APPENDIX C

TEST PIT LOGS

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-1 SHEET 1 of 1

PROJECT Mt Polley
LOCATION OF TEST PIT Approx 5,822,550N, 592,610E
DATE Jan 11/95 Fine Ore Stockpile

PROJECT No. 1623
GROUND ELEVATION ~1112 m
LOGGED BY KGB

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Dark brown / black ORGANICS
Moderate digging conditions.	1		Brown, dense, slightly moist, fine-grained sandy SILT with some fine-grained gravel and clay. Well graded, poorly sorted. Becomes denser at depth (dense, cohesive chunks are ripped from in-situ material). → Sandy Silt Glacial Till
	2		
	3		
Sample TP95-1 from 4 to 5.5 m depth ←	4		
Seep encountered at 5.2 m depth.	5		Saturated till below 5.2 m.
		E.O.P	Bedrock encountered at 5.5 m. Too deep to excavate any further.
	6		
	7		
	8		

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-2 SHEET 1 of 1

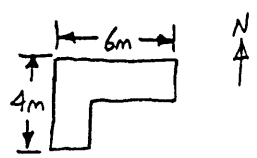
PROJECT Mt Polley — PROJECT No. 1623

LOCATION OF TEST PIT Approx 5,822,560 N, 592,730 E — GROUND ELEVATION ~1110 m

DATE Jan 11/95 Concentrator — LOGGED BY KGB

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		Dark brown/black, saturated, ORGANICS.
			Orange brown/brown, dense, moist to very moist, fine-grained sandy SILT with some gravel and clay. Organics sometimes encountered to 1m depth. Sandy SILT Glacial Till
Water table encountered at 1.2m	1		
No samples taken.		E.O.P.	Bedrock encountered at 1.2m depth. Angular fragments, typically 10cm dia. Wet due to water table.
	2		

Note: This trench was excavated approx. 10m long:

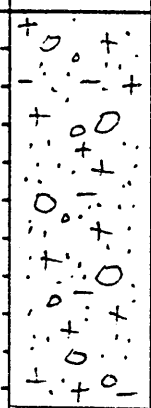
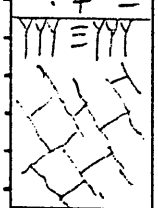


- The north-south portion typically had 1m of organics, a thin layer of till overlying bedrock.
- The east-west portion is described above.
- Both limbs encountered bedrock at shallow depths.

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-3 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5,822,560 N, 592,765 E
DATE Jan 11/95 Concentrator

PROJECT No. 1623
GROUND ELEVATION ~1110 m
LOGGED BY KGB

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe Moderate digging conditions No samples taken.	0 1		Brown, dense, fine-grained sandy SILT with some gravel and clay. Slightly moist to moist. Similar to material encountered in TP95-1 Sandy Silt Glacial Till
Water table encountered at 2.1 m Water ponded in pit to 2m depth after 18hrs.	▽ 2 2 3 4	 E.O.P.	Bedrock encountered at 2.1 m. Angular fragments 10 to 20 cm dia. typically. Very broken at surface, and becomes more competent with depth. Backhoe rips through 1m of bedrock, and could continue, indicating the contact is very fractured.

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-4 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5,822,510N, 592,765E South end of Concentrator
DATE Jan 11/95

PROJECT No. 1623
GROUND ELEVATION ~ 1109 m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		Orange-brown (near surface) to brown, dense fine-grained sandy SILT with some gravel and clay (similar to TP95-1). Slightly moist. Cohesive in-situ, especially at depth where chunks of material is ripped from pit. Fine to moderate-grained gravel.
Moderate digging conditions	1		
	2		Sandy Silt Glacial Till
Sample TP95-4 taken 2 to 3.6m			
	3		↓ Basal till
Water table encountered at 3.6m. water ponded to approx 2 to 2.5m depth after 18hrs			Bedrock encountered at 3.6m depth. Angular fragments encountered.
	4	E.O.P.	

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-5 SHEET 1 of 1

PROJECT Mt Polley

LOCATION OF TEST PIT Approx 5,822,720 N, 592,600 E Crusher

DATE Jan 12/95

PROJECT No. 1623

GROUND ELEVATION ~1120 m

LOGGED BY KGB

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Oxidized silty SAND with some gravel, trace clay. Coarser grained than tills in TP95-1, 3 and 4. Lots of roots throughout.
	1		Silty Sand Glacial Till
No seeps encountered.		E.O.P.	Bedrock encountered at 0.5m. Lapilli Tuff (volcanics). Oxidized (iron stained) on exposed outcrop. Fractured.
No samples taken.	2		Note: Test pit is 10 m long, and varies in depth up to 1.4m.

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-6
SHEET 1 of 1

PROJECT Mt Polley
LOCATION OF TEST PIT Approx 5,822,720 N; 592,740 E
DATE Jan 12/95 Coarse ore stockpile.

PROJECT No. 1623
GROUND ELEVATION ~1117 m.
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		ORGANICS
Moderate digging conditions	1		Brown, dense, fine-grained sandy SILT with some fine-grained gravel, trace to some clay. Slightly moist. Becomes very dense (hard) near bottom of pit as backhoe rips chunks of till (very cohesive, looks like gravelly clay with some sand and silt. Probably a local till layer).
Sample TP95-6 from 0 to 4m	2		
Digging becomes more difficult.	3		Sandy Silt Glacial Till
	4		Till becomes oxidized at 4m.
No seeps encountered.	5	E.O.P.	Oxidized coarse-grained sand and angular rock fragments encountered. No large rock fragments or visible outcrop encountered.
	6		

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-7

SHEET 1 of 1

PROJECT: Mt Polley

LOCATION OF TEST PIT: Approx 5,822,610 N; 592,730 E. Concentrator

DATE: Jan 12/95

PROJECT No. 1623

GROUND ELEVATION: ~1112 m

LOGGED BY: KGB

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Organics
Moderate digging conditions.	1 2		Brown, dense, slightly moist, fine-grained sandy SILT with some gravel, clay. Similar to material encountered in surrounding test pits. Hard, gray coloured till encountered at depth (~4.4m). Pips in extremely coarse, arise chunks from pit. Gravel is round and fine to medium sized. Typically, the more dense till is encountered near the till / bedrock contact in previous test pits.
Seep encountered at 4.4m.	3 4		Sandy Silt Glacial Till
Sample TP95-7 (4.4 to 5.8m) Difficult digging conditions	5 6	E.O.P.	

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-8 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5,822,560 N ; 592,690 E. Concentrator
DATE Jan 12/95

PROJECT No. 1623
GROUND ELEVATION ~1110m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Organics, black + brown colour.
Moderate digging conditions.	1		Dense, brown, fine-grained sandy SILT with some fine-grained gravel and clay. Loose once excavated. Similar till as majority of Millsite pits. No hard basal till encountered. Sandy Silt Glacial Till
Water quickly ponding at bottom of hole.	▽ ? 2		Bedrock encountered at 1.7m. Lapilli Tuff (volcanics). Angular fragments up to 30cm dia. Backhoe tears through approx 1.1m with difficulty. Becomes extremely difficult to excavate at 2.8m depth.
No samples taken.	3	E.O.P	

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-9

SHEET 1 of 1

PROJECT Mt. Polley

LOCATION OF TEST PIT Approx 5,823,280 N; 591,300 E
East side Bootjack Lake

DATE Jan 12/95

PROJECT No. 1623

GROUND ELEVATION ~1052m

LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Organics.
Moderate digging conditions	1		Brown, dense, moist, sandy gravelly SILT with trace to some clay. Medium sized gravel. Poorly sorted, well graded. Coarser than till at mill site.
Sample TP95-9A (0.2 to 2.5m) ←	2		Sandy Gravelly Silt Glacial Till
Sample TP95-9B (2.5 to 5.0m) ←	3		Grey, slight to moderately dense (firm), very moist → sat'd, (sticky and cohesive) sandy SILT with some clay trace to some gravel, trace cobbles. Gravel is fine to coarse grained. Moderate resistance when indented with finger. Very plastic. Backhoe creates suction when excavating material. This is very wet material!
Seep @ 4m. ▽ ?	4		
	5	E.O.P.	Sandy Silt Glacial Till

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-10 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5,822,850N; 551 480E (East side Bootjack Lake)
DATE Jan 12/95

PROJECT No. 1623
GROUND ELEVATION ~1048m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Organics.
Moderate digging conditions.	1 2		Oxidized, dense sandy SILT with some gravel and clay. Slightly moist. Same material as encountered at mill site. Loose once excavated. Sandy Silt Glacial Till
Sample TP95-10 ←	3		Brown, dense, moist, silty gravelly SAND with trace cobbles and clay. Non-plastic. Loose once excavated. Moderate to coarse gravel. Denser material at bottom of pit. Coarser than till encountered in TP95-9. Silty Gravelly Sand Glacial Till
More difficult digging (due to coarse rocks)	4 5		
No seeps encountered.	6	E.O.P.	Rock fragments encounted (up to 20cm dia.) at base of pit -- possible bedrock ?
	7		

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-11 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5,822,500 N; 591,800 E (East side of Bootjack Lake)
DATE Jan 12/95

PROJECT No. 1623
GROUND ELEVATION ~1040 m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Brown, dense, slightly moist (near surface) to very moist (to 2.8m depth), gravelly SAND with some silt. Non-plastic. Poorly sorted, moderately graded. Slightly oxidized near surface.
Moderate digging conditions	1		Gravelly Sand Glacial Till
Sample TP95-11 ←	2		
Seep encountered @ 2.8m.			
Difficult digging due to coarse material.	3		Saturated sandy GRAVEL with some cobbles, trace to some silt. Moderately dense. Angular cobbles and gravel. Very coarse material. Noticable water in material when excavated.
	4		Sandy Gravel Glacial Till
	5		
		E.O.P.	
	6		

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-12

SHEET 1 of 1

PROJECT Mt. Polley

LOCATION OF TEST PIT Appr 5 822 250 N ; 592 140 E (East side of Bootjack Lake)

DATE Jan 13/95

PROJECT No. 1623

GROUND ELEVATION ~1050m

LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Organics
Sample TP95-12 ←			Brown, moderately oxidized, moist to very moist, moderately dense, fine-grained sandy SILT with some fine-grained gravel and clay, trace organics. Poorly sorted, moderately graded. Slightly plastic.
Moderate digging to 2m.	1		Sandy Silt Glacial Till
	2	E.O.P.	Bedrock encountered at 1.3m depth. Fractured, typically 20 cm dia sizes. Slightly wet at contact.
	3		

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-13 SHEET 1 of 1

PROJECT: Mt Polley
LOCATION OF TEST PIT: Approx 5 822 170 N; 592 470 E (East side of Bootjack Lake)
DATE: Jan 13/95
PROJECT No.: 1623
GROUND ELEVATION: ~1076 m
LOGGED BY: KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Brown, dense, moist, silty SAND with some gravel, trace to some clay. Gravel is typically medium sized. Well graded, poorly sorted. Slightly plastic. Coarser than material encountered at mill site. Good construction material.
Moderate digging conditions	1		
Sample TP95-13 (0 to 3.5m) ←	2		Silty Sand Glacial Till
	3		
Difficult digging conditions	4		Till becomes denser and more difficult to excavate. Grey-brown, hard, slightly moist sandy SILT with some gravel and clay. Rounded gravel; variable sizes. Extremely cohesive (rips in chunks from pit). Looks like a basal till.
No seeps.	5	E.O.P.	Sandy Silt Basal Till
	6		

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-14 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5 825 000 N; 589 230 E
DATE Jan 13/95 (7.1 km along Main Access Road)

PROJECT No. 1623
GROUND ELEVATION ~ 975 m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		Organics
Moderate digging conditions	1		Oxidized-brown near surface (becoming grey-brown coloured with depth), dense, slightly moist, sandy SILT and CLAY with some gravel and trace cobbles. Gravel and cobbles are rounded. Material becomes denser below 1m:
Sample TP95-14. ←	2		Hard, slightly moist, sandy SILT with some gravel and clay. Moderate to well graded, poorly sorted. Plastic when wet. Good construction material.
No seeps.	3		Sandy Silt Glacial Till
Difficult digging with depth.	4	E.O.P.	
	5		

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-15
SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5826 300 N; 587 500 E
DATE Jan 13/95 (4.35 km along Main Access Road)

PROJECT No. 1623
GROUND ELEVATION ~930 m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		No organics (on top of clear-cut hill).
Moderate digging conditions.	1		Brown, dense, slightly moist, sandy gravelly SILT with trace to some clay, trace cobbles. Poorly sorted, well graded. Rounded cobbles and gravel. Dense basal-till like appearance when excavated in hard chunks, although majority of material is loose once excavated. Good construction material. (Similar till as TP95-14, only coarser.)
Sample TP95-15 ←	2		
No seeps.	3		
	4	E.O.P.	
	5		

Sandy Gravelly Silt Glacial Till

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-16 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5820 580N; 594 370E
DATE Jan 13/95 (T3F Access Road)

PROJECT No. 1623
GROUND ELEVATION ~980m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Organics
Easy to moderate digging conditions.	1		Brown, dense, slightly moist, sandy SILT with trace to some gravel and clay. Occasional rounded cobble or boulder. Moderately graded, poorly sorted. Plastic. No oxidation evident. In-situ material is 'very stiff'.
Sample TP95-16 (0 to 5m) ←	2		Sandy Silt Glacial Till
	3		
	4		
Seep at 5.0m.	5		Grey, hard, slightly moist sandy SILT with some gravel and clay, trace cobbles. Material is ripped from ground in extremely cohesive chunks. Slightly moist.
Very difficult digging conditions.	6		Note: Some local coarse areas of gravel and sand exist and water seeps through.
		E.O.P.	
	7		

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-16
SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5820 580N; 594 370E
DATE Jan 13/95 (TSF Access Road)

PROJECT No. 1623
GROUND ELEVATION ~980m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Organics
Easy to moderate digging conditions.	1		Brown, dense, slightly moist, sandy SILT with trace to some gravel and clay. Occasional rounded cobble or boulder. Moderately graded, poorly sorted. Plastic. No oxidation evident. In-situ material is 'very stiff'.
Sample TP95-16 (0 to 5m) ←	2		Sandy Silt Glacial Till
	3		
	4		
Seep at 5.0m.	5		Grey, hard, slightly moist sandy SILT with some gravel and clay, trace cobbles. Material is ripped from ground in extremely cohesive chunks. Slightly moist.
Very difficult digging conditions.	6		Note: Some local coarse areas of gravel and sand exist and water seeps through.
		E.O.P.	
	7		

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-17 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5 821 110 N; 594 230 E (TSF Access Road).
DATE Jan 13/95

PROJECT No. 1623
GROUND ELEVATION ~ 980 m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		
	1		Brown, moderately dense, moist, GRAVEL and SAND with some fine cobbles and silt. Poorly sorted, moderately graded. Non-plastic. Sub-angular gravel and cobbles.
Moderate digging conditions.	2		Gravel and Sand Glacial Till
Sample TP95-17			
Water level rises to 3m depth after 15 hrs.	3		
Water table encountered at 4.3m.	4		Material is saturated below 4.3m.
	5		
	6	E.O.P.	

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-18

SHEET 1 of 1

PROJECT: Mt Polley

PROJECT No. 1623

LOCATION OF TEST PIT: Approx 5821100 N; 593 295 E (Along tailings/reclaim pipeline route)

GROUND ELEVATION: ~992m

DATE: Jan 14/95

LOGGED BY: KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Organics
Moderate digging conditions.	1		Brown, dense, slightly moist sandy SILT with some gravel and trace clay. Occasional rounded cobble. Plastic. Poorly sorted, moderately graded. Approx. top 20cm is oxidized; the remainder is fresh.
Sample TP95-18 ←			Sandy Silt Glacial Till
Difficult digging conditions.	2		Grey-brown, hard, slightly moist sandy SILT with some gravel and clay and trace cobbles. Very dense and cohesive (rips out of pit in chunks). Poorly sorted, well graded. Gravel and cobbles are round to sub-rounded.
No seeps encountered.	3		
		E.O.P.	
	4		

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-19 SHEET 1 of 1

PROJECT: Mt. Polley
LOCATION OF TEST PIT: Approx 5821 600 N; 592 980 E (Along tailings/reclaim pipeline route)
DATE: Jan 14/95
PROJECT No.: 1623
GROUND ELEVATION: ~1042 m
LOGGED BY: KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	▽* 0		Organics.
*Seepage from 0.2 to 0.8m only.	1		Brown, dense, moist gravelly SAND and SILT with trace cobbles and clay. Oxidized near surface. Plastic. Very well graded, poorly sorted. Sub-angular to sub-rounded particles. Visible seepage. **Gravelly Sand and Silt Till** (Note: This may be a layer of material developed from road construction.)
Moderate digging conditions	2		Brown, dense, slightly moist, silty fine-grained SAND with some gravel, trace cobbles (with depth). Plastic. Poorly sorted, moderately graded. Becomes moister with depth. Material becomes sandy SILT with some gravel and clay, trace cobbles. All gravel is sub-round to sub-angular.
Sample TP95-19 (0.8 to 6.0m) ←	3		
	4		**Silty Sand/Sandy Silt Glacial Till**
	5		
Difficult digging conditions.	6		approximate depth. Becomes grey and hard. Rounded gravel and cobbles.
		E.O.P.	
	7		Note: Angular rock fragments encountered at bottom of hole. Fine-grained, mafic with white (>1mm) flecs. (Possible bedrock contact?)

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-20

SHEET 1 of 1

PROJECT Mt. Polley

LOCATION OF TEST PIT Approx 5 820 900 N; 595 670 E

DATE Jan 14/95 (South-east corner of Polley Lake)

PROJECT No. 1623

GROUND ELEVATION ~922 m

LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	▽* 0		Black/brown ORGANICS. Completely saturated. Side walls continuously slough into pit. Very smelly! Very soft. Water continuously seeps into pit.
*Perched water table above dense till.	1		
Very easy digging (0-2.5m)	2		
More difficult digging conditions.	3		Grey, very stiff → hard, slightly moist → moist, sandy SILT with some gravel and clay. Plastic. Poorly sorted, moderately graded. Very cohesive. Looks like basal till encountered in local pits, only more in-situ moisture.
Sample TP95-20 ←	4		Sandy Silt Basal Till
	5	E.O.P.	Approximate depth. Difficult to measure due to pit constantly collapsing and filling with water.

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-21 SHEET 1 of 1

PROJECT: Mt Polley
LOCATION OF TEST PIT: Approx 5 820 840N; 595 540E (50m south of Polley Lake)
DATE: Jan 14/95

PROJECT No.: 1623
GROUND ELEVATION: ~522 m
LOGGED BY: KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		
Visible seeps from peat from 0 to 1m depth. Pit is saturated.	1		Black/brown, saturated, very soft ORGANICS. Very strong odour. Minimal strength.
Very soft digging throughout.	2		Layer of gray, saturated, very soft, silty fine-grained SAND. Varves of grey and brown colours. Easily indented with finger.
No samples taken.	3		
	4		
	5		Tan and grey, saturated, very soft SILT and ORGANICS. Varved silt layers. Tan layers contain yellow grass and small (up to 1cm; ave 0.5cm long) white fresh water shells. Well sorted, poorly graded. Very plastic and cohesive. Strong odour. SILT and ORGANICS
	6		
	7	E.O.P.	

Note: Depths are approximate only, due to pit constantly collapsing and filling with water.

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-22 SHEET 1 of 1

PROJECT Mt Polley
LOCATION OF TEST PIT Approx 5820 890 N; 595 540 E
DATE Jan 14/95 (South end of Polley Lake)

PROJECT No. 1623
GROUND ELEVATION ~522m
LOGGED BY KGB

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	▽ 0		
Visible seeps from peat layer. Pit is saturated	1		Black/brown, saturated, very soft ORGANICS. Side walls continuously collapse into pit. Very strong odour. Minimal strength.
Very easy digging throughout test pit.	2		
No samples taken.	3		
	4	?	
	5	?	Tan/grey, saturated, very soft SILT and ORGANICS. Varved layers. Some material as encountered in TP95-21. SILT and ORGANICS
	6	E.O.P.	

Note: Depths are approximate only due to pit walls continuously collapsing and pit filling with water.

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-23 SHEET 1 of 1

PROJECT Mt Polley
LOCATION OF TEST PIT Approx 5820 890 N; 595 420 E (South west corner of Polley Lake)
DATE Jan 14/95

PROJECT No. 1623
GROUND ELEVATION ~922m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	▽ 3 0		Black/brown, saturated, very soft ORGANICS.
Soft digging conditions.	1		Grey, saturated, very soft CLAY and SILT. Well sorted, poorly graded. Varved. Very plastic. Strong odour. Very cohesive.
Pit is saturated.	2		
No samples taken.	3		Layers of dark grey/black, saturated, very soft fine-grained SAND and SILT. Some sand is coarse grained and of quartz composition. Cohesive. LACUSTRINE LAYERS
	4	? E.O.P.	

Note: Depths are approximate only due to pit walls continuously collapsing and the pit filling with water.

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-24
SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5 820 900 N; 595 360 E (south-west corner of Polley Lake)
DATE Jan 14/95

PROJECT No. 1623
GROUND ELEVATION ~922 m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	▽ 3 0		Black-brown, saturated, very soft ORGANICS.
Very soft digging conditions.	1		Lacustrine sequences of the following: • Dark grey, very soft, saturated CLAY and SILT with some organics. Varved. Well sorted, poorly graded. • Dark grey, very soft, saturated silty fine-grained SAND.
Pit walls are more competent than in earlier test pits (TP95-20 to 23)	2		Both are plastic due to high silt/clay content. Strong odour.
No samples taken.	3		LACUSTRINE LAYERS
	4		Tan/grey, saturated, very soft SILT and ORGANICS. Varved layers containing white fresh-water shells and yellow grass. Well sorted, poorly graded. Very plastic and cohesive. Strong odour.
	5		SILT and ORGANICS.
	6		
			E.O.P.
	7		

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-25 SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5 820 930 N; 595 250 E
DATE Jan 14 /95 (On access road to Polley Lake)

PROJECT No. 1623
GROUND ELEVATION ~522
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		Black/brown, saturated, very soft ORGANICS.
Very soft digging conditions.	1		Dark grey, saturated, very soft (and sticky) CLAY and SILT with some sand, coarsening with depth to sandy CLAY and SILT with trace gravel. Very plastic. Strong odour. Moderate to well sorted, poorly graded. Layers of sand and gravel at local intervals.
Sample TP95-25 (0.4 to 5m) ←	2		
	3		LACUSTRINE LAYERS
	4		
Difficult digging conditions at 5 to 5.8m	5		Brown, hard, slightly moist, sandy SILT with some gravel and clay, trace cobbles. Very dense chunks are ripped from pit. Poorly sorted, well graded. Plastic (when wet). Looks similar to basal till encountered locally, only brown in colour.
	6	E.O.P.	Sandy Silt Basal Till

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-26 SHEET 1 of 1

PROJECT: Mt. Polley
LOCATION OF TEST PIT: Approx 5819 180 N; 594 645 E (Tailings Basin)
DATE: Jan 15/95

PROJECT No.: 1623
GROUND ELEVATION: ~938m
LOGGED BY: KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		ORGANICS
	1		Brown, dense, slightly moist → moist, sandy SILT with some fine gravel and clay, trace cobbles. Very plastic. Poorly sorted, well graded. With depth, material becomes grey coloured and increases in gravel content. Looks very much like a typical basal till.
Moderate digging conditions	2		Very cohesive, hard chunks of material is ripped out of pit. This material is more moist than usually encountered.
No seeps encountered.	3		Sandy Silt Glacial Till
Sample TP95-26 ←	4		
	5		Material at approx 5.5m becomes very plastic due to higher moisture content (behaves like plasticene when remoulded). Material remains the same well graded nature, only more moist.
	6	E.O.P.	
	7		

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-27
SHEET 1 of 1

PROJECT: Mt Polley
LOCATION OF TEST PIT: Approx 5 819 740 N; 595 350E (North embankment alignment)
DATE: Jan 15/95

PROJECT No. 1623
GROUND ELEVATION ~530 m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		ORGANICS
*Local seeps at 2.7m and 4m only. The remainder of the pit is dry.	1 2 ▽*		Brown (grey at depth), hard, slightly moist sandy SILT with some gravel and clay, trace cobbles. Poorly sorted, well graded. Very cohesive (rips in dense chunks from pit). Gravel and cobbles are sub-rounded. Cobble content increases with depth to "some cobbles". Top 0.5m of material is oxidized. Plastic when wetted.
	3		Sandy Silt Basal Till
Sample TP95-27 ←	▽* 4		
Moderate to difficult digging conditions.	5 6		
		E.O.P.	
	7		

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-28 SHEET 1 of 1

PROJECT: Mt. Polley
LOCATION OF TEST PIT: Approx 5819 360 N; 595 285 E (Tailings Basin)
DATE: Jan 15/95

PROJECT No.: 1623
GROUND ELEVATION: ~923.4m
LOGGED BY: KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		Brown, soft, saturated ORGANICS.
Ponded water at surface. Easy digging conditions (0 to 1.5m)	1		Grey-green, soft, very moist layers of CLAY and SILT and silty SAND. Well sorted, poorly graded layers. Clay and silt are very plastic due to high moisture. Sand layer is visibly wet on pit walls.
	2		Brown-grey, hard, slightly moist, sandy SILT with some gravel and clay, trace cobbles. Very cohesive, dense chunks of material. Plastic when wet. Poorly sorted, well graded.
Moderate to difficult digging conditions (1.5 to 6.2m).	3		
	4		Sandy Silt Glacial Till
Sample TP95-28 (1.5 to 6.2m) ←	5		Material becomes moist at 5m depth. Clay and silt matrix materials become sticky and are easily remoulded (like plasticene). Bedrock and possible water table nearby.
	6		
		E.O.P.	
	7		

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-29

SHEET 1 of 1

PROJECT Mt. Polley

LOCATION OF TEST PIT Approx 5818 745 N; 596 270E

DATE Jan 15/95 (Potential East Ridge Borrow Area)

PROJECT No. 1623

GROUND ELEVATION ~ 936m

LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		ORGANICS.
Dry soil to 1m depth!	1		Brown, dense (firm to hard), dry to slightly moist, sandy SILT with some gravel, trace clay and cobbles. Material is drier than usually encountered. Poorly sorted, well graded. Plastic when wet, otherwise at plastic limit with natural moisture content. Becomes very hard with depth, and excavates in dense, cohesive chunks.
Moderate digging conditions			
No seeps.	2		
Sample TP95-29 ←	3		Good construction material.
			Sandy Silt Glacial Till
	4		
	5		
	6	E.O.P.	

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-30

SHEET 1 of 1

PROJECT: Mt. Polley

LOCATION OF TEST PIT: Approx 5818 495 N; 596 560 E (Potential East Ridge Borrow Area)

DATE: Jan 15/95

PROJECT No. 1623

GROUND ELEVATION ~938m

LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Bright orange ORGANICS (rotten wood).
No seeps encountered.	1		Brown, dense (firm to hard), slightly moist, sandy SILT with some gravel, trace clay and cobbles. Poorly sorted, well graded. Becomes more cohesive, grey coloured and hard with depth as material is ripped out of pit in chunks. Gravel and cobbles are sub-rounded to round.
Moderate digging conditions	2		Good construction material (similar to TP95-29).
	3		Sandy Silt Glacial Till
Sample TP95-30 ←	4		
	5		
	6		E.O.P.

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-31

SHEET 1 of 1

PROJECT: Mt. Polley

LOCATION OF TEST PIT: Approx 5 816 955 N; 596 470 E (Potential East Ridge Borrow Area)

DATE: Jan 15/95

PROJECT No. 1623

GROUND ELEVATION: ~939 m.

LOGGED BY: KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		ORGANICS.
No seeps encountered.	1		
Moderate digging conditions			
Sample TP95-31 ←	2		Brown, dense (firm to hard), slightly moist, sandy SILT with some gravel, trace clay and cobbles. Occasional boulder at depth. Poorly sorted, well graded. Same material as encountered in TP95-29 and 30 (same natural moisture content as TP95-30).
	3		Good construction material.
	4		Sandy Silt Glacial Till
	5		
	6	E.O.P.	

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-32

SHEET 1 of 1

PROJECT Mt. Polley

LOCATION OF TEST PIT Approx 5 819 140 N; 595 780 E (East Tailings Basin)

DATE Jan 16/95

PROJECT No. 1623

GROUND ELEVATION ~932 m

LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		ORGANICS, black/brown/orange
Moderate to difficult digging.	1		Brown, dense (very stiff), slightly moist, sandy SILT with some gravel and clay, trace cobbles. Becomes grey in colour and increases in density to 'hard' with depth. Poorly sorted, well graded. No oxidized zone near surface. Gravel and cobbles are sub-round to round. Becomes very basal-like with depth. Very low permeability.
No seeps encountered	2		
	3		Sandy Silt Glacial Till
Sample TP95-32 ←	4		
	5		
	6	E.O.P.	

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-33
SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5818750 N; 594 820 E (SW Tailings Basin)
DATE Jan 16/95

PROJECT No. 1673
GROUND ELEVATION ~932m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		Black, soft, saturated ORGANICS. Swamp. Willows + swamp spruce.
Ponded water at surface (perched water table).	1		Grey-black, oxidized, stiff, moist SILT and CLAY with some organics (grass and roots). Very plastic. Well sorted, poorly graded. Low permeability. SILT and CLAY
smooth, easy digging (0 to 0.9m) rate digging (0.9 to 4.1m)	2, 3, 4		Brown, dense (v. stiff), slightly moist sandy SILT with some gravel and clay, trace cobbles. Poorly sorted, well graded. Oxidized at contact with overlying silt + clay. Slightly plastic. Low permeability. Sandy Silt Glacial Till
smooth, easy digging (4.1 to 7.7m)	5		Grey, stiff to very stiff, moist, SILT and fine-grained SAND. Very thin laminated layers (<<1mm) which can be carefully peeled apart by hand. Plastic. Well sorted, poorly graded. No varves evident. Low permeability. Cohesive. SILT and SAND
Sample TP95-33 (4.1 to 7.7m)	6		
	7		
	8	E.O.P.	

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-34
SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5818730N; 595250E (South Basin)
DATE Jan 16/95

PROJECT No. 1623
GROUND ELEVATION ~824 m.
LOGGED BY KGB

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		Black, soft ORGANICS.
Moderate digging conditions.	1		Brown, dense (hard), slightly moist, sandy SILT with some gravel and clay, trace cobbles. Top 30cm is oxidized. Rounded gravel and cobbles. Material is just below plastic limit. Poorly sorted, well graded. Similar material as encountered in TP95-33. Low permeability.
Sample TP95-34A (0.2 to 4.1m)	2		
* Only local, low flow seeps visible at contact.	3		
	4		Sandy Silt Glacial Till.
Smooth, easy digging (4.1 to 6.4m)	5		Dark grey / black, stiff → very stiff, slightly moist, SILT and fine-grained SAND. Well sorted, poorly graded. Does not have layering like TP95-33 did. At plastic limit. Cohesive. Low permeability. Drier than TP95-33 silt and sand layers.
Sample TP95-34B (4.1 to 6.4m)	6		SILT and SAND
		E.O.P.	
	7		

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-35
SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5818 690 N; 595 535 E. (South Basin).
DATE Jan 16/95

PROJECT No. 1623
GROUND ELEVATION ~917m
LOGGED BY KGB

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		ORGANICS, black / orange.
Moderate digging conditions. (0.2 to 4.0m).	1 2		Brown, dense (v. stiff → hard), slightly moist sandy SILT with some gravel and clay, trace cobbles. Poorly sorted, well graded. Slightly plastic (at P.L.) Rounded gravel + cobbles. Dense, very cohesive chunks of material encountered with depth when ripped out of pit. Becomes grey-colour with depth. Very low permeability. **Sandy Silt Glacial Till**
* Seep at contact. Very localized and low flow rate.	3 4		
Smooth, easy digging (4.0 to 6.6m)	5		Dark grey, slightly moist, stiff, SILT and fine-grained SAND. Sand is visible as white qtz. flecks in silt. Well sorted, poorly graded. Below plastic limit. Cohesive chunks when excavated, and cohesive overall. Low permeability. Same material as encountered in TP95-34 pit. **Silt and Sand.**
Sample TP95-35 (4.0 to 6.6m)	6		
	7	E.O.P.	

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-36
SHEET 1 of 1

PROJECT: Mt. Polley
LOCATION OF TEST PIT: Approx 5818 520 N; 595 275 E (South Basin)
DATE: Jan 16/95

PROJECT No. 1623
GROUND ELEVATION ~924 m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		ORGANICS.
Moderate digging. Sides slough into pit.	1		Brown to grey, very stiff → hard, moist, silty SAND with trace to some gravel and clay. No coarse gravel or cobbles in this material. Poorly sorted, moderately graded. Moister than most tills. Rounded gravel. Cohesive. Coarser than most tills, also.
Sample TP95-36A (0.2 to 3.2m)	2		Silty Sand Glacial Till
Moderate flow from sand layer.	3		Black, medium to coarse-grained SAND with trace (to none) of silt. Not cohesive. Well sorted, poorly graded. Saturated. Approx 60 cm thick.
Smooth digging (3.2 → 6.3m)	4		SAND
Sample TP95-36B (3.8 to 6.3m)	5		Creamy brown, very stiff → hard, slightly moist SILT and CLAY. No coarse material. Layered. Well sorted, poorly graded. Very cohesive. Low permeability.
	6		SILT and CLAY
		E.O.P.	Brown, soft, moist to very moist SILT and fine-grained SAND. Well sorted, poorly graded. Slightly cohesive (probably due to high moisture content). Sides of pit continuously cave-in. Difficult to tell where this layer exists due to instability of test pit walls.
	7		SILT and SAND

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-37
SHEET 1 of 1

PROJECT Mt. Polley
LOCATION OF TEST PIT Approx 5818 345 N; 595 260 E (SW Tailings Basin).
DATE Jan 16/95

PROJECT No. 1623
GROUND ELEVATION ~938m
LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe	0		ORGANICS.
Moderate digging (0 to 1.5m)			Brown, very stiff, moist sandy SILT with some gravel and clay. Poorly sorted, well graded. Plastic. Contains more moisture than usual (probably due to close proximity to surface and bedrock).
Sample TP95-37 ←	1		Sandy Silt Glacial Till
Seep below till/bedrock contact.			
Difficult digging rock.	2		Bedrock encountered at 1.5m depth. Very fractured, purple volcanic conglomerate (friable). Fragments are typically 30cm size. and very angular.
	3	E.O.P.	

KNIGHT AND PIESOLD LTD.
CONSULTING ENGINEERS

TEST PIT LOG

TEST PIT No. TP95-38

SHEET 1 of 1

PROJECT Mt. Polley

LOCATION OF TEST PIT Approx 5 818 460 N; 585 485 E

DATE Jan 16/95

PROJECT No. 1623

GROUND ELEVATION ~915m

LOGGED BY KGB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		ORGANICS.
Moderate digging (0 to 4.7m)	1		Brown to grey, hard, slightly moist sandy SILT with some gravel and clay. Poorly sorted, well graded. Rounded gravel. Very dense, cohesive chunks ripped out of pit. Plastic. Grey colour on face of some chunks (along cracks in till?). Occasional cobble near surface and becoming "trace cobbles" with depth. Low permeability.
No seepage encountered.	2		Sandy Silt Glacial Till
	3		Dark gray, stiff to very stiff, moist SILT with some clay, trace to some sand, trace gravel. Very plastic. Looks like above till, although some material is layered (and peels apart on layers). (Probable transition where till has been mixed with underlying layers)
	4		
Moderate, get rough digging (~4.5 to 6.7m)	5		Creamy brown to grey, very stiff → hard, slightly moist SILT with some clay. Very cohesive and dense. Well sorted, poorly graded. Obvious layers in grey silt. Till-like feel for density of this material. Similar to silt/clay encountered in TP95-36. Low permeability.
ample TP95-38 ←	6		
	7	E.O.P.	SILT and CLAY

KNIGHT AND PIESOLD LTD. CONSULTING ENGINEERS	TEST PIT LOG	TEST PIT No. TP95-39 SHEET 1 of 1

PROJECT Mt. Polley — PROJECT No. 1623

LOCATION OF TEST PIT Approx 5818 405 N; 595 405 E (South tailings basin) — GROUND ELEVATION ~918 m

DATE Jan 16/95 — LOGGED BY KAB.

NOTES Groundwater level, difficulty in digging, equipment used, etc.	DEPTH (metres)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION OF MATERIAL
Hitachi 200 hoe.	0		Black, saturated, soft ORGANICS.
Moderate digging (0 to 2.5m)	1		Brown to grey, hard, slightly moist → moist, sandy SILT with some gravel and clay. Poorly sorted, well graded. More moist on surface of dense, cohesive chunks of till (from surface inflow?). Typical till.
	2		Sandy Silt Glacial Till
Water table at 2.7 m.	▽ 2.7		
Easy digging (2.5 to 7.5m)	3		Brown, soft, saturated, fine-grained SAND and SILT. No cohesion (pit walls continuously cave-in). Very well sorted, poorly graded. Becomes more dense with depth.
Sides of pit continuously sloough.	4		Sand and Silt
	5		
	6		
Sample TP95-39 (at bottom of pit). ←	7		Note: Bottom of pit is estimated only as continuous sloughing of side walls made accurate measurements impossible.
	8	E.O.P.	