS	4
DESCRIPTION	GRAVELLY		
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2131	1962	8.6
2	2249	2054	9.5
3	2252	2013	11.9
4	2217	1926	15.1

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2080	10.5
OVERSIZE CORRECTED	2162	8.8

COMMENTS

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 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

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

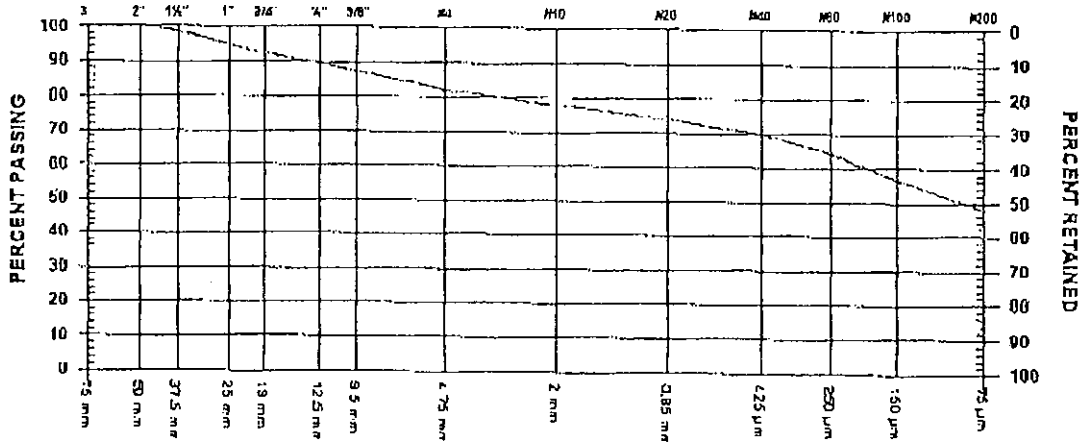
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Minc
Testing Services
CONTRACTOR

SIEVE TEST NO 25 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.16 DATE SAMPLED 2005.Aug.04

SUPPLIER
SOURCE KP-05-60
SPECIFICATION
MATERIAL TYPE Till, Gravelly

SAMPLED BY Client, MR
TESTED BY BO
TEST METHOD WASHED

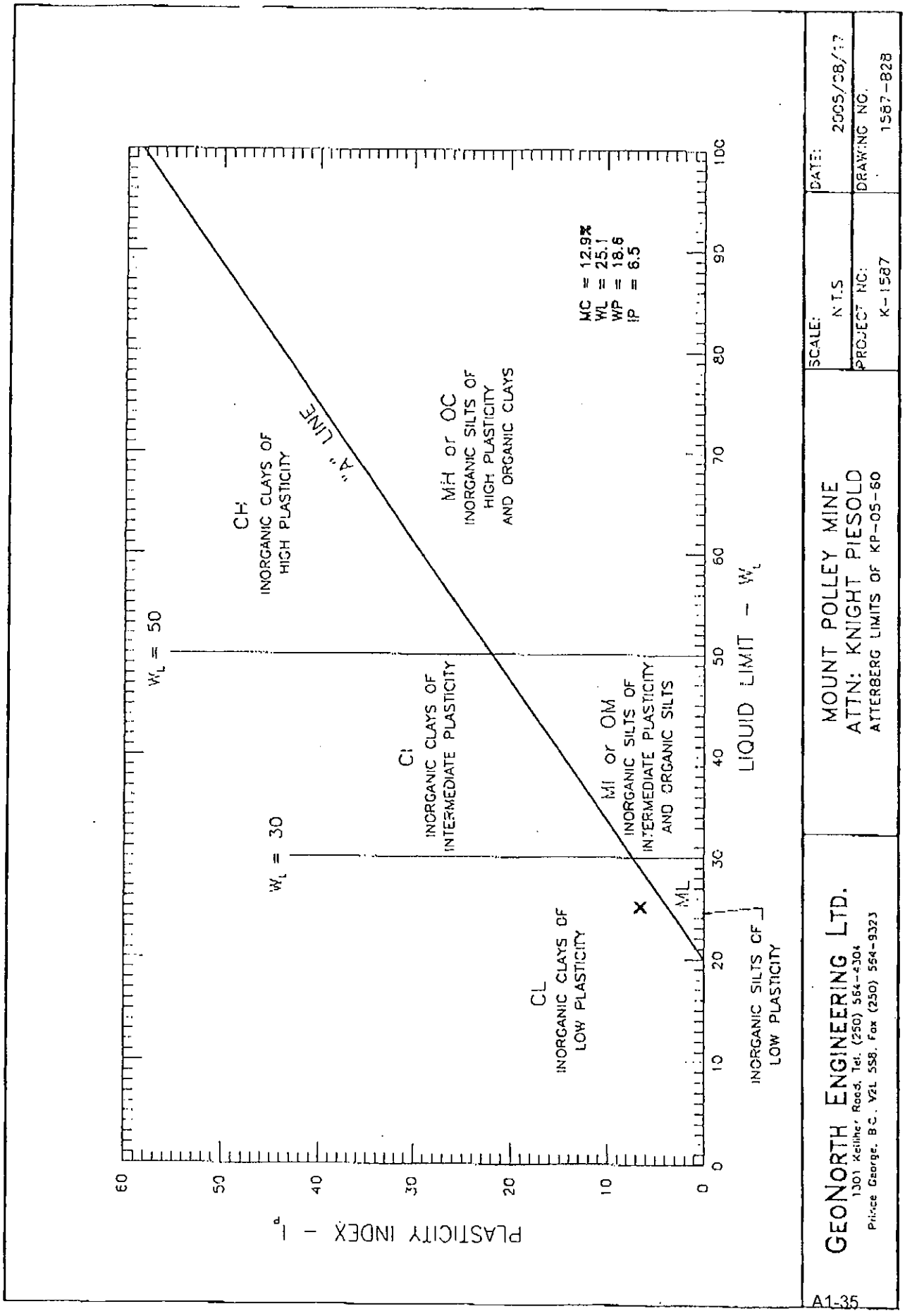


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	98.6	
1"	25 mm	94.7	
3/4"	19 mm	92.3	
1/2"	12.5 mm	89.4	
3/8"	9.5 mm	87.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	82.0	
No. 10	2.00 mm	78.1	
No. 20	850 µm	74.2	
No. 40	425 µm	70.0	
No. 60	250 µm	64.5	
No. 100	150 µm	56.8	
No. 200	75 µm	48.3	

COMMENTS
LOCATION: BORROW PIT 3
CHAINAGE: 17+75
ELEVATION: 944.9m

 2005.Aug.18 GeoNorth Engineering Ltd. PER.


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
"A" LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC = 12.9%
WL = 25.1
WP = 18.6
IP = 6.5
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-60
SCALE: N.T.S
DATE: 2005/08/17
PROJECT NO: K-1587
DRAWING NO. 1587-828
GEONORTH ENGINEERING LTD.
1301 Keilhe' Road, Tel. (250) 564-4304
Prince George, B.C. V2L 5S8. Fax (250) 564-9323

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: Terry Isaacs @ 250-790-2268

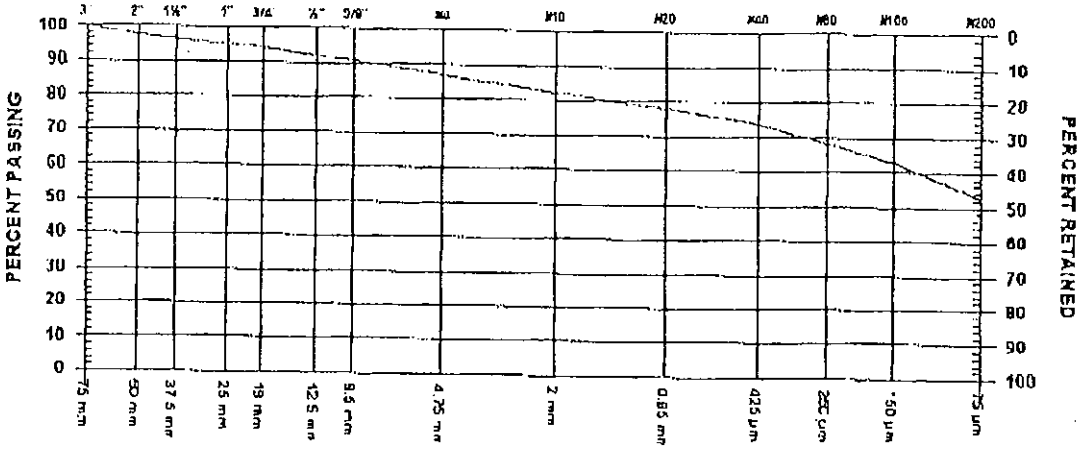
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 23 DATE RECEIVED 2005.Jul.22 DATE TESTED 2005.Jul.26 DATE SAMPLED 2005.Jul.19

SUPPLIER
SOURCE KP05-58
SPECIFICATION
MATERIAL TYPE TILL, SANDY

SAMPLED BY Client, MB
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES			PERCENT PASSING	GRADATION LIMITS
3"	75	mm	100.0	
2"	50	mm	97.5	
1 1/2"	37.5	mm		
1"	25	mm	95.0	
3/4"	19	mm	94.0	
1/2"	12.5	mm	91.8	
3/8"	9.5	mm	90.5	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	86.9	
No. 10	2.00	mm	82.3	
No. 20	850	µm	77.9	
No. 40	425	µm	73.7	
No. 60	250	µm	68.3	
No. 100	150	µm	62.5	
No. 200	75	µm	52.7	

COMMENTS
LOCATION; BORROW PITS

 2005.Jul.26 GeoNorth Engineering Ltd. PER.

Knight Piésold
CONSULTING

APPENDIX A2

ZONE S RECORD RESULTS

(Pages A2-1 to A2-64)

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: Terry Isaacs @ 250-790-2268

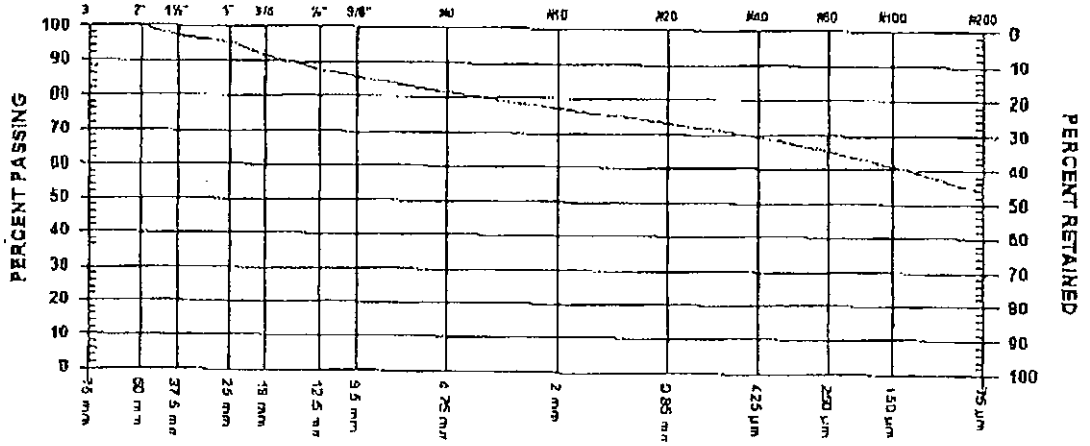
PROJECT NO K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 60 DATE RECEIVED 2005.Sep.14 DATE TESTED 2005.Sep.26 DATE SAMPLED 2005.Sep.10

SUPPLIER
SOURCE KP05-95
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
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	97.1	
1"	25 mm	95.2	
3/4"	19 mm	91.7	
1/2"	12.5 mm	87.6	
3/8"	9.5 mm	85.4	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	81.2	
No. 10	2.00 mm	77.1	
No. 20	850 µm	73.2	
No. 40	425 µm	69.5	
No. 60	250 µm	65.1	
No. 100	150 µm	60.7	
No. 200	75 µm	53.8	

COMMENTS
LOCATION: MAIN
CHAINAGE: 24+50
ELEVATION: 947.4

 2005.Sep.29 GeoNorth Engineering Ltd PER

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

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold

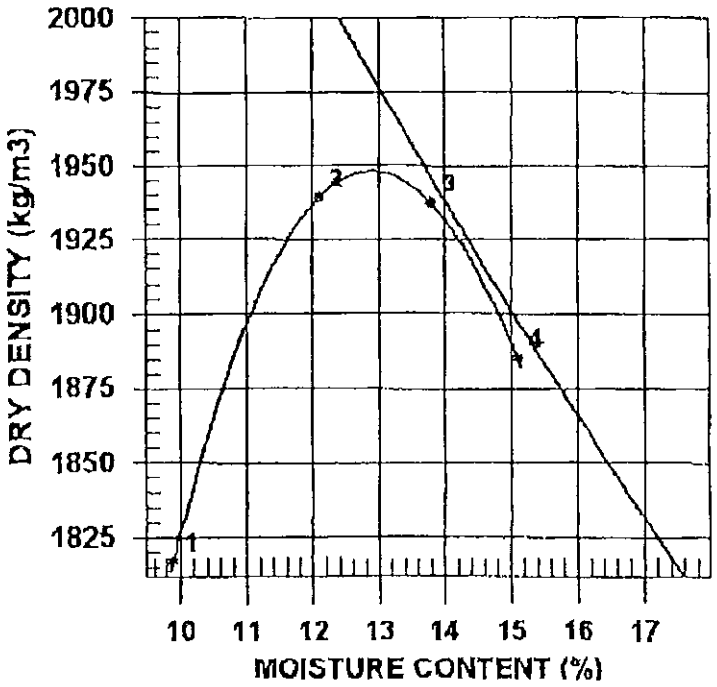
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Terry Isaacs @ 250-790-2260

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 55 DATE TESTED 2005.Sep.27 DATE RECEIVED 2005.Sep.14 DATE SAMPLED 2005.Sep.10

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, Talib		
TESTED BY	DJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP05-95	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	18.6 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.66
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1997	1817	9.9
2	2174	1939	12.1
3	2204	1937	13.8
4	2170	1885	15.1

ZERO AIR VOIDS CURVE FOR ESTIMATED SPECIFIC GRAVITY OF 2.66	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1950	13.0
OVERSIZE CORRECTED	2052	10.8

COMMENTS
SPECIFIC GRAVITY - 2.66

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

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold

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

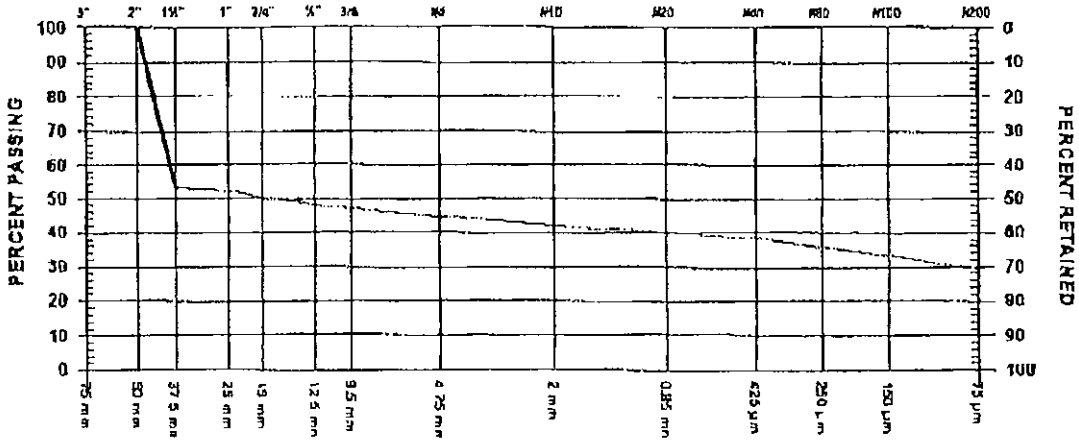
ATTN: Terry Isaacs @ 250-790-2260

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 60 DATE RECEIVED 2005.Sep.14 DATE TESTED 2005.Sep.26 DATE SAMPLED 2005.Sep.10

SUPPLIER
SOURCE KP05-95
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY DJ
TEST METHOD WASHED

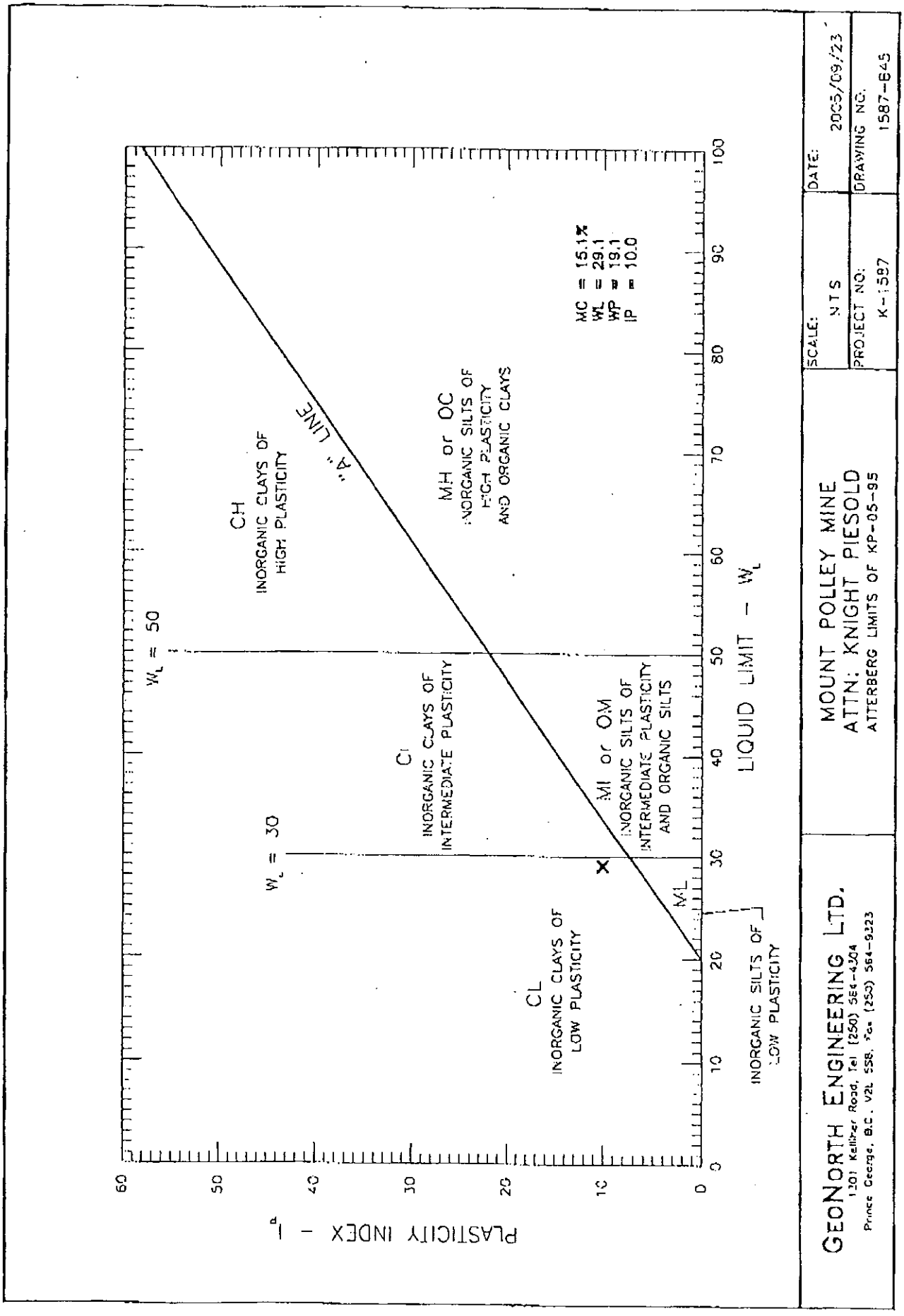


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	53.3	
1"	25 mm	52.2	
3/4"	19 mm	50.3	
1/2"	12.5 mm	48.1	
3/8"	9.5 mm	46.9	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	44.5	
No. 10	2.00 mm	42.3	
No. 20	850 µm	40.1	
No. 40	425 µm	38.1	
No. 60	250 µm	35.7	
No. 100	150 µm	33.3	
No. 200	75 µm	29.5	

COMMENTS
LOCATION: MAIN
CHAINAGE: 24+50
ELEVATION: 947.4

Page 1 of 1 2005.Sep.28 GeoNorth Engineering Ltd. PER


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
"A" LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC = 15.1%
WL = 29.1
WP = 19.1
IP = 10.0
GEONORTH ENGINEERING LTD.
1301 Kelliher Road, Tel (250) 564-4304
Prince George, B.C. V2L 5S8. Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-95
SCALE: NTS
DATE: 2005/09/23
PROJECT NO: K-1587
DRAWING NO: 1587-645

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

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

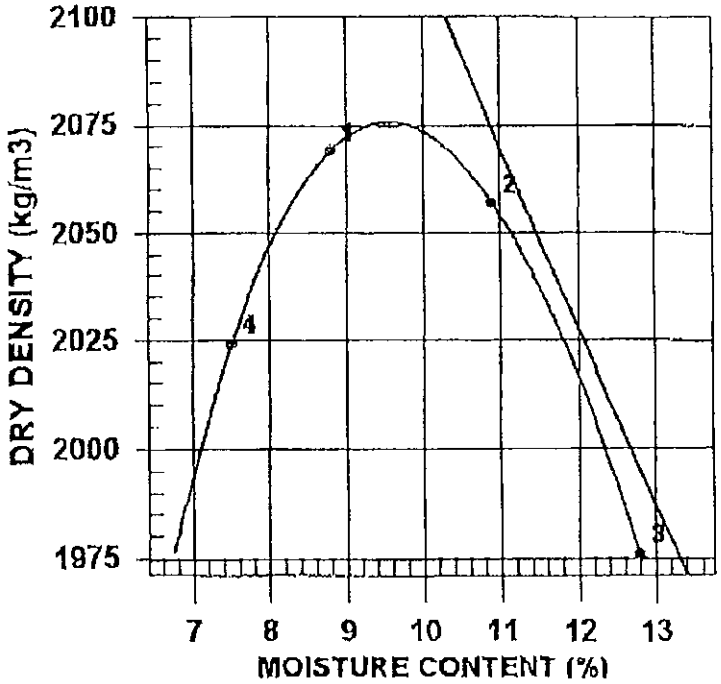
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1NO

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 54 DATE TESTED 2005.Sep.21 DATE RECEIVED 2005.Sep.14 DATE SAMPLED 2005.Sep.10

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, Talib		
TESTED BY	DJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP05-94	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	21.6 %
DESCRIPTION		OVERSIZE SPECIFIC GRAVITY	2.68
ROCK TYPE		TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2251	2069	8.8
2	2281	2057	10.9
3	2229	1976	12.8
4	2176	2024	7.5

ZERO AIR VOIDS CURVE FOR ESTIMATED SPECIFIC GRAVITY OF 2.68	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2080	9.5
OVERSIZE CORRECTED	2186	7.7

COMMENTS
SPECIFIC GRAVITY = 2.68

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

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

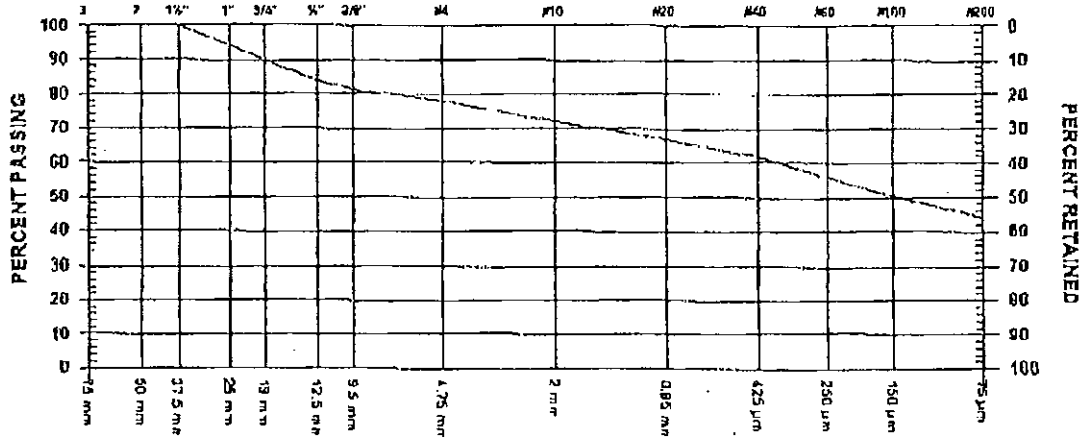
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 59 DATE RECEIVED 2005.Sep.14 DATE TESTED 2005.Sep.26 DATE SAMPLED 2005.Sep.10

SUPPLIER
SOURCE KP05-94
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY DJ
TEST METHOD WASHED

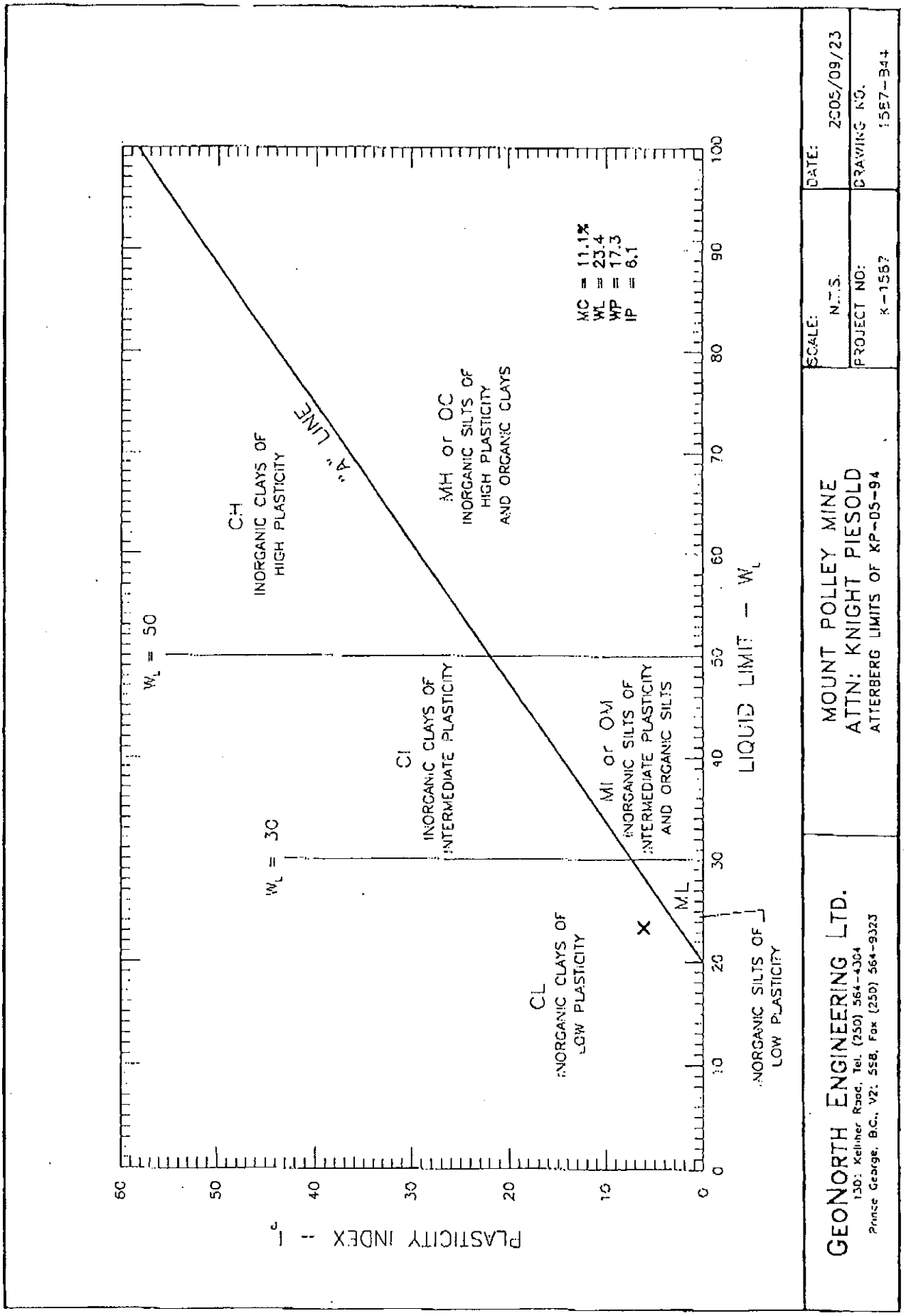


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	94.1	
3/4"	19 mm	90.0	
1/2"	12.5 mm	84.0	
3/8"	9.5 mm	81.1	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	78.1	
No. 10	2.00 mm	72.0	
No. 20	850 µm	66.9	
No. 40	425 µm	61.9	
No. 60	250 µm	55.9	
No. 100	150 µm	50.1	
No. 200	75 µm	44.3	

COMMENTS
LOCATION: MAIN
CHAINAGE: 20+00
ELEVATION: 947.5

Page 1 of 1 2005.Sep.28 GeoNorth Engineering Ltd. PER.



GeoNorth Engineering Ltd.
130: Kelliher Road, Tel. (250) 564-4304
Prince George, B.C., V2: 5S8, Fax (250) 564-9323

MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-94

SCALE: N.T.S.
DATE: 2005/09/23
PROJECT NO: K-1557
DRAWING NO. 1557-344

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

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

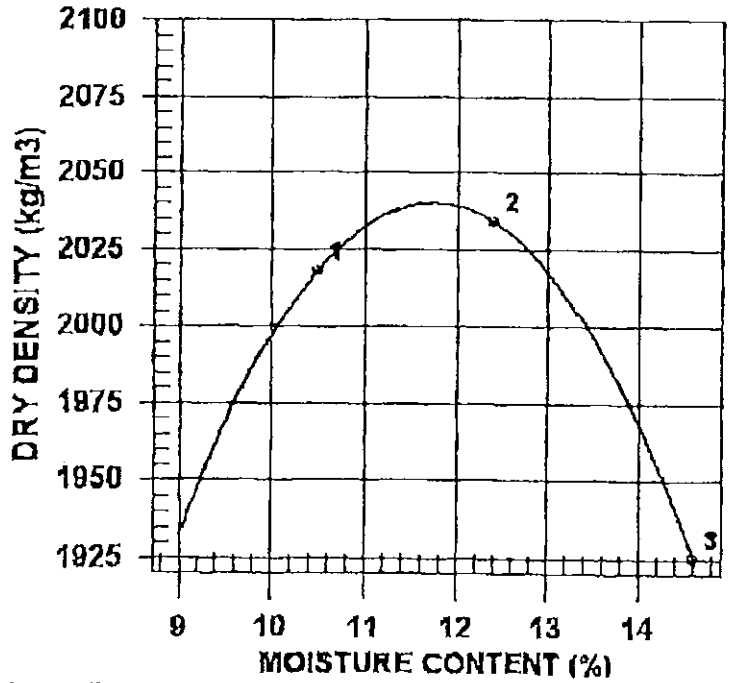
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 51 DATE TESTED 2005.Sep.17 DATE RECEIVED 2005.Sep.14 DATE SAMPLED 2005.Sep.06

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, Talib	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	RO	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-92	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	7.8 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.66
SIZE		TOTAL NUMBER OF TRIALS	3
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2230	2018	10.5
2	2286	2034	12.4
3	2206	1925	14.6

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2040	11.5
OVERSIZE CORRECTED	2078	10.7

COMMENTS
SPECIFIC GRAVITY = 2.66

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 1587
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold

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

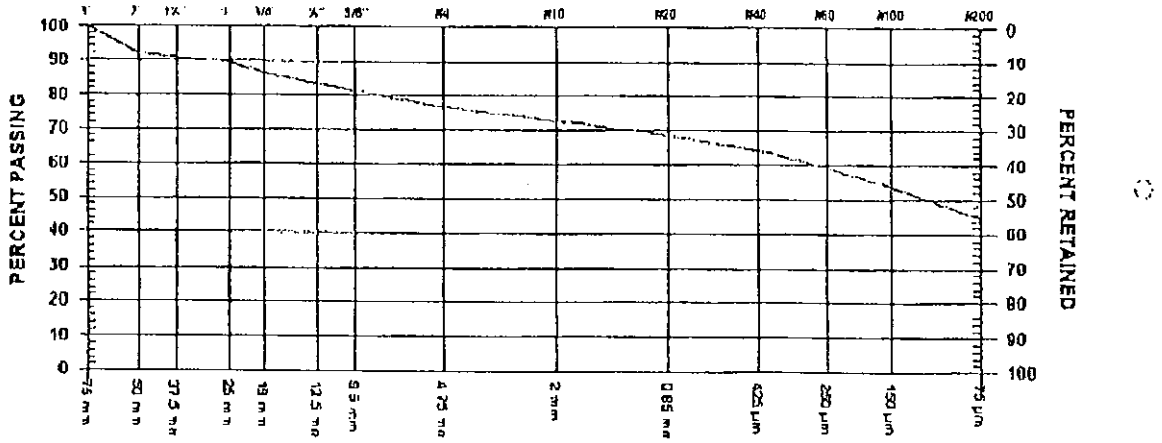
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 57 DATE RECEIVED 2005.Sep.14 DATE TESTED 2005.Sep.15 DATE SAMPLED 2005.Sep.06

SUPPLIER
SOURCE KP05-92
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY RO
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	92.0	
1 1/2"	37.5 mm		
1"	25 mm	89.4	
3/4"	19 mm	86.4	
1/2"	12.5 mm	83.3	
3/8"	9.5 mm	81.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	76.8	
No. 10	2.00 mm	72.6	
No. 20	850 µm	68.4	
No. 40	425 µm	64.3	
No. 60	250 µm	59.1	
No. 100	150 µm	53.6	
No. 200	75 µm	44.9	

COMMENTS
LOACATION: MAIN
CHAINAGE: 27+50
ELEVATION: 946

 2005.Sep.19 GeoNorth Engineering Ltd. PER

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

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

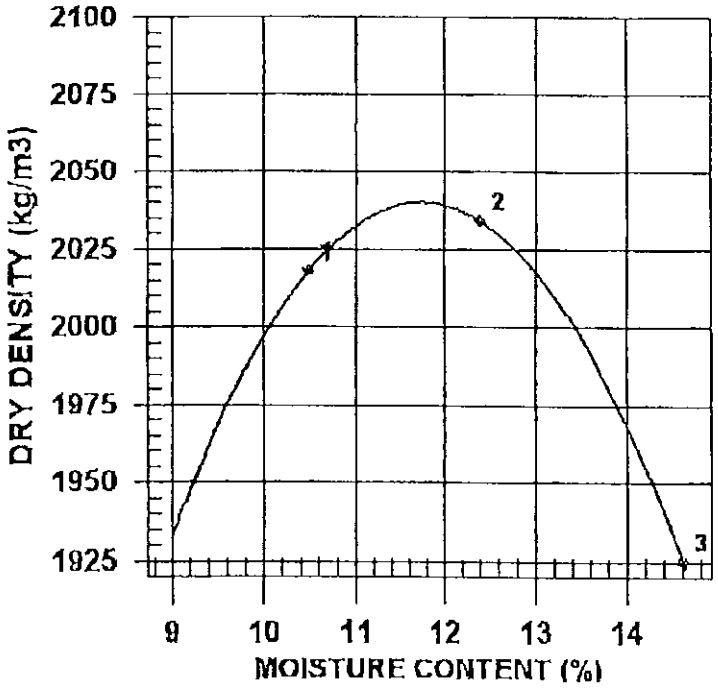
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Minc
Testing Services
CONTRACTOR

PROCTOR NO 51 DATE TESTED 2005.Sep.17 DATE RECEIVED 2005.Sep.14 DATE SAMPLED 2005.Sep.06

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, Talib	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	RO	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-92	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	7.8 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.66
SIZE		TOTAL NUMBER OF TRIALS	3
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2230	2018	10.5
2	2286	2034	12.4
3	2206	1925	14.6

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2040	11.5
OVERSIZE CORRECTED	2078	10.7

COMMENTS
SPECIFIC GRAVITY = 2.66

GeoNorth
1301 Kelliher Road Prince George, BC V2L5S6
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

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

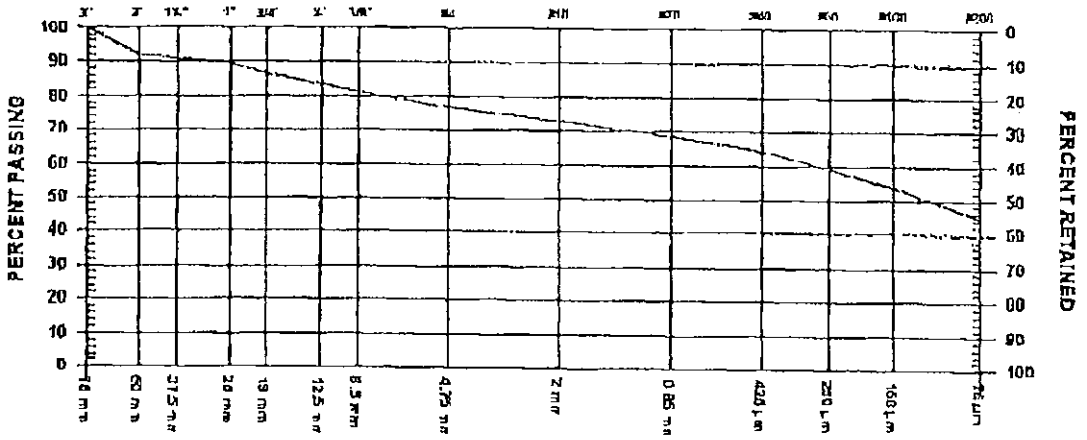
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 57 DATE RECEIVED 2005.Sep.14 DATE TESTED 2005.Sep.15 DATE SAMPLED 2005.Sep.06

SUPPLIER
SOURCE KP05-92
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY RO
TEST METHOD WASHED

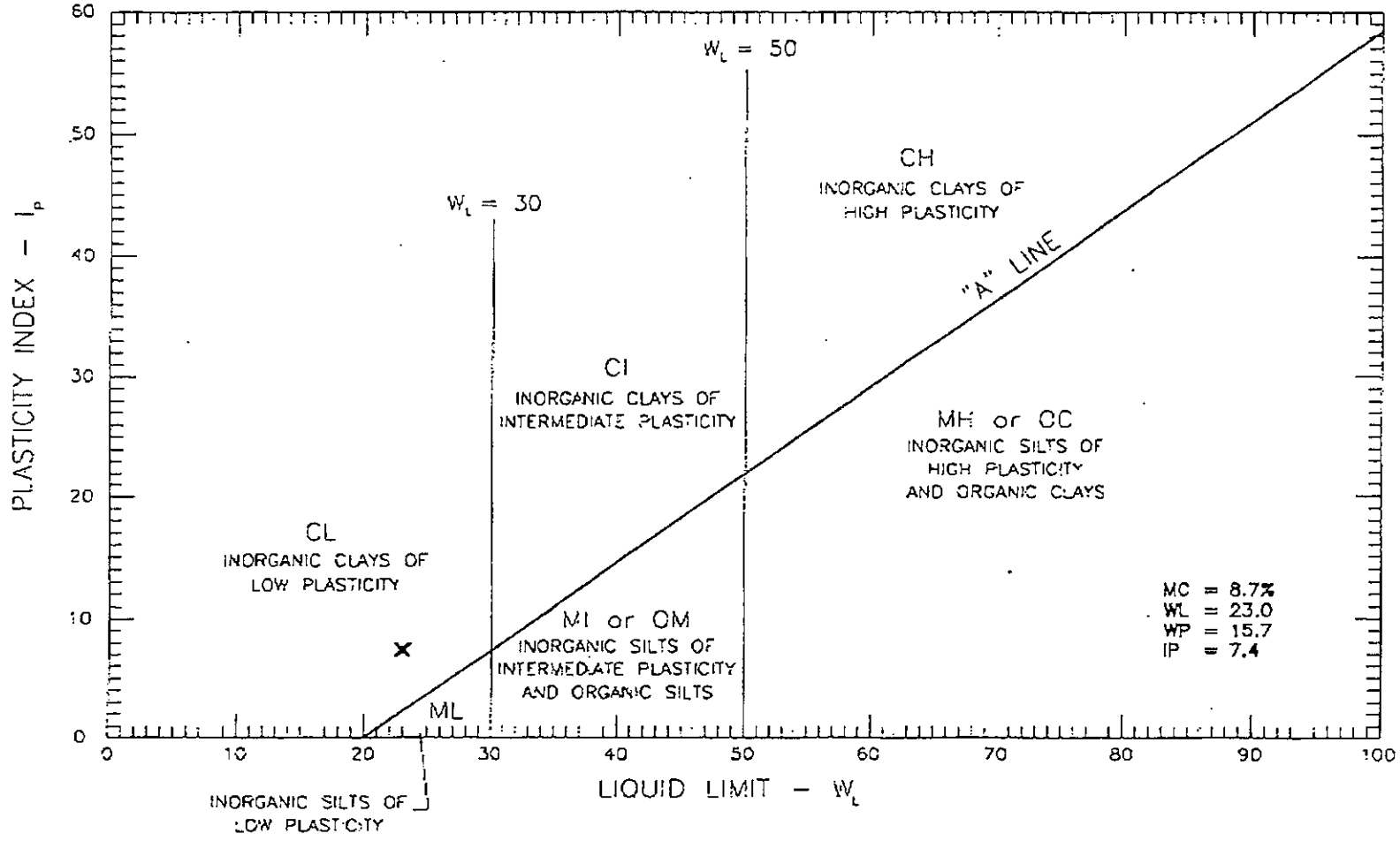


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	92.0	
1 1/2"	37.5 mm		
1"	25 mm	89.4	
3/4"	19 mm	86.4	
1/2"	12.5 mm	83.3	
3/8"	9.5 mm	81.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	76.8	
No. 10	2.00 mm	72.6	
No. 20	850 µm	68.4	
No. 40	425 µm	64.3	
No. 60	250 µm	59.1	
No. 100	150 µm	53.6	
No. 200	75 µm	44.9	

COMMENTS
ACATION: MAIN
CHAINAGE: 27+50
ELEVATION: 946

 2005.Sep.19 GeoNorth Engineering Ltd. PER.



GeoNorth Engineering Ltd. 1301 Kellner Road. Tel (250) 564-4304 Prince George, B.C., V2L 5S8. Fax (250) 564-9323	MOUNT POLLEY MINE ATTN: KNIGHT PIESOLD ATTERBERG LIMITS OF KP-05-92	SCALE: N.T.S.	DATE: 2005/09/20
		PROJECT NO: K-1587	DRAWING NO. 1587-B42

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 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

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

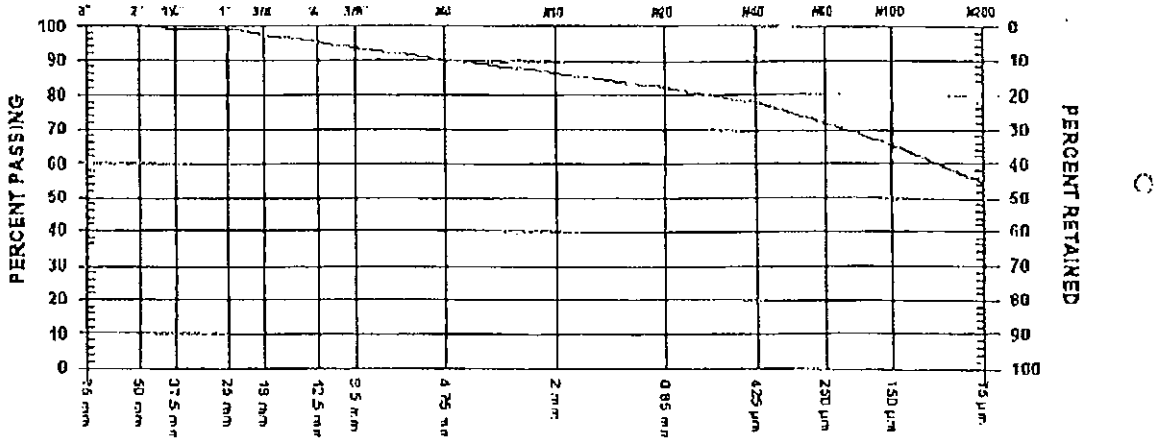
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 56 DATE RECEIVED 2005.Sep.14 DATE TESTED 2005.Sep.16 DATE SAMPLED 2005.Sep.06

SUPPLIER
SOURCE KP05-91
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY RO
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	99.2	
1"	25 mm	99.0	
3/4"	19 mm	97.6	
1/2"	12.5 mm	95.4	
3/8"	9.5 mm	93.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	90.1	
No. 10	2.00 mm	86.5	
No. 20	850 µm	82.1	
No. 40	425 µm	77.7	
No. 60	250 µm	71.8	
No. 100	150 µm	65.4	
No. 200	75 µm	54.5	

COMMENTS
LOCATION: MAIN
CHAINAGE: 26+50
ELEVATION: 946.5

Page 1 of 1 2005.Sep.19 GeoNorth Engineering Ltd. PER:

1301 Killiher 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: Terry Isaacs @ 250-790-2268

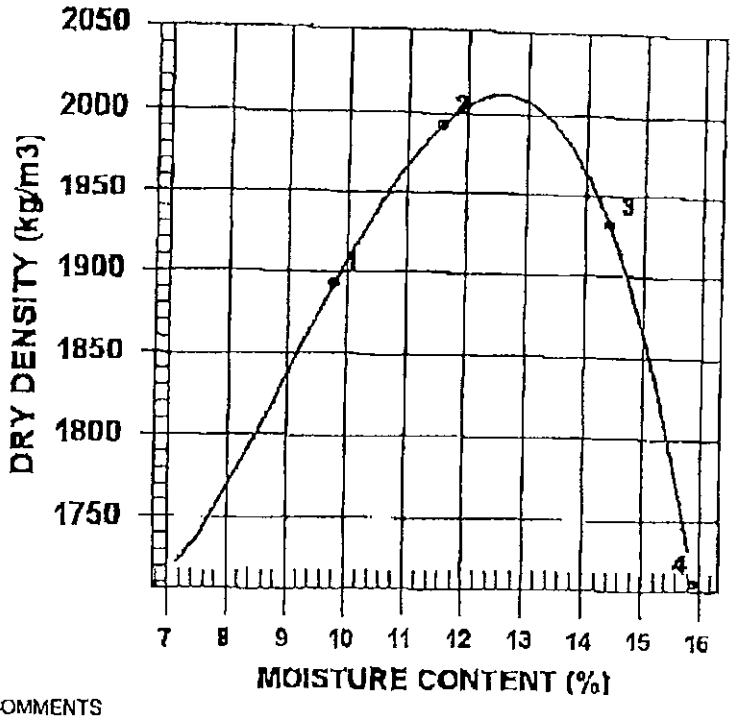
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 52 DATE TESTED 2005.Sep.20 DATE RECEIVED 2005.Sep.14 DATE SAMPLED 2005.Sep.06

INSITU MOISTURE	N/A %
SAMPLED BY	Client, Talib
TESTED BY	DJ
SUPPLIER	
SOURCE	KP05-91
MATERIAL IDENTIFICATION	
MAJOR COMPONENT	TILL
SIZE	
DESCRIPTION	
ROCK TYPE	

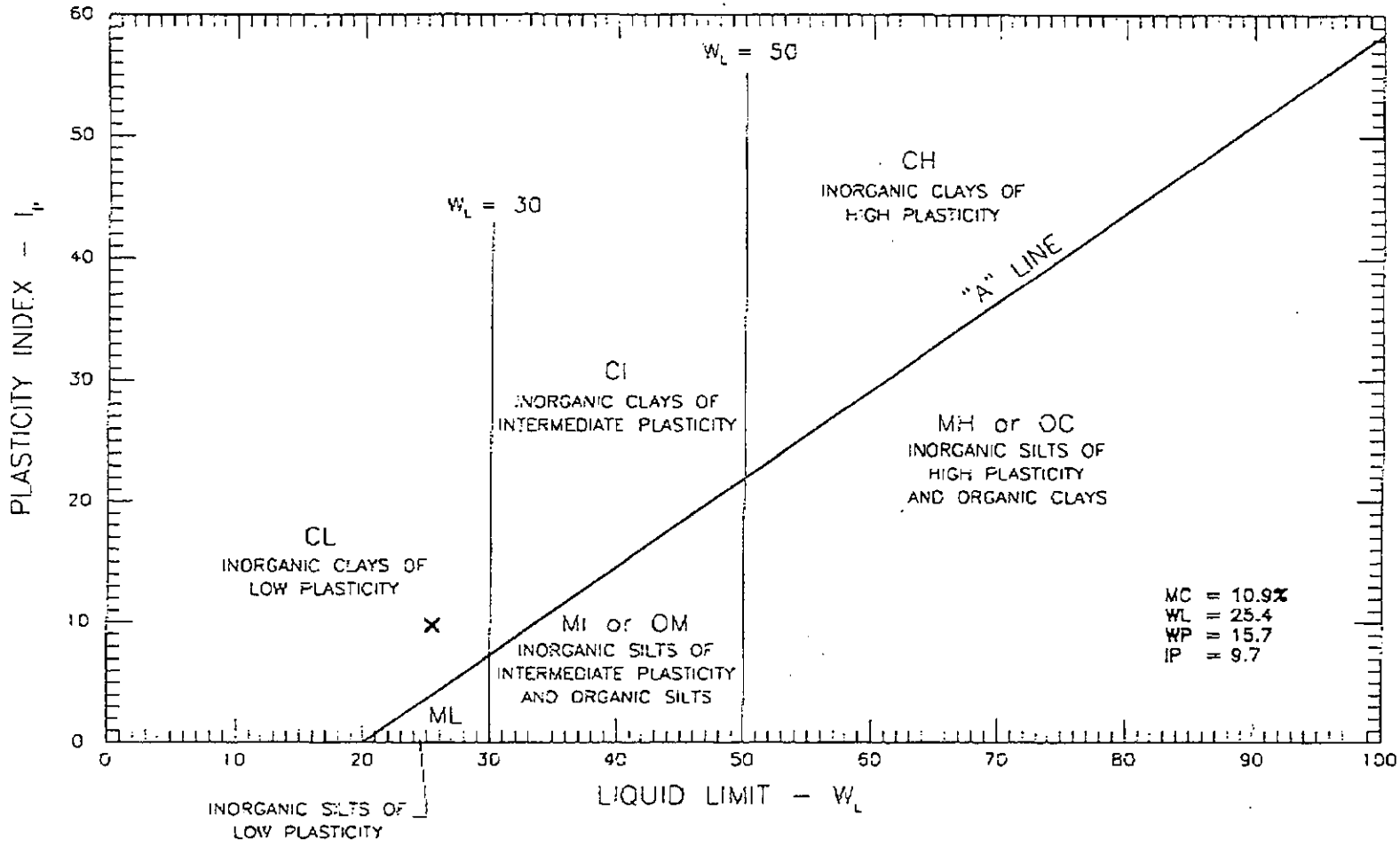
COMPACTION STANDARD	Standard Proctor, ASTM D698
COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
RAMMER TYPE	Manual
PREPARATION	Moist
OVERSIZE CORRECTION METHOD	ASTM 4718
RETAINED 4.76mm SCREEN	9.5 %
OVERSIZE SPECIFIC GRAVITY	2.68
TOTAL NUMBER OF TRIALS	4



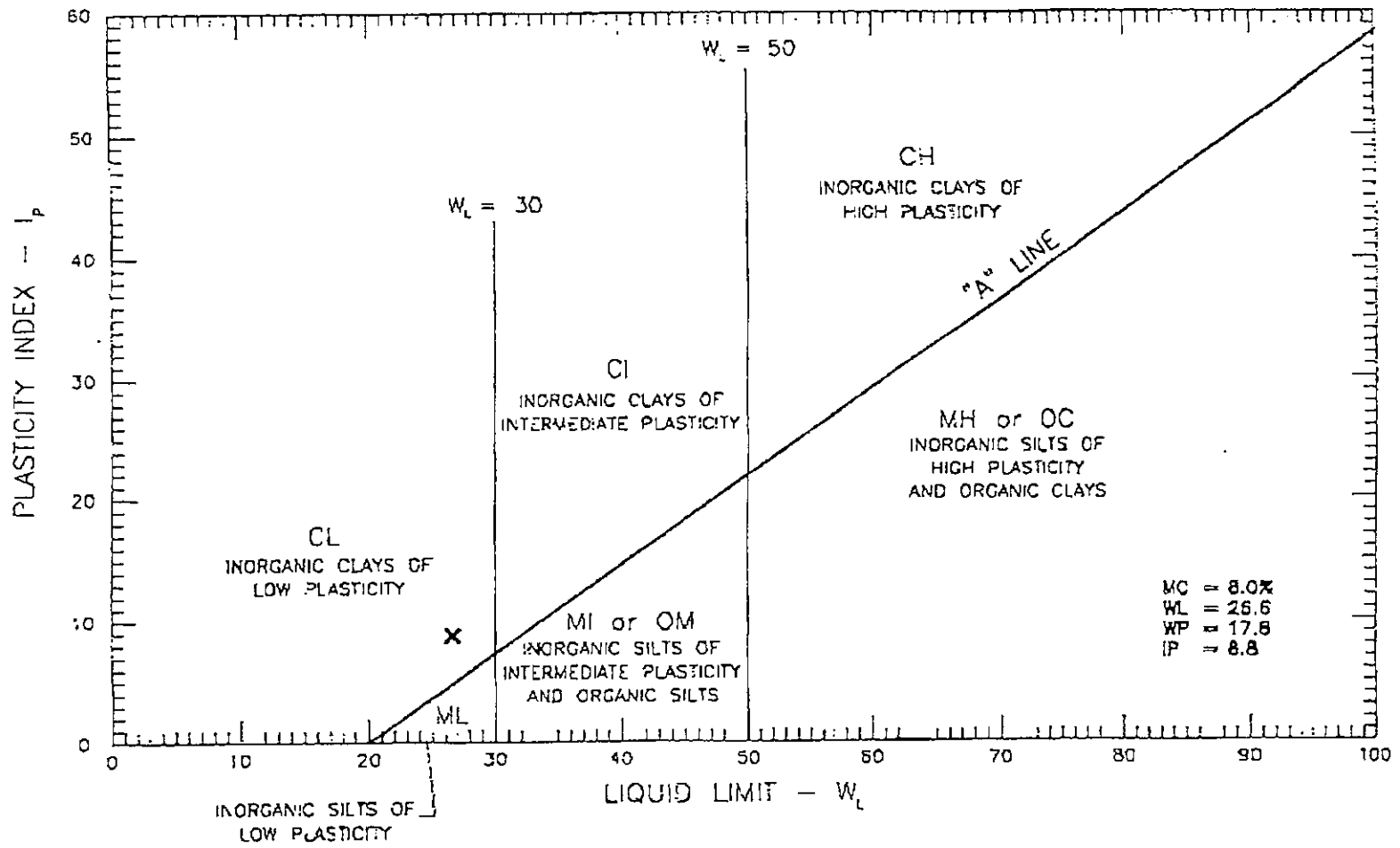
TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2079	1893	9.8
2	2224	1993	11.6
3	2210	1932	14.4
4	1983	1711	15.9

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2010	12.5
OVERSIZE CORRECTED	2059	11.4

COMMENTS
SPECIFIC GRAVITY = 2.68



GeoNorth Engineering Ltd. 1301 Kellner Road, Tel (250) 564-4304 Prince George, B.C. V2L 5S8, Fax (250) 564-9323	MOUNT POLLEY MINE ATTN: KNIGHT PIESOLD ATTERBERG LIMITS OF KP-05-91	SCALE: N.T.S.	DATE: 2005/09/20
		PROJECT NO: K-1587	DRAWING NO. 1587-841



GeoNorth Engineering Ltd. 1301 Kelliher Road, Tel. (250) 564-4304 Prince George, B.C. V2L 5S8, Fax (250) 564-9323	MOUNT POLLEY MINE ATTN: KNIGHT PIESOLD ATTERBERG LIMITS OF KP-05-87	SCALE: N.T.S	DATE: 2005/09/16
		PROJECT NO: K-1587	DRAWING NO. 1587-339

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

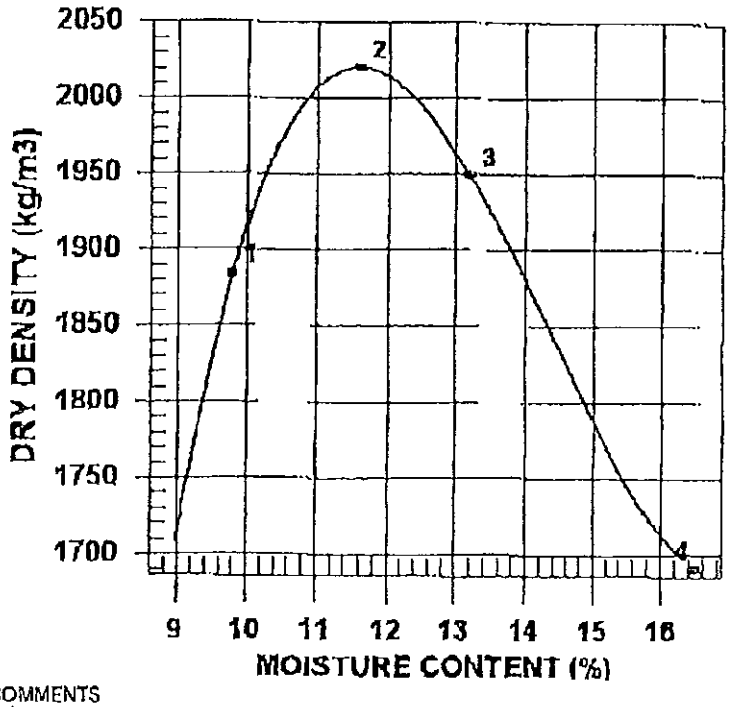
ATTN: Terry Isaacs @ 250-790-2268

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

PROJECT Construction Program - Mount Polley Minc
Testing Services
CONTRACTOR

PROCTOR NO. 50 DATE TESTED 2005.Sep.15 DATE RECEIVED 2005.Sep.08 DATE SAMPLED 2005.Aug.26

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, Talib	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	DJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-87	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	10.1 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2069	1884	9.8
2	2254	2020	11.6
3	2206	1949	13.2
4	1970	1691	16.5

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2020	11.5
OVERSIZE CORRECTED	2070	10.4

COMMENTS

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

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

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

ATTN: Terry Isaacs @ 250-790-2268

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

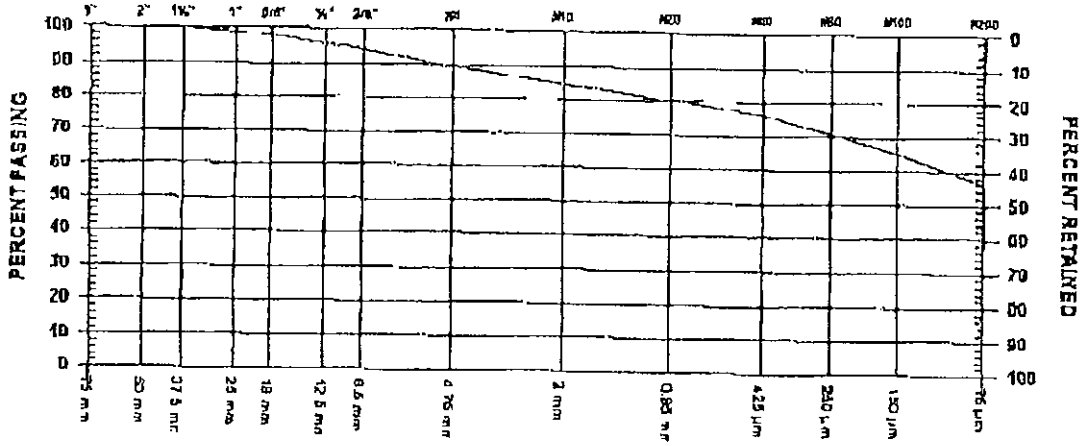
685.0147
Galbraith

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 54 DATE RECEIVED 2005.Sep.08 DATE TESTED 2005.Sep.14 DATE SAMPLED 2005.Aug.26

SUPPLIER
SOURCE KP05-87
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY DJ
TEST METHOD WASHED

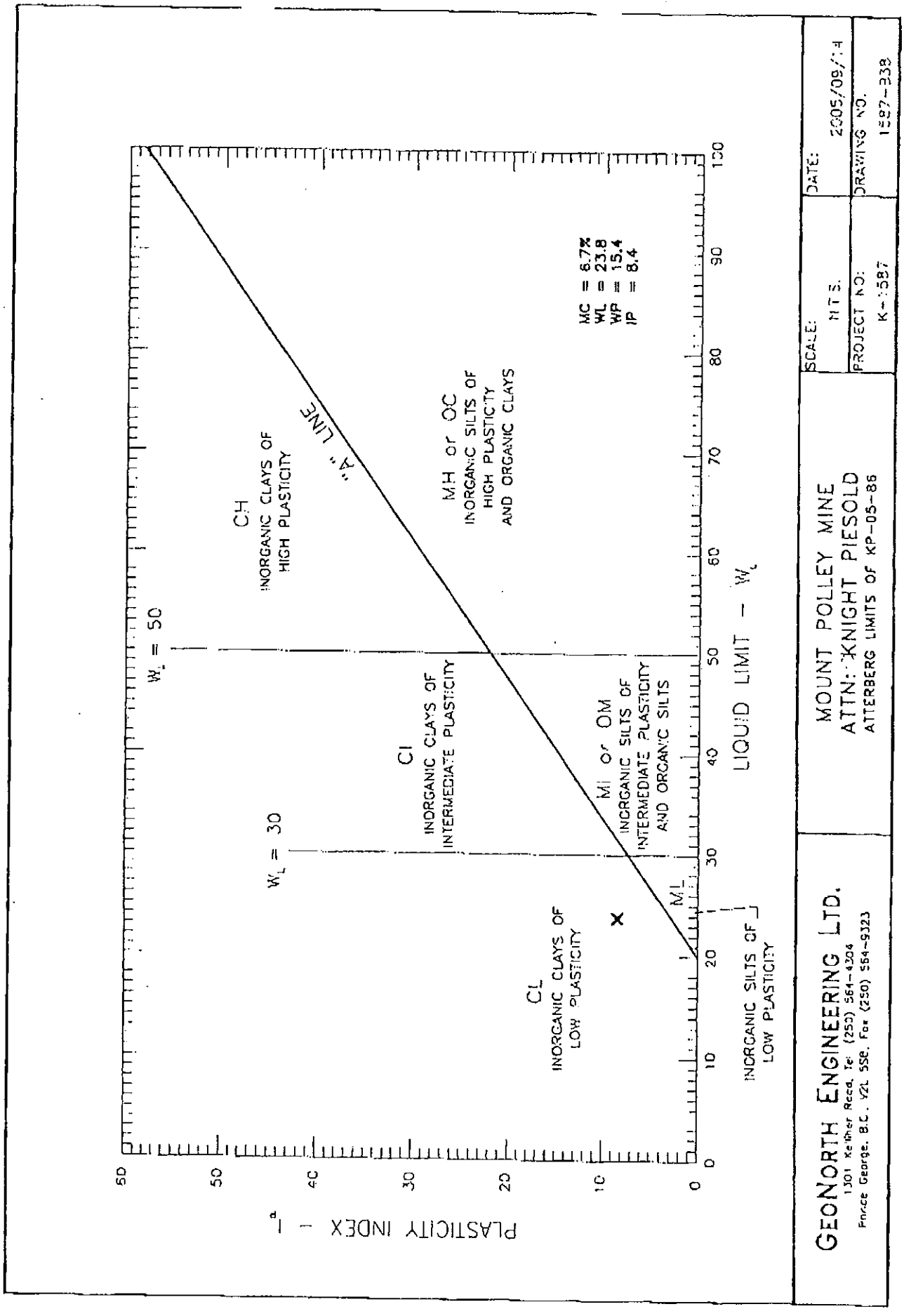


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	98.8	
3/4"	19 mm	97.7	
1/2"	12.5 mm	96.0	
3/8"	9.5 mm	94.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	89.4	
No. 10	2.00 mm	84.8	
No. 20	850 µm	80.4	
No. 40	425 µm	76.1	
No. 60	250 µm	70.6	
No. 100	150 µm	65.2	
No. 200	75 µm	56.4	

COMMENTS
LOCATION: MAIN
DRAINAGE: 20+70
ELEVATION: 947.50

 2005.Sep.16 GeoNorth Engineering Ltd. PER.


PLASTICITY INDEX – I_p
LIQUID LIMIT – W_L
"A" LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC = 6.7%
WL = 23.8
WP = 15.4
IP = 8.4
0
10
20
30
40
50
60
70
80
90
100
GEONORTH ENGINEERING LTD.
1301 Kelther Road, Tel (250) 564-4304
Prince George, B.C. V2L 5S8. Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-86
SCALE: N.T.S.
PROJECT NO: K-1587
DATE: 2005/09/14
DRAWING NO: 1587-338

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

MOISTURE - DENSITY RELATIONSHIP REPORT

HJG 10-11/10.6

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

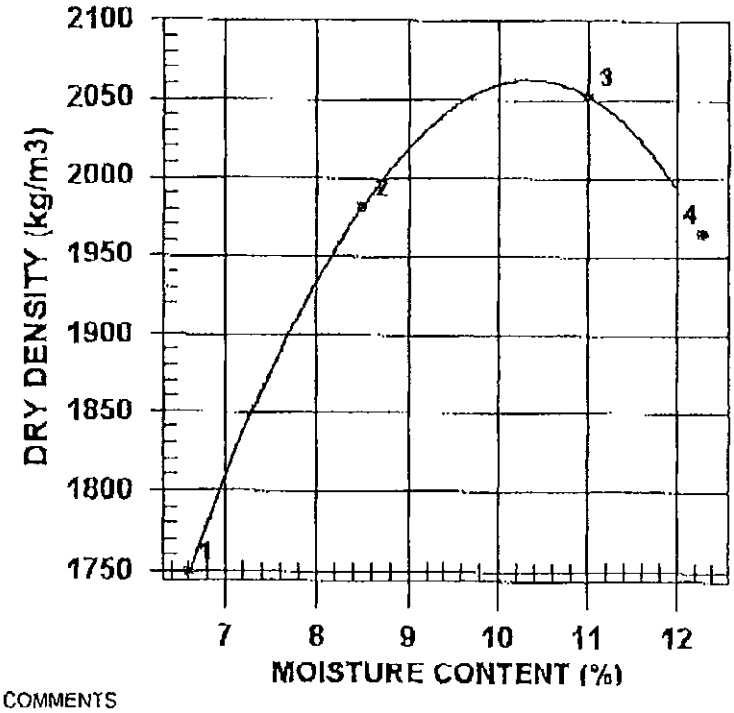
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 49 DATE TESTED 2005.Sep.14 DATE RECEIVED 2005.Sep.08 DATE SAMPLED 2005.Aug.26

INSITU MOISTURE N/A %
SAMPLED BY Client, Talib
TESTED BY DJ
SUPPLIER
SOURCE KP05-86
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 Manual
PREPARATION Moist
OVERSIZE CORRECTION METHOD ASTM 4718
RETAINED 4.75mm SCREEN 11.5 %
OVERSIZE SPECIFIC GRAVITY 2.65
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1864	1749	6.6
2	2149	1981	8.5
3	2278	2052	11.0
4	2207	1965	12.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2060	10.5
OVERSIZE CORRECTED	2114	9.4

COMMENTS

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 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

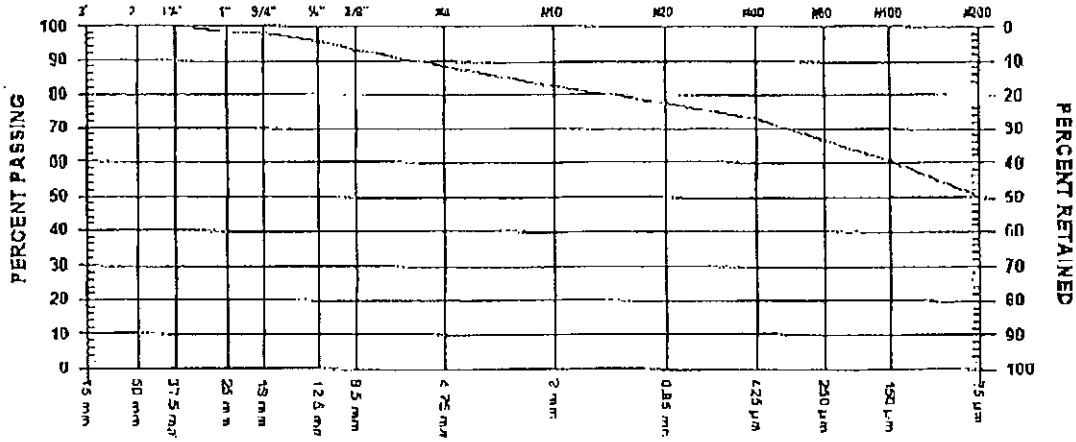
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 51 DATE RECEIVED 2005.Sep.08 DATE TESTED 2005.Sep.12 DATE SAMPLED 2005.Aug.26

SUPPLIER
SOURCE KP05-86
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY RO
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	98.4	
3/4"	19	mm	98.0	
1/2"	12.5	mm	95.6	
3/8"	9.5	mm	93.3	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	88.4	
No. 10	2.00	mm	82.1	
No. 20	850	µm	77.4	
No. 40	425	µm	72.6	
No. 60	250	µm	66.5	
No. 100	150	µm	60.4	
No. 200	75	µm	50.2	

COMMENTS
LOCATION: MAIN
CHAINAGE: 19100
ELEVATION: 948

Page 1 of 1 2005.Sep.14 GeoNorth Engineering Ltd. PER.

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

LCDC-A. 10-1/10.03

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

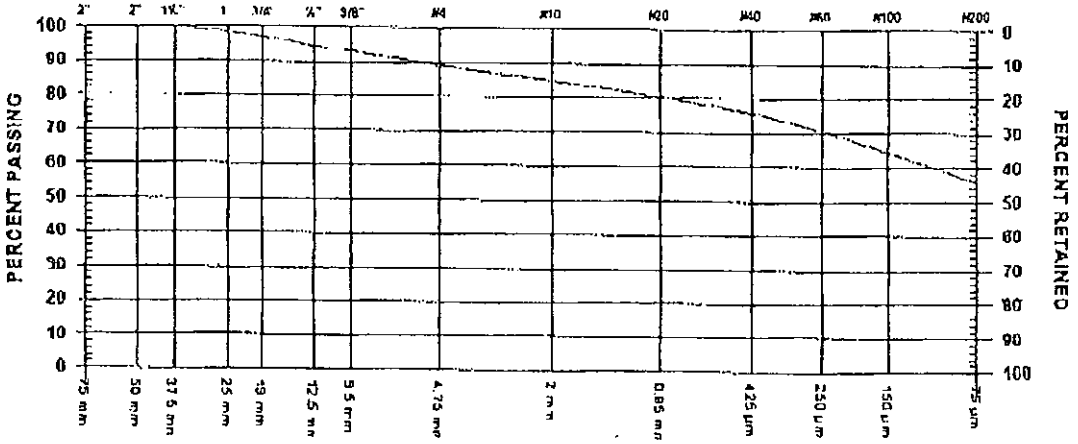
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:-
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 50 DATE RECEIVED 2005.Sep.08 DATE TESTED 2005.Sep.12 DATE SAMPLED 2005.Aug.26

SUPPLIER
SOURCE KP05-85
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY Client, Talib
TESTED BY DJ
TEST METHOD WASHED

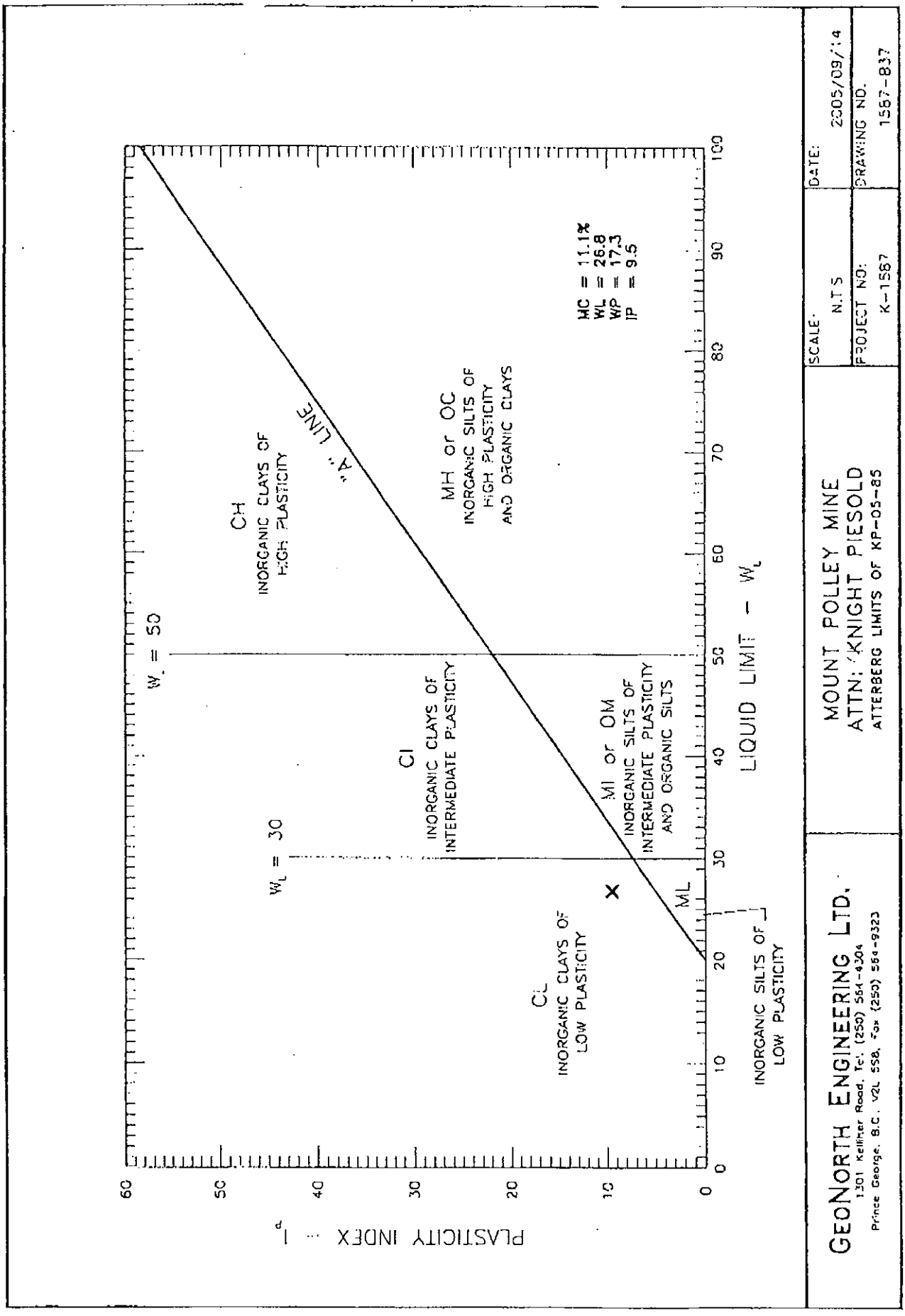


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	98.3	
3/4"	19 mm	96.9	
1/2"	12.5 mm	94.7	
3/8"	9.5 mm	93.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	89.1	
No. 10	2.00 mm	84.6	
No. 20	850 µm	80.3	
No. 40	425 µm	76.0	
No. 60	250 µm	70.5	
No. 100	150 µm	64.5	
No. 200	75 µm	55.8	

COMMENTS
LOCATION: MAIN
CHAINAGE: 18+50
ELEVATION: 947.60

Page 1 of 1 2005.Sep.14 GeoNorth Engineering Ltd. PER


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
A-LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
WC = 11.1%
WL = 26.8
WP = 17.3
IP = 9.5
GEONORTH ENGINEERING LTD.
1301 Kelliher Road, Tel. (250) 564-4304
Prince George, B.C. V2L 5S8, Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-85
SCALE: N.T.S
DATE: 2005/09/14
PROJECT NO: K-1567
DRAWING NO. 1567-837

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

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

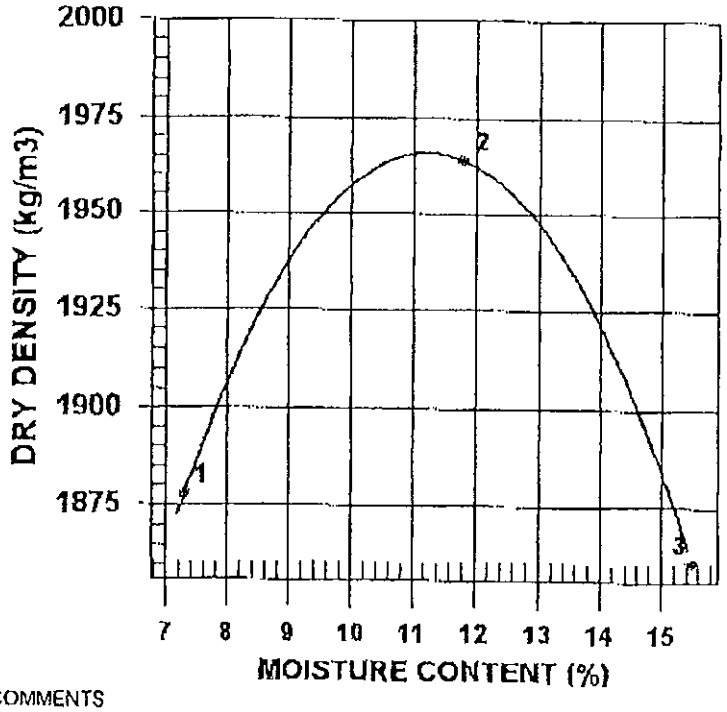
ATTN: Les Galbraith @ 604-685-0147

PROJECT NO K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 48 DATE TESTED 2005.Sep.14 DATE RECEIVED 2005.Sep.08 DATE SAMPLED 2005.Aug.26

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, Talib	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	DJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-85	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	10.7 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	3
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2015	1878	7.3
2	2196	1964	11.8
3	2150	1861	15.5

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2000	13.0
OVERSIZE CORRECTED	2054	11.7

COMMENTS

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 1587
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold

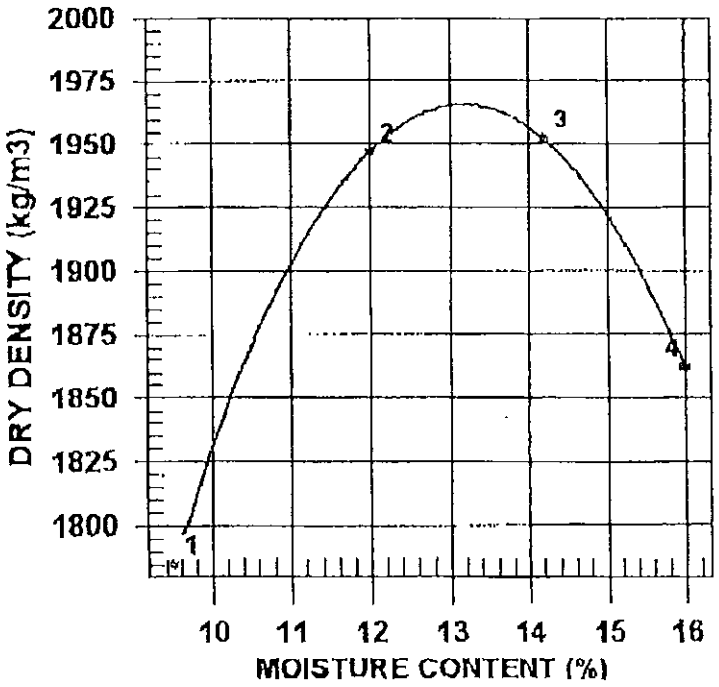
TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 46 DATE TESTED 2005.Sep.01 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.24

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client		
TESTED BY	DJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP05-84	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	10.4 %
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	1955	1785	9.5
2	2181	1947	12.0
3	2229	1952	14.2
4	2160	1862	16.0

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1970	13.0
OVERSIZE CORRECTED	2024	11.8

COMMENTS
LOCATION: MAIN, CHAINAGE: 19+00, ELEVATION: 947.5m

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

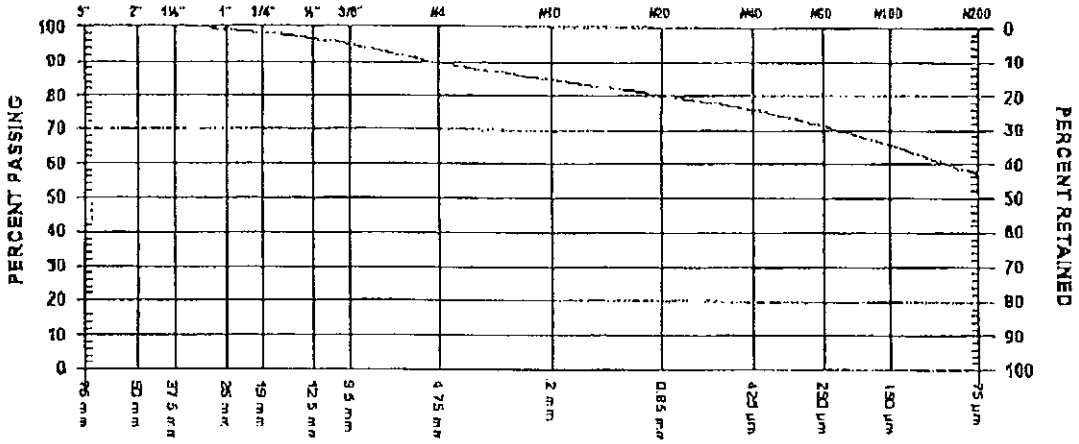
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 49 DATE RECEIVED 2005.Aug.26 DATE TESTED 2005.Sep.01 DATE SAMPLED 2005.Aug.24

SUPPLIER
SOURCE KP05-84
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, 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	99.3	
3/4"	19	mm	98.5	
1/2"	12.5	mm	96.6	
3/8"	9.5	mm	95.0	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	89.4	
No. 10	2.00	mm	84.6	
No. 20	850	µm	80.4	
No. 40	425	µm	76.3	
No. 60	250	µm	71.1	
No. 100	150	µm	65.7	
No. 200	75	µm	57.0	

COMMENTS
LOCATION: MAIN
CHAINAGE: 19+00
ELEVATION: 947.5m

Page 1 of 1 2005.Sep.02 GeoNorth Engineering Ltd. PER

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 1587
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

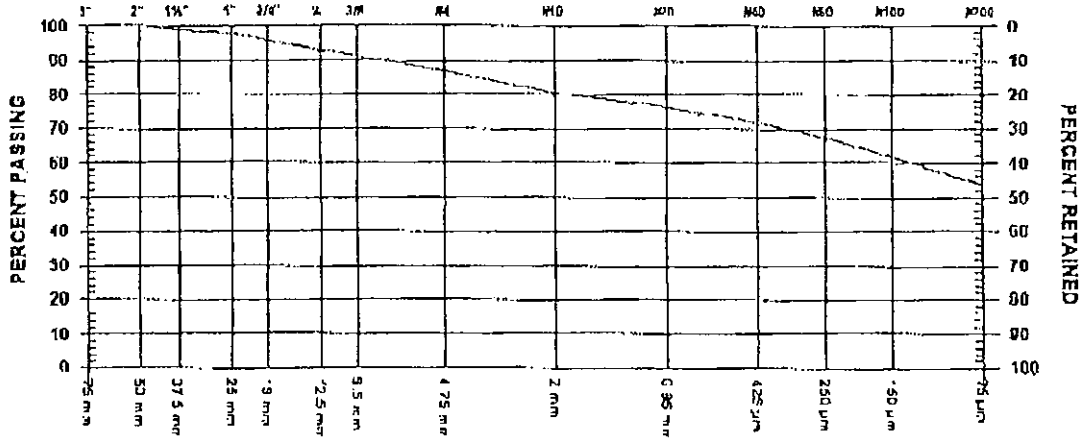
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 41 DATE RECEIVED 2005.Aug.26 DATE TESTED 2005.Aug.30 DATE SAMPLED 2005.Aug.18

SUPPLIER
SOURCE KP05-83
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, 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	98.6	
1"	25 mm	98.1	
3/4"	19 mm	95.8	
1/2"	12.5 mm	92.9	
3/8"	9.5 mm	91.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	87.0	
No. 10	2.00 mm	80.6	
No. 20	850 µm	76.1	
No. 40	425 µm	72.1	
No. 60	250 µm	67.1	
No. 100	150 µm	61.9	
No. 200	75 µm	53.5	

COMMENTS
LOCATION: SOUTH EMBANKMENT
CHAINAGE: 0+75 ~ 8+75m
ELEVATION: 946.2m
Sample #19

Page 1 of 1 2005.Aug.31 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

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

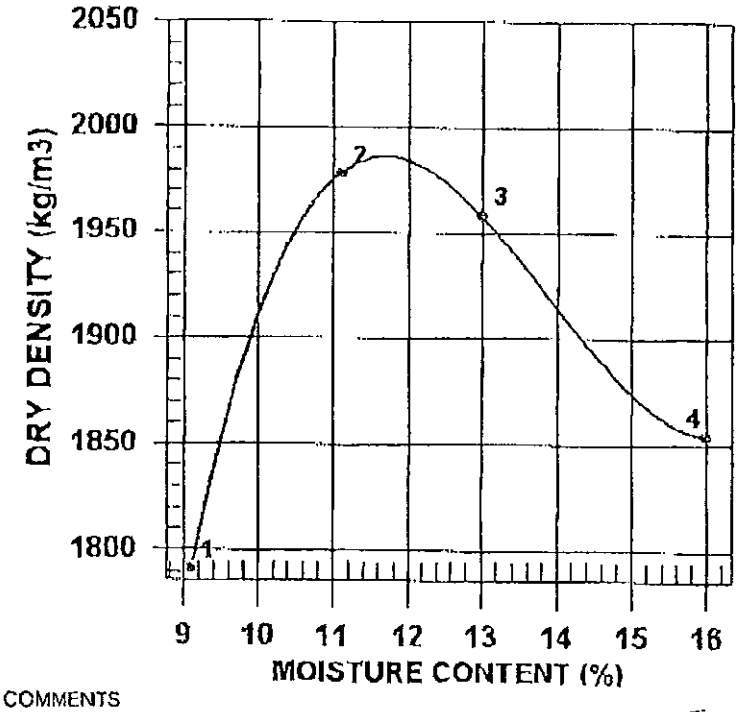
ATTN: Les Galbraith @ 604-685-0147

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 39 DATE TESTED 2005.Aug.30 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.18

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	DJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-83	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	12.7 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1954	1791	9.1
2	2198	1978	11.1
3	2212	1958	13.0
4	2151	1854	16.0

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1990	11.5
OVERSIZE CORRECTED	2055	10.2

COMMENTS
LOCATION: SOUTH EMBANKMENT, CHAINAGE: 0+75 (8+75) ELEVATION: 946.2m

Page 1 of 1 2005.Aug.31 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 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c Knight Piesold

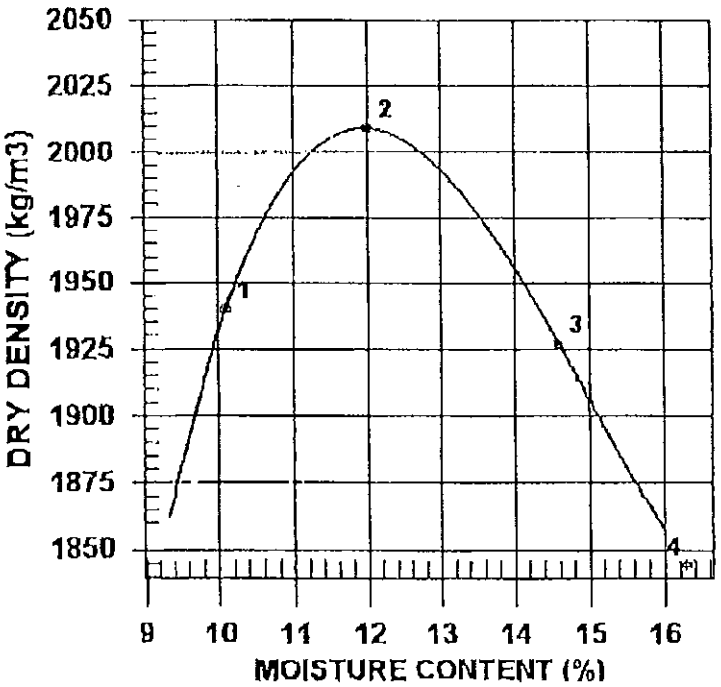
TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 45 DATE TESTED 2005.Sep.01 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.04

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	DJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-80	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	11.8 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2136	1940	10.1
2	2250	2009	12.0
3	2208	1927	14.6
4	2145	1844	16.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2010	12.0
OVERSIZE CORRECTED	2069	10.7

COMMENTS
LOCATION: 10+50, ELEVATION: 943-946m

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

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

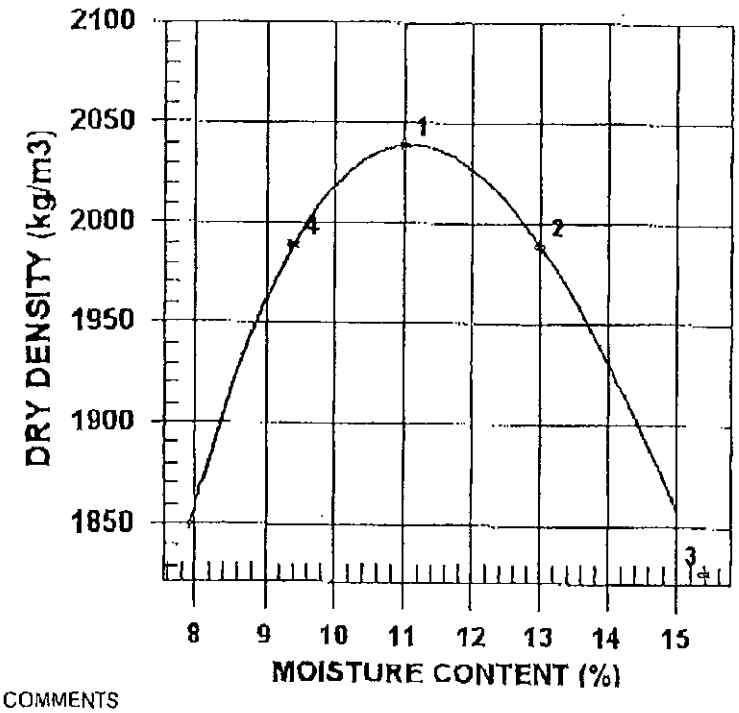
PROJECT NO. K 158/
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 47 DATE TESTED 2005.Sep.01 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.08

INSITU MOISTURE N/A %
SAMPLED BY MB, Client
TESTED BY DJ
SUPPLIER
SOURCE KP05-78
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 Manual
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	2263	2039	11.0
2	2247	1989	13.0
3	2108	1827	15.4
4	2176	1989	9.4

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	2040	11.0

COMMENTS

 2005.Sep.02 GeoNorth Engineering Ltd. PER.

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 1587
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

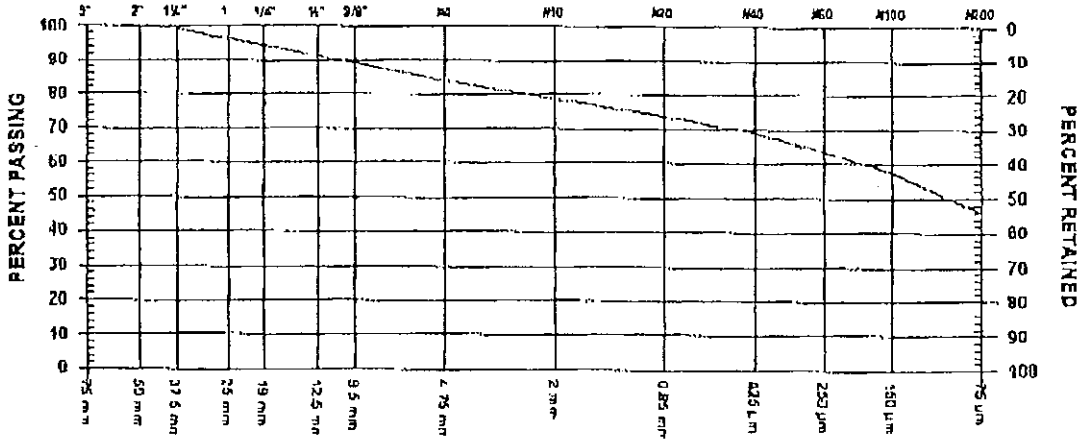
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 44 DATE RECEIVED 2005.Aug.26 DATE TESTED 2005.Aug.30 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-78
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, 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	99.2	
1"	25	mm	96.4	
3/4"	19	mm	94.7	
1/2"	12.5	mm	91.3	
3/8"	9.5	mm	89.1	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	83.8	
No. 10	2.00	mm	78.7	
No. 20	850	µm	73.7	
No. 40	425	µm	69.1	
No. 60	250	µm	63.5	
No. 100	150	µm	57.3	
No. 200	75	µm	45.8	

COMMENTS
LOCATION: 29+80
ELEVATION: 946m

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

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

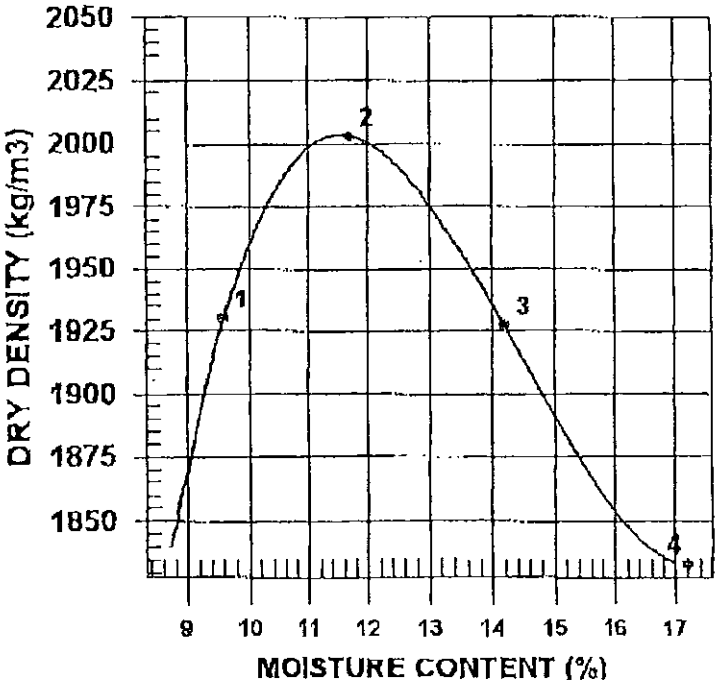
TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 41 DATE TESTED 2005.Aug.30 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client		
TESTED BY	DJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP05-77	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	11.2 %
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	2115	1930	9.6
2	2237	2003	11.7
3	2201	1927	14.2
4	2148	1833	17.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2000	11.5
OVERSIZE CORRECTED	2056	10.3

COMMENTS
LOCATION: PERIMETER, ELEVATION: 946.3m

32400

Page 1 of 1 2005.Sep.01 GeoNorth Engineering Ltd. PER

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

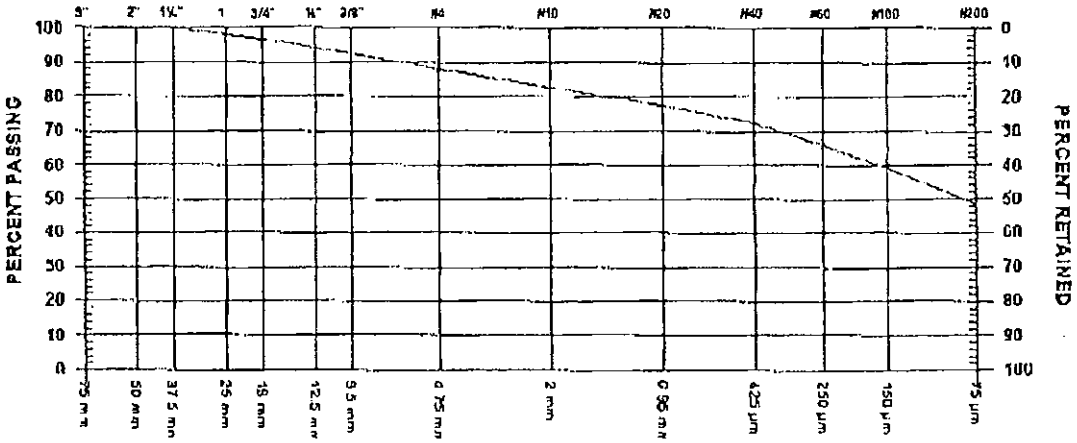
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Minc
Testing Services
CONTRACTOR

SIEVE TEST NO. 43 DATE RECEIVED 2005.Aug.26 DATE TESTED 2005.Aug.29 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-77
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, 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	97.9	
3/4"	19 mm	96.6	
1/2"	12.5 mm	94.2	
3/8"	9.5 mm	92.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	88.2	
No. 10	2.00 mm	82.4	
No. 20	850 µm	77.3	
No. 40	425 µm	72.3	
No. 60	250 µm	65.8	
No. 100	150 µm	59.2	
No. 200	75 µm	48.4	

COMMENTS
LOCATION: PERIMETER
ELEVATION: 946.3m

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

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold

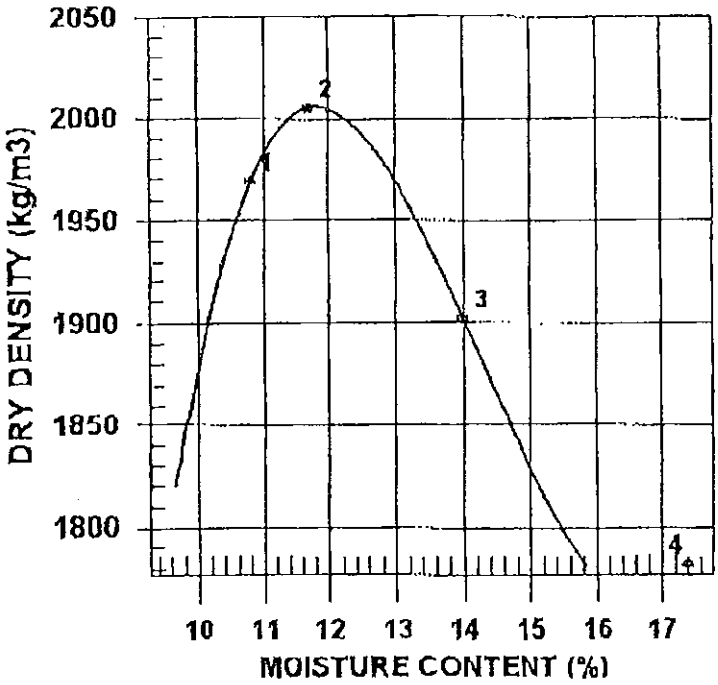
TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 40 DATE TESTED 2005.Aug.29 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client		
TESTED BY	DJ	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP05-76	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	11.3 %
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	2182	1969	10.8
2	2240	2005	11.7
3	2168	1902	14.0
4	2092	1782	17.4

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2010	12.0
OVERSIZE CORRECTED	2066	10.8

COMMENTS
LOCATION: MAIN EMBANKMENT, CHAINAGE: 31+00, ELEVATION: 946m

 2005.Sep.01 GeoNorth Engineering Ltd. PER

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

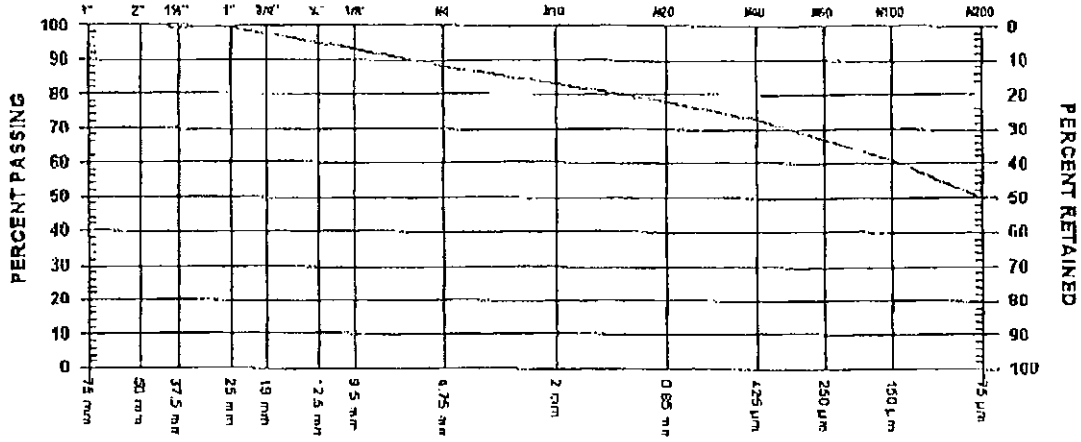
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 42 DATE RECEIVED 2005.Aug.26 DATE TESTED 2005.Aug.29 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-76
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, 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	99.2	
1"	25 mm	99.0	
3/4"	19 mm	97.5	
1/2"	12.5 mm	95.0	
3/8"	9.5 mm	93.1	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	88.1	
No. 10	2.00 mm	82.9	
No. 20	850 µm	77.7	
No. 40	425 µm	72.9	
No. 60	250 µm	67.0	
No. 100	150 µm	60.7	
No. 200	75 µm	49.7	

COMMENTS
LOCATION: MAIN EMBANKMENT
CHAINAGE: 31+00
ELEVATION: 946m

Page 1 of 1 2005.Sep.01 GeoNorth Engineering Ltd. PER.

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

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

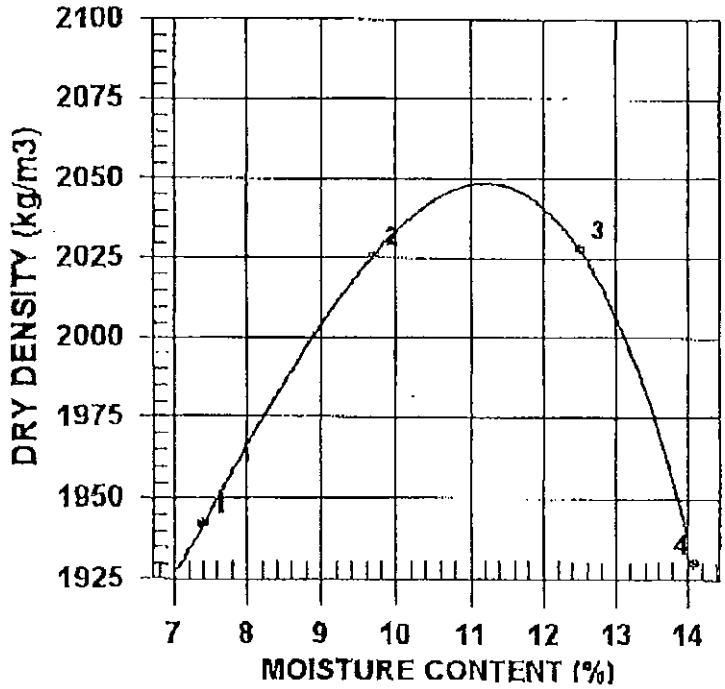
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 34 DATE TESTED 2005.Aug.23 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	BO	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-68	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	18.6 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION	GRAVELLY		
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2086	1942	7.4
2	2222	2026	9.7
3	2282	2028	12.5
4	2202	1930	14.1

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2050	11.0
OVERSIZE CORRECTED	2140	9.1

COMMENTS

Page 1 of 1 2005.Aug.25 GeoNorth Engineering Ltd. PER:

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

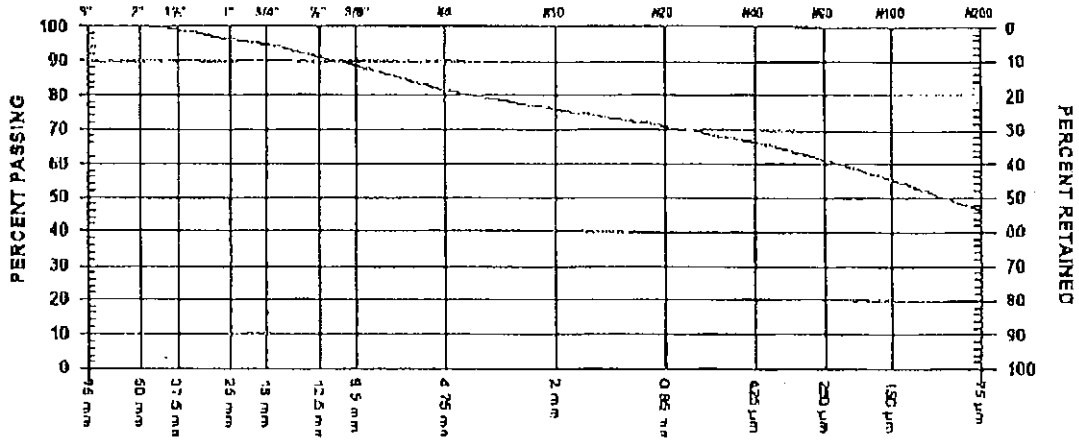
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 35 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.23 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-68
SPECIFICATION
MATERIAL TYPE TILL

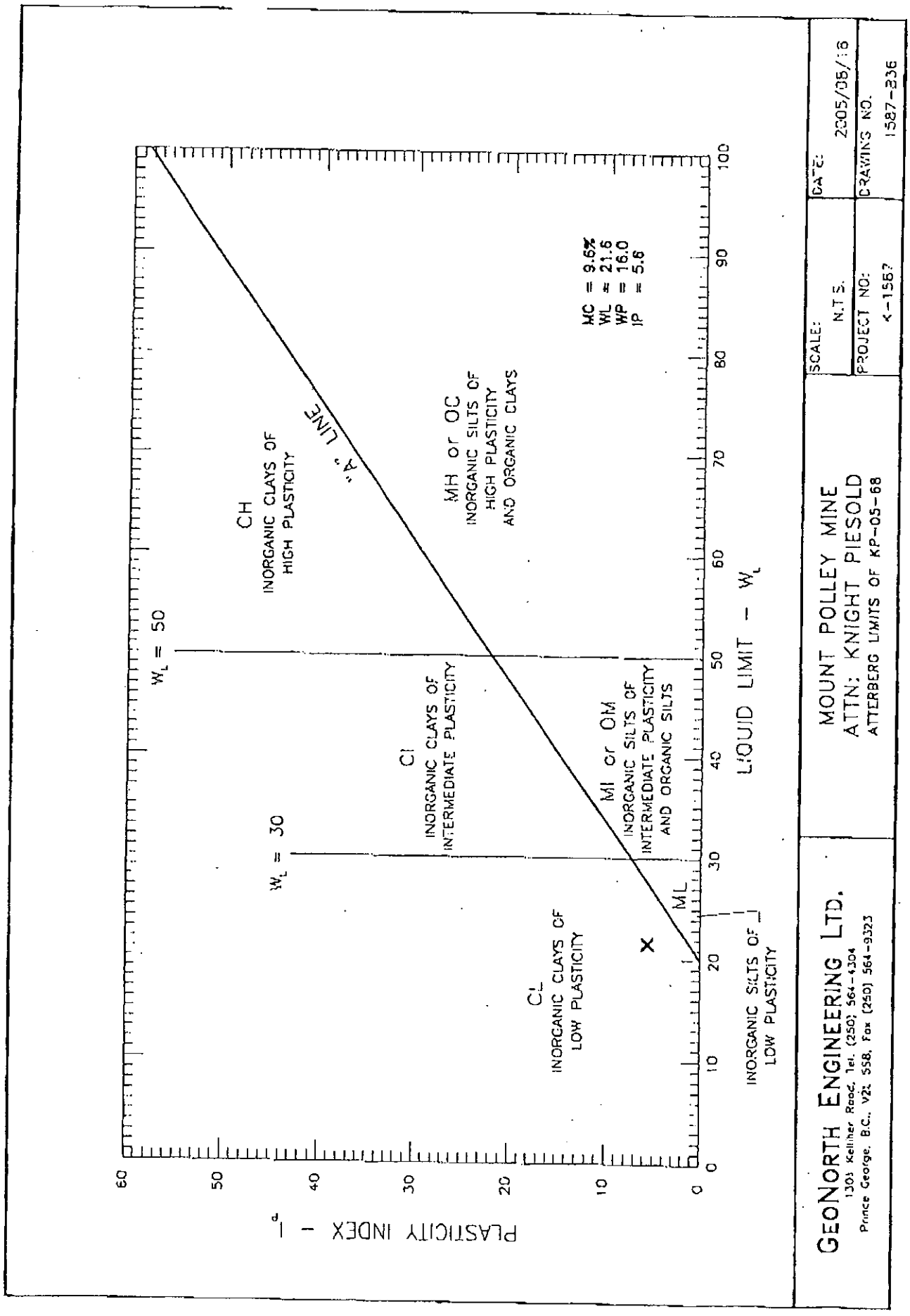
SAMPLED BY MB, Client
TESTED BY BO
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	99.1	
1"	25 mm	96.4	
3/4"	19 mm	94.8	
1/2"	12.5 mm	91.0	
3/8"	9.5 mm	88.7	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	81.2	
No. 10	2.00 mm	75.9	
No. 20	850 µm	71.1	
No. 40	425 µm	66.6	
No. 60	250 µm	61.1	
No. 100	150 µm	55.5	
No. 200	75 µm	46.2	

COMMENTS
CHAINAGE: 18+00
ELEVATION: 945.8m


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
A - LINE
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
W_L = 50
W_L = 30
MC = 9.6%
WL = 21.6
WP = 16.0
IP = 5.6
GEONORTH ENGINEERING LTD.
1303 Kelliher Road, Tel. (250) 564-4304
Prince George, B.C., V2L 5S8, Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-68
SCALE: N.T.S.
DATE: 2005/08/18
PROJECT NO: 4-1567
DRAWING NO. 1587-336

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 1507
CLIENT Mount Polley Mining Corp, Attn:
C.C. Knight Piesold

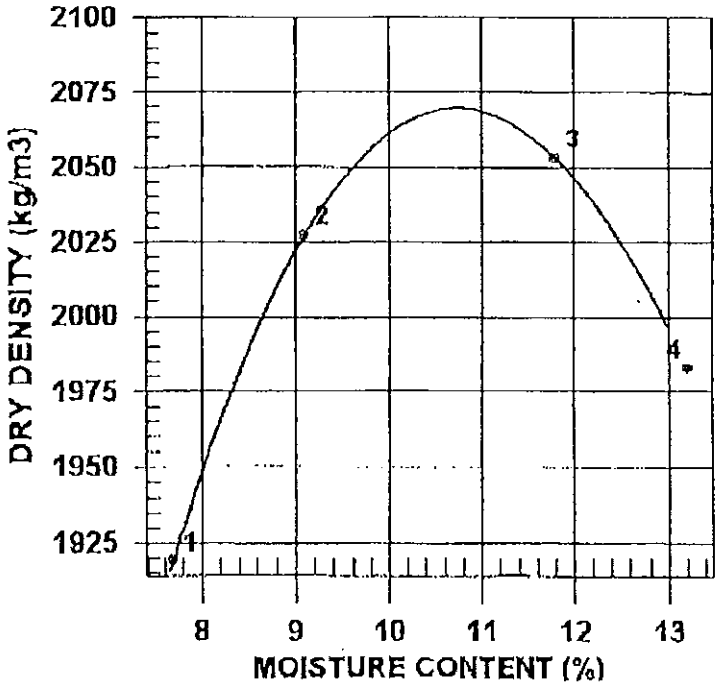
TO Mount Polley Mining Corp, Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1NO

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 33 DATE TESTED 2005.Aug.23 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client		
TESTED BY	BO	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP05-67	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	15.1 %
DESCRIPTION	GRAVELLY	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	2067	1919	7.7
2	2211	2027	9.1
3	2295	2053	11.8
4	2245	1983	13.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2070	10.5
OVERSIZE CORRECTED	2141	9.1

COMMENTS

GeoNorth
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 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c Knight Piesold

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

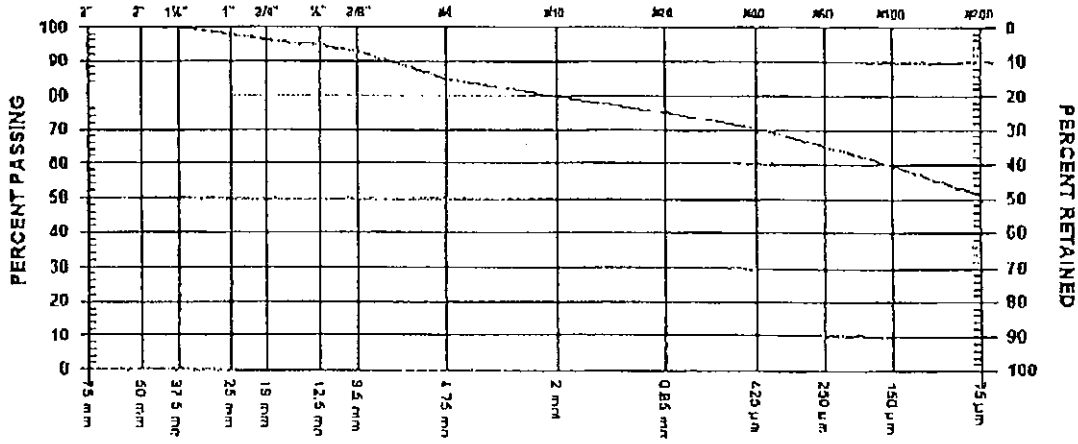
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 34 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.23 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-67
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, Client
TESTED BY BO
TEST METHOD WASHED

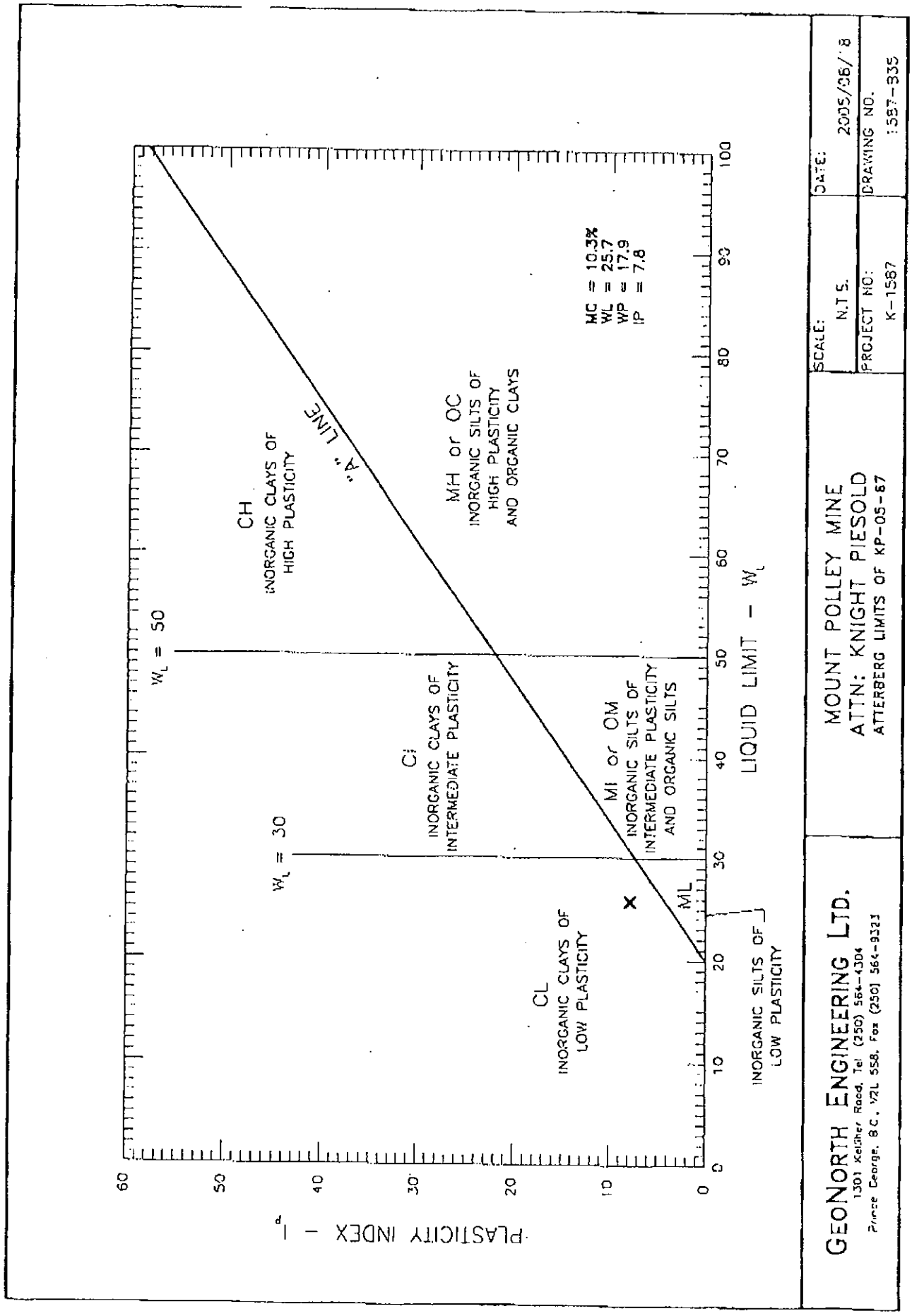


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	99.6	
1"	25 mm	97.7	
3/4"	19 mm	96.3	
1/2"	12.5 mm	94.6	
3/8"	9.5 mm	93.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	84.7	
No. 10	2.00 mm	79.8	
No. 20	850 µm	74.8	
No. 40	425 µm	70.5	
No. 60	250 µm	65.1	
No. 100	150 µm	59.6	
No. 200	75 µm	51.2	

COMMENTS
CHAINAGE: 32+25
ELEVATION: 944.6m

Page 1 of 1 2005.Aug.25 GeoNorth Engineering Ltd. PER.



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

MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-67

SCALE: N.T.S.
PROJECT NO: K-1587
DATE: 2005/08/18
DRAWING NO. 1587-335

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

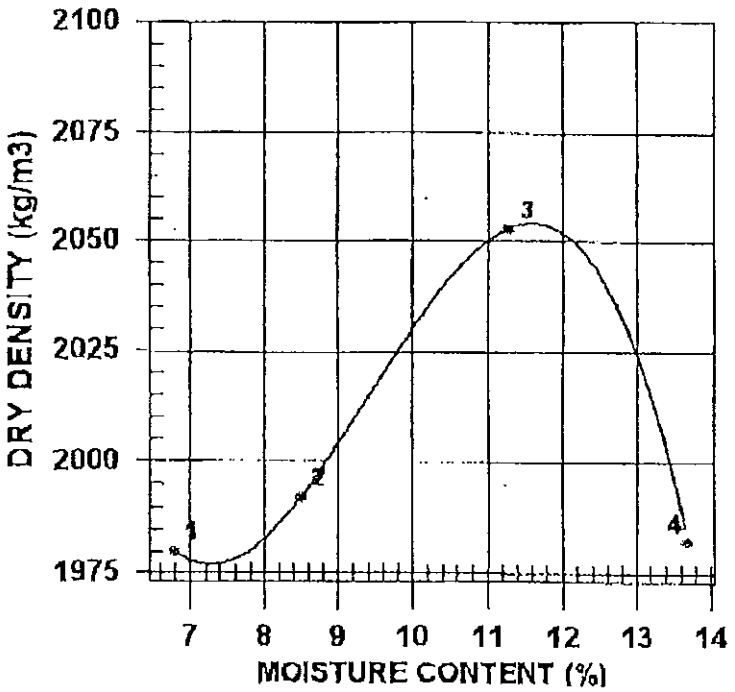
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 32 DATE TESTED 2005.Aug.22 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE N/A %
SAMPLED BY MB, Client
TESTED BY BO
SUPPLIER
SOURCE KP05-66
MATERIAL IDENTIFICATION
MAJOR COMPONENT TILL
SIZE
DESCRIPTION GRAVELLY
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 18.3 %
OVERSIZE SPECIFIC GRAVITY 2.65
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2115	1980	6.8
2	2161	1992	8.5
3	2285	2053	11.3
4	2254	1982	13.7

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2050	11.5
OVERSIZE CORRECTED	2139	9.6

COMMENTS

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

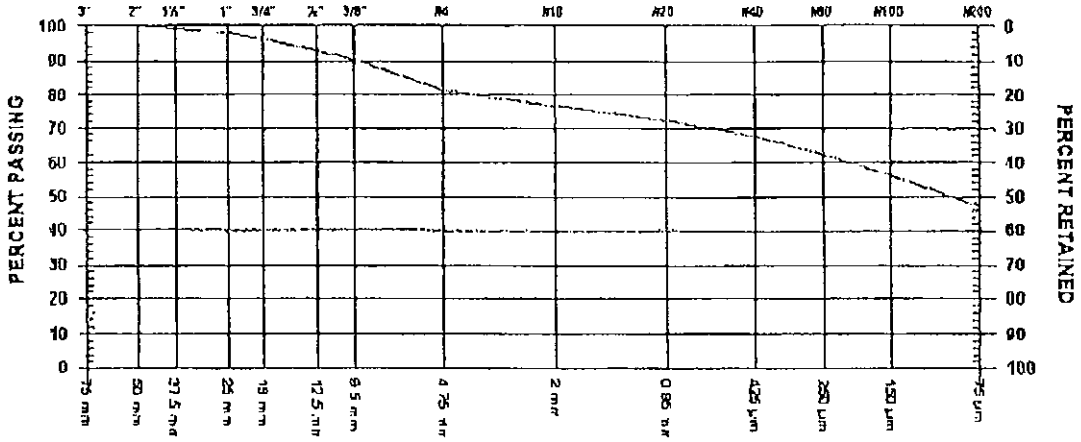
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 33 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.23 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-66
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, Client
TESTED BY BO
TEST METHOD WASHED

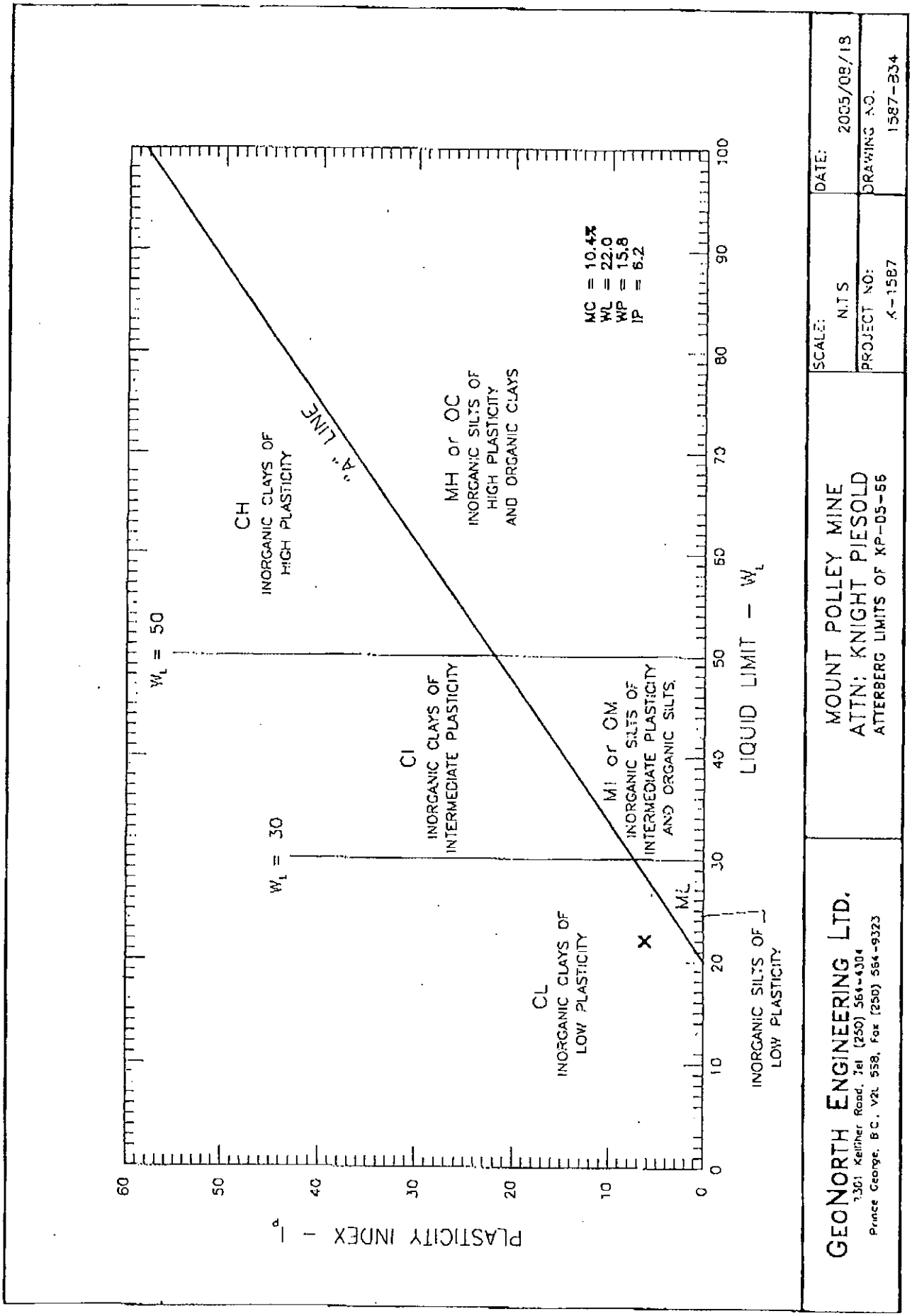


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	99.4	
1"	25 mm	97.8	
3/4"	19 mm	96.1	
1/2"	12.5 mm	92.7	
3/8"	9.5 mm	90.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	81.5	
No. 10	2.00 mm	76.8	
No. 20	850 µm	72.4	
No. 40	425 µm	67.9	
No. 60	250 µm	62.3	
No. 100	150 µm	56.3	
No. 200	75 µm	47.4	

COMMENTS
CHAINAGE: 39+00
ELEVATION: 944.3m

 2005.Aug.25 GeoNorth Engineering Ltd. PER.


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
"A" LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC = 10.4%
WL = 22.0
WP = 15.8
IP = 6.2
GEONORTH ENGINEERING LTD.
1361 Kelliher Road, Tel (250) 564-4304
Prince George, B.C. V2L 5S8, Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-56
SCALE: N.T.S
DATE: 2005/08/18
PROJECT NO: K-1587
DRAWING NO: 1587-334

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

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

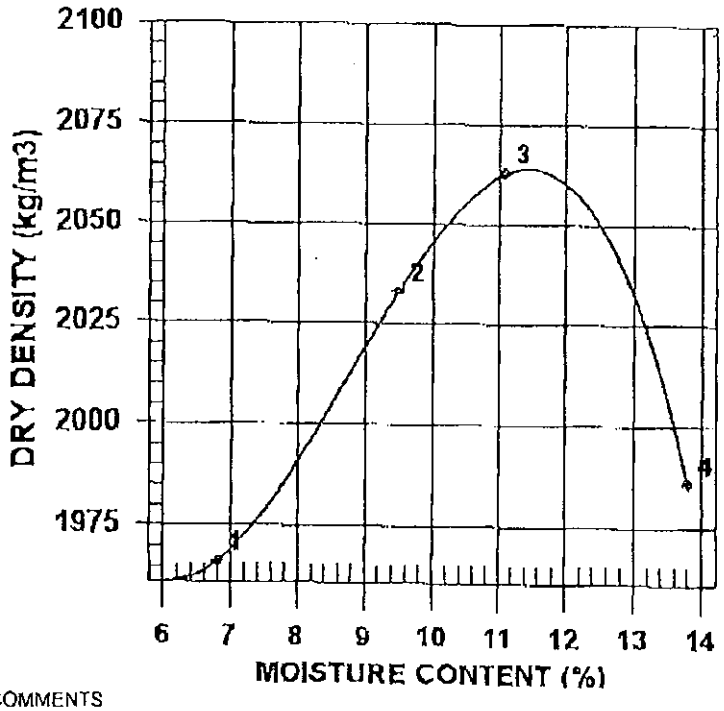
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 31 DATE TESTED 2005.Aug.23 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %
SAMPLED BY	MB, Client
TESTED BY	BO
SUPPLIER	
SOURCE	KP05-65
MATERIAL IDENTIFICATION	
MAJOR COMPONENT	TILL
SIZE	
DESCRIPTION	GRAVELLY
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	17.1 %
OVERSIZE SPECIFIC GRAVITY	2.65
TOTAL NUMBER OF TRIALS	4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2100	1966	6.8
2	2226	2033	9.5
3	2292	2063	11.1
4	2260	1986	13.8

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2060	11.5
OVERSIZE CORRECTED	2142	9.7

COMMENTS

Aug.23. 2005 12:15PM North GeoNorth Engineering 564 9323
1301 Kelliher Road .ce George, BC V2L5S8
Phone (250)564-4304; fax (250)564-9323

SIEVE ANALYSIS REPORT No. 7351 P. 1/2
10 20 40 60 SERIES

101-1/10.03

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

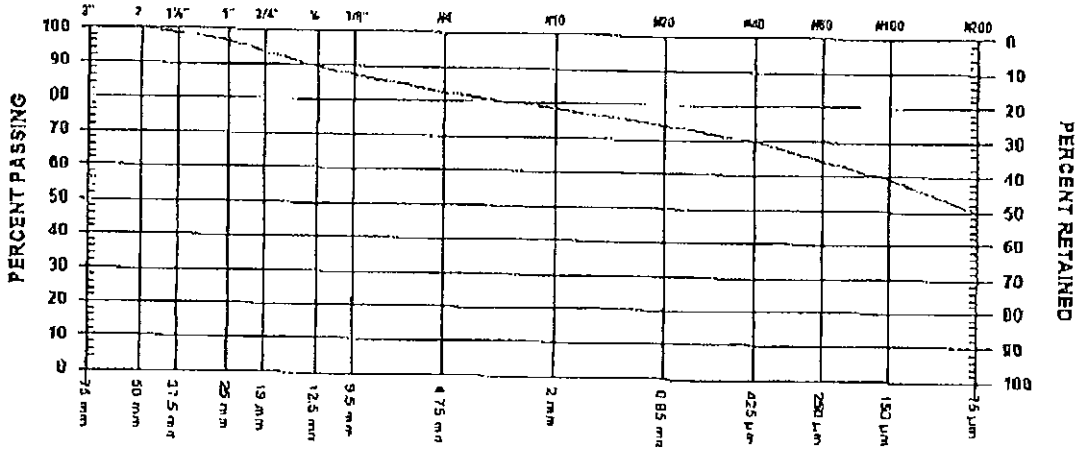
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 32 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.23 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-65
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, Client
TESTED BY BO
TEST METHOD WASHED

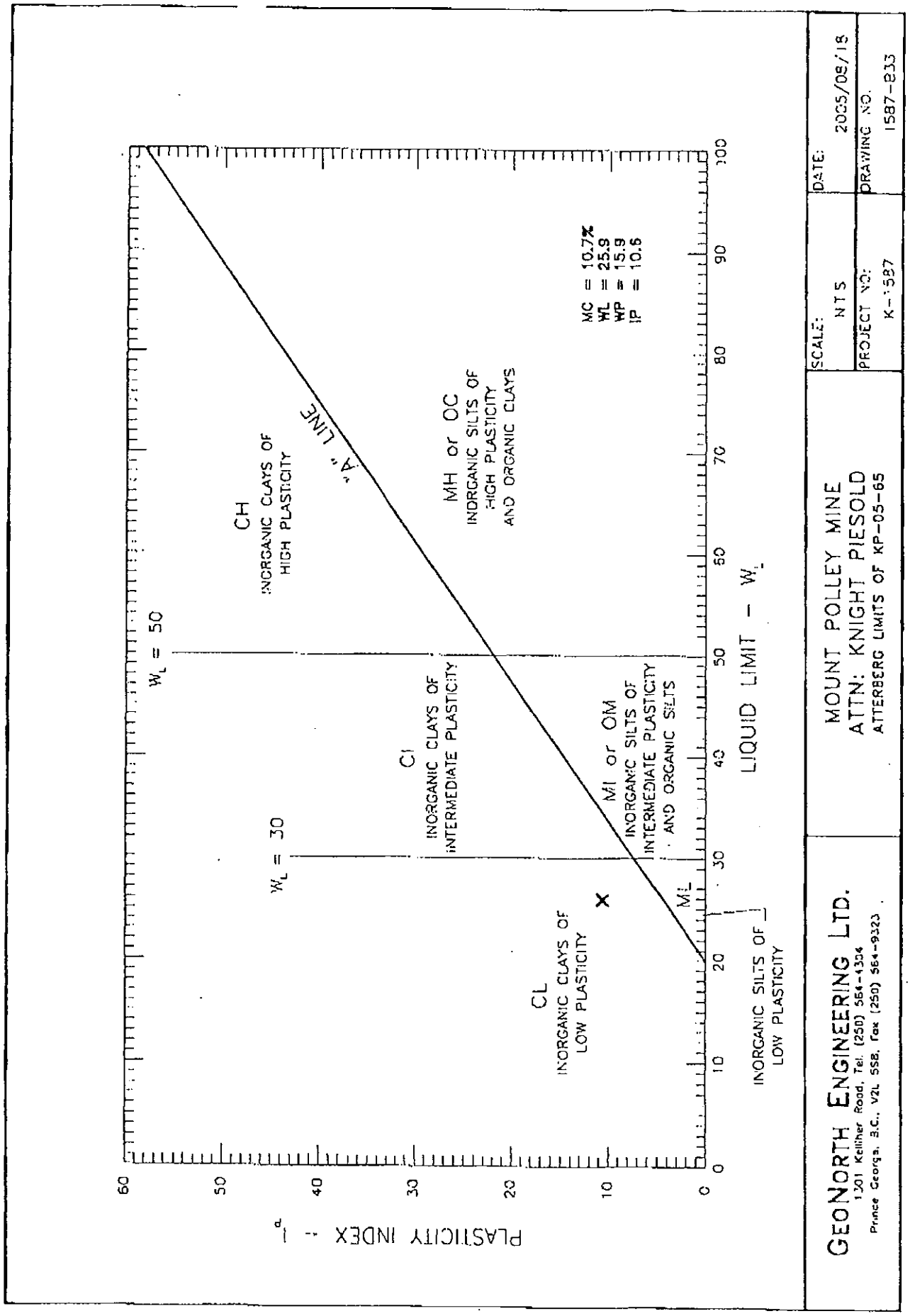


GRAVEL SIZES			PERCENT PASSING	GRADATION LIMITS
3"	75	mm		
2"	50	mm	100.0	
1 1/2"	37.5	mm	98.6	
1"	25	mm	96.7	
3/4"	19	mm	93.5	
1/2"	12.5	mm	89.4	
3/8"	9.5	mm	87.3	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	82.7	
No. 10	2.00	mm	78.2	
No. 20	850	µm	74.1	
No. 40	425	µm	69.9	
No. 60	250	µm	64.5	
No. 100	150	µm	59.0	
No. 200	75	µm	50.0	

COMMENTS
CHAINAGE: 43+25
ELEVATION: 945.8m

Page 1 of 1 2005.Aug.23 GeoNorth Engineering Ltd. PER



GEONORTH ENGINEERING LTD.
1301 Kelliher Road, Tel. (250) 564-4334
Prince George, B.C., V2L 5S8, Fax (250) 564-9323

MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-65

SCALE: NTS
DATE: 2005/08/18
PROJECT NO: K-1587
DRAWING NO: 1587-833

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

MOISTURE - DENSITY RELATIONSHIP REPORT

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0141

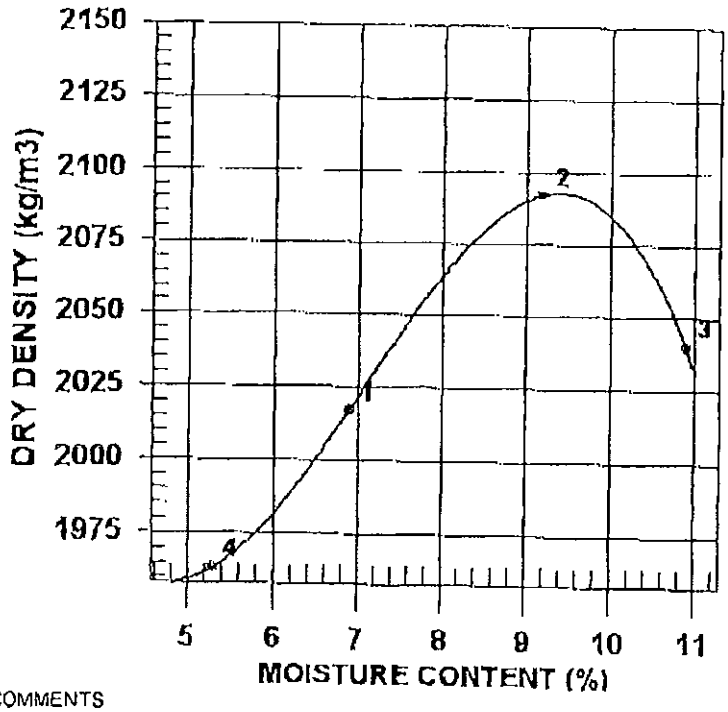
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 30 DATE TESTED 2005.Aug.22 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE N/A %
SAMPLED BY MB, Client
TESTED BY BO
SUPPLIER
SOURCE KP05-64
MATERIAL IDENTIFICATION
MAJOR COMPONENT TILL
SIZE 25MM
DESCRIPTION GRAVELLY
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 13.9 %
OVERSIZE SPECIFIC GRAVITY 2.65
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2156	2017	6.9
2	2284	2092	9.2
3	2262	2040	10.9
4	2067	1963	5.3

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2090	9.5
OVERSIZE CORRECTED	2153	8.3

COMMENTS

Page 1 of 1 2005.Aug.23 GeoNorth Engineering Ltd. PER.

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

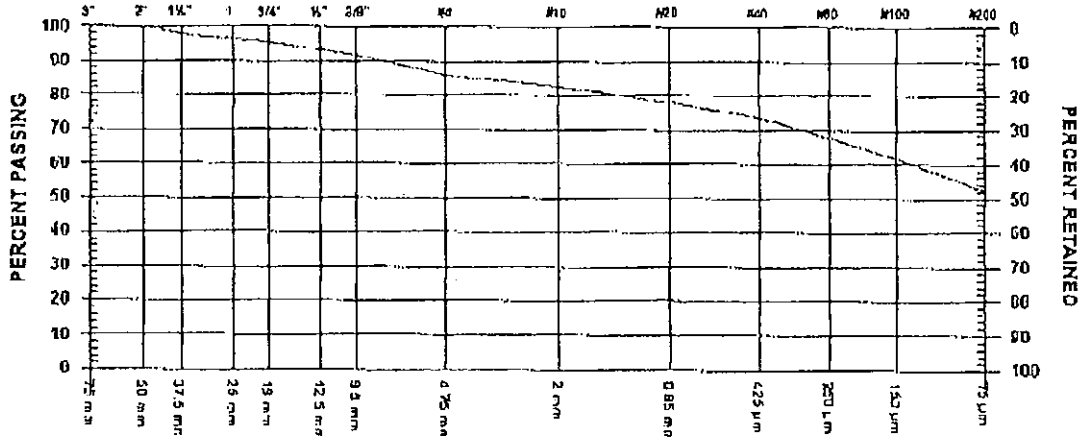
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 31 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.22 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-64
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, Client
TESTED BY BO
TEST METHOD WASHED

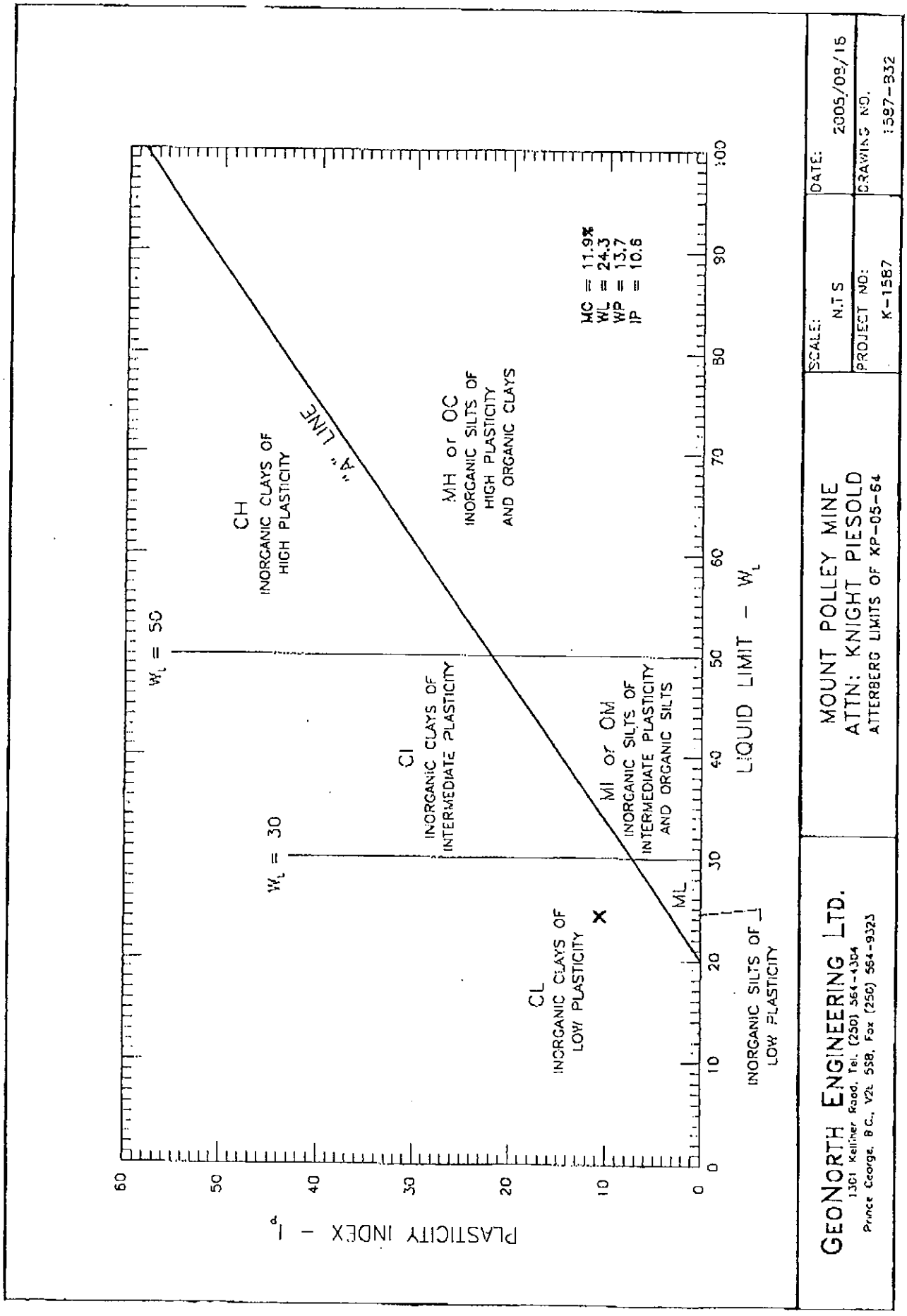


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	97.8	
1"	25 mm	96.3	
3/4"	19 mm	95.4	
1/2"	12.5 mm	93.1	
3/8"	9.5 mm	91.5	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	86.0	
No. 10	2.00 mm	82.6	
No. 20	850 µm	78.0	
No. 40	425 µm	73.5	
No. 60	250 µm	67.9	
No. 100	150 µm	61.9	
No. 200	75 µm	52.2	

COMMENTS
CHAINAGE: 40+50
ELEVATION: 945.9m

Page 1 of 1 2005.Aug.23 GeoNorth Engineering Ltd. PER.


PLASTICITY INDEX – I_p
LIQUID LIMIT – W_L
"A" LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC = 11.9%
WL = 24.3
WP = 13.7
IP = 10.6
GEONORTH ENGINEERING LTD.
1301 Kelliher Road, Tel. (250) 564-4304
Prince George, B.C., V2L 5S8, Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-64
SCALE: N.T.S
PROJECT NO: K-1587
DATE: 2005/08/15
DRAWING NO. 1597-B32

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

SIEVE No. 7324 SIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
cc Knight Piesold

TO
Knight Piesold
1400-750 West Pendor St.
Vancouver, BC
V6C -2T8

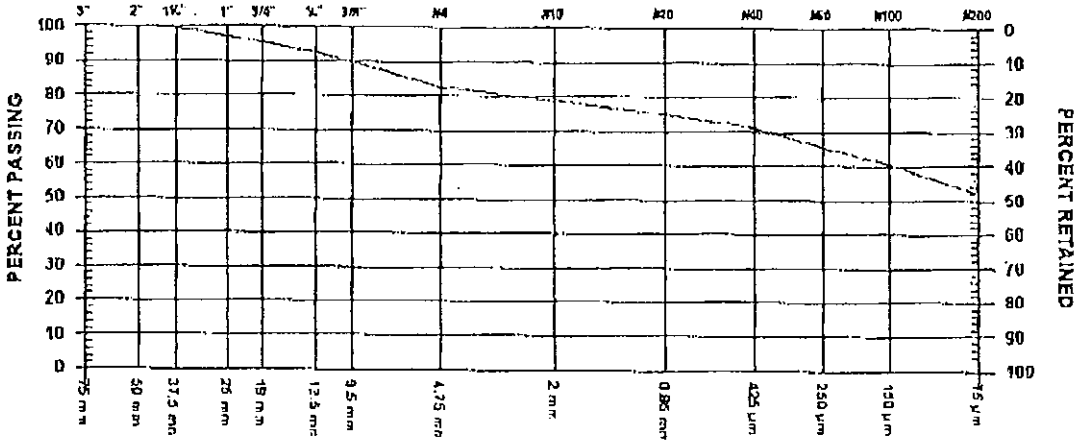
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 30 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.19 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-63
SPECIFICATION
MATERIAL TYPE TILL

SAMPLED BY MB, Client
TESTED BY BO
TEST METHOD WASHED

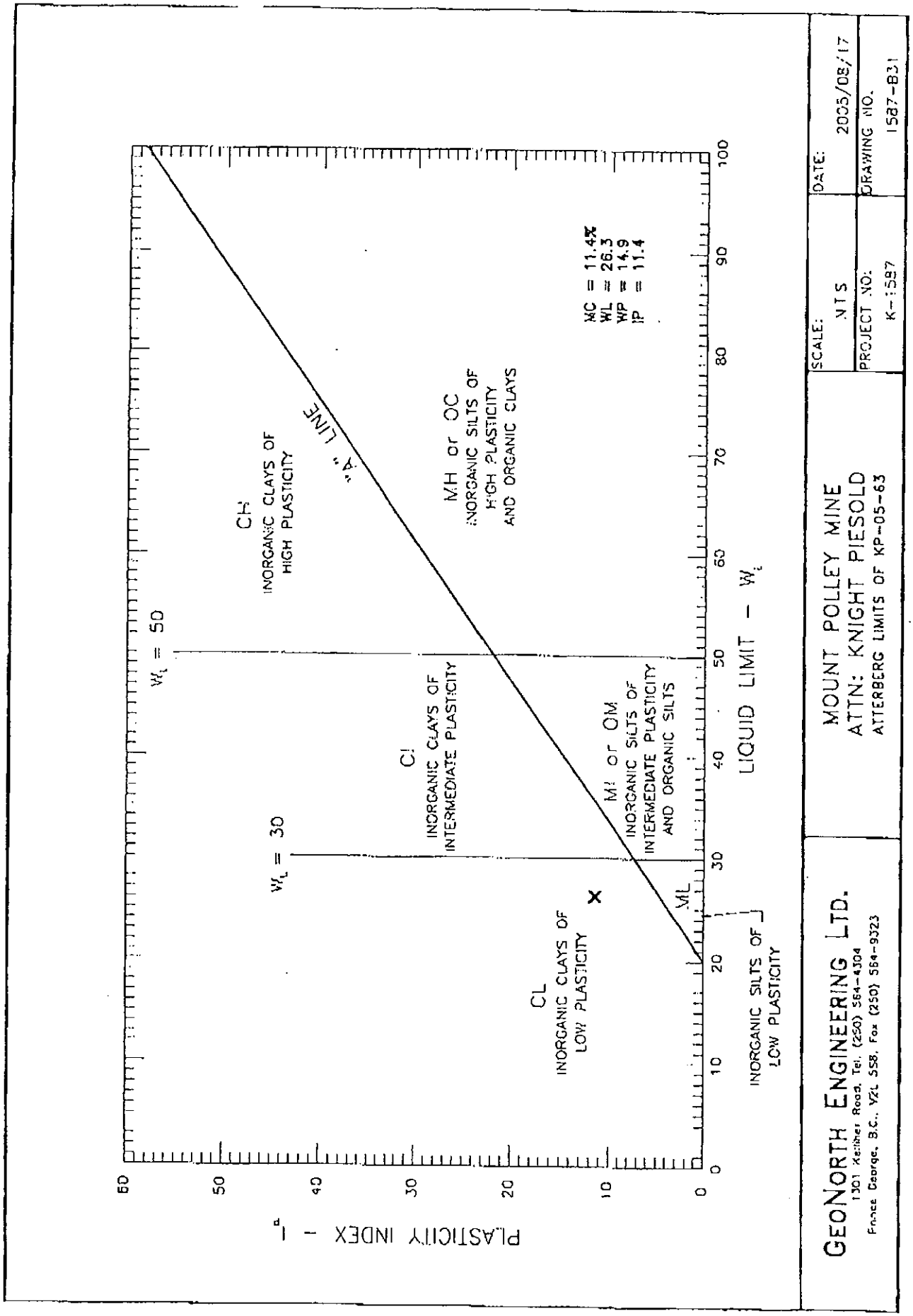


GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	99.5	
1"	25 mm	97.1	
3/4"	19 mm	95.2	
1/2"	12.5 mm	92.3	
3/8"	9.5 mm	89.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	82.8	
No. 10	2.00 mm	78.8	
No. 20	850 µm	74.8	
No. 40	425 µm	70.9	
No. 60	250 µm	65.7	
No. 100	150 µm	60.4	
No. 200	75 µm	51.8	

COMMENTS
CHAINAGE: 37+00
ELEVATION: 945.5m

 2005.Aug.23 GeoNorth Engineering Ltd. PER


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
"A" LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC = 11.4%
WL = 26.3
WP = 14.9
IP = 11.4
GEONORTH ENGINEERING LTD.
1301 Kelther Road, Tel. (250) 564-4304
Prince George, B.C., V2L 5S8, Fax (250) 564-9323
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-63
SCALE: NTS
DATE: 2005/08/17
PROJECT NO: K-1587
DRAWING NO. 1587-831

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

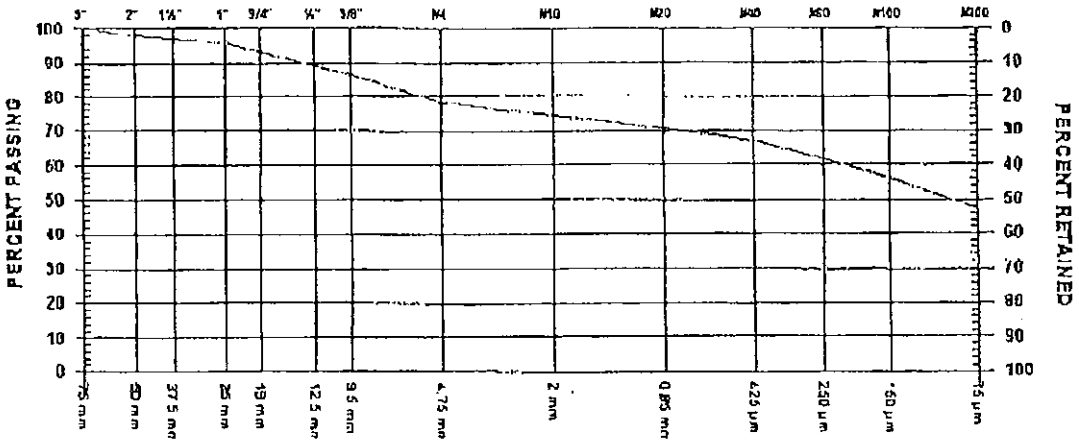
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 27 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.17 DATE SAMPLED 2005.Aug.04

SUPPLIER
SOURCE KP-05-62
SPECIFICATION
MATERIAL TYPE Till, Gravelly

SAMPLED BY Client, MB
TESTED BY BO
TEST METHOD WASHED



GRAVEL SIZES			PERCENT PASSING	GRADATION LIMITS
3"	75	mm	100.0	
2"	50	mm	97.8	
1 1/2"	37.5	mm		
1"	25	mm	95.7	
3/4"	19	mm	93.4	
1/2"	12.5	mm	89.0	
3/8"	9.5	mm	86.3	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	78.4	
No. 10	2.00	mm	74.5	
No. 20	850	µm	70.6	
No. 40	425	µm	66.7	
No. 60	250	µm	61.6	
No. 100	150	µm	56.2	
No. 200	75	µm	47.4	

COMMENTS
CHAINAGE: 42+25
ELEVATION: 944.9m

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

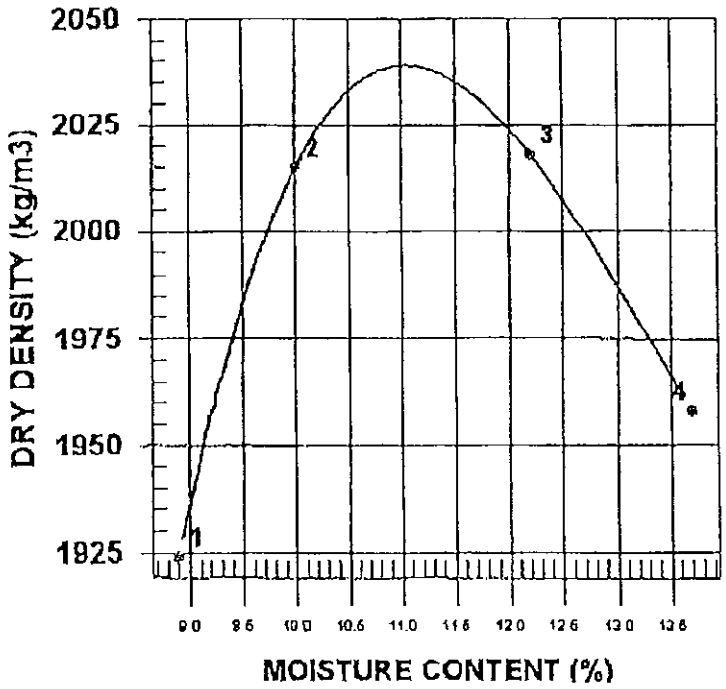
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 26 DATE TESTED 2005.Aug.18 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.04

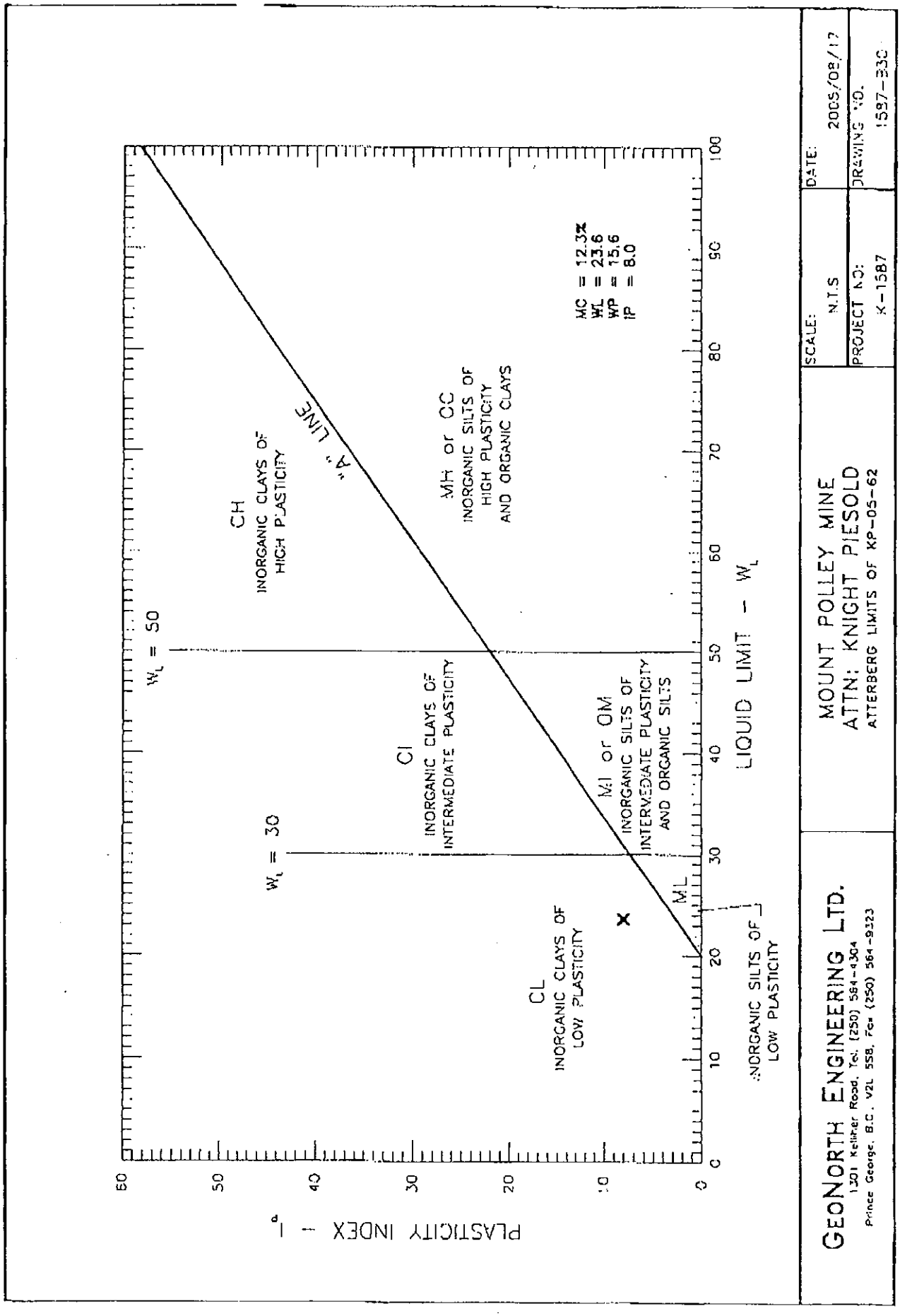
INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, MB		
TESTED BY	BO	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP-05-62	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	50MM	RETAINED 4.75mm SCREEN	21.2 %
DESCRIPTION	GRAVELLY	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	2095	1924	8.9
2	2216	2015	10.0
3	2264	2018	12.2
4	2226	1958	13.7

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2040	11.0
OVERSIZE CORRECTED	2145	8.9

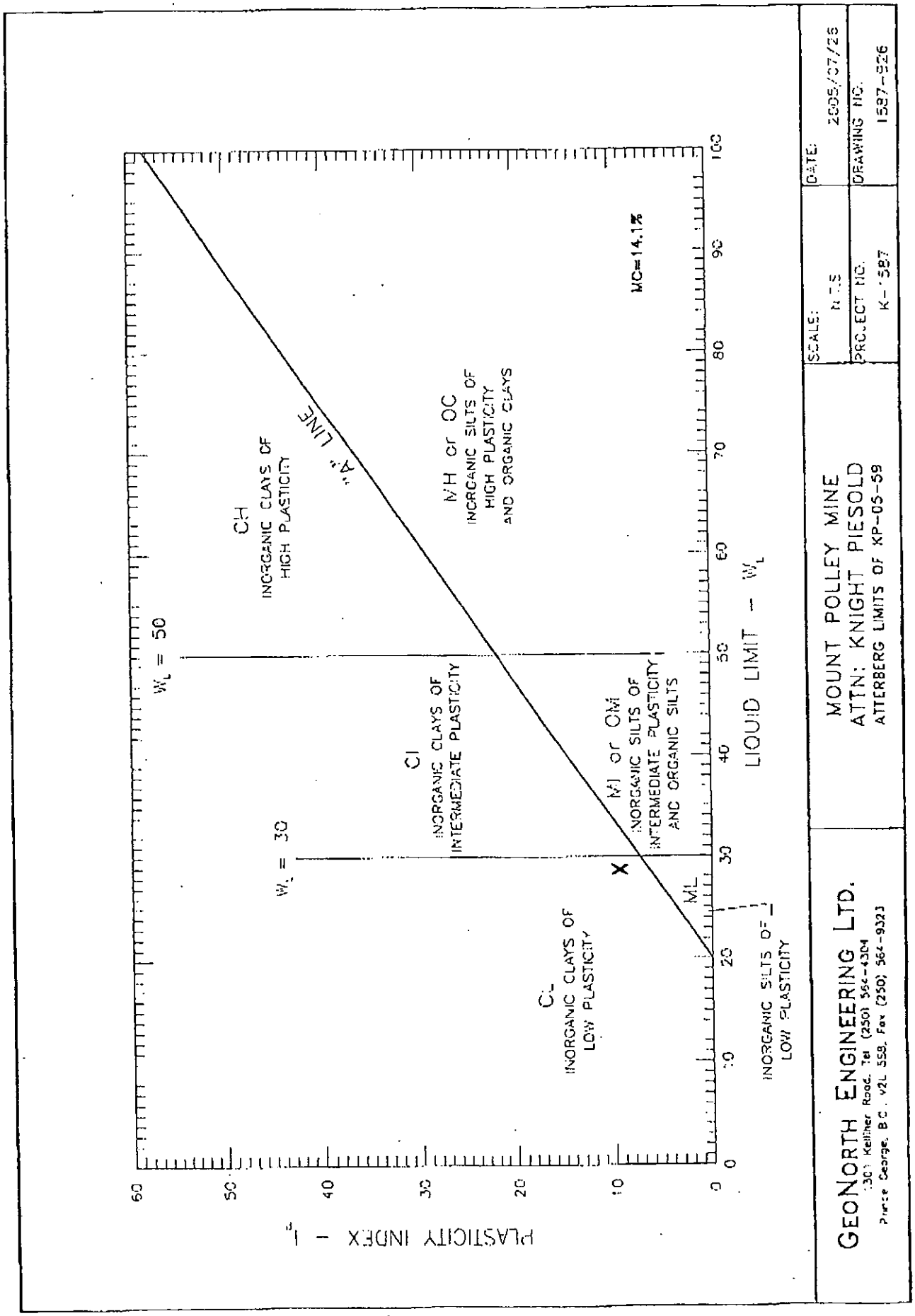
COMMENTS

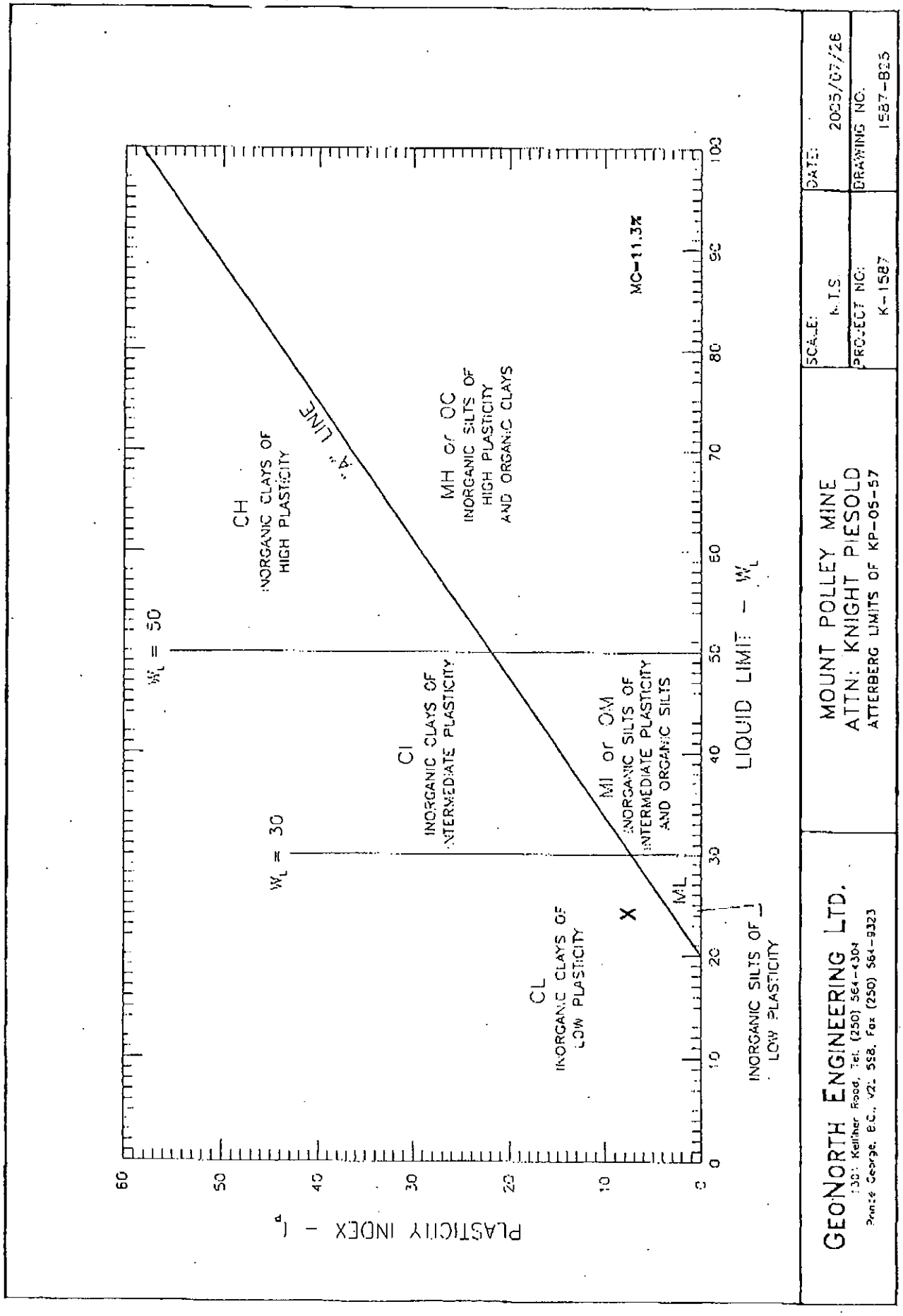


GeoNorth Engineering Ltd.
1301 Kelliher Road, Tel. (250) 564-4304
Prince George, B.C. V2L 5S8, Fax (250) 564-9323

MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-62

SCALE: N.T.S
PROJECT NO: K-1587
DATE: 2005/08/17
DRAWING NO. 1587-33C


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
A-LINE
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OMI
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
W_L = 50
W_L = 30
MC=14.1%
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-59
GEONORTH ENGINEERING LTD.
SCALE:
DATE: 2005/07/28
PROJECT NO. K-1587
DRAWING NO. 1587-526


PLASTICITY INDEX - I_p
LIQUID LIMIT - W_L
A-LINE
W_L = 50
W_L = 30
CH
INORGANIC CLAYS OF HIGH PLASTICITY
MH or OC
INORGANIC SILTS OF HIGH PLASTICITY AND ORGANIC CLAYS
CI
INORGANIC CLAYS OF INTERMEDIATE PLASTICITY
MI or OM
INORGANIC SILTS OF INTERMEDIATE PLASTICITY AND ORGANIC SILTS
CL
INORGANIC CLAYS OF LOW PLASTICITY
ML
INORGANIC SILTS OF LOW PLASTICITY
MC=11.3%
GEONORTH ENGINEERING LTD.
MOUNT POLLEY MINE
ATTN: KNIGHT PIESOLD
ATTERBERG LIMITS OF KP-05-57
SCALE: N.T.S
PROJECT NO: K-1587
DATE: 2005/07/26
DRAWING NO. 1587-B25

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

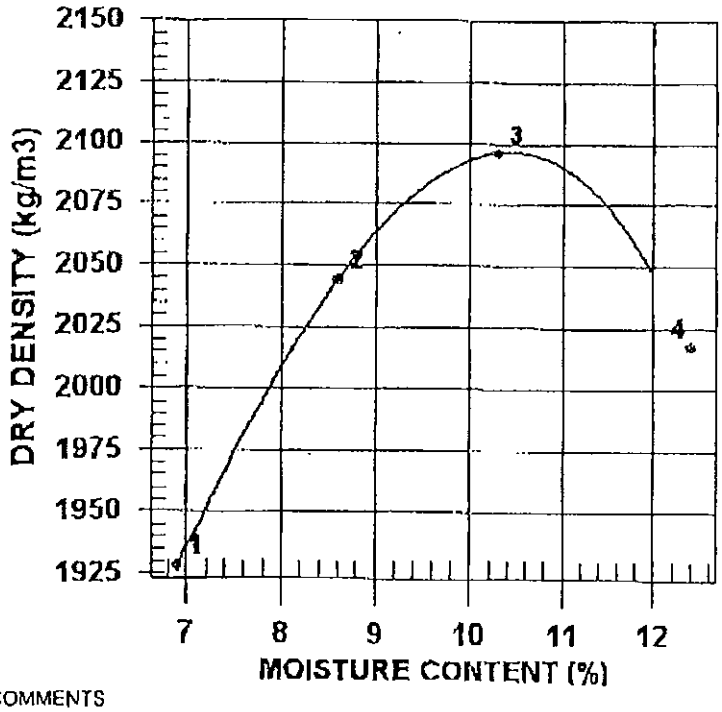
ATTN: Terry Isaacs @ 250-790-2268

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 22 DATE TESTED 2005.Jul.27 DATE RECEIVED 2005.Jul.21 DATE SAMPLED 2005.Jul.19

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	Client, MB	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	BO	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-57	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	24.2 %
MAJOR COMPONENT	TILL	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION	GRAVELLY		
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2061	1928	6.9
2	2220	2044	8.6
3	2312	2096	10.3
4	2267	2017	12.4

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2100	10.5
OVERSIZE CORRECTED	2211	8.2

COMMENTS

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 158 /
CLIENT Mount Polley Mining Corp. Attn;
cc. Knight Piesold

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

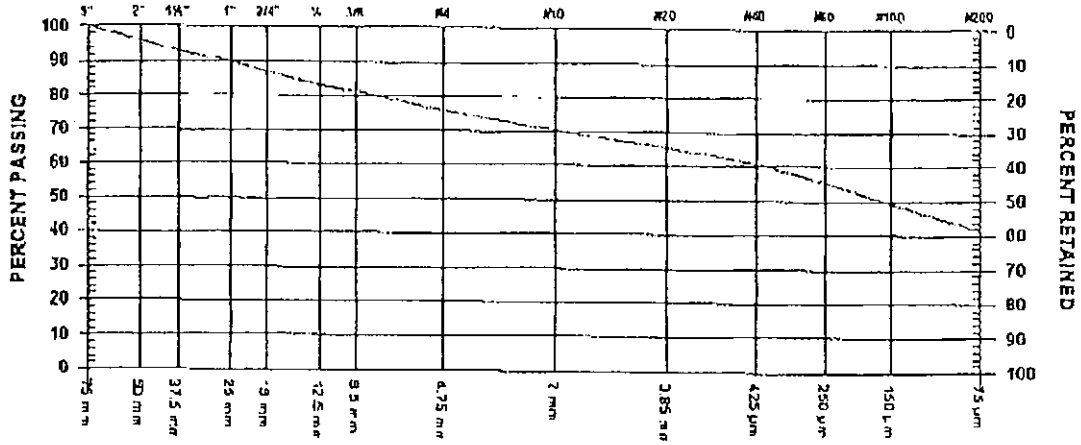
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 22 DATE RECEIVED 2005.Jul.21 DATE TESTED 2005.Jul.26 DATE SAMPLED 2005.Jul.19

SUPPLIER
SOURCE KP05-57
SPECIFICATION
MATERIAL TYPE TILL, GRAVELLY

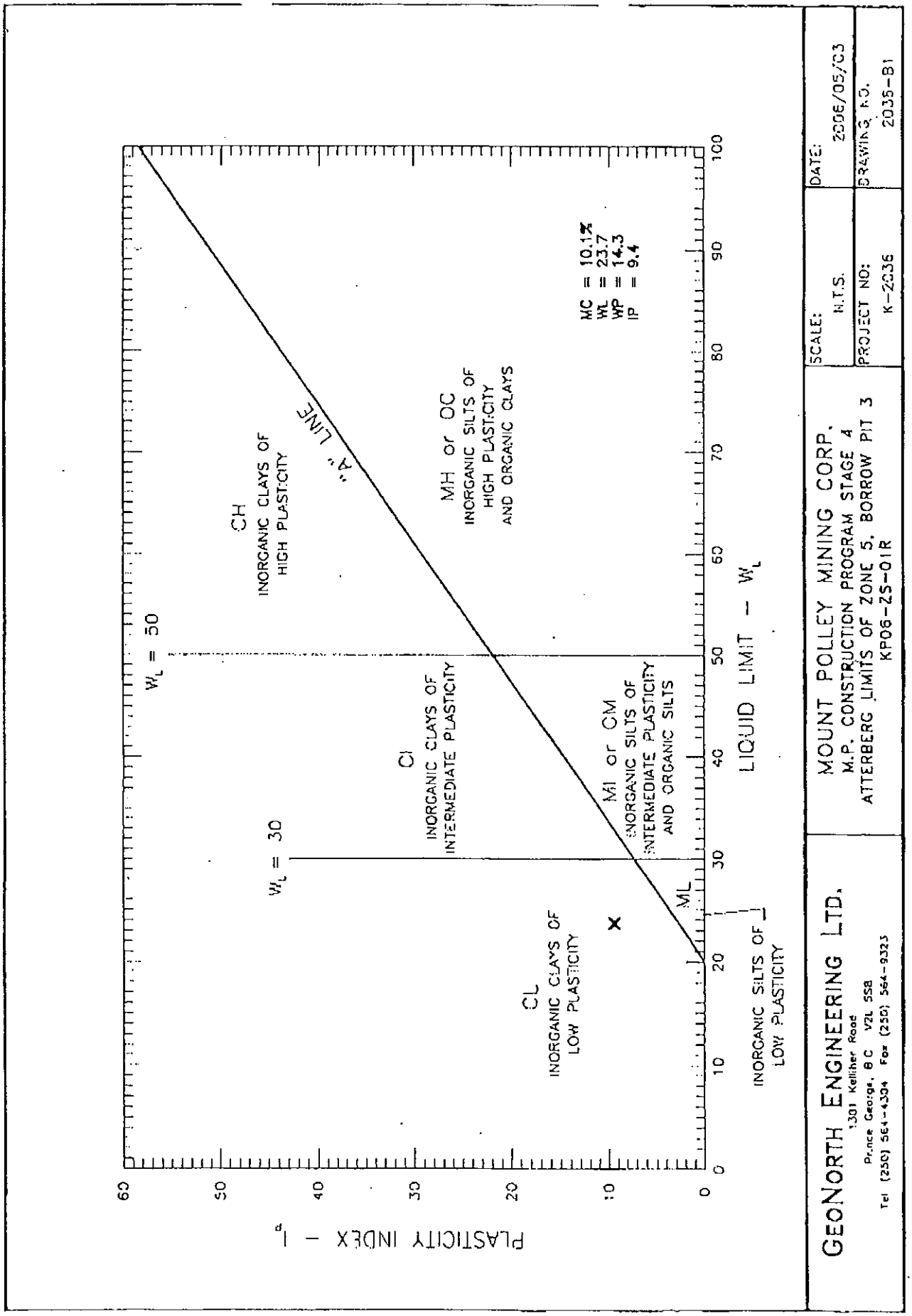
SAMPLED BY Client, MB
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	96.0	
1 1/2"	37.5 mm	92.8	
1"	25 mm	89.8	
3/4"	19 mm	86.8	
1/2"	12.5 mm	83.2	
3/8"	9.5 mm	81.1	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	75.6	
No. 10	2.00 mm	70.1	
No. 20	850 µm	65.3	
No. 40	425 µm	60.9	
No. 60	250 µm	55.3	
No. 100	150 µm	49.5	
No. 200	75 µm	41.2	

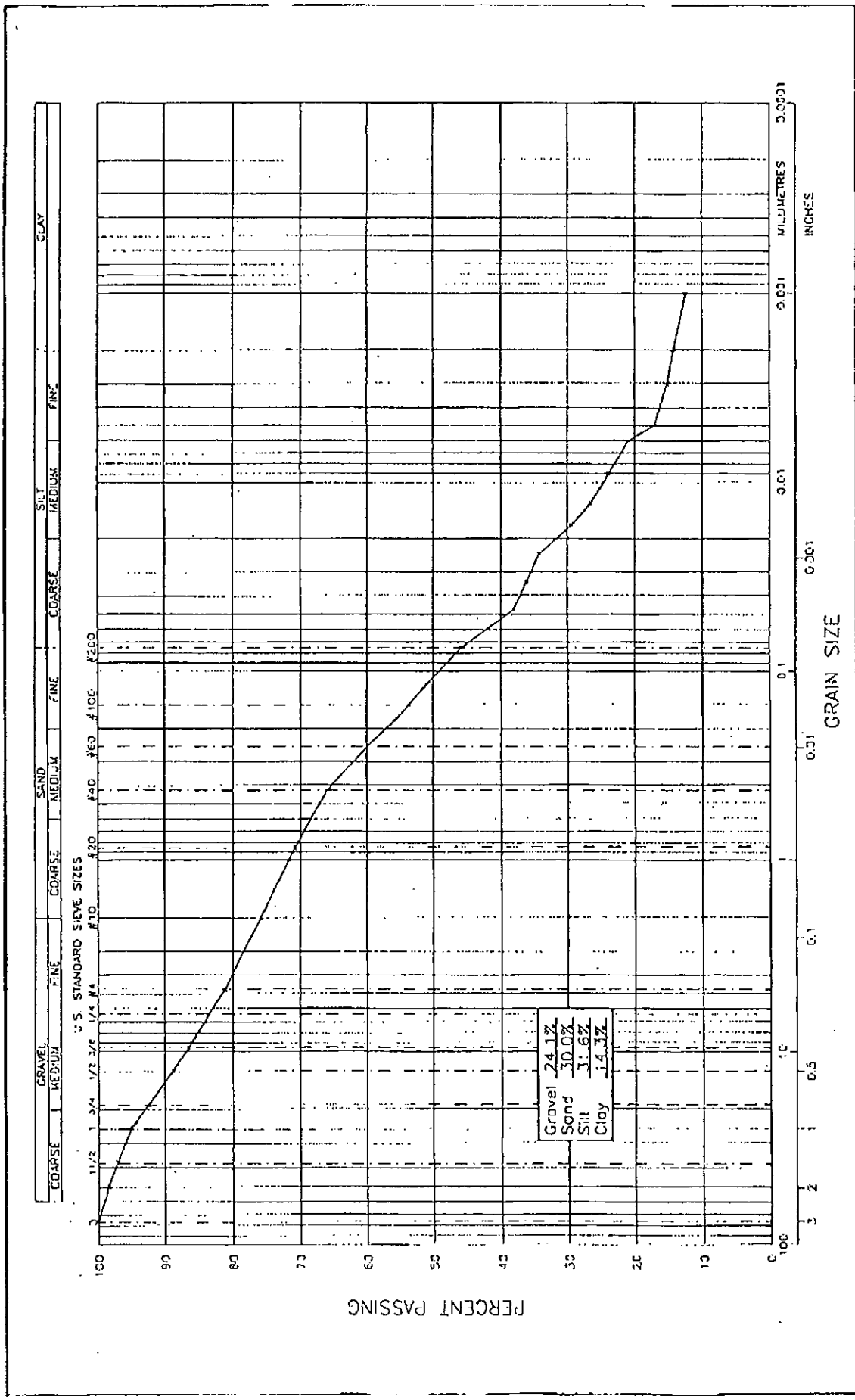
COMMENTS
LOCATION; PERIMETER EMBANKMENT
CHAINAGE; 44+00
ELEVATION; 944.3



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 ZONE 5, BORROW PIT 3
KP06-ZS-01R

SCALE: N.T.S.
DATE: 2006/05/03
PROJECT NO: K-2036
DRAWING NO. 2035-B1



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
GRAIN SIZE ANALYSIS OF ZONE S, BORROW PIT 3
KP06-ZS-01R

SCALE: N.T.S.
DATE: 2006/05/03
PROJECT NO: K-2036
DRAWING NO. 2036-32

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422

Client: Mount Polley Mining Corp. (Knight Piesold)				Date: May 3, 2006
Project Name: Mount Polley Construction Program - Stage 4				Project #: K-2036
Source/Location: KP06-ZS-01R - Borrow Pit 3 - Zone S				Type: TILL
Sample #:	Test #:	Hole #:	Depth:	Time:
Sampled By: Client	Tested By: DJ			Checked By: NS
Date Sampled: 04.25.06	Date Received: 04.28.06			Date Tested: 05.02.06

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	0.759	0.5	24.0	20.0	0.01365				0.065	60.0	45.5
40.0	0.759	1	20.0	20.0	0.01365				0.047	50.0	38.0
40.0	0.759	2	19.0	20.0	0.01365				0.034	47.5	36.1
40.0	0.759	4	18.0	20.0	0.01365				0.024	45.0	34.2
40.0	0.759	8	15.5	20.0	0.01365				0.017	38.8	29.4
40.0	0.759	15	14.0	20.0	0.01365				0.013	35.0	26.6
40.0	0.759	30	12.5	20.0	0.01365				0.009	31.3	23.8
40.0	0.759	60	11.0	20.0	0.01365				0.006	27.5	20.9
40.0	0.759	120	9.0	20.0	0.01365				0.005	22.5	17.1
40.0	0.759	240	8.0	20.0	0.01365				0.003	20.0	15.2
40.0	0.759	480	7.5	21.0	0.01348				0.002	18.8	14.3
40.0	0.759	1440	6.5	21.0	0.01348				0.001	16.3	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	75.9
20	2.7		93.3	70.8
40	2.5		87.0	66.0
60	3.2		79.0	60.0
100	3.3		70.8	53.7
200	4.1		60.5	45.9
Pan	24.2			
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 REPORT		
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) =	

NCE.co

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

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

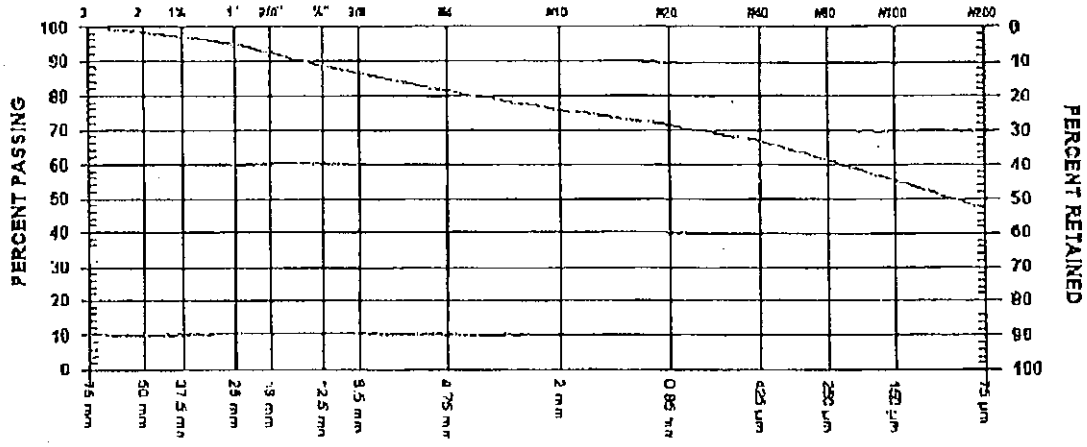
ATTN: Les Galbraith @ 604-685-0147

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

SIEVE TEST NO. 1 DATE RECEIVED 2006.Apr.28 DATE TESTED 2006.May.02 DATE SAMPLED 2006.Apr.26

SUPPLIER BORROW PIT 3, ZONE S
SOURCE KP06-ZS-01R
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	98.5	
1 1/2"	37.5 mm	97.0	
1"	25 mm	95.0	
3/4"	19 mm	92.4	
1/2"	12.5 mm	88.7	
3/8"	9.5 mm	86.5	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	81.2	
No. 10	2.00 mm	75.9	
No. 20	850 µm	71.4	
No. 40	425 µm	66.9	
No. 60	250 µm	61.4	
No. 100	150 µm	55.2	
No. 200	75 µm	47.3	

COMMENTS
CHAINAGE: 3+275m
ELEVATION: 948m

 2006.May.03 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

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

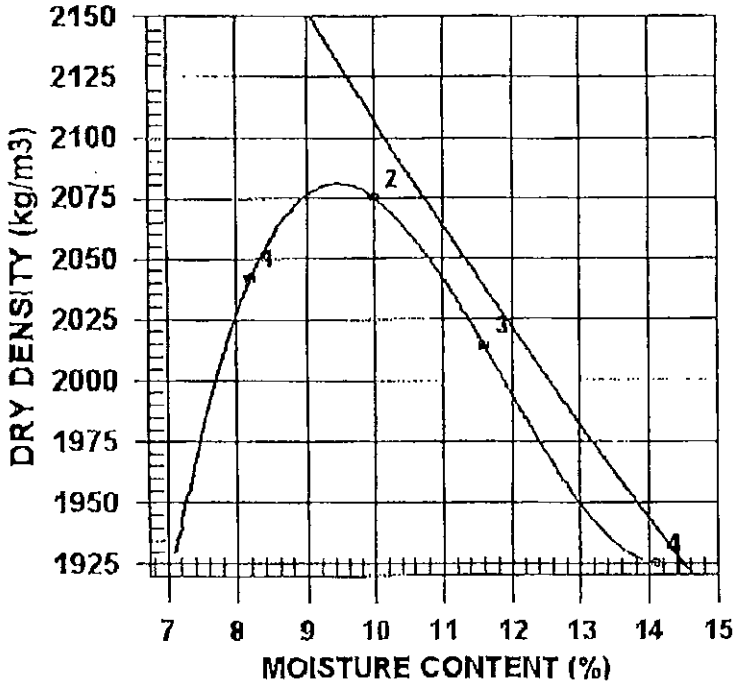
ATTN: Les Galbraith @ 604-685-0147

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

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

PROCTOR NO. 1 DATE TESTED 2006.May.02 DATE RECEIVED 2006.Apr.28 DATE SAMPLED 2006.Apr.25

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	CLIENT		
TESTED BY	RO	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER	BORROW PIT 3, ZONE S		
SOURCE	KP06-ZS-01R	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	TILL	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE	50MM	RETAINED 4.75mm SCREEN	18.8 %
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	2209	2042	8.2
2	2282	2075	10.0
3	2248	2014	11.6
4	2196	1925	14.1

ZERO AIR VOIDS CURVE FOR ESTIMATED SPECIFIC GRAVITY OF 2.67	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2080	9.5
OVERSIZE CORRECTED	2170	8.0

COMMENTS

Knight Piésold
CONSULTING

APPENDIX A3

ZONE U RESULTS

(Pages A3-1 to A3-15)

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
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

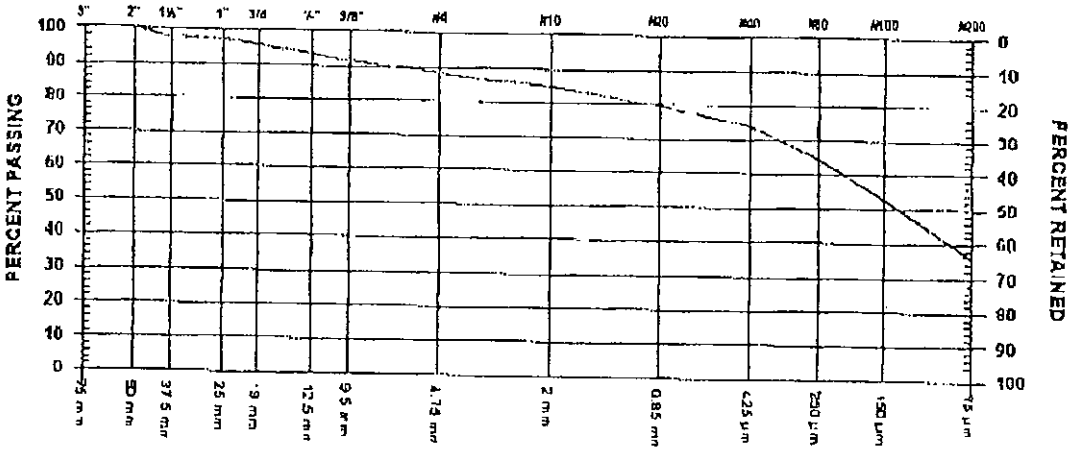
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 53 DATE RECEIVED 2005.Sep.08 DATE TESTED 2005.Sep.13 DATE SAMPLED 2005.Sep.01

SUPPLIER
SOURCE KP05-90
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY Client, Talib
TESTED BY RO
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	97.0	
3/4"	19 mm	96.0	
1/2"	12.5 mm	93.2	
3/8"	9.5 mm	91.7	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	88.3	
No. 10	2.00 mm	84.7	
No. 20	850 µm	79.7	
No. 40	425 µm	73.9	
No. 60	250 µm	64.4	
No. 100	150 µm	52.9	
No. 200	75 µm	35.6	

COMMENTS
NATURAL MOISTURE CONTENT - 8.9%
LOCATION: BORROW CONTROL PIT 3, U-ZONE

Page 1 of 1 2005.Sep.14 GeoNorth Engineering Ltd. PER

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
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Galbraith @ 604-685-0147

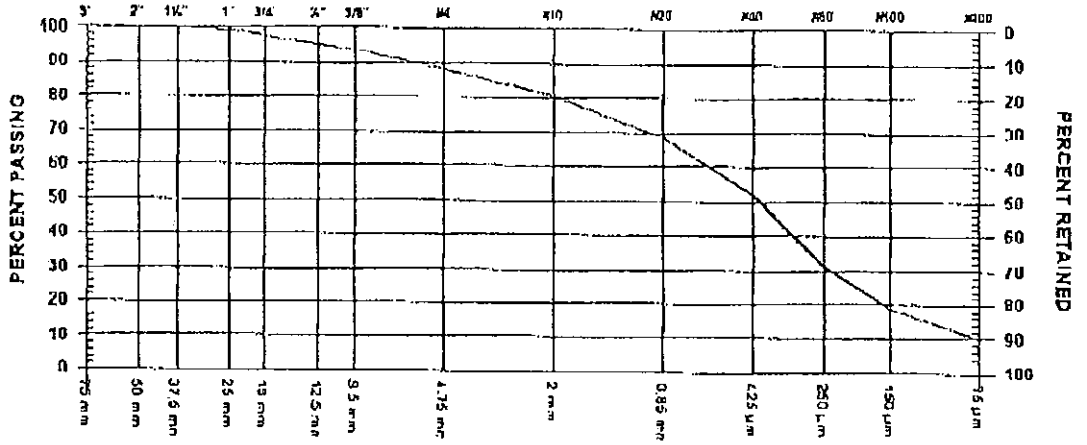
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 52 DATE RECEIVED 2005.Sep.08 DATE TESTED 2005.Sep.14 DATE SAMPLED 2005.Aug.31

SUPPLIER
SOURCE KP05-89
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY Client, Talib
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	99.0	
3/4"	19 mm	97.3	
1/2"	12.5 mm	95.0	
3/8"	9.5 mm	93.5	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	88.3	
No. 10	2.00 mm	80.4	
No. 20	850 µm	68.7	
No. 40	425 µm	51.9	
No. 60	250 µm	30.9	
No. 100	150 µm	18.7	
No. 200	75 µm	10.2	

COMMENTS
NATURAL MOISTURE CONTENT - 5.5%
LOCATION: MAIN, U-ZONE
CHAINAGE: 24+00, ELEVATION: 947

Page 1 of 1 2005.Sep.14 GeoNorth Engineering Ltd PER:

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

MOISTURE - DENSITY RELATIONSHIP REPORT

MB LG 101-1/10.0

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c Knight Piesold

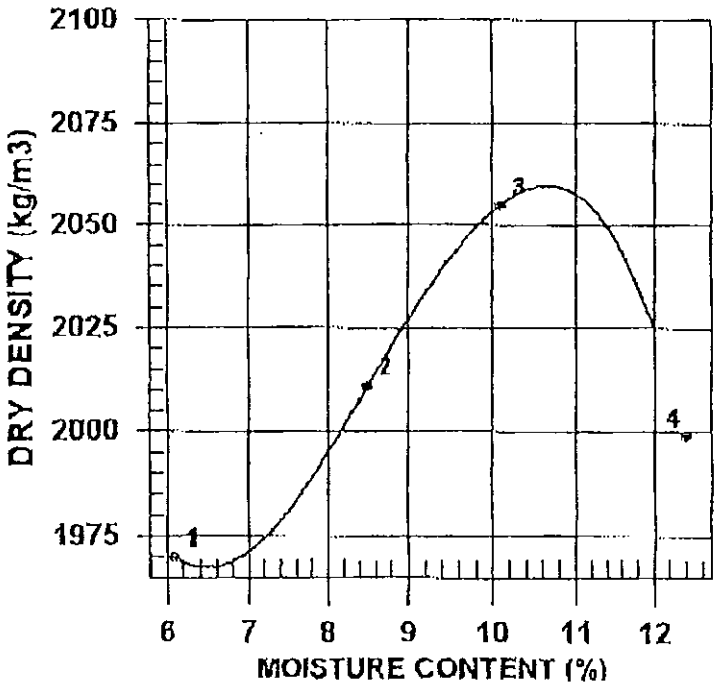
TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Calbraith @ 604-685-0141

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO 43 DATE TESTED 2005.Aug.31 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	WL	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-82	OVERSIZE CORRECTION METHOD	ASTM 4718
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	25.0 %
MAJOR COMPONENT	SAND	OVERSIZE SPECIFIC GRAVITY	2.65
SIZE		TOTAL NUMBER OF TRIALS	4
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2090	1970	6.1
2	2182	2011	8.5
3	2262	2055	10.1
4	2247	1999	12.4

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2060	10.5
OVERSIZE CORRECTED	2181	8.1

COMMENTS

Zone V 19+00 946m Main

 2005.Sep.01 GeoNorth Engineering Ltd. PER.

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

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

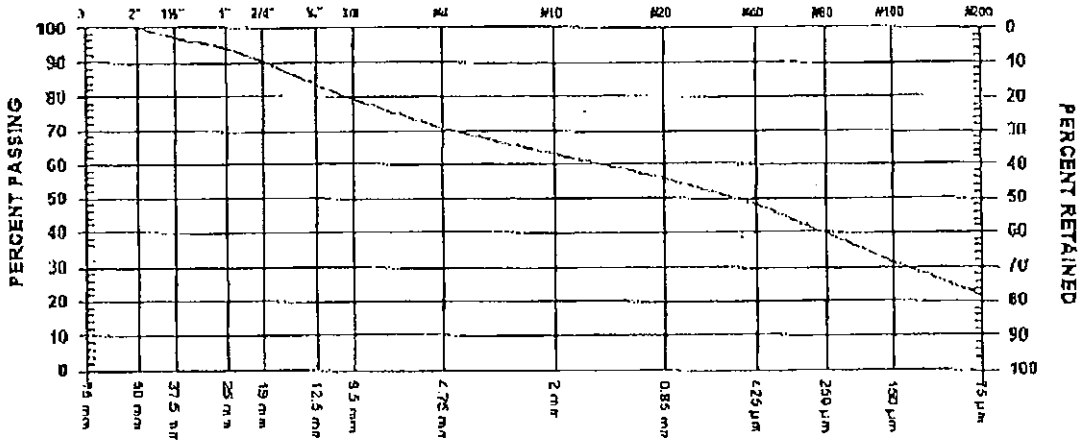
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 46 DATE RECEIVED 2005.Aug.26 DATE TESTED 2005.Aug.31 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-82
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY MB, 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	97.2	
1"	25	mm	94.2	
3/4"	19	mm	90.1	
1/2"	12.5	mm	83.5	
3/8"	9.5	mm	79.2	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	70.8	
No. 10	2.00	mm	63.1	
No. 20	850	µm	55.6	
No. 40	425	µm	48.0	
No. 60	250	µm	39.4	
No. 100	150	µm	31.7	
No. 200	75	µm	21.9	

COMMENTS
LOCATION: ZONE M
CHAINAGE: 19+00
ELEVATION: 946m

Page 1 of 1 2005.Sep.01 GeoNorth Engineering Ltd. PER.

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

MOISTURE - DENSITY RELATIONSHIP REPORT

10:1 1/10.03

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

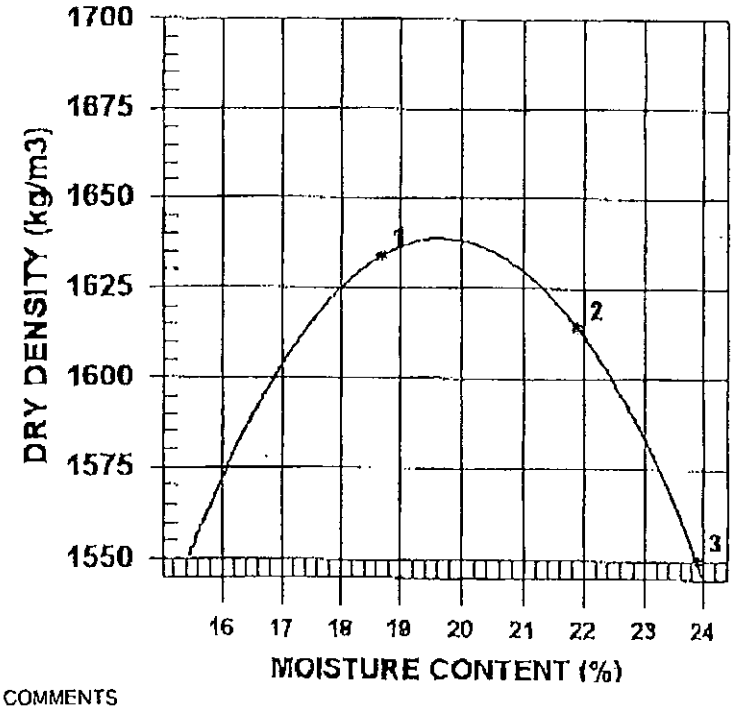
TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

ATTN: Les Calbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 42 DATE TESTED 2005.Aug.30 DATE RECEIVED 2005.Aug.26 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	DJ	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-81	OVERSIZE CORRECTION METHOD	None
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	%
MAJOR COMPONENT	SAND CELL	OVERSIZE SPECIFIC GRAVITY	
SIZE		TOTAL NUMBER OF TRIALS	3
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1940	1634	18.7
2	1968	1614	21.9
3	1920	1550	23.9

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1640	19.5

COMMENTS

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

KSB
101-1/16.

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

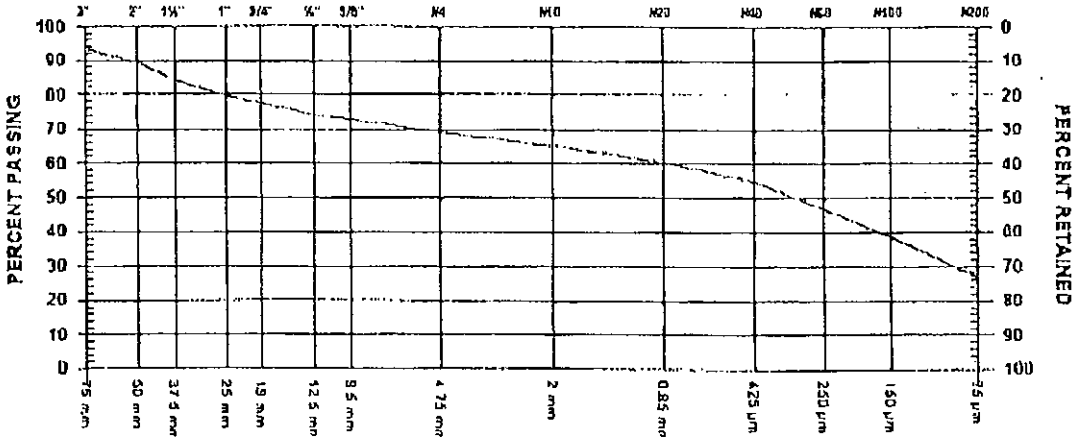
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 29 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.18 DATE SAMPLED 2005.Aug.04

SUPPLIER
SOURCE KP-05-73
SPECIFICATION
MATERIAL TYPE Sand/Gravelly

SAMPLED BY Client, MH
TESTED BY DJ
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	93.4	
2"	50 mm	89.4	
1 1/2"	37.5 mm	84.2	
1"	25 mm	79.7	
3/4"	19 mm	77.3	
1/2"	12.5 mm	74.2	
3/8"	9.5 mm	72.6	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	69.1	
No. 10	2.00 mm	65.0	
No. 20	850 µm	60.3	
No. 40	425 µm	54.7	
No. 60	250 µm	47.0	
No. 100	150 µm	38.7	
No. 200	75 µm	26.8	

COMMENTS
LOCATION: ZONE U
CHAINAGE: 25100
ELEVATION: 944.5m

Page 1 of 1 2005.Aug.19 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

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

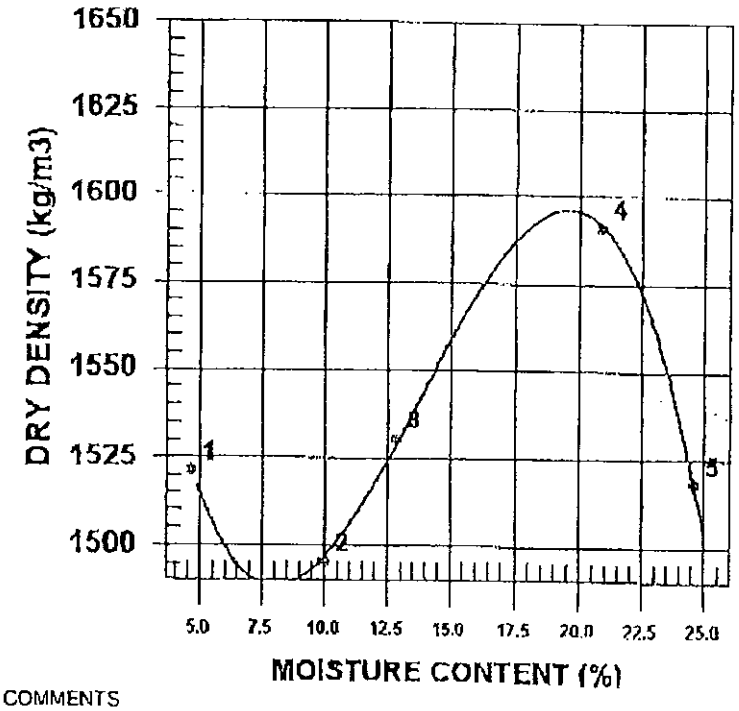
ATTN: Terry Isaacs @ 250-790-2268

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 37 DATE TESTED 2005.Aug.24 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
TESTED BY	BO	RAMMER TYPE	Manual
SUPPLIER		PREPARATION	Moist
SOURCE	KP05-71	OVERSIZE CORRECTION METHOD	None
MATERIAL IDENTIFICATION		RETAINED 4.75mm SCREEN	%
MAJOR COMPONENT	CYCLONE SAND	OVERSIZE SPECIFIC GRAVITY	
SIZE		TOTAL NUMBER OF TRIALS	5
DESCRIPTION			
ROCK TYPE			



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1593	1521	4.7
2	1645	1495	10.0
3	1726	1530	12.8
4	1924	1591	20.9
5	1891	1518	24.6

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1600	19.5
OVERSIZE CORRECTED		

COMMENTS
INITIAL MOISTURE CONTENT = 4.6%

 2005.Aug.25 GeoNorth Engineering Ltd PER.

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: Terry Isaacs @ 250-790-2268

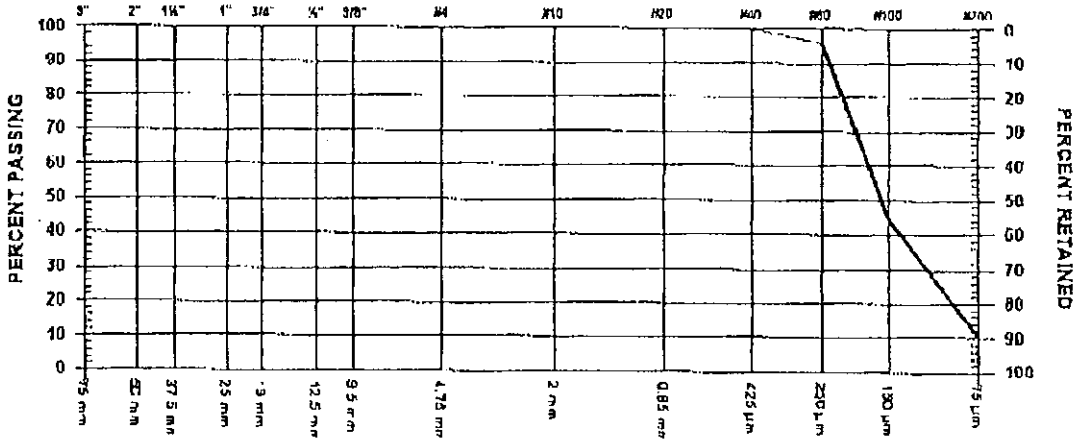
PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 38 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.24 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-71
SPECIFICATION
MATERIAL TYPE CYCLONE SAND

SAMPLED BY MB, 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		
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		
No. 20	850 µm	100.0	
No. 40	425 µm	100.0	
No. 60	250 µm	95.7	
No. 100	150 µm	44.1	
No. 200	75 µm	10.6	

COMMENTS

Page 1 of 1 2005.Aug.25 GeoNorth Engineering Ltd. PER.

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: Terry Isaacs @ 250-790-2268

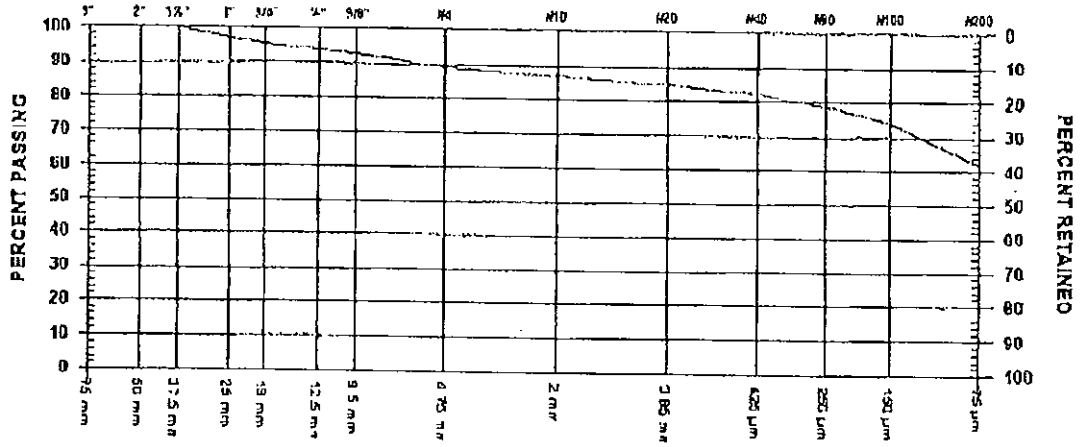
PROJECT NO K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 37 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.24 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-70
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY MB, 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	97.1	
3/4"	19 mm	95.4	
1/2"	12.5 mm	93.8	
3/8"	9.5 mm	92.7	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	89.1	
No. 10	2.00 mm	87.0	
No. 20	850 µm	84.8	
No. 40	425 µm	82.2	
No. 60	250 µm	78.6	
No. 100	150 µm	74.2	
No. 200	75 µm	61.6	

COMMENTS
LOCATION: ZONE 0
CHAINAGE: 17+00
ELEVATION: 945m

Page 1 of 1 2005.Aug.25 GeoNorth Engineering Ltd. PER.

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

MOISTURE - DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

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

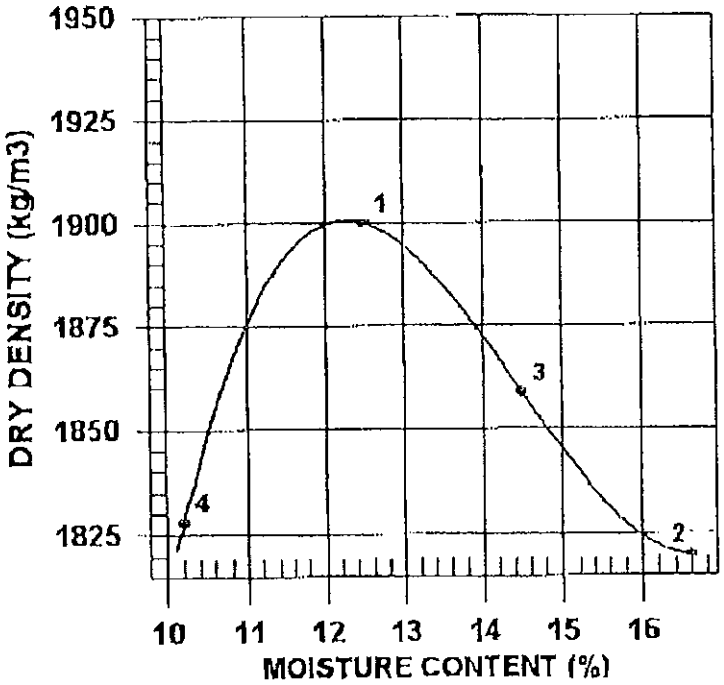
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 36 DATE TESTED 2005.Aug.24 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE N/A %
SAMPLED BY MB, Client
TESTED BY BO
SUPPLIER
SOURCE KP05-70
MATERIAL IDENTIFICATION
MAJOR COMPONENT SILTY SAND
SIZE
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 9.9 %
OVERSIZE SPECIFIC GRAVITY 2.65
TOTAL NUMBER OF TRIALS 4



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	2137	1900	12.5
2	2122	1820	16.6
3	2128	1859	14.5
4	2015	1828	10.2

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	1900	12.5
OVERSIZE CORRECTED	1955	11.4

COMMENTS
INITIAL MOISTURE CONTENT = 12.6%

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

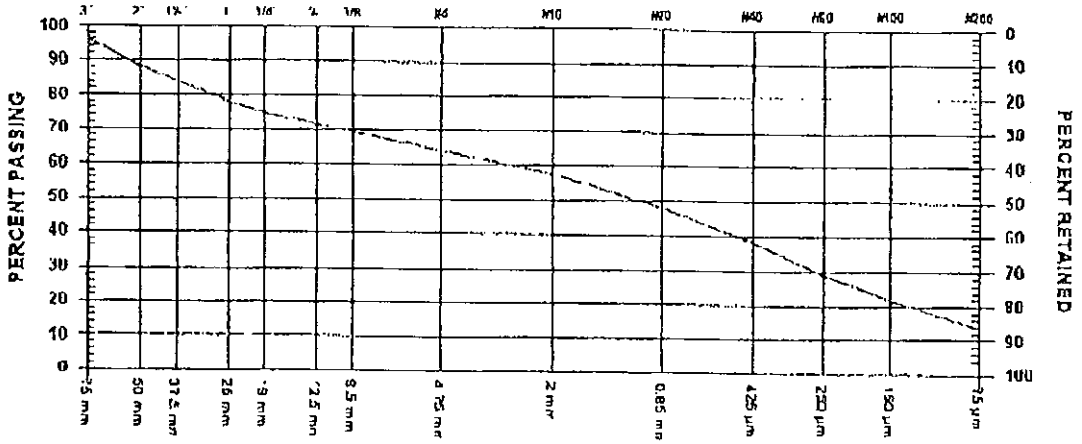
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO 36 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.23 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-69
SPECIFICATION
MATERIAL TYPE SAND

SAMPLED BY MB, Client
TESTED BY BO
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	96.4	
2"	50 mm	88.2	
1 1/2"	37.5 mm	83.1	
1"	25 mm	77.8	
3/4"	19 mm	74.7	
1/2"	12.5 mm	71.4	
3/8"	9.5 mm	69.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	63.7	
No. 10	2.00 mm	57.4	
No. 20	850 µm	48.3	
No. 40	425 µm	38.3	
No. 60	250 µm	29.0	
No. 100	150 µm	21.8	
No. 200	75 µm	13.7	

COMMENTS
LOCATION: MAIN EMBANKMENT, ZONE U, BORROW PIT 3
ELEVATION: 944.5m.

 2005.Aug.25 GeoNorth Engineering Ltd. PER

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

MOISTURE DENSITY RELATIONSHIP REPORT

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
cc. Knight Piesold

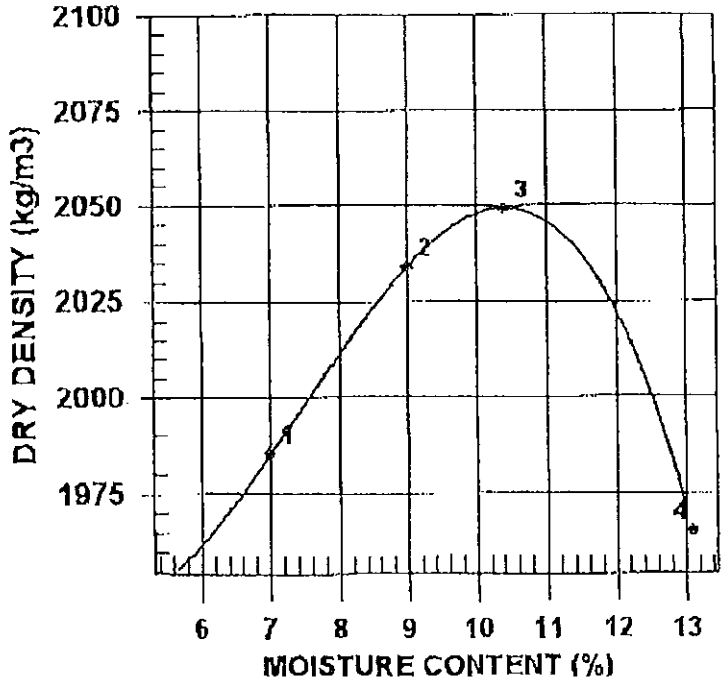
TO
Mount Polley Mining Corp. Attn:
Knight Piesold
P.O Box 12
Likely, BC
VOL -1N0

ATTN: Terry Isaacs @ 250-790-2260

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 35 DATE TESTED 2005.Aug.23 DATE RECEIVED 2005.Aug.04 DATE SAMPLED 2005.Aug.03

INSITU MOISTURE	N/A %	COMPACTION STANDARD	Standard Proctor, ASTM D698
SAMPLED BY	MB, Client		
TESTED BY	BO	COMPACTION PROCEDURE	A: 101.6mm Mold, Passing 4.75mm
SUPPLIER			
SOURCE	KP05-69	RAMMER TYPE	Manual
MATERIAL IDENTIFICATION		PREPARATION	Moist
MAJOR COMPONENT	SAND	OVERSIZE CORRECTION METHOD	ASTM 4718
SIZE		RETAINED 4.75mm SCREEN	30.0 %
DESCRIPTION	COARSE/GRAVELLY	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	2124	1985	7.0
2	2217	2034	9.0
3	2262	2049	10.4
4	2222	1965	13.1

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED	2050	10.5
OVERSIZE CORRECTED	2199	7.7

COMMENTS
INITIAL MOISTURE CONTENT = 5.3%

Page 1 of 1 2005.Aug.25 GeoNorth Engineering Ltd. PER.

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

EVE ANALYSIS REPORT
10 20 40 60 SERIES

101-1/10.03

PROJECT NO. K 1587
CLIENT Mount Polley Mining Corp. Attn:
c.c. Knight Piesold

TO
Knight Piesold
1400-750 West Pender St.
Vancouver, BC
V6C -2T8

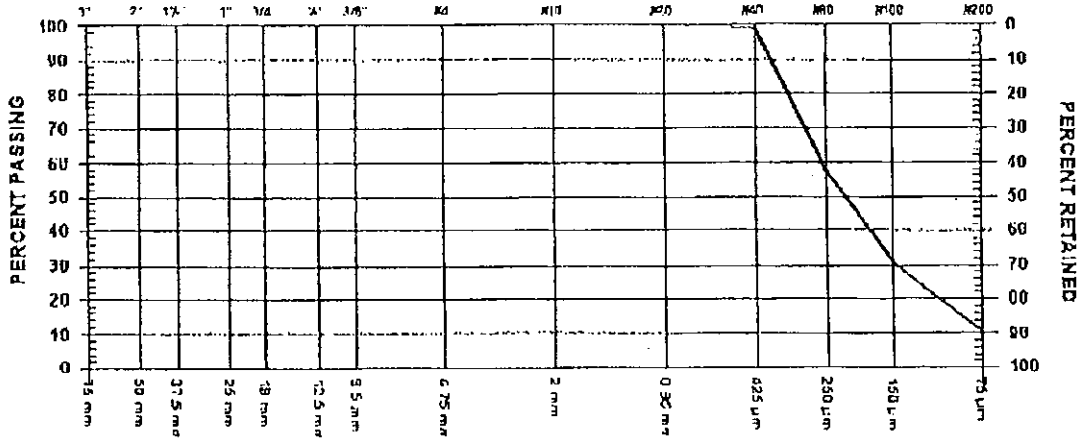
ATTN: Les Galbraith @ 604-685-0147

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 39 DATE RECEIVED 2005.Aug.04 DATE TESTED 2005.Aug.25 DATE SAMPLED 2005.Aug.03

SUPPLIER
SOURCE KP05-71
SPECIFICATION
MATERIAL TYPE CYCLONE SAND - 2ND TRIAL

SAMPLED BY MB, 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		
No. 10	2.00 mm	100.0	
No. 20	850 µm	100.0	
No. 40	425 µm	99.1	
No. 60	250 µm	57.4	
No. 100	150 µm	30.6	
No. 200	75 µm	10.5	

COMMENTS

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

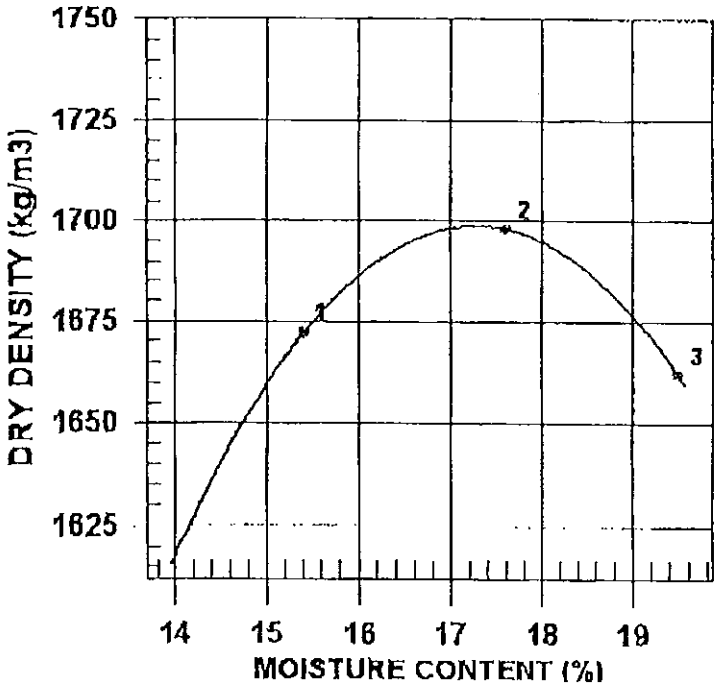
ATTN: Terry Isaacs @ 250-790-2268

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

PROCTOR NO. 20 DATE TESTED 2005.Jul.22 DATE RECEIVED 2005.Jul.21 DATE SAMPLED 2005.Jul.19

INSITU MOISTURE N/A %
SAMPLED BY Client, MB
TESTED BY RF
SUPPLIER
SOURCE KP05-54
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 Manual
PREPARATION Moist
OVERSIZE CORRECTION METHOD None
RETAINED 4.75mm SCREEN %
OVERSIZE SPECIFIC GRAVITY
TOTAL NUMBER OF TRIALS 3



TRIAL NUMBER	WET DENSITY (kg/m3)	DRY DENSITY (kg/m3)	MOISTURE CONTENT (%)
1	1929	1672	15.4
2	1997	1698	17.6
3	1986	1662	19.5

	MAXIMUM DRY DENSITY (kg/m3)	OPTIMUM MOISTURE CONTENT (%)
CALCULATED OVERSIZE CORRECTED	1700	17.5

COMMENTS
FIELD MOISTURE CONTENT, UPON ARRIVAL IN LAB = 10.3%.

NO ATTERBURG LIMIT TEST PERFORMED DUE TO THE NATURE OF THE MATERIAL.

 2005.Jul.26 GeoNorth Engineering Ltd. PER

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 1587
CLIENT Mount Polley Mining Corp. Attn:
C.C. Knight Piesold

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

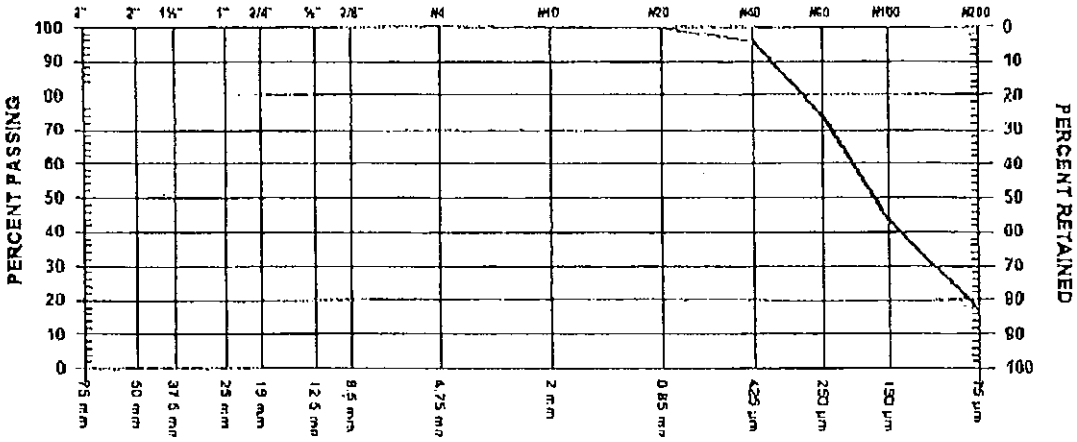
ATTN: Terry Isaacs @ 250-790-2260

PROJECT Construction Program - Mount Polley Mine
Testing Services
CONTRACTOR

SIEVE TEST NO. 21 DATE RECEIVED 2005.Jul.21 DATE TESTED 2005.Jul.22 DATE SAMPLED 2005.Jul.19

SUPPLIER
SOURCE KP05-54
SPECIFICATION
MATERIAL TYPE Sand

SAMPLED BY Client, MB
TESTED BY RF
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	99.8	
No. 20	850 µm	99.6	
No. 40	425 µm	96.0	
No. 60	250 µm	74.0	
No. 100	150 µm	43.5	
No. 200	75 µm	17.0	

COMMENTS
LOCATION; PERIMETER EMBANKMENT
CHAINAGE; 30100
ELEVATION; 944.3m

APPENDIX B

INCLINOMETER INSTALLATIONS

Appendix B1	Drill Logs
Appendix B2	Laboratory Test Results

Knight Piésold
CONSULTING

APPENDIX B1

DRILL LOGS

(Pages B1-1 to B1-9)

Project:	Mount Polley	Drill Hole No.	SI06-1	Page	1 of 2
Drilling Co:	Geotech Drilling	In-Situ Sampler:	SPT	Date Started:	9 May 06
Drilling Method:	DDH	Elevation:	917 m	Date Completed:	11 May 06
Location:	20+00	Total Depth:	42.2 m	Logged by:	MW
		Azimuth,Inclination	0, -90	Reviewed by:	LJG

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE
			Rock Fill						
30	9		Dark grey to greyish brown SILT, trace clay, trace sand		100		SI06-1-1	15/29/39	68
	10				100		SI06-1-2	14/20/27	47
35	11				100		SI06-1-3	6/9/13	22
40	12				150		SI06-1-Shelby1	//	
45	13				100		SI06-1-4	7/10/15	25
	14				100		SI06-1-5	11/15/32	47
50	15		Brownish grey SAND, trace silt		100		SI06-1-6	17//	
55	16		Fine to coarse gravel, some sand		100		SI06-1-7	76/38/57	95
60	17		Dark grey to greyish brown sand SILT, trace gravel, low plasticity (Glacial Till)		100		SI06-1-8	80//	
65	18								
70	19								
	20								
	21								

SPT TEST DATA Uncorrected 'N' values vs. depth (●)
20 40 60 80

NOTES

1. Air percussion drilling.
2. Split spoon sampling. (1 1/2" diameter samples)
3. Inclinometer casing was installed in the hole immediately after the hole was drilled.
4. Some sampling may contain no SPT 'N' values due to very stiff material or possible gravel obstruction

Mount Polley Mining Corporation
Mount Polley
Overburden Log For SI06-1

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B1

Rev. 0 - Issued for Report

SOILS LOG 3INCLOS.GPJ TEMPLATE.GDT 8 Mar 07

M:\1\01\00001\10\A\DATA\INCLIN~1\3INCLOS.GPJ

Date Revised: 20 Feb 07

Project: Mount Polley | Drill Hole No. SI06-1 | Page 2 of 2

Drilling Co: Geotech Drilling | In-Situ Sampler: SPT | Date Started: 9 May 06

Drilling Method: DDH | Elevation: 917 m | Date Completed: 11 May 06

Location: 20+00 | Total Depth: 42.2 m | Logged by: MW

Azimuth,Inclination: 0, -90 | Reviewed by: LJG

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (●) 20 40 60 80	NOTES
75	23				100		SI06-1-9	22/80/	80		
80	24				100		SI06-1-10	53//			
85	25				100		SI06-1-11	62/80/	80		
90	27				100		SI06-1-12	29/80/	80		
95	28				0		SI06-1-13	80//			
100	29				100		SI06-1-14	80//			
105	31										
110	32		Reddish grey VOLCANIC CONGLOMERATE, highly weathered bedrock		100		SI06-1-15	45/59/80	139		
115	33										
120	34										
125	35				100		SI06-1-16	80//			
130	36										
135	37										
140	38										
	39				100		SI06-1-17	39/41/80	121		
	40										
	41										
	42		End of hole at 42.2 m		100		SI06-1-18	80//			
	43										

Mount Polley Mining Corporation
Mount Polley
Overburden Log For SI06-1

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B1

Rev. 0 - Issued for Report

SOILS LOG 3INCLOS.GPJ TEMPLATE.GDT 8 Mar 07

M:\1\01\00001\10\A\DATA\INCLIN~1\3INCLOS.GPJ

Date Revised: 20 Feb 07

Project: Mount Polley | Drill Hole No. SI06-2 | Page 1 of 2

Drilling Co: Geotech Drilling | In-Situ Sampler: SPT | Date Started: 12 May 06

Drilling Method: DDH | Elevation: 917 m | Date Completed: 13 May 06

Location: 21+00 | Total Depth: 34.7 m | Logged by: MW

Azimuth,Inclination: 0, -90 | Reviewed by: LJG

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (●) 20 40 60 80	NOTES
			Rock Fill								1. Air percussion drilling. 2. Split spoon sampling. (1 1/2" diameter samples) 3. Inclinometer casing was installed in the hole immediately after the hole was drilled.
5	1										
	2										
10	3										
	4										
15	5										
	6										
20	7										
25	8										
			Grey to brownish grey SILT, trace clay, occasional sand seems, low plasticity		100		SI06-2-1	3/7/9	16		
30	9										
	10				100		SI06-2-2	6/12/16	28		
35	11										
					100		SI06-2-Shelby1	//			
40	12										
	13				100		SI06-2-3	6/11/17	28		
45	14										
					100		SI06-2-4	7/12/17	29		
50	15										
	16										
55			Dark grey SAND, trace silt		100		SI06-2-Shelby2	//			
	17										
60	18				100		SI06-2-5	9/16/22	38		
	19										
65											

SOILS LOG 3INCLOS.GPJ TEMPLATE.GDT 8 Mar 07

Mount Polley Mining Corporation
Mount Polley
Overburden Log For SI06-2

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B2

Rev. 0 - Issued for Report

M:\1\01\00001\10\A\DATA\INCLIN~1\3INCLOS.GPJ

Date Revised: 20 Feb 07

Project:	Mount Polley	Drill Hole No.	SI06-2	Page	2 of 2
Drilling Co:	Geotech Drilling	In-Situ Sampler:	SPT	Date Started:	12 May 06
Drilling Method:	DDH	Elevation:	917 m	Date Completed:	13 May 06
Location:	21+00	Total Depth:	34.7 m	Logged by:	MW
		Azimuth,Inclination	0, -90	Reviewed by:	LJG

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (●) 20 40 60 80	NOTES
70	21		Dark grey to greyish brown sandy SILT, trace gravel, low plasticity (Glacial Till)		100		SI06-2-6	33/27/80	107		
	22										
75	23				100		SI06-2-7	13/35/80	115		
	24		Greyish brown SAND, some silt, trace gravel (Glacial Till)								
80	25										
85	26				100		SI06-2-8	32/80/80	160		
	27		Reddish grey VOLCANIC CONGLOMERATE, highly weathered bedrock								
90	28										
95	29				100		SI06-2-9	22/29/53	82		
100	30										
	31										
105	32				100		SI06-2-10	70/80/	80		
	33										
110	34										
115	35		End of hole at 34.7 m		100		SI06-2-11	80/80/	80		
	36										
120	37										
125	38										
	39										
130											

SOILS LOG 3INCLOS.GPJ TEMPLATE.GDT 8 Mar 07

Mount Polley Mining Corporation
Mount Polley
Overburden Log For SI06-2

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B2

Rev. 0 - Issued for Report

M:\1\01\00001\10\A\DATA\INCLIN~1\3INCLOS.GPJ

Date Revised: 20 Feb 07

Project:	Mount Polley	Drill Hole No.	SI06-3	Page	1 of 2
Drilling Co:	Geotech Drilling	In-Situ Sampler:	SPT	Date Started:	15 May 06
Drilling Method:	DDH	Elevation:	918 m	Date Completed:	16 May 06
Location:	22+00	Total Depth:	40.6 m	Logged by:	MW
		Azimuth,Inclination	0, -90	Reviewed by:	LJG

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (●) 20 40 60 80
0	0		Rock Fill							
25	7		Greyish brown SILT, trace clay, trace sand, trace gravel, subangular to subrounded		100		SI06-3-1	17/20/28	48	
30	9				100		SI06-3-2	10/13/18	31	
35	10				100		SI06-3-3	8/14/19	33	
40	12		Greyish brown SAND, trace silt, trace gravels, subangular		100		SI06-3-4	10/18/22	40	
45	13		Greyish brown SILT, some sand, trace clay		100		SI06-3-5	20/31/27	58	
50	15				100		SI06-3-6	8/15/20	35	
55	16				100		SI06-3-7	8/13/17	30	
60	17		Greyish brown SAND, some silt		100		SI06-3-8	11/15/19	34	
65	19						SI06-3-9	11/15/20		

NOTES

1. Air percussion drilling.
2. Split spoon sampling. (1 1/2" diameter samples)
3. Inclinometer casing was installed in the hole immediately after the hole was drilled.

SOILS LOG 3INCLOS.GPJ TEMPLATE.GDT 8-Mar-07

Mount Polley Mining Corporation
Mount Polley
Overburden Log For SI06-3

Rev. 0 - Issued for Report

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B3

M:\1\01\00001\10\A\DATA\INCLIN~1\3INCLOS.GPJ

Date Revised: 20 Feb 07

Project:	Mount Polley	Drill Hole No.	SI06-3	Page	2 of 2
Drilling Co:	Geotech Drilling	In-Situ Sampler:	SPT	Date Started:	15 May 06
Drilling Method:	DDH	Elevation:	918 m	Date Completed:	16 May 06
Location:	22+00	Total Depth:	40.6 m	Logged by:	MW
		Azimuth, Inclination	0, -90	Reviewed by:	LJG

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (●) 20 40 60 80	NOTES
70	22				100				35		
75	23				100		SI06-3-10	16/27/33	60		
			Brownish grey SILT, trace sand, trace gravel, poorly graded, subangular to subrounded (Glacial Till)								
80	24				100		SI06-3-11	15/22/30	52		
	25						SI06-3-12	//			
85	26										
	27										
90	28										
95	29				100		SI06-3-13	14/25/34	59		
	30										
100	31										
105	32				100		SI06-3-14	25/60/80	140		
	33										
110	34		GRAVEL, trace sand, some clay								
115	35				100		SI06-3-15	30/21/80	101		
	36										
120	37		Reddish grey VOLCANIC CONGLOMERATE, highly weathered bedrock								
125	38				100		SI06-3-16	70/80/	80		
	39										
130	40										
135	41		End of hole at 40.6 m		100		SI06-3-17	40/80/	80		

SOILS LOG 3INCLOS.GPJ TEMPLATE.GDT 8 Mar 07

Mount Polley Mining Corporation
Mount Polley
Overburden Log For SI06-3

Rev. 0 - Issued for Report

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B3

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Date Revised: 20 Feb 07

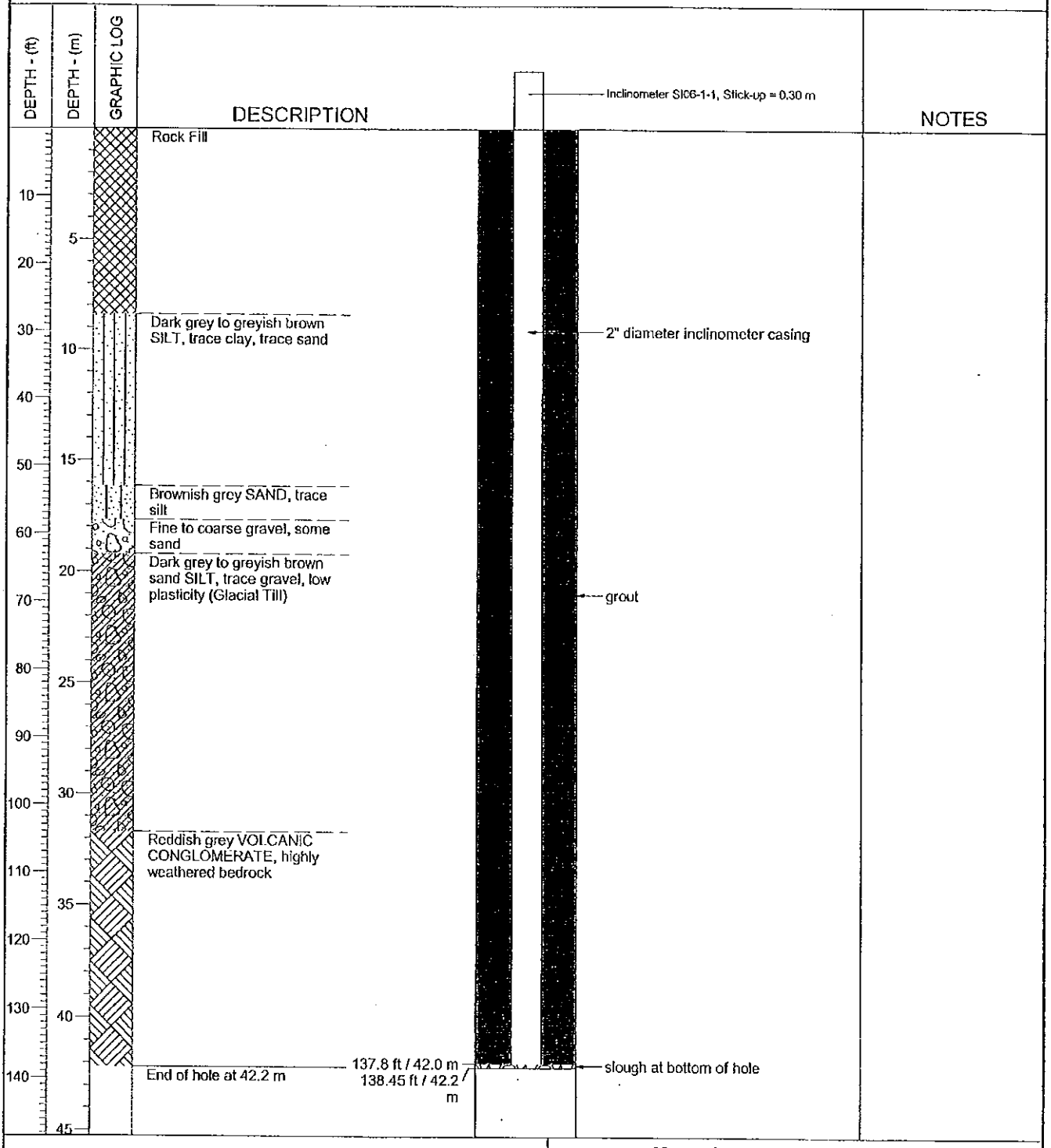
Project: Mount Polley | Drill Hole No.: SI06-1 | Page 1 of 1

Hole Depth: 138.4 ft / 42.2 m | Hole Diameter: 96 mm | Date Started: 9 May 06 | Date Completed: 11 May 06

Collar Elev: 3008.8 ft / 917.1 m | PVC Pipe I.D.: 51 mm | Logged by: MW | Reviewed by: LJG

Water Level Readings: Depth to Water / Date Measured

Well 1: /



Mount Polley Mining Corporation
Mount Polley
Well Completion Details For SI06-1

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B4

Rev. 0 - Issued for Report

WELL 3INCLOS.GPJ DRILL.GDT 9 Mar 07

M:\1\01\00001\10\A\DATA\INCLIN~1\3INCLOS.GPJ

Date Revised: 20 Feb 07

Project: Mount Polley

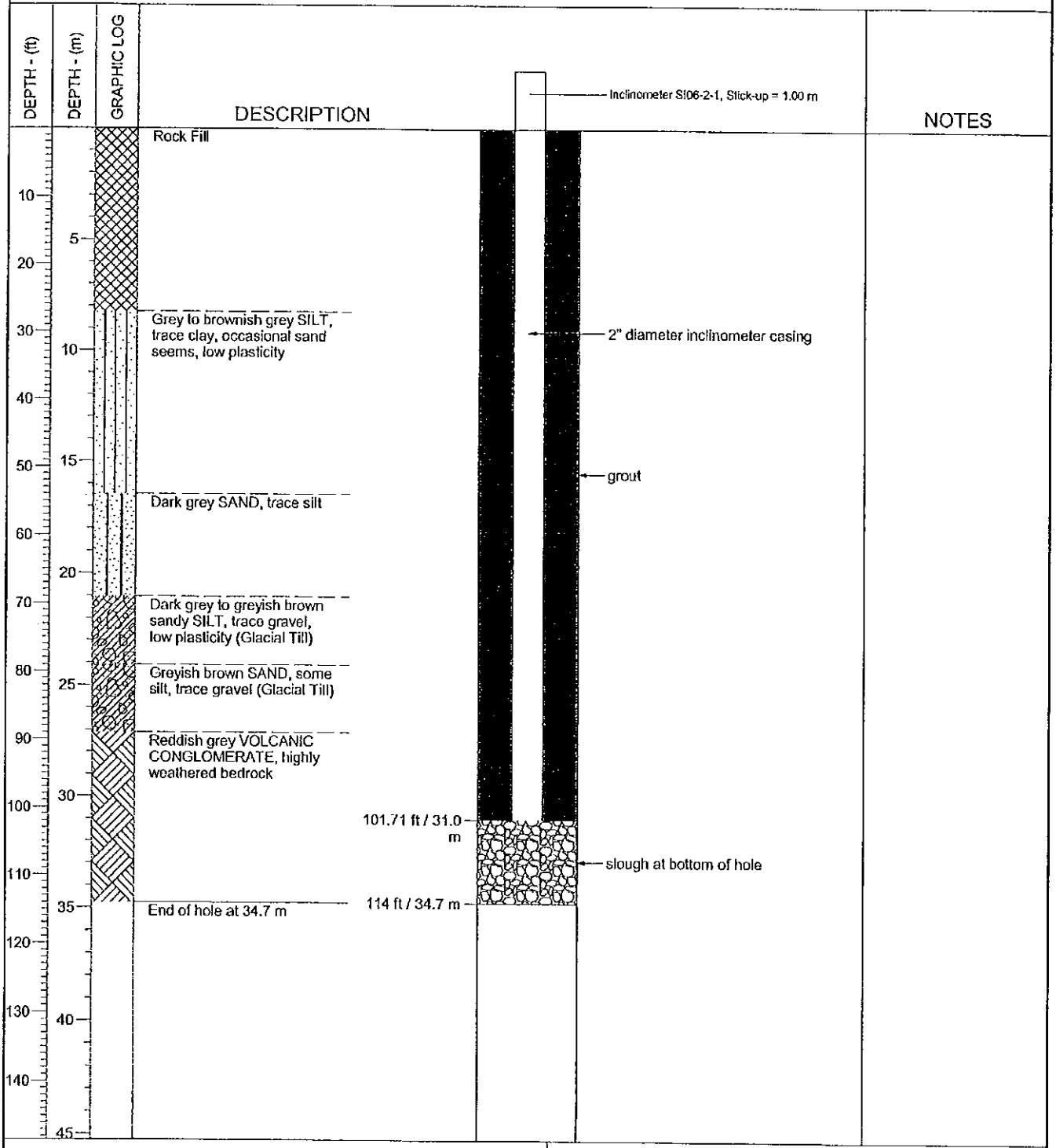
Drill Hole No.: SI06-2 | Page 1 of 1

Hole Depth: 114 ft / 34.7 m | Hole Diameter: 96 mm | Date Started: 12 May 06 | Date Completed: 13 May 06

Collar Elev: 3008.8 ft / 917.1 m | PVC Pipe I.D.: 51 mm | Logged by: MW | Reviewed by: LJG

Water Level Readings: Depth to Water / Date Measured

Well 1:



Mount Polley Mining Corporation
Mount Polley
Well Completion Details For SI06-2

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B5

Rev. 0 - Issued for Report

WELL 3INCLOS.GPJ DRILL.GDT 9 Mar 07

M:\1\01\00001\10\A\DATA\INCLIN~1\3INCLOS.GPJ

Date Revised: 20 Feb 07

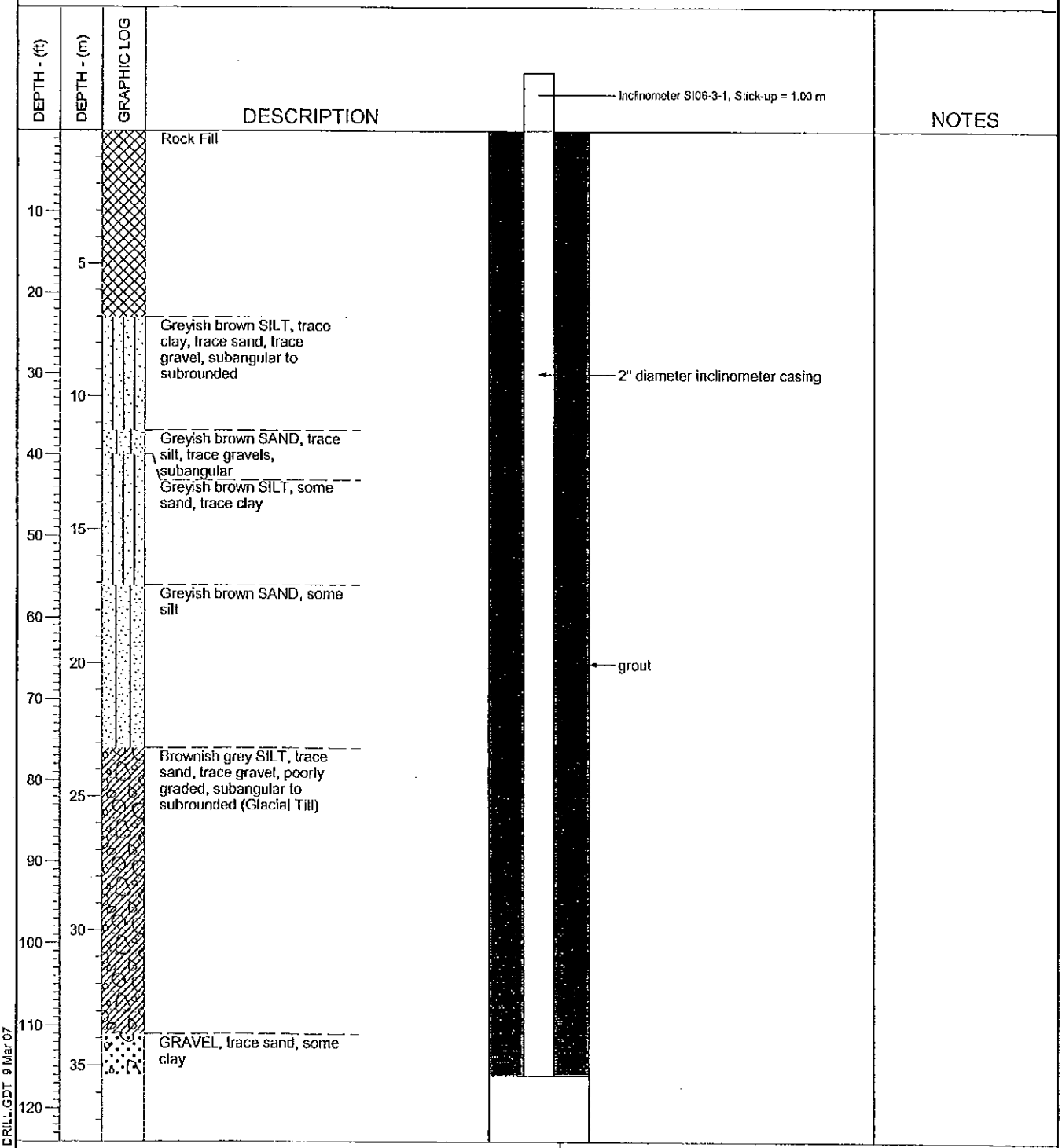
Project: Mount Polley | Drill Hole No.: SI06-3 | Page 1 of 1

Hole Depth: 133.3 ft / 40.6 m | Hole Diameter: 96 mm | Date Started: 15 May 06 | Date Completed: 16 May 06

Collar Elev: 3010.8 ft / 917.7 m | PVC Pipe I.D.: 51 mm | Logged by: MW | Reviewed by: LJG

Water Level Readings: Depth to Water / Date Measured

Well 1:



Mount Polley Mining Corporation
Mount Polley
Well Completion Details For SI06-3

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
101-1/10	1	0

Figure B6

Rev. 0 - Issued for Report

WELL 3INCLOS.GPJ DRILL.GDT 9 Mar 07

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Date Revised: 20 Feb 07

Knight Piésold
CONSULTING

APPENDIX B2

LABORATORY TEST RESULTS

(Pages B2-1 to B2-38)

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422 S106-1-Shelby)

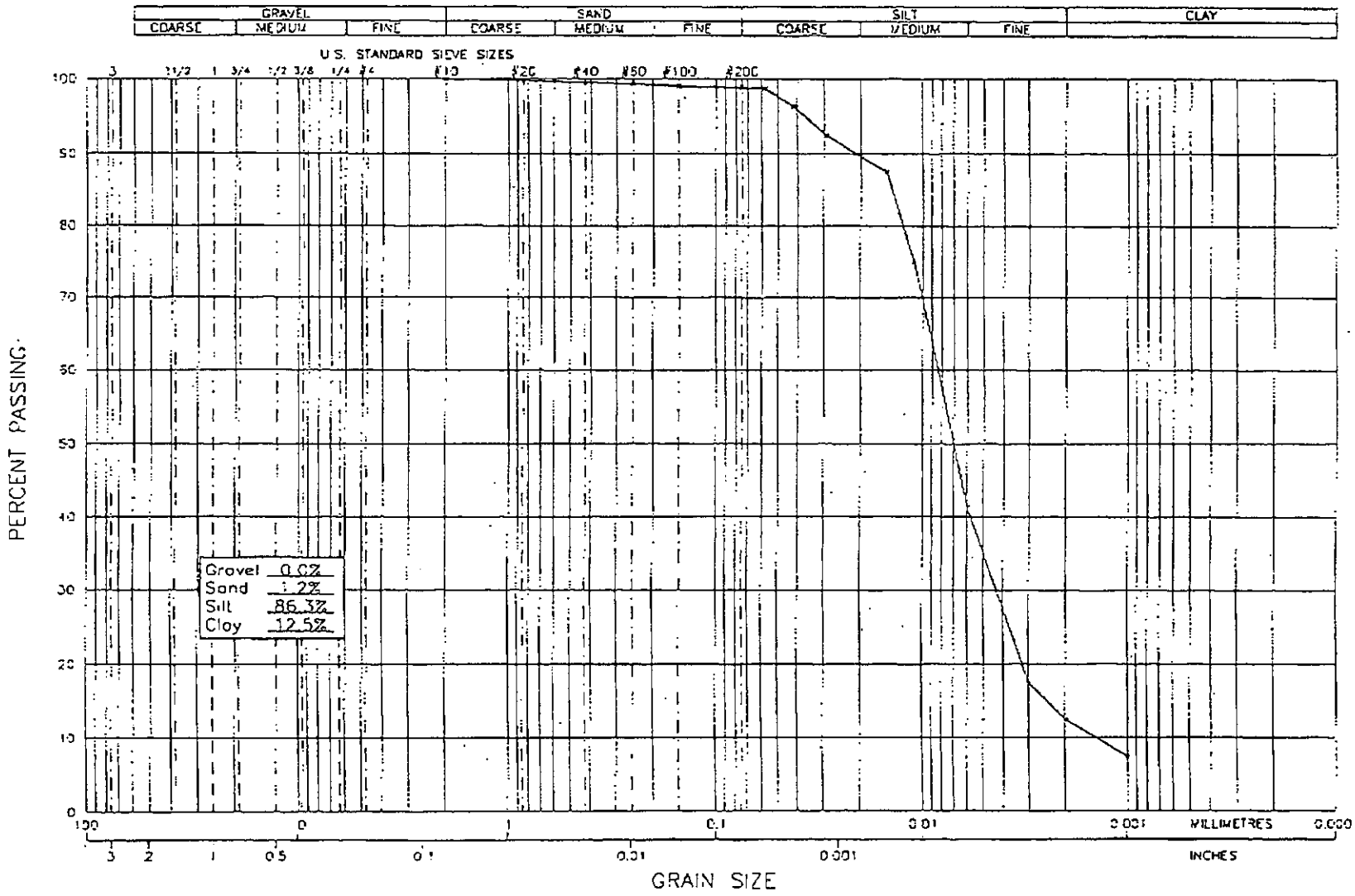
Client: Mount Polley Mining Corp. (Knight Piesold)									Date: June 26, 2006		
Project Name: MPCP - Stage 4									Project #: K-2036		
Source/Location: Tailings Storage Facility									Type:		
Sample #: ~~S103-1 (22+60)~~		Test #:		Hole #: (Shelby)		Depth: 43.0'			Time:		
Sampled By: Client			Tested By: DJ						Checked By: NK		
Date Sampled: 05.09.06			Date Received:						Date Tested: 06.26.06		
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	0.000	0.5	39.5	23.0	0.01317				0.058	98.7	0.0
40.0	0.000	1	38.5	23.0	0.01317				0.042	96.3	0.0
40.0	0.000	2	37.0	23.0	0.01317				0.029	92.5	0.0
40.0	0.000	4	36.0	23.0	0.01317				0.021	90.0	0.0
40.0	0.000	8	35.0	23.0	0.01317				0.015	87.5	0.0
40.0	0.000	15	30.0	23.0	0.01317				0.011	75.0	0.0
40.0	0.000	30	23.0	23.0	0.01317				0.008	57.5	0.0
40.0	0.000	60	16.5	23.0	0.01317				0.006	41.3	0.0
40.0	0.000	120	11.0	23.0	0.01317				0.004	27.5	0.0
40.0	0.000	240	7.0	23.0	0.01317				0.003	17.5	0.0
40.0	0.000	480	5.0	23.0	0.01317				0.002	12.5	0.0
40.0	0.000	1440	3.0	23.0	0.01317				0.001	7.5	0.0
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	
20	0.1		99.8	
40	0.1		99.5	
60	0.1		99.3	
100	0.1		99.0	
200	0.1		98.8	
Pan	39.5			
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			
Total =			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**30.7%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

NEC.60

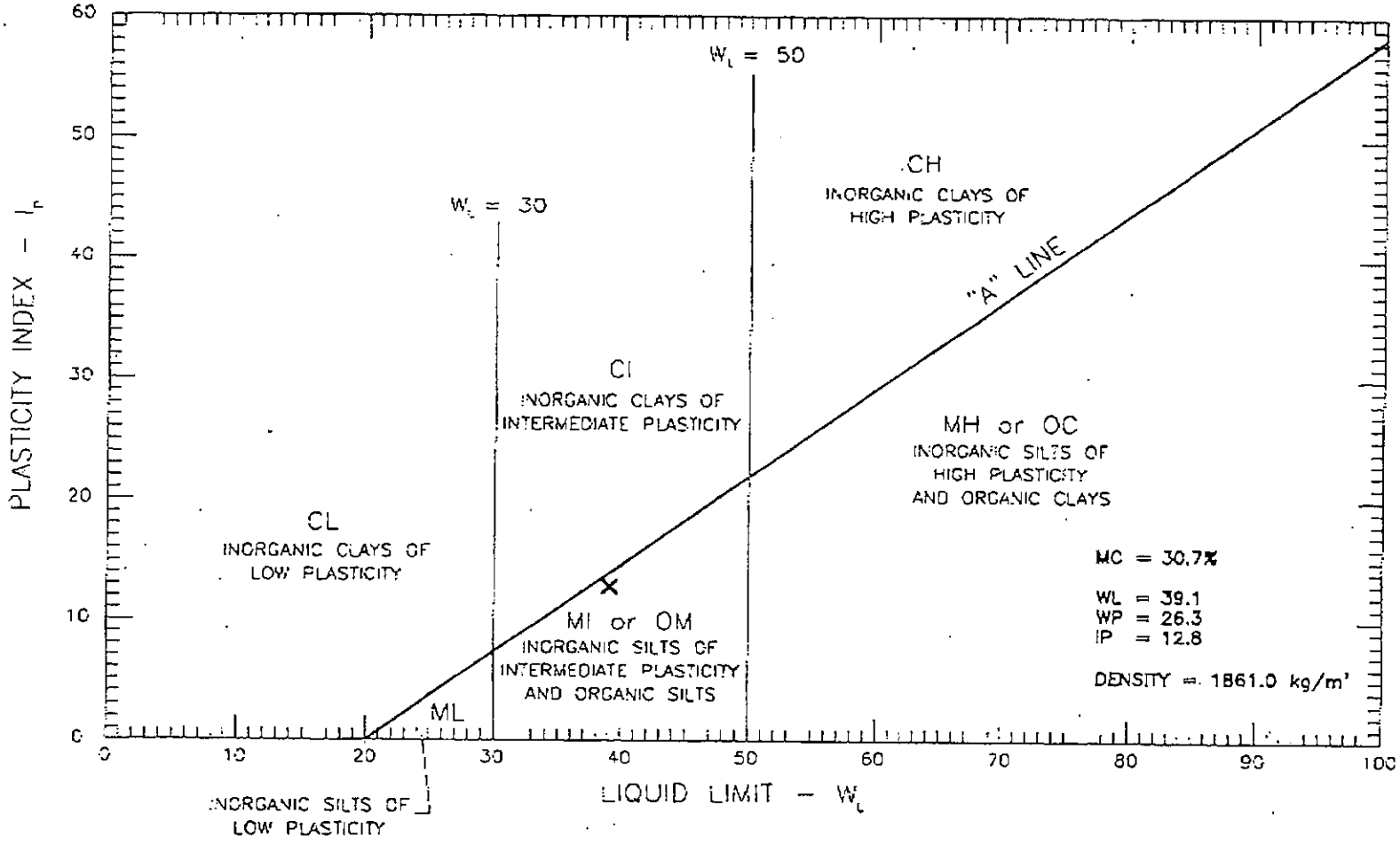


B2-2

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
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF ~~SI03-15 (22+00)~~ SI06-1-Shelby 1

SCALE:	DATE:
N.T.S	2006/06/27
PROJECT NO:	DRAWING NO.
K-2036	2036-820



B2-3

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
TAILINGS STORAGE FACILITY
ATTERBERG LIMITS OF ~~S103-1+(22+00)~~

SCALE:	DATE:
N.T.S.	2006/05/27
PROJECT NO:	DRAWING NO.
K-2036	2036-B18

S106-1-sh(b7)

GeoNorth Engineering

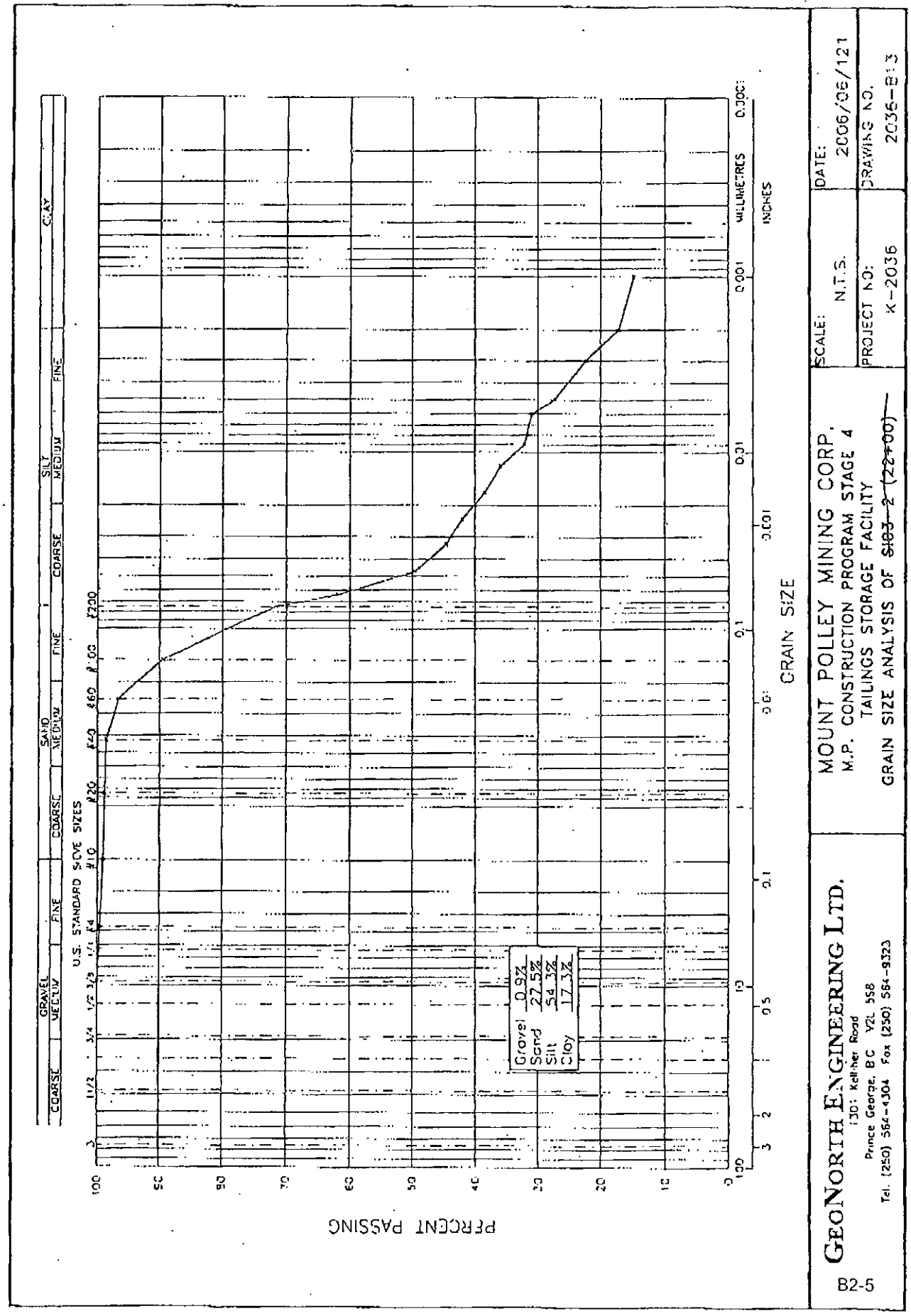
Hydrometer Analysis

Test Designation: ASTM D-422

S166-1-2

Client: Mount Polley Mining Corp. (Knight Piesold)									Date: June 20, 2006		
Project Name: M.P. Construction Program - Stage 4									Project #: K-2036		
Source/Location: Tailings Storage Facility									Type:		
Sample #: ~~S193-2 (22+80)~~		Test #:		Hole #:		Depth: 33'			Time:		
Sampled By:			Tested By: DJ						Checked By: NK		
Date Sampled: 05.09.06			Date Received:						Date Tested: 06.19.06		
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	0.991	0.5	25.0	22.0	0.01332				0.064	62.5	61.9
40.0	0.991	1	20.0	22.0	0.01332				0.047	50.0	49.6
40.0	0.991	2	18.0	22.0	0.01332				0.033	45.0	44.6
40.0	0.991	4	17.0	22.0	0.01332				0.024	42.5	42.1
40.0	0.991	8	15.5	22.0	0.01332				0.017	38.8	38.5
40.0	0.991	15	14.5	22.0	0.01332				0.012	36.3	36.0
40.0	0.991	30	13.0	21.0	0.01348				0.009	32.5	32.2
40.0	0.991	60	12.5	21.0	0.01348				0.006	31.3	31.0
40.0	0.991	120	11.0	21.0	0.01348				0.005	27.5	27.3
40.0	0.991	240	9.0	21.0	0.01348				0.003	22.5	22.3
40.0	0.991	480	7.0	21.0	0.01348				0.002	17.5	17.3
40.0	0.991	1440	6.0	22.0	0.01332				0.001	15.0	14.9
Hydrometer #: 794968			Graduate #: 2			Dispersing Agent: Sodium Hex				Amount: 125ml	
Density of Solids:											
Description of Sample:											

Hydrometer Sieve Analysis					Sieve Analysis				Initial Moisture Content	
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		40.0	100.0	99.1	38.1				Tare No.	
20	0.1		99.8	98.9	25.4				Wet Wt. & Tare	
40	0.1		99.5	98.5	19.0				Dry Wt. & Tare	
60	0.8		97.5	96.6	12.5				Water Wt.	
100	2.9		90.3	89.5	9.5		280.6	100.0	Tare Wt.	
200	7.2		72.3	71.6	4.75	1.1		99.6	Wt. of Dry Soil	=W
Pan	28.9				10	1.3		99.1	Moisture Content	16.0%
Total	40.0								Dry Wt. of Sample from Initial Moisture	
Unwashed Wt. =									=(100xWet Soil Wt.)/(100 + Initial Moisture) =	
Tare =		Wt. Passing #200 =			Total =					

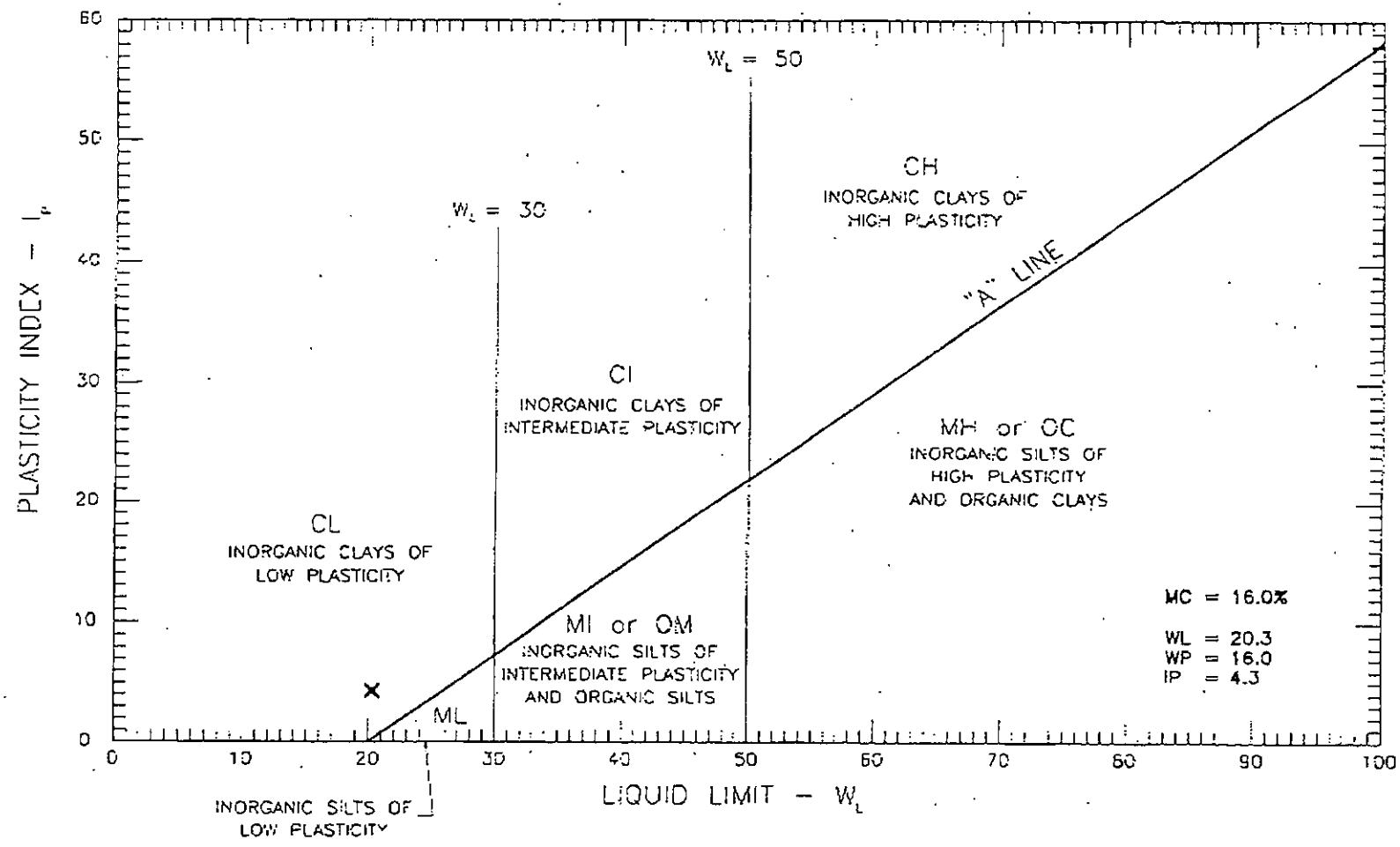


GEONORTH ENGINEERING LTD.
1301 Kelliher Road
Prince George, BC V2L 5S8
Tel. (250) 564-4304 Fax (250) 564-9323

B2-5

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF ~~SIB3-2 (22+00)~~ S106-1-2

SCALE: N.T.S.
PROJECT NO: K-2036
DATE: 2006/06/12
DRAWING NO. 2036-B13



GEONORTH ENGINEERING LTD. 1301 Ketliher 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 ~~S103-2~~	SCALE: N.T.S	DATE: 2005/06/15
		PROJECT NO: K-2036	DRAWING NO. 2036-39

S106-1-2

VA101-1//10-A.03

GeoNorth Engineering

Test Designation: ASTM D-422

S106 -2-1

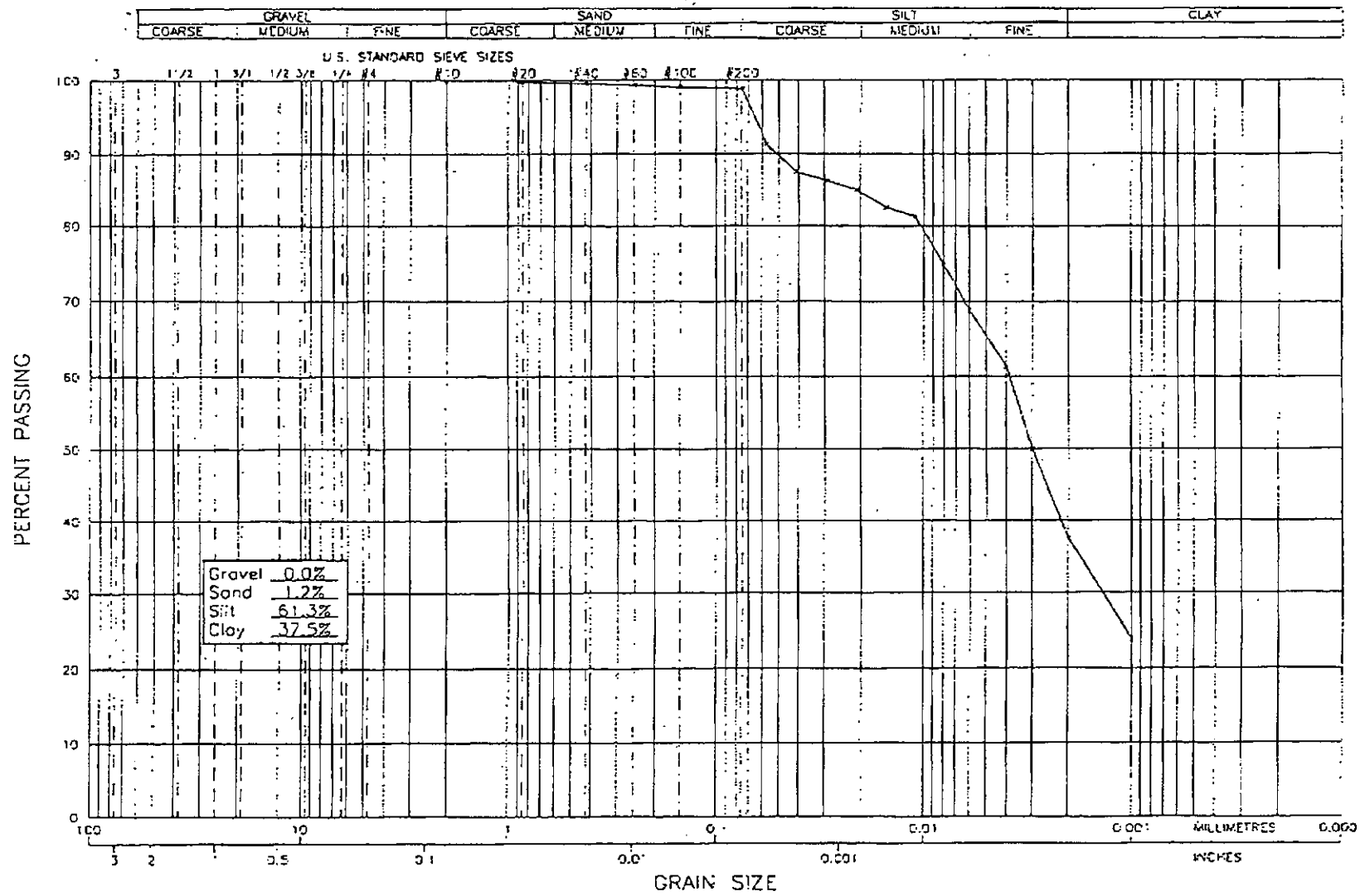
Hydrometer Analysis

Client: Mount Polley Mining Corp. (Knight Piesold)									Date: June 16, 2006		
Project Name: M.P. Construction Program - Stage 4									Project #: K-2036		
Source/Location: Tailings Storage Facility									Type:		
Sample #: ~~S104-1 (21+00)~~		Test #:		Hole #:		Depth: 28.0'			Time:		
Sampled By: Client			Tested By: DJ						Checked By: NK		
Date Sampled: 05.12.06			Date Received:						Date Tested: June 15, 2006		
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	0.000	0.5	36.5	23.0	0.01317				0.057	91.3	0.0
40.0	0.000	1	35.0	23.0	0.01317				0.041	87.5	0.0
40.0	0.000	2	34.5	23.0	0.01317				0.029	86.3	0.0
40.0	0.000	4	34.0	23.0	0.01317				0.021	85.0	0.0
40.0	0.000	8	33.0	23.0	0.01317				0.015	82.5	0.0
40.0	0.000	15	32.5	23.0	0.01317				0.011	81.3	0.0
40.0	0.000	30	30.0	23.0	0.01317				0.008	75.0	0.0
40.0	0.000	60	27.5	23.0	0.01317				0.006	68.8	0.0
40.0	0.000	120	24.5	23.0	0.01317				0.004	61.3	0.0
40.0	0.000	240	20.0	23.0	0.01317				0.003	50.0	0.0
40.0	0.000	480	15.0	23.0	0.01317				0.002	37.5	0.0
40.0	0.000	1440	9.5	23.0	0.01317				0.001	23.8	0.0
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	
20	0.1		99.8	
40	0.1		99.5	
60	0.1		99.3	
100	0.1		99.0	
200	0.0		98.8	
Pan	39.5			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

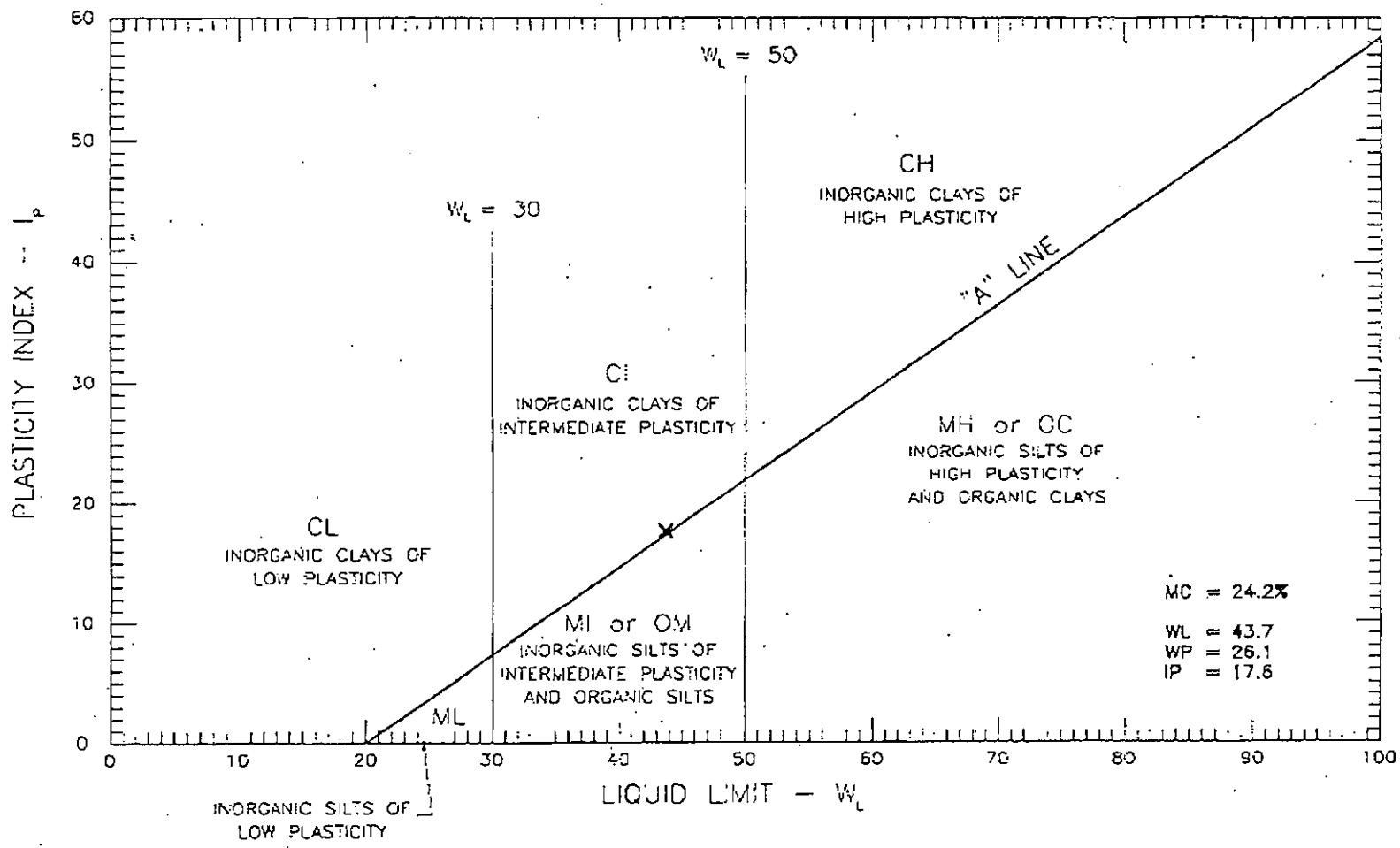
Sieve Analysis			
Seive No.	Weight Retained	Total Wt. Passing	% Finer Than Orig. Samp.
38.1			
25.4			
19.0			
12.5			
9.5			
4.75			
10			
Total =			

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) =	



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 GRAIN SIZE ANALYSIS OF ~~S104-1 (21+00)~~	SCALE: N.T.S	DATE: 2006/06/16
		PROJECT NO: K-2036	DRAWING NO. 2036-B10

S106-2-1



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		PROJECT NO: K-2036	DRAWING NO. 2036-B3

S106-2-1

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422 S106-2-Shelby 1

Client: Mount Polley Mining Corp. (Knight Piesold)			Date: June 26, 2006
Project Name: MPCP - Stage 4			Project #: K-2036
Source/Location: Tailings Storage Facility			Type:
Sample #: ~~S104-15 (21+00)~~	Test #:	Hole #: (shelby) Depth: 38.5'	Time:
Sampled By: Client	Tested By: DJ		Checked By: NK
Date Sampled: 05.12.06	Date Received:		Date Tested: 06.26.06

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	0.000	0.5	39.5	23.0	0.01317				~~0.060~~	~~98.8~~	0.0
40.0	0.000	1	38.0	23.0	0.01317				0.042	95.0	0.0
40.0	0.000	2	37.0	23.0	0.01317				0.029	92.5	0.0
40.0	0.000	4	36.0	23.0	0.01317				0.021	90.0	0.0
40.0	0.000	8	35.5	23.0	0.01317				0.014	88.8	0.0
40.0	0.000	15	34.5	23.0	0.01317				0.011	86.3	0.0
40.0	0.000	30	33.5	23.0	0.01317				0.008	83.8	0.0
40.0	0.000	60	31.5	23.0	0.01317				0.005	78.8	0.0
40.0	0.000	120	28.0	23.0	0.01317				0.004	70.0	0.0
40.0	0.000	240	25.0	23.0	0.01317				0.003	62.5	0.0
40.0	0.000	480	21.0	23.0	0.01317				0.002	52.5	0.0
40.0	0.000	1440	15.0	23.0	0.01317				0.001	37.5	0.0

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	
20	0.1		99.8	
40	0.1		99.5	
60	0.1		99.3	
100	0.2		98.8	
200	0.4		97.8	
Pan	39.1			
Total	40.0			
Unwashed Wt. =				
Tare =		Wt. Passing #200 =		

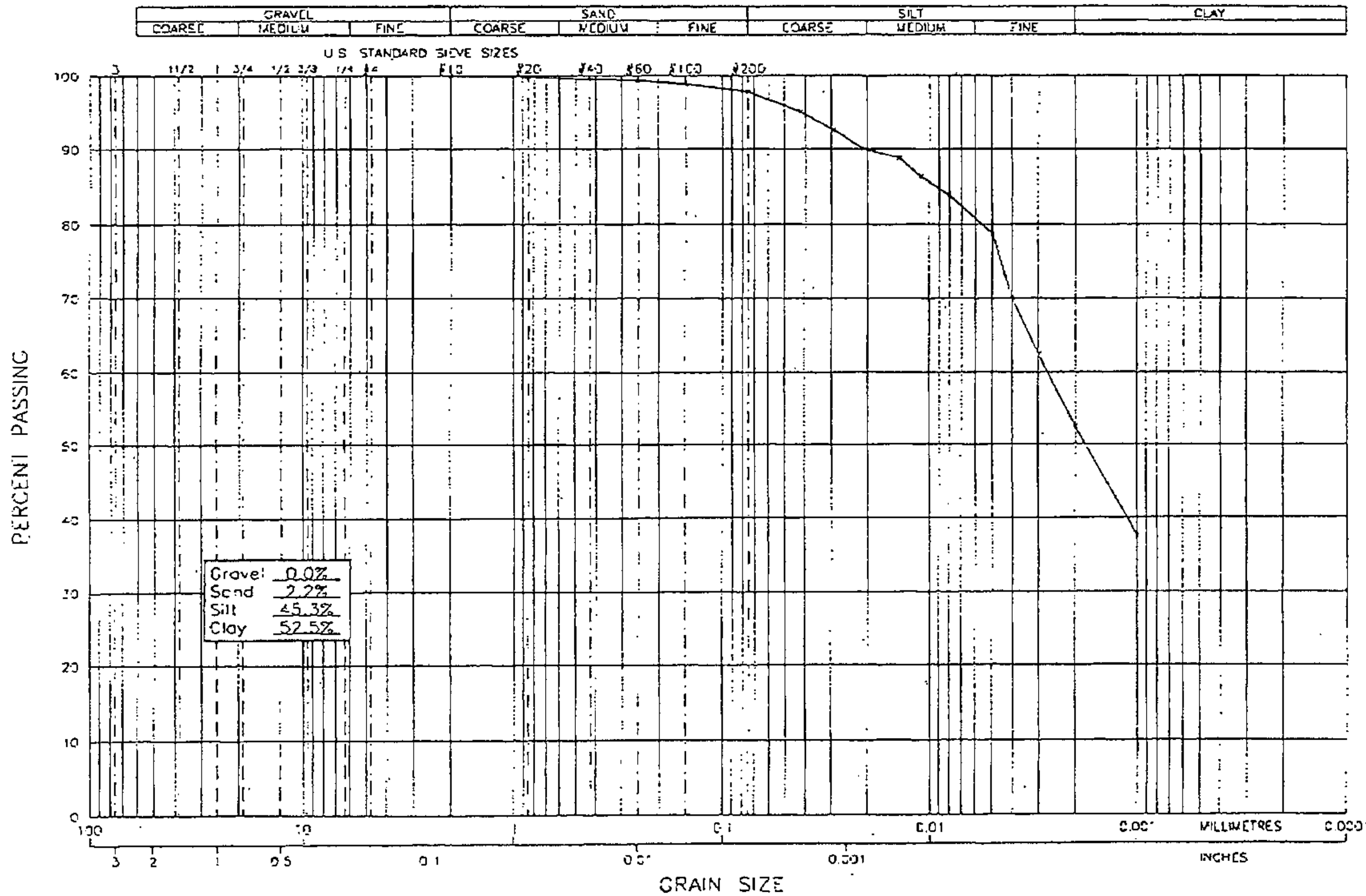
Sieve Analysis

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

Initial Moisture Content

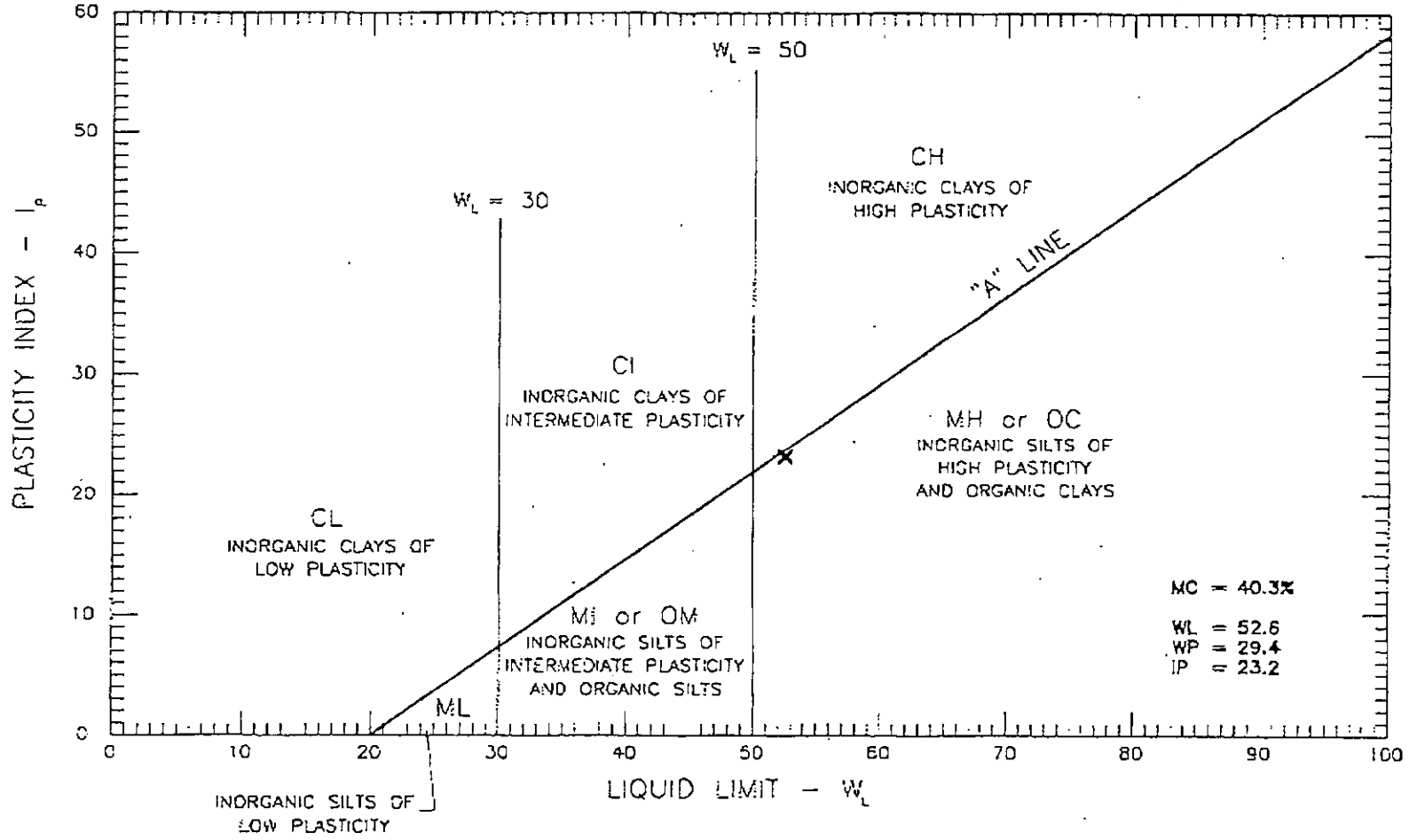
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	**40.3%**
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

N3ELEC



B2-11 **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 TAILINGS STORAGE FACILITY GRAIN SIZE ANALYSIS OF ~~S104-15 (21+00)~~	SCALE: N T S. PROJECT NO: K-2036	DATE: 2006/06/27 DRAWING NO. 2036-B21

S106-2-Sh-lb, l



B2-12

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MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
ATTERBERG LIMITS OF ~~S104-15(21+00)~~

SCALE:	DATE:
N.T.S.	2006/06/27
PROJECT NO:	DRAWING NO.
K-2036	2036-B19

S106-2-Shelby1

GeoNorth Engineering

Test Designation: ASTM D-422 S166-2-Shelby 2

Hydrometer Analysis

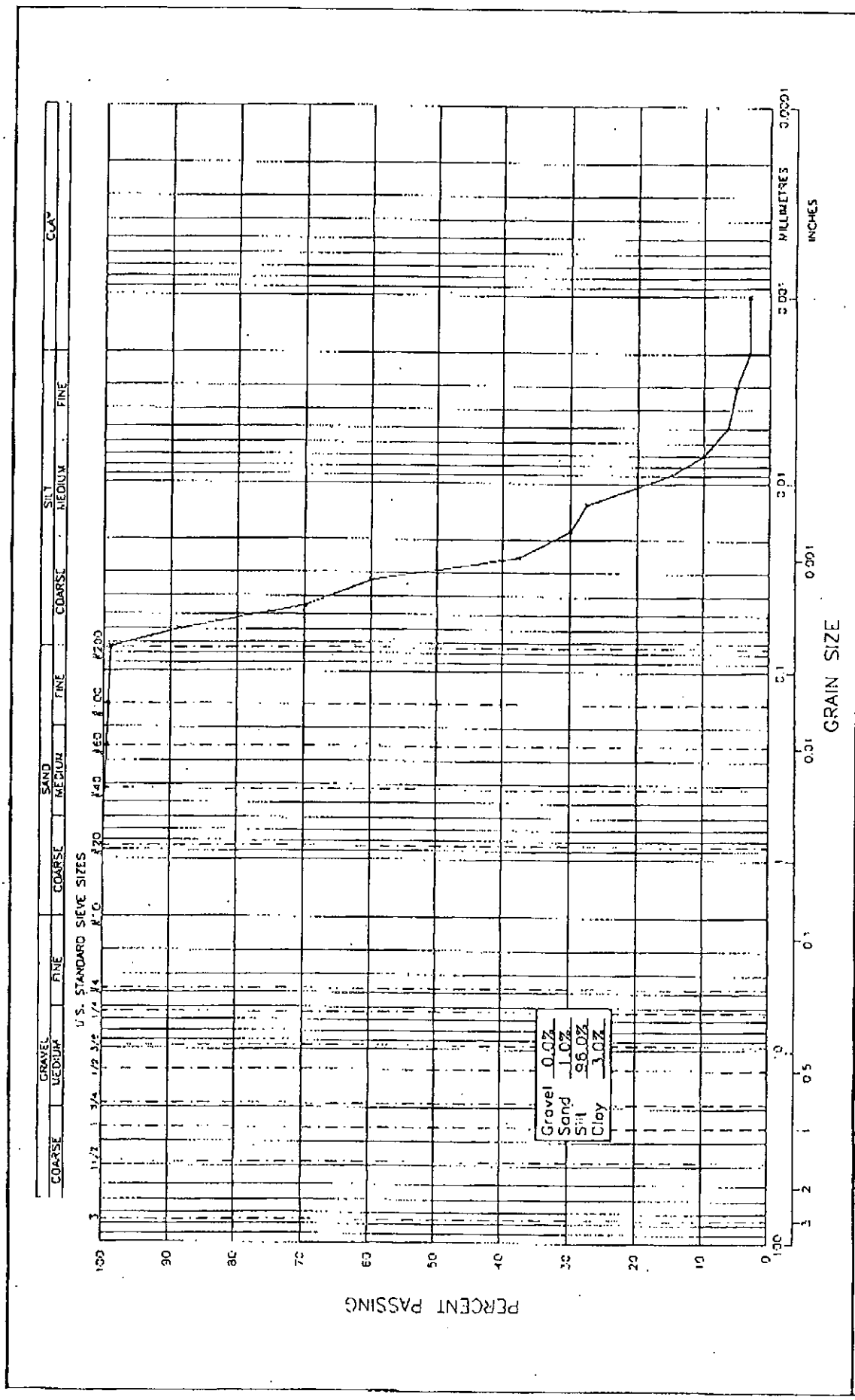
Client: Mount Polley Mining Corp. (Knight Piesold)									Date: June 26, 2006		
Project Name: MPCP - Stage 4									Project #: K-2036		
Source/Location: Tailings Storage Facility									Type:		
Sample #: ~~S104-2 (21+00)~~		Test #:		Hole #: (Shelby)		Depth: 53.5-55.5'			Time:		
Sampled By: Client			Tested By: DJ						Checked By: NK		
Date Sampled: 05.12.06			Date Received:						Date Tested: 06.26.06		
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	0.000	0.5	35.5	23.0	0.01317				0.060	88.8	0.0
40.0	0.000	1	28.0	23.0	0.01317				0.045	70.0	0.0
40.0	0.000	2	24.0	23.0	0.01317				0.033	60.0	0.0
40.0	0.000	4	15.0	23.0	0.01317				0.025	37.5	0.0
40.0	0.000	8	12.0	23.0	0.01317				0.018	30.0	0.0
40.0	0.000	15	11.0	23.0	0.01317				0.013	27.5	0.0
40.0	0.000	30	6.0	23.0	0.01317				0.009	15.0	0.0
40.0	0.000	60	4.0	23.0	0.01317				0.007	10.0	0.0
40.0	0.000	120	2.5	23.0	0.01317				0.005	6.3	0.0
40.0	0.000	240	2.0	23.0	0.01317				0.003	5.0	0.0
40.0	0.000	480	1.0	23.0	0.01317				0.002	3.0	0.0
40.0	0.000	1440	1.0	23.0	0 01317				0.001	3.0	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				
20		40 0	100.0	
40	0.1		99.8	
60	0.1		99.5	
100	0.1		99.3	
200	0.1		99.0	
Pan	39.6			
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			
Total =			

Initial Moisture Content	
Tare No.	
Wet Wt. & Tare	
Dry Wt. & Tare	
Water Wt.	
Tare Wt.	
Wt. of Dry Soil	=W
Moisture Content	27.3%
Dry Wt. of Sample from Initial Moisture	
=(100xWet Soil Wt.)/(100 + Initial Moisture) =	

NOELC3



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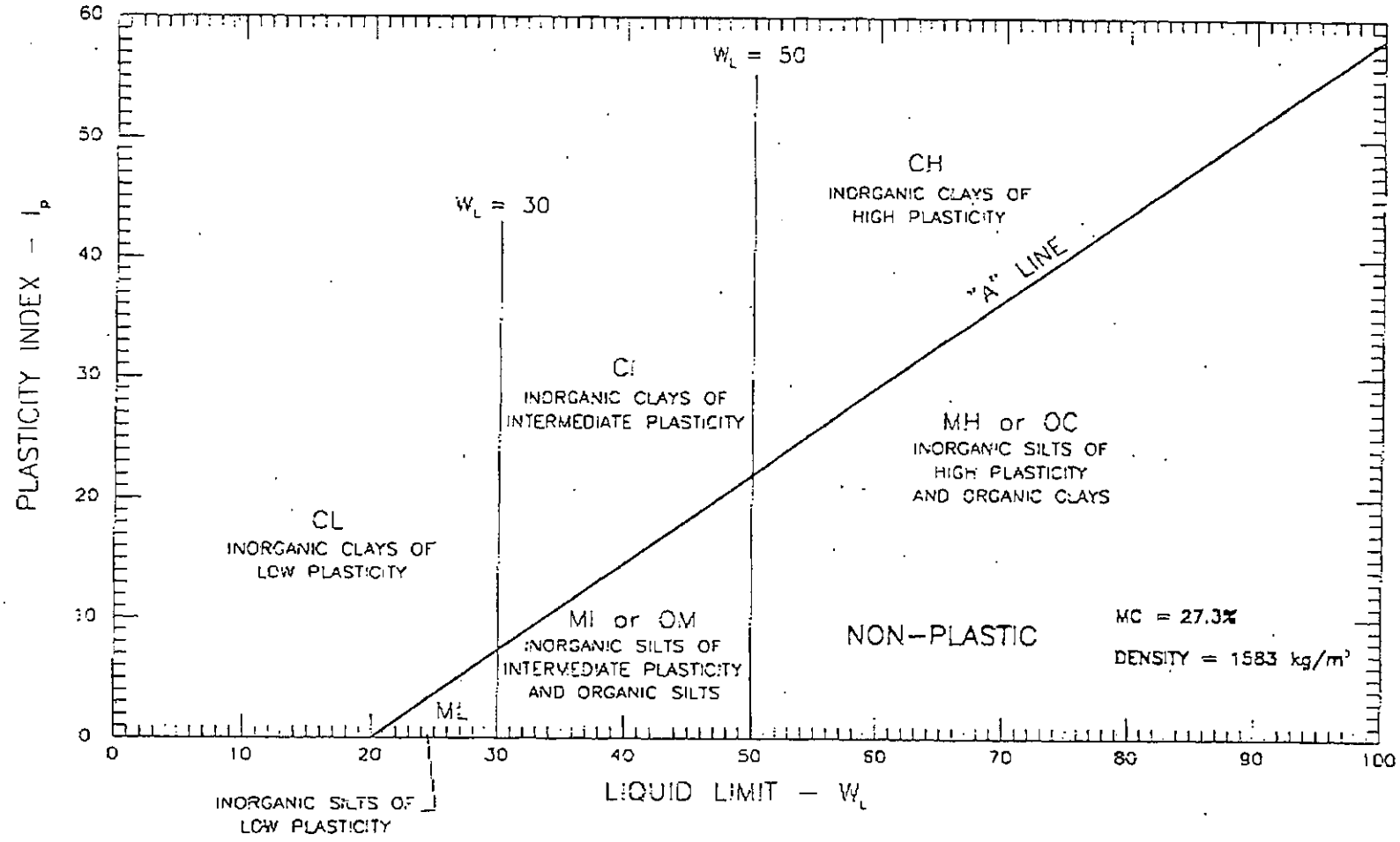
MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF ~~SM4-25(21+00)~~ S106-2-Shelby2

SCALE: N.T.S
DATE: 2006/06/27
PROJECT NO: K-2036
DRAWING NO. 2036-B22



B2-15

GeoNorth Engineering Ltd. 1381 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 TAILINGS STORAGE FACILITY ATTERBERG LIMITS OF ~~SI04-28~~	SCALE: NTS	DATE: 2006/06/26
		PROJECT NO: K-2036	DRAWING NO. 2036-317

S106-2-Shell 2

GeoNorth Engineering

Test Designation: ASTM D-422 S106-3-29

Hydrometer Analysis

Client: Mount Polley Mining Corp. (Knight Piesold)			Date: June 21, 2006
Project Name: M.P. Construction Program - Stage 4			Project #: K-2036
Source/Location: Tailings Storage Facility			Type:
Sample #: ~~S105-2a (20-06)~~	Test #:	Hole #:	Depth: 28.0'	Time:
Sampled By: Client	Tested By: DJ		Checked By: NK
Date Sampled: 05.15.06	Date Received:		Date Tested: 06.19.06

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	0.810	0.5	28.0	22.0	0.01332				0.062	70.0	56.7
40.0	0.810	1	23.0	22.0	0.01332				0.045	57.5	46.6
40.0	0.810	2	21.0	22.0	0.01332				0.033	52.5	42.5
40.0	0.810	4	20.0	22.0	0.01332				0.023	50.0	40.5
40.0	0.810	8	17.5	22.0	0.01332				0.017	43.8	35.5
40.0	0.810	15	16.0	22.0	0.01332				0.012	40.0	32.4
40.0	0.810	30	13.5	21.0	0.01348				0.009	33.8	27.4
40.0	0.810	60	11.5	21.0	0.01348				0.006	28 8	23.3
40.0	0.810	120	9.5	21.0	0.01348				0.005	23.8	19.3
40.0	0.810	240	7 5	21.0	0.01348				0.003	18.8	15.2
40.0	0.810	480	6.5	21.0	0.01348				0.002	16.3	13.2
40.0	0.810	1440	6.0	21.0	0.01348				0.001	15.0	12.2

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	81.0
20	1.4		96.5	78.2
40	0 9		94.3	76.4
60	1.8		89.8	72.7
100	1.8		85.3	69.1
200	3.5		76.5	62.0
Pan	30.5			
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		382.1	100.0
12.5	22.9		94.0
9.5			
4.75	12.9		90.6
10	36.8		81.0
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) =	

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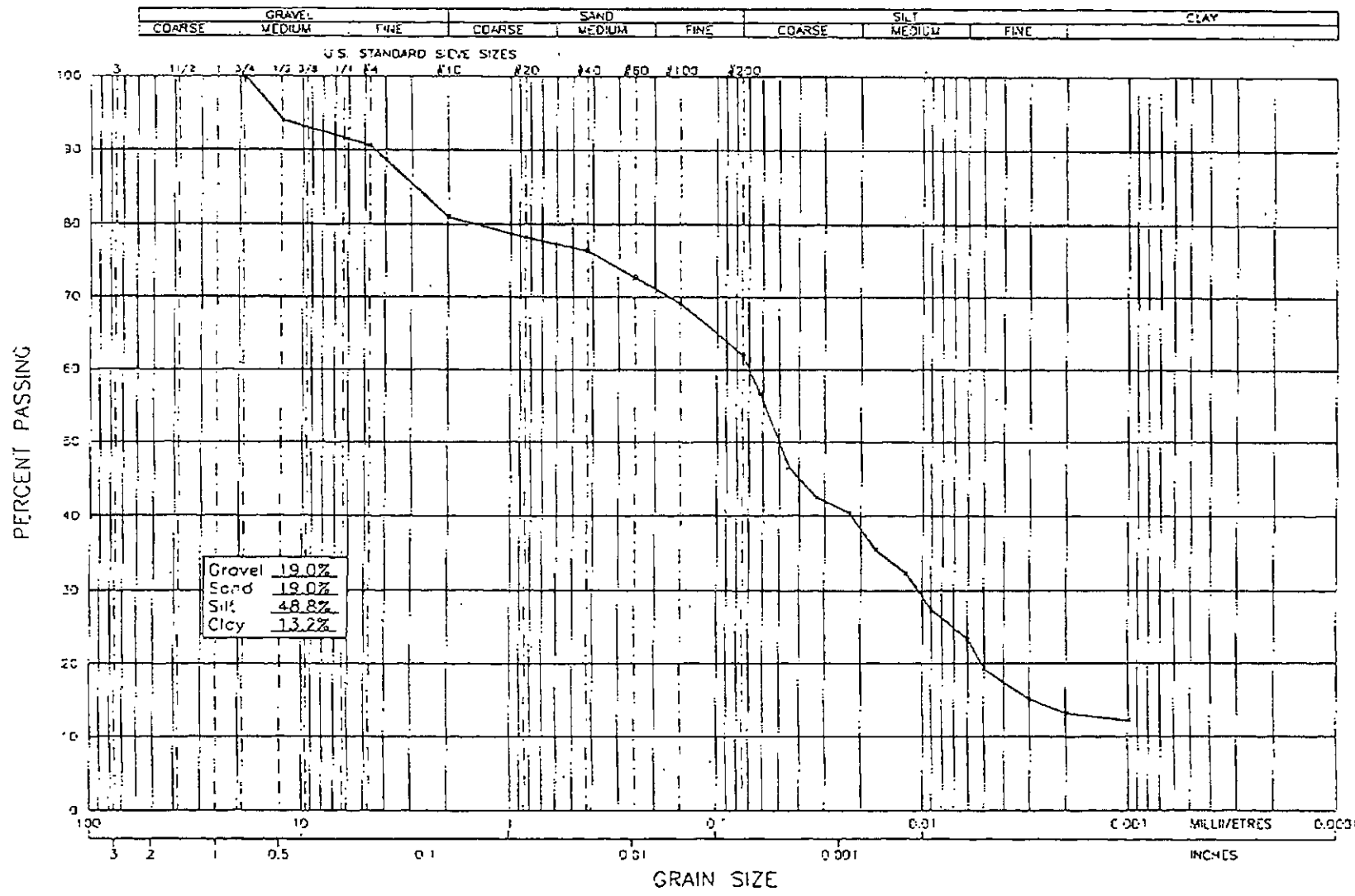

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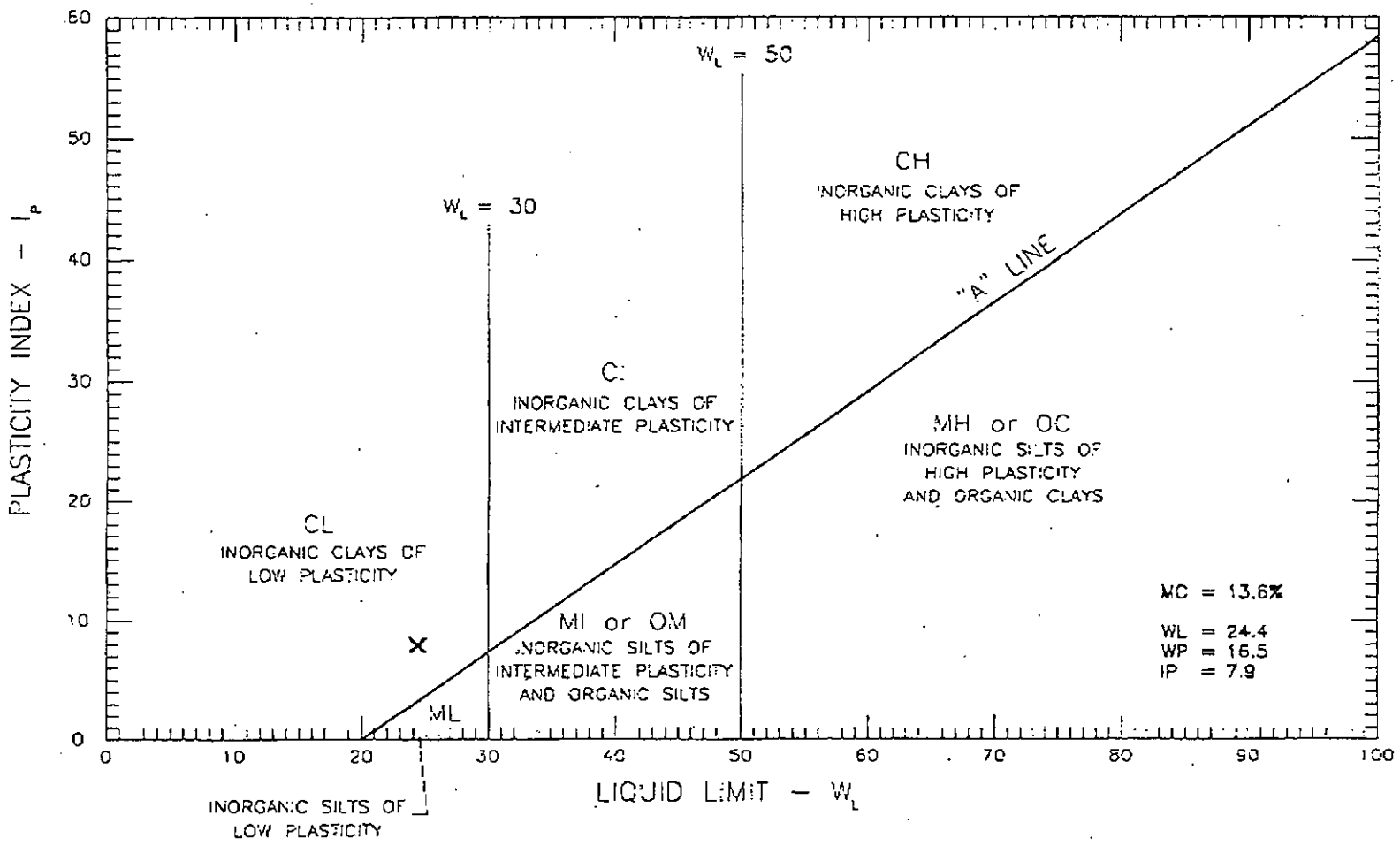
B2-17

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF ~~S105-2a (20+00)~~

SCALE:	DATE:
N.T.S.	2006/06/12
PROJECT NO:	DRAWING NO.
X-2036	2036-B14

S106-3-2a



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MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
ATTERBERG LIMITS OF ~~S104-2a~~ S106-3-29

SCALE:	DATE:
N.T.S	2006/06/15
PROJECT NO: K-2036	DRAWING NO. 2036-B4

B2-18

GeoNorth Engineering

Hydrometer Analysis

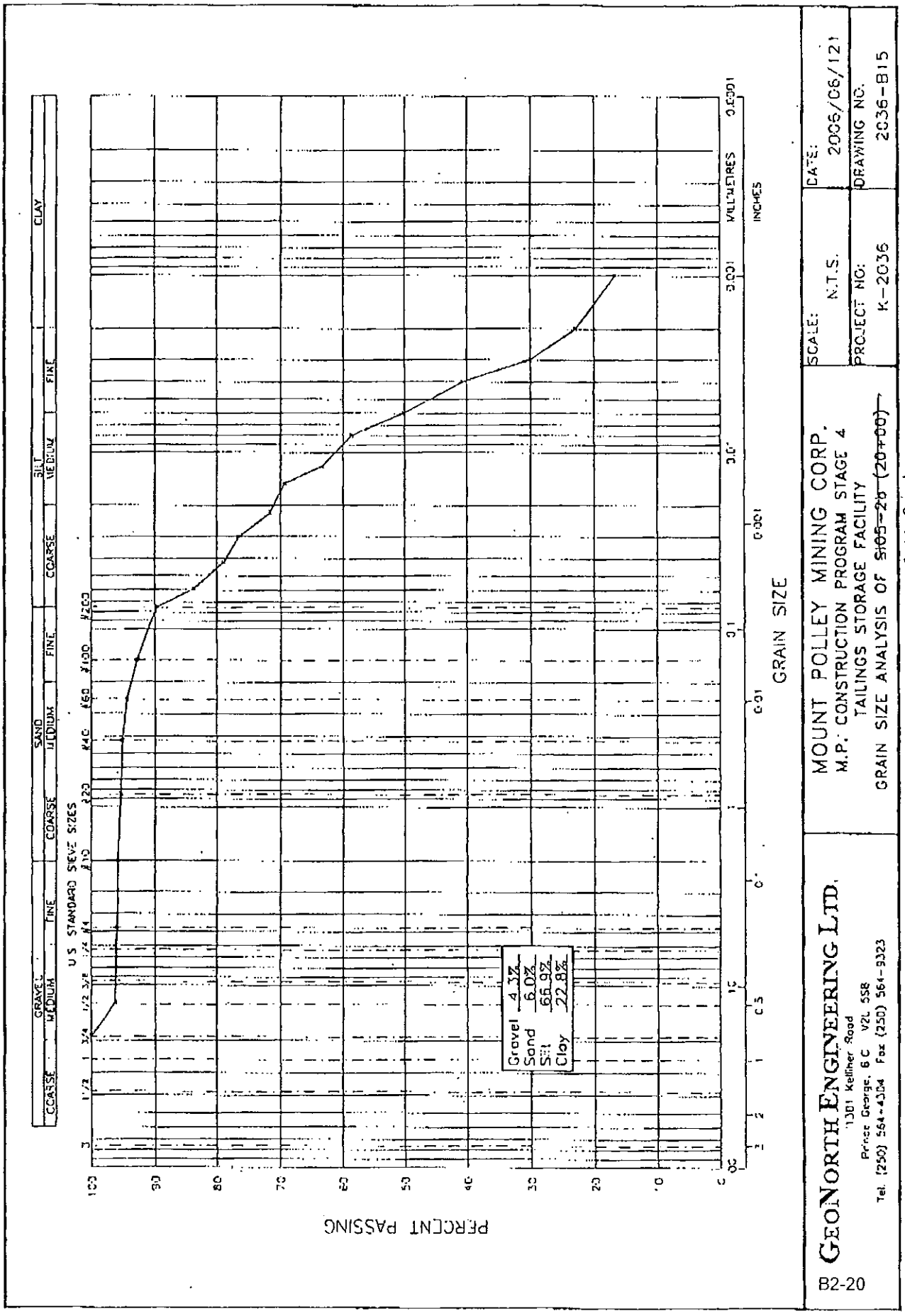
Test Designation: ASTM D-422 S106-2-2b

Client: Mount Polley Mining Corp. (Knight Piesold)			Date: June 20, 2006
Project Name: M.P. Construction Program - Stage 4			Project #: K-2036
Source/Location: Tailings Storage Facility			Type:
Sample #: ~~S105-2b (29+00)~~	Test #:	Hole #:	Depth: 28.75'	Time:
Sampled By: Client	Tested By: DJ		Checked By: NK
Date Sampled: 05.15.06	Date Received:		Date Tested: 06.20.06

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	0.957	0.5	35.0	22.0	0.01332				0.590	87.5	83.7
40.0	0.957	1	33.0	22.0	0.01332				0.420	82.5	79.0
40.0	0.957	2	32.0	22.0	0.01332				0.300	80.0	76.6
40.0	0.957	4	30.0	22.0	0.01332				0.220	75.0	71.8
40.0	0.957	8	29.0	22.0	0.01332				0.150	72.5	69.4
40.0	0.957	15	26.5	21.0	0.01348				0.120	66.3	63.4
40.0	0.957	30	24.5	21.0	0.01348				0.008	61.3	58.7
40.0	0.957	60	21.0	21.0	0.01348				0.006	52.5	50.2
40.0	0.957	120	17.0	21.0	0.01348				0.004	42.5	40.7
40.0	0.957	240	12.5	21.0	0.01348				0.003	31.3	30.0
40.0	0.957	480	9.5	21.0	0.01348				0.002	23.8	22.8
40.0	0.957	1440	7.0	22.0	0.01332				0.001	17.5	16.7

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

Hydrometer Sieve Analysis					Sieve Analysis				Initial Moisture Content	
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		40.0	100.0	95.7	38.1				Tare No.	
20	0.2		99.5	95.2	25.4				Wet Wt. & Tare	
40	0.1		99.3	95.0	19.0		347.7	100.0	Dry Wt. & Tare	
60	0.3		98.5	94.3	12.5	13.7		96.1	Water Wt.	
100	0.6		97.0	92.8	9.5				Tare Wt.	
200	1.3		93.8	89.7	4.75	0.9		95.8	Wt. of Dry Soil	=W
Pan	37.5				10	0.2		95.7	Moisture Content	%
Total	40.0								Dry Wt. of Sample from Initial Moisture	
Unwashed Wt. =									=(100xWet Soil Wt.)/(100 + Initial Moisture) =	
Tare =		Wt. Passing #200 =			Total =					


GRAVEL
COARSE
FINE
SAND
COARSE
MEDIUM
FINE
SILT
COARSE
MEDIUM
FINE
CLAY
U S STANDARD SIEVE SIZES
3
1 1/2
3/4
3/8
#4
#10
#20
#40
#60
#100
#200
PERCENT PASSING
100
90
80
70
60
50
40
30
20
10
0
Gravel 4.3%
Sand 6.0%
Silt 66.9%
Clay 22.8%
GRAIN SIZE
MILLIMETRES
INCHES
3.0
0.1
0.01
0.001
0.0001
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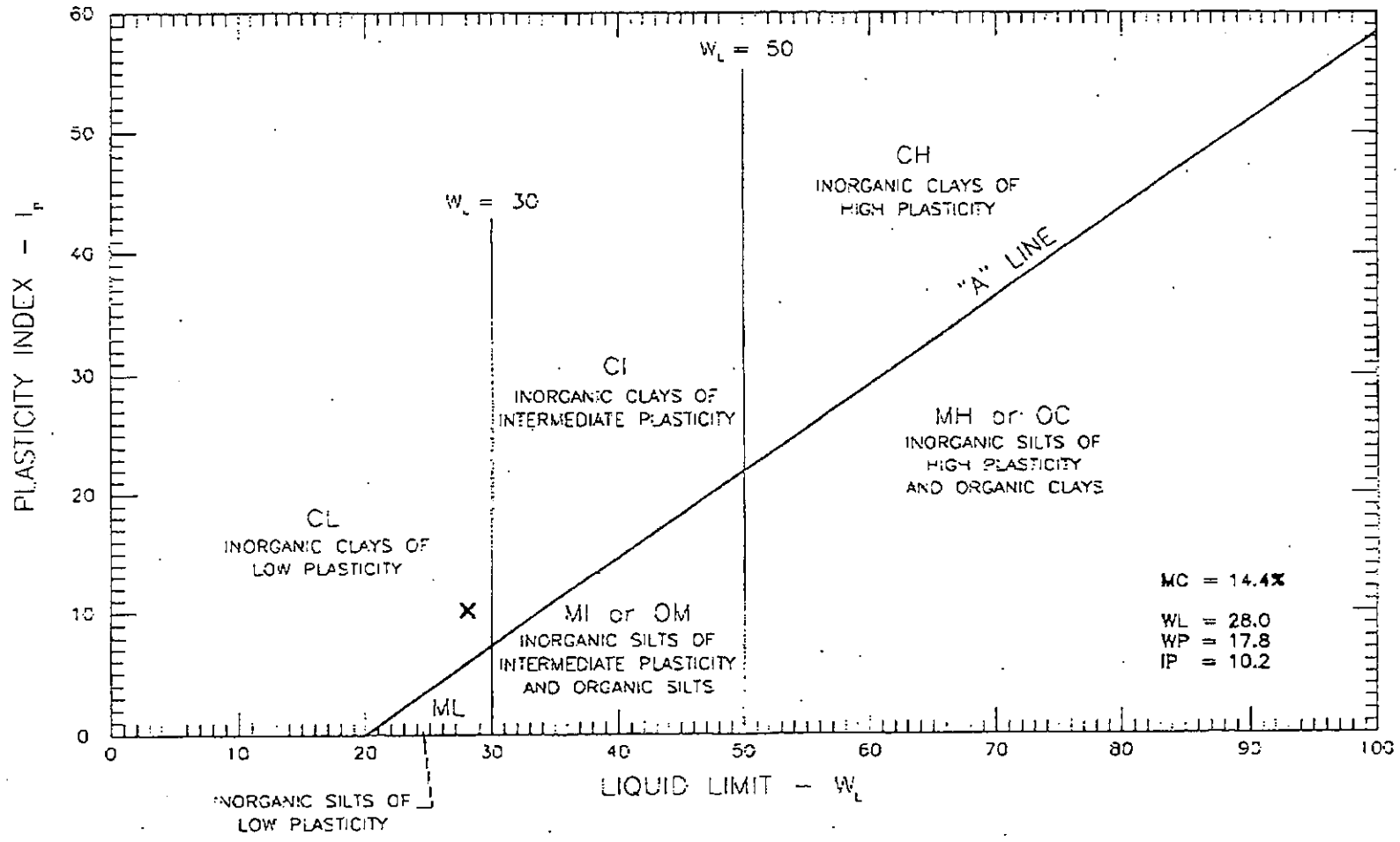
B2-20
MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF SM5-26 (20+00)
SCALE: N.T.S.
DATE: 2006/06/12
PROJECT NO: K-2036
DRAWING NO. 2036-B15

S109-3-26



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 S106-2b	SCALE: N.T.S	DATE: 2006/06/15
		PROJECT NO: K-2036	DRAWING NO. 2036-B5

S106-3-2b

GeoNorth Engineering

Hydrometer Analysis

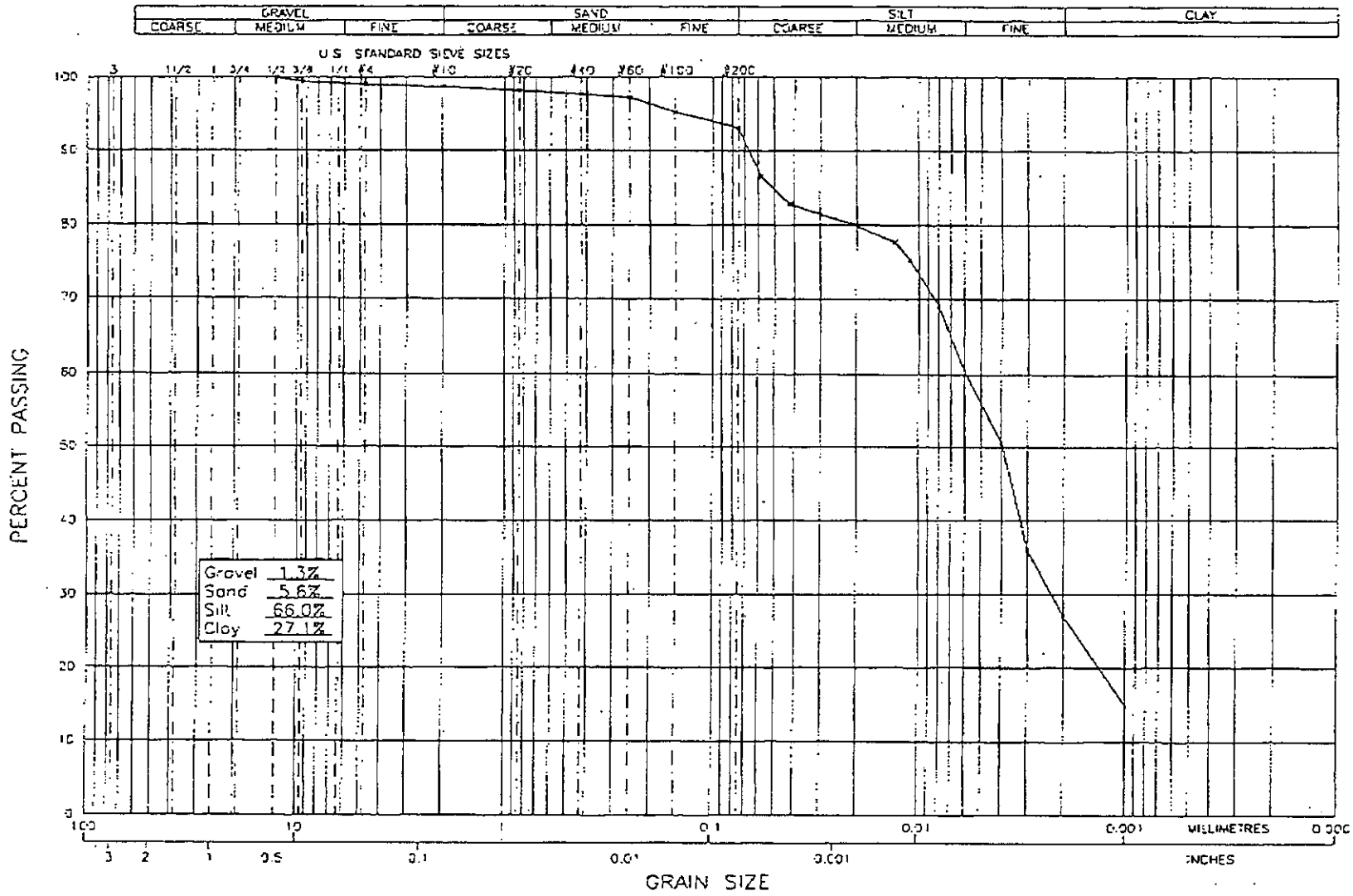
Test Designation: ASTM D-422 S106-3-4

Client: Mount Polley Mining Corp. (Knight Piesold)				Date: June 16, 2006
Project Name: M.P. Construction Program - Stage 4				Project #: K-2036
Source/Location: Tailings Storage Facility				Type:
Sample #: ~~S105-5 (20+00)~~	Test #:	Hole #:	Depth: 38.0'	Time:
Sampled By: Client	Tested By: DJ			Checked By: NK
Date Sampled: 05.15.06	Date Received:			Date Tested: 06.15.06

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	0.987	0.5	35.0	23.0	0.01317				0.058	87.5	86.4
40.0	0.987	1	33.5	23.0	0.01317				0.042	83.8	82.7
40.0	0.987	2	33.0	23.0	0.01317				0.030	82.5	81.4
40.0	0.987	4	32.5	23.0	0.01317				0.021	81.3	80.2
40.0	0.987	8	31.5	23.0	0.01317				0.013	78.8	77.8
40.0	0.987	15	30.5	23.0	0.01317				0.011	76.3	75.3
40.0	0.987	30	28.0	23.0	0.01317				0.008	70.0	69.1
40.0	0.987	60	24.5	23.0	0.01317				0.006	61.3	60.5
40.0	0.987	120	20.5	23.0	0.01317				0.004	51.3	50.6
40.0	0.987	240	14.5	23.0	0.01317				0.003	36.3	35.8
40.0	0.987	480	11.0	23.0	0.01317				0.002	27.5	27.1
40.0	0.987	1440	6.0	23.0	0.01317				0.001	15.0	14.8

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

Hydrometer Sieve Analysis					Sieve Analysis				Initial Moisture Content	
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		40.0	100.0	98.7	38.1				Tare No.	
20	0.2		99.5	98.2	25.4				Wet Wt. & Tare	
40	0.2		99.0	97.7	19.0				Dry Wt. & Tare	
60	0.2		98.5	97.2	12.5		380.0	100.0	Water Wt.	
100	0.8		96.5	95.2	9.5	2.3		99.4	Tare Wt.	
200	0.9		94.3	93.1	4.75	1.5		99.0	Wt. of Dry Soil	=W
Pan	37.7				10	1.3		98.7	Moisture Content	%
Total	40.0								Dry Wt. of Sample from Initial Moisture	
Unwashed Wt. =									=(100xWet Soil Wt.)/(100 + Initial Moisture) =	
Tare =		Wt. Passing #200 =			Total =					



B2-23

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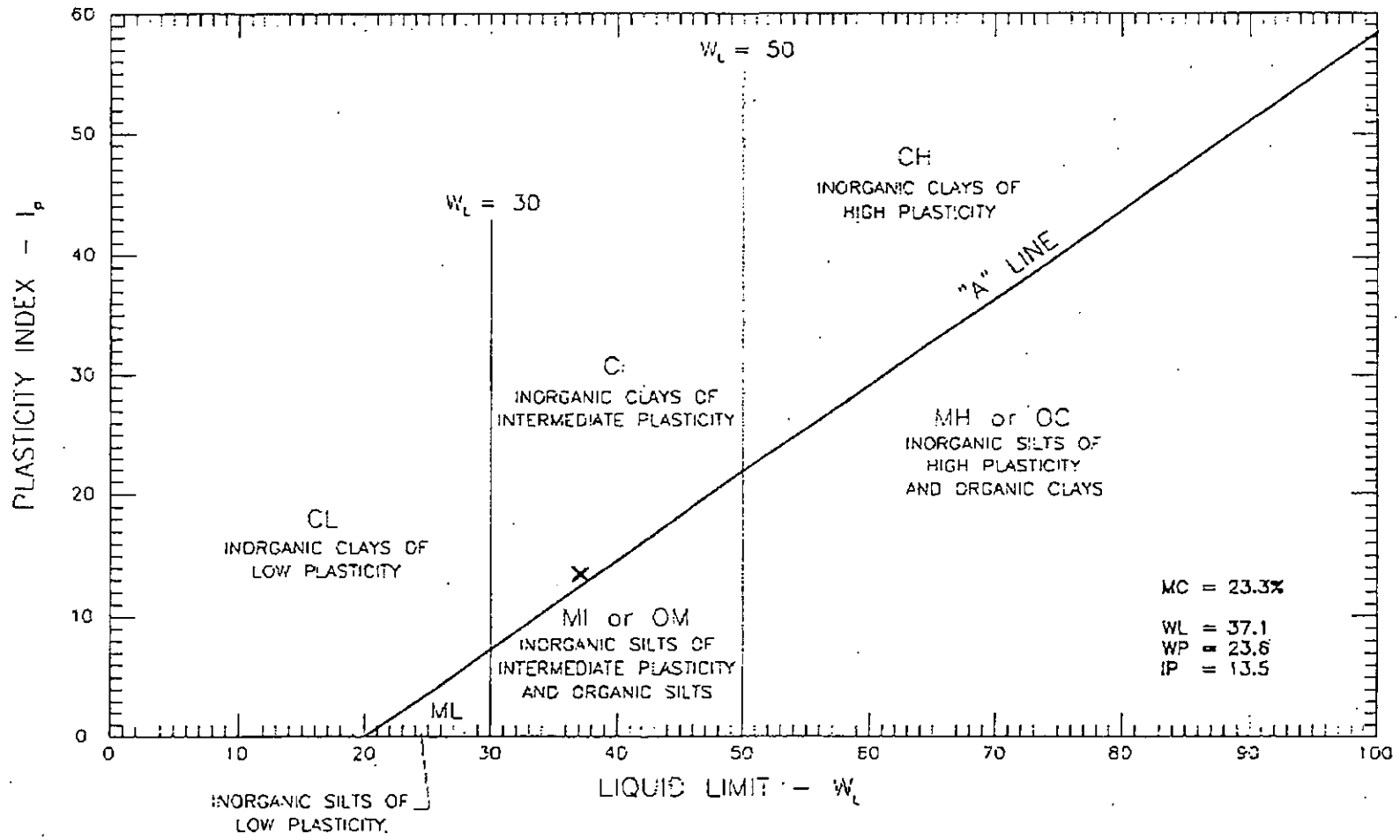
1301 Kelliher Road
Prince George, B.C. V2L 5S8
Tel (250) 564-4304 Fax (250) 564-9323

MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF ~~S105-5 (20+00)~~

SCALE:	DATE:
N.T.S	2006/06/16
PROJECT NO:	DRAWING NO.
K-2036	2036-B1

S106-3-4



GEONORTH ENGINEERING LTD. 1301 Kelther 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 TAILINGS STORAGE FACILITY ATTERBERG LIMITS OF SIDE ~~4~~ 5	SCALE: N.T.S.	DATE: 2006/05/15
		PROJECT NO: K-2036	DRAWING NO. 2036-B6

S106-3-4

GeoNorth Engineering

Hydrometer Analysis

Test Designation: ASTM D-422 S106-3-6

Client: Mount Polley Mining Corp. (Knight Piesold)				Date: June 16, 2006
Project Name: M.P. Construction Program - Stage 4				Project #: K-2036
Source/Location: Tailings Storage Facility				Type:
Sample #: ~~S105-6 (20+00)~~	Test #:	Hole #:	Depth: 48.0'	Time:
Sampled By: Client	Tested By: DJ			Checked By: NK
Date Sampled: 05.15.06	Date Received:			Date Tested: 06.15.06

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	0.000	0.5	37.0	23.0	0.01317				0.057	92.5	0.0
40.0	0.000	1	36.0	23.0	0.01317				0.041	90.0	0.0
40.0	0.000	2	35.0	23.0	0.01317				0.029	87.5	0.0
40.0	0.000	4	34.0	23.0	0.01317				0.021	85.0	0.0
40.0	0.000	8	33.0	23.0	0.01317				0.015	82.5	0.0
40.0	0.000	15	32.5	23.0	0.01317				0.011	81.3	0.0
40.0	0.000	30	30.0	23.0	0.01317				0.008	75.0	0.0
40.0	0.000	60	26.0	23.0	0.01317				0.006	65.0	0.0
40.0	0.000	120	22.5	23.0	0.01317				0.004	56.3	0.0
40.0	0.000	240	16.0	23.0	0.01317				0.003	40.0	0.0
40.0	0.000	480	12.0	23.0	0.01317				0.002	30.0	0.0
40.0	0.000	1440	7.0	23.0	0.01317				0.001	17.5	0.0

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

Hydrometer Sieve Analysis					Sieve Analysis				Initial Moisture Content	
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		40.0	100.0		38.1				Tare No.	
20	0.1		99.8		25.4				Wet Wt. & Tare	
40	0.1		99.5		19.0				Dry Wt. & Tare	
60	0.0		99.5		12.5				Water Wt.	
100	0.1		99.3		9.5				Tare Wt.	
200	0.2		98.8		4.75				Wt. of Dry Soil	=W
Pan	39.5				10				**Moisture Content**	%
Total	40.0								Dry Wt. of Sample from Initial Moisture	
Unwashed Wt. =									=(100xWet Soil Wt.)/(100 + Initial Moisture) =	
Tare =		Wt. Passing #200 =			Total =					

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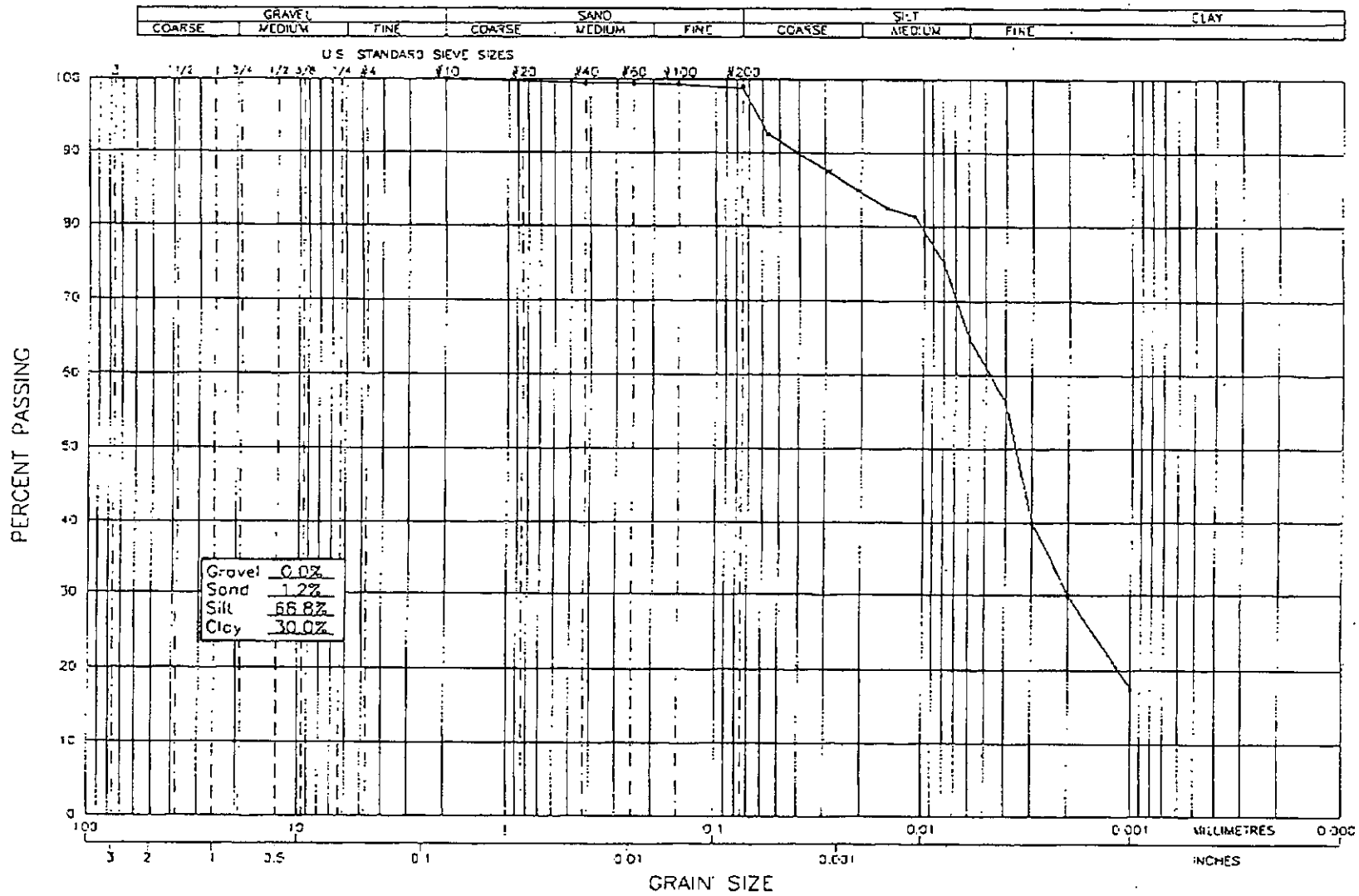

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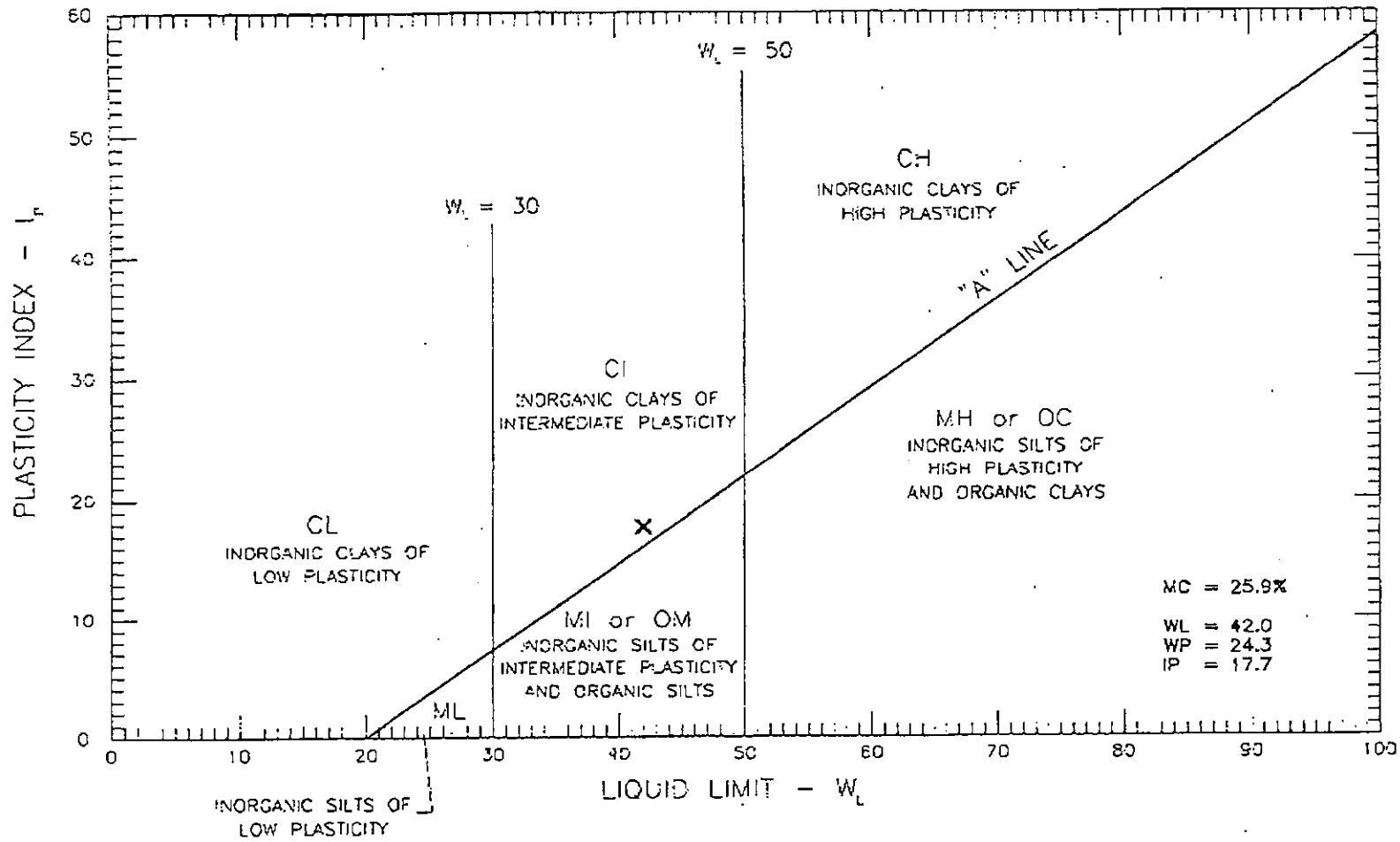
MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF ~~S105-6 (20+00)~~ S106-2-6

SCALE:	DATE:
N.T.S	2006/06/16
PROJECT NO:	DRAWING NO.
K-2036	2036-B12



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 TAILINGS STORAGE FACILITY ATTERBERG LIMITS OF ~~S106-6~~ S106-3-6	SCALE: N.T.S.	DATE: 2006/05/15
		PROJECT NO: K-2036	DRAWING NO. 2036-87

GeoNorth Engineering

Test Designation: ASTM D-422

S106-3-8

Hydrometer Analysis

Client: Mount Polley Mining Corp. (Knight Piesold)			Date: June 21, 2006
Project Name: M.P.Construction Program - Stage 4			Project #: K-2036
Source/Location: Tallings Storage Facility			Type:
Sample #: ~~S105-8 (20+06)~~	Test #:	Hole #:	Depth: 58'	Time:
Sampled By: Client	Tested By: DJ		Checked By: NK
Date Sampled: 05.16.06	Date Received:		Date Tested: 06.19.06

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	0.000	0.5	33.5	21.0	0.01348				0.066	83.8	0.0
40.0	0.000	1	26.5	21.0	0.01348				0.045	66.3	0.0
40.0	0.000	2	22.5	21.0	0.01348				0.033	56.3	0.0
40.0	0.000	4	16.5	21.0	0.01348				0.024	41.3	0.0
40.0	0.000	8	11.0	21.0	0.01348				0.018	27.5	0.0
40.0	0.000	15	7.5	21.0	0.01348				0.013	18.8	0.0
40.0	0.000	30	5.5	21.0	0.01348				0.009	13.8	0.0
40.0	0.000	60	3.0	21.0	0.01348				0.007	7.5	0.0
40.0	0.000	120	2.5	21.0	0.01348				0.005	6.3	0.0
40.0	0.000	240	2 0	21.0	0.01348				0.003	5.0	0.0
40.0	0.000	480	1.0	21.0	0.01348				0.002	2.5	0.0
40.0	0.000	1440	0.5	21.0	0.01348				0.001	1.3	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		40.0	100.0	
20	0.1		99.8	
40	0.1		99.5	
60	0.1		99.3	
100	0.1		99.0	
200	0.1		98.8	
Pan	39.5			
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			
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) =	

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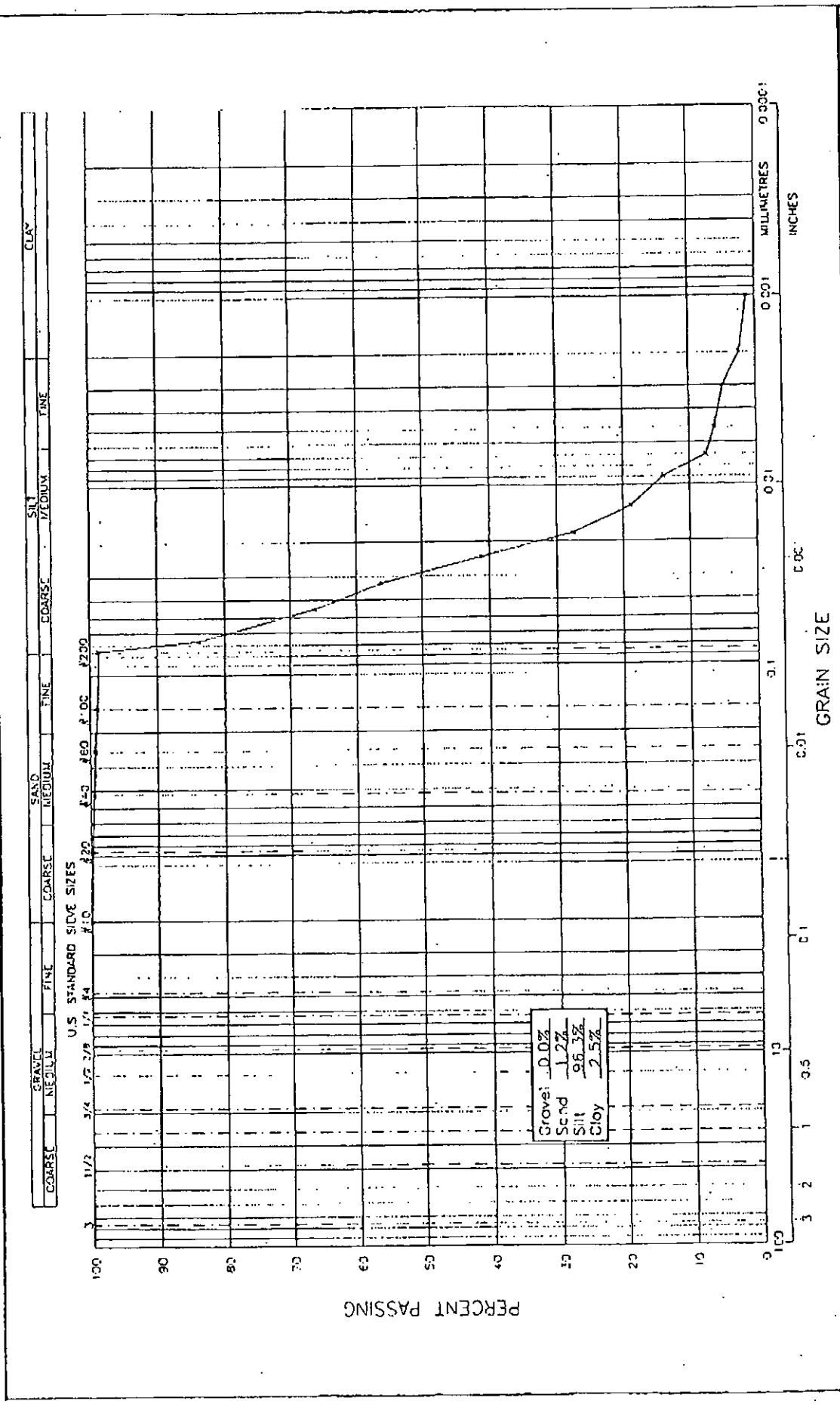

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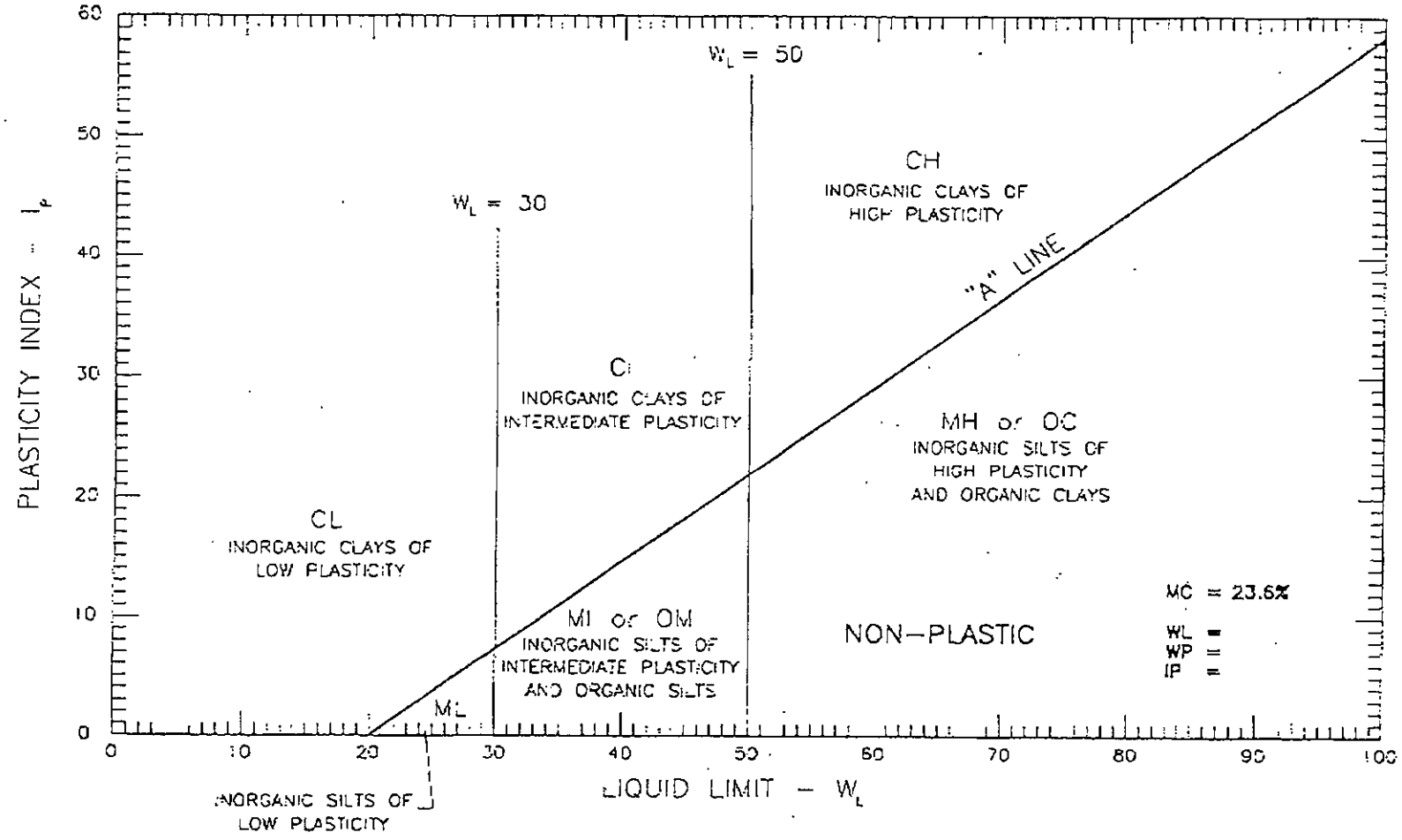
MOUNT POLLEY MINING CORP.
M.P. CONSTRUCTION PROGRAM STAGE 4
TAILINGS STORAGE FACILITY
GRAIN SIZE ANALYSIS OF ~~SM5-8 (20+00)~~ SM06-3-8

SCALE: N.T.S.
PROJECT NO: K-2036
DATE: 2006/06/12
DRAWING NO. 2036-B-6

B2-29



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 ~~SILT~~ S106-3-8	SCALE: N.T.S.	DATE: 2006/06/15
		PROJECT NO: K-2036	DRAWING NO. 2036-B5

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GEONORTH ENGINEERING LTD.

CONSOLIDATION TEST - PARAMETERS & CALCULATIONS Job No.: K-2036

CLIENT: Mount Polley Mining Corperation
PROJECT: MCPC Stage 4
HOLE NO: S104-S1 REPORTING BY: DHG
DEPTH: 38.5' DATE OF REPORTING: 2006/07/07

APPARATUS:

RING HT:	20.12	mm	LOAD FACTOR:	10	
RING DIA:	63.5	mm	UNIT PRESSURE:	31.0	kPa / kg
RING AREA (A):	31.67	cm^2			

EQUATIONS

$G_s = 2.68$ $\quad r_w = 1.0 \ g/cm^3$

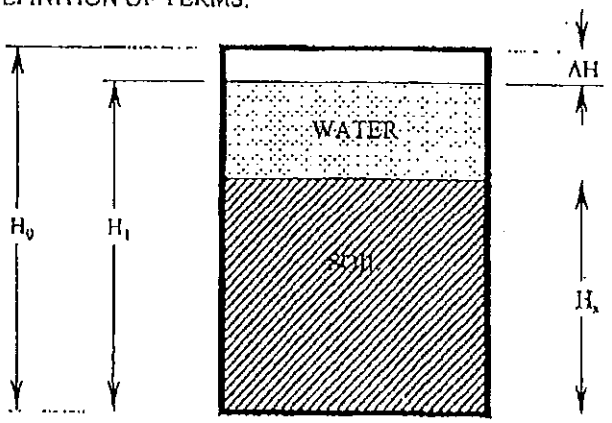
$H_s = M_s / (A * G_s * r_w)$ $\quad H_s = 9.63 \ mm$

$e_1 = (H_1 - H_s) / H_s = (H_1/H_s) - 1$

$C_v = 0.848 * H^2 / t_{90}$ $\quad C_v = 0.196 * H^2 / t_{50}$

$M_v = (1/H_0) * ((H_0 - H_1)/(\sigma_1 - \sigma_0))$

DEFINITION OF TERMS:



GEONORTH ENGINEERING LTD.

CLIENT: Mount Polley Mining Corperation HOLE: S104-S1 START DATE: PROJECT NO: K-2036

PROJECT: MCPC Stage 4 DEPTH: 38.5' END DATE:

LOAD NO.	APPLIED LOAD	PRESSURE	FINAL DIAL	FINAL DIAL	CHANGE	SAMPLE HEIGHT (H_i)	ΔH (H_0 - $H1$)	VOID HEIGHT	VOID RATIO	FITTING TIME t_{90}	FITTING TIME t_{50}	AVERAGE THICKNESS PER DRAINAGE SURFACE ($H_i/2$)	COEFFICIENT OF CONSOLIDATION, C_v t_{90}	COEFFICIENT OF CONSOLIDATION, C_v t_{50}	COEFFICIENT OF VOLUME COMPRESSIBILITY M_v
	(kg)	(kPa)	(in.)	(mm)	(mm)		(mm)	(mm)		(min)		(mm)	(cm²/sec)		(m²/kN)
0	0.0	0	0.19356	4.916		20.120		10.494	1.09						
					0.945		0.945			12.22		9.824	0.0011		0.0015
1	1.0	31.0	0.15636	3.972		19.175		9.549	0.99						
					0.400		1.345			27.83		9.488	0.00046		0.0023
2	2.0	61.9	0.14062	3.572		18.775		9.149	0.95						
					0.641		1.985			25.64		9.228	0.00047		0.0017
3	4.0	123.9	0.11540	2.931		18.135		8.509	0.88						
					0.719		2.704			15.61		8.888	0.00072		0.0012
4	8.0	247.7	0.08709	2.212		17.416		7.790	0.81						
					0.785		3.489			14.83		8.512	0.00069		0.0008
5	16.0	495.4	0.05619	1.427		16.631		7.005	0.73						
					0.495		3.984			5.88		8.192	0.0016		0.0010
6	24.0	743.1	0.03670	0.932		16.136		6.510	0.68						
					-0.188		3.797			N/A		8.115	N/A		N/A
7	8.0	247.7	0.04409	1.120		16.323		6.697	0.70						
					-0.151		3.646			N/A		8.199	N/A		N/A
8	4.0	123.9	0.05003	1.271		16.474		6.848	0.71						
					-0.347		3.298			N/A		8.324	N/A		N/A
9	1.0	31.0	0.06370	1.618		16.822		7.195	0.75						

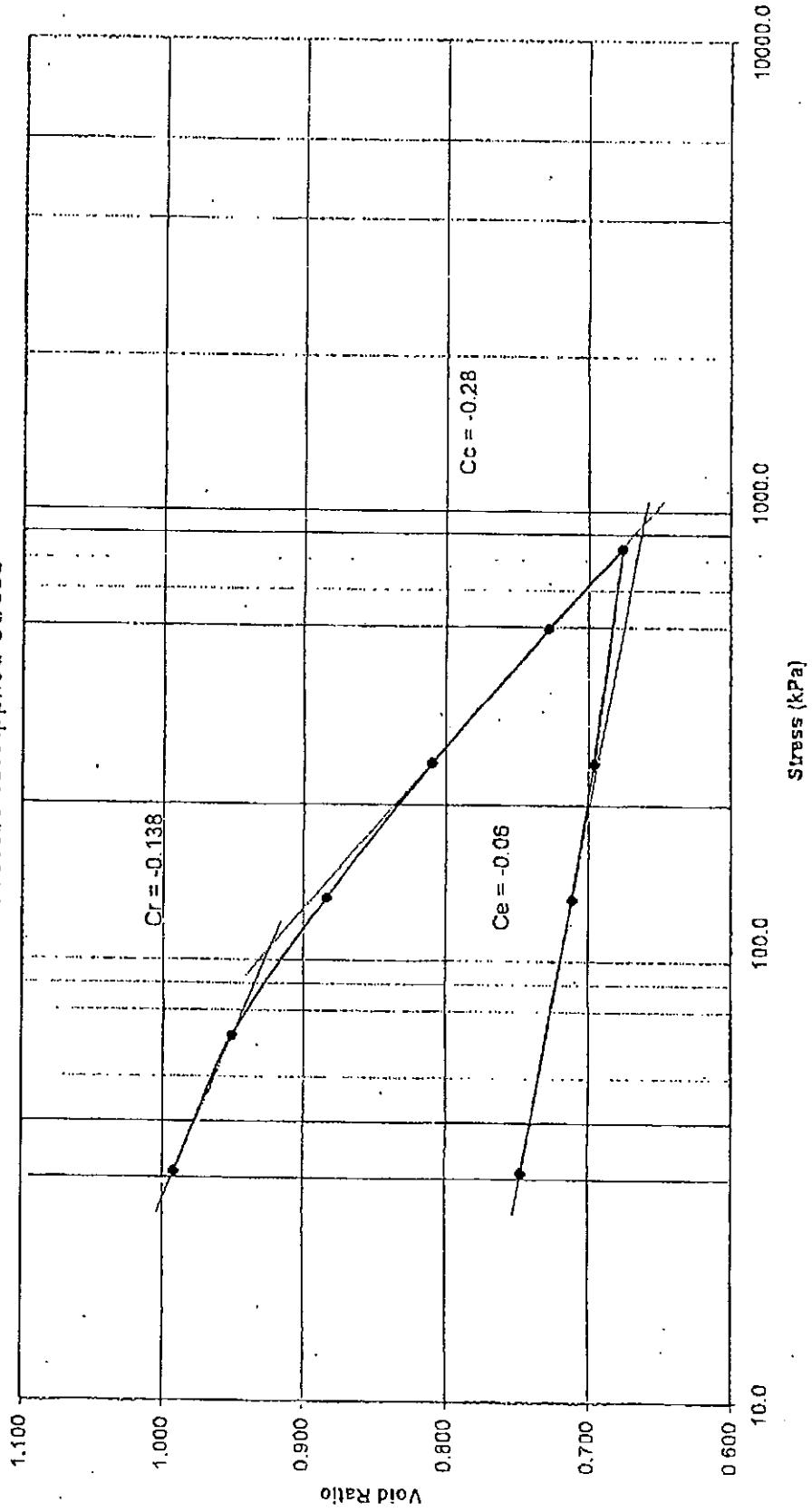
GEONORTH ENGINEERING LTD.

CLIENT: Mount Polley Mining Corporation
PROJECT: MCPC Stage 4

HOLE S104-S1
DEPTH: 38.5'

START DATE: 2006:06:22
END DATE: 2006:07:04

PROJECT NO: K-2036



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CONSOLIDATION TEST - SAMPLE INFORMATION SHEET JOB NO.: K-2036

CLIENT: Mount Polley Mining Corperation

PROJECT: MCPC Stage 4

HOLE NO: S104-S1 PREPARED BY: DHG

DEPTH: 38.5' DATE OF PREP.: 2006/06/22

[X] COMPLETE SOIL DESCRIPTION: Claycy silt and silty clay, mixed.

[ ] SWELL

[ ] NO REBOUND UNIFIED CLASSIFICATION: ML to CH

RING PARAMETERS:

RING NO: GNEL HEIGHT: 20.12 mm WEIGHT: 63.9 g

DIAMETER: 63.5 mm AREA: 63.7E-6 m^2

DATA GATHERED DURING SAMPLE PREPARATION:

7.	Wt. of Ring:	=	63.9	g
4.	Wt. of Ring + Soil + Water:	=	180.0	g
-	Pocket penetrometer*	=		kPa
-	Torvane*	=	230	kPa

(* conduct on adjacent, undisturbed material)

All data above this line should be complete BEFORE starting consolidation!

NATURAL MOISTURE CONTENT:
(OF ADJACENT MATERIAL)

Tare	194.9	g
Tare + Wet Soil	663.7	g
Tare + Dry Soil	529.0	g
Wt. Dry Soil	334.1	g
Wt. Water	134.7	g
Moisture Content	40.3	%

DATA GATHERED AT THE END OF CONSOLIDATION:

1A.	Wt. of Tare	=	13.8	g
1.	Wt. of Tare + Ring + Wet Soil	=	184.8	g
2.	Wt. of Tare + Ring + Dry Soil	=	159.4	g
-	Pocket Penetrometer	=	250.0	kPa
-	Torvane	=		kPa

CALCULATED PARAMETERS:

3.	Wt. of Water (end)	(1.-2.)	=	25.4	g
5.	Wt. of Ring + Soil	(2.-1A.)	=	145.6	g
6.	Wt. of Water (start)	(4.-5.)	=	34.4	g
8.	Wt. of Oven Dry Soil	(5.-7.)	=	81.7	g
-	Water Content (start)	(6./8. x 100)	=	42.1	%
-	Water Content (end)	(3./8. x 100)	=	31.1	%

REMARKS:

Shelby tube sample partially disturbed due to shipping conditions. Tube contained 50 cm of soil: starting at the top, approximately 12 cm of soft, wet silt or clay (assumed to be drill cuttings) over 8 cm of fissured silt and clay, over approximately 30 cm of layered silty sand. MC carried out on sand in addition to MC as part of Atterberg limits on fine-grained sample.

GEONORTH ENGINEERING LTD.

CONSOLIDATION TEST - SAMPLE INFORMATION SHEET JOB NO.: K-2036

CLIENT: Mount Polley Mining Corperation
PROJECT: MCPC Stage 4
HOLE NO: S104-S1 PREPARED BY: DHG
DEPTH: 38.5' DATE OF PREP.: 2006/06/22

[X] COMPLETE SOIL DESCRIPTION: Clayey silt and silty clay, mixed.
[ ] SWELL
[ ] NO REBOUND UNIFIED CLASSIFICATION: ML to CH

RING PARAMETERS:
RING NO: GNEL HEIGHT: 20.12 mm WEIGHT: 63.9 g
DIAMETER: 63.5 mm VOLUME: 0.0000637 m³

DATA GATHERED DURING SAMPLE PREPARATION:

7. Wt. of Ring: = 63.9 g
4. Wt. of Ring + Soil + Water: = 180.0 g
- Pocket penetrometer* = kPa
- Torvane* = 230 kPa
(* conduct on adjacent, undisturbed material)

INITIAL WET DENSITY: 1822 kg/m³

NATURAL MOISTURE CONTENT: (OF ADJACENT MATERIAL)

Tare	194.9 g
Tare + Wet Soil	663.7 g
Tare + Dry Soil	529.0 g
Wt. Dry Soil	334.1 g
Wt. Water	134.7 g
Moisture Content	40.3 %

All data above this line should be complete BEFORE starting consolidation!

DATA GATHERED AT THE END OF CONSOLIDATION:

1A. Wt. of Tare = 13.8 g
1. Wt. of Tare + Ring + Wet Soil = 184.8 g
2. Wt. of Tare + Ring + Dry Soil = 159.4 g
- Pocket Penetrometer = 250.0 kPa
- Torvane = kPa

CALCULATED PARAMETERS:

3. Wt. of Water (end) (1.-2.) = 25.4 g
5. Wt. of Ring + Soil (2.-1A.) = 145.6 g
6. Wt. of Water (start) (4.-5.) = 34.4 g
8. Wt. of Oven Dry Soil (5.-7.) = 81.7 g
- Water Content (start) (6./8. x 100) = 42.1 %
- Water Content (end) (3./8. x 100) = 31.1 %

REMARKS:

Shelby tube sample partially disturbed due to shipping conditions. Tube contained 50 cm of soil: starting at the top, approximately 12 cm of soft, wet silt or clay (assumed to be drill cuttings) over 8 cm of fissured silt and clay, over approximately 30 cm of layered silty sand. MC carried out on sand in addition to MC as part of Atterberg limits on fine-grained sample

GEONORTH ENGINEERING LTD.

CONSOLIDATION TEST - LOAD INCREMENT DATA SHEET SHEET NO.: 1 of 3

CLIENT: Mount Polley Mining Corporation JOB NO: K-2036

PROJECT: MCPC Stage 4 TESTED BY:

HOLE NO: S104-S1 START DATE 2006/06/23 MACHINE NO.: C230-A

DEPTH: 38.5' DIAL NO. Baty DIAL UNITS: Inches

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
8:43:00	0	0.19356
8:43:06	0.1	0.18060
8:43:15	0.25	0.17930
8:43:30	0.5	0.17810
8:43:45	0.75	0.17730
8:44:00	1	0.17660
8:44:30	1.5	0.17540
8:45:00	2	0.17460
8:47:00	4	0.17180
8:51:30	8.5	0.16723
8:58:00	15	0.16465
9:15:00	32	0.16110
9:43:00	60	0.15941
10:43:00	120	0.15839
12:43:00	240	0.15769
16:41:00	478	0.15721
16:36:00	1913	0.15636

Load No.: 1 Load Applied (kg): 1.0

Date: 2006/06/23 Total Load (kg): 1.0

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
8:43:00	0	0.15636
8:43:06	0.1	0.15530
8:43:15	0.25	0.15480
8:43:30	0.5	0.15430
8:43:45	0.75	0.15398
8:44:00	1	0.15360
8:44:30	1.5	0.15313
8:45:00	2	0.15268
8:47:00	4	0.15169
8:51:00	8	0.14990
8:58:00	15	0.14811
9:24:00	41	0.14551
9:56:00	73	0.14423
10:43:00	120	0.14333
13:08:00	265	0.14229
17:08:00	505	0.14148
8:27:00	1424	0.14062

Load No.: 2 Load Applied (kg): 1.0

Date: 2006/06/26 Total Load (kg): 2.0

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
8:32:00	0	0.14062
8:32:06	0.1	0.13851
8:32:15	0.25	0.13738
8:32:30	0.5	0.13688
8:32:45	0.75	0.13615
8:33:00	1	0.13549
8:33:30	1.5	0.13453
8:34:00	2	0.13372
8:36:00	4	0.13120
8:40:00	8	0.12803
8:47:00	15	0.12492
9:02:00	30	0.12173
9:32:00	60	0.11945
10:33:00	121	0.11799
12:32:00	240	0.11699
16:32:00	480	0.11622
8:14:00	1422	0.11540

Load No. 3 Load Applied (kg): 2.0

Date: 2006/06/27 Total Load (kg): 4.0

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
8:19:00	0	0.11540
8:19:06	0.1	0.11250
8:19:15	0.25	0.11130
8:19:30	0.5	0.11010
8:19:45	0.75	0.10920
8:20:00	1	0.10850
8:20:30	1.5	0.10710
8:21:00	2	0.10615
8:23:00	4	0.10315
8:27:00	8	0.09975
8:34:00	15	0.09636
8:49:00	30	0.09302
9:19:00	60	0.09105
10:19:00	120	0.08975
12:19:00	240	0.08864
16:19:00	480	0.08795
8:16:00	1437	0.08709

Load No. 4 Load Applied (kg): 4.0

Date: 2006/06/28 Total Load (kg): 8.0

GEONORTH ENGINEERING LTD.

CONSOLIDATION TEST - LOAD INCREMENT DATA SHEET

SHEET NO.: 2 of 3

CLIENT: Mount Polley Mining Corperation

JOB NO: K-2036

PROJECT: MCPC Stage 4

TESTED BY:

HOLE NO: S104-S1

START DATE: 2006/06/23

MACHINE NO.: C230-A

DEPTH: 38.5'

DIAL NO.: Baty

DIAL UNITS: Inches

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
8:19:00	0	0.08709
8:19:06	0.1	0.08220
8:19:15	0.25	0.08103
8:19:30	0.5	0.07972
8:19:45	0.75	0.07889
8:20:00	1	0.07800
8:20:30	1.5	0.07681
8:21:00	2	0.07560
8:23:00	4	0.07220
8:27:00	8	0.06810
8:34:00	15	0.06482
8:51:00	32	0.06199
9:19:00	60	0.06018
10:19:00	120	0.05885
12:20:00	241	0.05788
16:19:00	480	0.05709
8:21:00	1442	0.05619

Load No. 5 — Load Applied (kg): 8.0

Date: 2006/06/29 — Total Load (kg): 16.0

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
8:26:00	0	0.05619
8:26:06	0.1	0.05370
8:26:15	0.25	0.05280
8:26:30	0.5	0.05205
8:26:45	0.75	0.05150
8:27:00	1	0.05105
8:27:30	1.5	0.05040
8:28:00	2	0.04980
8:30:00	4	0.04827
8:34:00	8	0.04643
8:41:00	15	0.04463
8:56:00	30	0.04290
9:26:00	60	0.04135
10:26:00	120	0.04010
12:30:00	244	0.03901
17:19:00	533	0.03810
17:54:00	2008	0.03688

Load No. 6 — Load Applied (kg): 8.0

Date: 2006/06/30 — Total Load (kg): 24.0

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
10:47:00	0	0.03670
10:47:30	0.5	0.04135
10:48:00	1	0.04209
10:49:00	2	0.04250
10:51:00	4	0.04297
11:02:00	15	0.04338
11:49:30	62.5	0.04372
12:48:00	121	0.04385

Load No. 7 — Load Applied (kg): -16.0

Date: 2006/07/04 — Total Load (kg): 8.0

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
13:21:00	0	0.04409
13:21:30	0.5	0.04633
13:22:00	1	0.04672
13:23:00	2	0.04731
13:25:00	4	0.04796
13:37:00	16	0.04905
14:23:00	62	0.04976
15:22:30	121.5	0.05003

Load No. 8 — Load Applied (kg): -4.0

Date: 2006/07/04 — Total Load (kg): 4.0

GEONORTH ENGINEERING LTD.

CONSOLIDATION TEST - LOAD INCREMENT DATA SHEET SHEET NO.: 3 of 3

CLIENT: Mount Polley Mining Corperation JOB NO: K-2036
PROJECT: MCPC Stage 4 TESTED BY:
HOLE NO: S104-S1 START DATE 2006/06/23 MACHINE NO.: C230-A
DEPTH: 38.5' DIAL NO. Baty DIAL UNITS: Inches

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
15:26:00	0	0.05003
15:26:30	0.5	0.05290
15:27:00	1	0.05352
15:28:00	2	0.05450
15:30:00	4	0.05582
15:46:00	20	0.05985
16:26:00	60	0.06241
18:00:00	154	0.06370

Load No. 9 Load Applied (kg) : -3.0
Date: 2006/07/04 Total Load (kg) : 1.0

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING
		0.06370

Load No. Load Applied (kg) :
Date: Total Load (kg) :

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING

Load No. Load Applied (kg) :
Date: Total Load (kg) :

CLOCK TIME (24:00:00)	ELAPSED TIME (min)	DIAL READING

Load No. Load Applied (kg) :
Date: Total Load (kg) :

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APPENDIX C

NUCLEAR DENSOMETER RESULTS

(Pages C1 to C5)

Revised March 5, 2007

Knight Piésold CONSULTING

FIELD COMPACTION TESTS
NUCLEAR GAUGE

PROJECT NO.: 101-01/10

DATE:

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	Perimeter Embankment 32+00	944.3	0.2	2030.0	10.6	1910.5	11.6	94.1	95.0	Fail
2	Perimeter Embankment 31+00	944.3	0.2	2030.0	10.6	1987.5	10.7	97.9	95.0	Pass
3	Perimeter Embankment 30+00	944.3	0.2	2030.0	10.6	1958.0	10.5	96.5	95.0	Pass
4	Perimeter Embankment 29+00	944.3	0.2	2030.0	10.6	1961.0	13.1	96.6	95.0	Pass
5	Perimeter Embankment 33+00	944.3	0.2	2030.0	10.6	2008	10.0	98.9	95.0	Pass
6	Perimeter Embankment 34+00	944.3	0.2	2030.0	10.6	1921.5	12.8	94.7	95.0	Fail
7	Perimeter Embankment 35+00	944.3	0.2	2030.0	10.6	1935	11.7	95.3	95.0	Pass
8	Perimeter Embankment 36+00	944.3	0.2	2030.0	10.6	1979	12.1	97.5	95.0	Pass
9	Perimeter Embankment 37+00	944.3	0.2	2030.0	10.6	2036	10.3	100.3	95.0	Pass
10	Perimeter Embankment 38+00	944.3	0.2	2030.0	10.6	2011	10.2	99.1	95.0	Pass
11	Perimeter Embankment 45+00	944.3	0.2	2030.0	10.6	1873	13.1	92.3	95.0	Fail
12	Perimeter Embankment 45+00	944.3	0.2	2030.0	10.6	1923	12.1	94.7	95.0	Fail
13	Perimeter Embankment 44+00	944.3	0.2	2030.0	10.6	1969.5	12.3	97.0	95.0	Pass
14	Perimeter Embankment 44+00	944.6	0.2	2030.0	10.6	2040	11.3	100.5	95.0	Pass
15	Perimeter Embankment 40+00	944.3	0.2	2030.0	10.6	2025.5	11.2	99.8	95.0	Pass
16	39+00	944.3	0.2	2030.0	10.6	2047.5	9.9	100.9	95.0	Pass
17	Borrow Pit 3		0.2	2030.0	10.6	1983.5	12.3	97.7	95.0	Pass
18	30+00	944.3	0.2	2030.0	10.6	1965	11.3	96.8	95.0	Pass
19	43+00	944.6	0.2	2030.0	10.6	1984.5	10.1	97.8	95.0	Pass
20	29+00	944.6	0.2	2030.0	10.6	2009	11.4	99.0	95.0	Pass
21	30+00	944.6	0.2	2030.0	10.6	2043	11.6	100.6	95.0	Pass
22	32+00	944.9	0.2	2030.0	10.6	1955.5	11.6	96.3	95.0	Pass
23	31+00	944.9	0.2	2030.0	10.6	1979	12.5	97.5	95.0	Pass
24	30+00	944.9	0.2	2030.0	10.6	2019	11.5	99.5	95.0	Pass
25	28+00	944.9	0.2	2030.0	10.6	2007	11.4	98.9	95.0	Pass
26	28+00	944.6	0.2	2030.0	10.6	1931	12.9	95.1	95.0	Pass
27	29+00	944.6	0.2	2030.0	10.6	1754.5	16.4	86.4	95.0	Fail
28	29+00	944.6	0.2	2030.0	10.6	1898.5	12.9	93.5	95.0	Fail
29	30+00	944.6	0.2	2030.0	10.6	1894	15.6	93.3	95.0	Fail
30	27+00	944.3	0.2	2030.0	10.6	2035	10.8	100.2	95.0	Pass
31	25+00	944.3	0.2	2030.0	10.6	1976.0	12.7	97.3	95.0	Pass
32	16+00	944.6	0.2	2030.0	10.6	1982	11.3	97.6	95.0	Pass
33	17+00	944.3	0.2	2030.0	10.6	2050.5	8.6	101.0	95.0	Pass
34	18+00	944.3	0.2	2030.0	10.6	1989.5	9.1	98.0	95.0	Pass
35	19+00	944.3	0.2	2030.0	10.6	1953	11.7	96.2	95.0	Pass
36	26+50	944.6	0.2	2030.0	10.6	1950	10.6	96.1	95.0	Pass
37	24+50	944.6	0.2	2030.0	10.6	2020.5	10.0	99.5	95.0	Pass
38	22+50	944.6	0.2	2030.0	10.6	2027.5	10.5	99.9	95.0	Pass
39	20+50	944.6	0.2	2030.0	10.6	2016.5	10.9	99.3	95.0	Pass
40	18+50	944.6	0.2	2030.0	10.6	1977	12.7	97.4	95.0	Pass
41	27+00	944.9	0.2	2030.0	10.6	2025.0	12.2	99.8	95.0	Pass
42	25+00	944.9	0.2	2030.0	10.6	1911.0	14.0	94.1	95.0	Fail
43	26+00	944.9	0.2	2030.0	10.6	1997.0	11.6	98.4	95.0	Pass
44	43+25	944.9	0.2	2030.0	10.6	2003.0	12.3	98.7	95.0	Pass
45	42+25	944.9	0.2	2030.0	10.6	2030.0	11.7	100.0	95.0	Pass
46	41+25	944.9	0.2	2030.0	10.6	2070.0	10.3	102.0	95.0	Pass
47	40+25	944.9	0.2	2030.0	10.6	2041.0	10.9	100.5	95.0	Pass
48	43+40	944.9	0.2	2030.0	10.6	2014.0	10.5	99.2	95.0	Pass
49	44+50	945.2	0.2	2030.0	10.6	1976.0	12.4	97.3	95.0	Pass
50	42+25	945.2	0.2	2030.0	10.6	2047.0	11.8	100.8	95.0	Pass
51	43+25	945.2	0.2	2030.0	10.6	2166.0	9.7	106.7	95.0	Pass
52	44+50	945.5	0.2	2030.0	10.6	2074.0	10.5	102.2	95.0	Pass
53	41+00	945.5	0.2	2030.0	10.6	2055.0	9.6	101.2	95.0	Pass
54	43+00	945.5	0.2	2030.0	10.6	2140.0	8.8	105.4	95.0	Pass
55	25+00	944.9	0.2	2030.0	10.6	2012.0	10.4	99.1	95.0	Pass
56	24+60	945	0.2	2030.0	10.6	2001.0	10.4	98.6	95.0	Pass

Knight Piésold CONSULTING

FIELD COMPACTION TESTS
NUCLEAR GAUGE

PROJECT NO.: 101-01/10
DATE:

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
57	45+25	944	0.2	2030.0	10.6	1949.0	13.5	96.0	95.0	Pass
58	23+60	944.9	0.2	2030.0	10.6	2064.0	10.1	101.7	95.0	Pass
59	21+60	944.9	0.2	2030.0	10.6	2059.0	9.1	101.4	95.0	Pass
60	19+60	944.9	0.2	2030.0	10.6	2015.0	9.5	99.3	95.0	Pass
61	45+30	946	0.2	2030.0	10.6	2067.0	10.7	101.8	95.0	Pass
62	44+10	946	0.2	2030.0	10.6	2090.0	9.1	103.0	95.0	Pass
63	43+62	946	0.2	2030.0	10.6	2044.0	9.7	100.7	95.0	Pass
64	18+00	945	0.2	2030.0	10.6	2052.0	9.2	101.1	95.0	Pass
65	37+50	945.2	0.2	2030.0	10.6	2027.0	11.4	99.9	95.0	Pass
66	36+50	944.9	0.2	2030.0	10.6	2119.0	7.8	104.4	95.0	Pass
67	35+50	944.9	0.2	2030.0	10.6	2100.0	8.0	103.4	95.0	Pass
68	33+50	944.9	0.2	2030.0	10.6	2169.0	6.5	106.8	95.0	Pass
69	32+00	944.6	0.2	2030.0	10.6	2105.0	8.5	103.7	95.0	Pass
70	27+00	945.2	0.2	2030.0	10.6	2030.0	10.8	100.0	95.0	Pass
71	25+50	945.2	0.2	2030.0	10.6	1999.0	11.6	98.5	95.0	Pass
72	23+50	945.2	0.2	2030.0	10.6	1993.0	9.3	98.2	95.0	Pass
73	20+00	945.4	0.2	2030.0	10.6	2051.0	8.7	101.0	95.0	Pass
74	18+00	945.2	0.2	2030.0	10.6	2034.0	9.0	100.2	95.0	Pass
75	16+00	945.2	0.2	2030.0	10.6	2067.0	8.7	101.8	95.0	Pass
76	45+25	946	0.2	2030.0	10.6	2054.0	9.0	101.2	95.0	Pass
77	45+45	946	0.2	2030.0	10.6	2050.0	11.9	101.0	95.0	Pass
78	45+30	946	0.2	2030.0	10.6	1983.0	12.4	97.7	95.0	Pass
79	41+00	946	0.2	2030.0	10.6	2100.0	10.7	103.4	95.0	Pass
80	39+75	946	0.2	2030.0	10.6	2045.0	11.5	100.7	95.0	Pass
81	38+50	946	0.2	2030.0	10.6	1994.0	12.1	98.2	95.0	Pass
82	34+00	945.2	0.2	2030.0	10.6	2014.0	12.1	99.2	95.0	Pass
83	34+00	945.5	0.2	2030.0	10.6	2090.0	10.6	103.0	95.0	Pass
84	32+00	944.6	0.2	2030.0	10.6	1989.0	12.3	98.0	95.0	Pass
85	32+50	944.6	0.2	2030.0	10.6	2048.0	11.0	100.9	95.0	Pass
86	32+00	944.6	0.2	2030.0	10.6	2021.0	12.5	99.6	95.0	Pass
87	32+50	944.6	0.2	2030.0	10.6	2047.0	10.2	100.8	95.0	Pass
88	23+00	945.8	0.2	2030.0	10.6	2063.0	10.3	101.6	95.0	Pass
89	15+75	944.6	0.2	2030.0	10.6	2017.0	7.3	99.4	95.0	Pass
90	28+50	945.5	0.2	2030.0	10.6	2014.0	11.2	99.2	95.0	Pass
91	29+50	945.8	0.2	2030.0	10.6	2058.0	9.9	101.4	95.0	Pass
92	32+00	945.8	0.2	2030.0	10.6	2093.0	9.4	103.1	95.0	Pass
93	35+00	946	0.2	2030.0	10.6	2166.0	8.5	106.7	95.0	Pass
94	32+25	944.6	0.2	2030.0	10.6	2020.0	11.6	99.5	95.0	Pass
95	22+50	945.8	0.2	2030.0	10.6	2041.0	11.4	100.5	95.0	Pass
96	23+50	945.8	0.2	2030.0	10.6	2040.0	10.8	100.5	95.0	Pass
97	25+50	945.3	0.2	2030.0	10.6	2109.0	9.2	103.9	95.0	Pass
98	25+50	945.6	0.2	2030.0	10.6	2047.0	11.3	100.8	95.0	Pass
99	25+00	944.5	0.2	2030.0	10.6	1972.0	11.7	97.1	95.0	Zone U
100	39+20	945.5	0.2	2030.0	10.6	2022.0	13.5	99.6	95.0	Pass
101	40+00	945.8	0.2	2030.0	10.6	1993.0	11.5	98.2	95.0	Pass
102	15+75	945	0.2	2030.0	10.6	1747.0	15.7	86.1	95.0	Zone U
103	18+00	945.8	0.2	2030.0	10.6	1913.0	13.4	94.2	95.0	Fail
104	43+50	946.5	0.2	2030.0	10.6	2004.0	9.9	98.7	95.0	Pass
105	41+50	946.5	0.2	2030.0	10.6	2115.0	9.4	104.2	95.0	Pass
106	39+50	946.5	0.2	2030.0	10.6	1988.0	11.3	97.9	95.0	Pass
107	38+50	946.5	0.2	2030.0	10.6	2016.0	12.5	99.3	95.0	Pass
108	37+00	945.5	0.2	2030.0	10.6	2045.0	10.8	100.7	95.0	Pass
109	32+00	944.6	0.2	2030.0	10.6	2101.0	10.2	103.5	95.0	Pass
110	33+00	946	0.2	2030.0	10.6	2035.0	10.1	100.2	95.0	Pass
111	40+00	946	0.2	2030.0	10.6	2171.0	10.7	106.9	95.0	Pass
112	30+00	944.8	0.2	2030.0	10.6	1996.0	11.7	98.3	95.0	Pass

Knight Piésold CONSULTING

FIELD COMPACTION TESTS NUCLEAR GAUGE

PROJECT NO.: 101-01/10

DATE:

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
113	34+00	946	0.2	2030.0	10.6	2018.0	10.5	99.4	95.0	Pass
114	32+80	946.1	0.2	2030.0	10.6	1925.0	13.9	94.8	95.0	Fail
115	34+00	946.3	0.2	2030.0	10.6	1914.0	13.8	94.3	95.0	Fail
116	18+50	945.5	0.2	2030.0	10.6	1981.0	11.4	97.6	95.0	Pass
117	7+05	945.5	0.2	2030.0	10.6	2140.0	9.4	105.4	95.0	Pass
118	7+20	945.5	0.2	2030.0	10.6	2069.0	10.0	101.9	95.0	Pass
119	Test Canceled		0.2	2030.0	10.6			-	95.0	Pass
120	18+50	947.5	0.2	2030.0	10.6	2147.0	8.2	105.8	95.0	Pass
121	20+00	947.5	0.2	2030.0	10.6	2069.0	9.7	101.9	95.0	Pass
122	23+00	947.3	0.2	2030.0	10.6	1985.0	12.0	97.8	95.0	Pass
123	17+50	948	0.2	2030.0	10.6	2067.0	10.8	101.8	95.0	Pass
124	22+90	947.5	0.2	2030.0	10.6	2070.0	8.1	102.0	95.0	Pass
125	22+80	947.5	0.2	2030.0	10.6	2106.0	10.3	103.7	95.0	Pass
126	20+70	947.5	0.2	2030.0	10.6	2041.0	8.3	100.5	95.0	Pass
127	19+00	948	0.2	2030.0	10.6	2020.0	11.7	99.5	95.0	Pass
128	17+25	947.2	0.2	2030.0	10.6	2052.0	10.4	101.1	95.0	Pass
129	19+00	948	0.2	2030.0	10.6	2010.0	11.4	99.0	95.0	Pass
130	Borrow Pit 3		0.2	2030.0	10.6	1994.0	12.8	98.2	95.0	Pass
131	22+00	947.2	0.2	2030.0	10.6	2073.0	8.9	102.1	95.0	Pass
132	23+20	947	0.2	2030.0	10.6	2041.0	9.7	100.5	95.0	Pass
133	24+00	946.8	0.2	2030.0	10.6	2017.0	11.2	99.4	95.0	Pass
134	24+90	946.5	0.2	2030.0	10.6	2072.0	11.7	102.1	95.0	Pass
135	25+80	946.5	0.2	2030.0	10.6	1969.0	13.1	97.0	95.0	Pass
136	26+20	946	0.2	2030.0	10.6	1947.0	14.0	95.9	95.0	Pass
137	26+20	946	0.2	2030.0	10.6	2008.0	12.2	98.9	95.0	Pass
138	25+80	946+50	0.2	2030.0	10.6	2039.0	11.0	100.4	95.0	Pass
139	20+20	947.8	0.2	2030.0	10.6	1949.0	8.2	96.0	95.0	Pass
140	21+20	947.8	0.2	2030.0	10.6	1983.0	8.5	97.7	95.0	Pass
141	22+10	947.8	0.2	2030.0	10.6	1695.0	20.0	83.5	95.0	Fail
142	22+00	947.7	0.2	2030.0	10.6	2055.0	11.3	101.2	95.0	Pass
143	23+00	947	0.2	2030.0	10.6	2123.0	10.4	104.6	95.0	Pass
144	24+10	946.5	0.2	2030.0	10.6	2075.0	10.0	102.2	95.0	Pass
145	25+50	946	0.2	2030.0	10.6	2015.0	10.6	99.3	95.0	Pass
146	25+70	946	0.2	2030.0	10.6	2048.0	10.1	100.9	95.0	Pass
147	This is a retest for test 141		0.2	2030.0	10.6	1740.0	18.8	85.7	95.0	Fail
148	26+50	946.5	0.2	2030.0	10.6	1984.0	10.8	97.7	95.0	Pass
149	27+00	946.2	0.2	2030.0	10.6	2093.0	8.7	103.1	95.0	Pass
150	27+50	946	0.2	2030.0	10.6	2107.0	8.7	103.8	95.0	Pass
151	27+80	946	0.2	2030.0	10.6	2058.0	8.5	101.4	95.0	Pass
152	26+00	946.8	0.2	2030.0	10.6	2076.0	10.4	102.3	95.0	Pass
153	25+50	946.8	0.2	2030.0	10.6	2031.0	10.8	100.0	95.0	Pass
154	25+00	946.8	0.2	2030.0	10.6	2169.0	9.6	106.8	95.0	Pass
155	24+80	946.8	0.2	2030.0	10.6	2011.0	10.8	99.1	95.0	Pass
156	27+80	946.3	0.2	2030.0	10.6	2075.0	9.9	102.2	95.0	Pass
157	27+10	946.3	0.2	2030.0	10.6	2119.0	9.9	104.4	95.0	Pass
158	26+50	946.8	0.2	2030.0	10.6	2024.0	10.0	99.7	95.0	Pass
159	26+00	946.8	0.2	2030.0	10.6	2028.0	10.1	99.9	95.0	Pass
160	25+70	946.7	0.2	2030.0	10.6	2060.0	10.5	101.5	95.0	Pass
161	24+70	946.8	0.2	2030.0	10.6	2118.0	9.9	104.3	95.0	Pass
162	24+00	946.5	0.2	2030.0	10.6	2120.0	10.0	104.4	95.0	Pass
163	27+00	946.8	0.2	2030.0	10.6	2054.0	10.8	101.2	95.0	Pass
164	26+80	946.8	0.2	2030.0	10.6	2080.0	9.3	102.5	95.0	Pass
165	27+50	946.8	0.2	2030.0	10.6	2089.0	9.9	102.9	95.0	Pass
166	27+50	946.5	0.2	2030.0	10.6	2102.0	10.3	103.5	95.0	Pass
167	26+80	946.5	0.2	2030.0	10.6	2087.0	10.2	102.8	95.0	Pass
168	26+50	946.5	0.2	2030.0	10.6	2118.0	10.2	104.3	95.0	Pass

Knight Piésold CONSULTING

FIELD COMPACTION TESTS NUCLEAR GAUGE

PROJECT NO.: 101-01/10

DATE:

TEST NO.	LOCATION	Elevation (m)	Test Depth (m)	LABORATORY		FIELD DESIGN				
				Max. Dry Density (kg/m³)	Optimum Moisture (%)	Dry Density (kg/m³)	Moisture Content (%)	Compaction (%)	Compaction Specification (%)	Pass or Fail
169	26+50	946.5	0.2	2030.0	10.6	2094.0	10.1	103.2	95.0	Pass
170	25+50	946.8	0.2	2030.0	10.6	2077.0	11.2	102.3	95.0	Pass
171	25+20	946.8	0.2	2030.0	10.6	2047.0	12.0	100.8	95.0	Pass
172	25+00	946.8	0.2	2030.0	10.6	2092.0	10.5	103.1	95.0	Pass
173	24+50	946.8	0.2	2030.0	10.6	2054.0	11.7	101.2	95.0	Pass
174	27+50	947.4	0.2	2030.0	10.6	2027.0	12.2	99.9	95.0	Pass
175	27+25	947.4	0.2	2030.0	10.6	2032.0	11.5	100.1	95.0	Pass
176	27+00	947.3	0.2	2030.0	10.6	2063.0	11.5	101.6	95.0	Pass
177	26+80	947.5	0.2	2030.0	10.6	1938.0	12.0	95.5	95.0	Pass
178	26+50	947.5	0.2	2030.0	10.6	2042.0	11.0	100.6	95.0	Pass
179	26+20	947.5	0.2	2030.0	10.6	2087.0	10.6	102.8	95.0	Pass
180	25+50	947.4	0.2	2030.0	10.6	1972.0	11.6	97.1	95.0	Pass
181	25+00	947.5	0.2	2030.0	10.6	1956.0	13.4	96.4	95.0	Pass
182	24+00	947.4	0.2	2030.0	10.6	1968.0	13.1	96.9	95.0	Pass
183	24+00	947.5	0.2	2030.0	10.6	2016.0	11.5	99.3	95.0	Pass
184	24+50	947.5	0.2	2030.0	10.6	1956.0	13.8	96.4	95.0	Pass
185	23+80	947.5	0.2	2030.0	10.6	1958.0	12.3	96.5	95.0	Pass
186	23+00	947.5	0.2	2030.0	10.6	1940.0	13.4	95.6	95.0	Pass
187	22+50	947.5	0.2	2030.0	10.6	2035.0	11.5	100.2	95.0	Pass
188	22-00	947.5	0.2	2030.0	10.6	2087.0	11.4	102.8	95.0	Pass
189	21+50	947.5	0.2	2030.0	10.6	1922.0	13.4	94.7	95.0	Fail
190	21+00	947.5	0.2	2030.0	10.6	1940.0	15.4	95.6	95.0	Pass
191	20+50	947.5	0.2	2030.0	10.6	2053.0	12.0	101.1	95.0	Pass
192	20+00	947.5	0.2	2030.0	10.6	1962.0	13.9	96.7	95.0	Pass
193	20+10	947.5	0.2	2030.0	10.6	2118.0	11.0	104.3	95.0	Pass
194	21+20	947.5	0.2	2030.0	10.6	2009.0	11.9	99.0	95.0	Pass
195	22+50	947.6	0.2	2030.0	10.6	2042.0	11.7	100.6	95.0	Pass
196	23+50	947.4	0.2	2030.0	10.6	2052.0	10.0	101.1	95.0	Pass
197	25+50	947.7	0.2	2030.0	10.6	2059.0	9.4	101.4	95.0	Pass
198	26+50	947.6	0.2	2030.0	10.6	1961.0	9.8	96.6	95.0	Pass
199	20+50	947.2	0.2	2030.0	10.6	2133.0	6.7	105.1	95.0	Pass
200	20+00	947.2	0.2	2030.0	10.6	1948.0	7.4	96.0	95.0	Pass
201	21+00	948	0.2	2090.0	10.6	2089.0	10.5	100.0	95.0	Pass
202	22+30	948	0.2	2090.0	10.6	2002.0	10.9	95.8	95.0	Pass
203	23+30	948	0.2	2090.0	10.6	2035.0	11.9	97.4	95.0	Pass
204	24+20	948	0.2	2090.0	10.6	2064.0	11.9	98.8	95.0	Pass
205	43+50	947.3	0.2	2090.0	10.6	2062.0	12.6	98.7	95.0	Pass
206	Borrow 3	946.4	0.2	2090.0	10.6	2151.0	10.3	102.9	95.0	Pass
207	44+00	946.4	0.2	2090.0	10.6	2090.0	9.7	100.0	95.0	Pass
208	41+00	946.4	0.2	2090.0	10.6	2101.0	10.7	100.5	95.0	Pass
209	42+50	947.7	0.2	2090.0	10.6	2068.0	11.4	98.9	95.0	Pass
210	41+50	947.4	0.2	2090.0	10.6	2087.0	11.1	99.9	95.0	Pass
211	40+00	947	0.2	2090.0	10.6	2025.0	12.5	96.9	95.0	Pass
212	Borrow Pit 3 control	947	0.2	2090.0	10.6	2004.0	13.4	95.9	95.0	Pass
213	39+00	946.2	0.2	2090.0	10.6	2089.0	11.8	100.0	95.0	Pass
214	Perimeter Embankment 29+00	946.7	0.2	2070.0	10.6	2045.0	11.1	98.8	95.0	Pass
215	Perimeter Embankment 31+50	946.5	0.2	2070.0	10.6	2105.0	9.7	101.7	95.0	Pass
216	Perimeter Embankment 32+00	947	0.2	2070.0	10.6	2147.0	9.8	103.7	95.0	Pass
217	Perimeter Embankment 32+50	947	0.2	2070.0	10.6	1964.0	11.6	94.9	95.0	Fail
218	Perimeter Embankment 32+70	947	0.2	2070.0	10.6	2067.0	11.3	99.9	95.0	Pass
219	Perimeter Embankment 37+60	946.5	0.2	2170.0	10.6	2093.0	10.7	96.5	95.0	Pass
220	Perimeter Embankment 38+00	946.5	0.2	2170.0	10.6	2077.0	11.0	95.7	95.0	Pass
221	Perimeter Embankment 38+20	946.5	0.2	2170.0	10.6	2100.0	10.6	96.8	95.0	Pass
222	Perimeter Embankment 38+40	946.3	0.2	2170.0	10.6	2066.0	9.9	95.2	95.0	Pass
223	Perimeter Embankment 28+00	946.5	0.2	2090.0	10.6	2181.0	7.9	104.4	95.0	Pass
224	Perimeter Embankment 38+75	947	0.2	2170.0	10.6	2076.0	10.8	95.7	95.0	Pass

Revised March 5, 2007

Knight Piésold CONSULTING

FIELD COMPACTION TESTS
NUCLEAR GAUGE

PROJECT NO.: 101-01/10

DATE:

TEST NO.	LOCATION	Elevation (m)	Test Depth (m)	LABORATORY Max. Dry Density (kg/m³)	LABORATORY Optimum Moisture (%)	FIELD DESIGN Dry Density (kg/m³)	FIELD DESIGN Moisture Content (%)	Compaction (%)	Compaction Specification (%)	Pass or Fail
225	Perimeter Embankment 39+70	947	0.2	2170.0	10.6	2104.0	10.1	97.0	95.0	Pass
226	Perimeter Embankment 28+00	947	0.2	2090.0	10.6	2084.0	10.4	99.7	95.0	Pass
227	Perimeter Embankment 33+13	948	0.2	2170.0	10.6	2272.0	14.5	104.7	95.0	Pass
228	Perimeter Embankment 33+25	948	0.2	2170.0	10.6	2313.0	12.0	106.6	95.0	Pass
229	Perimeter Embankment 32+75	948	0.2	2170.0	10.6	2249.0	10.5	103.6	95.0	Pass
230	PerimeternEmbankment 29+00	948	0.2	2090.0	10.6	2016.0	12.1	96.5	95.0	Pass
231	Perimeter Embankment 29+13	948	0.2	2090.0	10.6	2044.0	10.9	97.8	95.0	Pass
232	Perimeter Embankment 37+75	948	0.2	2170.0	10.6	2310.0	10.8	106.5	95.0	Pass
233	Perimeter Embankment 37+60	948	0.2	2170.0	10.6	2305.0	11.9	106.2	95.0	Pass
234	Perimeter Embankment 37+50	948	0.2	2170.0	10.6	2254.0	11.5	103.9	95.0	Pass
235	Perimeter Embankment 37+80	947.7	0.2	2170.0	10.6	2272.0	8.1	104.7	95.0	Pass
236	Main Embankment 26+75	947.7	0.2	2090.0	10.6	2020.0	11.4	96.7	95.0	Pass
237	Main Embankment 26+80	947.7	0.2	2090.0	10.6	1895.0	11.5	90.7	95.0	Fail
238	Main Embankment 26+80	947.7	0.2	2090.0	10.6	2063.0	11.6	98.7	95.0	Pass
239	Main Embankment 26+85	947.7	0.2	2090.0	10.6	1997.0	11.4	95.6	95.0	Pass
240	Main Embankment 26+90	947.7	0.2	2090.0	10.6	2033.0	11.7	97.3	95.0	Pass
241	Main Embankment 27+00	948.0	0.2	2090.0	10.6	2022.0	8.8	96.7	95.0	Pass
242	Main Embankment 26+00	948.0	0.2	2090.0	10.6	2191.0	8.0	104.8	95.0	Pass
243	Main Embankment 25+00	948.0	0.2	2090.0	10.6	2110.0	8.5	101.0	95.0	Pass
244	Main Embankment 24+00	948.0	0.2	2090.0	10.6	2186.0	8.2	104.6	95.0	Pass
245	Main Embankment 23+00	948.0	0.2	2090.0	10.6	2163.0	8.1	103.5	95.0	Pass
246	Main Embankment 21+75	948.0	0.2	2090.0	10.6	2094.0	9.0	100.2	95.0	Pass
247	Main Embankment 21+00	948.0	0.2	2090.0	10.6	2109.0	9.9	100.9	95.0	Pass
248	Main Embankment 17+00	948.0	0.2	2090.0	10.6	2093.0	9.9	100.1	95.0	Pass
	Min			2030.0	10.6	1695.0	6.5	83.5		
	Max			2170.0	10.6	2313.0	20.0	106.9		
	Median			2030.0	10.6	2041.0	10.8	99.9		
	Std Dev.			35.5	0.0	83.1	1.8	3.6		
	Average			2045.4	10.6	2038.4	10.9	99.7		

Comments:

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Proctor No.:	Proctor Description: Kg/m³	M.C.	95%
KP06-ZS-04C	2030	10.5	1980
KP06-ZS-05C	2140	8.5	2040
KP06-ZS-06C	2090	9.5	2020
KP06-01-C	2090	9.7	2012
KP06-02-C	2060	10.6	1970
KP05-88	2090	11.0	2040
KP05-93	2130	9.1	2030
KP05-79	1930	14.7	1900
KP05-74	2070	10.8	1990
KP05-60	2160	8.8	2080
KP05-61	2170	8.6	2080
KP05-58	2040	11.4	1970

Technician: MB/ALS DS: 45553 MS: 9437 Gauge No: MD50808091 Daily Rep.#

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APPENDIX D

PHOTOGRAPHS

(Pages D1 to D18)

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

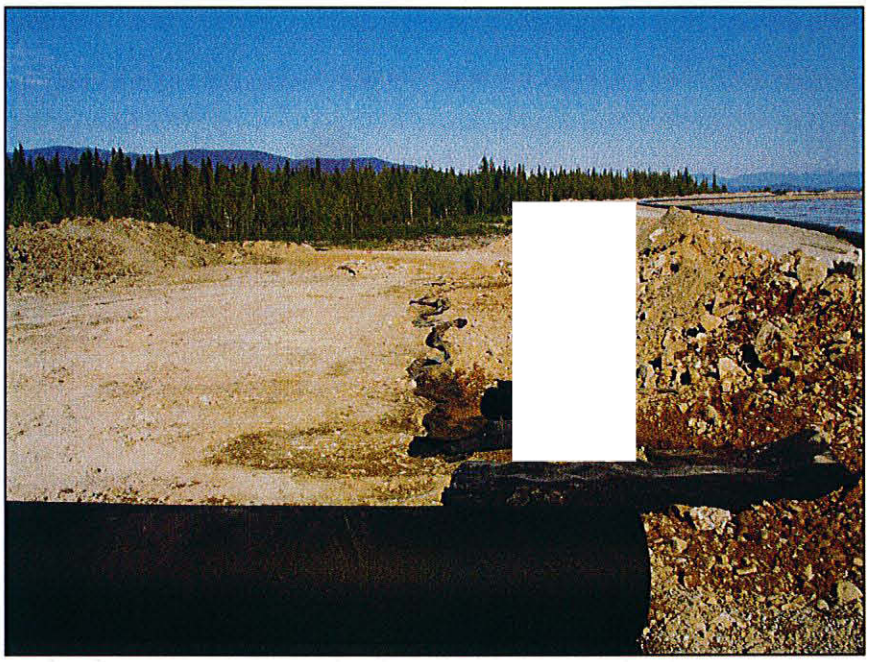

PHOTO 3 – Geotextile placed on the Perimeter Embankment prior to placement of the shell zone.

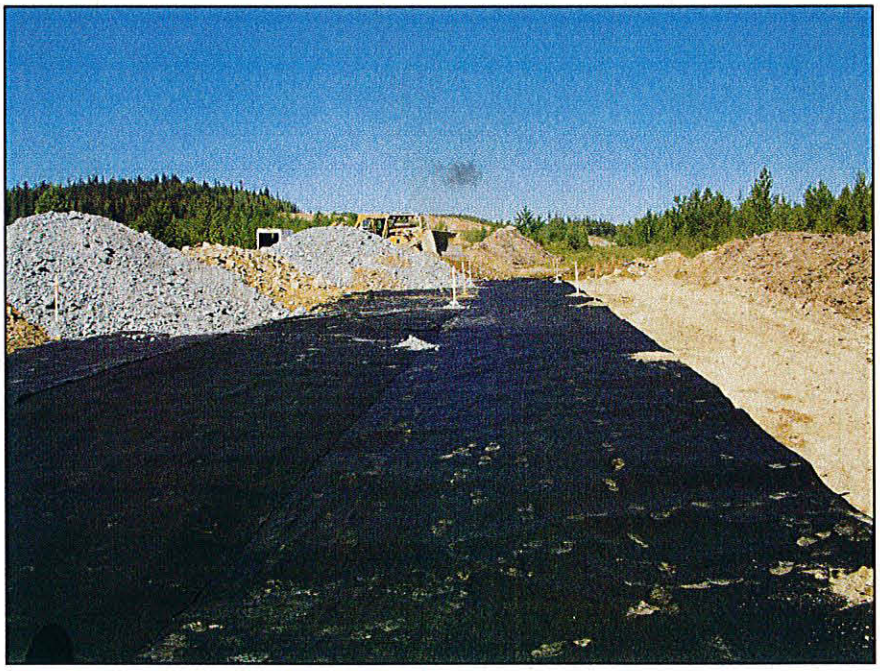

PHOTO 4 – Geotextile placed on the Perimeter Embankment prior to placement of the shell zone.

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

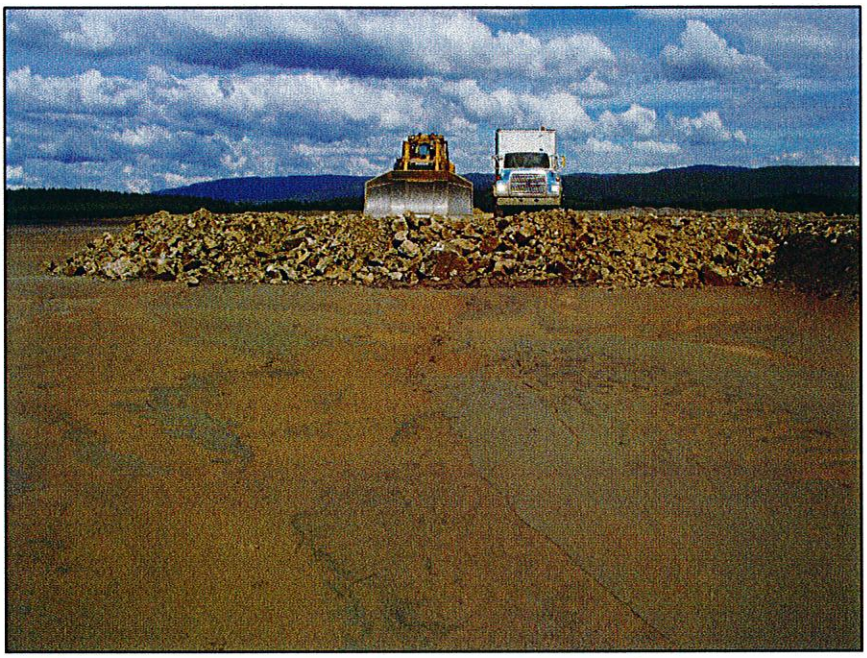

PHOTO 5 – CBL placement on the tailings beach at the Main Embankment.

PHOTO 6 –CBL placement on the tailings beach at the Perimeter Embankment.

PHOTO 7 – South Embankment after the Stage 4 CBL was placed.

PHOTO 8 – South Embankment sand cell.

PHOTO 9 – Spigoting tailings into the sand cell at the South Embankment.

PHOTO 10 – Using a dozer in the sand cell at the South Embankment to distribute and compact the tailings sand.

PHOTO 11 – Using a dozer in the sand cell at the South Embankment to distribute and compact the tailings sand.

PHOTO 12 – 0.3 m of sand was placed in 7.5 hours in the first sand cell at the South Embankment.

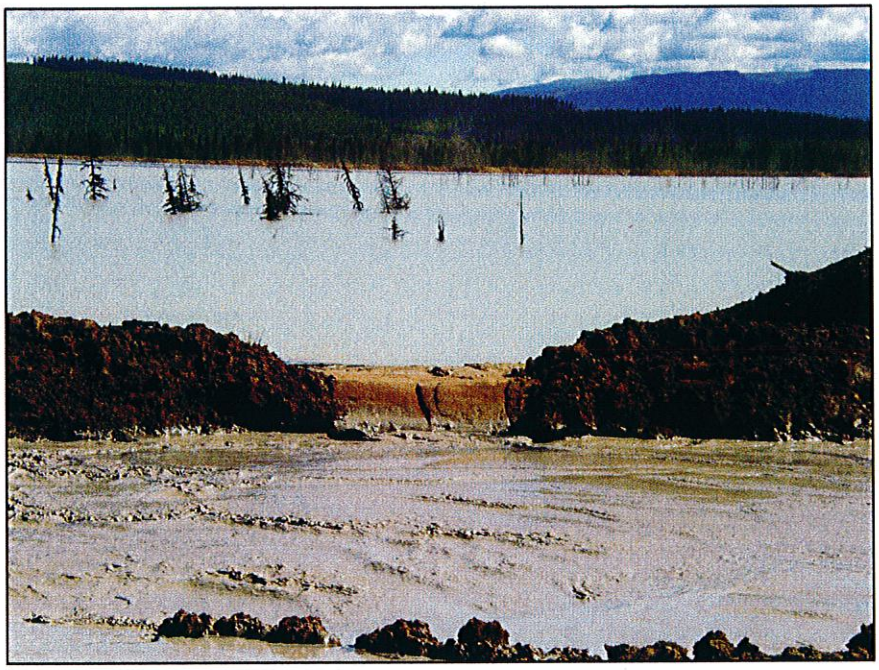

PHOTO 13 – Typical sand cell drains, which are raised as the sand elevation rises.

PHOTO 14 – Sand cell on the Perimeter Embankment.

PHOTO 15 – Sand Cell on the Perimeter Embankment.

PHOTO 16 – Sand cell on the Perimeter Embankment. Tailings are discharged at the far end and exit into the TSF through culverts installed at the opposite end of the cell.

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

PHOTO 17 – Comleted sand cell on the Perimeter Embankment.

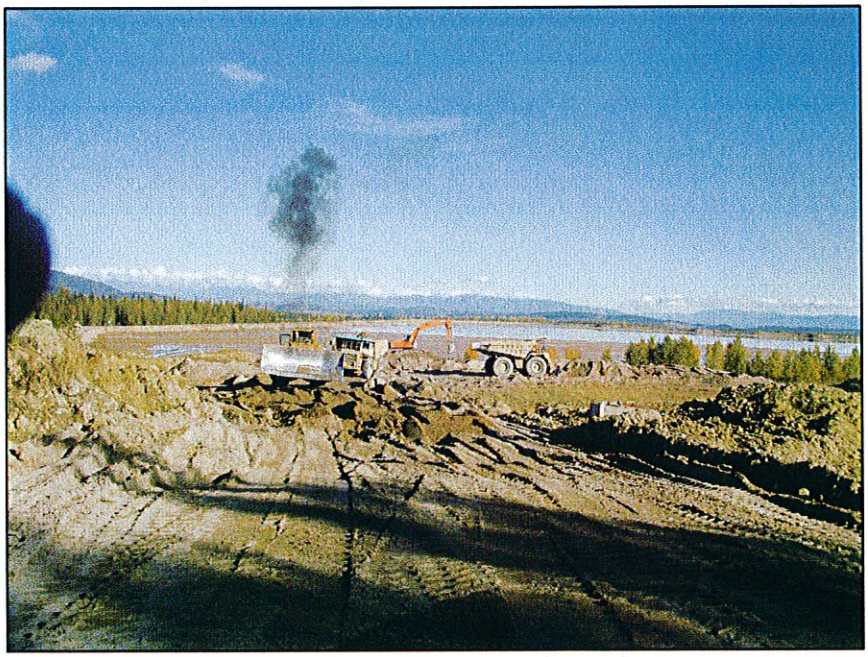

PHOTO 18 – Sand from the Cyclone sand stock pile was also used as Zone U material on the Perimeter Embankment.

PHOTO 19 – Placing sand from the Cyclone sand stock pile on the Perimeter Embankment as Zone U.

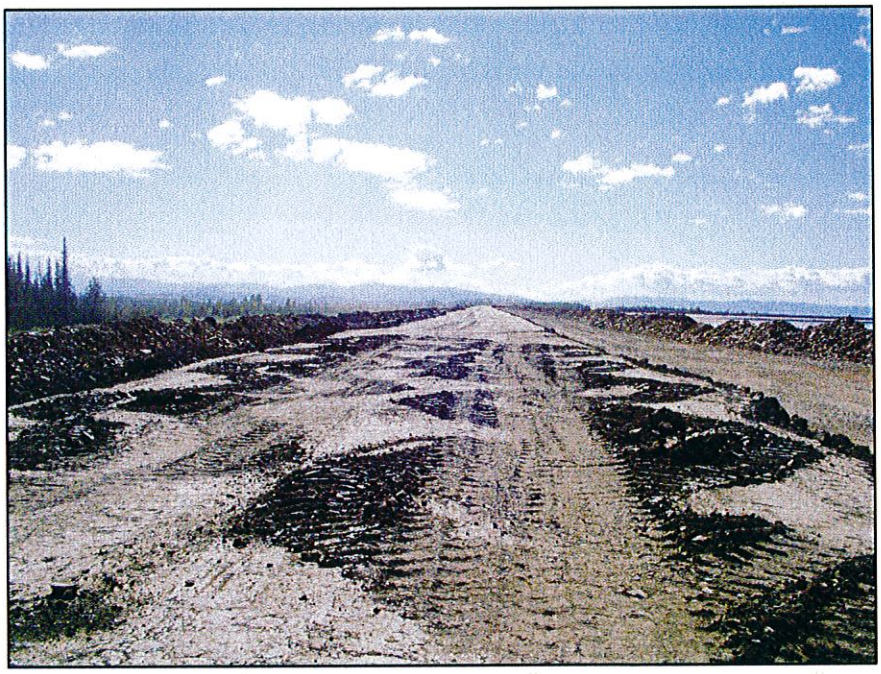

PHOTO 20 – Scarifying the Zone S material at the Perimeter Embankment with a dozer prior to placing the next lift.

PHOTO 21 – Scarifying the Zone S material at the South Embankment with a sheepsfoot prior to placing the next lift.

PHOTO 22 – Placing till on the Perimeter Embankment.

PHOTO 23 – Nuclear densometer testing on the Perimeter Embankment.

PHOTO 24 – The vibratory smooth drum compacting Zone S material on the Main Embankment.

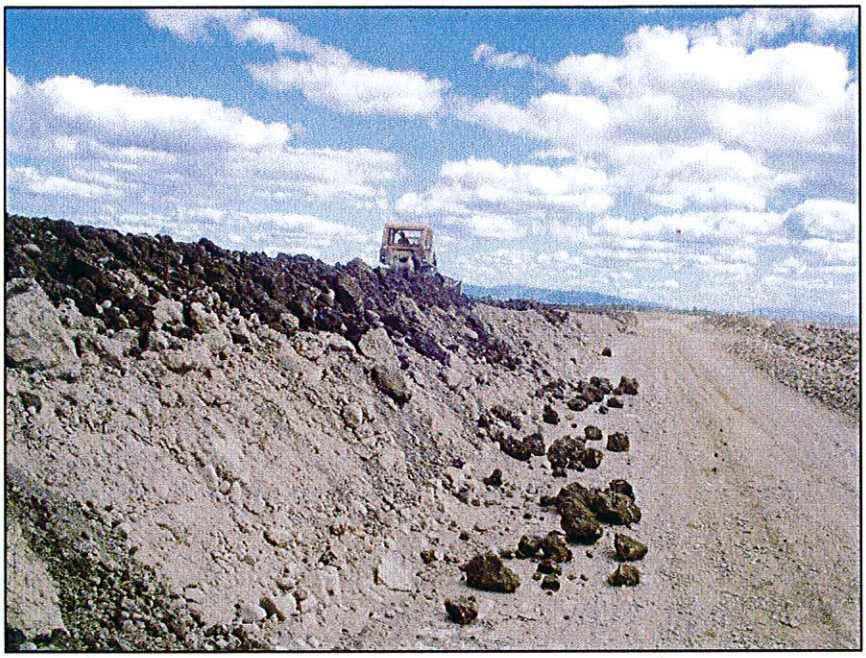

PHOTO 25 – 0.3 m lift of Zone S placed on the Perimeter Embankment.

PHOTO 26 – 0.3 m lift of Zone S placed on the Perimeter Embankment.

PHOTO 27 –Till ramps were set up to minimize the traffic on the Zone S material with the 777 haul trucks.

PHOTO 28 – Placing Zone S material with a 777 haul truck on the Perimeter Embankment.

PHOTO 29 – Perimeter Embankment looking up towards the mine.

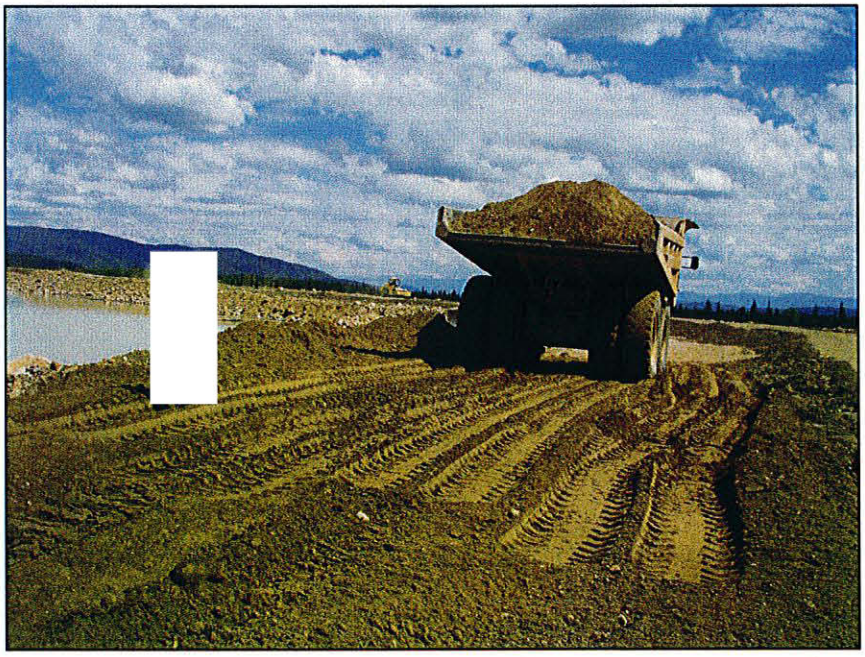

PHOTO 30 – Placement of Zone U material on the Main Embankment. The Zone U material for the Main Embankment was sourced from Borrow Area No. 3.

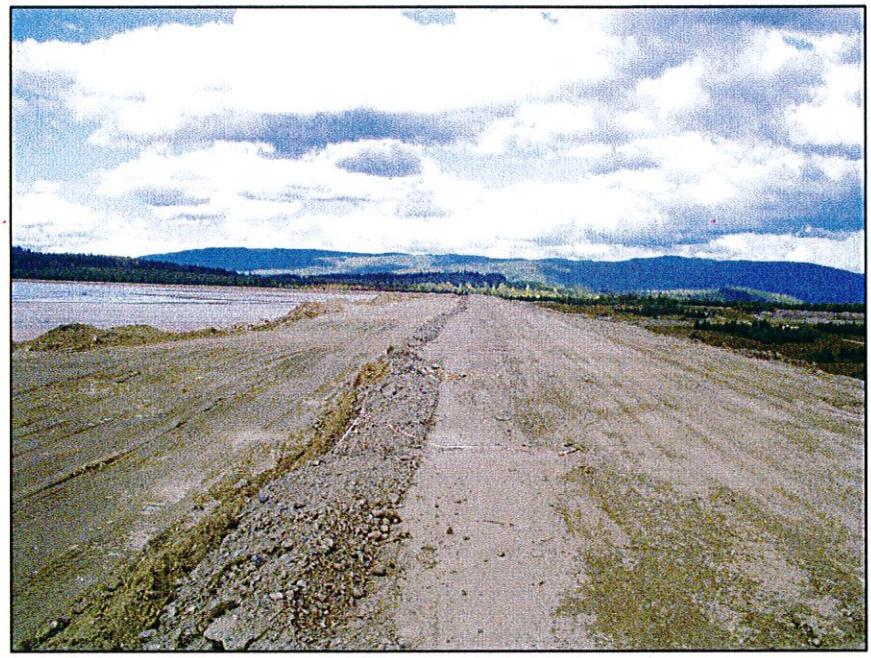

PHOTO 31 – Completed Zone U and Zone S lift on the Main Embankment.

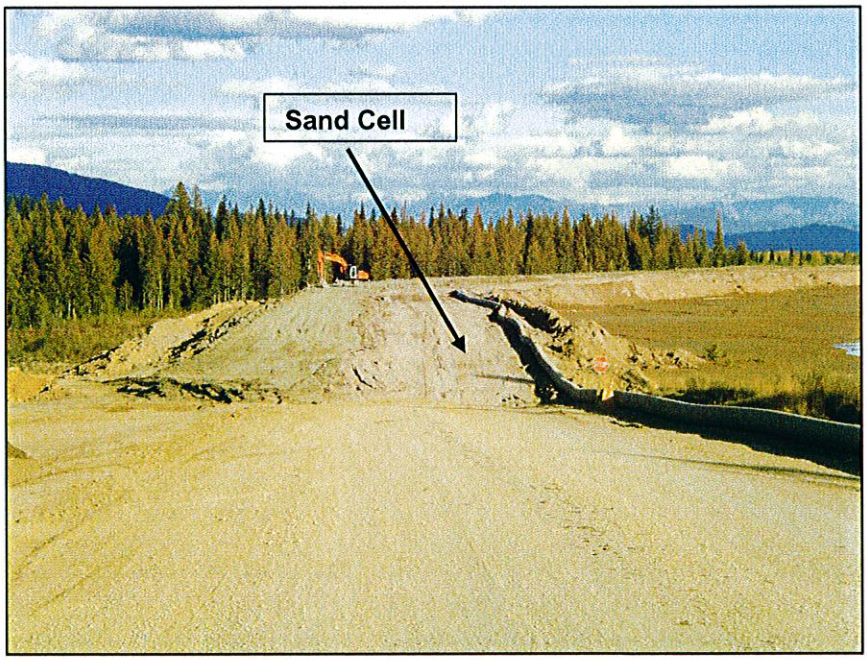

PHOTO 32 – Perimeter Embankment. The Zone U was completed using sand cell construction.

PHOTO 33 – A "poorboy" was used to ensure that there were no "pinch points" in the inclinometers.

PHOTO 34 – The Mount Polley TSF facing the Main Embankment.

PHOTO 35 – The Mount Polley Tailings Storage Facility.