

CORPORATION FALCONBRIDGE COPPER

MEMORANDUM

DATE: April 27, 1983
TO: D. H. Watkins
COPIES TO: M. J. Knuckey
DE FROM: A. J. Davidson
SUJET SUBJECT: THISTLE PROPERTY NTS 92F/2

827243

Summary

The old Thistle Mine, 15 kilometres south of Port Alberni, is situated in the Myra Formation of the Sicker Group volcanics. Past production yielded 6867 tons grading 0.39 oz/ton Au, 0.24 oz/ton Ag, and 4.56% Cu from 1938-1942.

Work on the property since then has been sporadic and meagre.

Two "glory hole" pits are now mappable on the property. Ore in the upper glory hole is mainly stringers of chalcopryrite-pyrite-quartz enveloped by black chlorite. An "exhalite" lying stratigraphically above these stringers dips at 20° into the hillside. In the Lower Glory hole a 6' wide band of massive sulphide assayed 2.96% Cu, 1.12 oz/ton Au. This band dips steeply away from the hillside and may be the same exhalite as in the upper pit folded over. An anticlinal structure, the core occupied by heavily chloritized rock and stringer sulphides, (similar to the Lynx Mine) is suggested for this prospect. The rocks in the Thistle area are tuffwackes and volcanoclastics and also appear very similar to those recently seen at Buttle Lake. The property has excellent geology, mineralization, and potential.

The land position held by Nexus Resources is excellent except for the base metal rights on 5 crown grants (which include the old mine) which have not yet been acquired. Westmin have made an offer on the property subject to the acquisition of the base metal rights. The only way to better Westmin's offer would be to make a lesser offer that is not subject to acquiring base metal rights in the hope of acquiring them soon afterwards. I recommend we make such an offer soonest.

Location and Access

The Thistle Mine is situated at 49°06'N, 124°38'W approximately 15 km south of Port Alberni, B. C. in the Alberni Mining Division, NTS 92F/2 (Fig. 1).

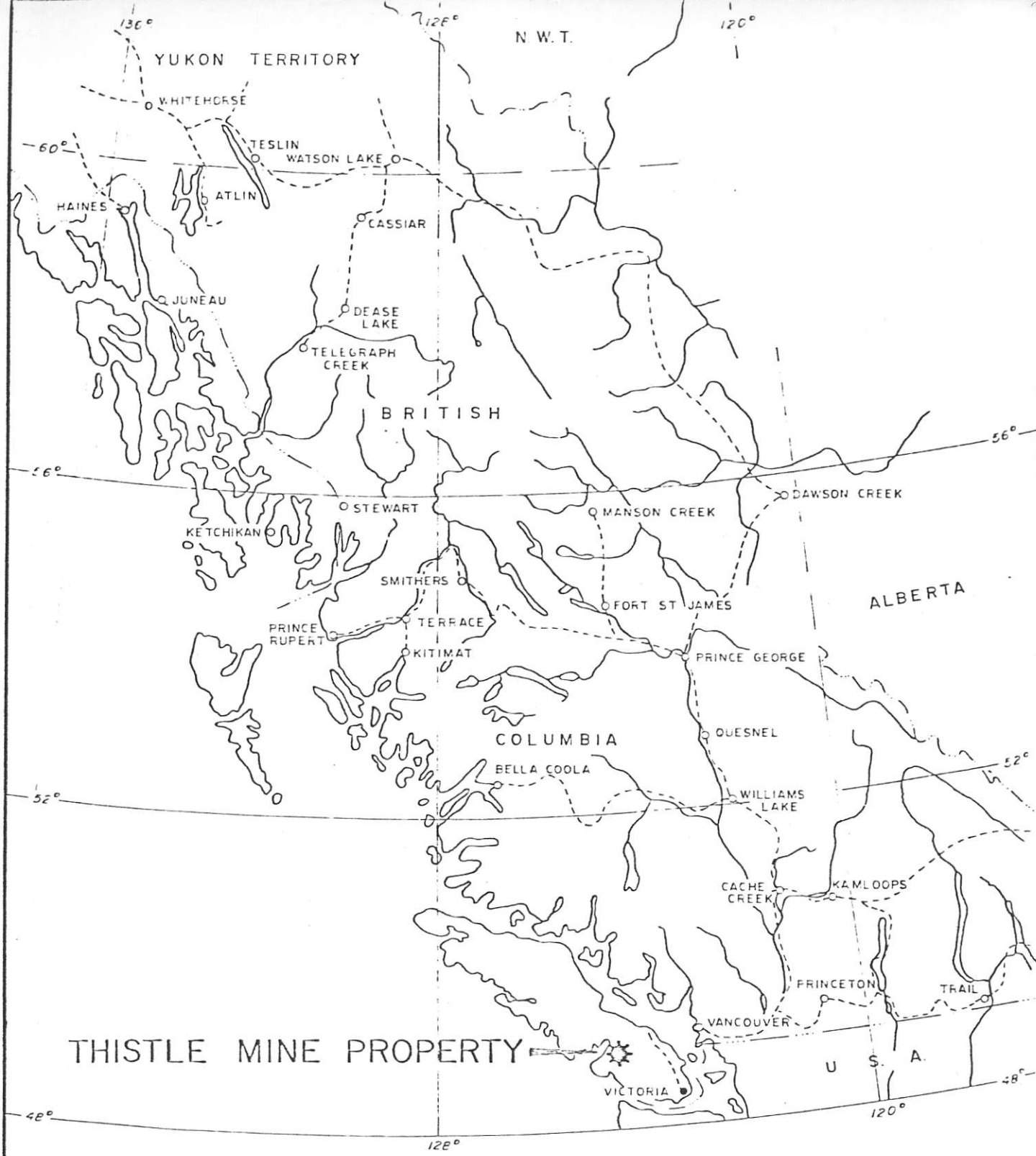
The claims can be reached by a series of logging roads from Port Alberni.

Property

The original property consists of three Crown Grants L91G-L93G held by Nexus Resources under option from Mr. Frank Harris of Port Alberni. Two reverted crown grants are held by Nexus under option from Mr. David Murphy of Vancouver. However the base metal rights of all 5 crown grants are not presently held by Nexus. Six mineral claims listed below have been recently acquired by McQuillan Gold Ltd. (Nexus Resource) and would form part of any Thistle property. G. White (Kargen Development Corp) holds a 10% interest in the Crow, Levi and Sue claims.

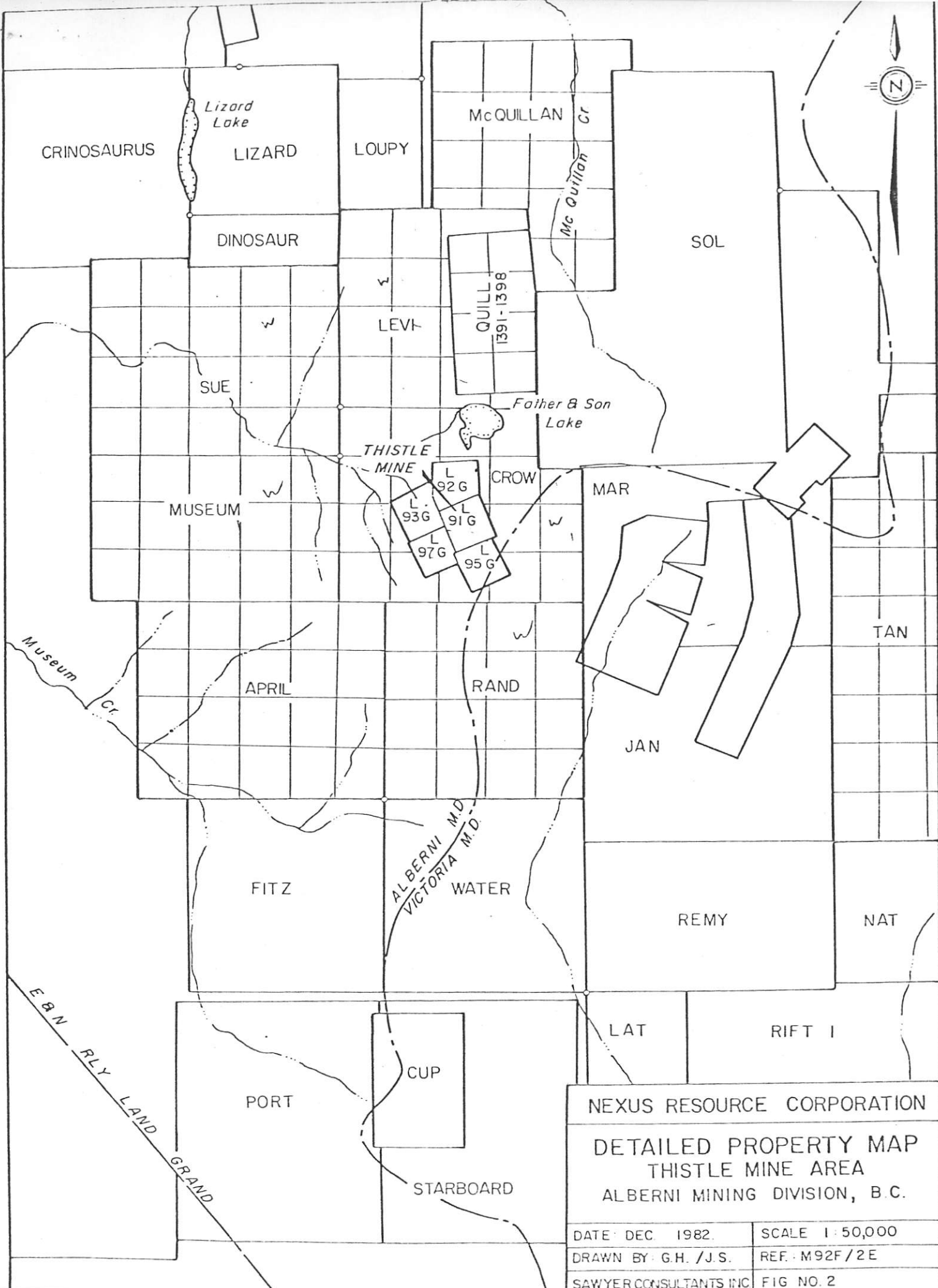
Name	Units	Record #	Expiry Date	Owner
Sue	20	488	28/6/83	Kargen
Levi	20	490	28/6/83	Kargen
Crow	20	489	28/6/83	Kargen
Rand	16	731	29/2/84	McQuillan
April	20	1226	6/5/84	McQuillan
Museum	15	1223	6/5/84	McQuillan

Thus total number of units in the property is 116. Each unit is 25 hectares. The total area under consideration is 2900 hectares (Fig.2).



THISTLE MINE PROPERTY

NEXUS RESOURCE CORPORATION	
GENERAL LOCATION MAP THISTLE MINE PROPERTY ALBERNI MINING DIVISION, B. C.	
DATE: Dec 1982.	SCALE: 1" = 125 Miles
DRAWN BY: C. L. C.	REF:
SAWYER CONSULTANTS INC.	FIG. No. 1



NEXUS RESOURCE CORPORATION	
DETAILED PROPERTY MAP THISTLE MINE AREA ALBERNI MINING DIVISION, B.C.	
DATE: DEC. 1982.	SCALE: 1:50,000
DRAWN BY: G.H. / J.S.	REF: M92F/2E
SAWYER CONSULTANTS INC.	FIG NO. 2

History

The Thistle Mine, known since 1862, produced mainly from 1938-1942. Approximately 6867 tons of high grade ore containing 2667 ounces of gold (0.39 oz/ton) 1667 ounces of silver (0.24 oz/ton) and 626556 pounds of copper (4.56%) were shipped. The property was idle until 1960.

In 1960 Gunnex Ltd. completed geochemical surveys and an airborne mag survey over the area. In 1966 Vananda Explorations carried out soil geochemistry and a ground mag survey and drilled four holes totalling 1743 feet.

In 1979 and 1980 reconnaissance geochemistry was carried out by Kargen Development Corp. and McQuillan Gold Ltd. A good copper soil anomaly was outlined on the southeast corner of the Levi claim north of and along the geological trend of the Thistle Mine. The copper is in the order of 10 times background and roughly parallels the last 1000 metres of the TM50 spur road.

In 1981 Western Geophysical Aero Data Ltd. carried out an airborne VLF-EM and magnetic survey of the Crow, Levi, Sue, Mar, Jan, Rand and Remy claims for McQuillan Gold Ltd. Coincident anomalies were outlined adjacent to a number of known prospects including the Thistle Mine.

Geology

The geology of the Mt. McQuillan area south of Port Alberni has been recently mapped (Muller) as Sicker volcanics. The intense amount of exploration activity in the area tends to support this interpretation! The Sicker volcanics here consist of thick volcanoclastics, limited rhyolite horizons, and andesitic-dacitic flows and tuffs. These same kind of volcanoclastics etc. form the mine sequence in the Buttle Lake area.

At Myra Falls (Westmin Mine) this 1500' thick sequence is capped by what is called Sharp Bedded Tuff, a thick sequence of turbidite flows, finely bedded cherts and argillites. Immediately below this unit is an extremely thick sequence of volcanoclastics. These volcanoclastics are typically of andesitic-dacitic composition and are made up of clasts of argillite, rhyolite, dacite, jasper and sulphides. These fragments range up to lapill size. Interspersed in this 1500' sequence are also vitric tuffs, quartz eye rhyolites and QFP's. It is along two of these 'rhyolite horizons' in these volcanoclastics that the Lynx and HW orebodies occur. These two horizons are approximately 500' apart, the HW orebody on the lower horizon. The rhyolite horizons when not occupied by ore are less than 20' thick. The Lynx orebody is folded into an anticlinal structure with the ore lenses occupying the limbs of the fold (Fig. 3).

Similarities between the Buttle Lake Mine Sequence described above and the immediate Thistle area are striking.

The Thistle workings occurs on a very steep hillside on three levels: the Upper Glory Hole, the 500 adit, and the Lower Glory Hole (Fig. 4). At the Upper Glory Hole beautiful, thick (1-3 feet) massive chalcopyrite-pyrite-quartz stringers in a heavily chloritized matrix occur on the walls of this pit. The rocks, where textures are preserved, are finely bedded tuff-wackes and clastics. They appear in places to be folded either by soft-sed or tectonic processes. A 10' sample of this stringer material ran 0.98% Cu and 0.025 oz/ton Au (Nexus). Further up the pit wall, above the stringers (stratigraphically also?) a 3 foot thick bed of fine grained cherty pyrite exhalite dips at about 20° into the hillside. Another outcrop of this material above the pit contains some chalcopyrite.

At the Lower Glory Hole a six foot wide band of bedded massive sulphide mineralization dips steeply away from the hillside. This material although sheared may be the same unit as the bedded exhalite in the upper pit. A 6 foot sample across here ran 2.69% Cu and 1.12 oz/ton Au. The rocks between the Upper and Lower Glory Holes are extremely altered.

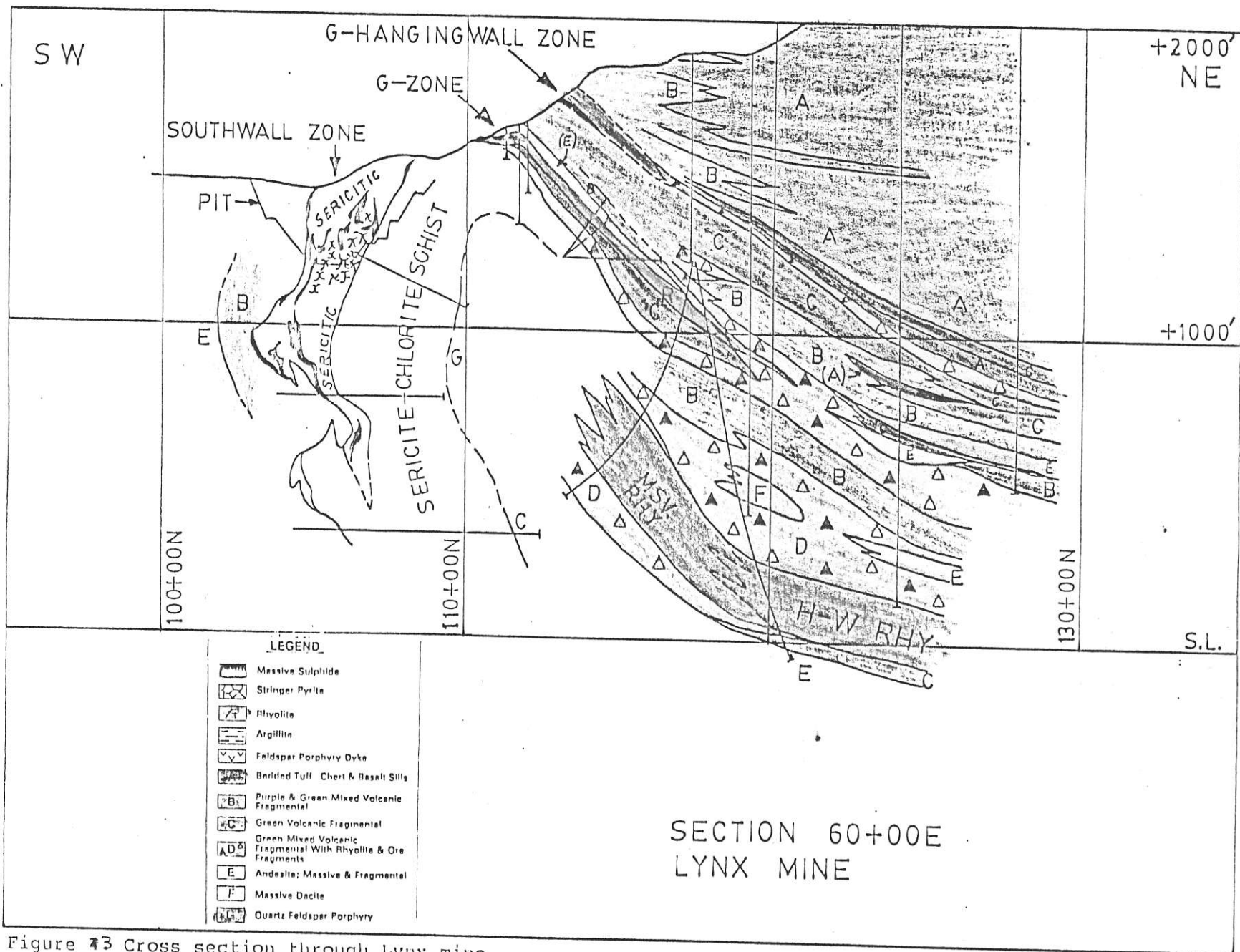
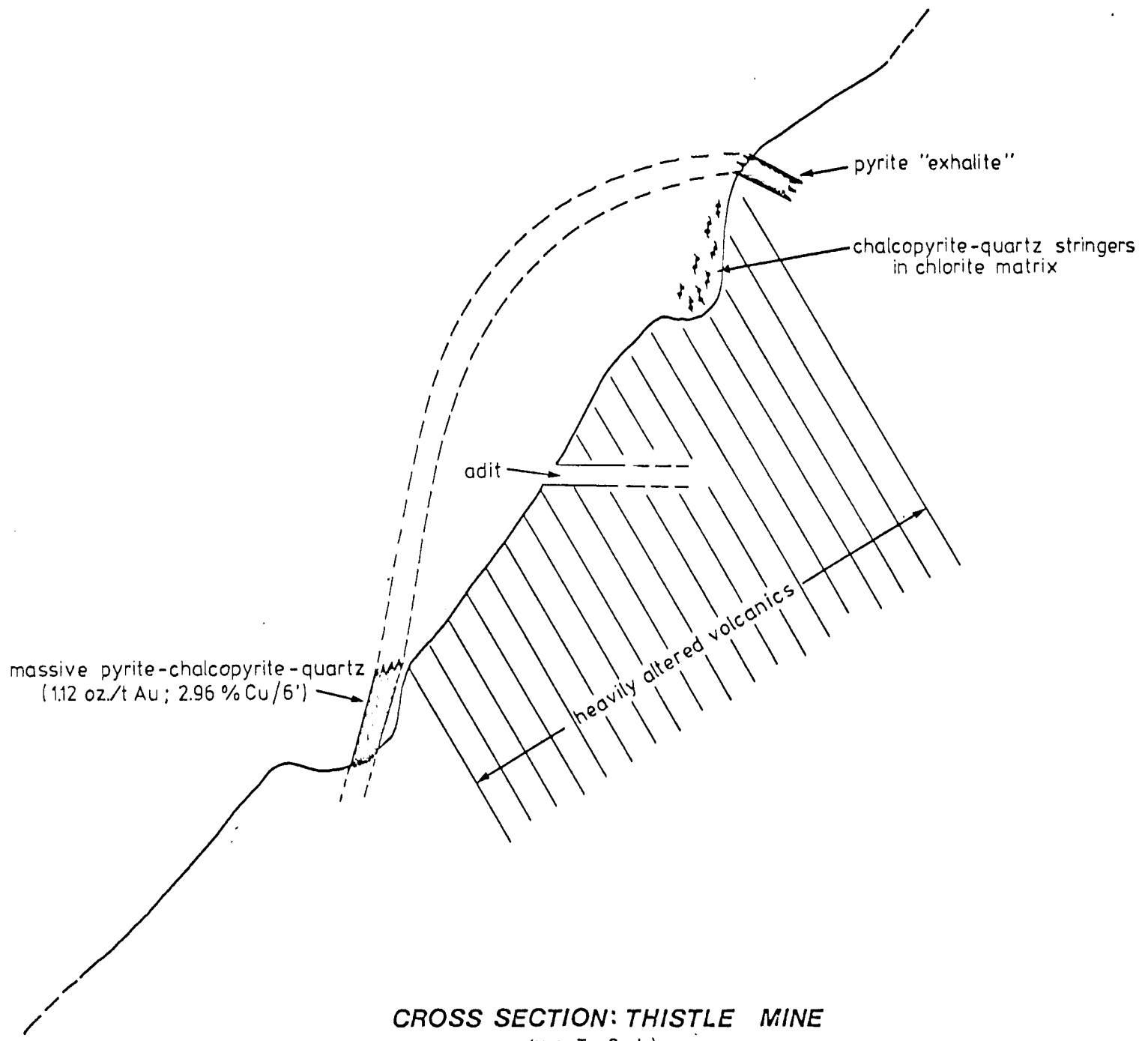


Figure 43 Cross section through Lynx mine



CROSS SECTION: THISTLE MINE
(Not To Scale)

This property may represent an anticlinally folded exhalative horizon overlying stringer sulphides and a strong alteration zone. The massive sulphides associated with these stringers may have been eroded (although no boulders have been found in the valley). Excellent potential exists down the shallow dip of the exhalites as well as along strike.

As mentioned above the stratigraphy is remarkably similar to the Mine Sequence at Westmin. The structural setting envisioned above for the Thistle is also strikingly similar to the situation at the Lynx Mine. This may be why Westmin are so eager to acquire this property.

Deal

Through discussions with Terry Schorn, vice-president of Nexus, the following has been surmised:

1. Nexus is close to signing with Westmin for the following terms

<u>Year</u>	<u>Adv. Royalty</u>	<u>Payment</u>	<u>Expenditure</u>
1			100,000
2			250,000
3		100,000	350,000
4		100,000	1,000,000
5	300,000		
6	300,000		
7	300,000		
8	300,000		

This would earn Westmin a 60% interest. Nexus could reduce to 20% carried.

The only thing (according to Schorn) holding up this agreement is the fact that Nexus do not control the base metal rights on the 5 crown granted claims. (They are held by a little old lady and a prospector's daughter in Victoria.) Westmin will not close until Nexus has the basemetal rights.

2. Nexus told me an offer such as the following would receive a favourable hearing if we were ready to close now (i.e. before Nexus acquires basemetal rights). The possibility exists that Schorn is trying to use CFC as a lever to get Westmin to close. The deal proposed by Schorn is

<u>Year</u>	<u>Adv. Royalty</u>	<u>Payment</u>	<u>Expenditure</u>
1			100,000
2		50,000	200,000
3		50,000	200,000
4		50,000	500,000

At this point CFC would have a vested interest of 40%

5		50,000	1,000,000
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This would earn CFC a 60% interest. Nexus could reduce to 20% NPPR.

6	150,000		
7	150,000		
8	150,000 to production.		

3. I believe we should propose the following

<u>Year</u>	<u>Adv. Royalty</u>	<u>Payment</u>	<u>Expenditure</u>
1			100,000
2		25,000	150,000
3		50,000	300,000
4		50,000	300,000
5		75,000	350,000
6	150,000		
7	150,000 to production.		

This would earn CFC a 70% interest. Nexus to participate or reduce to 15% NPPR after recoupment. CFC would also have the option of buying out Nexus' interest for \$1,000,000.

Conclusions

The principal problem with the above is the lack of basemetal rights on the 5 crown grants. Nexus thinks they can get the rights but \$10,000 and 25,000 shares of Nexus was not enough for one of the holders. However, geology, grades and potential are excellent. CFC is making an offer independent of the basemetal rights with the contingency that the rights be included as part of the agreement if, as, and when they are acquired. This will at least give us a chance to edge out Westmin and acquire basemetal rights on the 5 grants either independently or through Nexus. No option payments are required for 2 years and no work would be done until the basemetal rights are acquired. If acquisition proves impossible, the option with Nexus could be terminated.

A full mapping and sampling program in Year 1 combined with more of the same and detailed drilling in Year 2 and 3 has good potential to result in an early massive sulphide - gold discovery.

APPENDIX - UNDERLYING AGREEMENTS

1. Nexus - David Murphy on the Rose and Jumbo claims. Nexus to pay Murphy: \$5,000 in 1983
 \$5,500 in 1984
 \$6,500 in 1985
 \$7,000 in 1986.

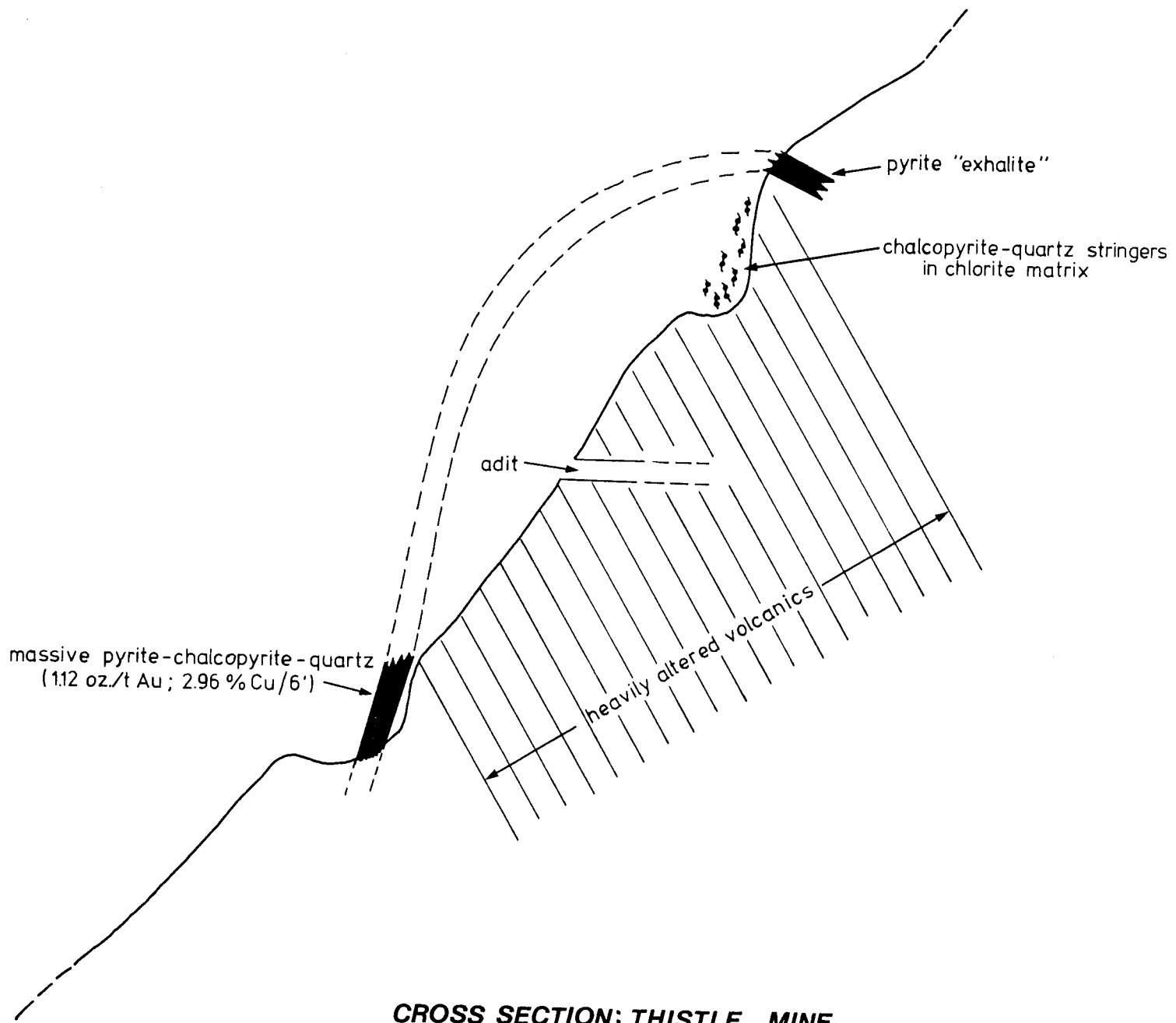
CFC would assume these payments.

David Murphy would retain a 2% NSR on these two crown grants. There is a \$100,000 buyout of this royalty.

2. Nexus - Kargen Developments - Sue, Crow and Levi claims. No payments are due as far as I know but Kargen retains a 10% interest in the claims. There is a \$500,000 buyout of the interest.

W

E



CROSS SECTION: THISTLE MINE
(Not To Scale)