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NEWNHAM EXPLORATION & MINING SERVICES

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EL 20/92

MOINA AREA - NORTHERN TASMANIA

ANNUAL REPORT

1994-95

FILE NO. EL20/92	
28 AUG 1995	
NO. 1	
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22 August 1995

95-3764

ANNUAL REPORT 1994-5 EL 20/92
MOINA - GOLDSTREAM MINING
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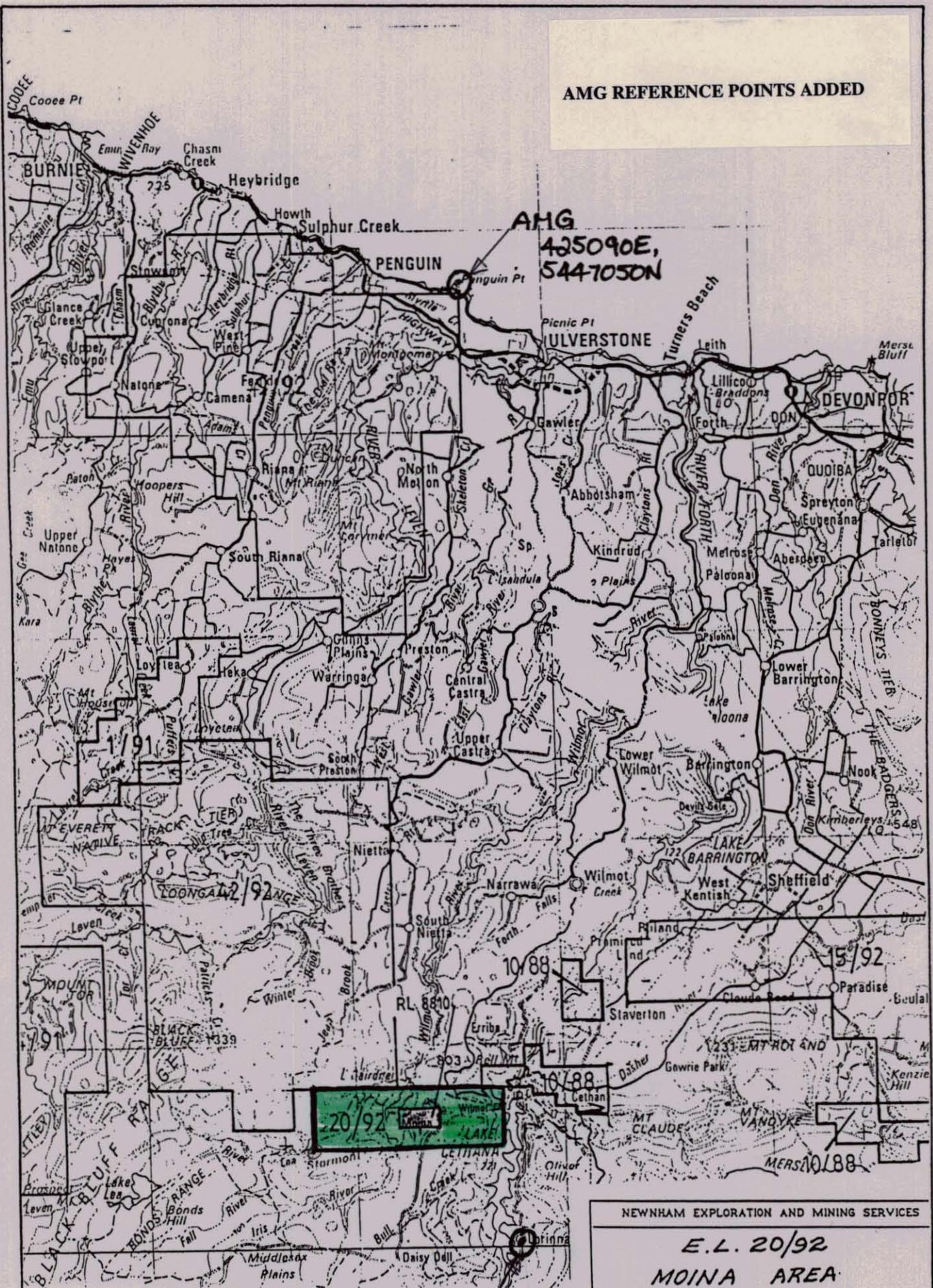
Figure 6: Hugo Skarn Geological Interpretation

Figure 7: Hugo Skarn Cross Sections

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Figure 9: Stormont Detailed Plan 1:1,000

AMG REFERENCE POINTS ADDED



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**E.L. 20/92
MOINA AREA
LOCATION MAP**

0km	10	Scale: 1:250,000.
Drawn: L.A. Newnham	Date: 02 Aug 95	Figure: 1

1. SUMMARY

EL 20/92 covers an area of Ordovician sediments adjacent to the Devonian Dalcoath Granite. The area is underlain at shallow depths by a spur or ridge of this granite and has been folded in several directions and extensively faulted as a result of the granite intrusion.

Extensive and intensive fluorine metasomatism adjacent to the granite ridge has resulted in widespread alteration of the Ordovician sediments.

These metasomatic fluids have leached metals from both the granite and adjacent Cambrian volcanic rocks, and transported these to mineral deposit repositories in both the sediments and structures.

Deposits of Sn, W, Bi, Mo, Zn, Au and CaF₂ are widespread.

The principal exploration objectives of Titan-Goldstream are commercially viable Au-base metal deposits, either within major northwest trending fault zones or in altered sediments adjacent to these structures.

Attention to date has been focused on two targets:

- ◆ Au-Zn Hugo Skarn
- ◆ Au-Bi Stormont Skarn.

A four hole cored drilling program to test the Hugo Skarn was completed in July 1994.

Results suggested potential for a Zn-Bi-Au skarn deposit remained to the south of existing drilling, but potential to the north was diminished.

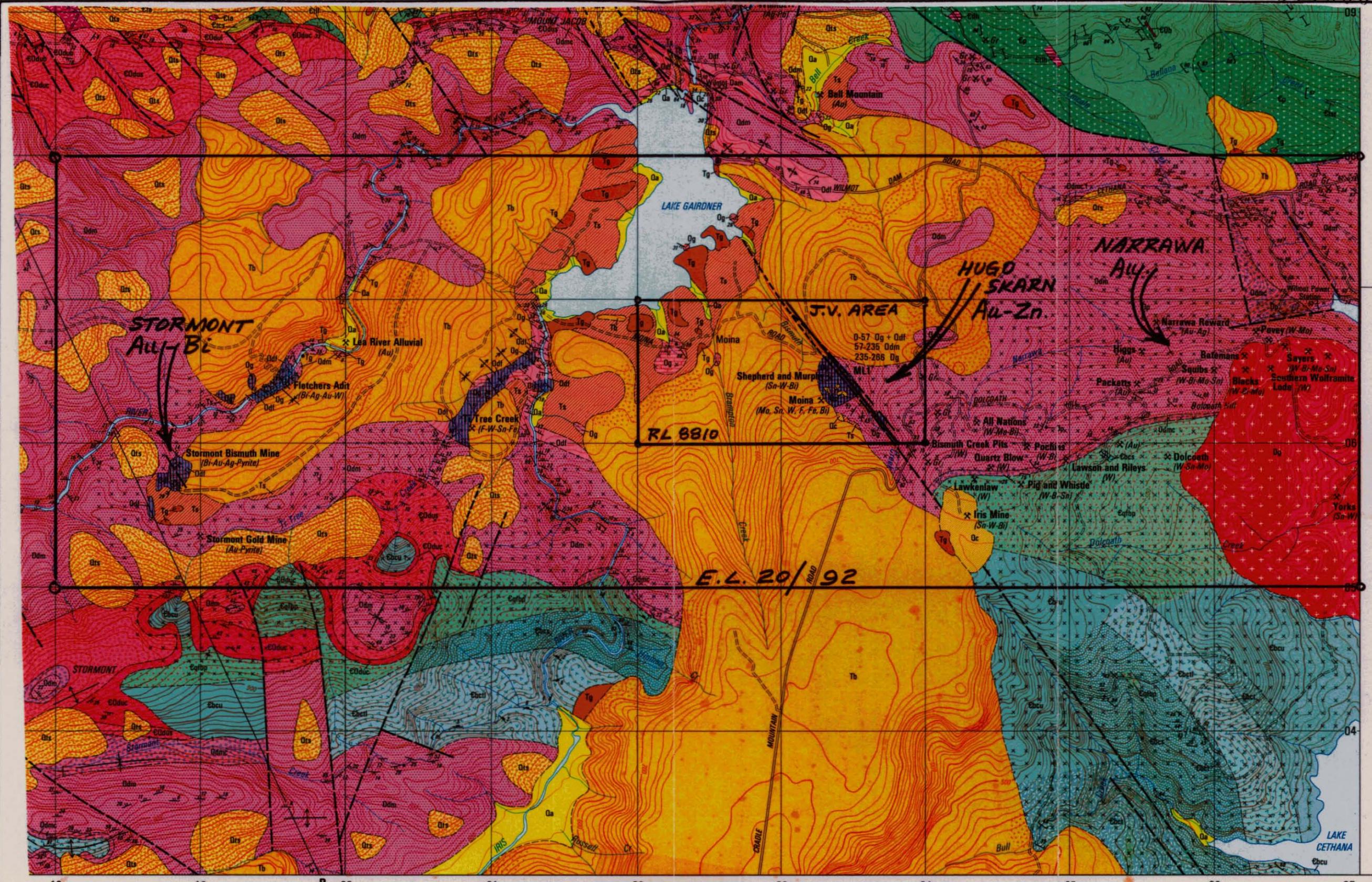
A further program of drilling to test this southern potential is planned for October-November 1995 at an estimated cost of \$68,000.

At Stormont, work was restricted to further evaluation of existing data and drill program planning. In October-November 1995, it is planned to undertake a ten hole cored drilling program totalling 700 metres, to further test the Au-Bi skarn either side of the Stormont Fault. this program is estimated to cost \$94,000.

2. TENURE

Exploration Licence 20/92 of 24 square kilometres is held by Goldstream Mining NL and explored under a joint venture agreement with Titan Resources NL.

Within EL 20/92 is a two square kilometre Retention Licence (RL), 8810, held jointly by CRA and Acacia Resources Ltd. Titan and Goldstream joint venture the eastern section of this RL with Acacia and CRA.

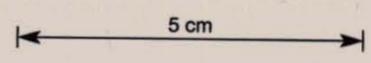


Hugo Fault projected outcrop
 Hugo Skarn Au-Zn mineralisation
 Possible skarn extensions beneath Basalt.

Tb Tertiary Basalt
 Tg, Ts Tertiary sediments and gravels
 Og Gordon Limestone
 (Vertical stripes = skarn)
 Odm Moina Sandstone
 Odmc Roland Conglomerate
 Evxx Various Cambrian Volcs + Seds

Dg Dalcoath Granite
 xx Contact alteration zone around Dg.

Map is a photocopied section of the
 State 1:25,000 Winterbrook-Moina Geol. Map.
 (MRVP Map 9.)



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MOINA AREA
REGIONAL GEOLOGY

0 Km. 0.5 Km 1 Scale 1:25,000
 Drawn LAN Date APR 92 Figure 2

3. WORK COMPLETED 1994-95

3.1 HUGO

A four hole core drilling program totalling 790 metres was completed in July at a cost of \$90,000.

Results were presented in a report titled "*EL 20/92 and RL 8810, Moina Area, Report on Drilling Program, May-July 1994*" for Goldstream Mining NL by L A Newnham, 12 September 1994.

This program indicated the Hugo Skarn was disrupted by a series of steeply dipping north south faults. Potential for skarn hosted mineralisation to the north was restricted to a narrow zone adjacent to the Bismuth Creek Fault at depths exceeding 150 metres.

However, there remains potential for skarn hosted Au-Bi-Zn mineralisation to the south of existing drilling. Best results obtained in the 1994-95 drilling program were:

- ◆ HS001: 17 metres 0.32 Au, 0.36 Bi
- ◆ HS002: 5 metres 1.73 Zn.

3.2 STORMONT

No active field work was completed during 199⁴~~3~~⁵~~94~~. However, existing data was thoroughly reassessed, and it remains clear that significant potential for a medium sized Au-Bi skarn exists adjacent to the Stormont Fault, south of the former Stormont open cut.

Further drilling programs are recommended on both the Hugo and Stormont Skarns.

4. WORK PROPOSED 1995-96

It is planned to further drill test the Hugo and Stormont Skarns for gold and base metals in October-November 1995.

4.1 PLANNED HUGO DRILLING PROGRAM

Three cored HQ holes are planned to test the southern extension of the Au-Bi-Zn skarn east of the Bismuth Creek Fault.

The holes are shown on the attached figures 6 and 7.

Recommended Hole 1

Approximately 170 metres long, designed to further test the significant Zn intersections in SMD 16, SMD 13, and to a lesser extent in HS 002.

Recommended Hole 2

Approximately 150 metres long, designed to test the southern extensions of the four significant Zn and Au intersections in SMD 16.

Recommended Hole 3

Approximately 150 metres long, primarily to test the southern extension of the Au-Bi intersection in HS 001 (10 m, 0.4 Au, 0.52% Bi). Bismuth is becoming a reasonably attractive commodity and this skarn body does have the potential to host a moderate sized deposit.

The total metreage in these three holes is 500 metres. HQ coring is recommended. Drilling conditions are difficult and unit costs will reflect this.

Hugo Budget Estimate

500 metres HQ at \$80 per metre	40,000
Mobilise/demobilise	1,000
Access development	3,000
Field supplies (trays, etc)	3,000
Management (including reporting)	12,000
Assaying (200 samples at \$20 per sample)	4,000
Travel and accommodation	5,000
Total	\$68,000

4.2 PLANNED STORMONT DRILLING PROGRAM

A detailed report on the Stormont Au-Bi skarn was contained in "Annual Report 1992-93, EL 20/92, Moina Area, Northern Tasmania".

This report highlighted the potential of the prospect to host a modest open cuttable deposit of relatively high Au grades (4-5 g/t) and by-product bismuth (0.4-0.5%). This potential was supported by previous drilling programs and detailed underground sampling.

A drilling program was recommended to test the Au-Bi potential in three synclinal structures. Maps illustrating this program are reproduced herein.

Central Syncline

The highest grade skarn is developed adjacent to the Stormont Fault.

Ten holes totalling 700 metres are recommended to test the skarn either side of the fault over a 300 metre strike length.

Western Syncline

Eight short holes totalling 320 metres are recommended to test this syncline.

This could be reduced to five holes totalling 200 metres if the faulted eastern margin only was tested.

Eastern Syncline

Two holes totalling 150 metres are recommended to test the higher grade hanging wall skarn on this north plunging syncline.

The total metreage for this program is therefore 1050 metres. However, it would be hard to justify drilling the eastern and western synclines if the results from the central zone were poor.

Therefore, it is recommended that the 700 metre program on the central syncline be drilled first. A decision could then be made on whether to drill the other two targets.

HQ core drilling is recommended in this difficult area.

Stormont Budget Estimate

700 metres HQ at \$80 per metre	56,000
Access development	8,000
Field supplies (trays, etc)	4,000
Management (including reporting)	14,000
Assaying (300 samples at \$20 per sample)	6,000
Travel and accommodation	6,000
Total	\$94,000

GEOLOGY

Factual geology RGC 1987
Interpretative geology L.A.N.

Pale green calcareous quartzite
Magnetite-calc silicate
Oxidised calc-silicate

Garnet-actinolite skarn
Banded calc-silicate minor magnetite
Moina Sandstone?

Actinolite skarn bismuthite rich

Moina Sandstone
Footwall Calc-silicates

Garnet Skarn

Garnet-actinolite skarn, visible bismuthite
Variable alteration (actinolite, epidote, chlorite) especially along shears.

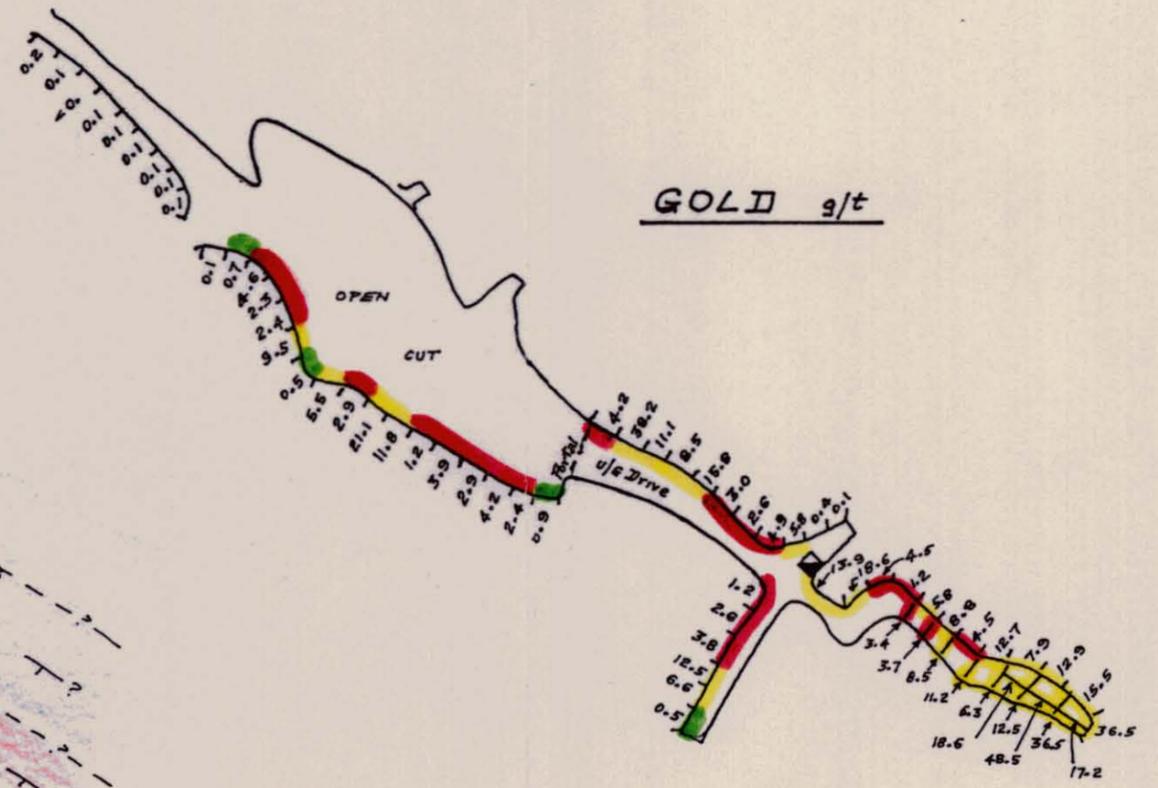
Banded magnetite calc-silicate

No. 1 Cross-Cut calc-silicate hornfels

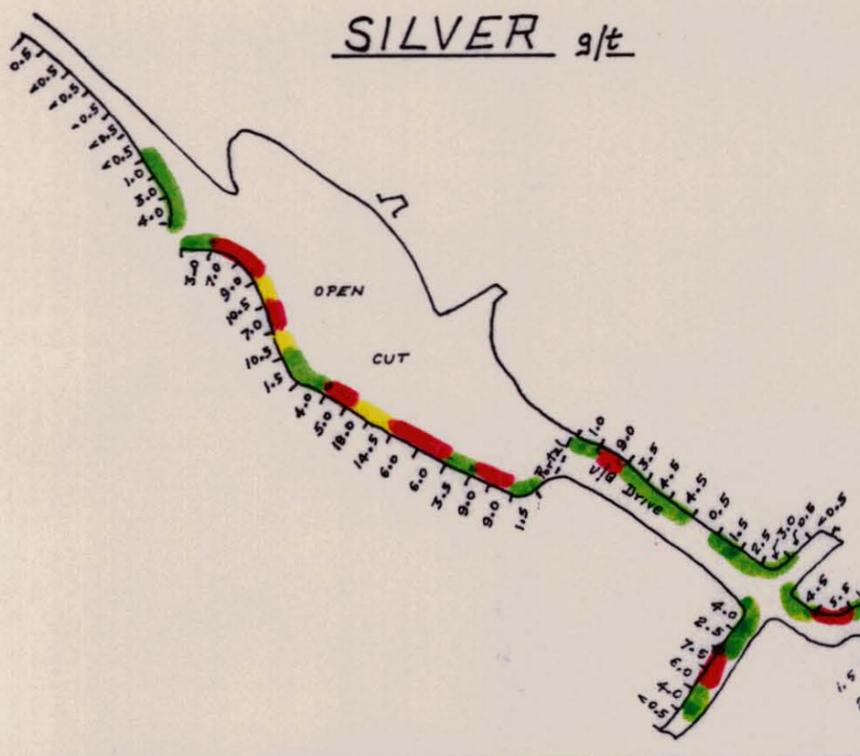
F.W. Calc-silicates

Garnet Skarn

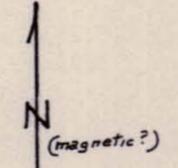
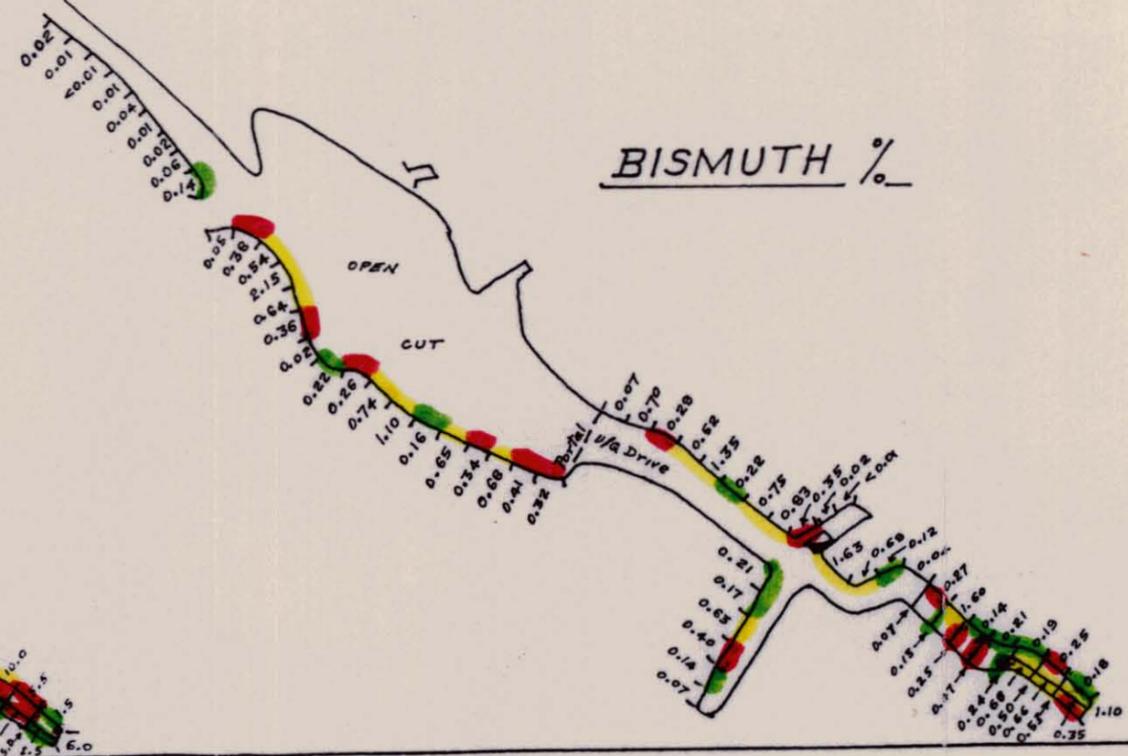
GOLD g/t



SILVER g/t



BISMUTH %



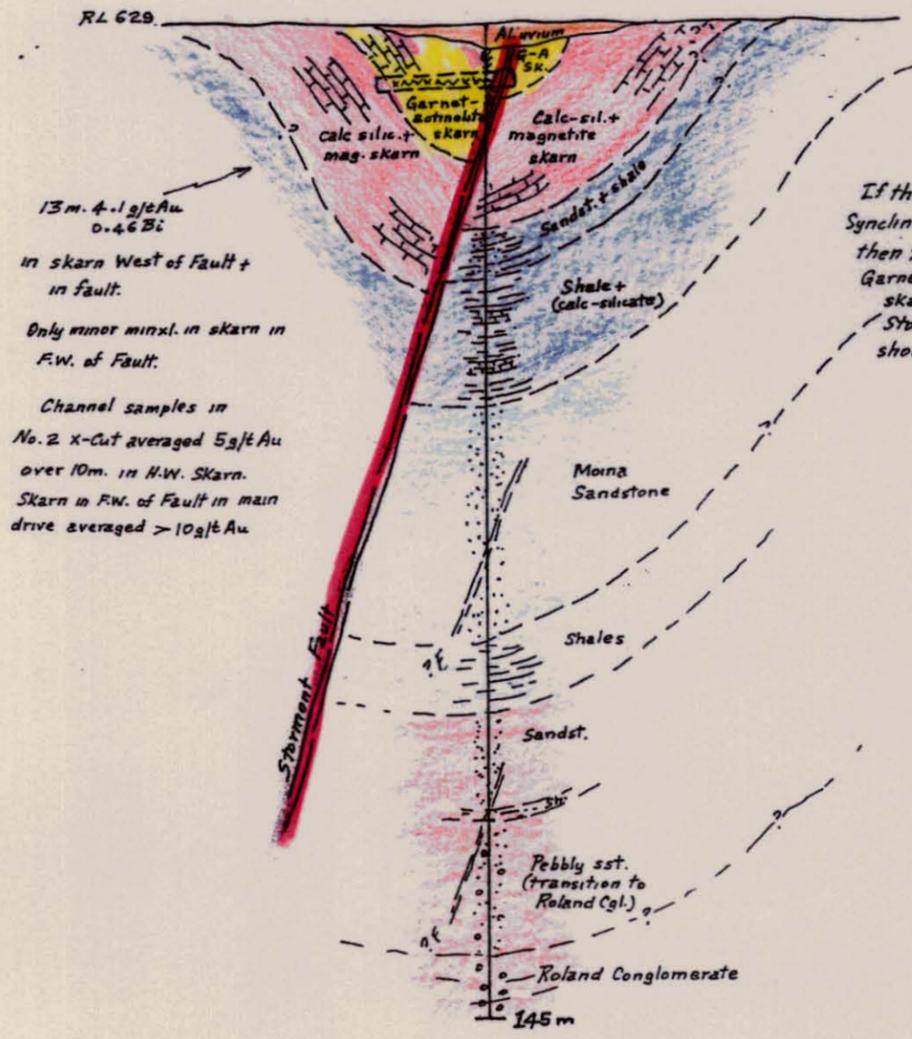
5 cm

The Stormont Bismuth Mine workings were sampled by RGC in 1986. Channels were dug with a pneumatic chisel and sampled over 2m. intervals.

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E.L. /92
STORMONT BISMUTH MINE
CHANNEL SAMPLE RESULTS
AND GEOLOGY

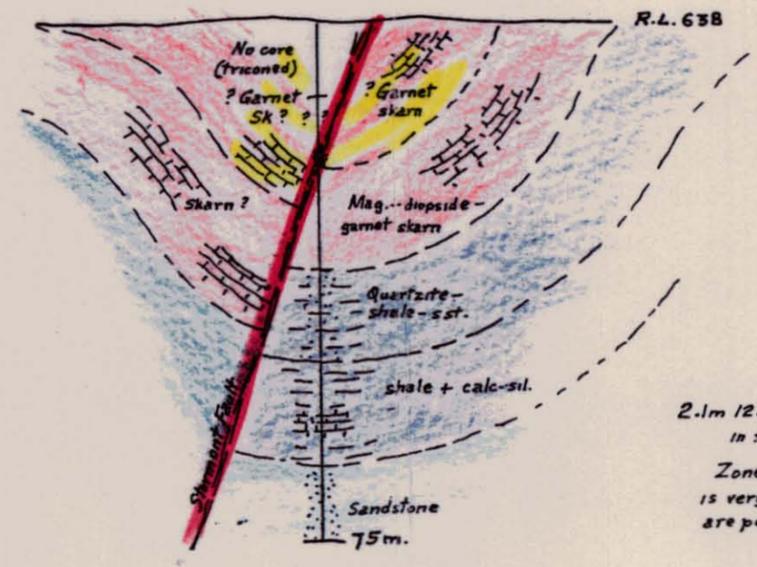
0m 10 20 Scale 1:500
Drawn: L.A. Newham Date: June 92 Figure 3(b)



13m. 4.1g/t Au
0.46 Bi
in skarn West of Fault +
in fault.
Only minor mixl. in skarn in
E.W. of Fault.
Channel samples in
No. 2 x-cut averaged 5g/t Au
over 10m. in N.W. Skarn.
Skarn in E.W. of Fault in main
drive averaged > 10g/t Au

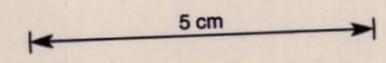
If the Gordon Limestone
Syncline plunges South,
then the amount of
Garnet-actinolite (gold-bismuth)
skarn adjacent to the
Stormont Fault, both East and West
should increase.

SD 1



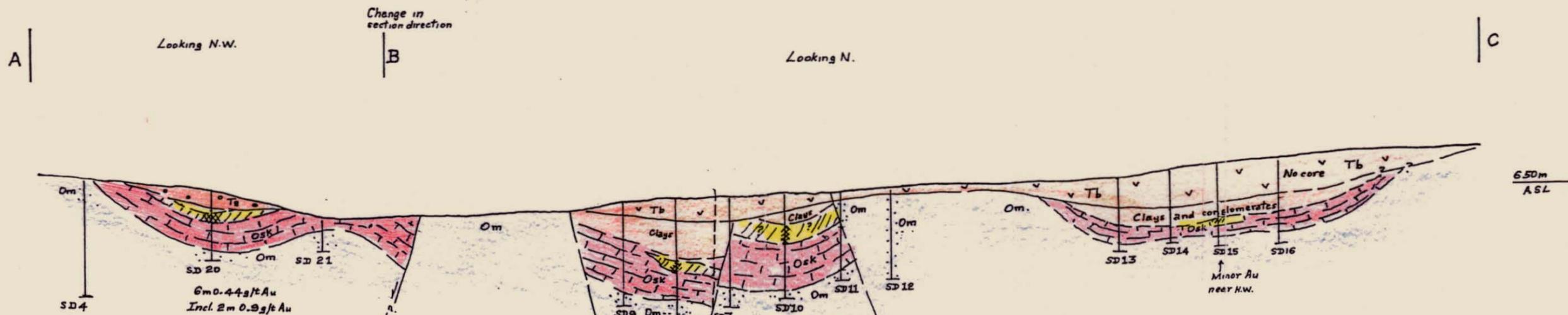
2.1m 12.7g/t Au, 0.35 Bi
in faulted skarn.
Zone above this interval
is very leached and recoveries
are poor.

SD 3



Sections Looking North

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E.L. 20/92		
STORMONT MINE AREA		
INTERPRETED DRILL SECTIONS		
SD 1 and SD 3		
Drawn: LAN	Date: July 92	Scale: 1:1000
		Figure: 4



↑
Gold normally occurs in the H.W. half of the skarn. That section has been eroded away in SD21, and a remnant exists in SD20.

↑
Thicker skarn sections adjacent to the inferred fault are prospective, either to North or South, depending on which way Syncline plunges.

↑
Steep folding would produce a similar interpretation to the inferred faults.

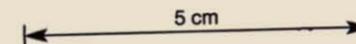
↑
However flat dips in outcrop and drill holes do not support steep folding

↑
Stormont Fault

↑
The sandstone above skarn in SD11 appears to be Om. If so, it can be explained by a reverse fault or steep folding.
BCA's in SD11 suggest flat bedding.

↑
Skarn in this syncline is thin (5-10m) because H.W. half which normally carries the Au mineralisation has been eroded away.

↑
If the syncline plunges South, the skarn should thicken South of this section



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STORMONT MINE PROJECT		
SECTION A-B-C		
(See 1:1000 plan for location)		
10	80m	Scale: 1:2000
Drawn: L.A. Newham	Date: July 92	Figure: 5.

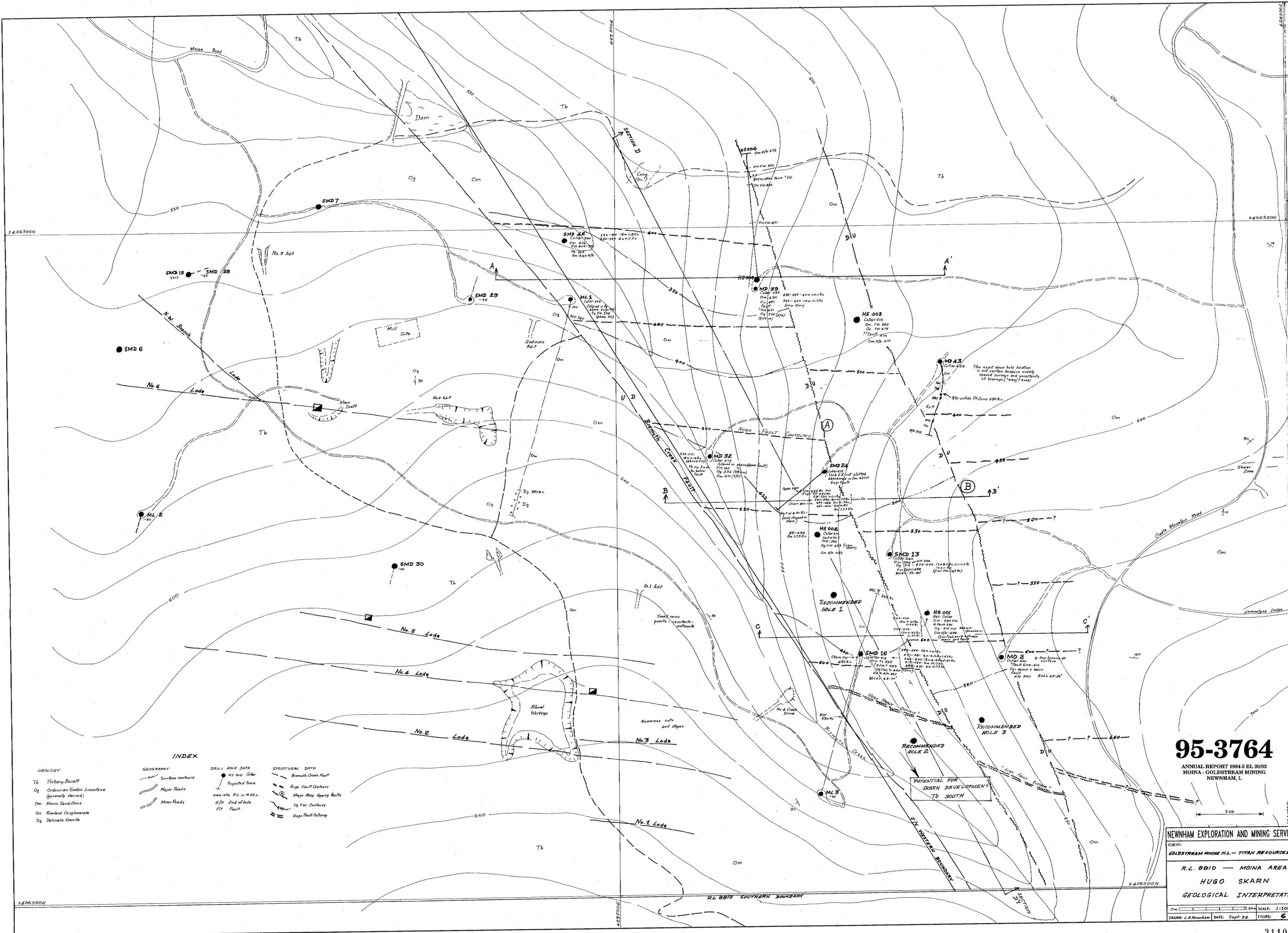
5. EXPENDITURE (Table 1)

Expenditure 1994-95	\$8,359	
Project to date	\$17,878	
Proposed 1995-96	\$94,000	(excludes Hugo RL 8810)

A/C	ACCOUNT-NAME	O/P BAL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	THIS YR	PROJ TOTAL
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
140001	***MOINA***															
1401661	Accommodation	274.66														274.66
1401667	Analysis															
1401670	Drafting & Maps	30.00	497.53												497.53	527.53
1401673	Drilling															
1401676	Equipment Hire															
1401682	Freight & cartage															
1401685	Fuel															
1401688	General Contractors															
1401691	Geological Consultants	4,085.00		1,210.00	700.00		519.00				350.00				2,779.00	6,864.00
1401700	Insurance															
1401703	Legal / stamp Duty	305.00														305.00
1401706	Office Expenditure/consumables	45.00														45.00
1401712	Rates & Taxes															
1401718	Salaries	1,795.00	262.50			262.50									525.00	2,320.00
1401721	Small Tools & Equipment	2,008.00														2,008.00
1401724	Surveying & Pegging															
1401730	Tenement Administration															
1401733	Tenement Costs	1,635.20	660.00												660.00	2,295.20
1401736	Travel	1,530.50			550.00										550.00	2,080.50
1401740	Vehicles															
1401760	Acquisition Costs															
1403990	Reimbursement of Expenses	(5,140.50)			(2,655.00)			(390.00)			(175.00)				(3,220.00)	(8,360.50)
1403996	Retained Earnings															
1403997	Year to Date Net Income															
1404999	Total Sales															
		6,567.86	1,420.03	1,210.00	(1,405.00)	262.50	519.00	(390.00)			175.00				1,791.53	8,359.39
		6,567.86	7,987.89	9,197.89	7,792.89	8,055.39	8,574.39	8,184.39	8,184.39	8,184.39	8,359.39	8,359.39	8,359.39	8,359.39	8,359.39	8,359.39
	<i>Total Moina Ex Reimbursement</i>														5,011.53	16,719.89

Table 1

*Total Expenditure
fr 1994/95*

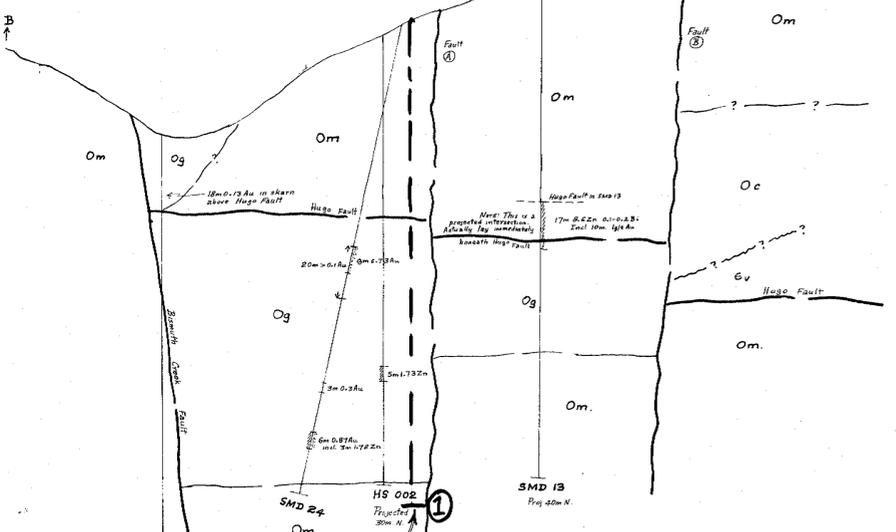
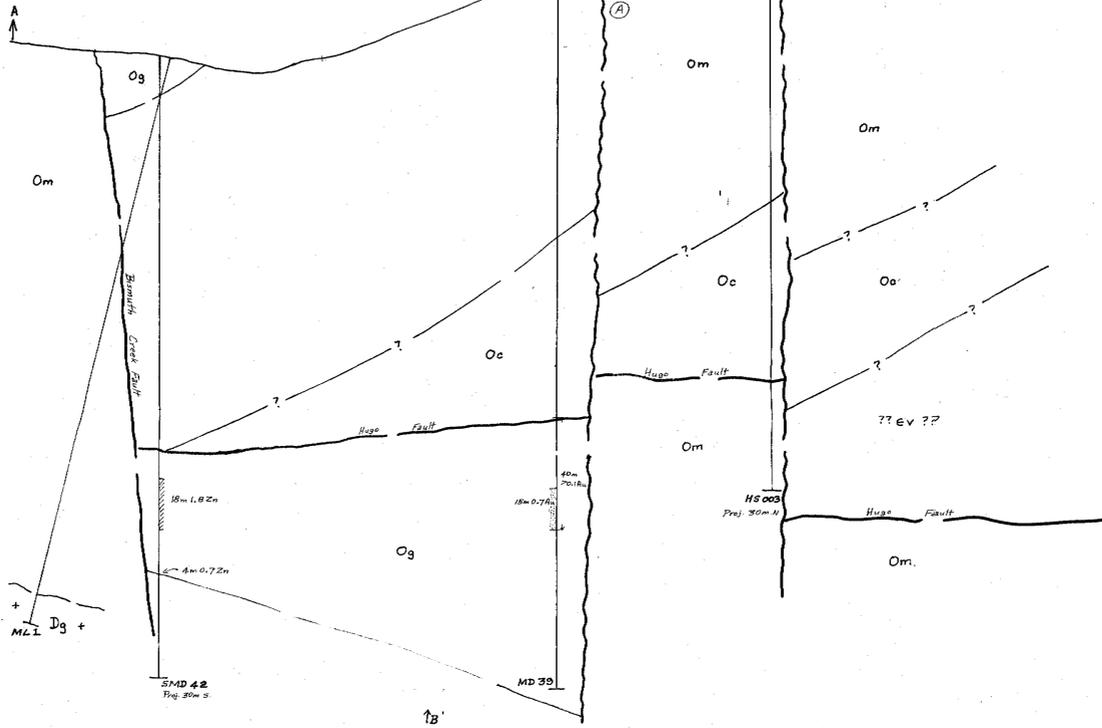


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 CLIENT:
 GOLDSTREAM MINING N.L. - TITAN RESOURCES N.L.
 R.L. 8810 - MOINA AREA
 HUGO SKARN
 GEOLOGICAL INTERPRETATION
 SCALE: 1:1000
 DRAWN: L.A. Newham DATE: Sept 94 FIGURE: 6

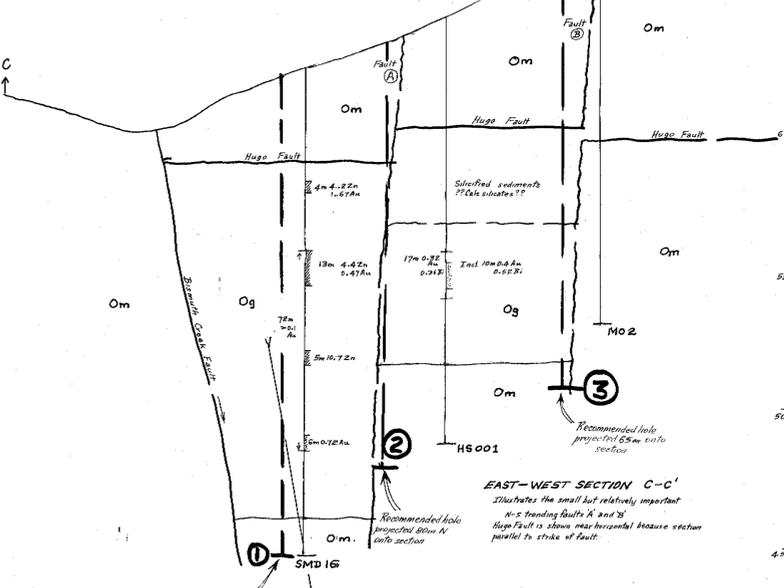
EAST-WEST SECTION A-A'

Illustrates the result of the Hugo Fault dipping more steeply to the N than the stratigraphy. This results in lower formations being present above Hugo Fault, and less skarn below Hugo Fault. Further N of this section, skarn thickness will appear above Hugo Fault (see section 2-2').



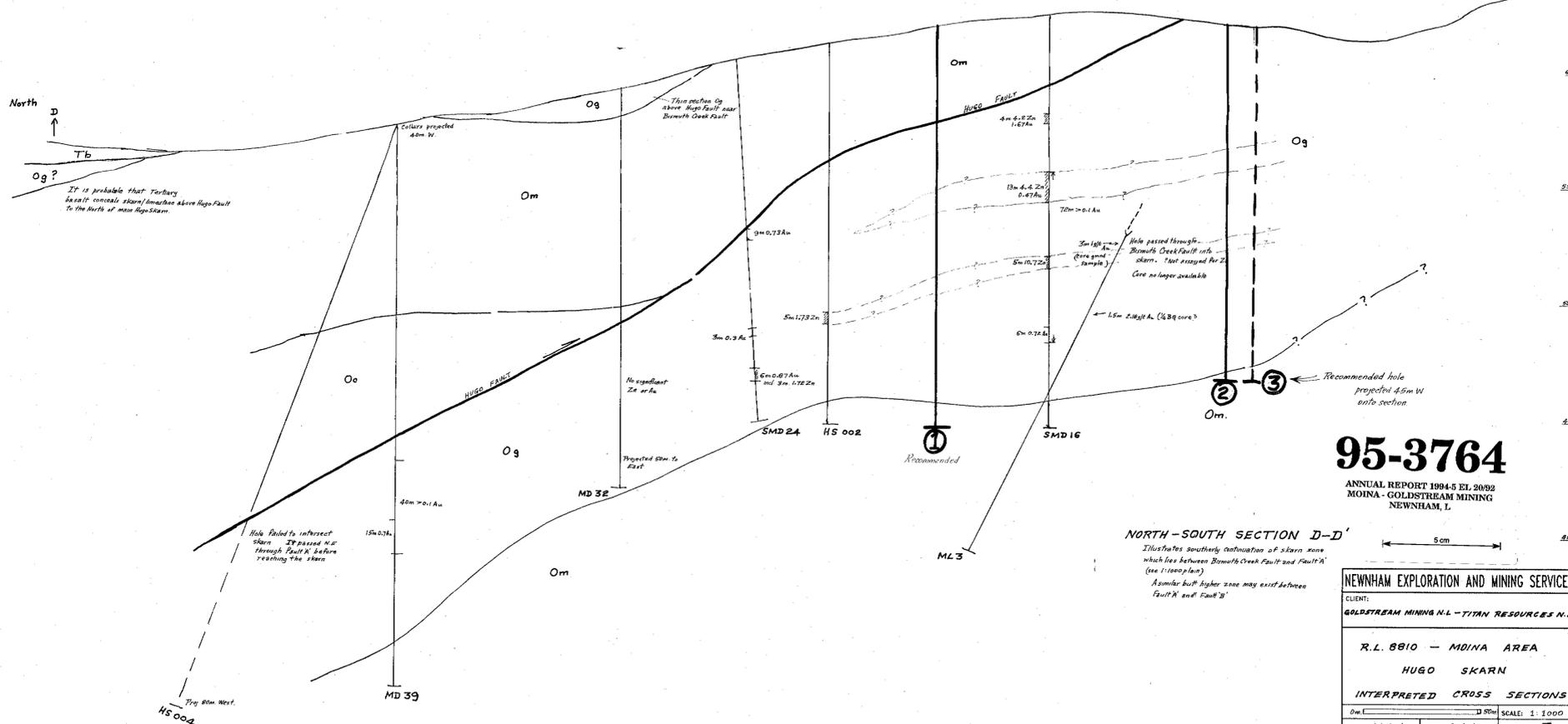
EAST-WEST SECTION B-B'

Illustrates presence of gold and some mineralization on both sides of skarn between Bonanza Creek Fault and Fault B.



EAST-WEST SECTION C-C'

Illustrates the small but relatively important N-S trending faults N and S. Hugo Fault is shown near horizontal because section parallel to strike of fault.

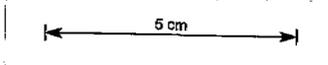
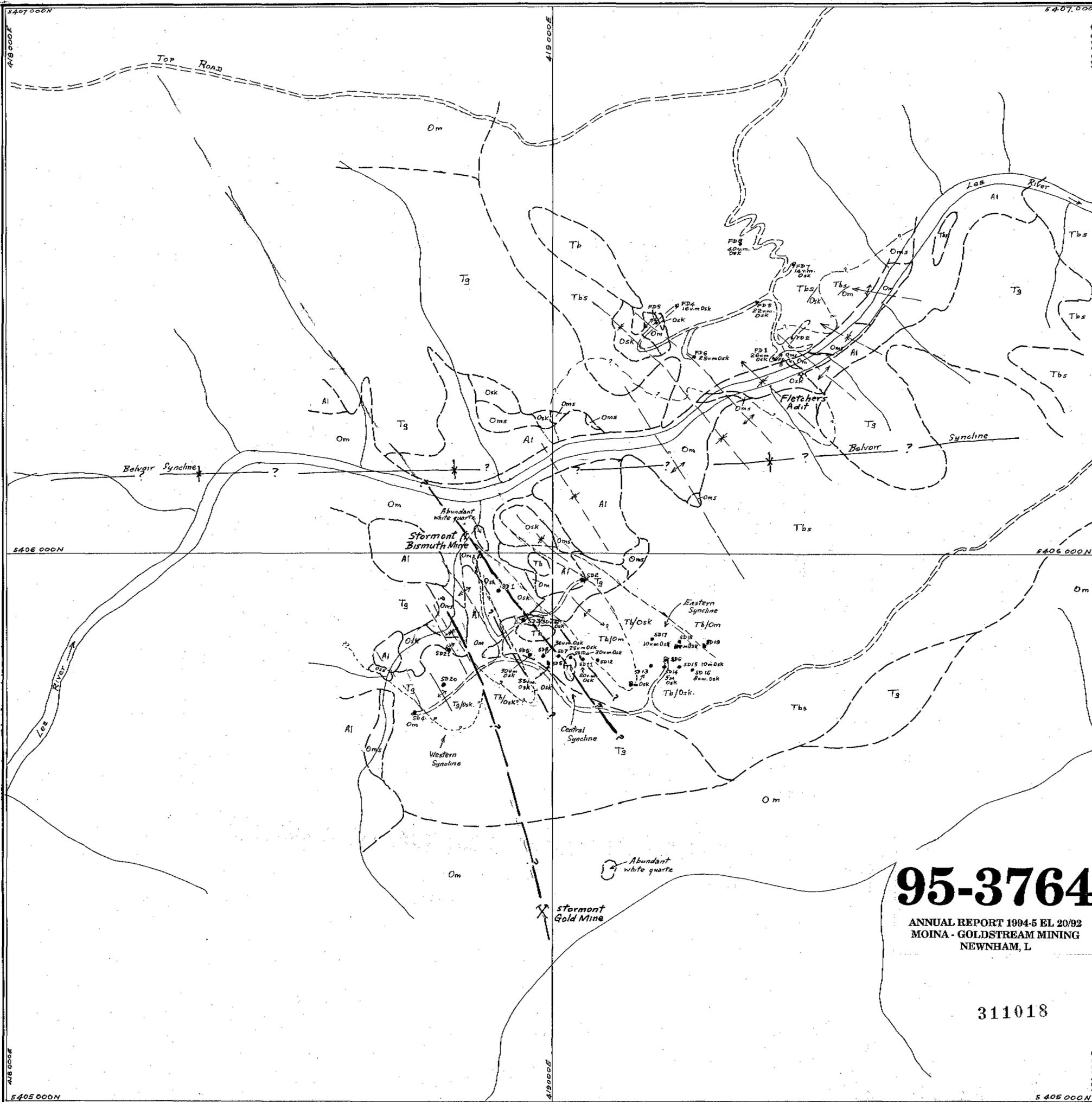


NORTH-SOUTH SECTION D-D'

Illustrates southerly continuation of skarn zone which lies between Bonanza Creek Fault and Fault N (see 1-1 section). Assumed fault higher zone may exist between Fault N and Fault B.

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CLIENT:	GOLDSTREAM MINING N.L. - TITAN RESOURCES N.L.
R.L. 8810 - MOINA AREA	
HUGO SKARN	
INTERPRETED CROSS SECTIONS	
Scale:	1:1000
DRAWN:	L. A. Nambour
DATE:	September 24
FIGURE:	7



- RECENT**
- Al Alluvium
- TERTIARY**
- Tbs Basalt soil
- Tb Basalt
- Tg Greyblilly
- ORDOVICIAN**
- Osk Skarn and Osk. limestones (after Gordon Limestone)
- Oms Metasilstone
- Om Main Sandstone
- Fault
- Access Tracks
- River and Tributaries
- Former Mine Workings
- Geological Boundaries
- Inferred Anticlines/Synclines

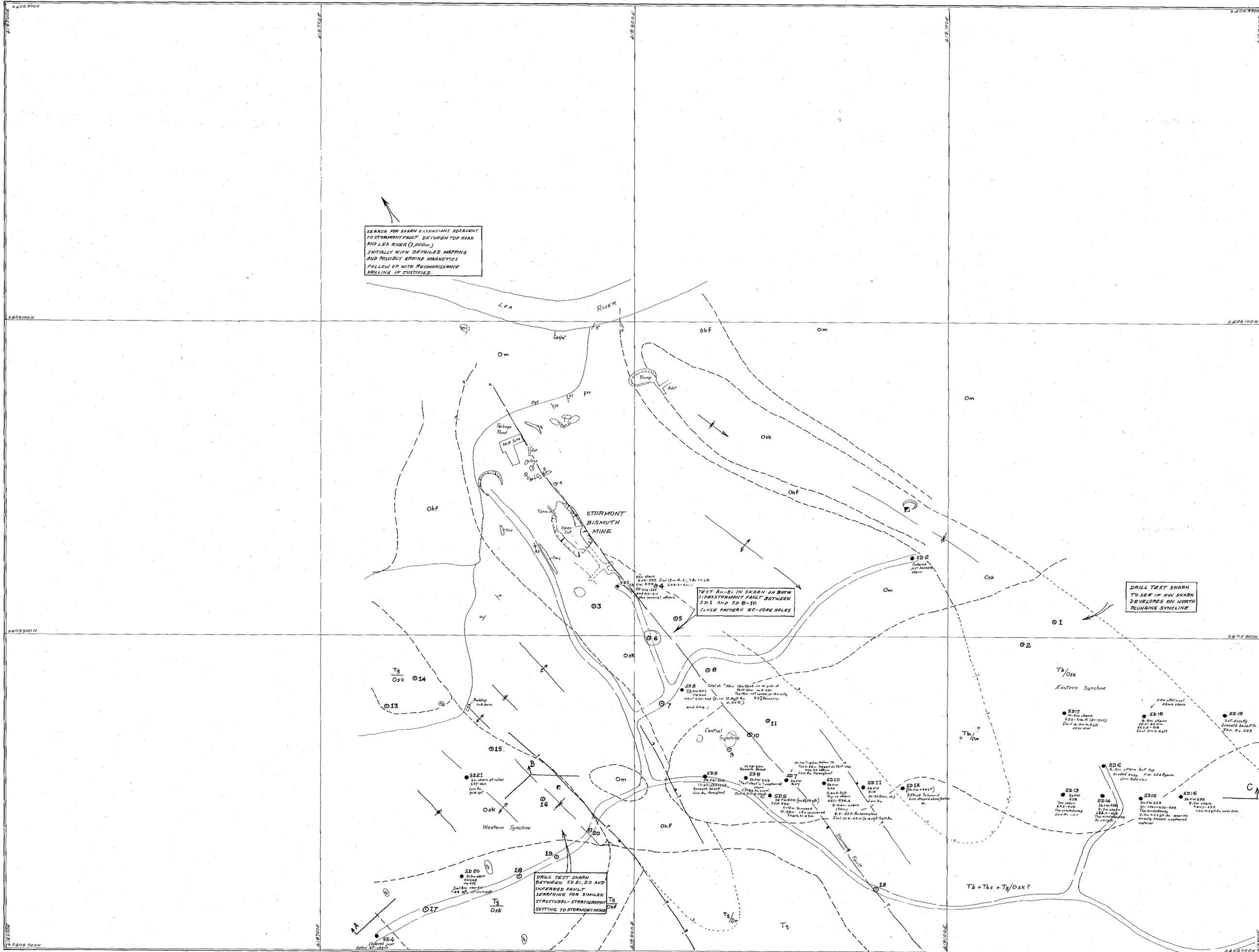
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 NEWNHAM, L

311018

NEWNHAM EXPLORATION AND MINING SERVICES

**STORMONT PROJECT
 GENERAL GEOLOGY**

Drawn: L.A. Newnham Date: June 92 Fig 8



SEARCH FOR SKARN EXTENSIONS ADJACENT TO STORMONT FAULT BETWEEN TOP ROAD AND LEA RIVER (1,000m) INITIALLY WITH DETAILED MAPPING AND POSSIBLY GRIND MAGNETICS FOLLOW UP WITH RECONNAISSANCE DRILLING IF JUSTIFIED.

TEST A-B-DI IN SKARN ON BOTH SIDES STORMONT FAULT BETWEEN SD 1 AND SD 8-10 CLOSE PATTERN RC-CORE HOLES

DRILL TEST SKARN TO SEE IF NW SKARN DEVELOPS ON NORTH PLUNGING SYNCLINE

DRILL TEST SKARN BETWEEN SD 21, 20 AND INFERRED FAULT SEARCHING FOR SIMILAR STRUCTURAL-STRATIGRAPHIC SETTING TO STORMONT MINE

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- Tb Tertiary Basalt, often magnetic
 - Tb s Basalt silt
 - Tg Tertiary gravels (grey/blue), easily confused with Om and Or
 - Osk Striated Gneiss Limestone (grey, garnet, schistose, etc.)
 - Ohf Unroofed shales, sandstones, calc silicates
 - Om Moona Sandstone, tabular sandstone
 - SD Core drill holes by RSC 1986-87
 - 100 Proposed drill holes
- Base mapping data by RSC
E-Trace only interpreted by incorporating drill hole data - L.A. Newham



SCALE 1:1,000

NEWRHAM EXPLORATION AND MINING SERVICE

STORMONT PROJECT
DETAILED PLAN
STORMONT MINE AREA

Drawn: L.A. Newham Date: October 91 Fig: 9