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ANNUAL and FINAL REPORT
SIDELING RANGE PROSPECT
EL 1/99

13/04/99 to 12/04/00

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Annual and Final report - Sideling Range Prospect - EL1/99 - 13/4/1999 to 12/4/2000
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ABSTRACT

Previously unknown gold mineralisation has been discovered at the Sidling Range, near Scottsdale in north-east Tasmania. The main zone of mineralisation was exposed along a fire break at the edge of a forest plantation, and subsequent trenching revealed narrow, discontinuous veins. The veins are auriferous comb quartz-sulphide and quartz-breccia (± sulphide) veins up to half a metre wide, with gold values up to 5 ppm and arsenic up to 5000 ppm. Veins appear to be parallel or sub-parallel to bedding and occur over a strike length of at least 400 metres, trending NNW. Several isolated veins also occur up to 800 metres south of the main area of mineralisation.

The extent of mineralisation remains to be determined, as the trenching program was constrained by the plantation on one side and an informal ridge line reserve on the other. Also, the trenching which was undertaken along the fire break was at a shallow angle to the strike. Subsequent to the trenching program, an all-weather forestry road has been constructed along the fire break and through the area of trenching and has created very good geological exposure in a long road cutting through the zone of mineralisation and to the north. This exposure, and the surrounding area is currently being mapped in detail by an Honours student from the University of Tasmania.

Although to date the veins have been found to be narrow and discontinuous, the mineralisation warrants further investigation, perhaps using a soil geochemical technique. as the plantation areas have been deep ripped to about 800 mm and the soil profile mixed, any soil sampling will need to address this. Methods such as MMI, wacker sampling, or enzyme leach may be worth trying.

FIGURES

Figure No.	Title	Scale
1	E.L. 1/99 location	1:100 000
2	E.L. 1/99 simplified geology	1:25,000
3a	Rock chip sample nos. & locations	1:25,000
3b	Rock chip assays & locations - Au in ppb	1:25,000
3c	Rock chip assays & locations - As, Sb in ppm	1:25,000
3d	Rock chip assays & locations - Cu, Pb, Zn in ppm	1:25,000
4	Trench location plan	1:10,000
5	Plans for trenches 1 and 2.	1:500
6	Plans for trenches 3, 4, 5 and 6.	Various

TABLES

Table No.	Title
1	Rock chip sample record
2	Trench sampling log sheet

APPENDICES

Appendix No.	
1	Assay sheets

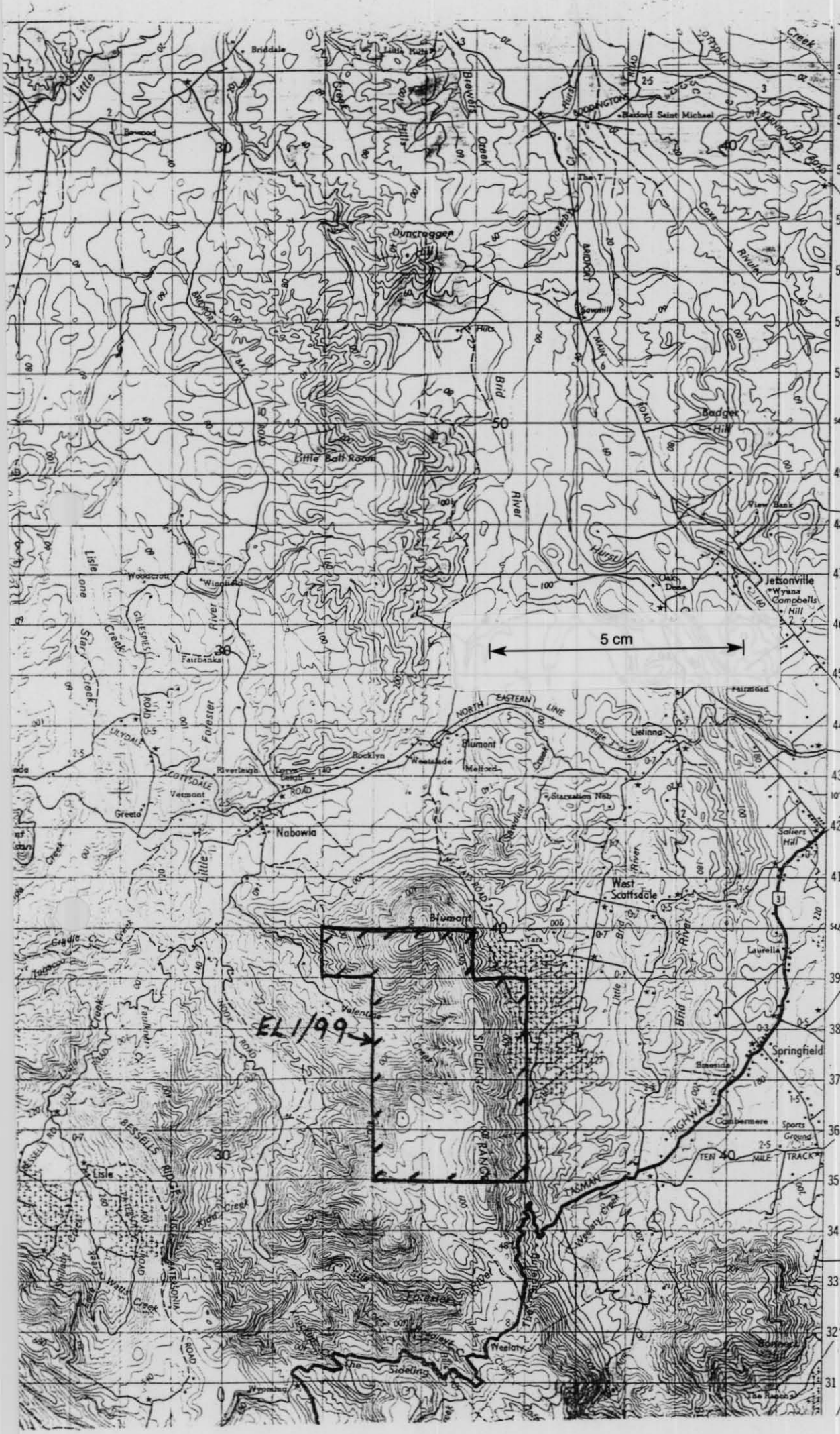
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FIGURE 1
EL 1/99
LOCATION PLAN
"PIPERS"
1:100,000
TASMAP
EL 1/99
5 cm
NORTH SCOTTSDALE 7 ML
NORTH SCOTTSDALE 4 ML
SCOTTSDALE 1 ML
SCOTTSDALE 5 ML
SCOTTSDALE 8 ML
SOUTH SPRINGFIELD 1 ML
IGFIELD 3 ML
CONVERSION TABLE
METRES TO FEET
1 = 3.281
2 = 6.562
3 = 9.843
4 = 13.124
5 = 16.404
6 = 19.685
7 = 22.966
8 = 26.247
9 = 29.528
1 FOOT = 0.3048 METRES

1.1 Exploration rationale and geological setting

EL 1/99 was applied for by Mr. Frank Bardenhagen following the discovery of mineralised rocks during a prospecting trip by Mr. Frank Bardenhagen in the company of the author of this report.

In terms of regional geology the prospect falls within the Eastern Tasmanian Terrane which is the southernmost Australian expression of the Lachlan Fold Belt. In north-eastern Tasmania, the oldest rocks are a succession of turbiditic quartzwackes and pelites which range in age from early Ordovician to early Devonian, the Mathinna Group. Regional deformation in the early Devonian produced NNW trending folds within the Mathinna Group and regional very low-grade regional metamorphism. Mathinna Group rocks were intruded by NNW- to N-oriented composite granitoid batholiths during three phases from the early to the late Devonian period. Flat-lying sediments of the late Carboniferous/Early Permian to Triassic Parmeener Supergroup unconformably overlie both the Mathinna Group sediments and the Devonian granitoids. The Parmeener Supergroup rocks are intruded by thick sheets of Jurassic dolerite. Areas of Tertiary basalt are scattered through the north-east and in some areas have significantly changed pre-existing drainages. Tertiary sediments are widespread in the lower relief northern parts of the north-east. Quaternary alluvium occurs in river valleys, and on the coastal plains, windblown sands blanket much of the bedrock. Talus deposits are locally significant in some areas of more rugged relief. Primary gold mineralisation occurred during the early to middle Devonian period.

EL 1/99 occupies ground adjacent to the western margin of the Scottsdale Batholith, a N-S trending elongate body of I-type, hornblende granodiorite. The majority of the licence area is underlain by Mathinna Group sandstones and shales and spotted hornfels nearer to the granodiorite.

Gold mineralisation occurs in several different styles in north-east Tasmania, and the Sidling Range area is prospective for the first two styles, mentioned below, and possibly the third. The different styles are:

Auriferous quartz-rich veins hosted by Mathinna Group sediments.
The vast majority of deposits are of this style. Veins vary in length up to 2,000 metres and may be as wide as 7 metres. Mined grades fall in the range of 15 to 30 g/t, but may be much higher. Vein style mineralisation occurs in two main orientations, NNW or bedding parallel and ENE.

Disseminated within sandstone
This style of mineralisation may be associated with silicification and disseminated sulphides in porous sandstones, with auriferous quartz veins absent. This style of mineralisation is reported from the nearby Denison, Golconda, Lisle and Panama fields and offers the possibility for high tonnage, low grade deposits amenable to open pitting.

Granitoid-hosted.

The Golconda-Panama area, near the Lisle field, produced about 2,000 ounces of primary gold at an average grade of about 14 g/t from narrow veins hosted within granodiorite. The granodiorites at the Lisle include magnetite series granites which are considered to be more favourable to gold mineralisation than more felsic types. The possibility of disseminated gold mineralisation within the roof zone of fractionated, high K, I-type biotite granites exists within north-east Tasmania, as similar rocks host this style of mineralisation at Timbarra, in northern NSW.

Alluvial and placer deposits.
The largest alluvial field is located within the nearby Lisle valley, and produced about 320,000 ounces of gold, Gold was present in both alluvium and elluvium, in possible lacustrine sediments and within carbonaceous horizons underlying talus. Deposits are also know from Tertiary sub-basaltic deep leads.

1.2 Tenement details

The exploration licence was granted to Mr. Frank Bardenhagen on 13/04/99 and covers an area of 15 square kilometres.

1.3 Location

Exploration Licence 1/99 "Sidling Range" is located in Tasmania's north-east, approximately 35 kilometres north-east of Launceston.

1.4 Access

There is very good access to the licence area via all-weather forestry roads and good four-wheel drive tracks.

1.5 Land Status/Usage

The tenement lies within one of the Strategic Prospectivity Zones which have been introduced by Tasmanian government legislation to significantly reduce the level of sovereign risk for the mining and mineral exploration industries and to guarantee resource security. The area covered by EL 1/99 is comprised almost entirely of State Forest. All ground within the licence area is available for exploration.

1.6 Topography and Vegetation

The licence area covers the western slopes and ridge-line of the Sideling Range. Vegetation is diverse. There are patches of myrtle and sassafras-dominated rainforest, wet sclerophyll dominated by tall eucalypts, scrub-filled gullies, and eucalpyt plantations at various stages of growth. Generally, there is relatively open going beneath the canopies of myrtle and tall eucalypt.

2.0 REVIEW OF PREVIOUS WORK

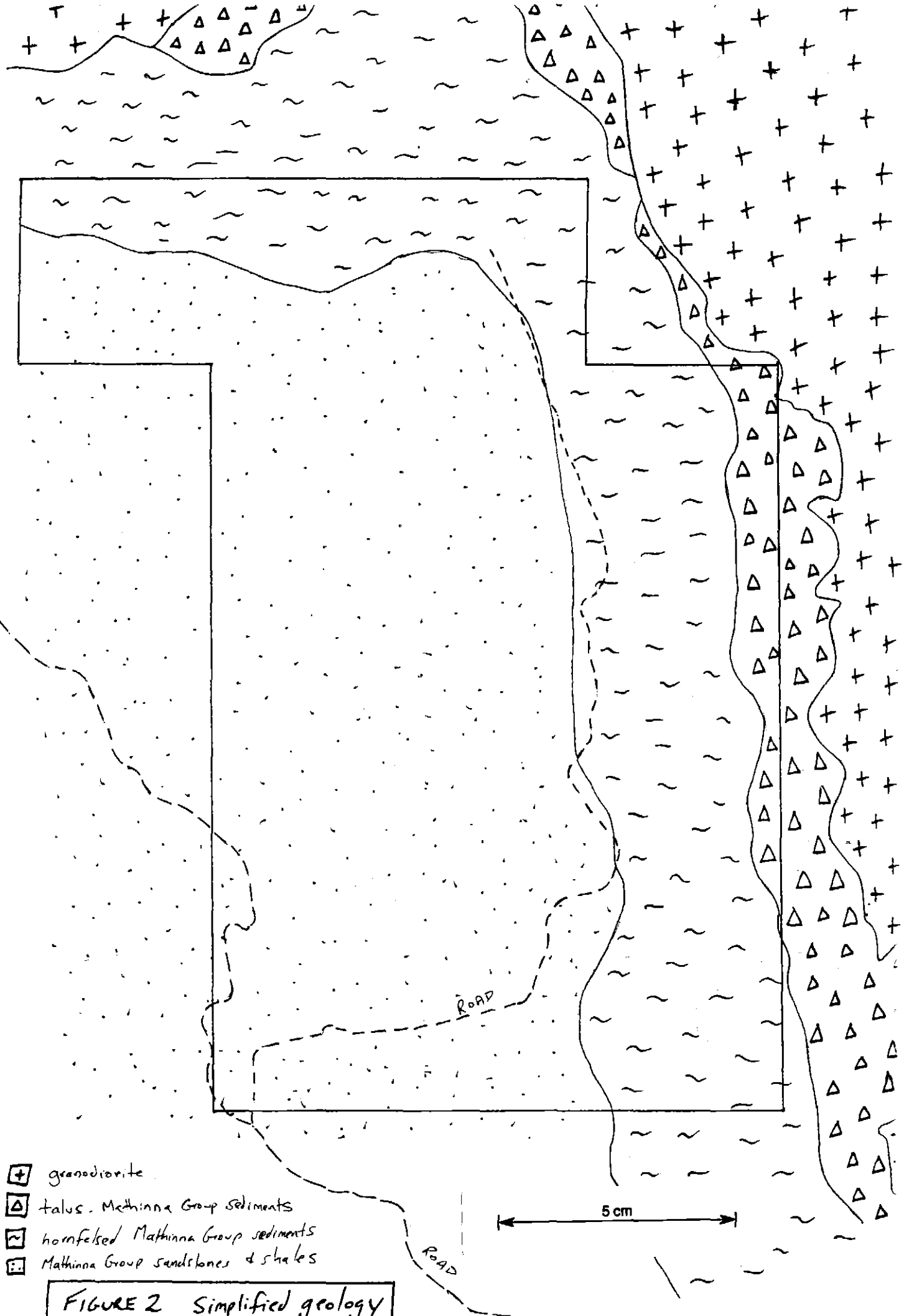

FIGURE 2 Simplified geology 1:25,000

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2.0 REVIEW OF PREVIOUS WORK

Although some of the EL has been included in previous EL's no record was found of any on-ground work having been undertaken.

3.0 EXPLORATION COMPLETED DURING THE REPORT PERIOD

3.1 Summary of work carried out.

Exploration consisted of rock chip sampling followed up by trenching.

Initial work on the lease consisted of rock chip sampling along a new forestry road and in forest plantation areas which had been recently deep-ripped to about 0.8 metres depth by bulldozers prior to planting out with seedlings. A total of 22 rock chip samples were collected.

Following on from good results obtained from sampling along a 400 metre recently bulldozed fire break, a trenching program was initiated to locate the source of the mineralisation, which takes the form of comb quartz-sulphide and quartz breccia veins. Several hundred metres of trenching was carried out (Figure 4), the majority of which was along fire breaks. Trenching was conducted along fire breaks to avoid disturbing the plantation and to avoid too much disturbance of a Forestry Tasmania informal skyline reserve. Trenches 1 and 2 were dug in areas where quartz vein float was most abundant (Figure 5), and trench 3 was dug along the fire break between trench 1 and 2, but was at a relatively shallow angle to strike. Trench 4 was dug in a forested area, along strike to the south of the main zone of mineralisation, in the vicinity of an anomalous rock chip sample. Trenches 5 and 6 were dug in an area where some quartz veined rocks returned an assay of 0.1 g/t and lie roughly along strike to the north of the main zone of mineralisation. Sampling was concentrated on zones of quartz veining and silicification and a total of 37 channel samples were collected from trenches All samples were assayed for gold (fire assay) and arsenic at Aquatic Laboratories, Westbury. Some samples were also assayed for antimony, copper, lead and zinc.

3.2 Summary of results.

Initial rock chip (float) samples from the main zone of mineralisation returned good results, with assays of 0.9, 2.0, and 3.46 ppm gold, and 1334, 3321, and 4885 ppm arsenic respectively for three samples. Samples collected from locations further to the south returned gold assays of 0.34, 0.53, 0.61 and 1.43 ppm, and 138, 1362, 204, and 3475 ppm arsenic. Assays and sample descriptions are reported in Table 1, while sample locations and assays are shown in Figures 3a to 3d.

Au,

The best assay from the trenching program was one metre at 4.98 g/t (95 ppm arsenic) in trench three, the sample being taken across a fine grained sandstone with dark brown comb quartz veining making up about 10% of the sample. A sample of quartz-breccia(± sulphide) vein with arsenopyrite returned assays of 1.1 g/t gold and 165 ppm arsenic, which was surprising considering arsenopyrite was visible. Apart from a half metre at 0.6 g/t, one metre at 0.24 g/t and 0.17 g/t gold, the rest of the channel samples from the returned assays at or below detection limit for gold. Arsenic is also very low, most samples returning assays

below detection limit. Trench sample assays and descriptions are shown in Table 2.

From the rock chip sampling and trenching it appears that the mineralisation is confined to narrow, <0.5 metre wide comb quartz(± sulphide) veins and quartz-breccia(± sulphide) veins which have short strike lengths.

PROSPECT: SIDLING **SAMPLE RECORD** **TABLE 1**

ppb ppm

Sample	Easting	Northing	Description	Au	As	Sb	Cu	Pb	Zn
VAL1	535100	5437950	laminated fe-rich qtz vein material	900	1334	36	8.3	14	3.6
VAL2	535025	5438270	brown-cream recrystallised qtz SS, vughy, minor pyrite/arsenopyrite	2000	3321	39	7.8	10.7	<1
VAL3	534750	5439200	pale cream-yellow spotted meta-SS, part lateritised, minor fe stockwork	<50	<20	N/A	N/A	N/A	N/A
VAL4	534750	5438950	pink-green mg banded meta-SS, laminated qtz vn and minor fe stockwork	60	<20	N/A	N/A	N/A	N/A
VAL5	535080	5438100	laminated qtz vn, 1 cm band of bue-grey sulphide-rich material	3460	4885	58	20.2	23	17.2
VAL6	534850	5438500	grey-green spotted meta-SS, mod fe stockwork and 5cm qtz vnwith vcg mica	<50	87	N/A	N/A	N/A	N/A
VAL7	534830	5438650	fe stained QZ, trace cg pyrite	<50	45	N/A	N/A	N/A	N/A
VAL8	534300	5436240	silicified mg SSm mod fe-qtz stockwork	<50	37	N/A	N/A	N/A	N/A
VAL9	534700	5440080	cream meta-SS, 50% comb text. qtz-tourmaline vning	280	284	15	2.7	10.4	2.4
VAL10	534920	5438130	part silicified mg qtz SS,minor fe-ox along fractures	<50	<20	N/A	N/A	N/A	N/A
VAL11	534200	5436160	green-grey mg SS, 2mm pyrite casts and oxid pyrite along joints	<50	159	8.9	2.2	<5	8
VAL12	535050	5437350	green-grey, fe-ox, fg-mg qtz SS, mod stockwork fe-ox vning	<50	<20	<20	N/A	N/A	N/A
VAL13	535000	5437490	grey-brown, laminated, 3cm Qz vein in fg SS, minor sulphide, vughs	530	1362	55	N/A	N/A	N/A
VAL14	534800	5437840	dark grey massive Qz, float	<50	53	<20	N/A	N/A	N/A
VAL15	534690	5438380	green-grey mg qtz SS, 2% qtz veinlets	<50	<20	<20	N/A	N/A	N/A
VAL16	534480	5438410	grey, strongly silicified 50% qtz vned SS, minor fe-ox.	100	<20	<20	N/A	N/A	N/A
VAL17	534550	5438360	grey-green, auto-breccia like texture, fg-mg SS, 5% stockwork fe vnlets	<50	<20	<20	N/A	N/A	N/A
VAL18	534650	5438310	black-green, very indurated , mg qtz SS	80	20	<20	N/A	N/A	N/A
VAL19	535000	5437000	grey-yellow silic qtz SS, 5% vnlets, 50mm qtz vn	<50	<20	N/A	N/A	N/A	N/A
VAL20	534950	5437600	grey-yellow fl SS, 1 cm qtz-fe comb vn	1430	3475	N/A	N/A	N/A	N/A
VAL26	535010	5437540	grey-brown, laminated, 20% qtz veining in fg SS	340	138	N/A	N/A	N/A	N/A
VAL27	535040	5437100	grey-yellow fl SS, 30% qtz-fe comb vn	610	204	N/A	N/A	N/A	N/A

fl - foliated, SS - sandstone, SZ - shale, fg - fine grained, mg m- medium grained

Figure 3a. Sidling Range Prospect - Rock chip sample locations
Scale 1:25,000

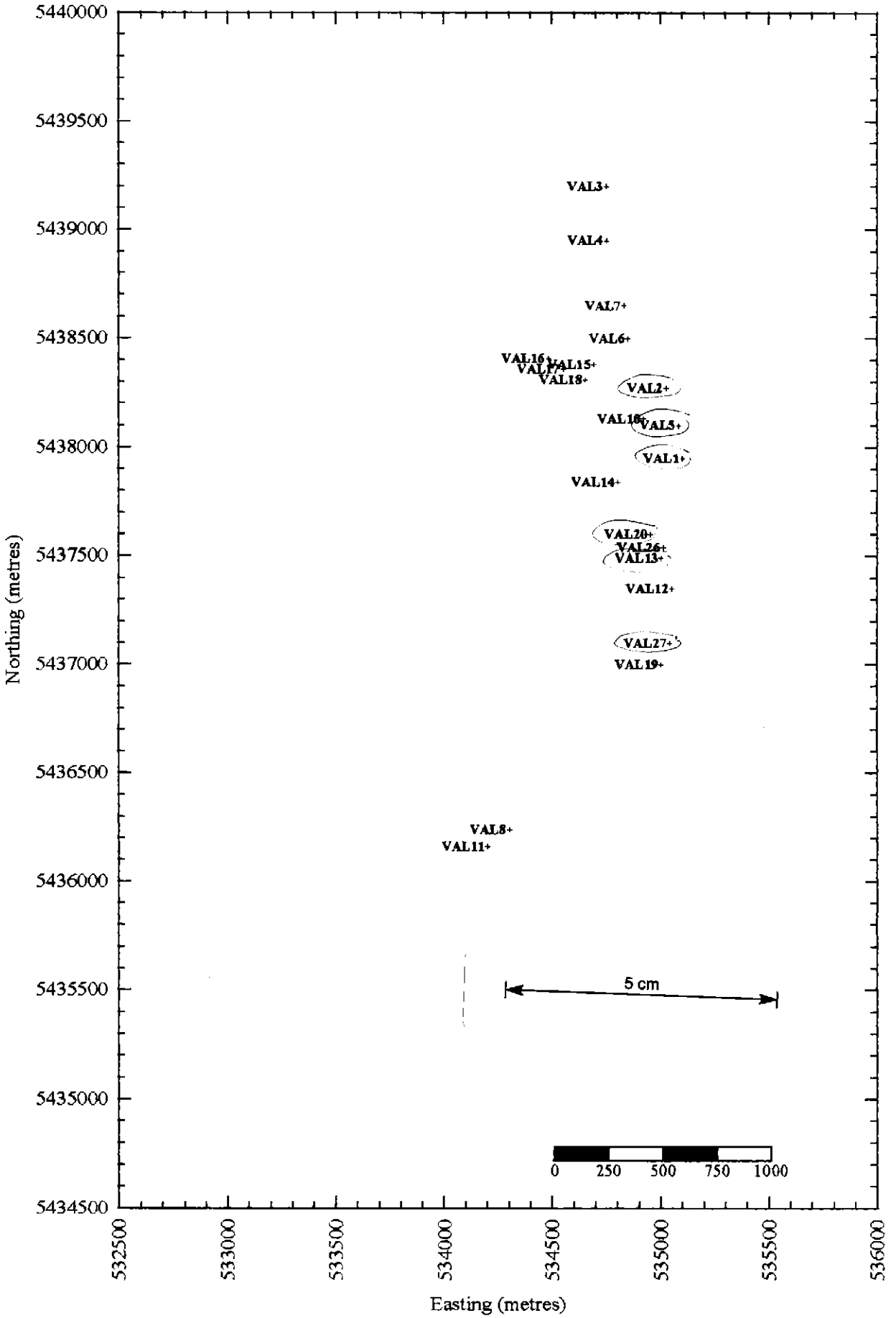


Figure 3b. Sidling Range Prospect - Rock chip samples
Au in ppb, detection limit 50 ppb. Scale 1:25,000

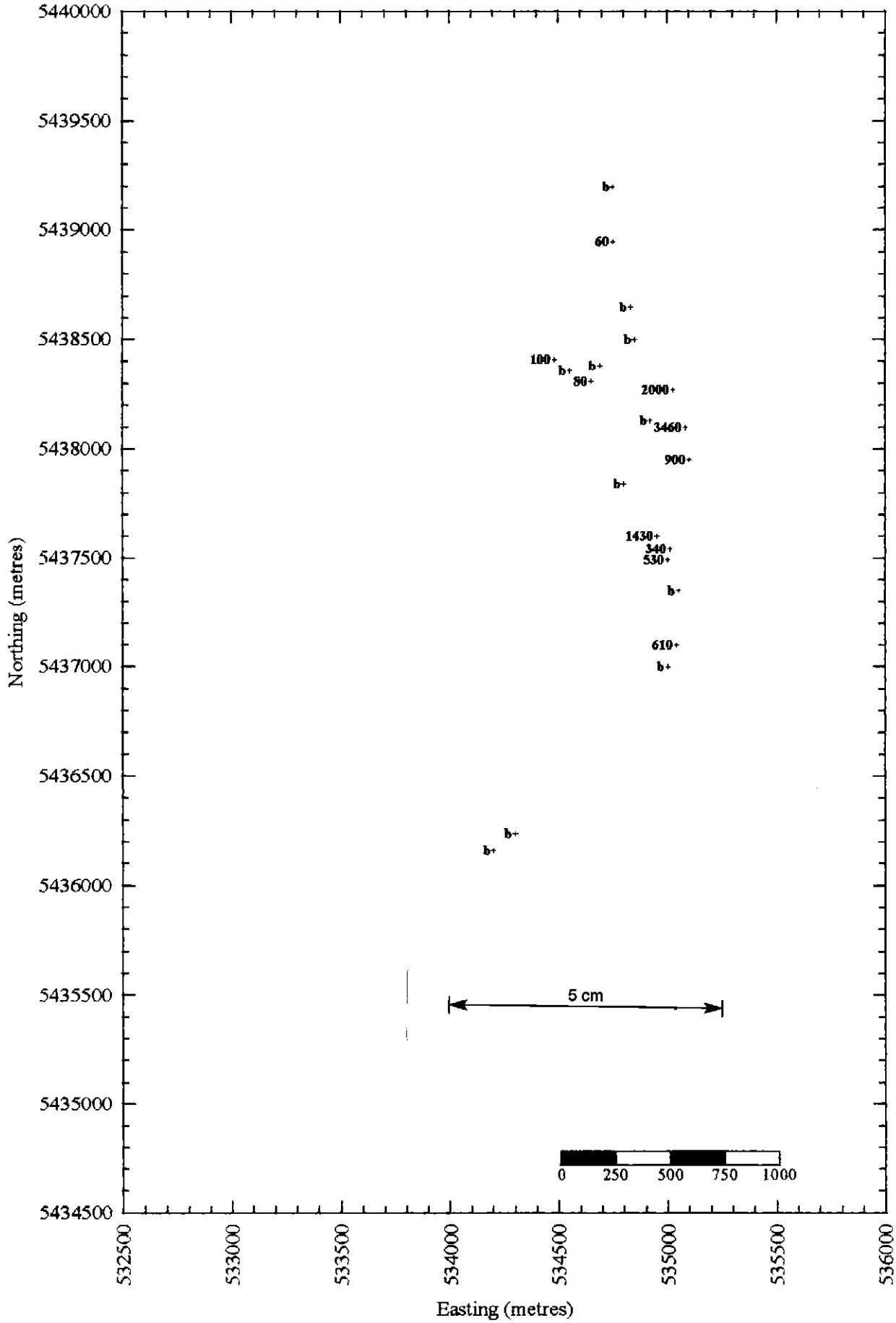


Figure 3c. Sidling Range Prospect - Rock chip samples
As, Sb in ppm, detection limits 20 ppm. Scale 1:25,000

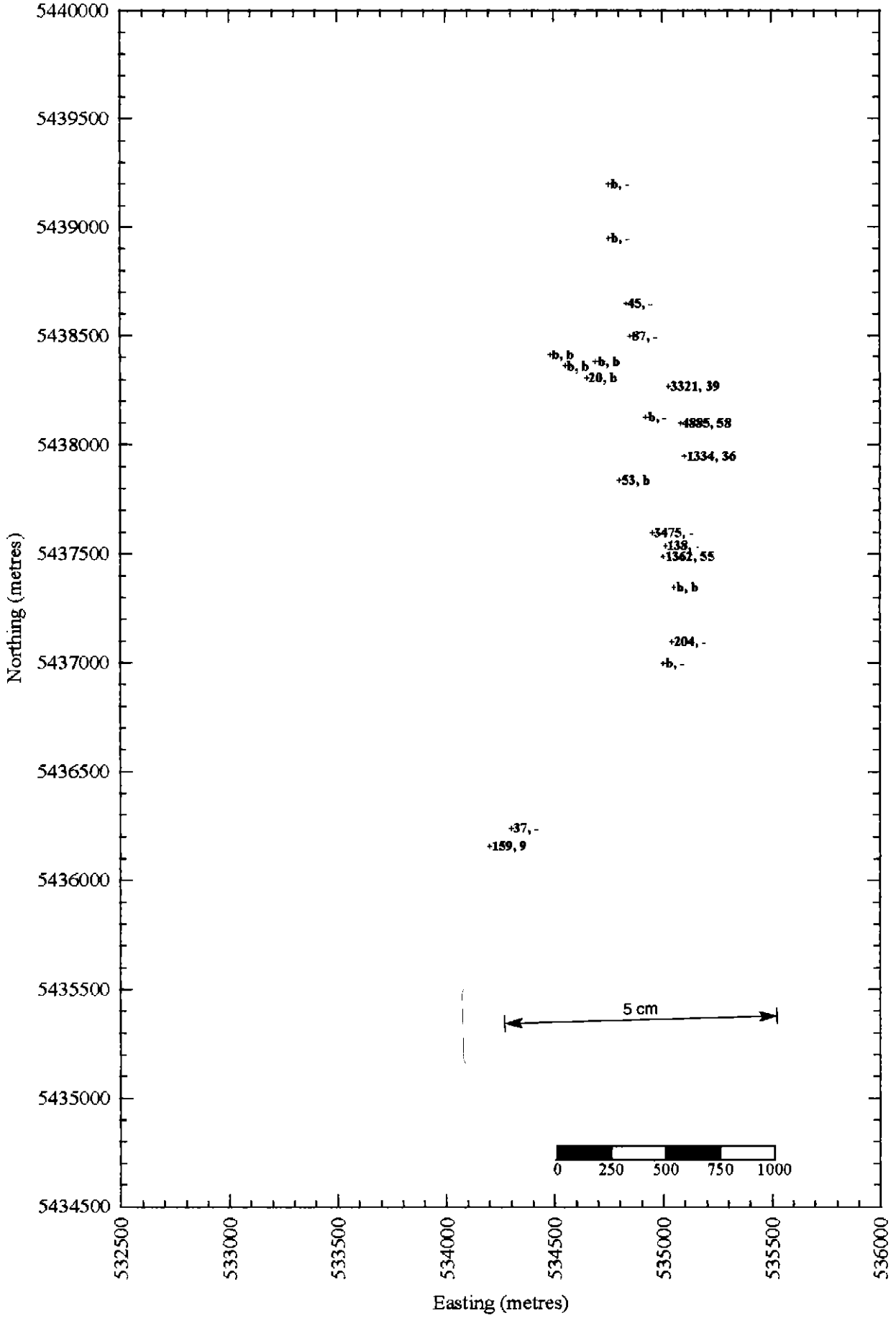
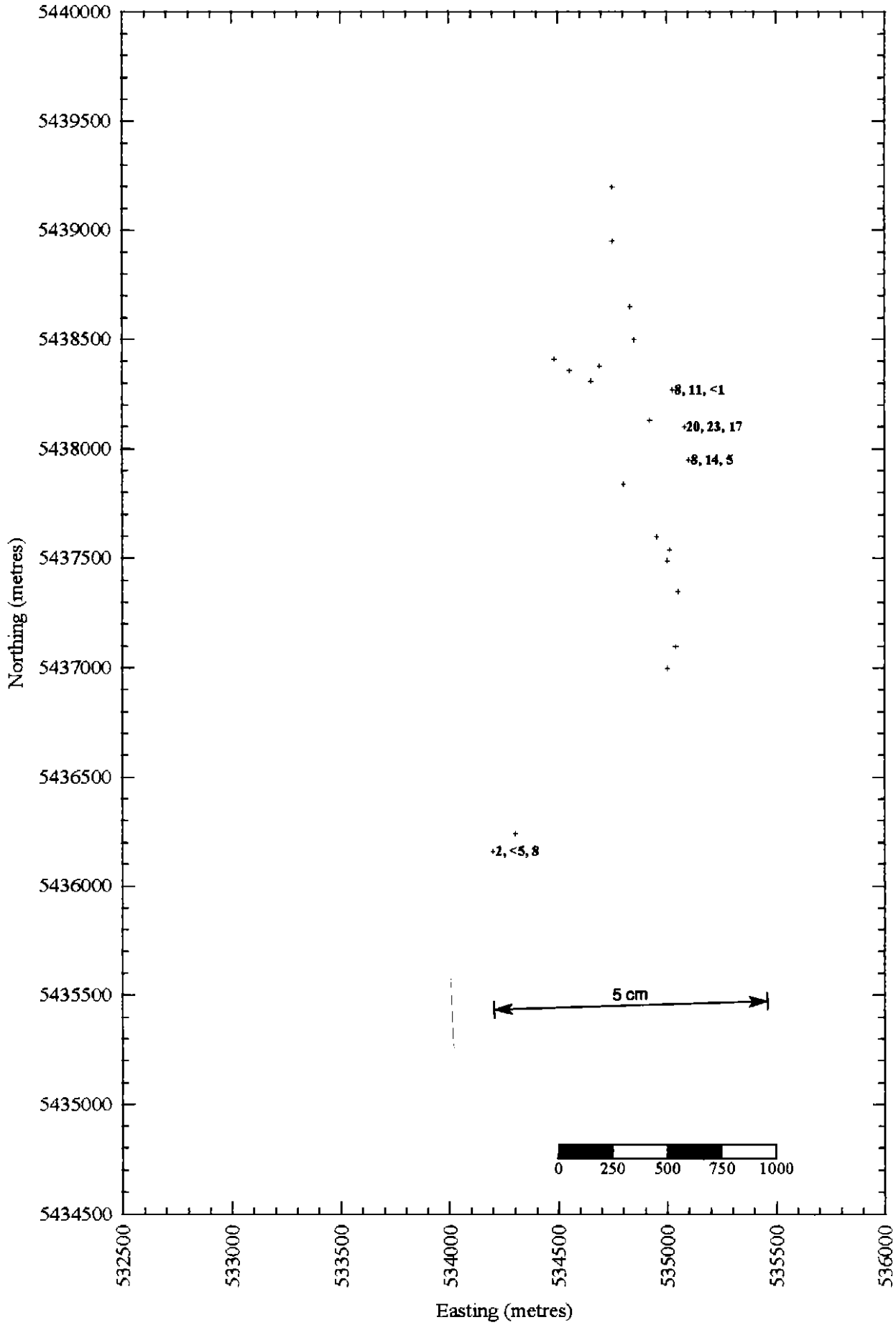


Figure 3d. Sidling Range Prospect - Rock chip samples
Cu, Pb, Zn in ppm, detection limits 1, 5, 1 ppm. Scale 1:25,000



TRENCH SAMPLING LOG SHEET

TABLE 2

Trench #	Sample #	Interval		Width	Assay results		Description
		From	To	(metres)	Au (ppb)	As (ppm)	
Trench 1	T1-01	57.5	58	0.5	600	525	laminated, vughy qtz vein in fg SS
Trench 1	T1-02	56	56.5	0.5	170	<20	silicified SS, 20% qtz vning
Trench 1	T1-03	49	51	2	<50	27	silicified, green SS
Trench 1	T1-04	5.5	6	0.5	50	20	fg-mg SS, 50% qtz vning
Trench 1	T1-05	35	37	2	50	<20	silicified, green SS
Trench 1	T1-06	37	39	2	<50	<20	silicified, green SS
Trench 1	T1-07	39	42	3	<50	<20	silicified SS, 50% qtz vning
Trench 1	T1-08	32	35	3	<50	<20	silicified SS, 10% qtz vning
Trench 1	T1-09	42	43	1	50	<20	silicified SS, 20-30% qtz vning
Trench 1	T1-10	44	45	1	50	<20	silicified SS, 20% qtz vning
Trench 1A	T1 45-46	45	46	1	240	407	strongly qtz vned mg SS
Trench 1A	T1 48-50	48	50	2	<50	124	silicified SS
Trench 1A	T1 52-55	52	55	3	50	<20	strongly qtz vned mg SS
Trench 2	T2-01	43	43.5	0.5	100	<20	silicified spotted SZ-SS, 25 cm fe-oxqtz vn
Trench 2	T2-02	15	16	1	<50	<20	silicified spotted SZ-SS
Trench 2	T2-03	28	29	1	<50	<20	silicified spotted SZ-SS, 25% qtz vning
Trench 2	T2-04	32	33	1	<50	<20	silicified SS, 1cm comb qtz vn
Trench 2	T2-05	62	63	1	<50	<20	micaceous, green, silicified SS
Trench 2	T2-06	64	65	1	<50	<20	strongly qtz vned SS
Trench 2	T2-07	90	91	1	<50	<20	strongly qtz vned SS
Trench 2	T2-08	97	98	1	<50	<20	strongly qtz vned SS
Trench 2	T2A-01	103	103	0.03	1100	165	3cm qtz vn with arsenopyrite.
Trench 3	T3-01	31	32	1	<50	30	qtz-SS breccia, fe-ox
Trench 3	T3-02	45	46	1	<50	<20	green, part silicified, fg SS
Trench 3	T3-03	55	56	1	4980	95	fg SS, 10% dark fe-ox comb qtz vn
Trench 3	T3-04	74	75	1	<50	<20	silicified SZ-SS, 20% qtz vning
Trench 3	T3-05	117	118	1	<50	<20	silicified SS, 5-10% fe-ox comb qtz vns
Trench 3	T3-06	160	161	1	<50	<20	silicified SZ-SS
Trench 3	T3-07	173	174	1	<50	<20	green, very silicified SS
Trench 3	T3-08	180	181	1	<50	<20	silicified SS, 20 cm fe-ox comb qtz vns
Trench 4	VALR 21	2	5	3	<50	<10	fl SZ-SS
Trench 5	VALR 22	4	6	2	<50	<10	mgSS, 10-15% fe-ox vnlets
Trench 5	VALR 23	8	10	2	<50	<10	mgSS, 10-15% fe-ox vnlets
Trench 5	VALR 24	10	12	2	<50	<10	Mn stained mg SS, fe-ox spots
Trench 5	VALR 25	12	14	2	<50	<10	mg-cg SS, fe-ox spotting, 1-2% vnlets
Trench 6	FB 1	5	7	2	<50	<10	fg SS, 10% qtz vning
Trench 6	FB 2	11	13	2	<50	<10	fg SS, 10% qtz vning

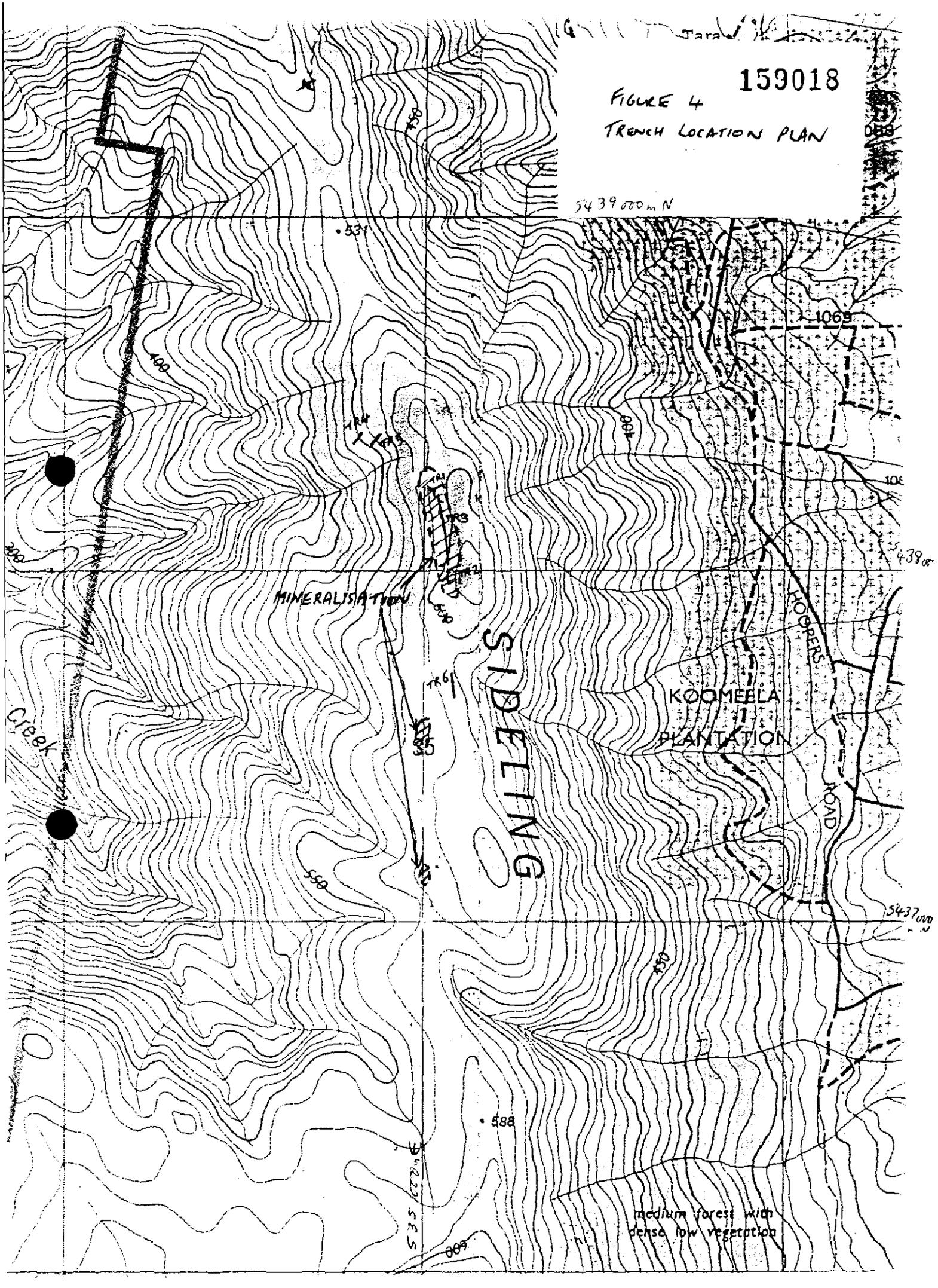

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FIGURE 4
TRENCH LOCATION PLAN
5439000mN
Tara
1069
MINERALISATION
TR1
TR2
TR3
TR4
TR5
TR6
SIDELING
KOOMEELA
PLANTATION
HOOPERS
ROAD
Creek
5438000
5437000
medium forest with
dense low vegetation

159019

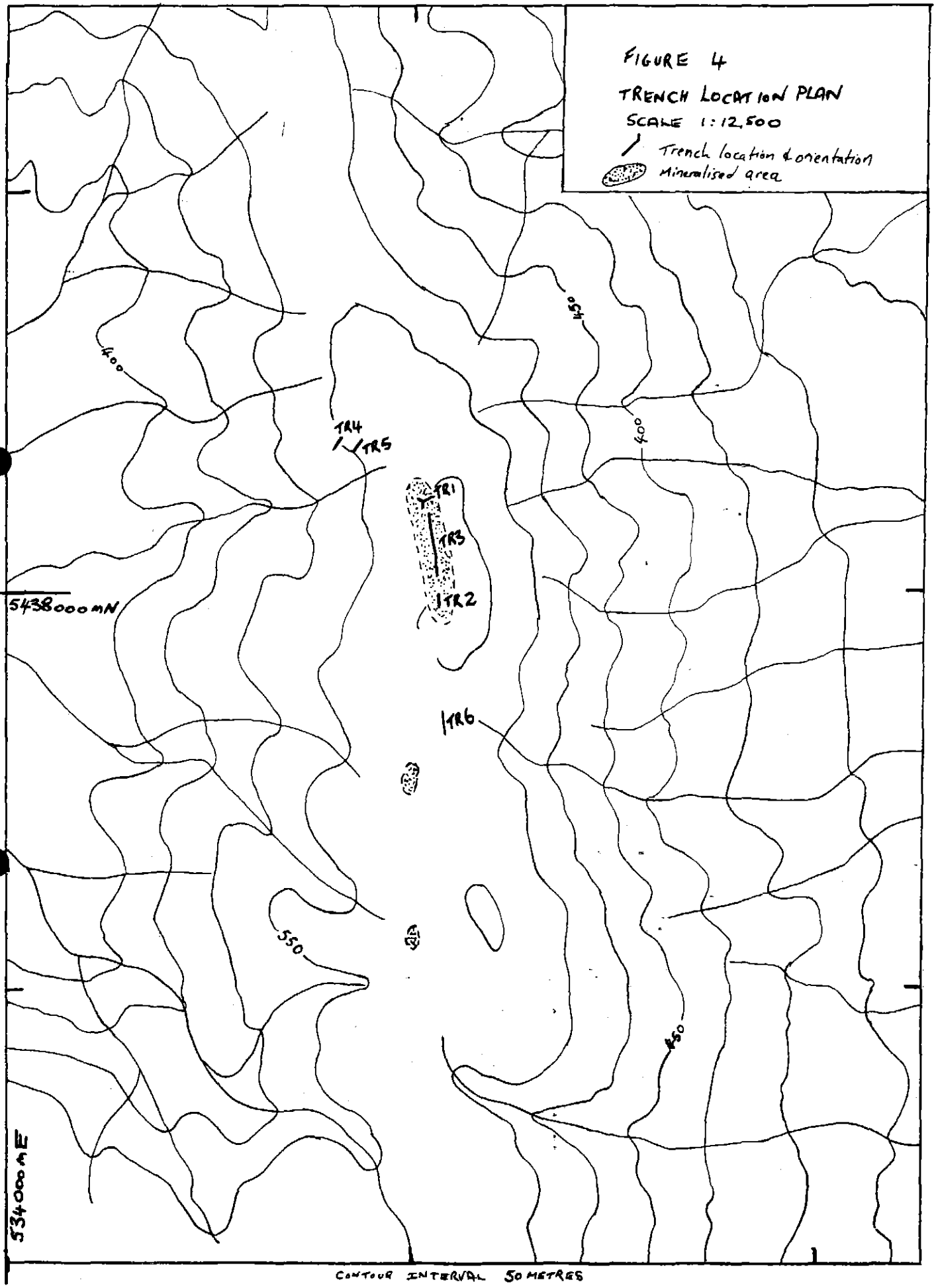


FIGURE 4
TRENCH LOCATION PLAN
SCALE 1:12,500
Trench location & orientation
Mineralised area
400
450
400
TR4
TR5
TR1
TR3
TR2
TR6
5438000mN
550
450
534000mE
CONTOUR INTERVAL 50 METRES

159020

Figure 5.

Plans for trenches 1 & 2.

Scale 1:500

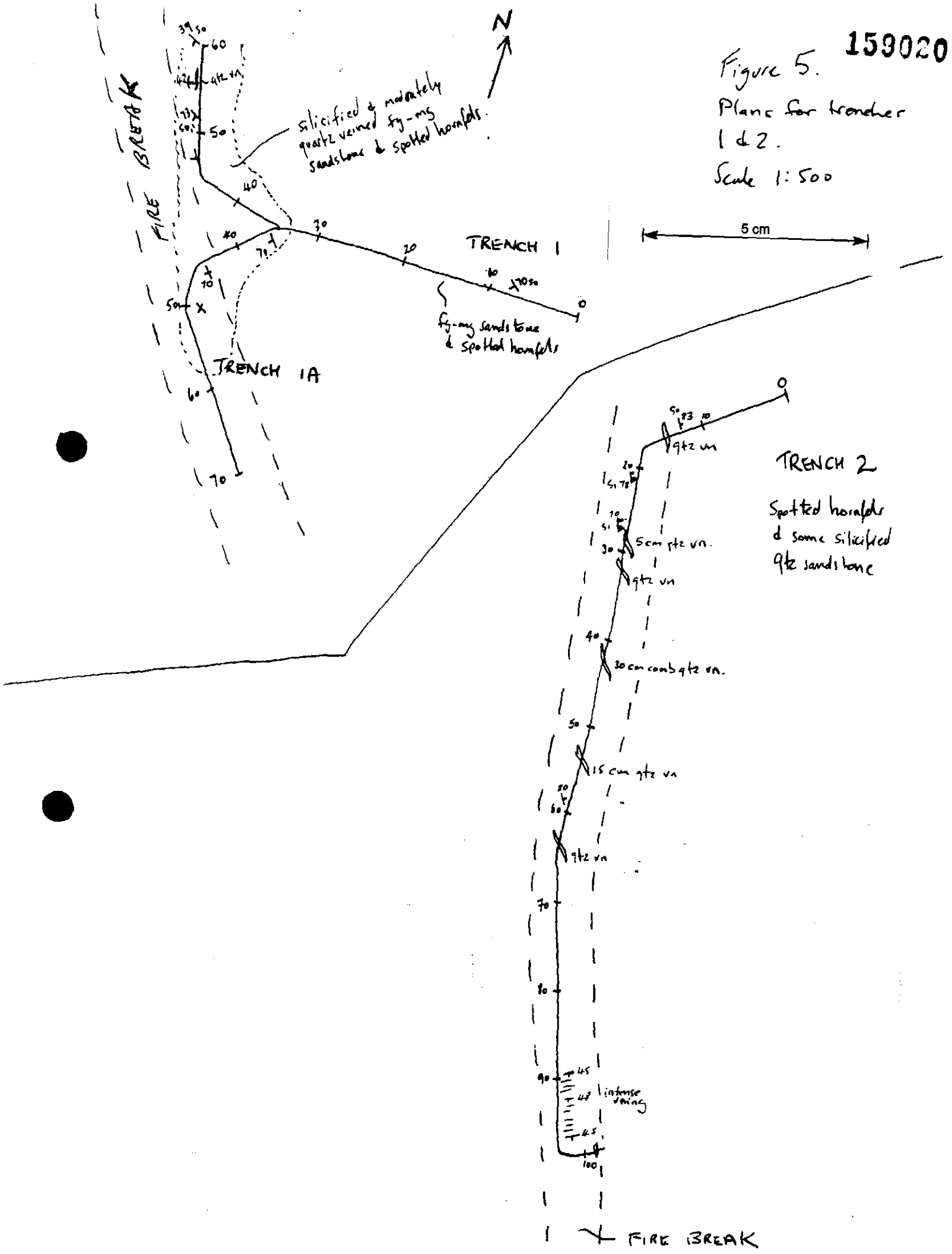
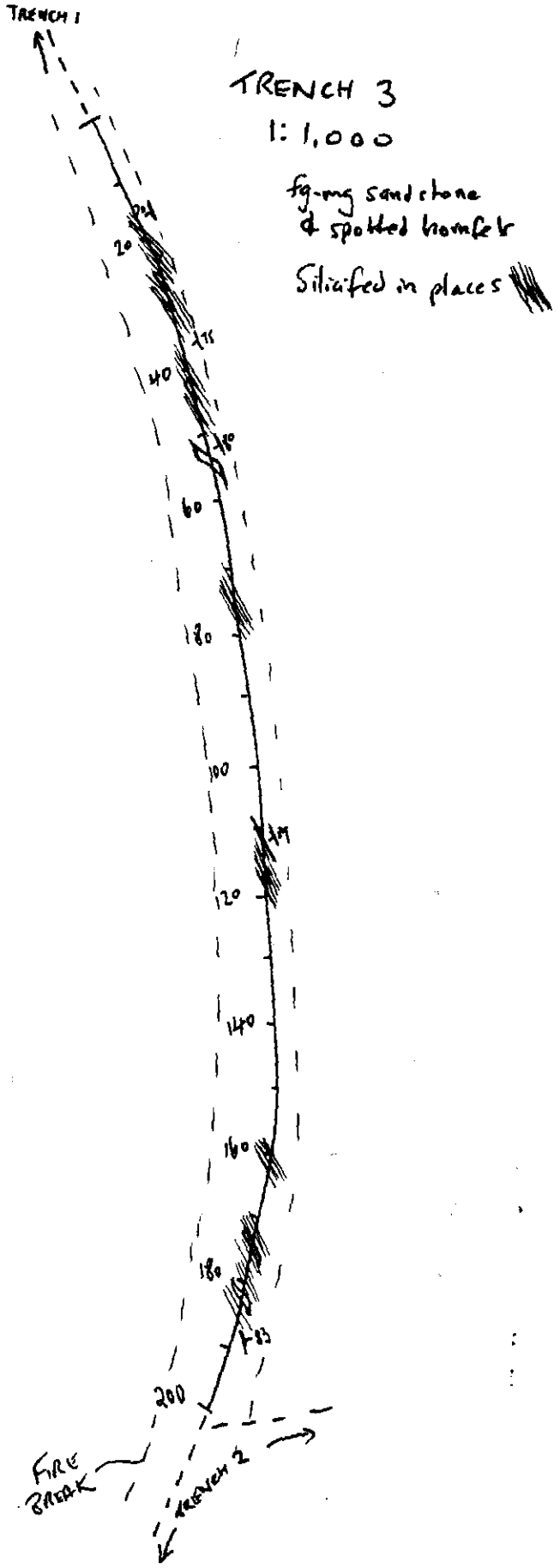
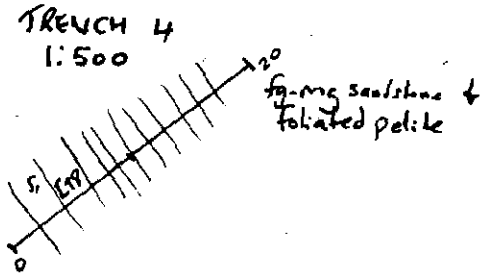
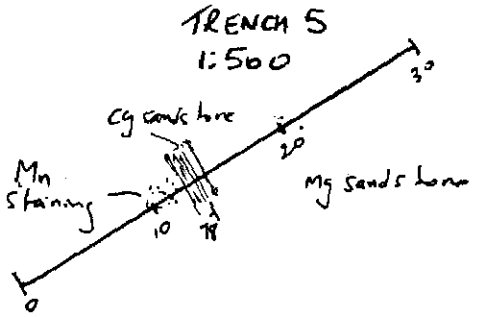
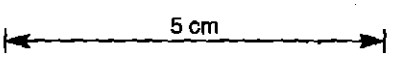


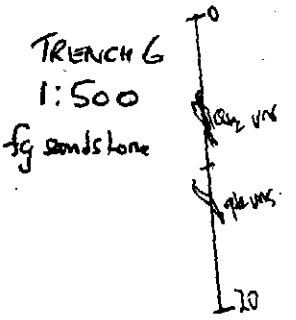
FIGURE 6 159021
Plans for trenches 3, 4, 5 & 6











4.0 DISCUSSION/CONCLUSIONS

A small area of gold mineralisation has been discovered on the Sidling Range, west of Scottsdale. The main zone of mineralisation was exposed along a fire break at the edge of a forest plantation, and subsequent trenching revealed narrow, discontinuous veins. The veins are auriferous comb quartz(± sulphide) and quartz-breccia (± sulphide) veins up to half a metre wide, with gold values up to 5 ppm and arsenic values up to 5000 ppm. Veins appear to be parallel or sub-parallel to bedding and occur over a strike length of at least 400 metres, trending NNW. The host rocks are a sequence of fine to medium grained sandstones, with patchy silicification. The finer grained rocks are foliated and spotted. Several isolated veins occur in similar host lithologies up to 800 metres south of the main area of mineralisation.

Because a significant amount of trenching was excavated at a shallow angle to the strike of the mineralisation, it is not possible to comment on the likely extent of mineralisation other than to say, the veins were generally narrow and do not appear to occur in sufficient density or carry high enough gold grade to bulk up to a resource. However, it is possible that the mineralisation at surface today may form the upper level of a more densely mineralised system deeper down. Therefore, the mineralisation warrants further investigation, perhaps using a soil geochemical technique. As the plantation areas have been deep ripped to about 800 mm and the soil profile mixed, any soil sampling will need to address this. Methods such as MMI, wacker sampling, or enzyme leach may be worth trying.

The area where the trenching was carried out has been subsequently modified (obliterated)by the construction of a road which has provided good exposure along a fresh road cutting. This exposure should be mapped in detail to determine the structural setting of gold mineralisation this is current and the surrounding area is currently being mapped in detail by an Honours student from the University of Tasmania. Thin section and fluid inclusion studies are also proposed to be carried out on the mineralised veins to determine the nature and source of the mineralising fluids.

5.0 ENVIRONMENT

The majority of the trenching was carried out in areas that had been significantly disturbed, or was subsequently disturbed, by Forestry Tasmania. All trenches have been filled in, except for some small sections of trenches 1 and 2. These were unable to be filled in because Forestry Tasmania constructed a road through them without advising Mr. Bardenhagen. The small sections which are open have had vegetation and soil pushed across them during the road-making and accessing them now would involve damaging the new road.

APPENDIX

AQUATIC LABS
The Tassy Assay Professionals

Enquires:J.R.Lethborg(B.Sc.Chemistry)
Phone : 003 931 774
Your reference : Purchase Order
Our file :990012-0020

Assay laboratory
Box 126,
Westbury
Tasmania 7303

18 January, 1999

Dear Frank

Please find below the assay result on the samples you delivered to Aquatic Labs .

Aquatic Labs Reg No.	Description	mg Cu/ Kg (p.p.m) (2)	mg Pb / Kg (p.p.m) (2)	mg Zn/ Kg (p.p.m) (2)	mg Sb / Kg (p.p.m) (2)	mg As / Kg (p.p.m) (2)	mg Au / Kg (p.p.m) (1)
981558	Frank Barrdenhagan VALR 1	8.3	14	3.6	36	1,334	0.9
981559	Frank Barrdenhagan VALR 2	7.8	10.7	<1	39	3,321	2.0
990012	Frank Barrdenhagan VALR 3	N/A	N/A	N/A	N/A	<20	<0.05
990013	Frank Barrdenhagan VALR 4	N/A	N/A	N/A	N/A	<20	0.06
990014	Frank Barrdenhagan VALR 5	20.2	23	17.2	58	4,885	3.46
990015	Frank Barrdenhagan VALR 6	N/A	N/A	N/A	N/A	87	<0.05
990016	Frank Barrdenhagan VALR 7	N/A	N/A	N/A	N/A	45	<0.05
990017	Frank Barrdenhagan VALR 8	N/A	N/A	N/A	N/A	37	<0.05
990018	Frank Barrdenhagan VALR 9	2.7	10.4	2.4	15	284	0.28
990019	Frank Barrdenhagan VALR 10	N/A	N/A	N/A	N/A	<20	<0.05
990020	Frank Barrdenhagan VALR 11	2.2	<5	8.0	8.9	159	<0.05
990004	Frank Barrdenhagan Rice 1	11.6	17	6.2	46	5613	2.69

(1) Gold by fire assay

Aquatic Labs reference source for Fire assaying is "A Manual on Fire Assaying and Determination of the Noble Metals in Geological Materials" published by the American Geological Survey in 1977.

159025

AQUATIC LABS
The Tassy Assay Professionals

Enquires:J.R.Lethborg(B.Sc.Chemistry)
Phone : 003 931 774
Your reference : Purchase Order
Our file :990186-0195

Assay laboratory
Box 126,
Westbury
Tasmania 7303

24 February, 1999

Dear Frank

Please find below the assay result on the samples you delivered to Aquatic Labs .

Aquatic Labs Reg No.	Description	mg Cu/ Kg (p.p.m) (2)	mg Pb / Kg (p.p.m) (2)	mg Zn/ Kg (p.p.m) (2)	mg Sb / Kg (p.p.m) (2)	mg As / Kg (p.p.m) (2)	mg Au / Kg (p.p.m) (1)
990186	VALR 12 : Assay Au , Sb & As	N/A	N/A	N/A	<20	<20	<0.05
990187	VALR 13 : Assay Au , Sb & As	N/A	N/A	N/A	55	1362	0.53
990188	VALR 14 : Assay Au , Sb & As	N/A	N/A	N/A	<20	53	<0.05
990189	VALR 15 : Assay Au , Sb & As	N/A	N/A	N/A	<20	<20	<0.05
990190	VALR 16 : Assay Au , Sb & As	N/A	N/A	N/A	<20	<20	0.10
990191	VALR 17 : Assay Au , Sb & As	N/A	N/A	N/A	<20	<20	<0.05
990192	VALR 18 : Assay Au , Sb & As	N/A	N/A	N/A	<20	20	0.08

(1) Gold by fire assay

Aquatic Labs reference source for Fire assaying is "A Manual on Fire Assaying and Determination of the Noble Metals in Geological Materials" published by the American Geological Survey in 1977.

(2)Method AQUA REGIA extraction of metals and flame acetylene/nitrous oxide AAS determination of extracted metal

159027

AQUATIC LABS
The Tassy Assay Professionals

Enquires:J.R.Lethborg(B.Sc.Chemistry)
Phone : 003 931 774
Your reference : Purchase Order
Our file :990600-0615

Assay Laboratory
Box 126,
Westbury
Tasmania 7303

10 June, 1999

Dear Frank

Please find below the assay result on the samples you delivered to Aquatic Labs .

Aquatic Labs Reg No.	Description	mg As / Kg (p.p.m) (2)	mg Au / Kg (p.p.m) (1)
990600	Frank Bardenhagah Valr 19	<10	<0.05
990601	Frank Bardenhagah Valr 20	3475	1.43
990602	Frank Bardenhagah Valr 21	<10	<0.05
990603	Frank Bardenhagah Valr 22	<10	<0.05
990604	Frank Bardenhagah Valr 23	<10	<0.05
990605	Frank Bardenhagah Valr 24	<10	<0.05
990606	Frank Bardenhagah Valr 25	<10	<0.05
990607	Frank Bardenhagah Valr 26	138	0.34
990608	Frank Bardenhagah Valr 27	204	0.61
990609	Frank Bardenhagah Guy 1	333	<0.05
990610	Frank Bardenhagah Aronald 2	259	0.20
990611	Frank Bardenhagah Jesen 3	3265	0.18
990612	Frank Bardenhagah Dobson 4	19	0.08
990613	Frank Bardenhagah Coote 5	22	0.05
990614	Frank Bardenhagah FB 2	<10	<0.05
990615	Frank Bardenhagah FB1	<10	<0.05
990606	Frank Bardenhagah Valr 25	<10	<0.05

(1) Gold by fire assay

Aquatic Labs reference source for Fire assaying is "A Manual on Fire Assaying and Determination of the Noble Metals in Geological Materials" published by the American Geological Survey in 1977.

(2)Method nitric acid extraction of arsenic and flame acetylene/nitrous oxide AAS determination of extracted metal

Please consider Aquatic Labs for all your assaying requirements .You will not be disappointed in our service or the fees that are charged for that service.

159028

AQUATIC LABS
The Tassy Assay Professionals

Enquires:J.R.Lethborg(B.Sc.Chemistry)
Phone : 003 931 774
Your reference : Purchase Order
Our file :990521-0580

Assay laboratory
Box 126,
Westbury
Tasmania 7303

17 May, 1999

Dear Frank

Please find below the assay result on the samples you delivered to Aquatic Labs .

Aquatic Labs Reg No.	Description	mg As / Kg (p.p.m) (2)	mg Au / Kg (p.p.m) (1)
990521	Frank Bardenhagan T1 - 05	<20	0.05
990522	Frank Bardenhagan T1 -06	<20	<0.05
990523	Frank Bardenhagan T1 - 07	<20	<0.05
990524	Frank Bardenhagan T1 - 08	<20	<0.05
990525	Frank Bardenhagan T1 – 09	<20	0.05
990526	Frank Bardenhagan T1 –10	<20	0.05
990527	Frank Bardenhagan T2 – 01	<20	0.10
990528	Frank Bardenhagan T2 - 02	<20	<0.05
990529	Frank Bardenhagan T2 – 03	<20	<0.05
990530	Frank Bardenhagan T2 - 04	<20	<0.05
990531	Frank Bardenhagan T2 - 05	<20	<0.05
990569	Frank Bardenhagan T2A – 01	165	1.10
990570	Frank Bardenhagan T2 – 06	<20	<0.05
990571	Frank Bardenhagan T2 – 07	<20	<0.05
990572	Frank Bardenhagan T2 –08	<20	<0.05
990573	Frank Bardenhagan T3 – 01	30	<0.05
990574	Frank Bardenhagan T3 - 02	<20	<0.05
990575	Frank Bardenhagan T3 – 03	95	4.98
990576	Frank Bardenhagan T3 - 04	<20	<0.05
990577	Frank Bardenhagan T3 – 05	<20	<0.05
990578	Frank Bardenhagan T3 – 06	<20	<0.05
990579	Frank Bardenhagan T3 - 07	<20	<0.05
990580	Frank Bardenhagan T3 - 08	<20	<0.05
990531	Frank Bardenhagan T2 - 05	<20	<0.05
990578	Frank Bardenhagan T3 – 06	<20	<0.05

check
check

(1) Gold by fire assay

23

Aquatic Labs reference source for Fire assaying is "A Manual on Fire Assaying and Determination of the Noble Metals in Geological Materials" published by the American Geological Survey in 1977.

(2)Method nitric acid extraction of arsenic and flame acetylene/nitrous oxide AAS determination of extracted metal

159029

AQUATIC LABS
The Tassy Assay Professionals

Enquires:J.R.Lethborg(B.Sc.Chemistry)
Phone : 003 931 774
Your reference : Purchase Order
Our file :990506-0513

Assay laboratory
Box 126,
Westbury
Tasmania 7303

10 May, 1999

Dear Frank

Please find below the assay result on the samples you delivered to Aquatic Labs .

Aquatic Labs Reg No.	Description	mg As / Kg (p.p.m) (2)	mg Au / Kg (p.p.m) (1)	
990506	Frank Bardenhagan T1 - 01	525	0.71	
990507	Frank Bardenhagan T1 – 02	<20	0.17	
990508	Frank Bardenhagan T1 – 03	27	<0.05	
990509	Frank Bardenhagan T1 – 04	<20	0.05	
990508	Frank Bardenhagan T1 45-46	407	0.24	
990509	Frank Bardenhagan T1 48-50	124	<0.05	
990510	Frank Bardenhagan T1 52-55	<20	0.05	
990511	Frank Bardenhagan Extra	22	0.22	
990506	Frank Bardenhagan T1 - 01	-	0.49	check
990510	Frank Bardenhagan T1 52-55	<20	-	check

(1) Gold by fire assay

(3)

Aquatic Labs reference source for Fire assaying is "A Manual on Fire Assaying and Determination of the Noble Metals in Geological Materials" published by the American Geological Survey in 1977.

(2)Method nitric acid extraction of arsenic and flame acetylene/nitrous oxide AAS determination of extracted metal

Please consider Aquatic Labs for all your assaying requirements .You will not be disappointed in our service or the fees that are charged for that service.

J.R.Lethborg (B.Sc. Chemistry)