MOUNT POLLEY PROJECT

CONSTRUCTION DRAWINGS
### TABLE 1

**MOUNT POLLEY PROJECT**  
**CONSTRUCTION DRAWINGS**

<table>
<thead>
<tr>
<th>KP No.</th>
<th>Drawing No.</th>
<th>Rev. No.</th>
<th>Title</th>
<th>Plot Scale</th>
<th>Date Issued</th>
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*Date Issued* indicates the date when the drawing was issued.
1. Milled layout as per CSFM Engineering.
2. As-built information from Mount Polley Mining Corporation.
3. Topography has not been updated from 1997 flyover.
4. Pipeline alignments to be updated based on as-built survey.
### Table: Original Setting Out Points

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### Notes
1. Stripping and clearing required for beyond seepage collection ponds and pipeworks.
2. As-built information provided by Mount Polley Mining Corporation.
3. Topography has not been updated for 1997 flyovers.

### General Arrangement
- **1625.213 TSF TAILINGS CONTROL AND SEEPAGE COLLECTION**
- **1625.211 TSF TAILINGS EMBANKMENT - SECTIONS AND DETAILS**
- **Stage 2 Tailings Impoundment**

### Scale
- 1:10000
- 100 m

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**Legend**
- C1 - Curve No. 1 (typ.)
- BC - Begin Curve
- EC - End Curve
- P1 - Point of Intersection for Curve No. 1

**Notes**
- 1. Stripping and clearing required for beyond seepage collection ponds and pipeworks.
- 2. As-built information provided by Mount Polley Mining Corporation.
- 3. Topography has not been updated for 1997 flyovers.
- 4. Pipeline alignments to be updated based on as-built survey.
1. Barge requires a minimum water depth of 3 m for operation and can operate over a 3 m range (see Drg. No. 1625.223).

2. Pond level at start-up approx. El. 927, with initial access road and ball joint at El. 922 and channel invert at El. 922 or lower.

3. Additional access ramps to be added at 3 m elevation increments. If the initial ramp is moved down channel from the assumed start-up location, additional reclaim pipe will be required.

4. Compacted glacial till placed along the barge channel excavation when higher permeability soils encountered (to meet basin liner requirements), as directed by the Engineer.

5. As-built information provided by Mount Polley Mining Corporation.

6. Topography has not been updated for 1997 flyover.

7. Pipeline alignments to be updated based on as-built survey.
**Main Embankment**

**Seepage Collection Pond,**

- MIN. POND LEVEL: EL. 925
- PRIOR TO TAILINGS DEPOSITION
- 2m min. of Zone B
- 90 below drainage system (.opts.)
- Embankment foundation drain
- Outlet drain, see Note 3
- Geotextile locally anchored over exposed filter material
- Outlet pipe, EL. 908.3
- Drain monitoring sump
- Groundwater monitoring well DW93-3

**Outlet drain to be extended to Drain Monitoring Sumps during Stage II construction.

**NOTES:**
1. Longitudinal drain installed with invert EL. 915.7 m approx. (Ch. 16+40 to 23+40); On the right abutment, (Ch. 16+40 to 18+50) it was installed to invert EL. 929 m in placed and compacted Zone B fill. On the left abutment (Ch. 23+00 to 29+25) it was installed in original ground, following the prepared ground surface.
2. HDPE toe drain conveyance pipe to be installed at later date. To be bedded with concrete as shown on Org. No. 1625.202.
3. Outlet drains to be extended to Drain Monitoring Sumps during Stage II construction.
4. As-built information provided by Mount Polley Mining Corporation.
5. Topography has not been updated for 1997 Flyover.
Perimeter Embankment
Seepage Collection Pond, see DETAIL C/1625.214
Seepage Recycle Sump

Chimney/Longitudinal Drain, see Note 4

Outlet Drains, see Note 4

Overflow culverts

1. Changes denoted by setting out point S1 at S+00.
2. Extent of Basin Liner determined from exploration trenches.
3. Outlet Drains for Main Embankment to be extended to Drain Monitoring Sump during Stage II Construction.
4. Chimney Drain, Longitudinal Drain and Outlet Drains for Perimeter Embankment to be installed during Stage II construction.
5. As-built information provided by Mount Polley Mining Corporation.
6. Topography has not been updated for 1997 Flyover.
7. Details of Pressure Relief Wells and Pressure Relief Trenches shown on Drg. No. 1625.211.
1. Test pits indicate 4m thickness of loam in proposed location of barge channel. Additional test pits will be required to confirm adequate thickness of loam to follow barge channel alignment.

2. Compacted gravel 80 shall be placed along the barge channel excavation. If higher permeability sediments encountered (to meet basin liner requirements) as directed by the Engineer.

3. Seepage recycle pumps to be electric submersible pumps, discharging to pipelines extended up D/S face of tailings embankment. Pump sump to be fully enclosed with an insulated building c/w venting and I beam suitable for raising the pumps.

4. Extent of basin liner determined from exploration trenches.

5. Pumphouse by C.S.F.M. Engineering, Ltd. see Drg. No. 903

6. Penetration of concrete sump by CSP culvert to be watertight.

7. As built information provided by Mount Polley Mining Corporation.

8. Topography has not been updated for 1997 flyover.
1. Final location of cross drain culverts to be determined in the field.

2. Final location of Bockock Creek crossing to be determined in the field.

3. Setting out points for roadway are to be adjusted in the field to achieve a cut/fill balance to the greatest extent possible and to avoid excessive grades or low spots in pipeline.

4. Pipelines under logging roads to be placed in 900mm x 3 m minimum wall CSP culverts with 500 mm minimum depth of cover. Culverts to be well graded and compacted sand and gravel.

5. Profiles and quantities on Drg. No. 1625.228.

6. Mobile pump drainage inlet to be installed before start-up.

7. Air-built information provided by Mount Polley Mining Corporation.

8. Topography not updated for 1997 Flyover.

9. Pipeline alignment to be updated based on as-built survey.
**TAILINGS DISTRIBUTION & RECLAIM SYSTEM**

**DRG. 1625.218**

1. **Riprap erosion protection as required by the Engineer** - Slope angles based on soil and rock conditions encountered in the field. Minimum anticipated slope 1.5H:1V for gravel fill and 0.5H:1V for bedrock.
2. **Pipe containment channel** - See Note 4.
3. **200mm thick wearing course** - See Note 1.
4. **Pipe invert elevation** - See Note 5.

**DIVERSION DITCH AND CROSS-CREEK CULVERT FOR TAILINGS ACCESS ROAD**

Scale B

**NOTES**

1. Wearing course required for Tailings Access Road, Reclaim Barge Access Road and Bootjack-Morehead Connector relocation only.
2. For crossing under roads, tailings and reclaim pipelines to be installed in individual 800 mm (36") dia. culvert box under road with 500 mm min. cover. Culverts laid immediately downstream of cross-drain.
3. Spacing of fill for anchoring to be determined in the field. Anchor posts or concrete anchor blocks can be substituted for local fill.
4. Trench width may vary locally to accommodate additional pipelines or structures in the trench.
5. Tailings and reclaim pipelines cross over immediately upstream of T2 Dropbox and where the pipelines cross over structures, a grouted spall at the Tailings Storage Facility.
6. Runoff Diversion Ditches may require periodic cleaning.

**TAILINGS ACCESS ROAD WITH DIVERSION DITCH**

Scale B

4. **1.8 m # Pipe Arch Culvert** - Installed at neutral grade to provide 0.5m min. water depth.
5. **200mm thick wearing course** - See Note 1.
6. **Safety trench** - Local fill to be compacted in place or placed as directed by the Engineer.

**TAILINGS ACCESS ROAD WITH DIVERSION DITCH ON FLAT GROUND**

Scale B

7. **Retain pipeline** - See Note 5.
8. **Tailing pipeline, see Note 5**.
9. **Slope angles based on soil and rock conditions encountered in the field. Minimum anticipated slope 1.5H:1V for gravel fill and 0.5H:1V for bedrock.**

**SECTION 1625.218 TAILINGS ACCESS ROAD WITH DIVERSION DITCH**

Scale B

**Slope angles based on soil and rock conditions encountered in the field. Minimum anticipated slope 1.5H:1V for gravel fill and 0.5H:1V for bedrock.**

**TYPICAL DETAIL FOR BURIED HOPE PIPE**

**NOTES**

1. Wearing course required for Tailings Access Road, Reclaim Barge Access Road and Bootjack-Morehead Connector relocation only.
2. For crossing under road, tailings and reclaim pipelines to be installed in individual 800 mm (36") dia. culvert box under road with 500 mm min. cover. Culverts laid immediately downstream of cross-drain.
3. Spacing of fill for anchoring to be determined in the field. Anchor posts or concrete anchor blocks can be substituted for local fill.
4. Trench width may vary locally to accommodate additional pipelines or structures in the trench.
5. Tailings and reclaim pipelines cross over immediately upstream of T2 Dropbox and where the pipelines cross over structures, a grouted spall at the Tailings Storage Facility.
6. Runoff Diversion Ditches may require periodic cleaning.

**REFERENCE DRAWINGS**

1. 1625.218 - TAILINGS DISTRIBUTION & RECLAIM SYSTEM - PLAN
2. 1625.219 - TAILINGS DISTRIBUTION & RECLAIM SYSTEM - ELEVATIONS
3. 1625.226 - TAILINGS ACCESS ROAD WITH DIVERSION DITCH
4. 1625.228 - TAILINGS ACCESS ROAD WITH DIVERSION DITCH ON FLAT GROUND

**MOUNT POLLEY MINING CORPORATION**

**MOUNT POLLEY PROJECT**

**TAILINGS STORAGE FACILITY**

**TAILINGS DISTRIBUTION AND RECLAIM SYSTEM - SECTIONS AND DETAILS**

**DATE**

JUNE 2, 1995

**SCALE AS SHOWN**

ORG. NO. 510-01-02-1625.219 REV. 7
### In instrumentation sections

**Description**

- **Scale A**
- **Rev. MTE 5 4 7**
- **Bootjack-Moorehead Connector relocation**
- **May - May 30**
- **Apr - Sep**
- **96 - 930**
- **940**
- **920**
- **910**
- **900**

#### Issued for construction

- **Revision Piezo. Locations**

#### Approved

- **Plane D**

**Scale B**

- **768.104 475.326 924.84**
- **787.950 496.070 916.60**
- **810.500 496.070 914.70**

**Summary of Piezometer Lead Lengths**

<table>
<thead>
<tr>
<th>Piezometer No.</th>
<th>Lead Length (m)</th>
<th>Existing</th>
<th>ELEV.</th>
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<td>D2-PET-06-01</td>
<td>200</td>
<td>1485.830</td>
<td>949.590</td>
</tr>
</tbody>
</table>

**Notes**

1. Piezometers are vibrating type, RST model WV-2100 with a pressure rating of 100 psi or equivalent, connected to a residual sensor via standard non-return valve WV-232 direct burial cable.

2. Piezometer leads are to be extended to instrumentation monitoring hut after foundation preparation for final embankment during Stage II construction.

3. Future survey monuments not shown. A minimum of 2 monuments will be installed for each embankment stage.

4. Seepage cutoffs placed at 5m intervals with 10% benite added to fine grazed lift backfill, see Fig. No. 1625.221.

5. As-built information provided by Mount Polley Mining Corporation.

6. Topography has not been updated for 1997 flyover.

7. Installation details for borehole piezometers as shown on Fig. No. 1625.221.
Select fine screened fill backfill carefully placed along entire length of lead to comprise select fine gravelly fill with all particles exceeding 25mm removed. Material compacted using hand-guided vibrating compactors as directed. Bedding and backfill for piezometer leads to be left for 1000 min. prior to installation of piezometer tips.

**SECTION 1**
**TYPICAL SECTION THROUGH PIEZOMETER LEAD TRENCH IN PREPARED EMBANKMENT FOUNDATION OR IN ZONE S AND B FILL**

- Bedding and backfill for piezometer leads
- Surface of prepared embankment foundation or fill
- Piezometer leads
- Select fine screened fill backfill
- Sand backfill
- Piezometer tip
- Min. hole diameter 60 mm for SPI equipment

**DETAIL A**
INSTALLATION OF PIEZOMETERS IN BOREHOLES

- Select fine screened fill backfill
- Sand backfill
- Piezometer tip
- Min. hole diameter 60 mm for SPI equipment

**DETAIL C**
TYPICAL PIEZOMETER INSTALLATION IN EMBANKMENT FOUNDATION DRAIN OR TOE DRAIN

- Select fine screened fill backfill
- Sand backfill
- Piezometer tip
- Min. hole diameter 60 mm for SPI equipment

**NOTES**
1. Dimensions are in millimeters unless otherwise noted.
2. Allgage piezometers to be installed during future investigation programs.
1. For Tailings Pipework offtake locations, see Org. No. 1525.228.

2. Mark 3 offtakes temporarily omitted. Pipe sections have flanged joints to permit Mark 3 offtakes to be installed as required.

3. Mark 2 offtakes have been revised and are included on the movable discharge section, as shown on Mark 2/1625.244.

4. All bends in tailings and reclaim HOPE pipelines are made using natural flexibility of pipe unless otherwise noted. Minimum bend radius to be 25 diameter.

5. Pipelines at roadway crossings to be sleeved in 920 mm x 2 mm minimum wall CSP culvert with 300 mm minimum depth of cover. Backfill to be well graded and compacted sand and gravel.

6. Reclaim pipeline is assumed to be required only to original ground elevation at 925 m. Additional pipe may be required if pond level at startup is lower than 925 m. See additional notes on Org. No. 1625.206. Additional ramps to be added as required.

7. As-built information provided by Mount Polley Mining Corporation.

8. Topography has not been updated for 1997 Flyover.

9. Pipeline alignments to be updated based on as-built survey.
TYP. TAILINGS HEADER OFFTAKE (MARK 2/1625.222) SCALE A

Local placement of concrete pipe restraint or flanged rubber lined. Rotate to suit local slope.

Local placement of concrete anchor block or flange. Local excavation as required.

600 mm (24") # Std. wt steel 90 radius elbow, 3/8" (9.5 mm) rubber lined. Rotate to suit embankment grade.

Local burial of elbow.

600 mm (24") # Dr: 15.5 HPDE c/a backup flange and stub end.

Full end of pipe discharge onto local riprap or as otherwise approved by the Engineer.

600 mm (24") # Dr: 15.5 HPDE stub end.

Steel HPDE stub end at 45° to match Knife Gate Valve limit diameter.

Knife Gate Valve Port diameter.

Knife Gate Valve limit diameter.

Local concrete embedment only if required by the Engineer.

TYP. TAILINGS HEADER OFFTAKE WITH HEADER VALVE (MARK 3/1625.222) SCALE A

Local placement of concrete pipe restraint or flanged rubber lined. Rotate to match local slope.

Local excavation as required.

600 mm (24") # Dr: 15.5 HPDE header.

Flanged joint (Typ.)

600 mm (24") # Dr: 15.5 HPDE header.

Flanged joint (Typ.)

Each section consists of flanged 600 mm (24") HPDE DR: 15.5 joints (6x16.76m=100.58m).

Both ends require a flange.

End of discharge section to be supplied with a blind flange.

2 1/2" Dia. steel pipe (4x6" waxed) sharpened on end and driven 1500 mm to refusal (as approved by the Engineer).

Flange bolt

Ratting streets, Robar 6626 modified c/a 150 db. Flanged offsite, see Note 3.

Pipeline guideposts locate as required by the Engineer. See DETAIL B.

Local reinforcement to suit offsite supplied.

Robar or stitches through pipe driven to refusal (Typ.)

Local excavation as required.

Heavy duty rubber lined hose (flexible flanged hose) discharges into HPDE pipe (min. 150 mm #)

Natches cut in HPDE pipe at 1.0 m intervals (Typ.)

HPDE pipe anchored to embankment for erosion protection and terminated below surface of water.

Local excavation as required.

Concrete embankment if required by the Engineer.

DETAIL C

SCHEMATIC PLAN OF PIPABLE DISCHARGE SECTION

DETAIL A

PIPE RESTRAINT FOR 24" HOPE

(Location as required by the Engineer) NTS

NOTES

1. Rubber lining to be Liner PIR or approved equivalent.

2. Pipe restraint by local burial of pipeline or as otherwise required by the Engineer to control movement due to thermal and hydraulic forces.

3. Robar 6626 c/a 1/4" rubber lining of offsite and external reinforcement of offsite to suit joint.

4. HPDE Pipe 0 exceeds that of knife gate valve and is to be field leveled to match.

5. HPDE pipelines to be connected under cool conditions with naking allowance made for additional thermal contraction of empty pipeline.

6. Note 2 and 3 offsites to be added as required.

SECTION 2

NTS

SECTION 1

NTS

DETAIL B

GUIDEPOST

Scale B

2 1/2" Dia. steel pipe (4x6" waxed) sharpened on end and driven 1500 mm to refusal (as approved by the Engineer).

Knife Gate Valve Port diameter.

Knife Gate Valve limit diameter.

Local concrete embedment only if required by the Engineer.

DETAIL A

KNIFE GATE INLET (Note 4) NTS

TYP. TAILINGS DUMP VALVE (MARK 1/1625.222)

Local placement of concrete pipe restraint or flanged rubber lined. Rotate to match local slope.

Local excavation as required.

600 mm (24") # Dr: 15.5 HPDE c/a backup flange and stub end.

Full end of pipe discharge onto local riprap or as otherwise approved by the Engineer.

600 mm (24") # Dr: 15.5 HPDE stub end.

Steel HPDE stub end at 45° to match Knife Gate Valve limit diameter.

Knife Gate Valve Port diameter.

Knife Gate Valve limit diameter.

Local concrete embedment only if required by the Engineer.

600 mm (24") # Dr: 15.5 HPDE stub end.

Flanged joint (Typ.)

600 mm (24") # Dr: 15.5 HPDE stub end.

Flanged joint (Typ.)

Each section consists of flanged 600 mm (24") HPDE DR: 15.5 joints (6x16.76m=100.58m).

Both ends require a flange.

End of discharge section to be supplied with a blind flange.

2 1/2" Dia. steel pipe (4x6" waxed) sharpened on end and driven 1500 mm to refusal (as approved by the Engineer).

Flange bolt

Ratting streets, Robar 6626 modified c/a 150 db. Flanged offsite, see Note 3.

Pipeline guideposts locate as required by the Engineer. See DETAIL B.

Local reinforcement to suit offsite supplied.

Robar or stitches through pipe driven to refusal (Typ.)

Local excavation as required.

Heavy duty rubber lined hose (flexible flanged hose) discharges into HPDE pipe (min. 150 mm #)

Natches cut in HPDE pipe at 1.0 m intervals (Typ.)

HPDE pipe anchored to embankment for erosion protection and terminated below surface of water.

Local excavation as required.

Concrete embankment if required by the Engineer.

DETAIL C

SCHEMATIC PLAN OF PIPABLE DISCHARGE SECTION

DETAIL A

PIPE RESTRAINT FOR 24" HOPE

(Location as required by the Engineer) NTS

NOTES

1. Rubber lining to be Liner PIR or approved equivalent.

2. Pipe restraint by local burial of pipeline or as otherwise required by the Engineer to control movement due to thermal and hydraulic forces.

3. Robar 6626 c/a 1/4" rubber lining of offsite and external reinforcement of offsite to suit joint.

4. HPDE Pipe 0 exceeds that of knife gate valve and is to be field leveled to match.

5. HPDE pipelines to be connected under cool conditions with naking allowance made for additional thermal contraction of empty pipeline.

6. Note 2 and 3 offsites to be added as required.

SECTION 2

NTS

SECTION 1

NTS

DETAIL B

GUIDEPOST

Scale B

2 1/2" Dia. steel pipe (4x6" waxed) sharpened on end and driven 1500 mm to refusal (as approved by the Engineer).

Knife Gate Valve Port diameter.

Knife Gate Valve limit diameter.

Local concrete embedment only if required by the Engineer.

600 mm (24") # Dr: 15.5 HPDE stub end.

Flanged joint (Typ.)

600 mm (24") # Dr: 15.5 HPDE stub end.

Flanged joint (Typ.)

Each section consists of flanged 600 mm (24") HPDE DR: 15.5 joints (6x16.76m=100.58m).

Both ends require a flange.

End of discharge section to be supplied with a blind flange.

2 1/2" Dia. steel pipe (4x6" waxed) sharpened on end and driven 1500 mm to refusal (as approved by the Engineer).

Flange bolt

Ratting streets, Robar 6626 modified c/a 150 db. Flanged offsite, see Note 3.

Pipeline guideposts locate as required by the Engineer. See DETAIL B.

Local reinforcement to suit offsite supplied.

Robar or stitches through pipe driven to refusal (Typ.)

Local excavation as required.

Heavy duty rubber lined hose (flexible flanged hose) discharges into HPDE pipe (min. 150 mm #)

Natches cut in HPDE pipe at 1.0 m intervals (Typ.)

HPDE pipe anchored to embankment for erosion protection and terminated below surface of water.

Local excavation as required.

Concrete embankment if required by the Engineer.

DETAIL C

SCHEMATIC PLAN OF PIPABLE DISCHARGE SECTION

DETAIL A

PIPE RESTRAINT FOR 24" HOPE

(Location as required by the Engineer) NTS

NOTES

1. Rubber lining to be Liner PIR or approved equivalent.

2. Pipe restraint by local burial of pipeline or as otherwise required by the Engineer to control movement due to thermal and hydraulic forces.

3. Robar 6626 c/a 1/4" rubber lining of offsite and external reinforcement of offsite to suit joint.

4. HPDE Pipe 0 exceeds that of knife gate valve and is to be field leveled to match.

5. HPDE pipelines to be connected under cool conditions with naking allowance made for additional thermal contraction of empty pipeline.

6. Note 2 and 3 offsites to be added as required.
1. Layout including cut and fill details to be approved by the Engineer to ensure that BOP elevations and grades are achieved.

2. The 500 m³ capacity of the Overflow Pond is sufficient to contain the contents of the upstream tailings pipeline. Pond located by Mount Polley Mining Corporation.

3. Radius of natural bends in HOPE pipelines not to be less than 25 pipe diameters.

4. Tailings and Reclaim pipelines uniformly graded between pipe containment channel and structures without high or low points.

5. Details of pipelines into Reclaim Booster sump to be determined in conjunction with CSFM.

6. Invert of pipe containment channel is assumed to be 1 m below local road elevation.

7. Local drops required where 450 mm CSP overflow culvert exits overflow pond.

8. Top of discharge culvert for Overflow Pond to be 1000 mm below top of overflow pond.

9. Pond overflow culvert is 600 mm CSP with fill cover and min. 2.5% slope to pipe containment channel.

10. As-built information provided by Mount Polley Mining Corporation.


12. Pipeline alignments to be updated based on as-built survey.
EXCAVATION DETAILS

NOTES

1. Profiles, invert elevations and pipeline lengths shown to be updated to variations resulting from As-Built access road alignment, local construction requirements and correction of any errors.

2. Flange and flange locations may be adjusted in the field by the Engineer.

3. Flanges in pipelines must be supported off the ground if pipelines are dropped into position.

4. Any section of HOPE pipeline damaged during installation by a local reduction in wall thickness of 10% or more to be cut out and replaced.

5. HOPE profile assumes a pond water level of 927 m at mill storage. In water level is lower, the pipeline is designed to be relocated. If the pipe is in a barge channel excavation may be required. See also Note 2 on Fig. No. 1625.224.

6. All steel and HOPE DR 9 pipeline to be relocated with each barge relocation.

7. Butt fusion joining of lower DR pipe to higher DR pipe requires end of lower DR pipe to be within 10 mm of inside diameter of higher DR pipe.

RECLAIM PIPELINE PROFILE

LEGEND

- - Flange Joints (Minimum)
M - Mark 1 atline (2 Required)
M - Mark 2 atline (4 Required)
M - Mark 3 atline (10 Required)
M - Mark 4 atline (1 Required)
DR 9 - HOPE Pipe Dimensional Ratio (Typical)

MOUNT POLLEY PROJECT

SCALE AS SHOWN

DATE: JULY 15, 1996

GEOLOGY

REFERENCES: DRAWINGS

KNIGHT PINCOTT LIMITED

MOUNT POLLEY MINING CORPORATION

REFERENCES (DRAWINGS)

MOUNT POLLEY PROJECT

RECLAIM PIPELINE PROFILE

SCALE AS SHOWN

DATE: JULY 15, 1996

GEOLOGY

REFERENCES: DRAWINGS

KNIGHT PINCOTT LIMITED

MOUNT POLLEY MINING CORPORATION

REFERENCES (DRAWINGS)

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RECLAIM PIPELINE PROFILE

SCALE AS SHOWN

DATE: JULY 15, 1996

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REFERENCES (DRAWINGS)

MOUNT POLLEY PROJECT

RECLAIM PIPELINE PROFILE

SCALE AS SHOWN

DATE: JULY 15, 1996

GEOLOGY

REFERENCES: DRAWINGS

KNIGHT PINCOTT LIMITED

MOUNT POLLEY MINING CORPORATION

REFERENCES (DRAWINGS)
1. Basin liner limits finalized from exploration trenches.
2. All drift holes in tailings basin grouted as per technical specifications.
3. As-built information provided by Mount Polley Mining Corporation.
5. Results of previous investigations are available in previously issued reports.
6. Pipeline alignments to be updated based on as-built survey.
This drawing was prepared by Knight Piésold Ltd. for the account of Mount Polley Mining Corporation, for the purpose of providing a geotechnical investigation. Drawing is for reference or information to the extent known to the responsible engineer. Knight Piésold Ltd. accepts no responsibility for any decision or action based on this drawing or any reliance on or decisions to be made based on this drawing.

**LEGEND**
- Peat
- Fine Grained Glacial Till
- Firm Silty Glacial Till (Ablation)
- Stiff Silty Glacial Till (Ablation)
- Silty/Sandy Glacial Till (Baseline)
- Sand/Grovel/Silt Glacial Till (Baseline)
- Laminated Silt with Variable Clay Layers
- Fine to Medium Sand with Some Silt
- Medium Sand with Variable Grovel/Silt
- Bedrock

**REFERENCE DRAWINGS**
- Scale as shown

**DATE**
- May 30, 1997

**ISSUED FOR UPDATED DESIGN REPORT**
- MAY 16, 1997

**TAILINGS STORAGE FACILITY GEOLOGICAL INVESTIGATIONS**
- SECTION 2

**SCALE**
- 1:2000

**DRG. NO.**
- 1627.003
This drawing was prepared by Knight Piésold Ltd. for the account of Mount Polley Mining Corporation. The mapping and engineering depicted herein are based on information available as of the date of preparation. Knight Piésold Ltd. accepts no responsibility for any errors or omissions in this drawing.

LEGEND

- Pebble
- Fine Grained Glacial Till
- Firm Silty Glacial Till (Ablation)
- Soft Silty Glacial Till (Ablation)
- Laminated Silt with Variable Clay Layers
- Fine to Medium Sand with Some Silt
- Medium Sand with Variable Gravel/Silt
- Bedrock

Top of Ground Surface
Top of Bedrock Surface
Geological Contact

100 m = Vert. Scale
20 Metres

Dr. R. Pierson, May 16, 1997
MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
TAILINGS STORAGE FACILITY
GEOLOGICAL INVESTIGATIONS
SECT. 10

REFERENCE DRAWINGS
REL. NO.
DESCRIPTION
APPROVED
REV.
DATE
SCALE

1627.011
16
0
MAY 22, 1997
ISSUED FOR UPDATED DESIGN REPORT

MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY PROJECT
TAILINGS STORAGE FACILITY
GEOLOGICAL INVESTIGATIONS
SECT. 10

Dr. R. Pierson, May 16, 1997
Discontinuous Silt with lesser clay and sand layers (typical)

Volcanic Conglomerate/Fragmental Bedrock

Predominantly Glaciolacustrine, very stiff silty sand with lesser clay and fine sand layers interbedded (low permeability)

Volcanic Conglomerate / Fragmental Bedrock

Volcanic Basalt

Limestone

Sandstone