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COMINCO EXPLORATION PTY. LTD.

Progress Report on E.L. 22/73

(St. Dizier)

74-1065-

December 16, 1974.

D.C. Simpson

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COMINCO EXPLORATION PTY. LTD.

Subject: Progress Report on Exploration Licence 22/73 (St. Dizier)
Period: Six months ending December 16, 1974.
Date: December 16, 1974.
By: D.C. Simpson

1. SUMMARY

As indicated in the previous six-monthly report, the program for the period under review was essentially a compilation of all data gathered during the previous summer leading to a diamond drilling program. Also reported here are the results of exploration and drilling carried out towards the end of the previous six-month period.

One geologist and one technician were engaged on this property as demanded by the drilling program. This work was carried out in conjunction with a drilling program on the nearby Exploration Licence 47/71 (Queen Hill).

2. WORK PROGRAM(a) Drilling

D.D.H. S.D.1 mentioned in the previous report intersected minor tin mineralisation only.

Results are reported below. (See also geological log, cross section and assay overlay. Figs St. D. 23 and 24).

Best intersection was from 38.75 m. to 41.50 m. i.e. 2.75 m. x 2450 ppm Sn. 1.06 m x 1.92% Cu. 16.00 - 17.06 m.

Low levels of tin mineralisation, i.e. 50 - 800 ppm, were detected in skarns intersected in the hole but the poor values are thought to be due to the more siliceous nature of the original host in this area.

This hole bottomed in altered sediments which indicates that their contact with the adamellite is steep (possibly faulted). Geological mapping and drilling elsewhere in the vicinity show the adamellite-sediment contact to be shallow dipping.

A section of adamellite intersected in this hole is believed to be emplaced by faulting, but due to recent alluvial cover the fault altitudes can only be interpreted.

The faults controlling this are believed to be those shown on the cross section through S.D.3, S.D.4 and S.D.8 (Plate No. St.D. 30) extending in an easterly direction.

D.D.H. S.D.2, mentioned in the previous report, did not intersect significant mineralisation and core from it was not analysed. (see Cross Section Plate No. St.D.27)

D.D.H. S.D.3, S.D.4 and S.D.5. Mentioned in previous report. Refer to Plates

(Note: No section was drawn for S.D.5 as recoveries were too low for meaningful drawings to be produced)

D.D.H. S.D.6. This hole, collared at 20538E:19930N, was designed to test the interpreted source of a strong magnetic anomaly centred at approximately 20550E, 20030N. Interpretation of the magnetic data carried out by this company suggested that the source of the anomaly was not intersected by D.D.H. M2 drilled by Minops Pty. Ltd. Geological logging of the core from M2 revealed insufficient magnetite to explain the obtained magnetic anomaly. The hole did, however, pass through the potential host rock horizon. (For convenience this horizon will be termed the "skarn" and its significance discussed later.)

D.D.H. S.D.6 passed through the same "skarn" horizon at a lower level and intersected rocks containing up to 70% magnetite with a 20 metre section averaging ~10%. Sulphide content, however, was low, as was the tin. Assay results for tin are shown on an overlay to the cross section of S.D.6. Core was also assayed for Cu, Pb, Zn. No anomalous values for these metals were obtained.

Following the "skarn" horizon the hole passed through quartzite and then terminated in adamellite. (The significance of this is discussed under Discussion of Results.)

D.D.H. S.D.7 was designed to test a strong (i.e. + 60m sec/sec) chargeability anomaly whose centre is approximately 20100E 19925N. Interpreted depth to top of source was 50 metres. This anomaly lies easterly of, and along strike from, a massive pyrite-quartz outcrop, channel sampling over which produced values of ~1.5% Sn and 2.0% Zn. S.D.7 therefore was aimed at testing the I.P. anomaly and the easterly extent of this mineralisation.

The hole encountered no massive pyrite or significant mineralisation, but encountered what is believed to be a graphite-filled shear zone which is thought to have produced the chargeability anomaly. The hole entered adamellite at 67 metres and remained in it to its target depth of 125 metres.

D.D.H. S.D.8. This hole was designed to test an -1800 gamma magnetic anomaly, the centre of which is located at approximately 19850E 20050N. Depth to the top of the source was calculated to be 12 metres below surface. (Drill holes S.D.3 and S.D.4 drilled with a portable hydraulic rig were both designed to test this target, but as noted in the previous report, ground conditions caused the abandonment of both holes before the target depths were reached.)

S.D.8 successfully tested this zone being collared in adamellite, passing through hornfels and skarn and back into adamellite. Both contacts with the adamellite are strongly faulted and silicified. This has produced a graben which contains shales, "skarn" and volcanics, the last of which are believed to be Tertiary in age.

The "skarn" horizon intersected contained minor <5% magnetite and little sulphide. Anomalous tin values were obtained in this section but as can be seen on the overlay (Plate No. St.D. 22) values are low with a few results over 1000 ppm. Normal background values for Cu, Pb and Zn were obtained in this hole.

(b) Geochemistry

No geochemical sampling was conducted during the period under review. (The figure shown under Expenditure for geochemistry and assaying does include cost of analyses on some samples taken in the previous period.)

See under Discussion section for evaluation of results.

(c) Geophysics

No geophysical surveys were carried out during the six months period.

See under Discussion for further comments on the surveys conducted during the summer.

(d) Ore Reserves

A calculation was made of the reserves within the main mineralised body (the "Minops" body) at St. Dizier. Inferred reserves are based on seven drill holes which intersect the lode horizon. Three of these define a single ore shoot for which inferred reserves are 142,840 tons X 0.96% Sn. This is based on a tonnage factor of 10.5 cu. ft/ton.

This compares with Minops' figures of 600,000 to 700,000 tons averaging 0.8% Sn.

One vertical hole (Minops M1) drilled almost down dip was not used in the calculations on grade but was included for tonnage calculations.

The mineralised body, which includes rock grading better than 0.1% Sn, has the following approximate dimensions:

Length	80 metres
Width	30 metres
Depth	80 metres

It is approximately oval in plan with a steep plunge (80-90°).

Rock grading better than 0.5% Sn with some internal dilution, forms a core to the low grade mass, with small disconnected apophyses. These apophyses have not been included in reserve calculations.

At present tin prices, this deposit would not be economic to mine.

(e) Petrographic Work

A study was carried out on numerous thin and polished sections taken from drill core within and surrounding the main mineralisation at St. Dizier. The principal aims of this work were to establish:

- (i) the nature of the host rocks
- (ii) the nature of the tin mineralisation

The most significant observation made, supported by re-logging of Minops and Placer core, was that the host rock is essentially a serpentinitised forsterite-marble. Previous workers in the area, presumably influenced by the amount of serpentine present, had regarded the rock as an intrusive ultrabasic. Distinctive contact

metamorphic mineral assemblages and textures can be observed in much of the drill core (in thin section). The serpentine phase has been produced by hydrothermal alteration of the forsterite, pseudomorphs often being visible. Chemical evidence also shows that the serpentine is of a non-ultrabasic origin. Several specimens with high serpentine content returned assays for Cr, Ni and Co, all less than 25 ppm.

Tin occurs solely as cassiterite with pyrrhotite and magnetite being the principal gangue minerals in a host rock which is essentially serpentine. An average composition would be:-

Serpentine	40%
Magnetite	30%
Pyrrhotite	20%
Other minerals (chlorite, carbonate, fluorite etc.)	9%
Cassiterite	1%

Polished section studies indicate that cassiterite grain size is in the range 2-200 microns with an average of 50 microns. Reaction rims, which may affect flotation, have been observed in a small percentage of the cassiterite grains.

3. DISCUSSION OF RESULTS

The exploration program carried out by Cominco Exploration Pty. Ltd. during the past year is seen as having downgraded considerably the likelihood of finding mineable hard-rock tin ore in the vicinity of the leases 13M/59, 16M/62 and 17M/62 including the immediately surrounding parts of E.L. 22/73.

Tin of economic grades is confined to (with the possible exception of alluvials in the area) a hydrothermally altered forsterite-marble. This forsterite-marble is the result of contact metamorphism by the Heemskirk Granite of one portion of a dolomitic unit which has an east-west strike and almost vertical dip. Where it can be observed, this unit is less than 50 metres thick. Geological mapping and drilling information (E.g. D.D.H. S.D.6) have shown that the depth of the granite leasement beneath this dolomitic unit is probably not greater than 100-150 metres. From these figures it can be seen that volume of potential host rock is small. The shallow granite basement precludes the possibility of finding further ore at depth and the narrow width of the dolomitic unit means that potential is limited to areas along strike.

The strike extent of the dolomitic unit is not known more than a kilometre from the centre of the prospect as it does not outcrop. Therefore, exploration over the Licence area during the next summer will rely heavily on the close association of magnetite and sulphides with tin mineralisation to define the host rock horizon. To this end a combined airborne magnetic-E.M. survey is planned.

A general high level of tin values encountered in bedrock sampling within the shales is attributed to the fact that these shales are often limey, thus allowing some replacement by the mineralising solutions from the granite intrusion. Values in the range 100-300 ppm occur within the granite close to the margin. No significant alteration (e.g. greisen) was discerned in this zone and the values are believed to represent a marginal, low-level concentration of tin.

Several other metals show high local values:-

Arsenic as arsenopyrite was observed as knots within the granite and shales at one site as a shear filling. No economic importance is attached to its occurrence.

Copper. Several high copper assays were obtained in drill core due to veins of chalcopyrite with quartz. No follow-up was warranted.

Zinc. Sphalerite is probably the most abundant economic sulphide at St. Dizier. Values of 2-3% zinc were obtained close to the granite-sediment contact - one occurrence is associated with cassiterite. The occurrence of sphalerite is thought to be connected with the intrusion of aplite dykes but due to extreme weathering a positive identification of the rock was not possible.

Lead. Galena associated with a narrow shear occurs toward the eastern edge of the local grid.

Magnetic surveys are concluded to be the most effective geophysical method in exploring for the type of deposit that occurs at St. Dizier. Electrical methods used over the past year, S.P. and I.P., appear to be influenced to a large degree by the presence of graphite and/or water. The S.P. results obtained revealed large order anomalies, but it was not possible to correlate them with rock type, mineralisation or faults etc.

The induced polarisation and resistivity survey showed several anomalous zones correlating with known mineralisation and several others which are now considered to be caused by the presence of graphite.

An offset of 20-50 metres between the magnetic and I.P. data is thought to be due to this cause.

4. EXPENDITURE

Geology*	\$5130
Surveying	506
Geophysics	362
Geochemistry and assaying	5149
Drilling	32296
Tenure	83
Option payments, legal	2543
	<hr/>
	\$46069
	=====

These figures are for the period June 16, 1974 to November 26, 1974, the latter date being the end of this company's accounting year.

*Note: Geology figure includes supervision, and other items which are not classified under the above categories.

Please note that in the Report for the six months ending June 16, 1974, the figure of \$2318 for Geology should have read \$10318. The total expenditure as reported is correct.

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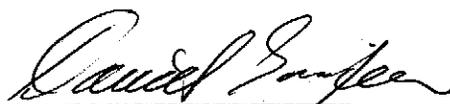
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5. CONCLUSIONS

1. The "Minops" body at St. Dizier is considered to be uneconomic under present economic conditions.
2. The probability of discovering other economic mineralisation within area of 3 square kilometres of the "Minops" body is rated as very low.
3. The probability of similar mineralisation occurring elsewhere within the Exploration Licence 22/73 is good. This remains to be tested.

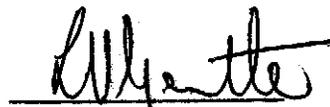
December 16, 1974.

By:



D.C. SIMPSON
Geologist

Endorsed by:



L.V. GENTLE
Chief Geologist

008

Ore Reserve Calculations

The ore reserve calculations for the St. Dizier ore shoot are based on the following figures:-

H 10 Block -

True width	55'
Length	80'
Depth	200'
Volume	880,000 cu. ft.

Using tonnage factor = 10.5 cu. ft./ton

Tonnage = 83,800

Grade = 0.97%

M4 Block

True width	= 12'
Length	= 30'
Depth	= 60'
Volume	= 21,600 cu. ft.
Tonnage	= 20,570 tons
Grade	= 0.72%

12'

2,057 tons

H1 Block

True width	35'
Length	40'
Depth	180'
Volume	= 252,000 cu. ft.
Tonnage	= 24,000 tons
Grade	= 1.14%

H5 Block

True width	38'
Length	40'
Depth	100'
Volume	= 152,000
Tonnage	= 14,470 tons
Grade	= 0.01%

009

St. Dizier - Ore Reserve Calculations

547010

Using the above figures to give total tons x grade as follows:-

			<u>Tons x grade</u>	
H10	83,800 x 0.97	=	81,286	81,286
M4	^{2,057} 20,570 x 0.72	=	14,810	1,481
H1	24,000 x 1.14	=	27,360	27,360
H5	14,470 x 1.01	=	14,614	14,614
	<u>124,327</u>			
	tons x grade	=	138,070	= 124,741
	tons	=	142,840	= 124,327
	Grade	=	0.96% Sn	1.00%

There-fore reserves are 142,840 tons x 0.96% Sn.

124,327 tons x 1000% Sn

Please note: A cut-off grade of 0.5% Sn has been used throughout

D.C. Simpson.

October 17, 1974.

012

Drill Hole Record



Property	St. Dizier	District	Zeehan	Hole No.	SD 1	547013
Commenced		Location		Tests at		Hor. Comp.
Completed		Core Size		Core Dip	70°	Vert. Comp.
Co-ordinates	20095N, 20009E			True Brg.	205° magnetic	Logged by G Boyle
Objective				% Recov.	54.8%	Date 9/5/74

From	To	Description	Sample No.	Length metres
0	3.65m	Auger hole. Creek gravel and cobbles.	94042	3.65 to 7.31
3.65	7.31	Quartzite. Fine, dark grey, massive quartzite. Slightly tinged brown and green. 5% fine, disseminated pyrite and patches up to 1 mm in size.	3	to 8.70
			4	to 9.45
7.31	8.?	Quartz-Pyrite. White quartz with thick patchy beds of fine pyrite. Possibly vein. Minor grey quartzite. 6 cm core after 8.23, then pug.	5	to 10.36
			6	to 11.88
8.?	9.45	Pug. Pale grey and cream micaceous clay. 11 cm of 'core'. Probably faulted qtzt.	7	to 12.90
9.45	10.36	Quartzite. Fine, dark grey quartzite, 1% fine disseminated pyrite.	8	to 14.00
10.36	11.88	Decomposed shale. Pale green to white clay, banded, possibly bychlorite veining. 5 mm chlorite-mica band in clay 2/3 from start. 5 cm brown tourmaline vein, minor chlorite, pyrite near end.	9	to 15.00
			94050	to 16.00
11.88	17.06	Pyritic Quartzite. Fine massive, pink-brown-grey quartzite. Kaolinised, pale pink grey from 11.88 to 12.14m, and 14.85m to 16.15m. 30% to 50% pyrite as fine veins, disseminated, and fine grained irregular patches up to 2 mm in size. Minor quartz as patches and veins. Rare cubes of pyrite.	1	17.06
			2	18.00
			3	19.00
17.06	24.61	Granite. Medium grained granite, muscovitized biotite, chloritized, possibly 3-5% biotite originally. 3% pyrite interstitial to grains and replacing biotite from 17.06 to 18.59m. 1% pyrite, interstitial to 19.96m. 1% black tourmaline, as grains up to 5 mm size. Patchy kaolinization of granite. Biotite after 20.5m, complete after 22m. 24.10m, 2 cm quartz tourmaline vein 35° to core axis.	4	20.00
			5	21.3
			6	22.09
			7	23.01
24.61	25.26	Quartz-Tourmaline. Fine to medium grained quartz with 30% network of black-brown tourmaline. Irregular chlorite vein at start, average 1 cm thick.	8	23.61
			9	24.61
25.26	26.34	Tourmalinized Granite. Massive, medium grained granite, biotite altered to chloritized muscovite.	94060	25.26
26.34	27.73	Tourmaline-Quartz. Massive, fine brown tourmaline, with 2% fine pyrite dissemination followed by fine massive, pale brown-grey quartz, possibly after quartzite.	1	26.34
			2	27.73
			3	28.49

COCKINGTON PRINT

010

Drill Hole Record



547011

Property	District	Hole No.	SD1
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim

T. Brg.

Collar Dip

Elev.

Length 65.61m.

Hole No. SD 1 Sheet 2

Footage		Description	Sample No.	Length	Analysis					
From	To									
				28.49						
27.73	29.26	Biotite-?Sericitic Schist. Fine brown biotite and pale green, fine sericite in a schistose textured rock, biotite well aligned, sericite fine. Biotite forms lenticular masses and swirls in a sericite matrix. Schistosity 20 to 30° to core axis.	94064	29.26						
			5	30.00						
			6	31.00						
29.26	31.00	Biotite Schist. Fine, brown biotite speckled by a pale grey cream mineral, schistose macro texture. Minor pyrite and quartz, carbonate veining..	7	32.00						
			8	32.91						
31.00	36.77	Shale - pale cream-green decomposed shale grading to fine pale grey green bedded shale after 33.5m. 5% chlorite and carbonate, pyrite veining. 1% fine, disseminated pyrrhotite. Bedding 10 to 15° to core axis. Rare biotite and sericite.	94035	28.17	Petrological sample					
			94036	29.50	Petrological sample					
			94069	32.91 to 34.59						
36.77	40.77	Metasomatized Quartzite. Pale grey to grey green fine quartzite. Bedded 30° to core axis. First 20 cm are veined by and have patchy beds of magnetite, fine, black. Fine, patchy pyrrhotite as disseminated material in patches. Magnetite is 20%, pyrrhotite 10%. Pyrite, quartz veins, rare patches, 1%. Chlorite and clay alteration to quartzite. 36.9 to 37.2 magnetite absent, pyrite veined pyrite-pyrrhotite as fine, disseminated, patches, 5%. After 37.1m quartzite is pale grey and grey brown. 37.2 to 38.0 50% of rock is cream coloured with minor dark green serpentine veins, veins containing 5% pyrite, veins partially replacing the quartzite, up to 10 cm thick. From 38m to 40.67m quartzite is completely altered, pale green, soft siltstone, Minor patches of unaltered pale grey quartzite to 38.4m angular to rounded, up to 5 cm in size, consistent in texture and bedding with the siltstone. Minor chlorite veining, 5% pyrite as fine disseminations and patches, thick patches in veins. Bedding, low angle 15°. 40.67 to 40.77 unaltered, bedded, dark grey quartzite, fine grained.	70	35.70						
			94021	36.70						
			94037	38.3	Petrological sample					
			94072	36.70 to 37.26						
			73	37.75						
			74	38.25						
			75	39.25						
			94076	40.77						
			77	41.50						
			78	42.20						
			79	43.20						
			80	44.25						
40.77	41.5	Serpentine-Magnetite. Fine, speckled and veinous cream and pale green serpentinite. 25% magnetite as 1-2 mm speckling and minor veins. 5% pyrite as angular, irregular patches up to 5mm size, minor veins	81	45.25						
			94039	41.0	Petrological sample					

011

Drill Hole Record



547012

Property	District	Hole No.	SD 1
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

T. Brg.	Collar Dip	Elev.	Length	Hole No. SD 1	Sheet 3
			65.6 metres		

Footage From	To	Description	Sample No.	Length	Analysis
41.5	45.30	Altered Quartzite. Yellow green and dark green, soft, fine altered quartzite with patches of pale and dark grey, fine grained unaltered quartzite. Bedded to massive bedding subparallel, to 15° to core axis. 5% fine, disseminated, banded pyrite pyrrhotite visible in unaltered quartzite, possibly also present in altered quartzite. Minor fine pyrite, black chlorite veining. After 46.25m 5% pyrite as heavy disseminations in certain beds. Minor mica in quartzite throughout.	94082	45.25 to 46.25	
			3	47.21	
			4	48.30	
			5	49.30	
			6	50.20	
49.30		Fault? Abrupt lithology change, truncated bedding on pyrite vein, 60° to core axis.	7	50.93	
49.30	50.20	?Serpentinite. Fine, soft, semitalcose, patchy coloured dark to mid grey and pale cream serpentinite. 15% cream carbonate veins with 5% pyrite. Minor patchy pyrite in serpentine. Minor biotite, sericite in last 15 cm.	8	52.20	
			9	53.28	
			94040	49.77	Petrological sample
50.20	50.95	Quartzite-Chert. Fine, translucent pale greenish grey cherty quartzite. Minor remnant medium grained quartzite. 15% black chlorite veins, silicified, with minor pyrite.	94090	53.28 to 53.55	
			1	55.20	
50.95	52.20	?Serpentinite. Fine dark grey to dark green-grey and cream green massive to low angle banded serpentine. 15% Carbonate veining containing 3% pyrite, 20% pyrite as fine grained patches up to 5mm in size, irregular, angular. 1% fine, disseminated magnetite, rare veins, up to 5% in patches. After 51.6m carbonate is absent, pyrite veining is 5%, up to 20% in parts.	2	55.80	
			3	56.24	
			4	57.60	
			94109	57.36	
52.20	53.28	Serpentine-Quartzite. Fine, pale grey quartzite and fine dark grey serpentine, diffusely replacing quartzite. Some soft pale grey ?Serpentine after quartzite well veined by black ?serpentine, 5% pyrite.	94108	58.27	
			94107	59.00	
			94041	52.74	Petrological sample
53.28	55.50	Quartzite. Pale grey to pale purple-grey, fine bedded, micaceous quartzite. Some brown tourmalinized beds, minor pink brown quartzite. Fine, dark green chlorite veining. 1% fine pyrrhotite speckling. Bedding subparallel to 10° to core axis. Minor pyrite and quartz veining. After 54.87 pyrite occurs as patchy fine grained masses up to 3 mm in size, rising from 2% to 10% by 55.2m	94106	59.00 to 59.68	
			05	60.85	
			04	62.10	
			03	63.02	

COCHINGTON PRINT

014

Drill Hole Record



Property	District	Hole No.	SD 1	547015
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates	True Brg.		Logged by	
Objective	% Recov.		Date	

Footage		Description	Sample No.	Length
From	To			
55.50	56.24	Serpentine-Magnetite. Fine, well banded, cream and cream-green serpentinite. 5% fine, disseminated magnetite, minor veins. After 56.16 pyrite largely replaces magnetite, some remnant bands.	94102	63.02 to 64.97
			01	65.61
56.24	56.87	Serpentinite. Fine, green-brown massive serpentinite, heavily cream serpentine veins. No pyrite or magnetite.		
56.87	65.61	Quartzite. Fine dark grey quartzite, 20% brown tourmalinized beds. 5% pyrite veining, minor carbonate 57.13 to 57.33 sheared pyrite vein, minor galena, 20° to core axis, true width 8 cm. Minor quartz in vein. After 57.53 quartzite is pale grey with grey-green dark grey and pink brown beds. 1% pyrite as rounded, irregular patches, up to 2mm in size, locally up to 5%. 62.3m to 63m pale grey, chlorite veined, quartzite, breccia like veining. 62.5m, 2cm sericite-green-blue quartz vein, 20° to core axis. 63 to 64.1m grey quartzite, weathered, chloritized in patches, thick irregular chlorite veins. 5% rounded irregular masses of carbonate (up to 1 cm in size) and 3% sericite (up to 2mm in size). 63.74m blue-green quartz mass 3 cm in size, minor carbonate, white quartz, may be vein. 63.18m to 63.24m pyrite-chlorite vein at right angles to core axis.		
End of hole				

SPEKTRON PRINT

Drill Hole Record



Property	District	Hole No. SD 1	547016
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage		Description												Sample No.	Length
From	To	From	Recovered	%	From	Recovered	%	From	Recovered	%	From	Recovered	%		
		3.65m	0.21	7	22.09	0.35	33	37.64	1.26	83	57.99	1.47	97		
		6.71	0.11	18	23.01	0.69	83	39.16	0.80	52	59.51	1.53	100		
		7.31	0.10	11	23.84	0.30	56	40.71	0.16	375*	61.04	0.35	92		
		8.23	0.19	16	24.38	0.61	100	40.77	0.40	32	61.42	0.31	69		
		9.45	0.08	9	24.99	0.67	62	42.01	0.16	45	61.87	0.44	80		
		10.36	0.27	18	26.07	0.34	20	42.37	0.34	59	62.42	0.75	125*		
		11.88	0.27	44	27.73	0.11	73	42.95	0.29	55	63.02	0.95	90		
		12.49	0.27	87	27.88	0.54	89	43.48	0.36	71	64.08	1.52	99		
		12.80	0.48	208*	28.49	0.55	72	43.99	0.74	58	65.61	-	-		
		13.03	0.35	31	29.26	0.13	87	45.26	1.27	84					
		14.22	0.24	38	29.41	0.45	155*	46.78	1.21	80					
		14.85	0.49	38	29.70	0.02	100	48.30	1.36	89					
		16.15	0.04	13	29.72	0.32	23	49.83	0.86	80					
		16.45	0.07	11	31.08	0.49	53	50.90	0.91	100					
		17.06	0.30	20	32.00	0.09	10	51.81	1.53	91					
		18.59	0.10	33	32.91	0.06	10	53.49	1.49	81					
		18.89	0.39	64	33.52	0.03	3	55.32	1.11	121*					
		19.50	0.40	87	34.59	0.04	5	56.24	0.38	50					
		19.96	0.34	56	35.35	0.10	67	57.00	0.48	91					
		20.57	0.46	100	35.50	0.80	87	57.53	0.15	54					
		21.03	0.24	23	36.42	1.22	100	57.81	0.08	44					

COCKINGTON PRINT

016

Drill Hole Record



547017

Property	St. Dizier	District	Zeehan	Hole No.	SD 2
Commenced	Location		Tests at		Hor. Comp.
Completed	Core Size		Corr. Dip	-55°	Vert. Comp.
Co-ordinates	20321E, 19866N		True Brg.	228° magnetic	Logged by G. Boyle
Objective			% Recov.	88.3%	Date 11/5/74

Metres		Description	Sample No.	Length
From	To			
0	0.15m	No core		
0.15	12.53	Shale, fine, massive, dark grey graphitic shale. 20% fine grained white quartz veins, highly irregular in direction and size. Some are chaotic in structure. 2% to 5% pyrite as veins, up to 3 mm thick, spongy in texture. Only rare pyrite in quartz veins. Patchy development of andalusite as needles up to 3mm long, sometimes in radiating groups. Up to 5% in patches but only 1% overall. In paler mid dark grey shale after 8.5m dark speckling is 2% overall, 1-2mm grains. 10.2m to 10.6m quartz veining well aligned 30° to core axis. Minor bedding of grey with dark grey after 10.6m, bedding 30° to 40° to core axis.		
12.53	12.79	Quartzite. Fine, pale and mid grey quartzite. Poorly bedded to massive. 1% brown tourmaline as small patches up to 2mm in size, are veins. 1% pyrite as fine grained veins.		
12.79	13.56	Skarn-Shale. Fine, dark grey shale with 5% yellow brown to dark green axinite grains, tabular to rounded, up to 2mm in size, grading into similar andalusite after 13.2m. 1% pyrite, finer disseminations and fine veins.		
13.56	17.83	Quartzite. Fine, grey green massive, micaceous quartzite. Chlorite occurs as diffuse clouration and speckling and veins 5% total. 1% pyrite, minor chalcopryrite as fine grained patches up to 2mm in size, irregular, often along veins. Minor quartz veining. Minor brown tourmaline specks 1-2mm in size, rounded, irregular and sub parallel veins 1/2% overall.		
17.83	21.06	Sericitized quartzite. Pale grey and fine grained quartzite masses rounded, often irregular in a mass of fine to medium grained pale green sericite. Quartzite masses range from only 2mm up to 5 cm in size. No obvious vein structure to sericite. Biotite vein, up to 2 cm thick circa 19.3m, low angle to core axis. 19.5m to 20.3m tourmaline patches up to 1 cm in size, occasionally needle like radiating, and cream yellow carbonate as highly irregular diffuse patches up to 5 cm in size.		

COCKINGTON PRINT

017

Drill Hole Record



Property	District	Hole No.	SD 2	547018
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Claim	T. Brg.	Collar Dip	Elev.	Length	H.H. 5 metres	Hole No. SD 2	Sheet 8
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Footage		Description	Sample No.	Length	Analysis		
From	To						
		Ratio of the two is 40:60. 30% of the sericite is replaced; in parts up to 60%. Sericite varies from 50% to 80% of rock. After 20.42m rock is grey green, contains 10% chlorite as masses with tourmaline masses up to 4mm in size, average 2mm, up to 30% in patches.					
21.06	25.39	Quartzite. Fine to medium grained grey green micaceous quartzite. Massive, 15% speckling and diffuse chlorite. Diffuse chlorite forms patches up to 2 cm in size. Minor quartz veining.					
25.39	26.36	Biotite-Quartzite. Fine to medium grained grey green micaceous quartzite, heavily infused with biotite 50% overall, up to 80%. "Islands" of quartzite within a network of biotite, no apparent vein structure. Minor remnant quartz in biotite matrix	94038	26m	Petrological	sample	
26.36	29.87	Quartzite. Fine to medium grained grey green quartzite. 10% dark green, or oxidized brown, speckling by chlorite, irregular masses 1-2mm in size. Also 20% diffuse chlorite, minor quartz veining, rare 1-2 mm patches of chalcopyrite. 28.4m to 28.56m dark grey, cherty discolouration to quartzite also 29.1m to 25.3m in this section containing 2% pyrite as fine grained patches up to 2mm, veins. 29.57 to 29.69 dark grey cherty discolouration, chlorite speckled.					
29.87	31.59	Hornfels. Fine grained, dark grey, massive, cherty hornfels, rare remnant pale grey green quartzite. 20% dark green chlorite speckling 1-2mm, subrounded, often semi rectangular, some hard, silicified. Rock is pocked by small rounded voids usually around 1mm size. Patchily altered in semi veinous and spotty cream kaolinisation. Minor quartz veining. 30-54m to 30.79m 20% pyrite as irregular fine grained masses up to 1cm in size. 30.94 to 31.20 bleached, kaolinised zone.					
31.59	44.50	Andalusite hornfels. Fine grained, dark grey, massive, cherty hornfels. 5% white and green andalusite tabular to rounded grains up to 3mm long, grains average 1 mm size. 1% dark green, rounded speckling 38.3m to 39.25 pale grey ?bleached colouration, cream kaolinisation, kaolinisation as spots and veins. 39.88 to 41.82 pale to dark grey and brown patchily bleached and oxidized hornfels, minor kaolinisation only. Also 44.25 to 44.50m					

DOCKINGTON PRINT

018

Drill Hole Record



547019

Property	District	Hole No.	SD 2
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov. 88-37	Date

Footage		From	Recoveries	%	From	Recoveries	%	From	Recoveries	%	Sample No.	Length
From	To											
		0	0	0	14.80	1.34	99	27.35	0.69	100		
		0.15	0.09	4	16.15	0.32	82	28.04	0.97	100		
		2.44	0.18	30	16.54	0.25	147*	29.01	1.65	93		
		3.05	0.81	100	16.71	0.92	95	30.75	0.24	96		
		3.86	0.36	100	17.68	0.15	100	30.94	0.38	85		
		4.22	0.25	100	17.83	0.23	100	31.39	1.07	100		
		4.47	0.18	1000	18.06	0.28	53	32.46	0.59	78		
		4.65	0.52	98	18.54	0.48	67	33.22	1.68	100		
		5.18	1.33	97	19.31	1.16	100	34.90	0.29	54		
		6.55	0.18	78	20.47	0.46	100	35.44	0.71	165*		
		6.78	1.28	100	20.93	0.32	97	35.87	1.15	76		
		8.06	1.62	100	21.26	0.37	97	37.39	1.14	98		
		9.68	1.37	100	21.64	0.40	91	38.56	0.37	82		
		11.05	0.68	100	22.08	0.28	74	39.01	0.78	93		
		11.73	0.71	92	22.40	0.13	100	39.85	0.53	98		
		12.50	0.45	100	22.53	0.33	59	40.39	0.07	30		
		12.95	0.60	98	23.09	0.24	292*	40.62	0.89	100		
		13.56	0.29	78	23.16	1.37	95	41.53	0.53	58		
		13.93	0.30	334*	24.61	0.63	153*	42.45	0.45	100		
		14.02	0.15	100	25.02	0.96	72	42.90	1.45	100		
		14.17	0.30	83	26.36	0.25	100	44.35	0.15	100		
		14.53	0.27	100	26.61	0.74	100	44.50	-	-		

019

Drill Hole Record



547020

Property	St. Dizier	District	Zeehan	Hole No.	SD 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	60°
Co-ordinates	19856E, 20029N			True Brg.	330° magnetic
Objective				% Recov.	20.7%
					Date 15/5/74

Footage		Description	Sample No.	Length
From	To			
0	1.52	N.B. This log is in <u>feet</u> Sand and clay. Two iron cemented granitic pebbles then fine iron stained sand and clay.		
0	5'0"			
1.52	13.1	Granitic sand. Fine white quartz sand, minor feldspar sand and white clay.		
5'	43'			
13.1	14.0	Quartz-Tourmaline. White, fine quartz and medium grained quartz-brown tourmaline rubble. Tourmaline as an angular network.		
43'	46'			
14.0	14.9	Granitic sand. Fine white sand and clay.		
46'	49'			
14.9	15.6	Quartz-Tourmaline. White medium-fine grained quartz with angular network brown tourmaline. Rubble-gravel.		
49'	51'3"			
15.6	16.15	Granitic sand. Fine white sand and clay.		
51'3"	53'0"			
16.15	17.15	Quartz-Tourmaline. Rubble as before.		
53'	56'3"			
End of hole.				
This could be either alluvium or solid, severely weathered granite with quartz-tourmaline veins.				
The sand is often probably inflow from up the hole since the drilling is conventional, not wire line.				
Recoveries				

From	To	Recovered	%	From	To	Recovered	%
0'	10'	9"	7.5	46'	51'3"	1'2"	22
10	13	10"	28	51'3"	56'3"	10"	17
13	15	1'0"	50				
15	20	1'5"	28				
20	23	1'8"	55				
23	30	11"	13				
30	35	10"	17				
35	40	1'2"	23				
40	46	1'1"	22				

GCKINGTON PRINT

Drill Hole Record

000000

547022

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage		Description				Sample No.	Length
From	To	Recoveries:					
		From	To	Recovered	%		
		0'	10"	11"	9		
		10'	15'	3"	5		
		15'	20'	4"	7		
		20	22	1' 10"	92		
		22	26	2' 9"	69		
		26	30	3' 0"	75		
		30	35	2' 9"	55		
		35	40	1' 9"	35		
		40	46	2' 11"	49		
		46	51	2' 5"	48		
		51	60	1"	1		
		60	65	8"	13		
		65	67	6"	25		
		67	81	1' 1"	27		
		81	86	9"	13		
		86	91	2"	3		
		91	96	4"	7		
		96	end	1"	?		

COCKINGTON PRINT

022

Drill Hole Record



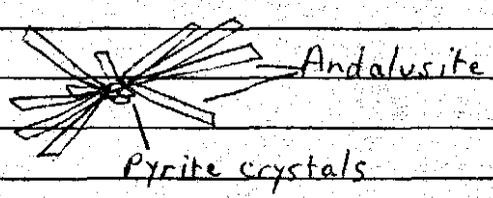
Property	St. Dizier	District	Zeehan	Hole No.	SD 5		547023
Commenced		Location		Tests at		Hor. Comp.	
Completed		Core Size		Cor. Dip	60°	Vert. Comp.	
Co-ordinates	20056E, 19978N			True Brg.	233° magnetic	Logged by	G. Boyle
Objective				% Recov.	29.7%	Date	16/3/74

Footage		Description	Sample No.	Length								
From	To											
0	5.5m 18'	N.B. this log is in <u>feet</u> Clay. Fine massive, white and grey clay and minor quartz pebbles.										
5.5m 18'	8.5m 28'		Quartz Pebbles. White, vuggy quartz pebbles.									
8.5m 28'	11.0m 36'	Sand and clay. Fine white sand and clay. Minor tourmaline sand, minor medium grained pyrite grains.										
11.0m 36'	12.0m 39'	Decomposed shale. Fine, semichaotic white and grey clay and shale.										
12.0m 39'6"	51.7m 104'0"	Shale. Fine, massive dark grey shale and decomposed shale clay. 1% pyrite as rounded, disc like patches, lenticular in section up to 2mm thick, 5 mm across, and as veins. 88'-88'6" 30% pyrite, medium grained, granular, in dark grey clay. 8'9" to 89' fine pyrite abundant in grey clay.										
End of Hole.												
Recoveries												
	From	To	Recovered	%	From	To	Recovered	%	From	To	Recovered	%
	0	13'0"	7"	4	63'0"	66'0"	1'3"	42	94'0"	97'0"	3"	14
	13'0"	18'0"	3"	5	66'0"	68'8"	1/4"	1	97'0"	98'0"	7"	58
	18'0"	28'0"	4"	6	68'8"	73'0"	1'8"	38	98'0"	100'0"	5"	21
	28'0"	40'0"	3'2"	26	73'0"	78'0"	10"	17	100'0"	103'0"	1'11"	64
	40'0"	45'0"	5"	8	78'0"	80'6"	3'3"	130*	103'0"	104'0"	7"	58
	45'0"	46'6"	6"	33	80'6"	85'0"	1'4"	30				
	46'6"	51'0"	2'2"	62	85'0"	88'0"	1'10"	92				
	51'0"	55'0"	1'9"	44	88'0"	89'0"	1'3"	125*				
	55'0"	60'0"	1'0"	20	89'0"	91'0"	1'1"	54				
	60'0"	63'0"	1'10"	61	91'0"	94'0"	2'7"	86				

COCKINGTON PRINT

Drill Hole Record

Property **ST. DIZIER** District _____ Hole No. **S.D.6**
 Commenced _____ Location **N.W. of Zeehan** Tests at _____ Hor. Comp. **547024**
 Completed _____ Core Size **NQ, HQ** Corr. Dip **-45°** Vert. Comp. _____
 Co-ordinates **20538E; 19930N** *R.L approx 180m ASL* Mag. ~~XXXX~~ Brg. **342°** Logged by **D.C. SIMPSON**
 Objective **Magnetic anomaly centred at 20515E; 20015E** % Recov. _____ Date _____

Metres		Description	Sample No.	Length
From	To			
0	3.2	Not cored. Slates		
3.2	20.70	Spotted Slates. Light brown to mid-grey spotted cordierite slates, well bedded, core generally broken and in places kaolinitic. Small quartzite band at 6.2 m. Mineralisation. Pyritic films on joints. Structure. Bedding 40° ^ C.A.		
20.70	72.20	Andalusite slates. Faintly bedded, light to dark grey andalusite slates containing pyrite on fractures and joint faces. Cavities rich in mica and pyrite occur locally. Variation in colour possibly due to graphite content. Irregular thin quartz veins. Graphitic slates 56-56.30; 67.10-69.70 Mineralisation. Fine to medium grained pyrite amounting to 0.5% in joints and disseminated. Pyrite often occurs as below, with andalusite. Coarse grained pyrite often occurs with graphitic sections.		
				
		Structure Bedding 40-50° ^ C.A. at 40m, 60° at 59m, 35° at 71m. Rock generally broken with some core loss.		
72.20	73.20	Rubble: Mixture of andalusite slate and serpentinuous fragments. Pyritic and micaceous in parts.		

DORRINGTON PRINT

Drill hole record



Property	ST. Dizier	District	Hole No.	SD6	547025
Commenced		Location	Tests at	Hor. Comp.	
Completed		Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates			True Brg.	Logged by	
Objective			% Recov.	Date	

Footage From	Metres To	Description	Sample No.	Length
73.20	75.30	Serpentine - dolomite rock. Very broken. Solid core is pale to dark green, well bedded, with traces of fine grained sulphide (pyrrhotite?) Minor opaline material in fragments. Mineralisation. Traces sulphide Structure. Bedding 45° \wedge C.A.		
75.30	76.60	Quartz rich rock. Quartz has a honeycomb texture with rounded voids which may have been occupied by corierite. Structure Faint banding 50° \wedge C.A. Mineralisation None observed.		
76.70	76.90	Serpentine rock. Banded pale to dark green with black particles - possibly graphite. Structure. Bedding 40° \wedge C.A. Irregularly oriented slip planes. Mineralisation. Minor pyrite on slip planes.		
76.90	78.90	Shales. Dark grey shales generally massive, silicified and containing minor andalusite which is very coarse grained (10 mm) locally. Minor thin quartz and pyrite veins, graphitic on joints and minor slip planes. Structure. Bedding 30° - 40° \wedge C.A. Mineralisation. Minor slip plane pyrite.		
78.90	80.50	Medium grained siliceous rock, possibly aplite. Original texture obscured by silicification but wall rock shales have been recrystallised to give coarse grained andalusite close to contact 20 cms. of shale at 80 m. Mineralisation. 5% disseminated pyrite. Structure. Doubtful banding 70° \wedge C.A.		

COCKINGTON PRINT

Drill Hole Record

Property	ST. DIZIER	District	Hole No.	S.D.6	547026
Commenced		Location	Tests at	Hor. Comp.	
Completed		Core Size	NQ from 92.80	Corr. Dip	Vert. Comp.
Co-ordinates			BQ from 120.75	True Brg.	Logged by
Objective				% Recov.	Date

Footage		Description	Sample No.	Length
From	To			
80.50	83.50	Andalusite shales. As 76.9 - 78.90		
83.50	87.40	Hornfels Quartz-feldspar-garnet(?) amphibole(?) hornfels coarsely crystalline with joint banding. Minor bands of andalusite slate within hornfels. Some chlorite in slightly sheared zone. Structure. Banding $40^\circ \wedge$ C.A. local light shearing. Mineralisation. Coarsely crystalline \pm 2mm sphalerite disseminated to $\sim 1\%$ Sph, minor crystalline pyrite dissemination. Rare chalcopyrite noted.		
87.40	100.4	Silicified black shales. As above. 10 mm wide band of muscovite parallel to bedding at 88.70. Pyrite, vivianite and carbonate on joint faces after 94.00. From 96.00 decomposed to clay with minor $< 1\%$ pyrite. Band of siliceous hornfels at 97.10. Structure Bedding $50^\circ \wedge$ C.A. Mineralisation. Minor pyrite only.		
100.4	117.2	Fault zone. Consists of rock fragments of shale, quartzite serpentine and cavernous quartz (often opaline). Muscovite flaks developed locally. Kaolinic on joints.		
117.2	120.75	Serpentine-magnetite-kaolin-pyrrhotite rock. Serpentine-carbonate-pyrrhotite 117.2 - 117.65 Po 5% Serpentine-magnetite-pyrrhotite dark green to black, coarse grained 117.65 - 120.75 Occasional kaolin veins Po 15% Magnetite up to 70%. Structure. Banding doubtful, probably low angle $\sim 20^\circ$		
120.75	123.50	Serpentine Pale to dark green, yellowish locally with minor strings of magnetite and pyrite. Quartz band 30 cms. wide 122.70. Dolomite band at base of quartz 5 cms. Mineralisation. Minor pyrite only as strings. Structure . Bedding possiby $70^\circ \wedge$ C.A. (doubtful)		

026

Drill Hole Record



Property	St. Dizier	District	Hole No.	547027
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

From	To	Description	Sample No.	Length
123.50	145.30	<p>Serpentinised skarn sequence.</p> <p>This is a highly variable sequence of serpentinites, serpentine-dolomite rocks, serpentine-dolomite magnetite rocks. Magnetite content generally < 10% except 125.95 - 127.40 where it is ~ 30%; 129-130 ~ 15%. Quartz band 131.40 - 132.00.</p> <p>Structure. Bedding variable 10-40°.</p> <p>Mineralisation. Pyrrhotite and pyrite is occasional blebs</p>		
145.30	151.00	<p>Interbedded serpentine-dolomite and quartzite sequence. Dolomites usually yellowish to brown, quartzite pinkish to purple.</p> <p>Structure. Bedding 25-35° ^ C.A.</p> <p>Mineralisation. Fine grained pyrite disseminated locally. Joints often carry pyrite. Content ~ 2%.</p>		
151.00	162.60	<p>Quartzite. Massive mid to dark brown fine grained quartzite with occasional limey bands. Often pyritic - content 5%. Carbonate pyrite and traces of vivianite on joint planes.</p> <p>Traces of muscovite visible, however, it is distinct from the micaceous quartzite below.</p> <p>Irregular veinlets of quartz common.</p> <p>Structure. No bedding visible. Joints 70° C.A.</p> <p>Mineralisation. Traces of pyrite on joints and occasionally disseminated.</p>		
162.60	166.60	<p>Serpentine-hornfels sequence with some quartzite. Hornfels very dark and fine grained (possibly axinite). Banding developed in upper and lower parts. Minor magnetite at 164.50. Occasional dolomite veins cutting across at 163-165.</p> <p>Mineralisation. Traces of pyrite and possibly disseminated in dark hornfels.</p>		

DORNINGTON PRINT

027

Drill Hole Record



547028

Property	St. Dizier	District	Hole No.	S.D.6
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres		Description	Sample No.	Length																														
From	To																																	
166.60	170.60	<p><u>Quartzite</u> Pale grey to brown quartzite bedded in upper portion becoming massive by 168.</p> <p>Impurities produce minor hornfels patches 168-170 containing muscovite, garnet(?) and dolomite.</p> <p><u>Structure</u> Bedding 40° C.A. at 160m, 60° at 180m. Joints bedding.</p>																																
170.60	200.52	<p>Bedded micaceous quartzite. Fine grained buff c-loured micaceous quartzite with pale to dark green intersects of shaley material. Bands over 1 cm thick rare. Minor slumps visible at 172m.</p> <p>This section becomes more hornfelsis progressively toward the adamellite contact also increasing in sulphide (Py) content 5%.</p> <p>Adamellite sill 197.66 - 197.52.</p> <p><u>Structure</u> Well preserved bedding 60-70° C.A.</p>																																
200.52	205.70	<p><u>Adamellite</u> Coarse grained biotite adamellite generally uniform and slightly weathered.</p> <p>Feldspar generally orangy-yellow colour. Quartz-servicite alteration along some veins.</p> <p>No evidence of tourmaline. Tr pyrite in joints.</p> <p><u>Structure</u> Joints 20° C.A.</p>																																
		205.70m. End of Hole																																
		<table border="1"> <thead> <tr> <th>Hole Surveys</th> <th>Depth(m)</th> <th>Dip</th> <th>Bearing</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td></td> <td>0</td> <td>-45</td> <td>-</td> <td>Acid tube</td> </tr> <tr> <td></td> <td>45</td> <td>-44</td> <td>346</td> <td>Camera</td> </tr> <tr> <td></td> <td>148</td> <td>-44</td> <td>-</td> <td>Acid tube</td> </tr> <tr> <td></td> <td>180</td> <td>42.5°</td> <td>-</td> <td>Acid tube</td> </tr> <tr> <td></td> <td>200</td> <td>41°</td> <td>-</td> <td>Acid tube</td> </tr> </tbody> </table>	Hole Surveys	Depth(m)	Dip	Bearing	Method		0	-45	-	Acid tube		45	-44	346	Camera		148	-44	-	Acid tube		180	42.5°	-	Acid tube		200	41°	-	Acid tube		
Hole Surveys	Depth(m)	Dip	Bearing	Method																														
	0	-45	-	Acid tube																														
	45	-44	346	Camera																														
	148	-44	-	Acid tube																														
	180	42.5°	-	Acid tube																														
	200	41°	-	Acid tube																														

WASHINGTON PRINT

028

Drill Hole Record



Property	ST. DIZIER	District	Hole No.	S.D.7	547029
Commenced		Location	N.W. of Zeehan	Tests at	Hor. Comp.
Completed		Core Size	NQ, BQ	Corr. Dip	Vert. Comp.
Co-ordinates	20100E; 19971N		True Brg.		Logged by D.C. Simpson
Objective	(1) E. extent of pyrite-Sn (2) Test I.P. anomaly		% Recov.		Date

Metres		Description	Sample No.	Length
From	To			
0	12	Not cored. Hole collared in broken opaline rock.		
12	40.50	Shales, sandstones, dolomite. This section is very badly weathered and broken. Positive identification not possible. Siliceous material with box-works, often pyrite, is the only hard rock present. Patches of serpentine, as well as bands parallel to bedding occur through the section, especially 23-24m. Fine crystalline. Dolomite 39.1 - 39.8 m. Mineralisation. Traces of pyrite visible in grey shales. Structure Banding where visible $70^{\circ} \wedge$ C.A. Shearing at 26.5 m. $\sim 60 \wedge$ C.A. Brecciation of sediments at 31.00 m.		
40.50	52.65	Shales Light to dark grey graphitic andalusite shales, showing good bedding locally. Core broken with some loss of core. Mineralisation Traces of pyrite confined to hairline joints which are common. Structure Bedding $15-20^{\circ} \wedge$ C.A. Joints randomly orientated.		
52.65	53.0 ⁽³⁾	Pale brown quartzite with minor sulphide mineralisation (Bottom contact doubtful position due to core loss).		
53.0	60.30	Very weathered (or altered) andalusite shales, serpentinous in parts, principally on shear planes. Coarse muscovite developed in completely kaolinised shale. Shales are usually graphitic. Structure Poorly preserved. Bedding $0-10^{\circ} \wedge$ C.A. Mineralisation. Traces of pyrite in joints.		

BRINGTON PRINT

Claim

029

Drill Hole Record



Property	St. Dizier	District	Hole No.	S.D.7	547030
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Footage		Description	Sample No.	Length	
From	To				
60.30	61.80	Serpentinised shales very broken and poor recovery.			
		Fine grained disseminated pyrite 20 cms wide at 61.00 (?). Pyrite content 5%.			
61.80	75.00	Adamellite Very broken and fragmented. Grains only. Biotite mostly chloritised. Core becoming more solid towards base of section. This is the coarse grained adamellite.			
		No mineralisation or structure visible.			
75.00	124.65	Adamellite Coarse grained biotite adamellite with distinct yellow colouration to feldspar, tourmaline patches developed locally but rare. Quartz boundaries to feldspar are clouded in hand specimen. Minor variation in grain size. Rock becomes porphyritic in feldspar at about 120 metres.			
		Kaolinisation is slightly developed in heavily jointed section.			
		Structure Joints 30° and 70° \wedge C.A.			
		Mineralisation None observed.			
		124.65 metres. End of hole.			
		Depth (m)	Declination	Azimuth (mag)	
		Surveys	45.8	-55	190
			93.0	-56.5	184
			124.6	-57	185
					Camera surveys

KINGSTON PRINT

030

Drill Hole Record



Property	St. Dizier	District	Zeehan	Hole No.	SD 8		547031
Commenced		Location	NW of Zeehan	Tests at		Hor. Comp.	
Completed		Core Size	NQ and BQ	Corr. Dip	-45 at collar	Vert. Comp.	
Co-ordinates	19828E, 20092N	True Brg.	149° mag.	Logged by	D.C. Simpson		
Objective	Test mag anomaly under deep lead.			% Recov.		Date	

From	To	Description	Sample No.	Length
0.0	3.0	Not cored.		
3.0	10.0	Yellow to brown weathered adamellite. Brown colouration due to sulphides, boxworks developed ~8 and 9.5 metres. Greisen veins of qtz, mica and tourmaline developed locally. Core broken and low recovery.		
10.0	11.6	Buff to white weathered aplite, now mostly kaolin. A few limonitic veins at 10.2m. No mineralisation observed		
11.6	18.75	Slightly weathered fine grained white adamellite (ie few ferromag minerals) containing patches of quartz-tourmaline. Veins of quartz-tourmaline often carry minor crystalline pyrite. Alteration of feldspars has produced a pale yellow green colouration in the rock. Limonite on fractures abundant - oxidation often extending into wall rock.		
18.75	25.2	As above but less oxidised. Core very broken in patches. From 24.6m appears to be silicified.		
25.2	26.50	Medium grained biotite adamellite partly kaolinised feldspars of pale yellow green colouration as above. Mineralisation - nil. Structure - irregular fractures.		
26.50	27.00(?)	Tourmalinised quartzite - very broken - only rubble.		
27.00	27.50	Dark green weathered serpentinite. Faintly banded		
27.50	28.80	Fault zone. Brecciated and heavily silicified. Rock has open texture in places due to working out of softer minerals. Structure - shearing 55° to CA		
28.80	36.60	Banded siliceous hornfels interbedded with hornfels of shaley composition and spotted hornfels. Coarse grained micaceous bands approximately parallel to bedding (Core is generally very broken). Sections are locally serpentinous. Traces of fine grained magnetite at 30m. Rock is often pale green probably due to the presence of fine grained chlorite.		

C:\UNIFORM PRINT

Claim

031

Drill Hole Record



547032

Property	District	Hole No.	SD 8
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage From	To	Description	Sample No.	Length
		Mineralisation - Pyrite and pyrrhotite disseminated and in blebs is a common feature in the siliceous hornfels. Sulphide content variable 1-10%.		
		Structure. - banding where developed is 30° to CA. Randomly oriented fractures occ. contain pyrite.		
		Suspected faulting in serpentinous section.		
36.60	41.00	Finely to medium banded siliceous hornfels sometimes spotted with occasional serpentinous bands, garnet and/or axinite bands. Bands of graphite occur locally. Rock is veined by mica-pyrite some carbonate and rarely vivianite.		
		Mineralisation - minor sulphide is developed principally pyrite but some pyrrhotite parallel to bedding and also disseminated locally. Sulphide content less than 0.1%.		
		Structure - Bedding 20° to CA.		
41.00	43.40	Fault zone - extremely broken and weathered - fragments only of serpentine, hornfels, mica, grey clay and shale, silicified fault material at 42m.		
43.40	57.00	Hornfels. Fine grained, usually pale green, tough and banded locally. Compositional banding variable where bands may consist of one or more of the following, quartz-diopside(?) axinite, garnet, pyrite, pyrrhotite, vivianite (?), magnetite. Serpentine developed rarely on slip planes and at 47.40.		
		Graphite locally developed in bands.		
		Structure - bedding where visible 0-15° to CA. Core generally very broken. Breccia trend 15° to CA at 48.40 sulphide replacement of blocks. Minor step faulting at 59m. Displacement 5 cms		
		Mineralisation - Pyrrhotite and to a lesser extent pyrite replace thin beds throughout and also occupy joints and fractures. Total sulphide content less than 1% although locally may reach 10%.		
57.00	61.00	As above but generally fragmented. Strong development of magnetite 60-60.5m.		

COCKINGTON PRINT

FILE A

032

Drill Hole Record



547033

Property	District	Hole No.	SD 8
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Footage		Description	Sample No.	Length
From	To			
61.00	64.00	Fault. Variably silicified, pale brown in colour, Recovery very low. Similar rock to fault material at 27.50-28.80.		
64.00	88.00	Adamellite. Light coloured fine to medium grained biotite adamellite showing minor alteration (?). Rock shows pale yellow colouration possibly due to limonite. Disseminated tourmaline and quartz-tourmaline aggregates common throughout. Biotite is often altered to chlorite, Tourmaline occasionally associated with sulphide in disseminations. White mica developed locally. Greisenized 78.20-80m Mineralisation - traces of pyrite only throughout. Crystalline pyrite vein at 86.35. Structure - Joints 70° to CA and 15° to CA. Core usually broken on these.		
88.00	92.50	Adamellite. Coarse grained altered biotite adamellite, feldspars often yellowish green. Alteration appears to have been extensive as grain boundaries a very diffuse. Patches of tourmaline with or without quartz locally developed. Otherwise as 64 to 88m.		
92.50	97.00	Adamellite as 64-88m Greisenized locally. Possibly fluorite developed on joint at 93.60.		
End of hole				

Surveys

Depth (m)	Dip	Bearing	Method
30	-45	N.D.	Acid tube
60	-45	"	Acid tube
94	-46	145	Camera.

COCHINISTON PRINT

ST. DIZIER Diamond Drill Hole SD1

DRILL CORE ASSAYS

From (metres)	To	Sample Number	Metal values PPM		
			Cu	Cu %	Sn
3.65	7.31	94042	540		80
7.31	8.70	3	3660		140
8.70	9.45	4	600		650
9.45	10.36	5	610		130
10.36	11.88	6	620		1720
11.88	12.90	7	660		70
12.90	14.00	8	780		40
14.00	15.00	9	690		90
15.00	16.00	94050	320		190
16.00	17.06	1	19200	1.92	330
17.06	18.00	2	600		400
18.00	19.00	3	290		800
19.00	20.00	4	280		130
20.00	21.03	5	40		190
21.03	22.09	6	30		80
22.09	23.01	7	< 10		50
23.01	23.61	8	< 10		30
23.61	24.61	9	< 10		40
24.61	25.26	94060	< 10		20
25.26	26.34	1	160		< 20
26.34	27.73	2	170		20
27.73	28.49	3	300		< 20
28.49	29.26	4	140		20
29.26	30.00	5	170		< 20
30.00	31.00	6	410		20
31.00	32.00	7	350		170
32.00	32.91	8	320		150
32.91	34.59	9	270		280
34.59	35.70	94070	380		590
35.70	36.70	1	430		640
36.70	37.26	2	250		850
37.26	37.75	3	120		80
37.75	38.75	4	490		390
38.75	39.75	5	460		1580
39.75	40.77	6	480		680
40.77	41.50	7	310		6400
41.50	42.20	8	150		60
42.20	43.20	9	110		350
43.20	44.25	94080	80		50

034

547035

From (metres)	To	Sample Number	Metal Values PPM			
			Cu	Cu %	Sn	Sn %
44.25	45.25	94081	100		50	
45.25	46.75	2	140		230	
46.75	47.21	3	210		70	
47.21	48.30	4	140		< 20	
48.30	49.30	5	200		760	
49.30	50.20	6	110		70	
50.20	50.93	7	< 10		50	
50.93	52.20	8	500		700	
52.20	53.28	9	280		180	
53.28	53.55	94090	100		60	
53.55	55.20	1	240		180	
55.20	55.80	2	380		520	
55.80	56.24	3	180		1520	
56.24	57.00	4	170		100	
57.00	57.36	94109	43700	4.37		0.063
57.36	58.37	8	260	0.026		0.028
58.27	59.00	7	220	0.022		0.013
59.00	59.68	6	110	0.011		0.005
59.68	60.85	5	140	0.014		0.053
60.85	62.10	4	190	0.019		0.056
62.10	63.02	3	110	0.011		0.025
63.02	64.97	2	100	0.01		0.058
64.97	65.61	1	370	0.037		0.042

035

547036

ST. DIZIER

Diamond Drill Hole SD6

DRILL CORE ASSAYS

From (metres)	To	Sample Number	Length (cm)	PPM Sn (XRF)	Metal Values %		
					Cu (AAS)	Pb (AAS)	Zn (AAS)
71.20	72.20	138070	100	33	< 0.01	< 0.01	< 0.01
72.20	73.05	1	85	< 20	< 0.01	< 0.01	< 0.01
73.05	74.30	2	125	85	0.014	< 0.01	0.082
74.30	74.55	3	25	50	< 0.01	< 0.01	0.029
74.55	74.95	4	40	< 20	< 0.01	< 0.01	< 0.01
74.95	75.25	5	30	< 20	< 0.01	< 0.01	< 0.01
75.25	76.40	6	115	26	< 0.01	< 0.01	< 0.01
76.40	76.80	7	40	21	0.01	< 0.01	0.024
76.80	77.50	8	70	24	0.013	< 0.01	< 0.01
77.50	78.85	9	135	33	0.013	< 0.01	0.011
117.10	117.55	138080	45	273	< 0.01	< 0.01	0.055
117.55	118.85	1	130	2598	0.01	< 0.01	0.32
118.85	119.80	2	95	5332	0.023	< 0.01	0.75
119.80	120.60	3	80	17700	0.014	0.01	< 0.01
120.60	122.25	4	165	654	< 0.01	< 0.01	0.025
122.25	122.70	5	55	215	< 0.01	< 0.01	0.02
122.70	123.75	6	105	199	< 0.01	< 0.01	0.02
123.75	124.80	7	105	184	< 0.01	< 0.01	0.019
124.80	125.15	8	35	50	< 0.01	< 0.01	< 0.01
125.12	125.60	9	45	269	< 0.01	< 0.01	0.04
125.60	125.95	138090	35	264	< 0.01	< 0.01	< 0.01
125.95	126.60	1	65	915	0.015	0.01	0.029
126.60	127.65	2	105	385	0.013	< 0.01	0.034
127.65	129.15	3	150	33	< 0.01	< 0.01	0.012
129.15	130.00	4	85	254	< 0.01	< 0.01	0.021
130.00	130.90	5	90	465	< 0.01	< 0.01	0.028
130.90	132.15	6	125	87	< 0.01	< 0.01	0.26
132.15	133.60	7	145	151	0.01	< 0.01	0.042
133.60	134.65	8	105	28	< 0.01	< 0.01	0.01
134.65	135.20	9	55	103	< 0.01	< 0.01	0.023
135.20	135.80	138100	60	56	< 0.01	< 0.01	0.01
135.80	136.50	1	70	72	< 0.01	< 0.01	0.059
136.50	137.40	2	90	427	< 0.01	< 0.01	0.072
137.40	138.60	3	120	264	0.011	< 0.01	0.03
138.60	139.60	4	100	72	< 0.01	< 0.01	0.015
139.60	140.50	5	90	< 20	< 0.01	< 0.01	0.018
140.50	141.30	6	80	< 20	0.011	< 0.01	0.042
141.30	142.30	7	100	24	0.012	< 0.01	0.021
142.30	142.70	8	40	30	< 0.01	< 0.01	0.013

↕

036

From (metres)	To	Sample Number	Length (cm)	PPM Sn (XRF)	Metal Values %		
					Cu (AAS)	Pb (AAS)	Zn (AAS)
142.70	143.20	138109	70	54	< 0.01	< 0.01	0.28
143.20	144.20	10	100	43	0.01	< 0.01	0.018
144.20	144.80	11	60	71	< 0.01	< 0.01	0.017
144.80	145.15	12	35	200	0.026	< 0.01	0.046
145.15	145.85	13	70	433	0.022	< 0.01	0.069
145.85	146.80	14	95	799	0.021	< 0.01	0.037
146.80	147.25	15	45	607	0.048	< 0.01	0.067
147.25	147.50	16	25	1886	0.17	< 0.01	0.105
147.50	148.50	17	100	375	0.025	< 0.01	0.052
148.50	149.50	18	100	54	0.011	< 0.01	< 0.01
149.50	150.50	19	100	43	< 0.01	< 0.01	< 0.01
150.50	151.50	138120	100	50	< 0.01	< 0.01	< 0.01
161.50	162.60	1	110	< 20	< 0.01	< 0.01	< 0.01
162.60	163.30	2	70	< 20	< 0.01	< 0.01	< 0.01
163.30	164.50	3	120	111	0.027	< 0.01	0.02
164.50	165.37	4	87	458	0.12	< 0.01	0.018
165.37	165.97	5	60	< 20	< 0.01	< 0.01	0.015
165.97	166.35	6	38	< 20	0.018	< 0.01	< 0.01
166.35	166.60	7	25	55	0.015	< 0.01	< 0.01
166.60	167.40	8	80	112	0.025	< 0.01	< 0.01
167.40	168.90	9	150	108	< 0.01	< 0.01	0.022
190.30	191.30	138130	100	48	0.015	< 0.01	< 0.01
191.30	192.30	1	100	54	0.011	0.014	0.054
192.30	193.30	2	100	57	< 0.01	< 0.01	0.01
193.30	194.30	3	100	81	0.017	< 0.01	0.01
194.30	195.30	4	100	66	0.01	0.024	0.022
195.30	196.30	5	100	100	0.01	< 0.01	0.014
196.30	197.52	6	122	40	0.012	< 0.01	0.014
197.52	197.66	7	14	154	< 0.01	< 0.01	< 0.01
197.66	198.60	8	94	158	< 0.01	0.01	0.033
198.60	199.60	9	100	155	0.012	0.018	0.092
199.60	200.52	138140	92	149	0.021	0.014	0.048
200.52	201.70	1	118	14	< 0.01	< 0.01	< 0.01
201.70	202.70	2	100	66	0.013	< 0.01	< 0.01
202.70	203.70	3	100	30	0.01	< 0.01	< 0.01
203.70	204.70	4	100	21	< 0.01	< 0.01	< 0.01
204.70	205.70	5	100	< 20	< 0.01	< 0.01	< 0.01

037

547038

ST. DIZIER

Diamond Drill Hole SD7

DRILL CORE ASSAYS

From (Metres)	To	Sample Number	Length (cm)	PPM Sn (XRF)	Metal Values		
					Cu(AAS)	Pb(AAS)	Zn(AAS)
18.30	19.80	138165	150	< 20	< 0.01	< 0.01	0.053
19.80	21.30	6	150	< 20	"	"	0.048
30.30	31.80	7	150	< 20	0.014	"	0.021
37.80	39.30	8	150	< 20	< 0.01	"	0.01
45.30	46.80	9	150	77	0.02	0.05	0.12
51.15	52.65	70	150	25	0.018	< 0.01	0.015
53.00	54.30	1	130	1867	< 0.01	"	0.29
54.30	55.80	2	150	1198	"	"	0.165
55.80	56.70	3	90	1159	"	"	0.016
56.70	57.80	4	110	1456	"	0.01	0.016
57.80	58.80	5	100	1214	"	< 0.01	0.041
58.80	60.30	6	150	1029	"	"	0.018
60.30	61.80	7	150	2712	0.01	"	0.085
61.80	63.30	8	150	78	< "	"	0.01
63.30	64.80	9	150	96	"	"	"
64.80	66.30	80	150	39	"	"	"
66.30	67.80	1	150	104	"	"	"
67.80	69.30	2	150	51	"	"	"
69.30	70.80	3	150	105	"	"	"
70.80	72.30	4	150	20	"	"	"
72.30	73.80	5	150	103	"	"	"
73.80	75.30	6	150	61	"	"	"
75.30	77.00	7	170	30	"	"	"
77.00	79.20	8	220	73	"	"	"
79.20	80.70	9	150	49	"	"	"
80.70	81.70	90	100	< 20	"	"	"
81.70	82.70	1	100	80	"	"	"
82.70	83.70	2	100	< 20	"	"	"
85.50	86.50	3	100	20	"	"	"
88.10	89.10	4	100	< 20	"	"	"
91.50	92.50	5	100	< 20	"	"	"
95.10	96.10	6	100	< 20	"	"	"
98.50	99.50	7	100	21	"	"	"
102.10	103.10	8	100	< 20	"	"	"
105.10	106.10	9	100	< 20	"	"	"
108.10	109.10	138200	100	< 20	"	"	"
110.85	111.85	1	100	< 20	"	"	"
113.55	114.55	2	100	< 20	"	"	"

130

547039

From (Metres)	To	Sample Number	Length (cm)	PPM Sn(XRF)	Metal Values		
					Cu(AAS)	Pb(AAS)	Zn(AAS)
116.60	117.60	138203	100	<20	<0.01	<0.01	<0.01
119.65	120.65	4	100	<20	"	"	"
120.65	121.65	5	100	<20	"	"	"
121.65	122.65	6	100	<20	"	"	"
122.65	123.65	7	100	34	"	"	"
123.65	124.65	8	100	37	"	"	"

039

547040

ST. DIZIER

Diamond Drill Hole SD8

DRILL CORE ASSAYS

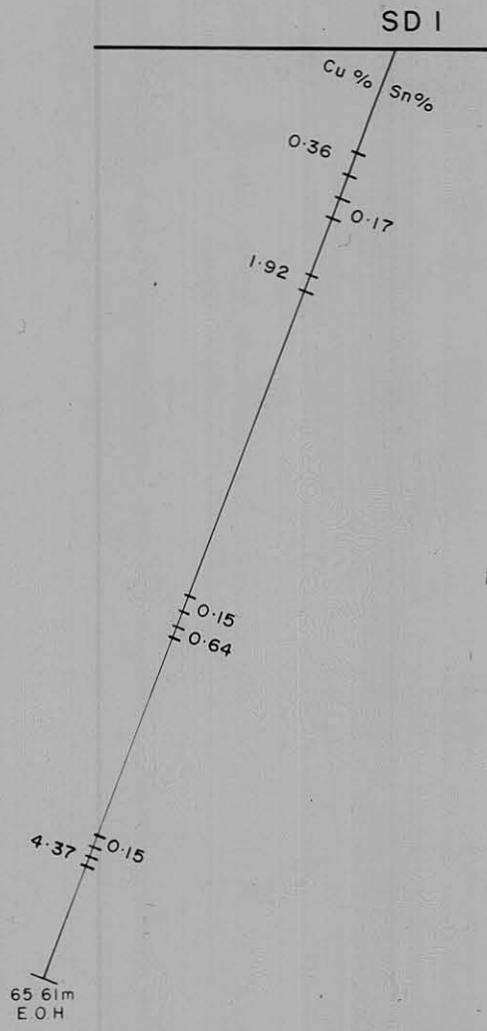
From (Metres)	To	Sample Number	Length (cm)	PPM Sn(XRF)	Metal Cu	Values Pb	% Zn
3.00	6.10	138146	310	140	0.028	<0.01	<0.01
6.10	9.15	7	305	65	0.014	<0.01	<0.01
9.15	10.00	8	85	143	0.016	"	"
10.00	11.60	9	160	<20	0.01	"	"
14.90	15.60	138150	70	<20	0.013	"	"
15.60	16.35	1	75	<20	0.01	"	"
18.95	19.95	2	100	<20	0.025	"	"
19.95	20.95	3	100	20	0.037	"	"
70.00	71.00	4	100	<20	<0.01	"	"
71.00	72.00	5	100	<20	"	"	"
77.00	78.00	6	100	28	"	"	"
82.50	83.60	7	110	78	"	"	"
83.60	84.60	8	110	36	"	"	"
88.20	89.70	9	150	<20	"	"	"
91.70	92.70	138160	100	21	"	"	"
92.70	93.70	1	100	<20	"	"	"
93.70	94.70	2	100	<20	"	"	"
94.70	95.70	3	100	<20	"	"	"
95.70	97.00	4	130	<20	0.025	"	"
24.50	25.50	138032	100	82	0.032	"	"
25.50	26.50	3	100	<20	<0.01	"	"
26.50	27.50	4	100	65	0.018	"	0.045
27.50	29.00	5	150	393	<0.01	"	0.036
29.00	31.00	6	200	330	0.012	"	0.042
31.00	32.00	7	100	148	<0.01	"	0.014
32.00	33.00	8	100	86	0.016	"	0.014
33.00	34.60	9	160	220	0.034	"	0.025
34.60	35.40	138040	80	1020	0.039	"	0.035
35.40	36.60	1	120	480	0.032	"	0.094
36.60	37.60	2	100	20	0.016	"	0.017
37.60	38.60	3	100	68	0.014	"	0.022
38.60	40.90	4	130	134	0.011	"	0.014
40.90	43.50	5	260	98	0.015	"	0.016
43.50	44.40	6	90	957	0.044	"	0.029
44.40	45.20	7	80	1188	0.086	"	0.015
45.20	46.10	8	90	5826	0.047	"	0.025

U40

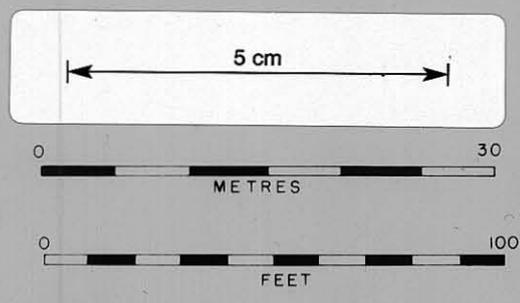
547041

From (Metres)	To	Sample Number	Length (cm)	PPM Sn(XRF)	Metal Cu	Values Pb	% Zn
46.10	46.70	138049	60	167	< 0.01	< 0.01	< 0.01
46.70	47.156	50	45	26	0.014	"	0.035
47.15	48.20	1	100	61	0.015	"	0.034
48.20	49.30	2	110	68	0.035	0.012	0.045
49.30	50.40	3	110	34	0.019	< 0.01	0.019
50.40	51.50	4	110	65	0.01	"	0.01
51.50	52.50	5	100	78	0.01	0.01	0.038
52.50	52.80	6	30	42	0.014	< 0.01	0.040
52.80	53.80	7	100	2250	0.024	0.01	0.01
**	54.70	9	60	28	0.046	< "	0.027
55.30	56.05	60	75	387	0.022	"	0.32
56.05	56.75	1	70	1997	0.022	"	0.016
56.75	58.15	2	140	2512	0.027	"	0.016
58.15	59.00	3	85	102	0.021	"	0.032
59.00	60.00	4	100	968	< 0.01	0.01	0.036
60.00	60.40	5	40	3124	< 0.01	0.01	0.032
60.40	61.20	6	80	2183	< 0.01	< 0.01	0.025
61.20	64.00	7	280	1383	< 0.01	"	0.079
64.00	65.00	8	100	80	< 0.01	"	0.026
65.00	66.00	9	100	56	< 0.01	"	< 0.01
**	53.80	8	90	49	0.01	< 0.01	0.01

547042



Results <0.1% not shown



COMINCO EXPLORATION PTY. LTD.

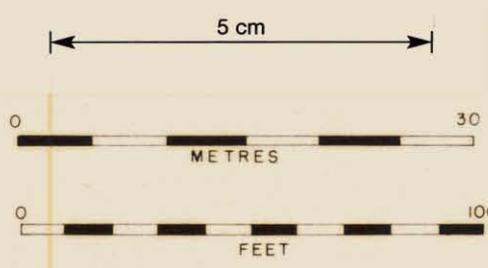
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Traced: P.F.
Checked:
Revised: _____ Date: _____

ST DIZIER
CROSS SECTION THROUGH DDH SD I
ASSAY OVERLAY
Section bears 205° grid looking West

Location code K 55/5/50
Scale: 1:500
Date: November 1974
Plate N° St D 23



- Alluvium (creek grounds)
- Q Quartzite
- sh Shale
- s. mgt Serpentinite, Serp-magnetite
- Sch Schist
- Py Pyrite
- G Granite
- Fault
- qtz Quartz
- tm Tourmaline
- tmd Tourmalinised
- Contact
- - - - - Interpreted contact



COMINCO EXPLORATION PTY. LTD.

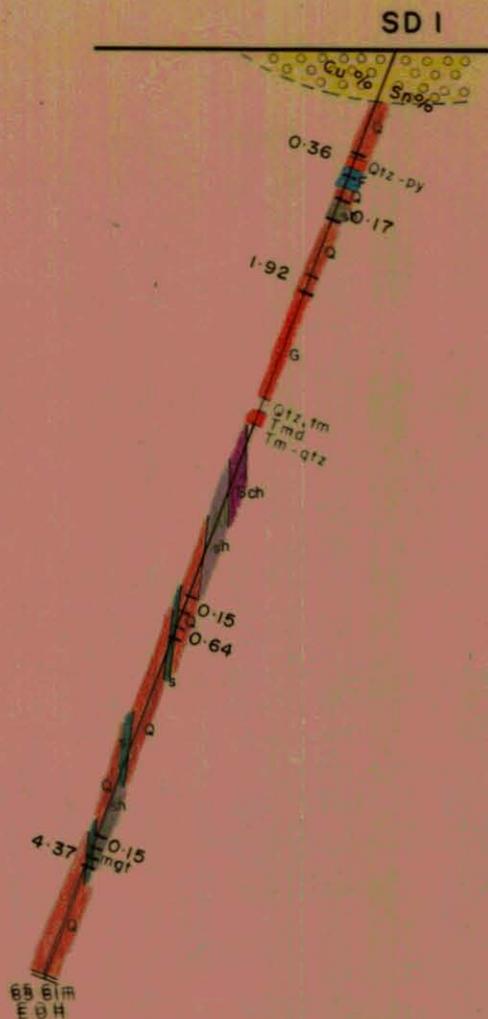
Drawn: D.C.S.	
Traced P.F.	
Checked	
Revised	Date

ST DIZIER
CROSS SECTION THROUGH DDH SD I
GEOLOGY

Section bears 205° grid looking West

Location code K 55/5/50
Scale 1:500
Date November 1974
Plate N ^o St D 24

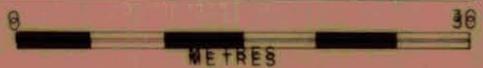
547042



- Alluvium (creek grounds)
- Quartzite
- Shale
- Serpentine, Serp-magnetite
- Schist
- Pyrite
- Granite

- Fault
- Results < 0.1% not shown
- qtz Quartz
- tm Tourmaline
- tmd Tourmalinised
- Contact
- - - Interpreted contact

5 cm



COMINCO EXPLORATION PTY. LTD.

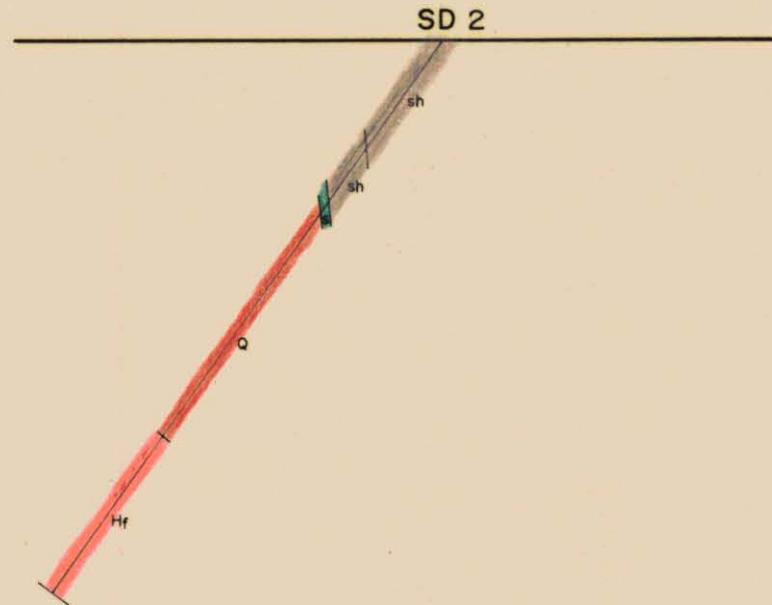
DRAWN: D.C.S.	
Traced PF	
Checked	
Revised	Date

ST BIZIER
 CROSS SECTION THROUGH DDH SD 1
GEOLOGY
 ASSAY OVERLAY
 Section bears 2058 grid looking West

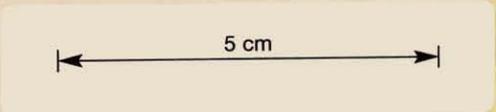
Location code K 55/5/50
Scale 1:500
Date November 1974
Plate No SF'D 23 ⁴

044

547044 75-1065



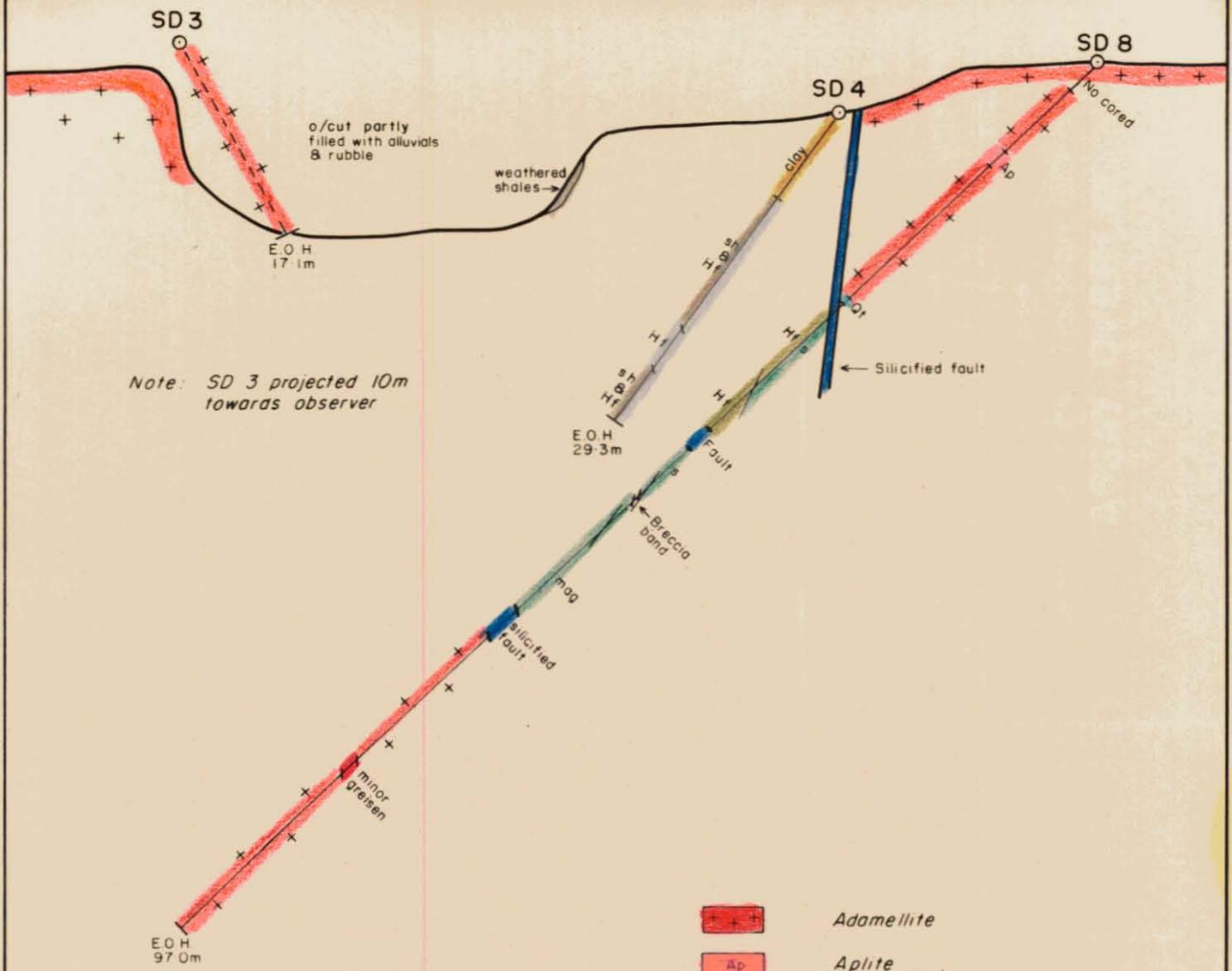
- Q Quartzite
- sh Shale
- s. mag Serpentine;
Serp-magnetite
- Hf Hornfels



COMINCO EXPLORATION PTY. LTD.		
Drawn: D.C.S. Traced: P.F. Checked: Revised: _____ Date: _____	ST DIZIER JV CROSS SECTION THROUGH DDH SD 2 GEOLOGY Section bears 228° grid looking West	Location code: K 55/5/50 Scale: 1: 500 Date: November 1974 Plate N ^o : St D 27

042

547046 75-1065

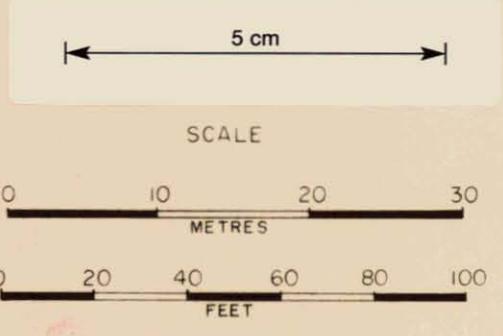


Note: SD 3 projected 10m towards observer

- Adamellite
- Aplite
- Hornfels
- Shales
- Serpentine

Dip or bedding

Magnetite

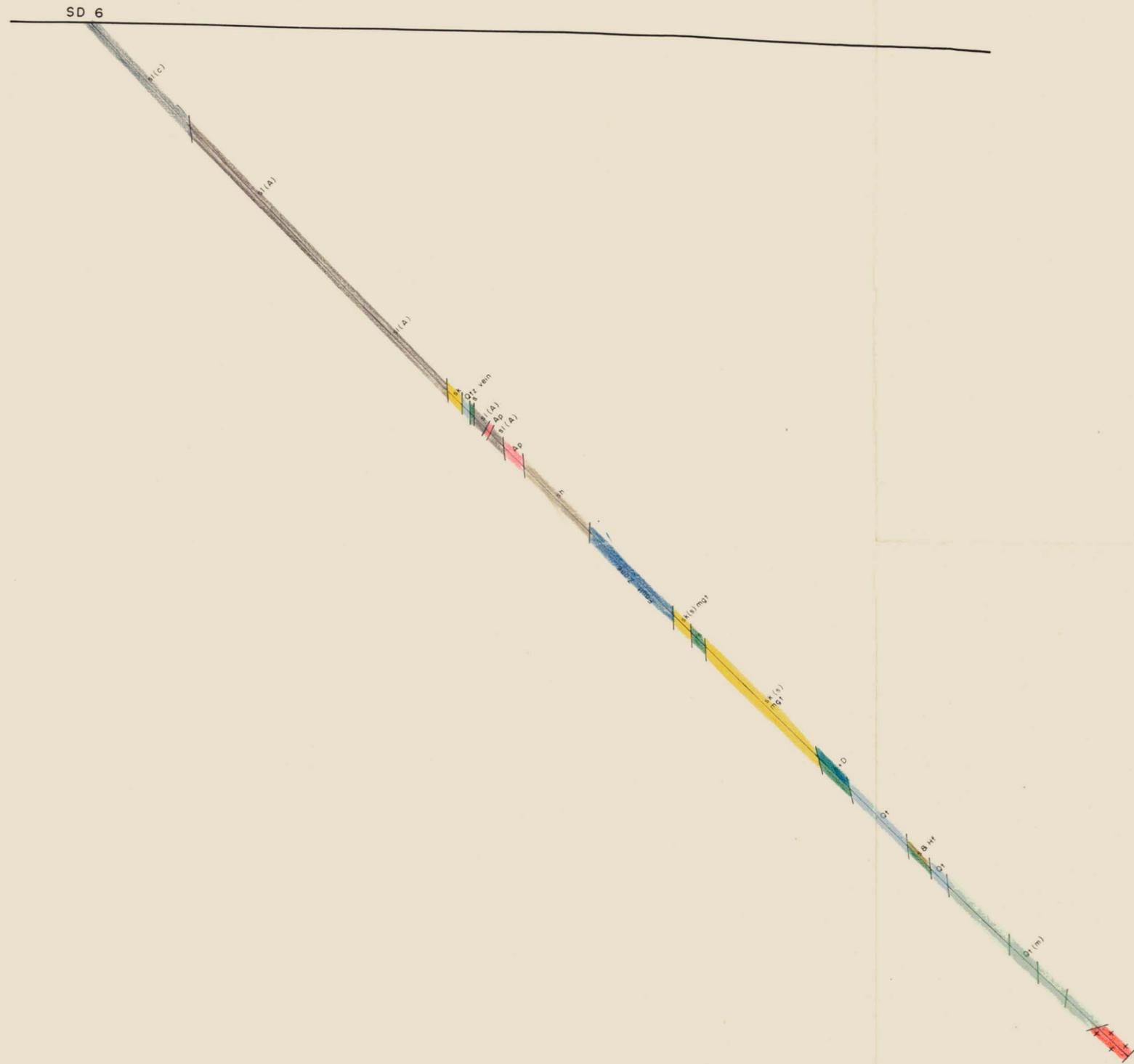


COMINCO EXPLORATION PTY. LTD.

Drawn: D.C.S.
 Traced: P.F.
 Checked:
 Revised: _____ Date: _____

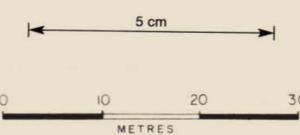
ST DIZIER
 Cross Section through DDH SD 3, SD 4 & SD 8
GEOLOGY
 Section bears 149° (mag) looking West

Location code: K 55/5/50
 Scale: 1:500
 Date: December 1974
 Plate: St D 30

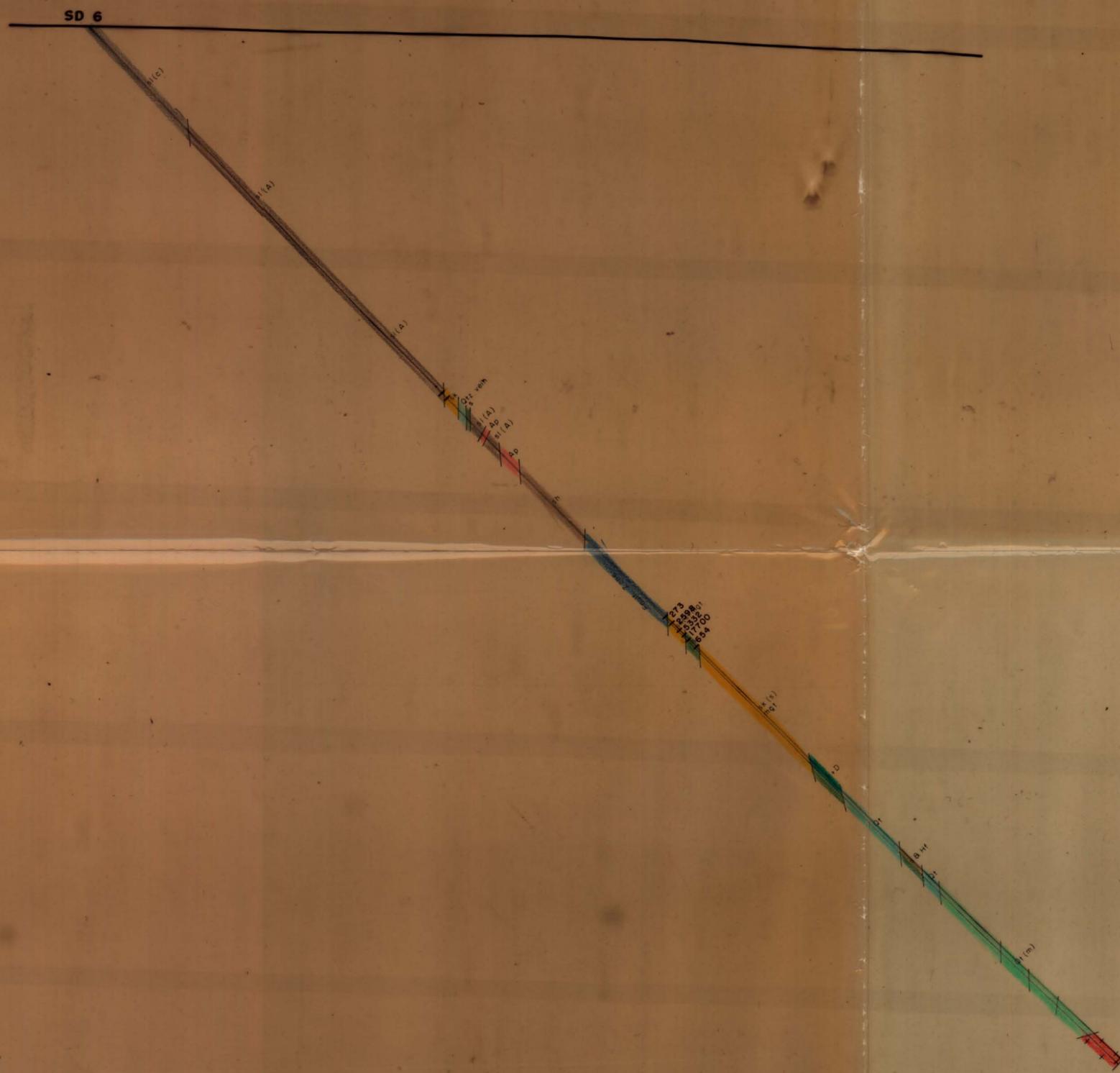


- Qt(m) Micaceous Quartzite
- Qt Quartzite
- sh Shales, often graphitic
- sl(A) Andalusite slates
- sl(C) Corderite slates
- sk Skarn
- s Serpentine
- Hf Hornfels
- D Dolomite
- Ap Aplite
- Ad Adamellite

— Dip or bedding
 mgt Magnetite

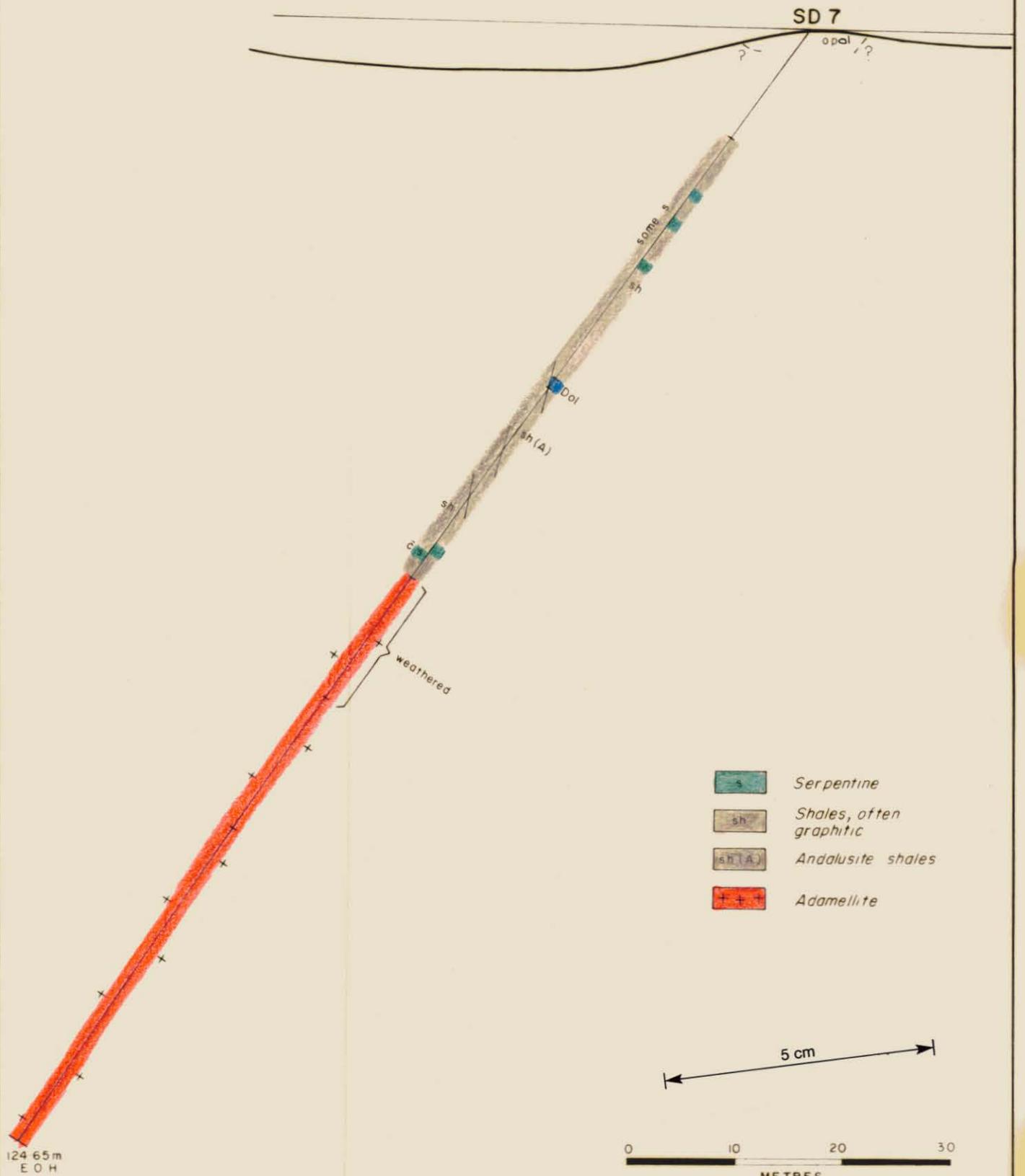


COMINCO EXPLORATION PTY. LTD.			
Drawn: D.C.S.	Traced: P.F.	ST DIZIER	
Checked:		CROSS SECTION THROUGH DDH SD 6	
		GEOLOGY	
		Section bears 342° mag looking West	
		1033	
Location code: K 55 / 5 / 50	Scale: 1:500	Date: December 1974	Plate: St D 28



041

547050 75-1065



124.65m
E O H

COMINCO EXPLORATION PTY. LTD.

Drawn	D.C.S.
Traced	P.F.
Checked	
Revised	Date

ST DIZIER
 CROSS SECTION THROUGH DDH SD 7
GEOLOGY
 Section bears 185° grid looking West

Location code	K 55/5/50
Scale	1 500
Date	November 1974
Plate No	St D 25



NOTE:
 1 Values shown in brackets are duplicate assays
 2 Areas not sampled due to
 a) access problems
 b) physical cover

Scale 1 : 1000
 Tin determined by Emission Spectrography



547051 **75-1065**

COMINCO EXPLORATION PTY. LTD.

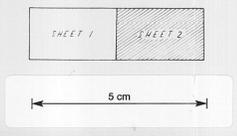
NORTH WEST TASMANIA **1102**
 ST. DIZIER
BEDROCK GEOCHEMICAL VALUES
 TIN ppm

DRAWN BY	TRACED BY	DATE	DATE
CHECKED BY	REVISED BY	DATE	DATE
REVISOR	DATE	DATE	DATE

LOCATION CODE 455/1/50 SCALE 1:1000 DATE May 1974 PLATE NO 510 23



NOTE: See notes on sheet 1



DRAWN BY:		TRACED BY: <i>K.A.</i>		NORTH WEST TASMANIA		1103
CHECKED BY:		REVISED BY: DATE		ST. DIZIER		
REVISOR BY DATE				BEDROCK GEOCHEMICAL VALUES		
				TIN ppm.		
LOCATION CODE		* 55/51/50		SCALE: 1/1000		DATE: May 1974
						PLATE NO: 37 B 34

547052 75-1065

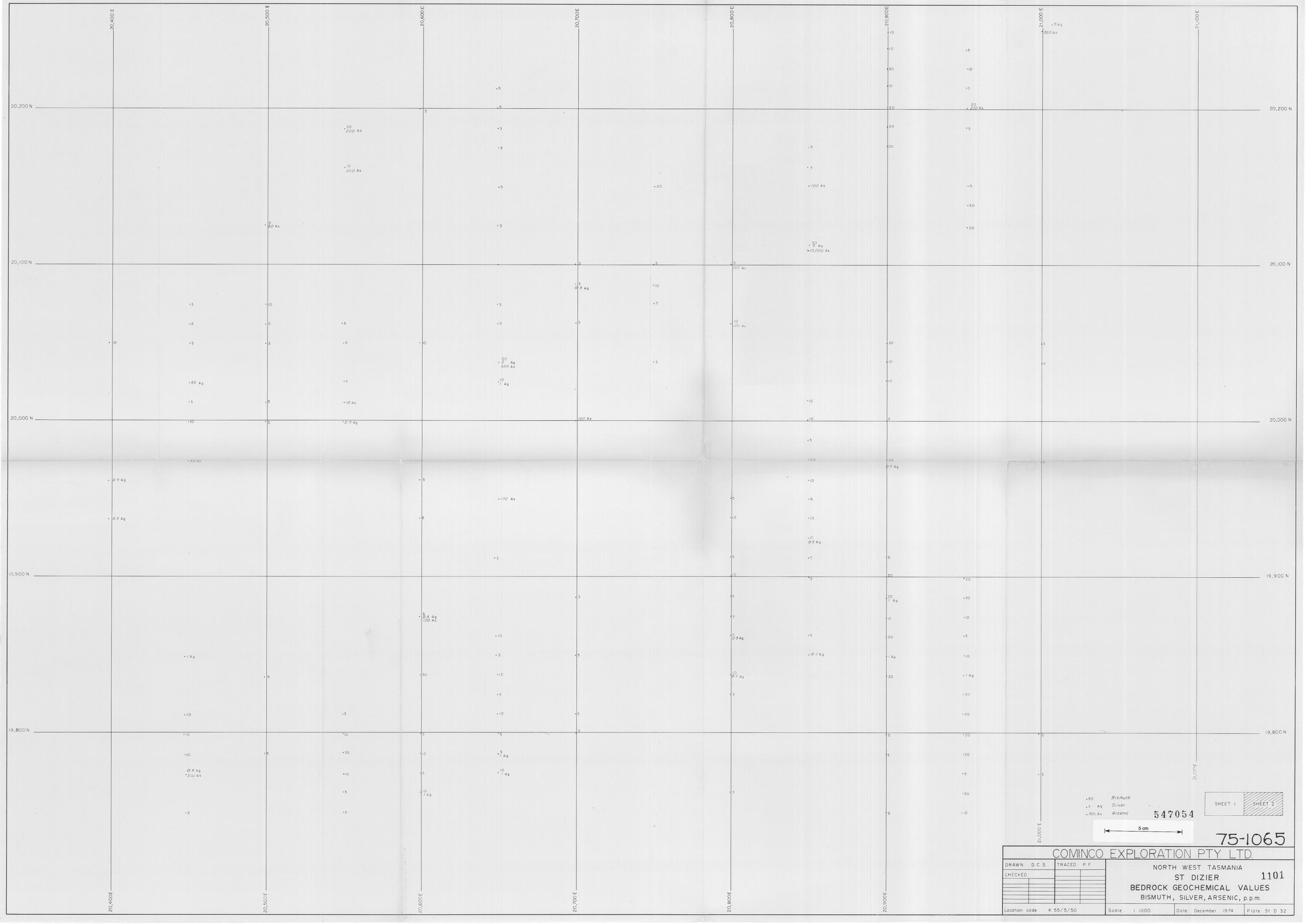


Notes
 1. Sampling sites are same as for tin but where no values are shown for Bi, Ag, As results are on or below limit of detection.
 2. Bi, Ag, As determined by Emission Spectrography.

547053 75-1065
COMINCO EXPLORATION PTY. LTD.
 NORTH WEST TASMANIA 1100
ST DIZIER
BEDROCK GEOCHEMICAL VALUES
 BISMUTH, SILVER, ARSENIC, p.p.m.

DRAWN : D.C.S.	TRACED : P.F.
CHECKED :	
Location code : K 55/ 5/50	Scale : 1:1000
Date : December 1974	Plate : S1 D 31

SHEET 1 SHEET 2



.50 Bismuth
 .5 Ag Silver
 .500 As Arsenic

547054

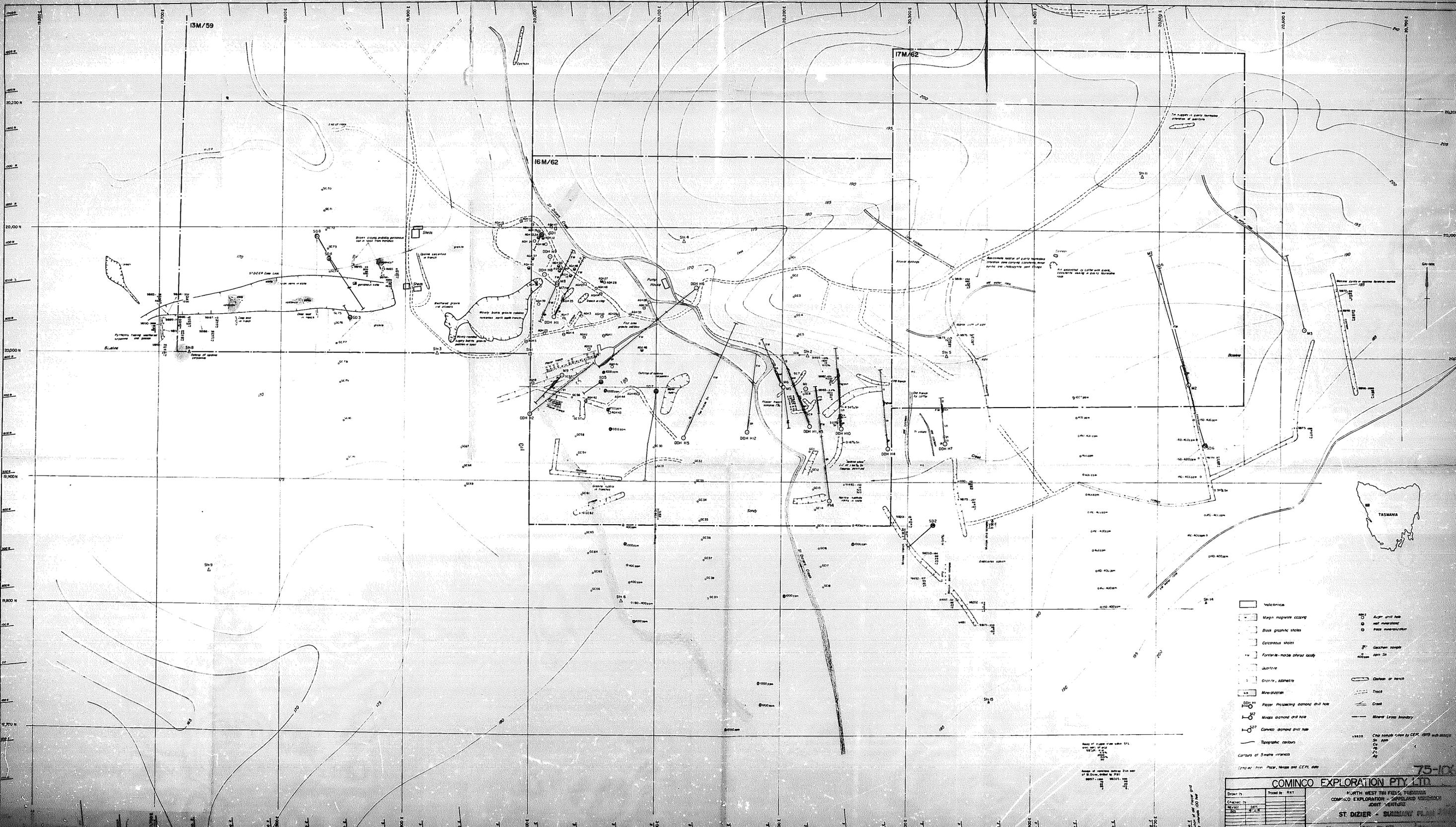
SHEET 1 SHEET 2



75-1065

DRAWN: D C S		TRACED: P F	
CHECKED:			
Location code K 55/5/50		Scale: 1:1000	Date: December 1974

COMINCO EXPLORATION PTY. LTD.
 NORTH WEST TASMANIA
 ST DIZIER 1101
 BEDROCK GEOCHEMICAL VALUES
 BISMUTH, SILVER, ARSENIC, p.p.m.
 Plate St D 32



- | | | | |
|--|---------------------------------------|--|--|
| | Volcanics | | Magnetite lodes |
| | Magnesian limestones | | Black graphitic shales |
| | Calcareous shales | | Garnet schists |
| | Further north schist area | | Quartzite |
| | Granite, gneiss | | Metachert |
| | Placer prospecting diamond drill hole | | Track |
| | Mine diamond drill hole | | Creek |
| | Contact diamond drill hole | | Mine Lease boundary |
| | Topographic contours | | Cape Range taken by CEPR 1975 with assistance of Dept. of Mines and Energy |
| | Contours of 5 metre intervals | | Contour of 50m |
| | Contour of 100m | | Contour of 200m |
| | Contour of 300m | | Contour of 400m |
| | Contour of 500m | | Contour of 600m |
| | Contour of 700m | | Contour of 800m |
| | Contour of 900m | | Contour of 1000m |

75-10

COMINCO EXPLORATION PTY LTD

NORTH WEST TERN PIERS, TASMANIA
COMINCO EXPLORATION - UNLICENSED GEOPHYSICAL SURVEYING
JOINT VENTURE
ST. DZIER - SHANNING PLANT

Drawn by:	Drawn by: RAY
Checked by:	Checked by: RAY
Scale:	Scale: 1:50,000
Revision:	Revision: 1
Date:	Date: 1975
Location code:	Location code: 75-10

Scale: 1:50,000