

K1745/40/MTP0101

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FAX COVER LETTER

TO: MEMPR <i>CC: Malcolm Swallow, IMC</i> DESTINATION FAX NO: 604 952-0481	FROM: Knight Piesold Ltd. #1400 - 750 West Pender Street Vancouver, B.C. CANADA V6C 2T8 Tel: (604) 685-0543 APPROVED BY: <i>KJB</i> ORIGIN FAX NO: (604) 685-0147
ATTENTION: George Headley	SENDER: Ken Embree
SUBJECT: Mt. Polley Site Inspection PAGE 1 OF 4	DATE: October 6, 1995 TIME: 14:00 PM FILE NO: 1625.01 REFERENCE NO: 5/2366 OPERATOR: kde

George,

This fax is a more detailed description of my activities, as discussed on the phone today. There will not be anyone at the Mt. Polley site on Monday October 9, 1995. On Tuesday, Jamie Stevenson will be available to show you around. I would not recommend driving a car around site, especially with the rain they have had lately. We are not constructing any drainage measures for the sub-surface silty sands this year. We are only constructing surface runoff drainage diversion ditches. This all that you will see on site.

Regarding my site inspection, the runoff drainage diversion ditches have been constructed to permit water to bypass the bottom of the basin, where the basin groundwater and foundation drains will be installed. The ditches were set out and installed with a slope of greater than one percent. The ditches were flowing slightly while I was on site as there had been some rainfall. The perimeter ditches are complete and only the central and embankment ditches remain to be built. The approximate locations of the ditches are shown on the included sketch. I believe that all of the springs which concerned you have been diverted. In addition, new culverts have been installed to replace existing damaged ones. There should be no problem with ditches collapsing because they are quite wide (made with a clean up bucket) and are cut into dense till. The temporary sediment control measures consist of some deep holes excavated in the ditches for sediment storage and hay bales with filter fabric as a barrier to any flows.

A total of 31 test pits were excavated at the embankment foundation for additional information to characterize the foundation soils as follows:

- 2 -

- 18 on the Stage Ib centreline at 25 m intervals across the bottom of the tailings basin
- 3 along the Stage Ib upstream toe at approximate 50 m intervals
- 4 along the Stage Ib downstream toe at approximate 50 m intervals
- 6 along the Final downstream toe at approximate 50 m intervals

The test pits were typically 6m deep. I started in the centre and went toward the left (east) abutment. Here, I encountered 2 to 3 m of dense, moist to wet till overlying stiff to very stiff, overconsolidated silt and silty sand (glaciolacustrine sediments). No sections of loose wet sediments were encountered. Next, I moved toward the right (west) abutment from the centre and identified similar stratigraphy for approx. 125m more. The first test pit with loose wet sand was TPME-15. Here, the till cap varied from 1.7 to 3m thick, with loose glaciofluvial sediments underlying the till. This material extended on the centreline for approx. 125 m, to TPME-20. On the upstream toe, this zone was approx. 100m wide. It had an identified width of approx. 130 m on the Stage Ib and final downstream toes.

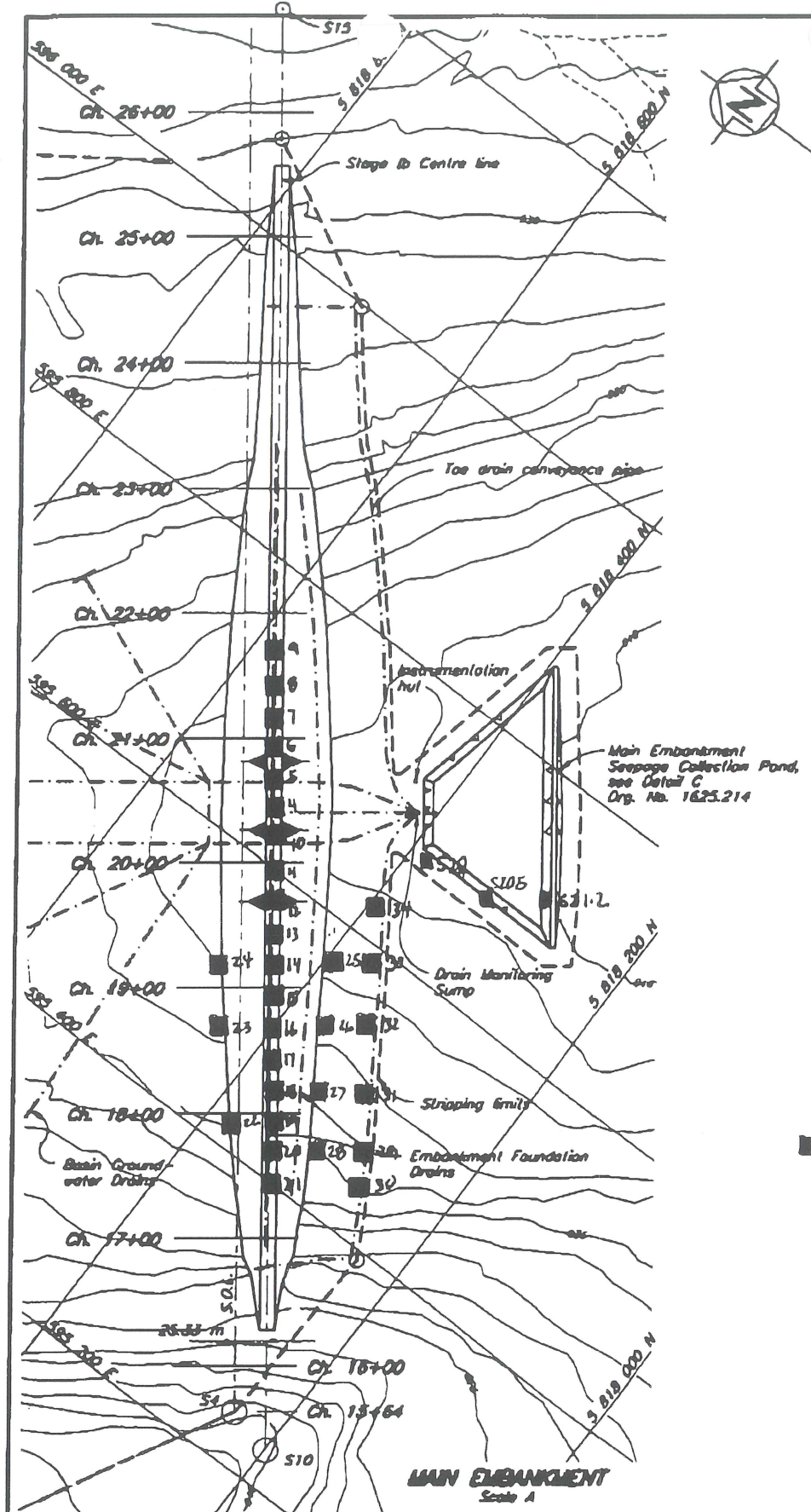
Three test pits were excavated in the seepage collection pond area to better define the limits of the fine till and glaciolacustrine sediments in which the pond could easily be excavated. It was found that only the southwest corner was underlain by loose sediments. The rest of the pond has stiff silt and silty sand (glaciolacustrine sediments) below a till cap and will be fine for excavation of the pond. We will likely make the pond a rectangular shape and avoid construction in this area.

After the test pit work was completed, we checked out Polley Lake for an intake site and pipeline route. The lake has a gentle sloping bottom and is very shallow with a soft bottom at the south end. Any intake will have to be located further to the north, where the bottom is steeper and has sandy gravel. Regarding pipeline routes, the south end is much too swampy for road access and disturbance would be considerable. It would probably be best to use existing roads. We will discuss this with Imperial Metals.

The additional topsoil stockpile area we proposed to you looks very good. It is on the side of a gentle hill which has been logged. The hill has a firm foundation and good natural drainage. We would like to use this area and will identify it as a stockpile on revised drawings.

The included sketch shows approximate locations of the test pits as well. I will be providing you with the test pit logs, photographs and an accurate location plan next week. I hope this is sufficient for now and I will talk to you next

Regards,

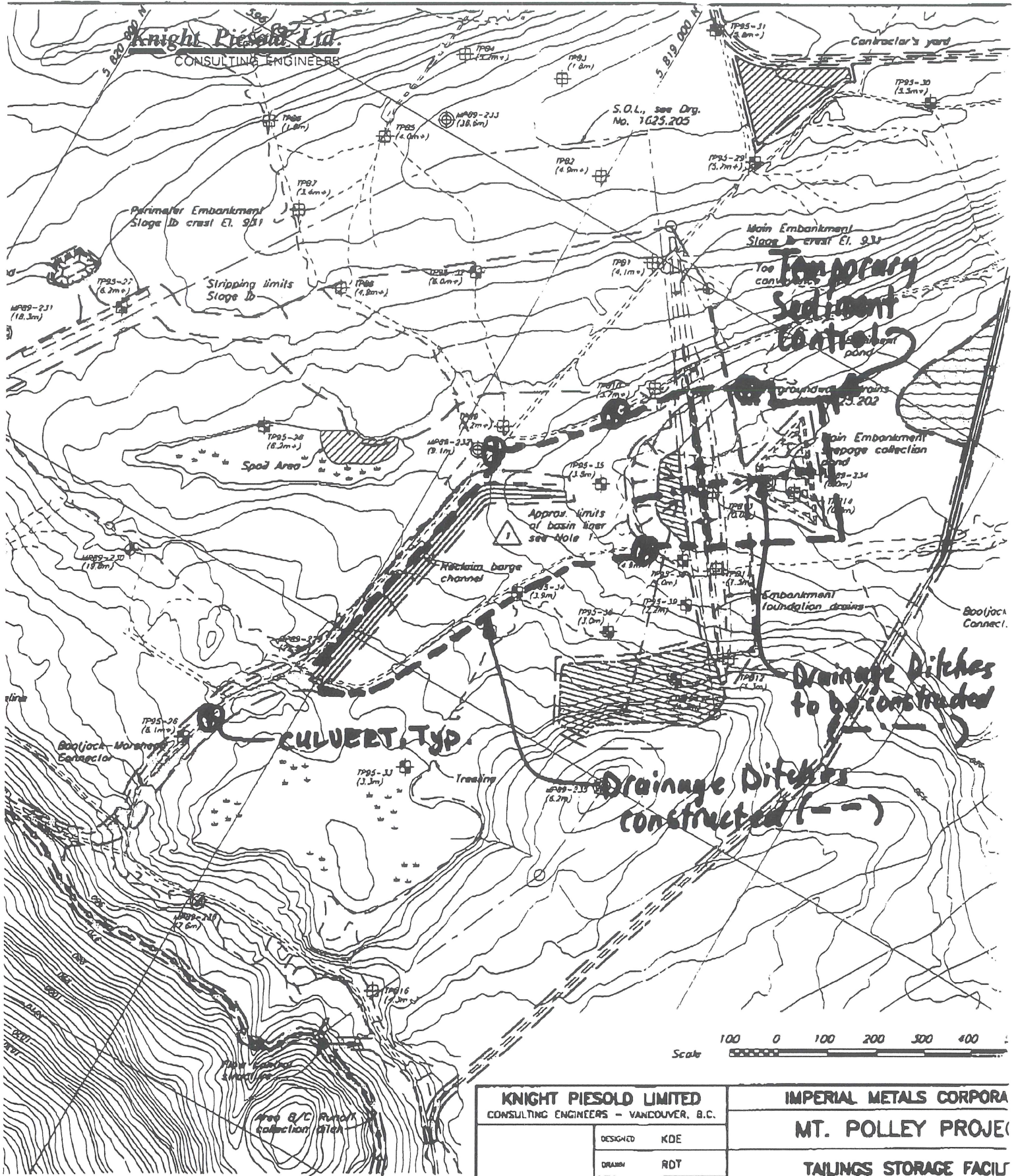


■ 26 New test pits.

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1625.202	TAILINGS STORAGE FACILITY - FOUNDATION PREPARATION AND BASIN LINER - SECTIONS AND DETAILS
1625.214	TAILINGS STORAGE FACILITY - SEDIMENT CONTROL AND SEEPAGE COLLECTION - SECTIONS AND DETAILS
REF. NO.	DESCRIPTION
REFERENCE DRAWINGS	

REV.	DATE	DESCRIPTION	APPROVED	A	MA
REVISIONS					



1	JULY 27 1995	NOTE 4 AND STRIPPING LIMITS	
0	JUNE 21 1995	ISSUE FOR TENDER	
APPROVED	REV.	Engineers	APPROVED
		of Canada	

KNIGHT PIESOLD LIMITED CONSULTING ENGINEERS - VANCOUVER, B.C.		IMPERIAL METALS CORPORA MT. POLLEY PROJECT	
DESIGNED	KDE	TAILINGS STORAGE FACILITY BASIN PREPARATION AND BASIN LINER	
DRAWN	RDY		
CHECKED			
APPROVED		DATE	JUNE 2, 1995
		SCALE	AS SHOWN
		DRG. NO.	510-11-01-1625.20