1628.A3

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
PROJECT LOCATION PLAN

CAD FILE: \1628\FIG\A3 Plot 1=1

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FIGURE 1.1

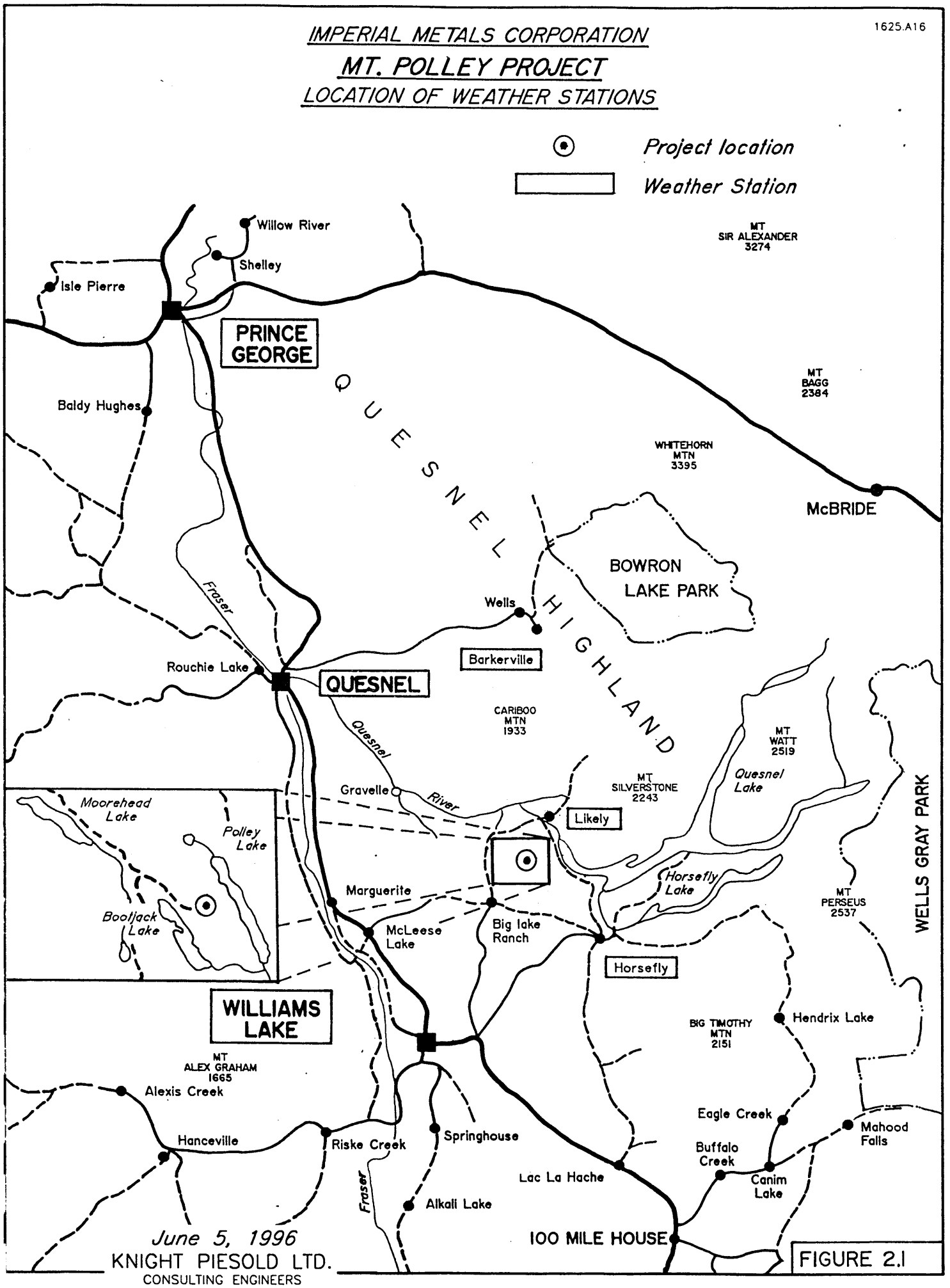
IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
LOCATION OF WEATHER STATIONS
1625.A16
Project location
Weather Station
Willow River
Shelley
Isle Pierre
PRINCE GEORGE
Baldy Hughes
QUESNEL HIGHLAND
MT SIR ALEXANDER 3274
MT BAGG 2384
WHITEHORN MTN 3395
McBRIDE
BOWRON LAKE PARK
Wells
Barkerville
Fraser
Rouchie Lake
QUESNEL
Quesnel
River
CARIBOO MTN 1933
MT WATT 2519
Quesnel Lake
MT SILVERSTONE 2243
Gravelle
Likely
Moorehead Lake
Polley Lake
Bootjack Lake
Marguerite
McLeese Lake
Big Iake Ranch
Horsefly Lake
MT PERSEUS 2537
WELLS GRAY PARK
Horsefly
WILLIAMS LAKE
BIG TIMOTHY MTN 2151
Hendrix Lake
MT ALEX GRAHAM 1665
Alexis Creek
Hanceville
Riske Creek
Springhouse
Eagle Creek
Mahood Falls
Buffalo Creek
Canim Lake
Lac La Hache
Alkali Lake
100 MILE HOUSE
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FIGURE 2.1

IMPERIAL METALS CORPORATION

MT. POLLEY PROJECT

SHORT DURATION RAINFALL INTENSITY – DURATION – FREQUENCY DATA FOR MINE SITE

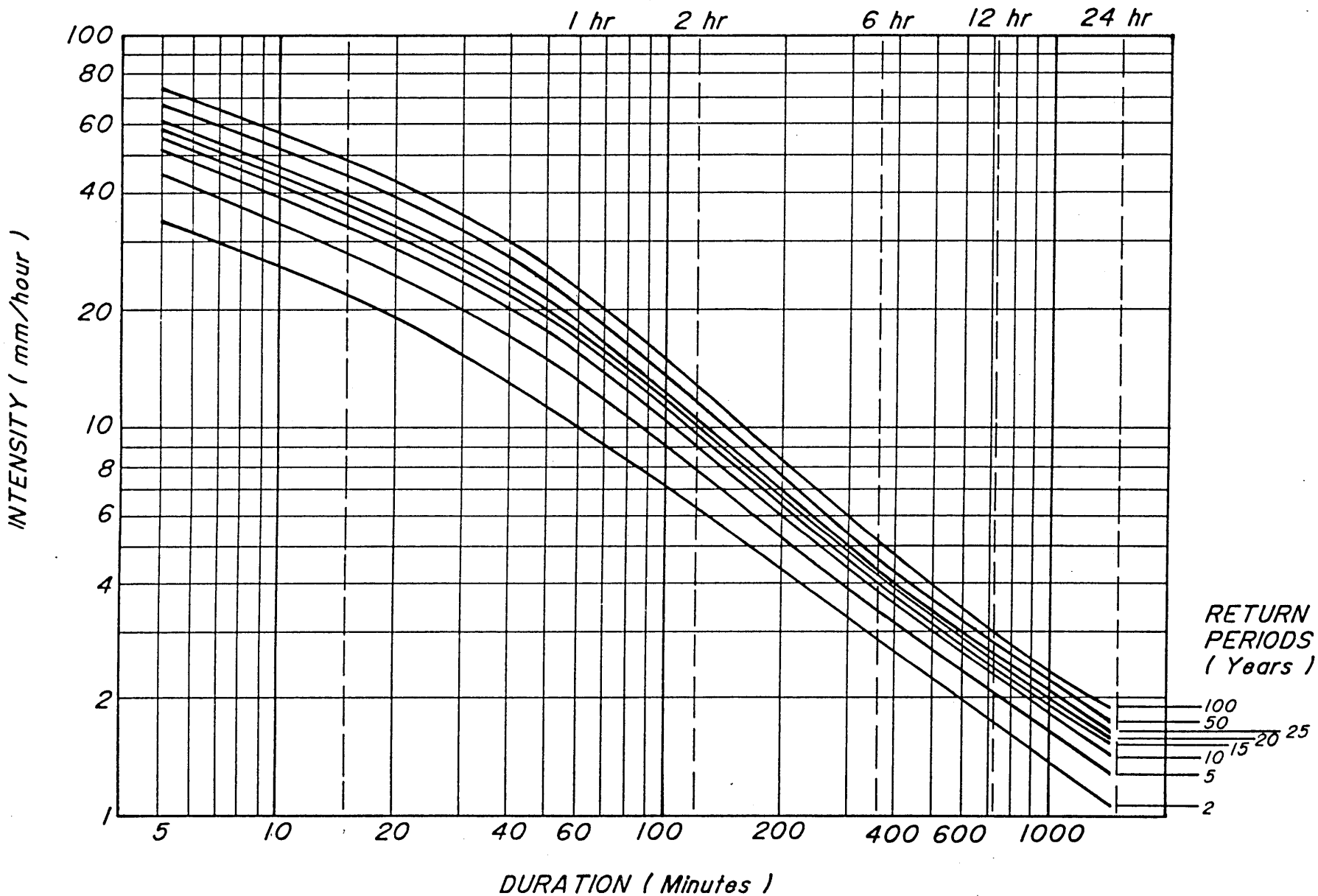

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FIGURE 2.2

1625.A1

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
OPEN PIT LAYOUT AND GEOTECHNICAL DRILL HOLE LOCATIONS

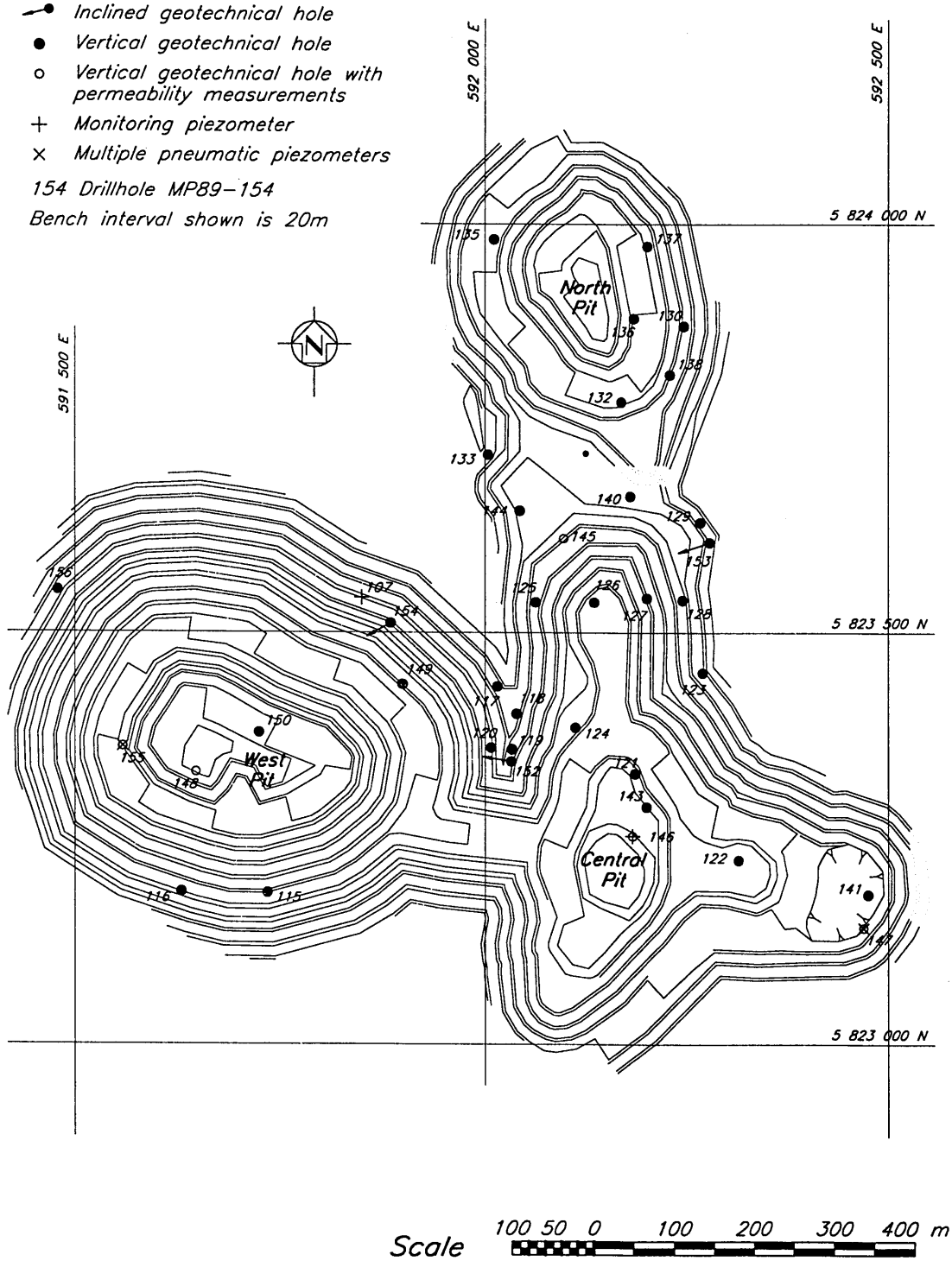

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FIGURE 3.1

CAD FILE: \1628\FIG\A1 1:6000 Plot 1=8

NCI - 763

1628.A6

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
SUMMARY OF JOINT DATA FOR MP89-152

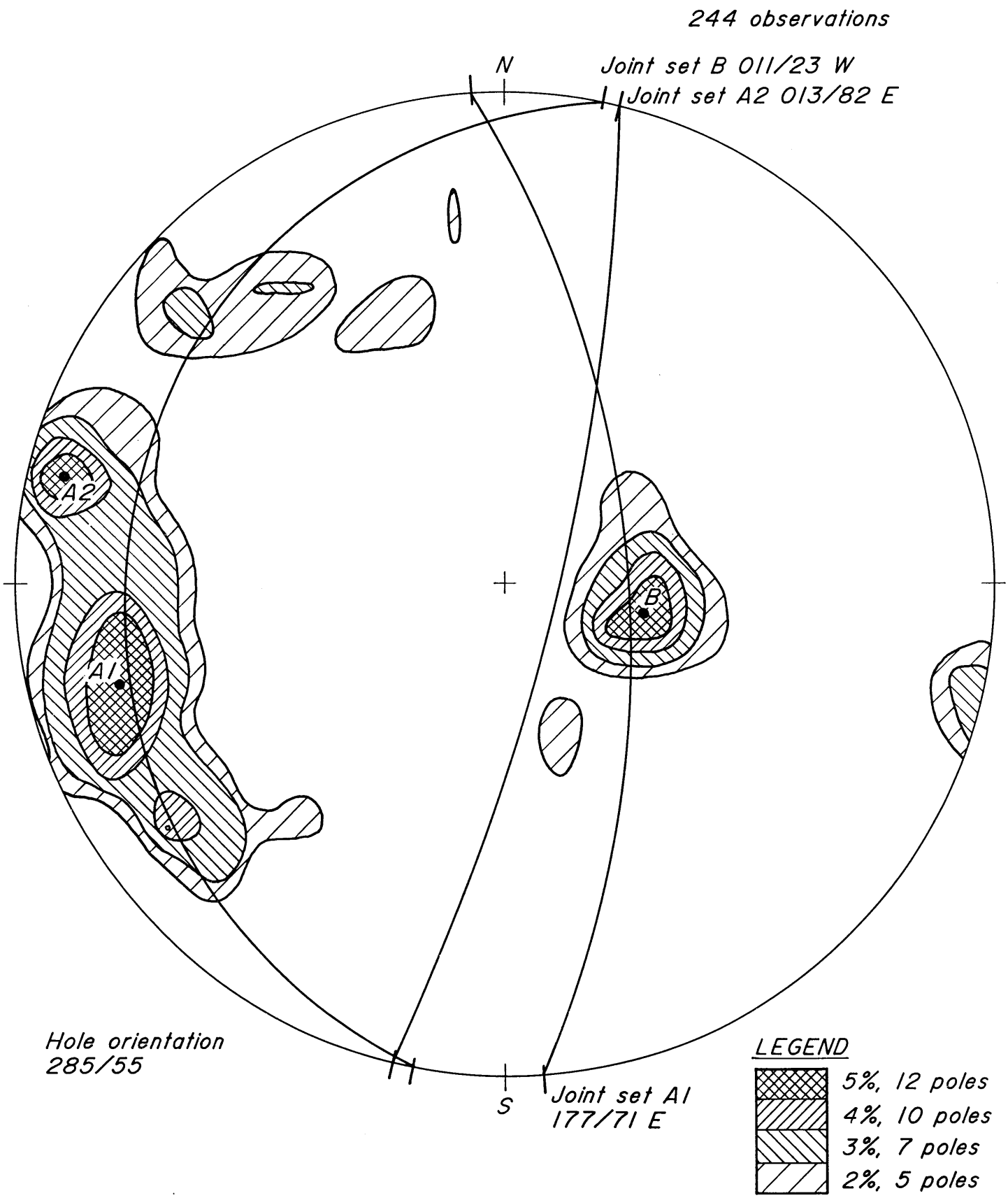

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FIGURE 3.2

NCI-763

1628.A7

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
SUMMARY OF JOINT DATA FOR MP89-153

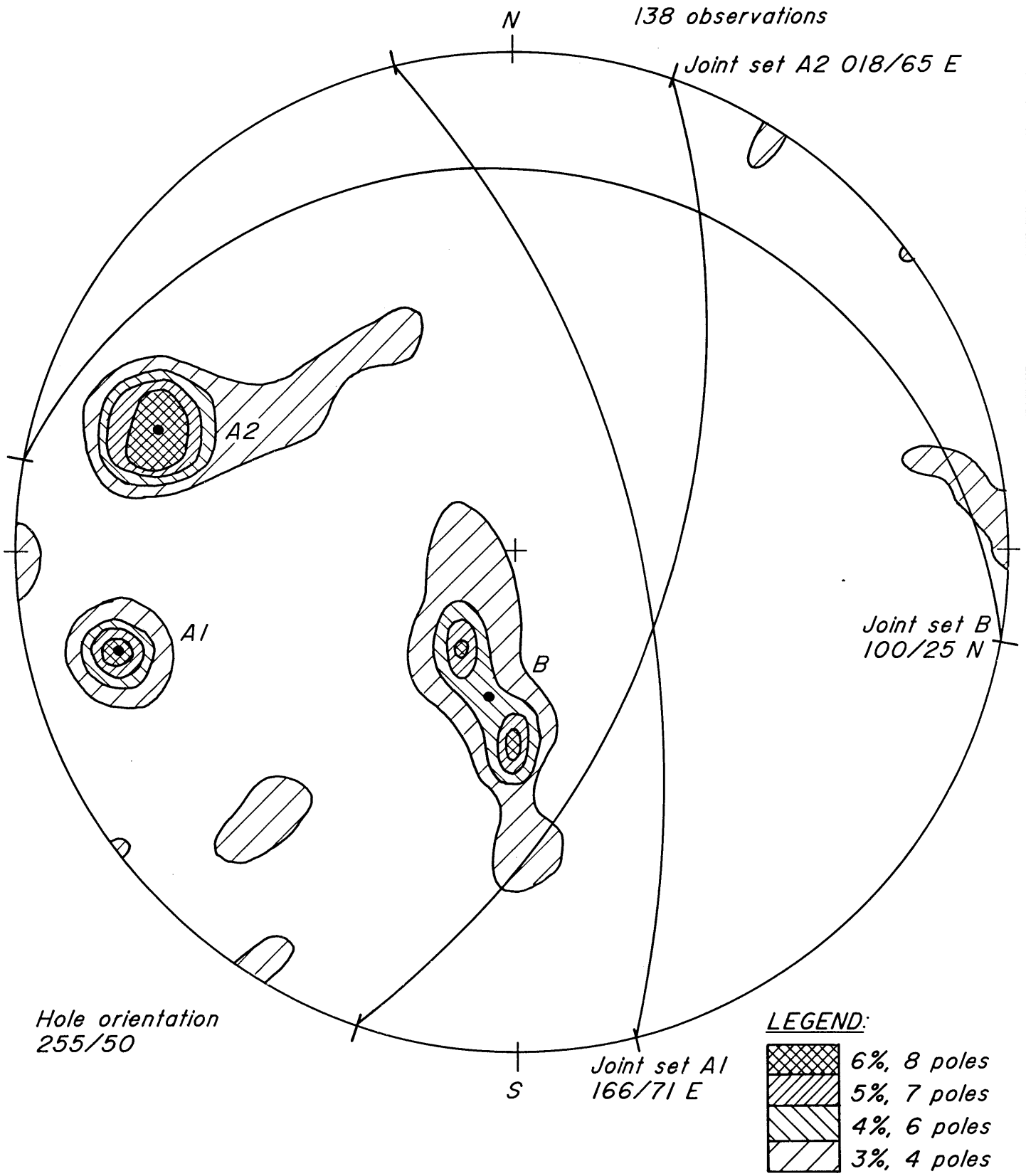

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FIGURE 3.3

NCI-763

1628.A8

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
SUMMARY OF JOINT DATA FOR MP89-154

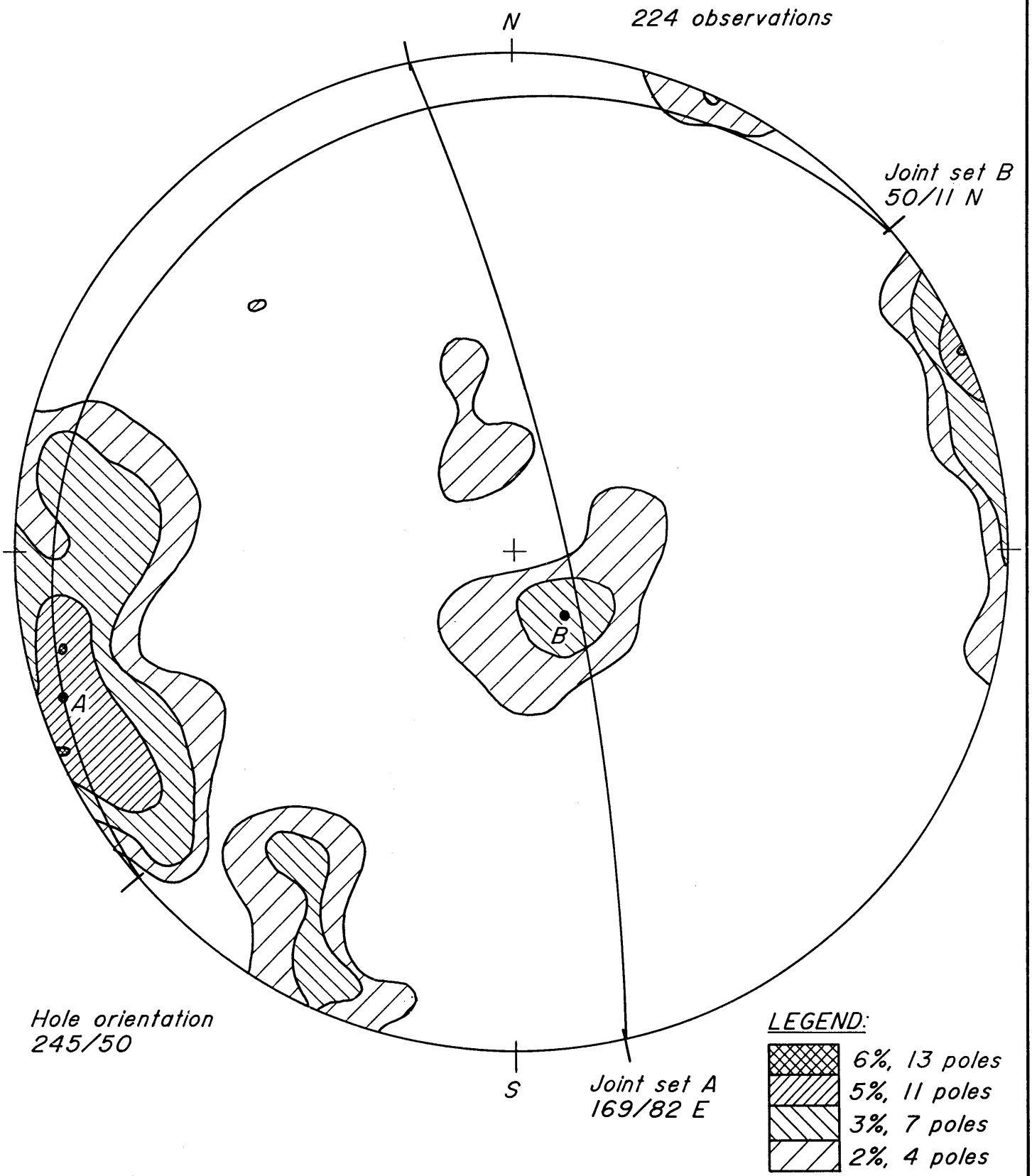

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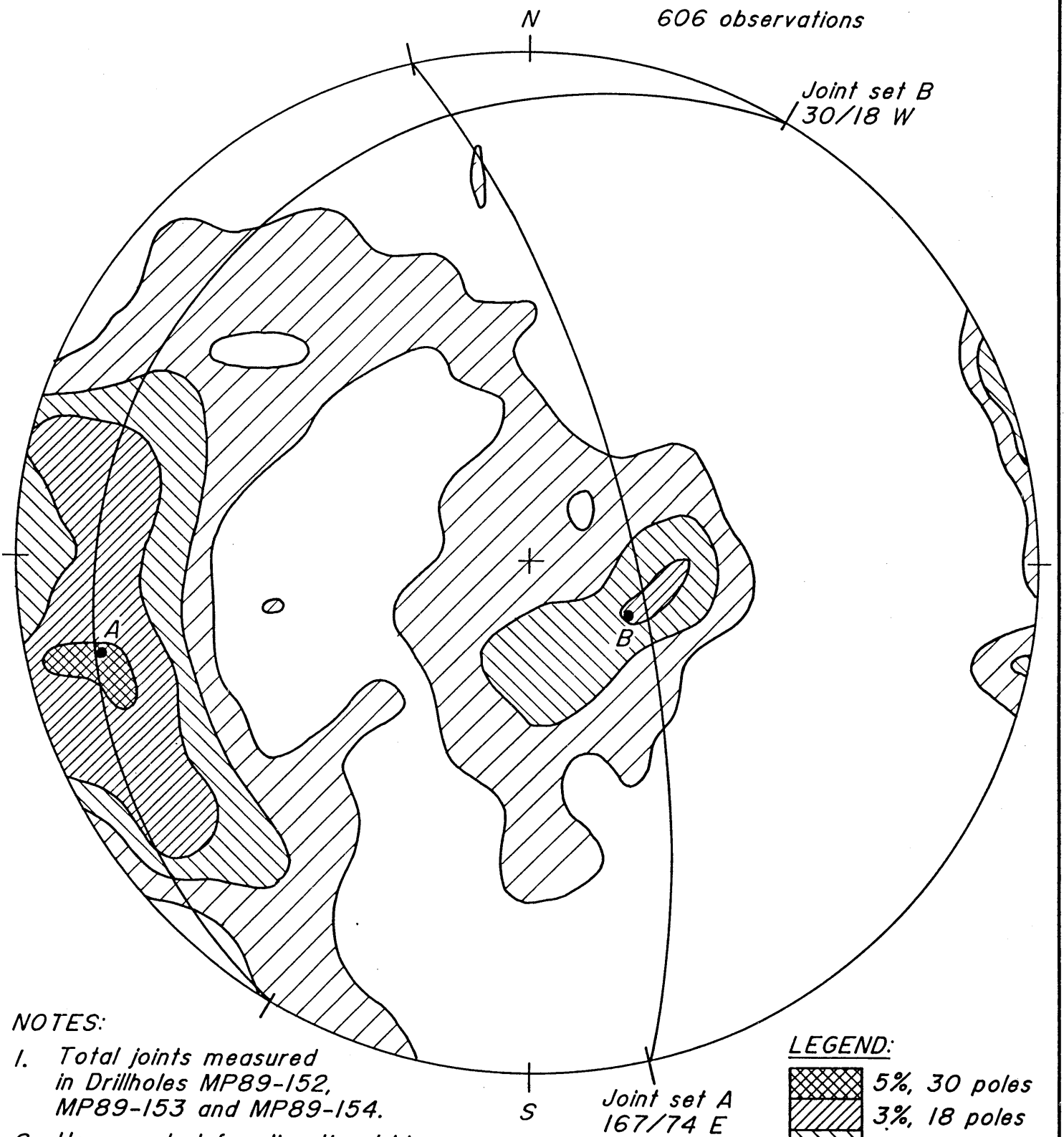
FIGURE 3.4

1628.A2

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
SUMMARY OF JOINT DATA



NOTES:

1. Total joints measured in Drillholes MP89-152, MP89-153 and MP89-154.
2. Uncorrected for directional bias.

LEGEND:

- 5%, 30 poles
- 3%, 18 poles
- 2%, 12 poles
- 1%, 6 poles

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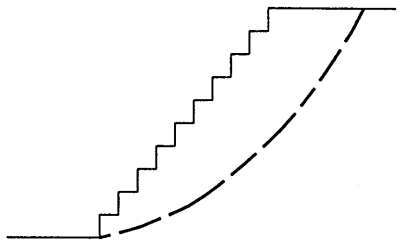
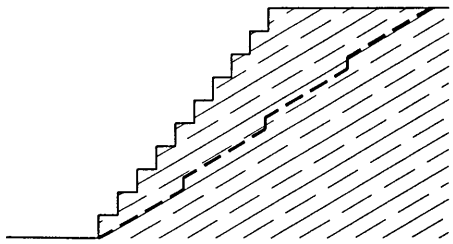
FIGURE 3.5

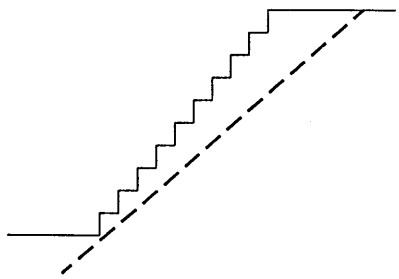
IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
OPEN PIT
TYPICAL FAILURE MODES



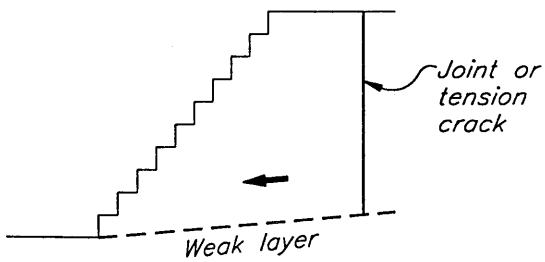
(a) Failure geometry in homogeneous rock or rock with random localized jointing



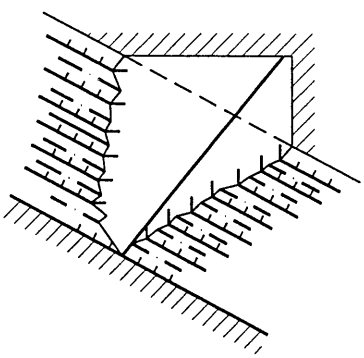
(b) Failure combining movement along discontinuous joints and through intact rock



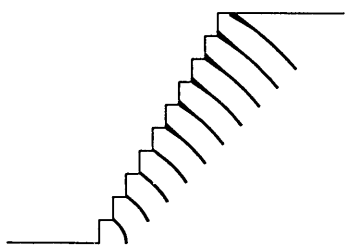
(c) Failure on the plane of a continuous fault, shear zone or joint



(d) Failure as a block on a weak layer bounded at the back by a joint or tension crack



(e) Failure as a wedge on two or more intersecting discontinuities



(f) Failure by toppling. Most frequent where major structure dips steeply

CAD FILE: \1628\FIG\A5 Plot 1=1

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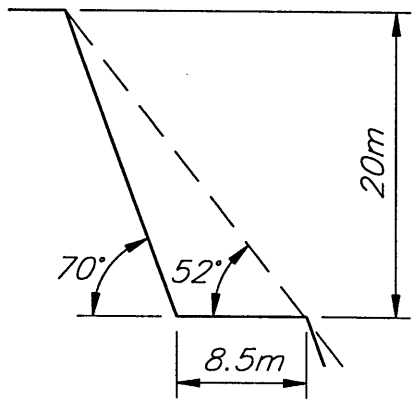
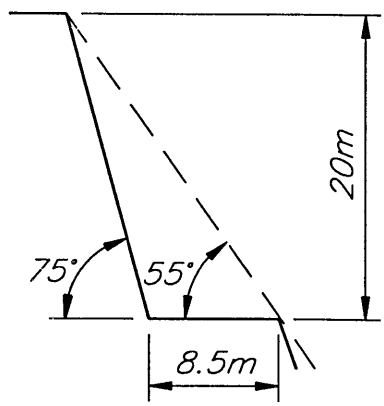
FIGURE 4.1

1628.A4

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
OPEN PIT – PRELIMINARY DESIGN
SLOPE ANGLES AND BENCH DESIGN



DESIGN I – ALL INITIAL PIT SLOPES



DESIGN II – FAVOURABLE CONDITIONS ENCOUNTERED DURING PIT EXCAVATION

Scale 10 5 0 10 20 30 m

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FIGURE 4.2

CAD FILE: \1628\FIG\A4 Plot 1=1

CAD FILE: \1625\FIG\A38 Plot 1=1

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
TYPICAL STATIC WEDGE FAILURE ANALYSIS

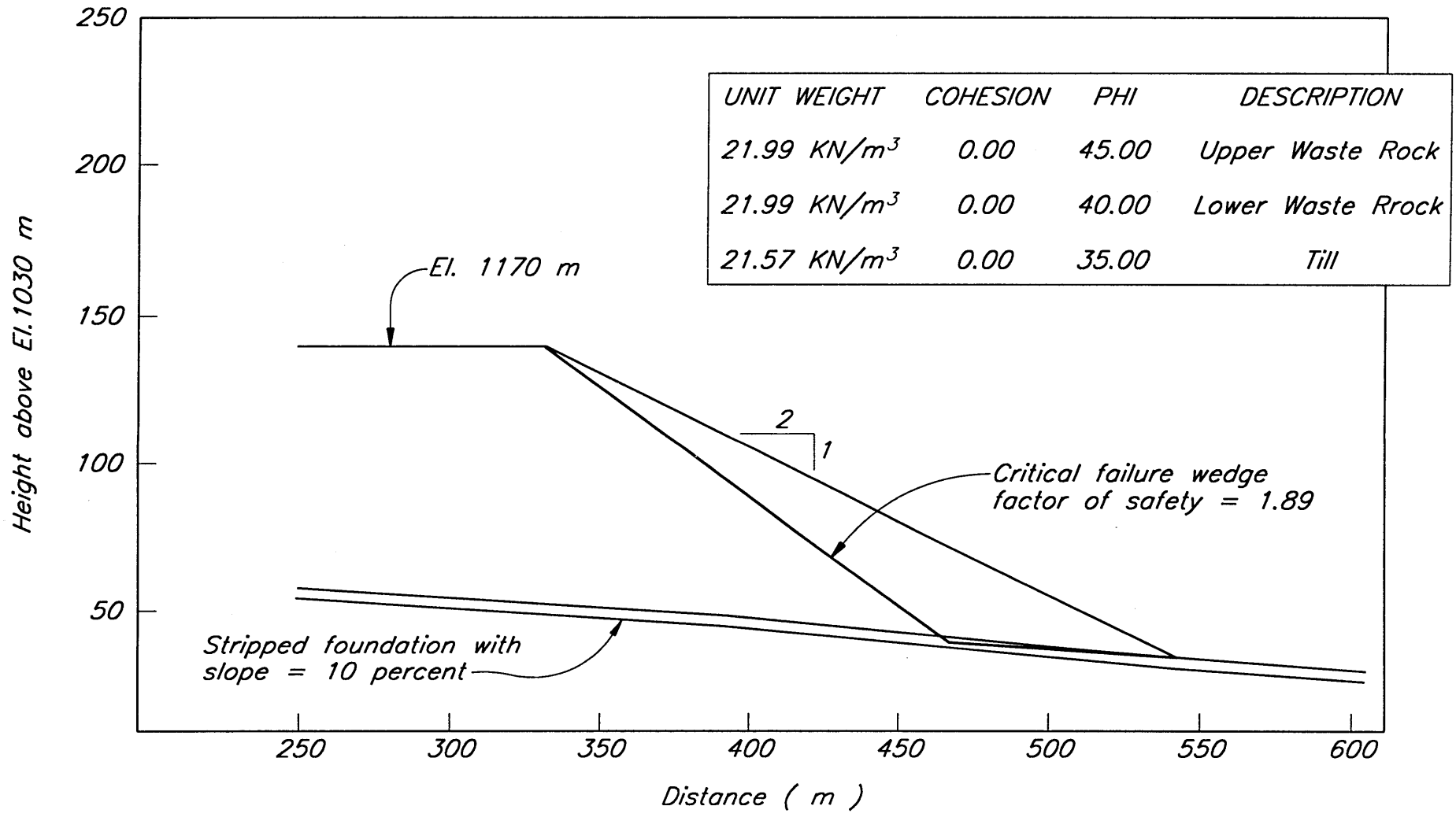

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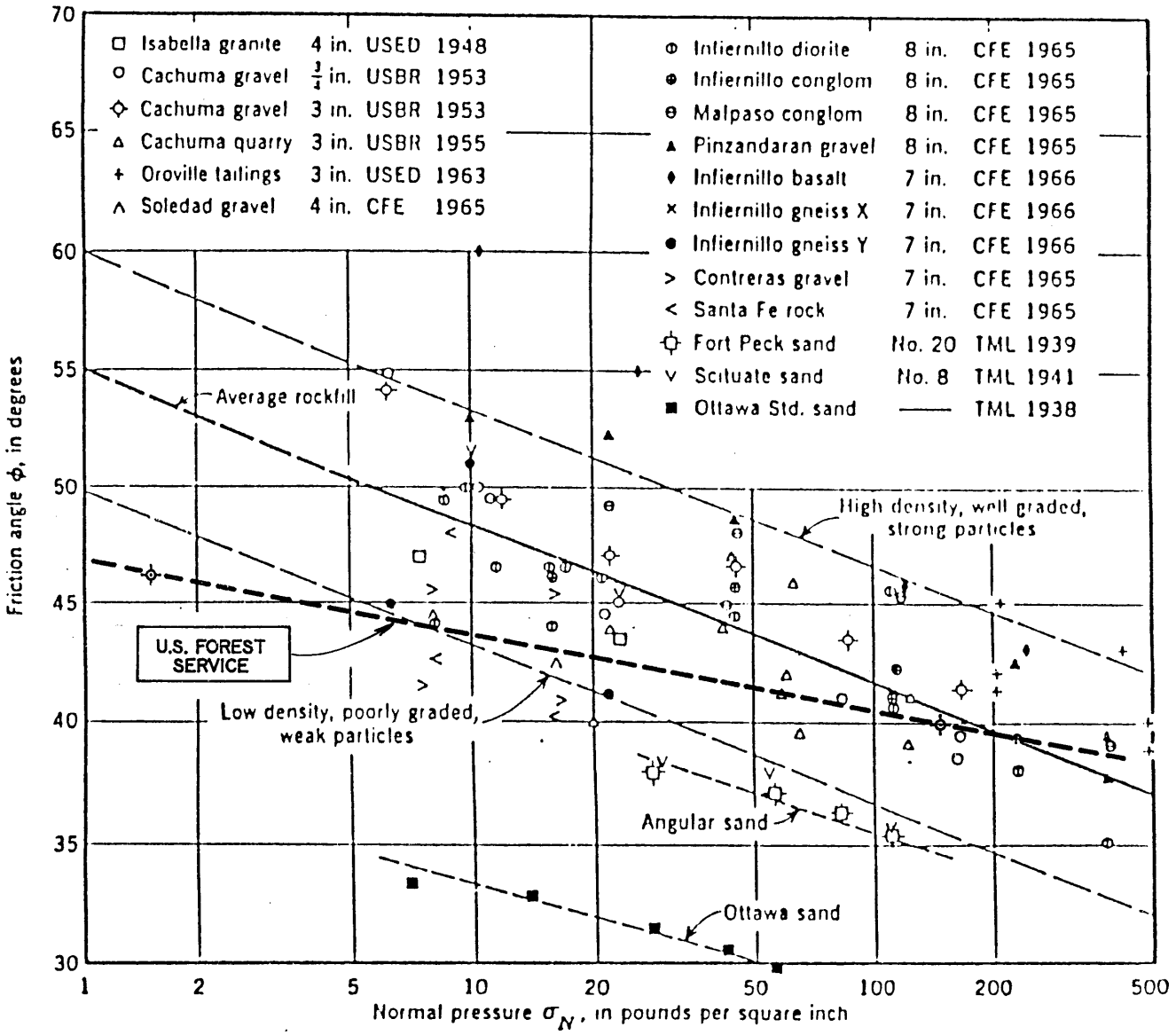
FIGURE 5.1

1625.A38

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
WASTE DUMPS
SHEAR STRENGTH OF ROCKFILL



Information taken from :

REVIEW OF SHEARING STRENGTH OF ROCKFILL
By Thomas M. Leps, F. ASCE
July , 1970

June 6, 1996

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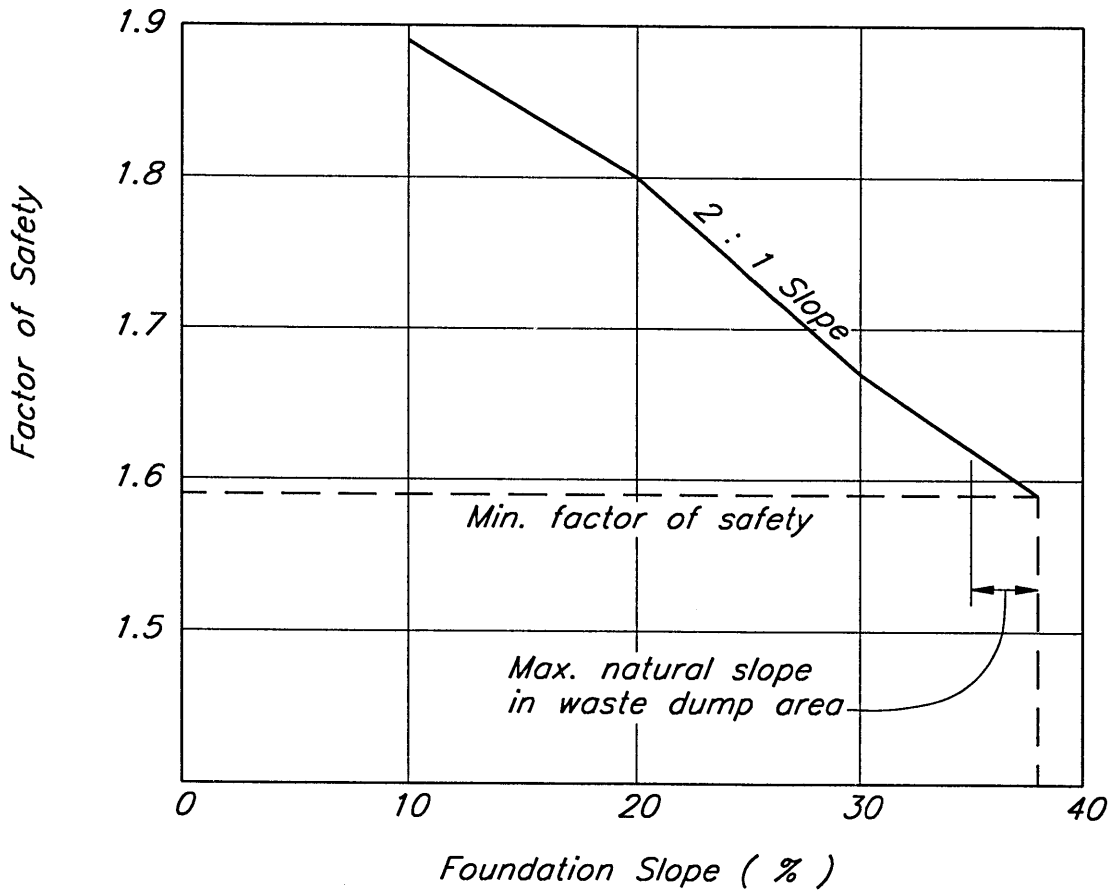
FIGURE 5.2

BCIL 7733 KP

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
WASTE DUMPS – STABILITY CHART



NOTE: Foundation will be stripped with $\varphi' = 35°$.

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FIGURE 5.3

CAD FILE: \1625\FIG\A39 Plot 1=1