825753

GRANDUC MINE

104B/1W

LOCATION:

At the head of the Leduc River, 25 miles NNW of Stewart, between elevations 1800 and 4000 feet. Discovered in 1951.

OWNERSHIP:

ESSO Minerals Canada.

GEOLOGY:

Massive sulphide mineralization is localized within a Lower Jurassic volcanic-sedimentary sequence at the eastern margin of the Coast Plutonic Complex.
Host rocks at Granduc form part of a shallow marine succession of thick andesite pillow lavas, siltstone, crystal tuff, conglomerate, volcanic sandstone and some rhyolite and chert members that trend north and dip steeply to the west.

RESERVES:

Pre-production:
43,300,000 Tons 1.73% Cu, 0.2oz/T Ag, 0.004oz/T Au.
7,400,000 Tons 1.63% Cu, 0.2oz/T Ag, 0.004oz/T Au (Dec. 1980)

REFERENCES:

1) GEM 1971 Pg. 34,35
2) GEM 1970 Pg. 68-73
3) Handbook of Strata-bound and Stratiform Ore Deposits 1976, pg. 88.

VALUATION: Granduc Mine

Assumptions: 6,000,000 Tons 1.63% Cu, 0.2oz/T Ag, 0.004oz/T Au

Recovery 92% Cu, 70% Ag, 70% Au

Production 1,200,000 Tons/Year

Productive Life 5 years

Capital Costs: $91,000,000 (1971 $)*

$235,000,000? (1982 $)

Cu: $0.80/lb. CAN

Ag: $12.00/oz CAN

Au: $450.00/oz CAN

Operating Costs: $50/Ton **

Annual Revenue	$32,300,000
Operating Cost	$60,000,000
NPV (15%)	NIL

* Let's assume this has been recovered by previous production.

** Perhaps this is too high?

Revenue contributions Cu: $28,800,000/Yr.

Ag: $ 2,000,000/Yr.

Au: $ 1,500,000/Yr.

ESTIMATED CASH FLOW - GRANDUC MINE ($000,000)

	1	2	3	4	5	6	7	8	9	10
REVENUE	32.3	32.3	32.3	32.3	32.3					
OPERATING COSTS	60.0	60.0	60.0	60.0	60.0					
NET INCOME BEFORE ALLOWANCES										
DEPRECIATION ALLOWANCE										
TAXABLE INCOME										
TAX (55%)										
TAX CREDIT										
TAX PAYABLE										
NET INCOME AFTER TAXES										
CAPITAL COSTS										
AFTER TAX CASH FLOW	-27.7	-27.7	-27.7	-27.7	-27.7					

0 1 2 3 4 5 6 7 8 9 10

Net Present Value (1982)

NPV= NIL

Grandue

file

Phoned John Drybrough Jan 10/63

Programme to - end of March

Not considering anything until drilling completed

1/2 drilling yet to be done

Already told one company they will talk to them.

Suggest that I Call in late March.

Fe - 40 mi to sea.
12 miles of this in Canada.

Grandue - Larry Postle, Director

Only bug is this -

All money gone - maybe enough for another year

6.000.000

Newmont - about 40-45 %.

Thinking - 50% equity money

Newmont being criticised for having too much of assets in Africa. One reason for going ahead.

Good mine - probably
30-50,000.000 - 1 1/2 % Cu.
or 25.000.000 - 2%. Cu.

Doing sensible job. Expected to reach decision last summer. Thinks pretty luck in 1 1/2 - 2 yrs.
Work could build up picture fast.

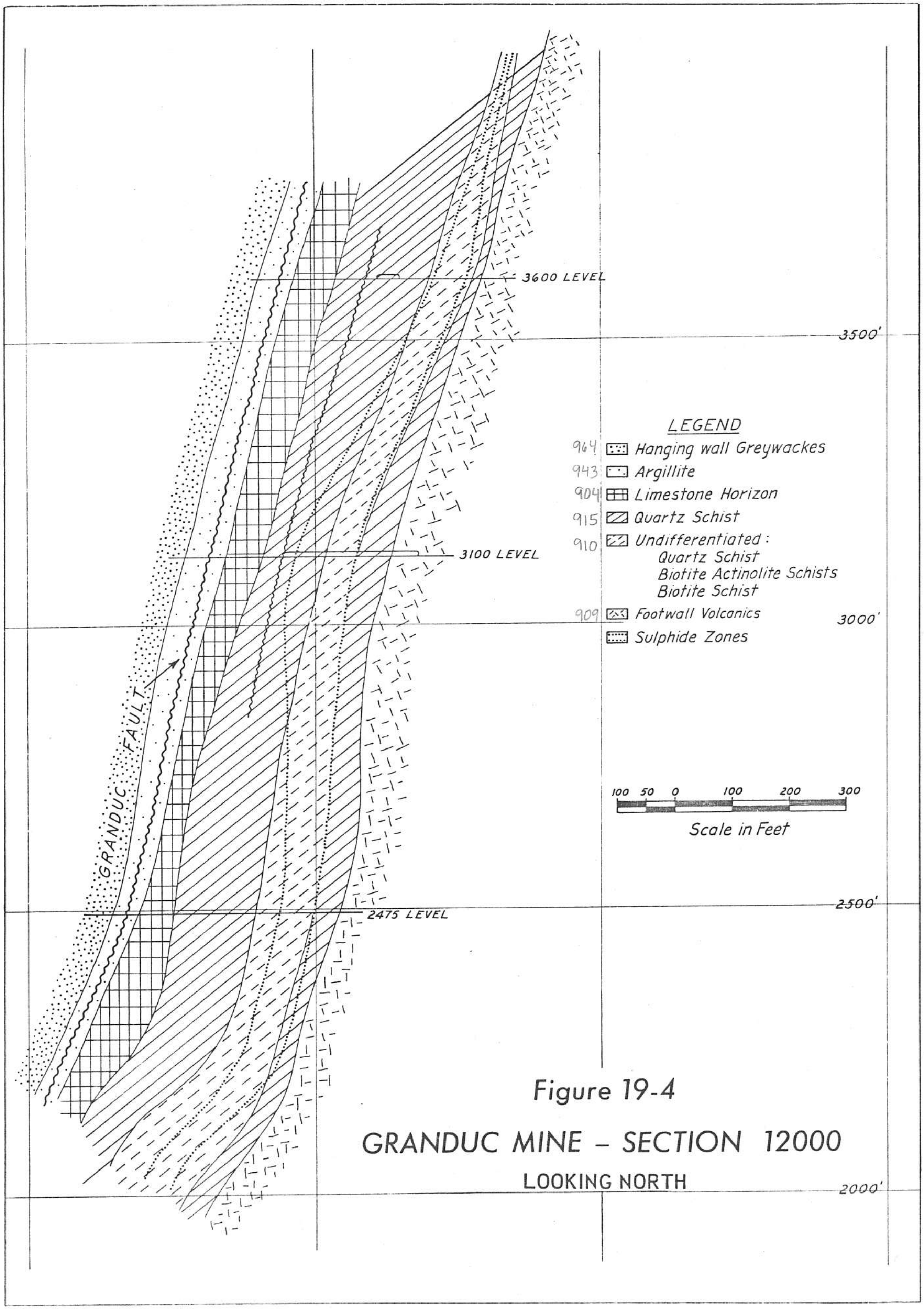

Figure 19-4

GRANDUC MINE – SECTION 12000

LOOKING NORTH

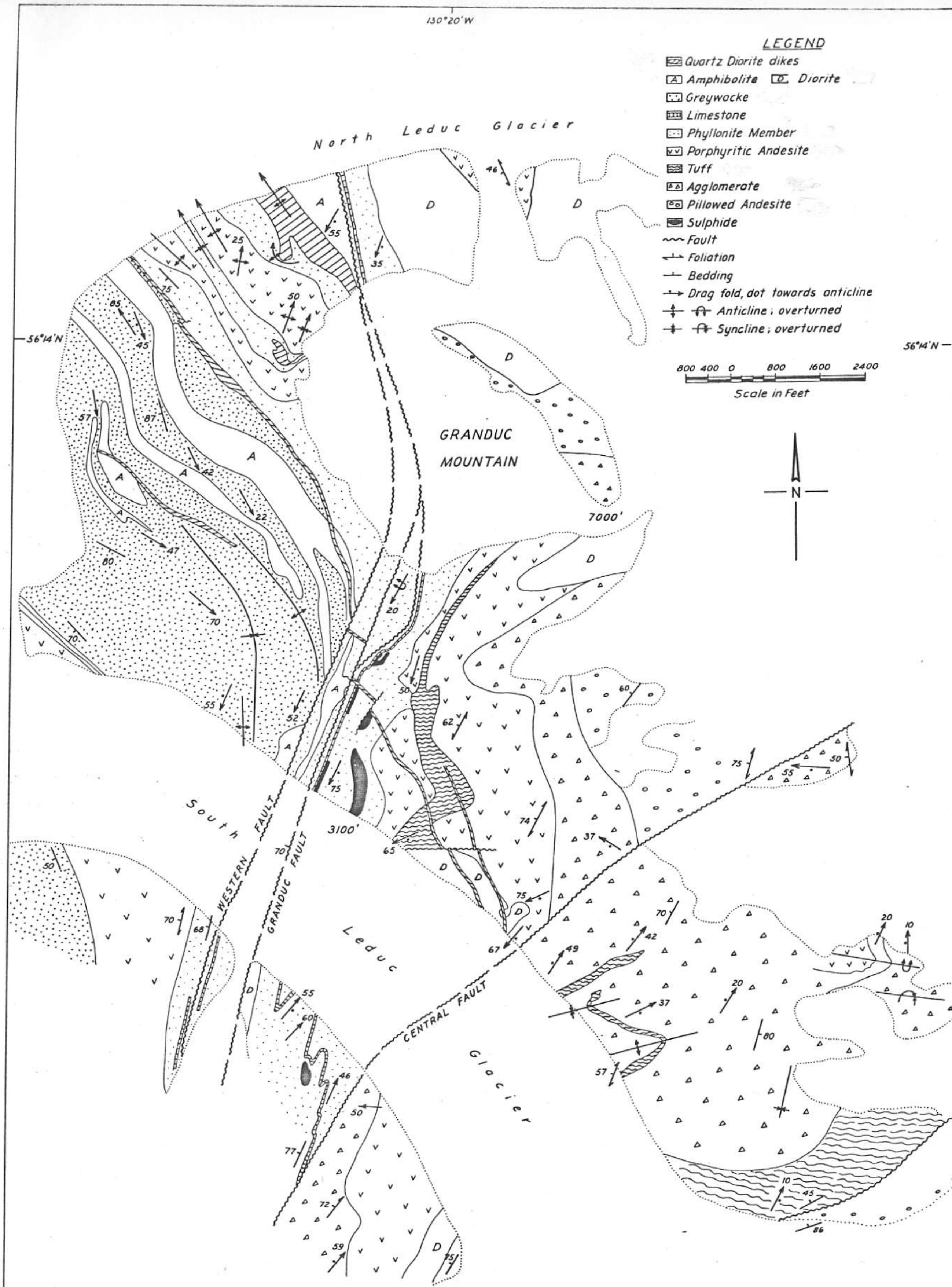

Figure 19-1

GEOLOGY AND STRUCTURE OF GRANDUC MOUNTAIN

SULPHIDE BODIES SHOWN IN DIAGRAMMATIC PROJECTION

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Au: 70%

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OPERATING COSTS	60.0	60.0	60.0	60.0	60.0					
NET INCOME BEFORE ALLOWANCES										
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TAXABLE INCOME										
TAX (55%)										
TAX CREDIT										
TAX PAYABLE										
NET INCOME AFTER TAXES										
CAPITAL COSTS										
AFTER TAX CASH FLOW	-27.7	-27.7	-27.7	-27.7	-27.7					

0 1 2 3 4 5 6 7 8 9 10

Net Present Value (19)

NPV= Nil

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