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A tabulated presentation of metallic mine and prospect data for the Pine Creek Geosyncline, N.T.

by R.S. Needham

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APPENDIX Data base, mines and prospects of the Pine Creek Geosyncline

ABSTRACT

Information describing 563 metallic mineral occurrences in the Pine Creek Geosyncline is given in tabulated form. The information was gathered as a base for a regional analysis of the province's mineralisation with emphasis on distribution controls. In other tables, metal production, reserves and resources (expressed as dollars) are ranked in relation to the various elements and mineral fields; mineral fields and host formations are ranked in order of average mine/deposit value; and host formations are ranked in value per km². The abundance and value of the different genetic groups of mines and deposits are also listed.

Uranium dominates the statistics; out of 16 metals it accounts for 92% of production and reserves and resources value, and its abudance int he northeast of the province is reflected by the 91% share of the total value contained in the Alligator Rivers Uranium Field. The average mine/deposit size is also greatest in this field, again indicating the dominance of uranium in the statistics. Most of the uranium of the province is in the Cahill Formation of the Alligator Rivers Uranium Field, and this Formation has a demonstrated value 12 times greater than its nearest rival, and has the largest average mine/deposit value by a factor of five.

Eight major genetic groups of mineral deposits are defined. Seventy percent of the mines and deposits are hydrothermal but account for only 1% of total value. The metamorphic hydrothermal/epigenetic, and modified syngemetic U + Au + Cu, Pb + Zn + Ag + Cu of the Alligator Rivers and Rum Jungle Uranium Fields make up 17% of the total number of mines and deposits, but account for 92% of the total value.

INTRODUCTION

In a regional analysis of the Pine Creek Geosyncline metalliferous province Needham (1981) described the geology, geophysics and evolution of the province, discussed the distribution and classification of metallic mineral occurrences, and estimated the mineral potential of some elements. The analysis was largely based on a tabulated lisiting of 563 metallic mineral occurrence descriptions. The data base is included in this Record as an Appendix.

Where known, the name, production statistics, geometry, ore character, host lithologies and formation, metamorphic grade and apparent mineralisation controls are given for each entry and a genetic classification attempted. The location of the sites is shown in Figure 1. The main data source is Crohn (1968). Additional information was gained from company reports held by the Northern Territory Department of Mines and Energy, and published company reports.

The occurrences include 410 mines (recorded production) or deposits (published reserve or resource, no production) with an aggregate recorded production + published reserve resource value of \$21 650 million as at 31 December 1980. Sixteen metals have been mined, uranium accounting for 92%, lead 3.4%, gold 1.4%, and all other metals <1%. 91% of the value is shared by only nine mines and deposits (uranium and minor gold) in the Alligator Rivers Uranium Field (A in Figure 1); the Rum Jungle Uranium Field accounts for 6.6%, the Cullen Mineral Field 1.3%, and all other areas less than one percent.

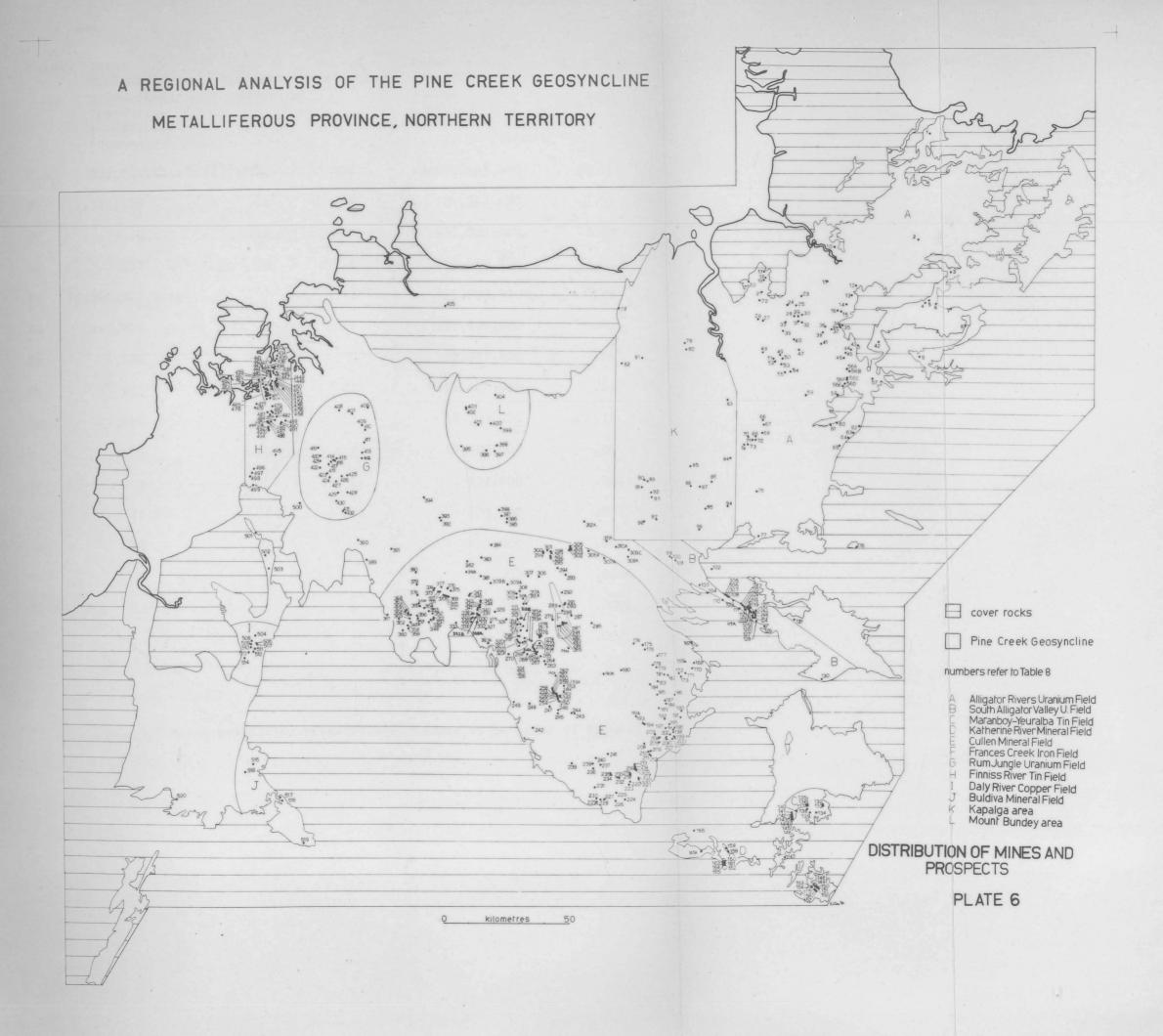
Tables 1-4 indicate the tonnage, value, and number of mines/ prospects for each metal and each mineral field; rank the mineral fields in order of average mine/deposit value; and rank the host formations in order of average mine/deposit value and average value per km². Table 5 ranks genetic groups in terms of value, and records the number of mines/ deposits for each category.

REFERENCES

- CROHN, P.W., 1968 The mines and mineral deposits of the Katherine

 Darwin region. Bureau of Mineral Reources, Australia, Bulletin 82,

 171-282.
- NEEDHAM, R.S., 1981 A regional analysis of the Pine Creek Geosyncline Metalliferous Province, Northern Territory. MSc. Thesis, James Cook University of North Queensland.



Metal	Total recorded production, reserves & resources (tonnes)	No. of mines & deposits	No. of prospects	Value \$A (as at 31 Dec. (1980)	% of total value
^U 3 ⁰ 8	335,781.75	30	131	19,945,447,000	92.13
Pb	1,129,820	25	36	734,362,400	3.39
Au	10.1	120	17	312,626,900	1.44
Ag	357	19	4	182,959,200	.85
Fe	10,600,000 (ore)	7	5	169,900,000	.78
Zn	198,860	4	16	142,346,000	.66
Sn	4,500	153	6	59,587,200	.28
Cu	31,525	32 .	47	53,687,600	•25
Со	1,550	1	1	33,300,000	.15
W	600	10	1	14,300,000	.06
Ta	9	2	1	957,000	.004
Cd	47.5	1	-	223,000	.001
As	36	1	_	220,000	.001
Mn	300	2	-	200,000	.0009
Bi	43	1	2	167,700	.0008
Мо	.13	. 2	-	6,300	.00003

Table 1. Metal production reserves and resourc es in order of value.

Mineral field	Metals in order of value (minor amounts in parentheses)	No. of mines & deposits	No. of prospects	Value \$A (as at 31 Dec1980)	% total value
Alligator Rivers	U, Au (Sn)	9	68	19,681,529,000	90.9
Rum Jungle	U, Pb, Ag, Zn, Cu (Co, Au)			1,419,217,900	6.56
Cullen	Au, Ag, Sn, Pb, Zn, Cu, W (As, Bi, Cd, Mn, Mo, U)	184	56	287,343,700	1.33
Frances Creek	Fe (Au, Ag)	6	2	160,000,000	.74
South Alligator Valley	U, Au (Ag, Pb)	14	18	57,272,600	.26
Maranboy-Yeuralba	Sn, W (Cu)	24	2	14,268,800	.066
Mount Bundey	Fe, Au	2	8	9,600,000	.044
Finniss River	Sn (Ta, Au)	69	2	6,548,100	.030
Daly River	Cu	6	4	2,184,000	.010
Buldiva	Au, Sn	4	1	1,926,700	.0089
Katherine River	Au, Cu	8	1	356,000	.0016
Kapalga area	(Au)	I	20	115,000	.0005
isolated mines	Au, U (Sn, Pb)	15	4	10,055,000	.046

21,650,413,000

Table 2. Relative value of production + reserves + resources between the mineral fields, sharing metals in order of value for each field.

¢

1	Alligator Rivers average value (\$m):	2 186.8	U, Au
2	Rum Jungle	141.9	U, Pb, Ag, Zn, Cu
3	Frances Creek	26.7	Fe
4	Mount Bundey	4.8	Fe
5	South Alligator Valley	4.1	U, Au
6	Cullen	1.6	Au, Ag, Sn, Pb, Zn, Cu, W
7	isolated mines	.7	Au, U
8	Maranboy-Yeuralba	.6	Sn, W
9	Buldiva	.5	Au, Sn
10	Daly River	•4	Cu
11	Kapalga	.1	Au
12	Finniss River	• 1	Sn, Ta
13	Katherine River	.05	Au, Cu

Table 3: Mineral fields ranked in order of average mine/deposit value.

e per km² (\$ million)		Ave	rage mine/deposit value (\$ million)	9
Cahill Formation	12.1	1.	Cahill Formation	3185.7
Masson Formation	1.1	2.	Myra Falls	567.2
Myra Falls Metamorphics	0.6	3.	Masson Formation	567.3 177.4
Wildman Siltstone	0.07	4.	Wildman Siltstone	14.9
Kapalga Formation	0.06	5.	Edith River	
Koolpin Formation	0.05			4.6
Burrell Creek		-	•	3.8
Formation	0.02	7.	Kapalga Formation	2.6
Gerowie Tuff	0.015	8.	Gerowie Tuff	1.2
Edith River Volcanics	0.01	9.	Burrell Creek Formation	0.9
Dorothy Creek		10.	Carpentarian Granites	0.5
Volcanics	0.01	11.	Mundogie Sandstone	0.07
	0.002	12.	Dorothy Creek Volcanics	0.03
-		13.	Zamu Dolerite	0.007
_		14.	Crater Formation	0.006
Zamu Dolerite	0.000006	٨		
	Cahill Formation Masson Formation Myra Falls Metamorphics Wildman Siltstone Kapalga Formation Koolpin Formation Burrell Creek Formation Gerowie Tuff Edith River Volcanics Dorothy Creek Volcanics Carpentarian granites Mundogie Sandstone Crater Formation	Masson Formation 1.1 Myra Falls Metamorphics 0.6 Wildman Siltstone 0.07 Kapalga Formation 0.06 Koolpin Formation 0.05 Burrell Creek Formation 0.02 Gerowie Tuff 0.015 Edith River Volcanics 0.01 Dorothy Creek Volcanics 0.01 Carpentarian granites 0.002 Mundogie Sandstone 0.0004 Crater Formation 0.00007	Cahill Formation 12.1 1. Masson Formation 1.1 2. Myra Falls Metamorphics 0.6 3. Wildman Siltstone 0.07 4. Kapalga Formation 0.06 5. Koolpin Formation 0.05 6. Burrell Creek 6. 6. Formation 0.02 7. Gerowie Tuff 0.015 8. Edith River 9. Volcanics 0.01 Dorothy Creek 0.01 Volcanics 0.01 Carpentarian granites 0.002 Mundogie Sandstone 0.0004 Crater Formation 0.00007	Cahill Formation 12.1 1. Cahill Formation Masson Formation 1.1 2. Myra Falls Myra Falls Metamorphics 0.6 3. Masson Formation Wildman Siltstone 0.07 4. Wildman Siltstone Kapalga Formation 0.06 5. Edith River Koolpin Formation 0.05 6. Koolpin Formation Burrell Creek Formation 0.02 7. Kapalga Formation Gerowie Tuff 0.015 8. Gerowie Tuff Edith River Volcanics 0.01 Pormation Dorothy Creek Volcanics 0.01 10. Carpentarian Granites Volcanics 0.002 11. Mundogie Sandstone Carpentarian granites 0.0004 13. Zamu Dolerite Crater Formation 0.00007

Table 4: Host formations ranked in orer of value per km² and average mine/deposit value.

Group	No. of mines & deposits	% No.	Value \$ million	% value
metamorphic hydrothermal/ epigenetic	27	13.4	19681.52	91.7
modified syngenetic	21	4.0	1264.05	5.9
hydrothermal	360	67.9	234.86	1.1
supergene	40	7.6	169.8	0.8
epigenetic	19	3.6	57.27	0.3
exhalative	14	2.6	30.97	0.1
metasomatic	1	0.2	19.14	0.1
syngenetic	4	0.8	-	-

Table 5. Genetic groups of mines and deposits - abundance and value.

APPENDIX 1: Data base, mines and prospects of the Pine Creek Geosyncline

- (1) uranium as U308, iron as lump ore
- (2) London Metal Bulletin, 31/12/80, as \$A; mostly calculated as refined metal prices. U as U₃08, Fe as 65% lump ore

Маже	Reference no. Plate 7 Mineral Field (ref. Plate 7) Hetals	Production (reserves) tormes metal (1)	Grade	Value \$million (2)	Geometry	Ore observater	Host lithblogies	Host formation	He tamorphic grade	Ometrols	Clased if cetion
Black Rock	1 A U	prospect			disseminated irregular, offset by faulting	disseminated uraninite	chlorite & mica quarts schist	Ęхn	retrograded m. amphibolite	unconformity; ?fault ?chlorite alteration	metamorphic hydrothermal + epigenetic; uncf. related?
Tadpole	2 A U	prospect			irregular to planar, thin	uraninite in pegmatite	quartz mica schist + quartzite	Bxm	m. amphibolite		hydrothermal
Nabarlek	3 A U	9,550 U ₃ 0 ₈	1.84% U ₃ 0 ₈	567.27	steep tabular to shallow cigar	massive and disseminated pitchblende, near-surface oxidised halo	chlorite mica quartz schist, nearby graphite schist	Bxu	retrograded m. amphibolite	shear some funconformity, fchlorite alteration	metamorphic hydrothermal uncf. related, ?stratabound (relict)
	4 A U	prospect			tabular 160°	secondary near surface	quartz mica schist and graphite schist	Bc			
Gurrigarri	5 Δ Մ	prospect			tabular ~60°	secondary near surface	quartz mica schist and graphite schist	Bc	m, amphibolite	stratabound; quartz stockwork breccia	stratabound, metamorphic hydrothermal, + epigenetic;
Gorrunghur	6 A U	prospect				secondary near surface	quartz mica schist	Be			uncf. related?
Myra Falls	7 A Sn.	0.4		.0053	alluvial	cassiterite		Cz	-		alluvial (reworked Mesozoic?)
Caramal	8 A U	prospect			arcuate band ~70°	scoty pitchblende in breccia veins	hematitic chlorite quarts schist	Bxm	retrograded m. amphibolite	unconformity, ?stratabound (relict), chlorite alter- ation?	stratabound?, metamorphic hydrothermal + epigenetic; uncf. related?
Beatrice	9 A U	prospect			irregular to planar steep	minute dissemination and vein-filling films of sooty pitchblende; secondaries in weathered zone	sericite hematite mica chlorite quartz schist	Bxn	•	shear zone breccias, unconformity	metamorphic hydrothermal + epigenetic; uncf. related?
Arrara	10 A U	prospect	•		tabular shallow	secondary, at base of pre-Kombolgie weathering profile	chlorite quartz sericite schist	Bak?	н	pre-Kombolgie weathering zone, ?stratabound ?fault	stratabound uncf. related ?epigenetic
Magela 2	11 A U	prospect			disseminated low-order radiometrics	-	garnet graphite biotite amphibole feldspar mag-	Bsk?	m. amphibolite	stratabound	stratabound, metamorphic hydrothermal
Ranger 49	12 A U	prospect			4		netite quartz schist	Bo?	n		
Ranger 34	13 A Cu, U	prospect						Bsk?		fault?, stratabound?	
Ranger 35	14 A U	prospect			•			Bsk?			
Magela 1	15 A U	prospect			disseminated low-order radiometrics	-	garnet graphite blotite amphibole feldspar mag- netite quartz schist	Вс	*	stratabound	stratabound, metamorphic hydrothermal
Ranger 44	16 A U	prospect						Bc		stratabound?	
Ranger 30	17 A U	prospect			n,			ABn	•		
Ranger 29	18 ▲ U	prospect									
Ranger 45	10 Α Ψ	prospect						ABn			
Ranger 50	20 A U	prospect						AB n			
Ranger 26	21 A U	prospect	•					ARn			
Ranger 25	22 A U	prospect						ABn			
Ranger 32	23 A U	prospect						ABn			
Ranger 59	24 A U	prospect						ABn.			
Ranger 60	25 A U	prospect						AHn	•		

Ranger 24	26 A U	prospect						Alm	m. amphibolite		
Ranger 23	27 A U	prospect						Allm	W		
Ranger 58	28 A U	prospect						ABn			
Ranger 2	29 A U	prospect						ABn			
Ranger 31	30 A U	prospect						Bc		stratabound	
Ranger 61	31 A U	prospect						ABn	•		
Ranger 17	32 · A U	prospect						Bc	•	atratabound	
Ranger 9	33 A U	prospect		,	,		`	ABn	• ,	,	,
Jabiluka 1	34 A U	(3,484 U ₃ 0 ₈)	0.256 % U ₃ 0 ₈	206,95	folded layers and lenses 0-70°, in 4 main strati- form ore-bearing horizons	disseminated & vein-filling pitchblende, & selvages to chlorite & alteration zone: hinor coffinite and bramerite	+ graphite schist	Bc	retrograded m. amphibolite	stratiform, unconformity, chlorite alteration, brecciation	stratabound, metamorphic hydrothermal & epigenetic; uncf. related?
Jabiluka 2	35 A U, Au	(8.1 Au) (203,800 U ₃ 0 ₈)	15.3gm/T Au 1 0.394 II 0	130,98 12,105,70		Di dillier I vo		Be	. #1		
Jabiluka 3	35A A U	prospect) 0.39% 1 ₃ 0 ₈	12,109.70	j j	similar to Jabiluka 1 & 2	similar to Jabiluka 1	Bc	ار "]
Julium)	JJE 2 0	prospect				Similar to Sapitura 1 & 2	& 2	ac .			
Ranger 5	36 A U	prospect						Bc	m. amphibolite	stratabound?	
Ranger 68	37 A Ū	prospect	*medium grade*, significant and unclosed body		irregular breccia pipe	Sooty .& colloform pitch- blende. Minor second- aries	chloritised breccia & pegmatoid, quarts sericite chlorite schist; nearby carbonate	Bc	retrograded m. amphibolite	chlorite alteration & brecciation at ABn/Bnc contact	stratabound & metamorphic hydrothermal + epigenetic, uncf. related?
Ranger 4	38 A U	prospect	*medium to low grade* small bod	¥	irregular to tabular		chloritic pegmatoid breccia in dolomite	Bc		n	
Ranger 27	39 A Ū	prospect						ABn	m. amphibolite		
Urralugoorwa	40 A U	prospect						AEn			1
Ranger 57	41 A U	prospect						ABn			
Algodo	42 Å U	prospect						Bon			
73	43 A U,An	prospect				disseminated pitchblende, near-surface secondaries	chlorite + graphite schist, hematitic near surface	Bc	retrograded m. amphibolite	stratabound, chlorite alteration unconformity	stratabound + metamorphic hydrothermal + epigenetic, uncf. related?
Hades Flat	44 A U	deposit				pitchblende in fractures & breccia zones, minor thucolite, near-surface secondaries	chlorite schist, chlor- itic breccia	Be	•	chlorite alteration and brecciation at ABn/Bc contact, unconformity	
Ranger 63	45 A Ū	prospect						ABn/Bc	m. amphibolite	stratabound	
Ranger 19	46 A U	prospect						ABn/Bc		•	• '
Ranger 55	47 A U	prospect						ABn			
Ranger 28	48 A U	prospect						Bc	0	stratabound	
Austatom 1	49 A U	deposit	confidential			disseminated pitchblende in schist below Km	Lower Cahill schists	Bc	00		
Ranger 37	50 A U	prospect						Bic .			•
Ranger 10	51 A U, Cu	prospect						Bc			
Ranger 54	52 A U	prospect					•	Bic			
Ranger 53 Ranger 14E	53 A U 54 A U	prospect						Bc To		n N	
Ranger 14E Ranger 14W	54 A U	prospect						Bic Bic			
nanger 14w	99 A U	prospect						ыс	•	•	
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Rar	anger 1 No. 4 Anomaly	56 A	A	U	prospect	thin, low grade mineralization		-]		Bc	retrograded m. amphibolite		
	No. 3 Orebody	56B	A	v	(50,000 v ₃ 0 ₈)		2,970.00	shallow-dipping tabular to lensoid body with conform- able base and down-dip & blind lenses.			Bc	H		
	No. 1 Orebody	56c	A	U	(50,000 v ₃ 0 ₈)	0.3% u ₃ 0 ₈	2,970.00	inverse cone with down-dip conformable lenses	in chlorite rock and chlor-	chlorite schist & micro- gneiss, silicified car-	Bc, Alm	н	chlorite alteration, silic-	
	No. '2 Anomaly	56 D	A	σ	prospect	significant primary & second- ary mineralisat- ion			ite schist, and carbonac- eous schist, particularly in brecciated zones	bonate, massive chlorite, graphite schist	Bc	a		- probably carbonate sol- ution. Uncf. related?
	No. 9 Anomaly	56 E	*	υ	prospect	'medium grade secondary miner- alisation' (no deeper drilling)		. -			Bc	u		
	No. 5 Anomaly	56 F	4	U	prospect					1	Bc	"		
		57	•	U	prospect						Во	m. amphibolite		•
Cor	pper Knob	58	•	Cu	prospect			•	near-surface secondary copper minerals	carbonate	Вс			
And	nomaly Q	59	•	U	prospect						_ABn			
And	nomaly A	60	A	ט	prospect					brecciated chlorite quartz schist, quartzite	Bc	m. amphibolite	stratabound to stratiform	stratabound + metamorphic
Koo	oongarra	61	•	υ.	(12,300 U ₃ 0 ₈)	0.346 % U ₃ 0 ₈	730.62	coalesced stratiform lenses form elongate wedge, dip 55°	secondary tail near sur- face	quartz chlorite & graph- ite schists, garnet quartz muscovite chlorite schist	Вс	retrograded m. amphibolite		hydrothermal + epigenetic, uncf. related?
AS	.2	62	A	υ	prospect				,		Во	m. amphibolite	i	
A S3	3	63	A	U	prospect						Во		unconformity, ?stratabound	
AS4	,4	64	A	U	prospect						Во	u l	?faulting	or epigenetic
AS	5	65	A	U	prospect						Во	• J		
		66	•	Cu,Pb,Zn	prospect			,	minor sulphide films in	1	ABn		faulting	hydrothermal
		67	A	Cu, Pb, Zn	prospect			tabular steep	quartz breccia, oxidised	quarts breccia in gneiss	ABn	•	u	
		68			prospect		J	'	near surface	1	ABn		,	
Coc	ooinda area	69	A		prospect			*	•		Bc	u u	stratabound?	
	m .	70	A		prospect						Be	"		
		71	A		prospect						Bc			
		72			prospect						Bc			
	"	73			prospect						Be			
T ex	-	74 nc		T Db. Cu	prospect			4 554m mile			Bc Bc	**	" litter /inl plane)	
Ter	m Mile Creek	75	A	Pb, Cu	prospect			tabular steep sub- parallel lodes	secondary minerals (main- ly beudantite) in oxidised zone	quartz breccia zones in phyllite	Вс	u. greenschist	faulting (axial plane)	hydrothermal
	ve Sisters		A		prospect				no visible uranium miner- als		Во	Ħ	carbon, unconformity	
Gra	raveside	77	A	U	prospect			tabular steep lodes		breccia zones in phy- llite, nearby meta- dolerite	Во	m. greenschist	breccia, funconformity	?epigenetic
Cru	usader 6	78	K	Th	prospect			tabular steep conformable	thorium in detritals	sandstone, conglomerate	Bpm	1. greenschist	stratiform	syngenetic
Kar	palga	79	K	Fe	prospect			H	ilmenitic siltstone	siltstone	Rpm			•
	rusader 2	80		Th	prospect			n		sandstone, conglomerate	Bpm			*
Crv	usader 4	81	K		prospect			u	II	N	Bpm	н	II .	
		82	K		prospect						Bom?	н		
Red	d Lily	83	K	U	prospect				no visible uranium	carbonaceous shale	Bak	m. greenschist	stratabound?	epigenetic?

Spring Peak	84	K	an	prospect			tabular steep sub- parallel lodes	minor disseminated caseit- erite	quarts veins in sandatone	H pm	a. greenschist	quarts reefs	hydrothermal
South Alligator	85	K	U	prospect	<7.2% Pb over As < 5000 ppm, < 30 ppm				siliceous breccia zone in carbonaceous siltstone	Bsk		breccia zone	hydrothermal
Barramındie	86	K	U	prospect					carbonaceous siltstone & carbonate	Brom	•	?stratabound	
	87	K		prospect			,			Bvs		?stratabound	
Mundogie Hill	88	K	A u	mine			tabular steep	native gold	quarts breccias in phy- llite + arkosė	Bpm	80	quartz breccia reefs	hydrothermal
Anomaly 5a	89	K		prospect					laterite	Cz	1. greenschist		supergene
Anomaly 5A	90	K	U	prospect						Cz			u
Anomaly 50	91	K	U	prospect						Cz	93		
Anomaly 5073	92	K	U	prospect						Cz	1. greenschist		tr .
Anomaly 5087	93	ĸ	U	prospect						Cz	00		n
Yemelba	94	K		.0071		.115	several tabular steep bodies + alluvial	native gold, minor copper	quartz reefs in quartzite	Bpm, Cz	u. greenschist	quartz reefs	hydrothermal
Anomaly 5P	95	K		prospect						Rom	m. greenschist		
Anomalies 5218, 5219	96		U	prospects						Cz	•		supergene
Coirwong	97	K		prospect						Bdz	1. greenschist		
Coirwong Gorge	98	K		prospect				near-surface radiometric anomaly	chert-banded hematitic siltstone	Bak	•		supergene
Gerowie No. 1	99	В		prospect				radon anomalies; no sig- nificant mineralisation	sandstone, siltstone	Bpw	æ	-	
Gerowie No. 2	100	В		prospect				0		Bow			
Gerowie No. 3	101	В	U	prospect				N		Bpw	ů		
Waterfall Creek	102	В	U	prospect				•		Bu		faulting	
Anomaly 2J	103	В	U	prospect	0.98% v ₃ 0 ₈			'yellow-green micaceous uranyl phosphate'	weathered tuffaceous shale & basalt	Bvs	н	faulting, ?stratabound	syngenetic/supe
Sandstone (north)	104	В	U	prospect	<300 ppm U ₃ 08 (<14 ppm U ₃ 08	4850ppm Th at depth)		no visible mineralisation	andesite, sandstone lenses	Ehp	unmetamorphosed	stratabound	supergene
Teagues	105	В	U, Au				linear near-surface	patchy secondaries along faulted sst/sltst contact & in fractures	carbonaceous siltstone, sandstone	Esk, Ehe	1. greenschist	faulting, carbonaceous shale, nearby acid volcanics, unconformity	epigenetic
Rockhole	106	В	U, Au	152 U ₃ 0 ₈	1.1 % 0 ₃ 0 ₈	9.03	several irregular tabular steep bodies along reverse fault			Bak, Bhe	u	ti .	H
O'Dwyers	107	В	U.Au	Au figures in- cluded under				00		Bak, Bhe	œ		
Sherrets	108	В	U, Au	El Sherana				9		Rak, Bhe			n
Airstrip	109	В	υ	prospect			near-surface x4 radioactivity	no visible mineralisation	4	Bak			
Sandstone (south)	110	В	υ.	prospect	<300 ppm U ₃ 0 ₈ , (<14 ppm U ₃ 0 ₈	4850 ppm Th. at depth)		и	andesite, sandstone lenses	Bhp	unmetamorphosed	stratabound	supergene
Alligator Fault	111	В	v	prospect	, ,		near-surface radioactivity			Bhr	1. greenschist		supergene
Boundary (or Stockpile)	112	В	U	prospect				fine-grained pitchblende, yellow powdery secondar- ies	aphanitic rhyolite	Ehe			
Flying Fox	113	В	U	prospect			near-surface radioactivity	10		Hhe	unmetamorphosed	l	и.
El Sherana West	114	В	U, Au, Ag	.007 Ag 185 U ₃ 0 ₈	0.8% U.0 0.5% U.308	.0036 11.0	•		cherty ferruginous silt- stone, carbonaceous			carbonaceous shale, near- by acid volcanics, ?fault-	epigenetic
El Sherana	115	В	U, Au	.33 Au 226 U ₃ 0 _B	,,	5.34 13.42		mainly in fractures. Near surface secondaries. Minor Au. Pb	siltstone, sandstone			ing, unconformity	
	116	В	U	prospect)	near-surface radioactivity		ferruginous siltatone	Bak			supergene
		В	-	prospect					rhyolite	Bhe	unmetamorphosed		#
Chavat [‡] s Line	117												
Chavat [†] s Line Monolith	117 118	В		prospect						Bsk	1. greenschist		

Koolpin	119▲	В	U	3 U ₃ 0 ₈	0.12 % U ₃ 0 ₈	.178		sooty & massive pitch- blende in fractures	carbonaceous shale	Bsk	1. greenschist	?faulting, unconformity	epigenetic
Scinto 6	120	В	σ	3 U ₃ 0 ₈	0.15% U ₃ 0 ₈	.178		secondary mineralis- ation	sheared and jointed ?volcanics	Bdz/Bhe?	п	п	epigenetic supergene?
Cliff Face	121	В	U	prospect						Bsk, Bhe		n	**
Palette	122	В	U, Au	Au incl.under El Sherana 124 U ₃ 0 ₈	2.5% U ₃ 0 ₈	7.37	pipe inclined ~45°, cuts across Bsk/Ehe contact	vein & massive nodular pitchblende, veins native gold, minor secondaries	carbonaceous shale, sandstone	Bsk, Bhe		Ħ	epigenetic
Skull	123	В	130 ⁸	3 U ₃ 08	0.5% u ₃ 0 ₈	.178	irregular	pitchblende nodules in shears	carbonaceous shale	Bsk	unmetamorphose	i "	Ħ
Saddle Ridge	124	В	U	78 U ₃ 0 ₈	0.2% T ₃ 0 ₈	4.63	steep tabular	secondaries, mainly meta- torbernite, minor sooty pitchblende below orebody	bleached carbonaceous shale, rhyolite & tuff	Rsk, Bhe	1. greenschist	carbonaceous shale, nearby acid volcanics, fault, unconformity	epigenetic
Scinto 5	125	В	U	22 U ₃ 0 ₈	0.4% T ₃ 0 ₈	1.307	irregular	secondaries, minor pitch- blende	bleached white & red ferruginous shale	Bak	unmetamorphose	d #	supergene?
Palm	126	В	U	prospect						Bhe	n	m .	II
Clear Springs	127	В	Ū	prospect						Bhe		W .	**
BMR No. 1	128	В	υ	prospect						Bhe	1. greenschist	3	epigenetic
Coronation Hill	129	В	U, Au	75 ^U 3 ⁰ 8	0.36 u ₃ 08	4.46	several ore shoots in volcanic breccia pipe	scoty pitchblende, disseminated & patchy; native gold	altered fragmentary vol- canics & carbonaceous schist	Ehe, Bak		carbonaceous shale, brecciation, unconformity	и
Sleisbeck	130	В	U	3 u ₃ 0 ₈	0.4% T ₃ 0 ₈	.178	irregular near-surface in breccia	pitchblende, secondaries, with phosphate and minor Cu, Ni, Co, As	chloritic carbonaceous schist, quartzite, mud- stone	Bak	u .		?epigenetic
Zamu Creek	131		Pb	mine	20 TAg-Pb ore	.0065	several subparallel veins	argentiferous galena	dolerite	Bdz			
	132		Cu, Pb	prospect]	narrow steep tabular lodes, enechelon within 330° shear zone	near surface copper oxides	diorite	Bdz	n]	
Ludan	133		Cu Pb	prospect)50 snear zone			Bdz	11	Quartz stringers & blows in shear zone, diorite	supergene
Yeuralba King	134	C	Sn]			steep tabular lode	quartz-tourmaline- cassiterite lode	pelitic hornfels, sand- stone		low grade horn- fels	nearby Yeuralba Granite	hydrothermal
	135	C	Sn				alluvial			Cz		Ħ	
	136	C	Sn				II .			Cz		n	
Sandy Creek	137	c	Sn				n			Cz	n	m .	
Zimmons	138	С	Sn, W				narrow steep tabular lodes	topazite lode	altered granite	Bgy		 Yeuralba Granite, hydro- thermal veins & alter- ation zones 	hydrothermal
Lyna! s	139	C	Sn, W, Au				a	tourmalinite/topazite	It	Bgy	"	п	n
O*Sullivans	140	С		35 W0 ₃ 10 Sn		.8 .1325	tt	tourmalinite lode and stringers	π	Bgy	Ħ	u .	m
Gates	141	C		15 Cu	24% Cu	.024	If .	quartz-wolframite greisen		Bu/Egy contact	п	н	п
Black Cat	142	C		l			u u	e .	` n	u	Ħ	H	H
Vivian	143	C		1			u	tr .	п	n	n	, II	п .
	144	C					п	n	n	n		Ħ	n
	145	C					n				× 11		Ħ
Black Diamond	146	C] .			u	и	Ħ	"	1. greenschist	Yeuralba Granite at depth, hydrothermal veining	n
King River	147	C	Sn	4.7 Sn	2.8%	.0623	ti	quartz-tourmaline vein with stringers of coarse cassiterite	shale	Bo	tt .	nearby Yeuralba Granite, conjugate hydrothermal veins (Main Lode')	n

Star of the West	148	С	Sm.				narrow steep tabular lodes	quartz-tourmaline lodes with narrow quartz- cassiterite veinlets	sandstone (partly tuffaceous), shale	Bu	1. greenschist	nearby Yeuralba Granite, conjugate hydrothermal veins ('Main Lode')	hydrothermal
0 sman	149	С	Sn				n	H .	n	Bu	n	n	11
Anaconda & Ray	150	C	Sn	Ì			n .	. "	u	Bu	n	11	11
Eureka & Bull	151	C	Sn				n .	ij	ü	Bu		u	u
Southern Claims	152	С	Sn			•	n			Bu	u •	nearby Yeuralba Granite, conjugate hydrothermal veins ('Stannum King Lode')	n
Ibis	153	С	Sn	1000 Sn	№1.6% Sn	13.25	0		Ħ	Bu		n n	н
	154	С				.,,,,		ii	n	Bu			11
Stannum King & Progress	155	C	Sn	1 .	•		n .	11	n	B u			
Klondyke	156	C	Sn	1					"	Bu			
Red Cross	157	c	Sn	1						Bu .			
Carpentaria	158	D	Cu	6	<40% Cu	.0096	small shallow tabular lodes	azurite malachite	sheared and veined volcan- ics and tuffs		"	host volcanics, nearby diorite, hydrothermal veins	II
Dorothy Creek	159	D	Cu	prospect]		0	II	ü	Bvd			u
	160	D	Au, Cu		•		н	auriferous quartz-iron- stone reefs, minor Cu. Sulphidic at depth?	quartz ironstone reefs in basalt, tuff and diorite	Bvd/Bdz	"	Ħ	п
	161	D	Au, Cu	1			u .	n	H	Bvd/Bdz		u	11
	162	В	Au, Cu			.243		u		Bvd/Bdz	e e	a	n
	163	D	Au, Cu	1		•24)				Bvd/Bdz			
	164	В	Au, Cu	.015 Au						Bvd/Bdz			
	165	D	Au, Cu					"	"	•	 		
Mount Cotos	165A		•)		110				Bvd/Bdz			
Mount Gates		D	Au	.007		.113		auriferous quartz reefs	quartz reefs in meta- sandstone slate	Bu		hydrothermal veins, nearby dolerite and granite dykes	
ABC	166		υ	prospect	0.4% U ₃ 0 ₈	.0238	shallow irregular	autunite, phosphuranylite	interbedded tuff and amygdaloidal basalt	Bhm	unmetamorphosed	host volcanics, ?nearby deep fracturing	epigenetic/syngenetic?
Mary River Junction	167	E	Cu	20		.32	shallow narrow steep lodes	malachite	minor brecciated shears in and beside massive quartz vein, in shale	Bap	1. greenschist	shearing along hydrothermal vein	l hydrothermal supergene
Ross	168	E	Sn	prospect					shale, greywacke	Bu			
Mary River Camp	169	E	Sn	40		.64	alluvial			Cz			
Coronet Hill	170	E	Cu, Pb, Zn As, Ag	, 56 Cu	22 % Cu	.896	several parallel steep lodes 1-3 m wide	quartz-sulphide lodes, pyrite+arsenopyrite+ chalcopyrite+galena, <0.7% Bi. Scorodite in oxidised zone	tuff, greywacke, silt- stone	Esp/Bu	l. greenschist	NW shear zone,	hydrothermal
	171	E	Cu?	prospect					granite	Bgc			n
Mount Davis	172	E	Cu	204		3.26	steep tabular, 2 parallel lodes 0.3-1.2 m wide	quartz sulphide lodes	quartz mica-chlorite pendant in granite	Bgc/Bu	hornfels	roof zone of pluton hydrothermal veins	н
	173	E	Cu	prospect						Bu			
Evelyn	174	E	Po,Ag,Zn, Cd,Au	22 Ag, .007 Au 47.5 Cd, 4990 Pb, 5980 Zn	, 5.5% Pb, 7.5% Zn, 275 gm/T Ag	Ag 11.28 Au .113 Gd .223 Pb 3.24 2n 4.28	mine steep parallel lodes ∠1.7 m wide crosscut bedding	Ag-Pb-Zn lodes, mainly galena & sphalerite; hydroxincite, smithsonite, cerrusite, anglesite, malachite, azurite in oxidised zone	crystalline dolomite/ skarn/calcareous slete	Bak	calc-silicate hornfels	skarn adjacent to granite	metasomatic
El Dollarado	175	E	Co	prospect				no apparent mineralis- ation	chert-nodular siltstone	Bsp	1. greenschist		

Northern Hercules	176	Б	Au, Pb, Cu	.93 Au, minor Cu		15.04	3 parallel lodes < 1.6 m wide, dip 70° W	quartz sulphide lodes, pyrite <u>+</u> arsenopyrite, minor Cu Pb Zn sulphides. Extensive secondary miner- alisation in oxidised zone	greywacke slate	Bsp	1. greenschist	shear zone, hydrothermal veins	hydrother
Bower Bird	177	E	Cu, Pb	8 Pb		•0052		argentiferous galena	greywacke, slate	Bsp	1. greenschist	shear zone, hydrothermal veins	u
Mount Gardiner	178	E	Cu,Pb,Ag	2 Pb		.0012	2 parallel shear zones, steep tabular	quartz, iron & copper oxides & carbonates	slatey hornfels	Bu	hornfels	shear zones, hydrothermal veining, nearby granite	ıı
IXL	179	E	Cu	mine		•	vertical shear zone		II	Bu	n	11	n n
McCarthys	180	E	Pb Ag	.16 Ag 400 Pb	280 gm/TAg 70% Pb	.082 .260	transgressive steep shear zone < 1 m wide		andalusite-chiastolite hornfels	Bsk	II .	п	11
Waldens	180A	E	Sn	mine			alluvial			Cz			
Mount Diamond	181	E	Cu	3.4 Ag, 36 As, .005 Au, 40 Bi, 2500 Cu	10 % Cu	Ag 1.74 As .22 Au .081 Bi .156 Cu 4.0	NW lode, steep tabular <1 m wide	quartz-chalcopyrite lode, minor bornite, Cu oxides + carbonates	hornfels with aplite & quartz porphyry dykes	Bu	hornfels	shear zone, hydrothermal veining, nearby granite	hydrother
Waldens	182	E	Cu	100	8_10%	.16	steep NW lode < 2 m wide	u	hornfels	Bu	11		"
	183	E	Au	prospect			alluvial			Cz			
Wandi e	184	E	Au	.18 Au		2.91	numerous NNW lodes, steep & ~ parallel to strike, and alluvial	auriferous quartz veins	slate	Bu, Cz	1. greenschist	hydrothermal veins	hydrother
	185	E	Au	prospect			TI .	n		Bu, Cz		u	н
Saunders Rush	186	E	Au	mine			II .	tt	II .	Bu, Cz		u .	
	187	E	Au	mine			11	H	11	Bu		n .	
Brilliant	188	E	Au	mine			. u	11	11	Bu			
Crest of the Wave	189	E	Sn	100		1.32	tabular body in NW lode dip 60°, parallel to strike, ~0.2 m wide	quartz-cassiterite reef, minor arsenopyrite	chlorite schist	Bu	Ħ	n	"
Tableland	190	E	Pb,Zn	prospect			quartz lenses < 0.7 m wide in NNW shear	galena sphalerite quartz lenses	shale, greywacke	Bu	•	shear zone, nearby granite	"
Silver Spray	191	E	Pb, Zn, Ag	85 Pb		.055	u	11	II .	Bu	u	u u	11
Harveys or Last Hope	192	E	Au	1 Kg Au		.016	steep E reefs	auriferous quartz reefs	n	Bu	II .	II .	n
	193	E	Cu	prospect					n	Bu	#		
	193A	E	Cu	prospect					H	Bu	H.	**	
	194	E	Cu	prospect					ll .	Bu	11	v	
Wolfram Hill	195	E	W, Cu	70 Cu 440 WO ₃	30% Cu	.112 10	2 parallel NW-NNW steep lodes, subparallel bedd- ing & joints. Best ore in steeply pitching pipes <3 m wide.	wolfram, chalcopyrite, minor pyrite, arsenopyrite in quartz biotite gangue	hornfelsed siltstone	F u	hornfels	hydrothermal veining, nearby granite	H
Connells	196	E	Sn	mine			irregular	disseminated cassiterite in granite	granite	Bgw		hydrothermal veining near granite cusp	"
Kellys	196▲	E	Sn, W	mine				cassiterite & minor wolf- ram in quartz + iron oxides + argillite reef	•	Bgw		,	
Irwins	197	E	Cu	mine			NW lode, 1.2-3.1 m wide	. CERTITION LEGI	hornfelsed siltstone	Bu	hornfels	hydrothermal veining,	
Martins	198	E	Sn	mine			irregular	disseminated cassiterite	granite	Bgw	Worth 619	nearby granite hydrothermal veining near	
				witte				in granite		_		granite cusp	
Bells	199	E	Sn, monazite				shallow, gently dipping tabular bodies in breccias	disseminated cassiterite in breccia zones	slate	Bu	hornfels	breccia zones, nearby granite	"
Black Angel	200	E	Sn	35 Sn		.464	II .	u		Bu		II .	11

.

Mountain View	202	E	W	mine		•	NW-NNW bodies dip 30°, 3-15 cm wide	wolfram in pegmatite	slate	B u	hornfels	pegaatite near granite	ydrothermal
Black Hill	203	E	Sn, W	prospect		•	narrow tabular	wolfram in quartz veins	н	Bu	H	hydrothermal veins near granite	
Crocodile Billabong	204	E	Pb	prospect			near-surface 10 m wide steep	cerussite	siltstone	Bu		crush zone in contact aureole	n
	205	E	Pb	prospect			near surface			Bu	11		н
	206	E	Pb	prospect			n		II .	Bu			
Wests	207	E	Pb	17.5 Pb .024 Ag	70 % Pb 950 gm/TAg	.0114 .0123	н		N	Bu	*		•
Emerald Creek	208	E	Sn	30		-397	several parallel steep lodes parallel to strike	cassiterite in quartx reefs, iron oxides & lead oxides at surface	siltstone, greywacke	Pau	1. greenschist	hydrothermal veins near granite	
Craers	209	E	Au				shallows short steep, irregular to tabular	auriferous quartz reefs & adjacent small fracture in-fills	u	B u		hydrothermal veins near granite, extensive faul- ting	tt
Lady Jane	210	E	Au	.15 Au	14 gm/T	2.43	Ħ	H	и	Bu	11	п	H
Lady Mary	211	E	∆u	•			n	tt .	H	Bu	n	a	h.
Gordon & Parrys	212	E	A u	,			n	it	п	B u	н	11	
Scotchman	213	E	Sn, Cu	460 Sn		6.09	irregular narrow N-NW bodies in fissures and shears < 0.8 m wide. Also alluvial	cassiterite in quartz kaolin veins, and in fissure infills, minor copper	н	Fu, Cz	n	hydrothermal veins near granite	Ħ
Boylings	214	E	Sn	J			п	n	п	Bu, Cz		N	11
	215	E	A u						II .	Bu	n	n	W
Quigley's Reef	216	E	∆u		20 gm/T		large, tabular, steep,	auriferous quartz reef	n	Bu	н	n	H
	217	E	Au				п	H	H .	Bu	п	n	n
Jones Bros	218	E	A u	0.026	24.5 gm/T	.42	long steep N tabular body <1 m wide	ferruginous quarts reef	greywacke, slate	Pu	1. greenschist	hydrothermal vein near granite	н
Tollis Reef	219	E	A u	mines	21.4 gm/T		long steep NW tabular body < 1.3 m wide	н	ti .	Bu		Ħ	
Morris	220	E	Sn	mine			N-NW irregular lenticular bodies in sub-conformable	cassiterite in quartz kaoline veins	н	Pu		, H	n
	221	E	Sn	130		1.72	shears "	n	n	Bu	u	п	
	222	E	Sn	l			Ħ	11	н	Bu	Ħ	H	n
Shamrock	223	E	Sn	mine			H		n	Bu	Ħ	н	Ħ
	224	E	Cu	prospect	_				u .	Bu	n		н
Edith River	225	E	Ū	prospect			patchy bodies in N or NW shears	disseminated torbernite & meta-autunite + apatite & hematite in quartz veins	silicified greisenised granite	Egc		hydrothermal alteration zones & quarts veining in granite	п
	226	E	-	prospect			п	n	n	Bgc			H
Tennysons	227	E		prospect	Į.		H	n	n .	Rgc		Ħ	Ħ
	228	E		prospect	0.1-0.2%		n	n	н	Bgc		n	H
	229	E	U	prospect	U ₃ 0 ₈ at surface		n	н	H	Rgc		n	н
	230	E	u	prospect	1		n	n	н	Bgc		н	n
Here & O'Connor's	231	E		prospect	j		н		n	Bgc		п	H
Yenberrie	232	E	W, Mo, Bi mines	0.125 Mo 160 WO ₃		.0063 3.5	steep tabular reefs, parallel to aplite dykes. Also dissem, in joints & mica rich seams	greisenised quartz aplite dykes containing wolfram å minor molybdenite in quartz veins. Fe, Cu, Bi sulphides at depth	aplite dykes in granite	Egc.		altered aplites near roof of granite	н
	233	E								Bgc		a .	H
Yenberrie	234	E	U	prospect			patchy bodies in N or NW sheets	disemminated torbernite & meta-autunite + apatite & sematite in quarts veins	silicified greisenised granite	Bgc		hydrothermal alteration somes & quartz veining in granite	n H
	235	E	Sn							Bgc			

Woolngi	236	E	Au	0.13		2.1	E & NNW tabular body < 1 m	auriferous quartz reef	hornfels	Hu	hornfels	hydrothermal veining near granite	hydrothermal
	237	E	W				wide, steep		tt	Bu		Er amr ce	
	238		 Au				steep tabular reef	auriferous quartz reef	II .	Etu .		II.	u
	239		W				soop odeana room	data and days on 1001	11	Bu	н		
Fergusson River	240		U	prospect			patchy bodies in N or NW shears	disseminated torbernite & meta-autunite + apatite & hematite in quartz veins	silicified greisenised granite	Bgc	Ħ	hydrothermal alteration zones & quartz veining in granite	н .
	241	E	w .						grani te	Bgc			tt .
Umbrawarra	242	E	Sn	190		2.52	alluvial			Cz			
Christmas	243	E	Au	prospect				altered aplite dykes	granite	Bgc		altered aplite in granite	u
	244	E	Pb, Cu				steep tabular < 2 m wide	Pb Cu oxides in massive-brecciated quartz veins	granite-hornfels contact	Bgc/Bu		hydrothermal veining near granite	11
Mount Wigley	245	E	Pb, Ag	0.03 Ag 10 Pb		.0154 .0065	steep tabular NNW lode 0.8 m wide	quartz-galena lode	shale, greywacke	Bu	l.greenschist	ıt	u
Lucknow	246	E	Pb, Ag	15 Pb 0.04 Ag		.0098 .0205	steep tabular	u	п	Bu	и .	11	tt
Copperfield	247	E	Cu	260	12%	.416	NNW lode dips 60° with bedding, tabular, <0.9 m wide	malachite, azurite in & close to brecciated quartz reef	hornfelsed shale & greywacke	Bu	hornfels	u.	II
Stray Creek	248	E	Sn	13		.172	alluvial			Cz			
	249	E	Cu?	prospect			false gossan on quartz breccia reef	barren quartz-iron oxide blow	granite	Bgc		hydrothermal veining in granite	hydrothermal
	250	E	Pb?	prospect				gossan	shale, greywacke	Bu	1.greenschist	hydrothermal veining near granite	u
Cosmopolitan Battery	251	E	Au, Ng	mine			alluvial (extraction of Au/Hg amalga	am in tailings originally fro	om Elsinore)				
Humak⁴s	252		Pb,Ag	prospect			NNW steep tabular lode	argentiferous galena quartz breccią lode	shale, greywacke	Bu	1.greenschist	hydrothermal veining near granite	11
Kellys	252▲		Sn	2	4.4%	.0265	small quartz veins in N shear zone	cassiterite in ferrugin- ous quartz veins	hornfelsed shale & greywacke	Ru	hornfels	п	H
Caledonian	253		A u	•013		•21	alluvial			Cz			
Elsinore & others	254		Au							Bu			hydrothermal
Kohinoor & others	255		A u	i						B u			n
Eleanore & others	256	E	Au				steep conformable to			₽u			II .
Sagabiel & others	257		A u	2.7 Au .007 Ag	39 gm/TAu	43.66 .0036	transcurrent lodes & S-			Đu			H .
Bashi Bazouk & others	258		Au	1 Pb	Jy Rmy Ind	.0007	plunging saddle reefs	auriferous quartz reefs, minor Ag-Pb & Sn bearing	shale, greywacke, minor arkose, in places horn-	Bu	l.greenschist hornfelsed in	hydrothermal veining in	
Enterprise & North Enterprise	259		Au	1.6 Sn		.0212	gently dipping leaders, numerous adjacent alluv-	reefs	felsed	Bu	places	major lineament, near granite	
New Monarch	259▲		Δu	1			ial & eluvial workings			Bu			n
Touchango	260		A u						•	Bu			#
Maid of Erin	261	E	Au							Bu		**	"
Gandy's Hill & North Gandys	262	E	Au]						Bu			Ħ
	262A			prospect		,	narrow steep parallel bodies	auriferous quartz reefs	carbonaceous shale	Bsp	It	hydrothermal veining near granite	II
	263		A u			į	en echelon quartz reefs in 2 subparallel NNW •	auriferous quartz reefs + pyrite, arsenopyrite, minor	hornfelsed slate &	Bu	u	II	н
Union Reefs	264		Au	1.6		25.87	shears < 5 m wide	galena & Cu sulphides +	greywacke	Bu	n.	H	Ħ
	265		Au			,		calcite dolomite ankerite		Bu	u u	tt	и
	266		Pb				NNW shear zone		sheared shale & grey- wacke	Bu	1.greenschist	N	
	266▲	E	Au				ii .		u	Bu	11	u u	#
	267	E	Pb				H .		п	BU	tt .	n	H

B 114	268		Sn				alluvial			Cz			
Rudi * s	269	-	Sn Sn				alluvial			Cz			
	270	E					near-surface tabular steep	malachite in breccia matrix	quartz breccia zone in altered granite	Bgc		shear zone & alteration in granite	hydrothermal
	271	E							sheared shale & grey- wacke	E u	1.greenschist	hydrothermal veining in shear zone, near granite	11
Flora Belle	272	E	Ag, Pb	.036 Ag 20 Pb		.0185 .013	vertical tabular lode, NNW, 1 m wide, in major	galena, sphalerite, mar- casite, arsenopyrite in	u	Bu	я	n	11
Elisabeth	273	E	Au	•097		1.57	shear zone NNW quartz reef <1 m wide dips 60° parallel to bedding	quartz auriferous quartz reef	п	Bu .	u	n	11
	274	P	Au				pedding	u		Bu			
Extended Union	275		Au					ı.		Bu			
Union Extended	276		Au	.1		1,62	irregular discontinuous			Bu			
onion Extended	2/6	L	Au	• '		1,02		auriferous stringers; rich 'secondary gold' assoc.with carbonate replacement zones		BU	•	"	
	277	E	Рь					argentiferous quartz veins in shear zone	Sheared shale, silt- stone & greywacke, minor dolerite dykes	B u	**	a '	
	278	E	Au					auriferous quartz stringers in shear zone	•	Bu	н	н	u
Watts Creek	279	E	Au	mine			alluvial	,		Cz			
Jasmine	280	F	Fe, Au				near-surface tabular to lenticular, flat to steep	massive hematite- goethite	pyritic carbonaceous siltstone, commonly brecciated	Bpw	1.greenschist	stratabound, brecciated pyritic black shales, pre- Mesozoic unconformity	supergene
Rosemary	281	F	Fe, Au				n	H .	II .	Bpw		n	n
Thelma Frances	282	F	Fe, Au	5,500,000	63% Fe	88	11	II .	TI .	Bpw	n	n	et .
Elizabeth Marion	283		Fe, Au	Fe ore mined		72	Ħ	N.	n	B pw	tt	н	11
Relene 1	284	F	Fe, Au	(4,500,000 reserves)			11	н	ır	Bpw	a	u u	ıı
Helene 2	285	F	Fe,Au				H.	Ħ	II .	Bpw	n	n	
Nellie Creek	285▲	E	Sn	2		.0265	alluvial	u	11	Cz	11	n	
	286	E	Fe	prospect			near-surface linear	massive hematite, goethite	pyritic carbonaceous siltstone	Bom	1.greenschist	stratabound, pyritic sed- iments at depth, pre- Mesozoic unconformity	supergene
Frances Creek	287	E	Au, Ag	.006 Au .06 Kg Ag		.097	alluvial			Cz			
Ochre Hill	288	F	Fe	prospect			shallow lenticular bodies	massive goethite, hem- atite	sheared brecciated slate & greywacke, iron oxides	Bpw	l.greenschist	stratabound, brecciated pyritic sediments at depth pre-Mesozoic unconformity	supergene
Saddle & Saddle Extended	289	F	Fe	prospect			N .	u	11	Врw	н	н	**
Frances Creek lode	290		Aυ	.2 Kg		.0032	steep narrow lodes	auriferous quartz reefs	sandstone	Врш	11	hydrothermal veining near granite	hydrothermal
	291	E	Au				II .	II .	II .	Bpm	"	u .	
McKeddies	292	E	A u	prospect			alluvial			Cz			
Glenys	293	E	Sn	1		.0132	alluvial			Cz			
Mount George	294	E	Sn	11		.146	quartz veins and stock- works	auriferous quartz in veins & stockwork	hornfelsed sandstone & slate	B pm	hornfels	hydrothermal veining in crush zone near granite	hydrothermal
Big Drum	295		Sn	1		.0132	steep, 5 cm - 1 m wide, tabular	iron stained quartz reef, sparse dissem. cassiterite	siltstone	Bpw	l.greenschist	hydrothermal veining near granite	n
Mount Masson	296		Sn	65	1.10% Sn	.861	ti .	cassiterite in quartz vein		Bpw		ii	н
Billy Can	297	E	Sn	2 50	1% Sn	3.31 3.31	cigar to tabular near- surface, N, 60-35° dip, approx. conformable	oxidised, leached & brecc- iated body with cassiterite above quartz-sulphide lode	N 3	Bpw		n	H
Jessops	298	E	Sn				a	II	R	₽pw	"	11	H

	299	E	Pb, Zn	prospect				gossan over quarts-	tuff	Bvg	l.greenschist	hydrothermal veining near	hydrothermal
			,					sulphide lode		_	_	granite	any of the tract
	300		Pb,Zn	prospect					11	Bvg		"	u .
	301	E		prospect			A	•		Bpw	"	H	11
Margaret	302	E	Sn				net veins, quartz reefs <2 m, in tension gashes in N-trending faults	ferruginous quartz veins with cassiterite & minor gold	hornfelsed slate and sandstone	Врш	hornfels	hydrothermal veining in tensional faults near granite	11
11	303	E	Sn	30	1.10% Sn	•3975	II .	II	tt .	B pm	II	u	11
Buffalo	304	E	Sn				II	н	и	B pm	H		H
Nelson	305	E	Sn			^	n	m .	at .	Bpm	u	n	н
	306	E					•		tuff	Bvg			
	306▲								siltstone	Bpw			
Hardies or McKinlay	307	E	Au	mine			several quartz reefs in NNW shear zone > 10 m wide	auriferous quartz reefs + limonite, clay, minor pyrite & arsenopyrite	sandstone, slate, chlor- itic slate	Bu	l.greenschist	hydrothermal veining in shear zone	hydrothermal
Minglo	307▲	E	Pb,Ag	.002 Ag 6.8 Pb	58% Pb, 125.6 gm/T Ag	.001 .0042		anglesite-galena 'potatoes' in quartz breccia	hornfelsed carbonaceous shale	Bpw	hornfels	hydrothermal veining in breccia zone near granite	и
	308	E							siltstone, greywacke	Bu .			
Namoona	308▲	-	Pb	prospect			parallel lodes, one parallel bedding, one steep transgressive < 0.8 m_wide	massive & dissem. galena in brecciated quartz- veined zones. Galena & cerussite in gossan	carbonaceous shale, cal- careous shale & sandstone	Bnm	1.greenschist	hydrothermal veining	hydrothermal
Mavis	309	E	Sn	2.7		.0358	conformable lode 15 cm	cassiterite in quartz vein + minor hematite & limonite	hornfelsed shale & grey- wacke	Bu	hornfels	н .	u
	309A	E	Au						hornfelsed siltstone, chert bands	Bap	hornfels	hydrothermal veining near granite	
	309B	E	Au						hornfelsed shale & greywacke	Bu	n	n	п
	3090		Cu	prospect			near-surface portion of steep tabular body	malachite in brecciated quartz vein	basalt agglomerate	Bvs	1.greenschist	hydrothermal veining, vol- canic host rock	syngenetic exhalative
	310	E	Au?				\$		hornfelsed siltstone & greywacke	Bu	hornfels	hydrothermal veining near granite	hydrothermal
	310A		Pb	prospect			narrow, tabular 70° dip	lead oxides in gossan	carbonaceous shale & calcarenite	Rnm	1.greenschist	a	н
Horners Creek	310B	E	Au	mine			alluvial			Cz			
	311	E	Au	prospect						Bap	1.greenschist	hydrothermal veining near granite	hydrothermal
	311A		Pb	prospect			narrow, tabular, 70 [°] dip	lead oxides in gossan	carbonaceous shale & calcarenite	Rom	u		II .
Mundic	312	E	Sn	see Dean's Cam	p		E steep tabular body 0.7 m wide	quartz-pyrite-clay cass- iterite vein	slightly hornfelsed tuff- aceous siltstone & hematitic shale	Bap	II		H
Gubberah Gossan or Mary River	312▲		Cu,Pb	prospect			steep tabular trans- gressive NE	gossan over quartz sulphide lode	arkose, feldspathic quartzite	B pm	и	tt	II .
Dean's Camp or Jimmys Knob	313	E	Sn	230 (includes Mundic, Horses & Snaddens Cre		3.05	numerous narrow veins	rich fine to coarse cassiterite-quartz- chlorite veins	composite granitoid intruding black slate	Вар	п	hydrothermal veining in altered granitic dyke	ıı
McKinlay	3134	E	Ag,Pb	1.5 Ag, 135 Pb 3 Sn, 0.2 Zn		Ag .7694 Pb .0876 Sn .0398 Zn .0001	N dip 55 [°] tabular <1 m wide	galena, cerussite, pyrite	siltstone, greywacke	Bu	n	hydrothermal veining near granite	H
Final Finn	313B	E	Cu,Sn		1% Sn, 450 ppm Cu		narrow tabular steep	quartz hematite vein	tuff, ferruginous siltstone	Взр			
	314	E	Sn							Bvg			
	31 4A									Bu			

Hor se shoe	315	E	Sn	see Dean's Camp			2 tabular steep bodies, + alluvial	kaolinised porphyry dyke; gossaneous shear zone at amphibolite contact	ferruginous siltstone, metadolerite	Bok, Eds	1.greenschist	hydrothermal veining in shears near granite	hydrothermal
Spring Hill	315▲	E	Au	0.6 Au 0.25 Kg Ag		9.702 .0001	3 parallel N shears, steep tabular < 4 m wide	ferruginous quartz reef	black slate	Bap	и	u	Ħ
	316	E	Au							Bap	u	n	H
	316A	E	Au							Bu	ır	u	ii .
	317	E	Sn							Bap	II .		
Mount Wells	3174	E	Sn,Gu	1070 Sn 2.6 Cu	1% Sn	14.176 .0042	veins <1.2 m wide, stack- works <6 m wide in N trending & plunging 300 m wide zone with 5 main parallel lodes	quartz-pyrite-chalcopy- rite + cassiterite + wolframite + chalcocite as dissem. crystals, aggregates, or isolated patches	hornfelsed biotite sericite greywacke, shale and quartzite	Bu	hornfels	hydrothermal veining, alteration and shearing above concealed granite cusp	hydrothermal
	318	E	Sn				narrow tabular steep NW	quartz cassiterite lodes	siltstone, greywacke	Bap	l.greenschist	hydrothermal veining near granite	II .
	319	E	Sn				H	11	н	Bsp	11	н	, n
	320	E	Sn				Ħ	ıı	u .			II .	n
	321	E	Sn				II	u .			п	ii	tt .
	322	E	Sn				H	n	at .		n	n	
Snadden's Creek alluvial	323	E	Sn				alluvial			Cz			
Douglas River	323A		Sn	2		.0265	n			Cz			
	324	E	Au				narrow tabular steep NW	quartz cassiterite lode	shale, greywacke	Bu	1.greenschist	hydrothermal vein in shear near granite	hydrothermal
	325	E	Sn				Ħ	II	II .	Bap	н	hydrothermal veining near granite	н
	326	E	Sn				, #	disseminated & stannif- erous quartz veins in minette	altered minette dyke intruding shale, grey- wacke	Bsp	н	hydrothermal veining and alteration of minette, near granite	п
Margaret Diggings	327	E	Au	mine			tabular steep & alluvial	auriferous quartz reefs	metadolerite	Cz, Bdz	1.greenschist	hydrothermal veining near granite	n
	327▲	E	A u					u	black shales	Esk	н	N	n
Burrundie	328	E	υ	prospect			shallow flat	anomalous radioactivity in gossan	gossan on pyritic black shale	Esk	at	ferruginous material over black shale	supergene
Pickfords or Bonnie Jean	329	E	Pb,Ag	1.3 Kg Ag 0.1 Kg Au 9 Pb		.0007 .0016 .0089	several narrow steep quartz veins in NNW shear	cerussite + Cu oxides in quartz veins, in graphite shear zones	tuff, tuffaceous silt- stone	Evg	и	hydrothermal veining near granite	hydrothermal
Mount Bonnie	330	E	Au, Ag, Cu, Pb, Zn	(2.7 Ag) (7500 Pb) (38500 Zn)	1.5% Pb, 7.7% Zn, 6 gm/T Ag	1.385 4.875 27.566	conformable NNE 20 m wide lode, dip 40°	stratabound <u>+</u> stratified sulphide-silicate-carbon- ate massive lode. Mainly pyrrhotite & sphalerite. Also silver, trace gold.	ashstone with pebble breccia, minor carbon- aceous mudstone	Bsp	н	stratigraphy, mudflow breccia & carbonaceous mudstone	syngenetic (di ^q genetic)
	331	E								Bsp	0		
Port Darwin Camp	332	E	Au	mine			alluvial			Cz			
Heatleys	332A	E	Po, Zn, Cu	prospect	minor zone 4% Pb		conformable lenses and aggregates	dissem, sulphides, quartz- sulphide veins	carbonaceous meta- siltstone, tourmalinite	Bsk	11	stratigraphy, tourmalinite iron-rich sediments	, exhalative + epigenetic
Good Shepherd	332B	E	Au	mine			II .	II	n	Bsk/Bdz	n		
Hayes Creek	333	E	Sn	110		1.467	5 cm - 2 m lodes dip 30- 90 in NNE fractured axial zone of anticline	quartz-cassiterite + minor iron oxides	slate, greywacke	B u	tt	hydrothermal veining near granite, intense fractur- ing	hydrothermal
Golden Dyke	334	E	A u	.035 Au .7 Kg Ag	11 gm/T Au	.566 .0004	Nw lode, conformable, dip 70, <3 m wide	finely disseminated gold + impregnated sulphides in host rocks, also Au in quartz veins	ferrug, siltstone, carbonaceous shale, tourmaline	Bsk	u	stratigraphy, tourmalinite, iron-rich sediments	exhalative + epigenetic
Afghan Gully	335	E	Au	prospect				ti	u	Bsk	11	ti .	u .
Davis Camp	336	E	∆ u	prospect				tt	- n	Bak	11	н	n
Sandy Creek	337	E	Au	mine			alluvial			Cz			
Stuarts Gully	338	E	Au				n			Cz			

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	339		A u				NNW conformable tabular bodies, dip 60°, plunge 20° N, 0.1 - 2 m wide	auriferous quartz lodes, minor chalcopyrite & arsenopyrite	shale, greywacke	Bap	l.greenschist	stratabound, hydrothermal veining near granite	hydrothermal
Radfords Blow	340	E	Au	mine			20 M, 0.1 = 2 M WIGE	ar semply i i de	ıı	Bap	n	H	п
Iron Blow	341	E	Cu,Pb,Zn, Au,Ag	60 Cu	7.7 gm/T Au, 0.1-1.0% Cu (4-5% Pb,6-14% 2n, 280-560 gm/ T Ag in places)	.039			H	Bap	Ħ	"	"
Neates Gully	342	E	A u	mine			alluvial			Cx			
Princess Louise	343	E	A u	mine			NNW conformable tabular	auriferous quartz reefs,	shale, greywacke	Bsp	1.greenschist	stratabound, hydrothermal veining near granite	hydrothermal
Temperance	344	E	A u	mine			bodies, dip 60°, plunge 20°N. 0.1-2 m wide	minor chalcopyrite and arsenopyrite	#	Bsp	<i>)</i> #	n	a
Yam Creek	345	E	A u	.44		7.115]	an Domopy and	11	Bap	H	H	
	346	E					NW steep tabular lodes in anticlinal axis, 5 cm-	auriferous quartz veins	n	Ru, Cz	п	hydrothermal veining in axial plane	,
Fountainhead	347	E	∆u	.28		4.53	0.9 m wide. Also alluvial		Ħ	Bu, Cz	н	n	
	348	E	A u				conformable disseminat - ions, locally transgress- ive steep lodes	disseminated gold + sulphides. Gold + pyrite + arsenopyrite in quartz veins in minor fold closures	graphitic shale, chert- banded siltstone, tuff	Bsk	П	Bsk/Bsp contact, shale, tourmalinite, minor folds	syngenetic/exhalative + epigenetic
	349	E	A u				n	II	n	Bak	п	н	н
	350	E	Au				n	n	11	Bsk	n	*	
	351	E	Au .					n .	n .	Bak	п	Ħ	Ħ
	352	E	Au				п	n	n	Bak	11	n	н
Cosmopolitan Howley	353	E	Au	0.96	19.2 gm/T	15.52	H	п	n	Bsk	ir	Ħ	n
Fleur de Lys	354	E	U, Cu	0.15 U ₃ 0 ₈		.0089	patches in conformable shear zones & joints & along bedding planes	uraninite+pyrite+chal- copyrite in shears. U+ Cu oxides near surface	siltstone, slate	Bak	•	hydrothermal	hydrothermal; possible exhalative/epigenetic
Chinese Howley	355	E	≜ u	0.55		8.89	alluvial+steep tabular bodies 15-30 cm wide	auriferous quartz veins	graphitic shale, silt- stone	Bak, Cz		stratigraphic, hydro- thermal	syngenetic/exhalative + epigenetic?
Big Howley	355▲	E	∆u	0.37		5,98	conformable saddle reef <6 m thick, NW pitch 33	quartz+gold+pyrite+ arsenopyrite	H	Bak	Ħ	н	R
Philip Greets	356	E	Cu	90	25-30%	.0585	N vertical tabular lode 1 m wide			Bap	п	hydrothermal veining near granite, parallel major N fault some	hydrothermal
	357	E	Cu							Bsp	н	n	
Wheatleys	358	E	Pb	prospect						Rvg	H	n	
	359	E	Cu	prospect						Bvg	n	H	n
Carruthers	360	E	Sn	prospect						Bvg	n	n ·	•
Green Ant Creek	361	E	Mn	250 MnO ₂		.17	irregular to flat	manganiferous altered & replaced siltstone	siltstone	Bu	l.greenschist	pre-Mesozoic land surface	supergene
Hillside	362	E	Mn	44 MnO ₂		.03	II .	H		Bu	H.	N	Ħ
Chinamens Hill	363	E	Sn	prospect			shallow tabular	cassiterite in pegmatite & greisen	siltstone, greywacke	Bu	п	hydrothermal veining near granite	hydrothermal
Barretts	363 A	E	Sn	80		1.06	NW irregular < 30 m wide, dip 30 NE	a	п	Bu	n	n	н
Pyromorphite	364		Pb	prospect					n	Bu			
Halls Creek	365	E	Sn	prospect			shallow tabular	cassiterite in greisen and pegmatite	п	Bu		n	п
Full Hand	366	E	Cu,Pb,U	2 Cu		.0013	2 lodes, one NNE 0.3-1 m thick, one ENE <3 m wide	rich patchy Gu oxides; dissem. Gu & Pb oxides. Minor U minerals	siltstone, graphitic shale	Bap	n	hydrothermal veins in shear zones near granite	r H
Jacksons	367	E	Pb,Ag	0.25 Pb 0.9 Kg Ag	av. 3% Pb over 16 m width of lode	.0002 .0005	narrow seams	galena & cerussite rich veinlets	feldspar porphyry in- truding hornfelsed shales	Bap	hornfels	hydrothermal veins in porphyry, near granite	п

Old Company (or Mt Shoobridge)	368	E	Sn	102		1.35	NNW zone of lodes < 2 m wide in 30 m wide NNW zone	patchy cassiterite shoots in quartz muscovite reef, & pegmatite & greisen stringers	siltstone, greywacke	Bu	hornfels	hydrothermal veining near granite	hydrothermal
Zapopan	369	E	≜ u,Pb	0.76 Au	< 10% Pb in places 20.5 gm/T Au	12.29		gold, galena in vein quartz	tuff, siltstone	Bvg	n	hydrothermal veining, fault controlled, near granite	II
Victoria	369▲	E	∆ u .	l		i		gold in vein quartz	п	Bvg	n	n	n
Morning Star	369B	E	A n					n	· ·	Bvg		H	н
Homeward Bound	3690	F	∆u	l		l			H .	Bvg		H	
Faded Lily	370	E	A u	0.18		2.91	WNW fault line	n	N .	Bvg	н	u .	11
Alligator	371	E	A u	1		1	containing W & cross	n	II .	Bvg		n	н
Crocodile	372	E	Au	Ì		į	lodes 30 cm-4 m wide, dip 60% steep.	н		Bvg		H .	11
John Bull	373		Au, Cu	•		ı	Best values at lode	gold, minor Cu in vein	п	Bvg		H	11
oun ball	212	_	,	J		J	intersections	quartz		6			•
Mackay & Frances	374	E	Cu, Au	mine	∠36% Cu <20 gm/T Au		25 cm wide lode	chalcocite-rich quartz lode, minor gold	ferruginous siltatone	Bak	"	hydrothermal veining near granite	и .
Brittania	375	E	A u	0.024	106 gm/T	.388	45 cm lode in NW fault. Stringers	gold in quartz vein	tuff, siltstone	Bvg	H	hydrothermal veining in fault near granite	н
Rising Tide	376	E	Cu	prospect			near-surface irregular	Cu-stained gossam above pyritic quartz dyke	graphitic slate	Esk	н	gossan, intersection of black slate horizon by pyritic fault	supergene
	377	E	U	prospect					granite	Bgb			hydrothermal
	378	E	∆u	prospect					tuff & siltstone	Bvg	1.greenschist	hydrothermal veining near granite	Ħ
Bridge Creek	379	E	A u	included under			group of leaders each 3-45 cm wide	gold in quartz veins	n	Bvg		' п	Ħ
Mount Pacqualin	380	E	Au	Chinese Howley					н	Bvg	u	н	н
Woolwonga	381	E	∆u	0.26		4.2	several reefs < 60 cm wide in NW shear zone & in perpendicular tension gashes	mostly in oxidised zone. Primary lode quartz+pyrite +arsenopyrite	sandstone, slate	Bu	и	п	н
Ban Ban	381▲	E	Fe	prospect			shallow	massive hematite-goethite	pyritic shale	Bsk	hornfels	gossan over pyritic shales	supergene
Mount Ellison	382	E	Cu,Bi	650 Cu 3 Bi	. 20% Cu	.423 .0117	conformable NNW tabular steep 8 cm-1 m wide. Subsidiary cross fract- ures & shears	Cu oxides, deeper cuprite- chalcocite, above quartz- chalcopyrite-pyrite lodes. Minor Bi.	п	Bsk	n	hydrothermal veining near granite	hydrothermal+supergene
	383	E	Sn							Bsp	tt tt	. "	hydrothermal
	384	E	Sn .						greywacke, siltstone	Bu	n	. "	m .
South Ringwood	385		Au	1			numerous 450-steep lodes	auriferous quartz veins	n	Bu	1.greenschist	hydrothermal veining	n
Ringwood	386		A u	0.08		1.294	5 cm-60 cm wide in broad NW sone. Also alluvial		n	Bu			н
	387		A u	1			AW BOILE, MISO MITUVIAL	n	tt .	Bu	n	n	n
North Ringwood	388		A u	İ				n	п	Bu			и
George Creek	389		υ '	1 0,0,	0.26%	.059	pods & stringers in weak	patchy pitchblende, pyrite,	et .	Bu		u	п
				1 U ₃ 0 ₆ prospect	-		steep N shear	chalcopyrite in joints & minor shears; torbernite at surface					
Adelaide River	390	-	U	45 ¹¹ 3 ⁰ 8	0.5% T ₃ 0 ₈	2.67	steep N shear zone; irregular ore zone pitches S450	pitchblende, pyrite, chal- copyrite in irregular quartz veins, & dissem. in host rock	d	Bu	н	n	н
Mount Tyan	391	-	Au	.3 Kg			steep tabular reefs 30 cm - 1 m wide	auriferous quartz veins	siltstone, greywacke	Bu	er .	п	IT

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Great Northern	392	-	Au				major reef 4.5 m wide, several minor narrow reefs	auriferous quartz veins	siltstone, greywacke	B u	l.greenschist	hydrothermal veining	hydrothermal
Great Western	393	-	A u	.1		4.85	- steep tabular NW	n	4	Bu	"	ıı	II
Star of the Worth	394	-	Au j					It	"	Bu	Ħ	п	m .
Pig Hole	395	L	Au	1.5 Kg		.0243	several N reefs 5-90 cm wide, steep	"	"	Bu	"	н	II
Quest 29	396	L	Pb, ≜ u	prospect	457.3 gm/T Au, shale anomalous in Zn, Gu, Pb, Ni		N steep lodes 1-3 m wide, enriched gossan caps	As, Pb, Zn, Cu sulphides in siderite-quartz bands separate sulphidic peg- matite lode with Au	brecciated altered lam- prophyre intruding horn- fels and carbonaceous shale	Bak	hornfels	stratabound, hydrothermal veining near granite	syngenetic hydrothermal
Quest 30	397	L	Pb,Cu,Zn	prospect	<12 ≸ Pb		linear shallow conformable	granular galena, minor Cu Bi sulphides. Pb oxides in gossan	gossaneous siliceous ironstone	Bak	11	п	n
Quest 44	398	L	Pb,Zn,Cu	prospect	<1.2% Pb, 1.9% Zn over 1 m		stratiform N sones 35°E. Local irregular skarn near granite	Fine patches & massive veins sphalerite Pb Cu & minor Mo sulphides	hornfelsed carbonaceous slate	Rsk	n	stratiform, chloritic zones, carbonaceous shale, nearby granite	•
Quest 42	399	L	Pb	prospect	<0.4% Pb, 0.3% Zn		irregular, grossly con- formable N zone	disseminations, quartz- hematite fracture fillings gossaneous zone	carbonaceous hornfels cut by micro syenite to lamprophyre dykes	Bsk	"	stratiform, hydrothermal veins, carbonaceous shale, near granite	н
Mount Bundey	400	L	Fe	600 000	63.3% Fe; 0.1% S; 0.06% P ₂ 0 ₅	9.6	2 tabular steep near surface lodes	martite+goethite & pyrite, over magnetite-pyrite- ferruginous sediment	siltatone, schist, horn- fels block in granite	Bap?	п	pyritic carbonaceous sediment, nearby granite, ?pre-Mesozoic surface	supergene
Quest 36	401	L	Pb	prospect					carbonaceous hornfels	Bsk	11	stratabound	syngenetic hydrothermal
Quest 45	402	L	Pb	prospect					siltstone	Bpw	1.greenschist		
Quest 41	403	L	Pb	prospect					н	Bpw	Ħ		
Anomaly 18,2	404	L	Pb Zn Cu Mn	prospect			tabular steep conformable	dissem.galena + sphaler- ite. Anomalous gossan	Shale, dolomite, graph- itic dolomitic shale, minor tuff	Врw			
Woolner	405	-	U, Cu	prospect							m-u greenschist	t stratabound, concealed granitic basement	
Frazer	406	G	σ										
	400	·	·	prospect			near-surface irregular	no visible uranium minerals	gossaneous caps over pyritic slate	Bnm	l.greenschist	pyritic carbonaceous sediment with gossan development	supergene
Ella Creek	407	G		prospect			near—surface irregular			Bom Bsk	l.greenschist	sediment with gossan	supergene n
		G	υ				ū				1.greenschist	sediment with gossan development	
Ella Creek	407	G G	υ	prospect			ū			Bsk	l.greenschist " " "	sediment with gossan development	
Ella Creek Brodribb	407 408	G G	U	prospect			n n	minerals #	pyritic slate	Bsk Bsk	1.greenschist " " " "	sediment with gossan development # R conglomerate near	n n
Ella Creek Brodribb Manton No. 1	407 408 409	G G G	U U Th	prospect prospect			n n	minerals #	pyritic slate	Bsk Bsk Bor	1.greenschist " " " " "	sediment with gossan development # R conglomerate near	n n
Ella Creek Brodribb Manton Mo. 1 Manton Mo. 2	407 408 409 410	G G G	U U Th	prospect prospect prospect	75% Pb, 12.5% Zn, 154 gm/T Åg	51.8 Ag 3.51 Pb 66.5 Zn	n n	minerals #	pyritic slate	Bsk Bsk Bor Bbr	1, greenschist n n n	sediment with gossan development # R conglomerate near	n n syngenetic detrital
Ella Creek Brodribb Manton No. 1 Manton No. 2 Woodcutters	407 408 409 410 411	G G G	U U Th Th U Ag, Pb, Zn Cd	prospect prospect prospect prospect prospect (101 Ag, 5400		3.51 Pb	conformable f 5 transgressive vertical en echelon fissures <20	minerals " detrital thorianite " pyrite, sphalerite, galena, lead & antinony/ arsenic sulphosalts, in veins in dolomite-silica-	pyritic slate " conglomerate " pyritic carbonaceous &	Bak Bak Bor Bor	1, greenschist " " " " " " " "	sediment with gossan development " conglomerate near granitic basement " Rnm/Bor contact, axial plane fissures, low-temp	u syngenetic detrital u supergene
Ella Creek Brodribb Manton No. 1 Manton No. 2 Woodcutters Woodcutters L5	407 408 409 410 411 412	G G G G	U U Th Th U Ag, Pb, Zn Cd	prospect prospect prospect prospect prospect (101 Ag, 5400 Pb, 92880 Zn)	0.16% U.O., 0.6% Pb, 2.2% Ou, 25.7 gm/T Åg	3.51 Pb 66.5 Zn	conformable f 5 transgressive vertical en echelon fissures <20	minerals " detrital thorianite " pyrite, sphalerite, galena, lead & antinony/ arsenic sulphosalts, in veins in dolomite-silica-	pyritic slate " conglomerate " pyritic carbonaceous &	Bak Bak Bbr Bbr Bbc Bbc/Bma	1, greenschist	sediment with gossan development " conglomerate near granitic basement " Rnm/Hor contact, axial plane fissures, low-temp remobilisation	u syngenetic detrital u supergene
Ella Creek Brodribb Manton No. 1 Manton No. 2 Woodcutters Woodcutters L5	407 408 409 410 411 412	G G G G G	U U Th Th U Ag,Pb,Zn Cd U U,Cu,Pb,	prospect prospect prospect prospect (101 Ag, 5400 Pb, 92880 Zn) prospect 1.8 Ag,861 Co, 15 000 Cu, 4100 Pb, 1069	0.16% U.O., 0.6% Pb, 2.2% Ou, 25.7 gm/T Åg	3.51 Pb 66.5 Zn 66.5 Zn Co 33.3 Cu 24.0 Pb 2.67	u conformable u transgressive vertical en echelon fissures <20 m wide roughly conformable steep 17-27 m wide ME shear	minerals " detrital thorianite " pyrite, sphalerite, galens, lead & antimony/ arsenic sulphosalts, in veins in dolomite-silica- gangue uraninite, torbernite, chalcopyrite, bornite + galena as disseminations	pyritic slate " conglowerate " pyritic carbonaceous & dolomitic shale, dolomite sheared graphitic sericitic, chloritic & pyritic	Bak Bak Bbr Bbr Bbc Bbc/Bma	1, greenschist " " " " " " " " "	sediment with gossan development " conglomerate near granitic basement " Ens/Ebr contact, axial plane fissures, low-temp remobilisation " Hns/Ebr contact, strata- bound, shear zones on synclinal limb, nearby basement granite, uncon-	syngenetic detrital supergene remobilised syngenetic syngenetic + epigenetic
Ella Creek Brodribb Manton No. 1 Manton No. 2 Woodcutters Woodcutters L5 Woodcutter South White's	407 408 409 410 411 412 413 414	G G G G	U U Th Th U Ag,Pb,Zn Cd U U,Cu,Pb, Co,Ni	prospect prospect prospect prospect prospect (101 Ag, 5400 Pb, 92880 Zn) prospect 1.8 Ag,861 Co, 15 000 Cu, 4100 Pb, 1069 U_308	0.16% U ₂ 0 ₁ , 0.6% Pb, 2.2% Bu, 25.7 gm/T Ag	3.51 Pb 66.5 Zn (Ag .923 (Co 33.3 Cu 24.0 Pb 2.67 U 63.5	conformable f 5 transgressive vertical en echelon fissures <20 m wide roughly conformable steep 17-27 m wide NE shear zone	minerals " detrital thorianite " pyrite, sphalerite, galena, lead & antimony/ arsenic sulphosalts, in veins in dolomite-silica- gangue uraninite, torbernite, chalcopyrite, bornite + galena as disseminations + veins vein & dissem, uraninite,	pyritic slate " " conglomerate " pyritic carbonaceous & dolomitic shale, dolomite sheared graphitic sericitic, chloritic & pyritic shale sheared graphitic shale,	Bsk Bbr Bbr Bbc Bbc/Hna Bba		sediment with gossan development " " conglomerate near granitic basement " Ens/Bor contact, axial plane fissures, low-temp remobilisation " Rnm/Bor contact, strata- bound, shear zones on synclinal limb, nearby basement granite, uncon- formity	syngenetic detrital " supergene remobilised syngenetic syngenetic + epigenetic + supergene
Ella Creek Brodribb Manton No. 1 Manton No. 2 Woodcutters Woodcutters L5 Woodcutter South White's	407 408 409 410 411 412 413 414	G G G G	U Th Th U Ag, Fb, Zn Cd U U, Gu, Fb, Co, Ni U	prospect prospect prospect prospect (101 Ag, 5400 Pb, 92880 Zn) prospect 1.8 Ag,861 Go, 15 000 Cu, 4100 Pb, 1069 U 308 534 U 308	0.16% U ₂ 0 ₁ , 0.6% Pb, 2.2% Bu, 25.7 gm/T Ag	3.51 Pb 66.5 Zn (Ag .923 (Co 33.3 Cu 24.0 Pb 2.67 U 63.5	conformable f 5 transgressive vertical en echelon fissures <20 m wide roughly conformable steep 17-27 m wide NE shear zone	minerals " detrital thorianite " pyrite, sphalerite, galena, lead & antimony/ arsenic sulphosalts, in veins in dolomite-silica- gangue uraninite, torbernite, chalcopyrite, bornite + galena as disseminations + veins vein & dissem, uraninite,	pyritic slate " " conglomerate " pyritic carbonaceous & dolomitic shale, dolomite sheared graphitic sericitic, chloritic & pyritic shale sheared graphitic shale, hematitic dolomite graphitic + talcose shale breccia in sheared graph-	Bsk Bbr Ebr Ebc Ebc/Emm Emm Emm		sediment with gossan development " " conglomerate near granitic basement " Ens/Bor contact, axial plane fissures, low-temp remobilisation " Rnm/Bor contact, strata- bound, shear zones on synclinal limb, nearby basement granite, uncon- formity	syngenetic detrital " supergene remobilised syngenetic syngenetic + epigenetic + supergene

Mount Fitch	419	G	U,Gu	(1500 U ₂ 0 ₈) (1885 Cd)	.042 % U ₃ 0 290,000 ³ T ⁸ 0.65 % Cu	89 .1 3.02	2 U bodies, E 110x30x20 m deep, N 160x110x100 m deep, 3 Cu lenses in 4 km con- formable enriched zone	fine ?thucolite in clayey graph, bands in Pnm, vein- lets in Ebc. Near sur- face Cu-enrichment in clays	chlorite sericite graph- ite schist, magnesite	Row/Hor	l.greenschist	Enm/Her contact, strata- bound, shear zones on synclinal limb, nearby basement granite, uncon- formity	syngenetic + epigenetic + supergene
Mount Burton	420	G	U, Cu	100 Cu 12.6 U ₃ 08	0.17% U ₃ 0 ₈ , 1.3% Gu ³	.16 .748	small conformable lens	dissem, torbernite, pitch- blende, malachite, chalco- -cite	pyritic black slate, minor quartzite	Emm	H	п	n
Dolerite Ridge	421	G	U,Pb,Cu, Zn	prospect						Bnn	H		н
Area 55	422	G	U,Pb,Zn, Cu	prospect			irregular pods in shears & plunging fold axes		pyritic black shale, dolomite	Bmm/Bbc		ti	t#
Rum Jungle Creek	423	G	U	prospect					chloritic & graphitic shale	Bnm	Ħ		m .
Rum Jungle Creek South	424	G	σ	2612	0.4% U ₃ 0 ₈	155.15	horizontal cigar 60 m x 245 m, 30 m depth	fine sooty pitchblende coatings, minor veins & stockworks	chloritic & graphitic pyrite shale	Binna	н	· n	н
Batchelor	425	G	∆u	.35 Kg	558 gm/T	.0056	small tabular steep	auriferous quartz-tourmal- ine stringer	arks)sic grit, conglomer- ate	Bbr	u	hydrothermal veining near granite	hydrothermal
Crater	426	G	Th	prospect			large stratiform	detrital thorium-bearing minerals in matrix	conglomerate	Hor	н	oligomictic conglomerate near basement	syngenetic
Laterites	427	G	U	prospect			shallow			Bon	n	stratabound, weathering	supergene
Waterhouse No. 1	428	G	U, Cu	prospect						Bsk	п	stratabound, unconformity?	syngenetic
Waterhouse No. 4	429	G	υ	prospect			anomalous radioactivity near quartz-filled fault	minor secondary mineral- isation		Bnm	н	stratabound near Enm/Ebc contact, nearby basement granite, unconformity	syngenetic+epigenetic +supergene
Waterhouse No. 2	430	G	Cu,V	prospect				minor pitchblende & secondary mineralisation	pyritic black shale	Bnm	н	•	
Waterhouse No. 3	431	G	u	prospect				anomalous radioactivity, no visible U minerals	siltstone, greywacke	Bu			hydrothermal?
Virginia	432	·G	Au	.7 Kg		.0113	steep narrow tabular	auriferous quartz reefs	"	Bu	н	hydrothermal veining near granite	hydrothermal
Kings Table	433	H	Sn	mine			steep tabular N-NNE <10 m wide	cassiterite in zoned pegmatite+kaclin, chlorite alteration	pegmatite in siltstone and greywacke	Bu	l-m greenschist	hydrothermal veining in meridional shear zone	n
Mugs Find	434	H	Sn	mine			H	11	n	Bu	n	n	m .
Black Jade	435	H	Sn	mine			n	11	n	Bu	H .	n	
Jewellers	436	H	Sn	mine			п	n	tt	Bu	n .	n	n
Hang Gong Landing	437	Н	Sn	mine				11	u .	Bu		n	п
	438	н	Sn	mine			H			Bu		n	
Rose * s	439	H	Sn	mine			N	H	и	Bu	н		
SP2		H	Sn					н		Bu		н	
5. 2	440												
Johnstone	440 441		Sn	mine							н	n	**
Johnstone Grant!s	441	H		mine			 II	n n	#	Bu	n st	n *	H H
Grant†s	441 442	H	Sn	mine mine			H	n n	и п	Bu Bu	81 82	n n	
Grant's Newsham's	441 442 443	H	Sn Sn	mine mine mine			" " " " " " " " " " " " " " " " " " "	n H		Bu Bu Bu	16 15 65 88	n n n	*
Grant's Newsham's Schoolmaster's	441 442 443 444	H H	Sn Sn Sn	mine mine mine mine						Bu Ehu Bu Bu	-	:	•
Grant's Newsham's Schoolmaster's Rundle's	441 442 443 444 445	H H H	Sn Sn Sn Sn	mine mine mine mine mine						Bu Bu Bu Bu Bu		:	
Grant's Newsham's Schoolmaster's Rundle's Pint Pot	441 442 443 444 445 446	H H H	Sn Sn Sn Sn Sn	mine mine mine mine mine mine						Bu Bu Bu Bu Bu	# #		
Grant's Newsham's Schoolmaster's Rundle's Pint Pot Quart Pot	441 442 443 444 445 446 447	н н н н н	Sn Sn Sn Sn Sn	mine mine mine mine mine mine mine						Bu Bu Bu Bu Bu	# # #	:	
Grant's Newsham's Schoolmaster's Rundle's Pint Pot Quart Pot Hills	441 442 443 444 445 446 447	H H H H H	Sn Sn Sn Sn Sn Sn	mine mine mine mine mine mine mine mine						Ba Bu Bu Bu Ba Bu			
Grant's Newsham's Schoolmaster's Rundle's Pint Pot Quart Pot Hills Hang Gong Wheel of Fortune	441 442 443 444 445 446 447 448	H H H H H	Sn Sn Sn Sn Sn Sn Sn Sn	mine mine mine mine mine mine mine		1.78				Bu Bu Bu Bu Bu Bu			
Grant's Newsham's Schoolmaster's Rundle's Pint Pot Quart Pot Hills Hang Gong Wheel of Fortune Henderson's	441 442 443 444 445 446 447 448 449	H H H H H	Sn Sn Sn Sn Sn Sn Sn Sn	mine mine mine mine mine mine mine mine		1.78				Bu Bu Bu Bu Bu Bu Bu			
Grant's Newsham's Schoolmaster's Rundle's Pint Pot Quart Pot Hills Hang Gong Wheel of Fortune	441 442 443 444 445 446 447 448	H H H H H	Sn Sn Sn Sn Sn Sn Sn Sn	mine mine mine mine mine mine mine mine		1.78				Bu Bu Bu Bu Bu Bu			
Grant's Newsham's Schoolmaster's Rundle's Pint Pot Quart Pot Hills Hang Gong Wheel of Fortune Henderson's	441 442 443 444 445 446 447 448 449	H H H H H H H H H H H H H H H H H H H	Sn Sn Sn Sn Sn Sn Sn Sn	mine mine mine mine mine mine mine mine		1.78				Bu Bu Bu Bu Bu Bu Bu			

Madigans	454	н.	. Th	prospect		patches along N fractures	thorium minerals in	ferruginous sandstone	Bu	1-m greenschist hy	drothermal veining in	hydrothermal
							fracture zones			me	ridional shear zone	
Bear & Wolf	455	H	Sn	mine		steep tabular N-NNE <10 m wide	cassiterite in zoned pegmatites + kaolin, chlorite alteration	pegmatite in siltstone & greywacke	Bu	II	н	"
Olsen & Thomas	456	H	Sn	mine		**			Bu	H	•	u
Jones	457	H	Sn	mine		H	W .	H	Bu	н		
Shirley	457▲	H	Sn	mine		H		11	Bu	H	II .	п
sp6	458	H	Sn	mine		H .	u		Bu		H	Tr .
Hordens	459	H	Sn	mine		H .	n	u	B u	n	n	
Litchfield & Luggs	460	H	Sn	mine			11	n	Pu			n n
	461	H	Sn	mine			n .	H	Pu	н	и	n
Lees Extended	462	H	Sn	mine		n .		H .	Bu	H .	#	h
Bradys	463	H	Sn	mine		u .	n		Bu			•
Golden Boulder	464	H	Au	•018	.291	H	auriferous quartz reefs		Bu		н	
Two Sisters	465	Н	Sn	mine		II	cassiterite in zoned pegmatite + kaolin, chlorite alteration	ıı	Bu	н	R	н
Bells Mona	465A	H	Sn	95	1.26	<pre># (<20 m wide)</pre>		n	B u	H	H	
	466	H	Sn	mine		II .	n	II .	Bu	H .	er e	и
Vickman	467	H	Sn	mine		н	n .	II .	Hu	n	н	n
White Angel	468	H	Sn	mine		n	n		Hu	н	H	н
Kelly	469	H	Sn	mine		n	•	n	Bu	n		12
Bell	470	H	Sn	mine		u		n	Bu	m .		
	471	H	Sn	mine		H	ıı	n	Bu	u .		
	472	H	Sn	mine			R	•	Pa		•	#
	473	H	Sn	mine		H		Ħ	Bu	n		
Ah Hoy	474	H	Sn	mine			H		Pu			n
Rocky Bar	475	H	Sn	maine		n .	tt .	H	Bu	*	*	
Ah Bung	476	H	Sn	mine		Ħ	H	11	Bu		n	4
Old Bucks	477	H	Sn	mine		u	N .	N	Bu		n	
Leviathan	478	H		120	1.59	ď	™(mostly´in marginal quarts mica zone)		B u		•	
TW4	479	H		mine			n e		B u			
Chinese	480	H		mine				"	Bu	11		
Mount Peel	481	H		mine				" "	Ehu ·			-
Lee Ah Chang TW6	482 483	H	Sn Sn	mine mine					Bu			" -
Annie	483A	H	Sn.	mine mine					Bu D			
Amme	484	H	Sn Sn	mine					Bu Bu			
	485	Н		mine					Bu		,	
	486	н	Sn	nine					Bu			
	487	н		mine .		ï			.mu Bru			
Sabine	488	н	Sn Sn	mine					En.			"
Charlotte River	489		Th	prospeat					Bu			
	490			mine		u		ii	Bu		11	
Lucy	491	н		mine		и ,	If	u	Bu		u	
Picketts	491▲		Li, ambly-				n	u	Bu	#	u	
			gonite									
	492		Sn			n	n	n	Bu	et	· ·	n
Goodluck	493	H	Sn			н	n	n	Bu	t _i	н	н

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Martins	494	Ħ	Än	ı			steep tabular N-NNE	cassiterite in somed pegmatite + kaolin, chlorite alteration	pegmatits in siltstone & greywacke	Bu	l-n gréènachis	t hydrotherääl võining in meridional shear sons	hydrothermal
Mount Finniss	495	H	Sn,Ta	13 Sn 8.5 Ta		.172 .935	" (200 x 80 m)	" (strongly zoned; cassiterite & tantalite slightly conc. in kaolinised feldspar zone)	н	Bu	H	a a	н
Goodwill Extended	496	H	Sn				H	" (local conc. in quartz-mica wall zones)	60	Bu	00	re .	
	497	H	Sn	5.3		.0702	N		n	Bu ·	и ,		H
Goodwill	498	H	Sn	l			n			Bu	n		
Bamboo Creek	499	H	Sn, Ta	32 Sn .2 Ta .24 Kg Au		.424 .022 .0039	lenticular steeply pitching, 20 x 80 m	"(ore minerals conc.on pegmatite foot- wall)	•	Bu		и	
Tolmer	500	-	υ	prospect					u	Bu	*	hydrothermal veining near major fault	
Mount Tolmer (Blyth)	501	-	Sn	53		.702	steep tabular <10 m, Ni; also alluvial	cassiterite in greisen & altered pegmatite	H	Bu, Cz	"	hydrothermal veining	
	502	-	Sn	mine					N	Bu		H .	W
Mount Tolmer South	503	-	Cu	prospect						Bu	04	u	n
Warrs	504	I	Cu	prospect		. 13	NNE shear zone	Cu-stained quartz reefs & shear zones		Bu	u	a	n
Wallaby	506	I	Cu; Ag, Pb, Zn	10 Cu	<5%1 Pb 112 gm/ TAg 3 gm/TAu 35%1 Cu	.016	2 NNE parallel sones 6 m wide, each with several small quarts reefs	cerrusite anglesite mim- etite pyromorphite		Đu	H	hydrothermal veining near large dolerite body	u
	507	I	Pb	prospect						Bu			
Wheal Danks North	508	ı	Cu]	2-4% Cu (28% Cu hand-				•	Bu		Ħ	
				.140	picked ore) 3 gm/T Au	.224	steep tabular	cellular ironstone gossan with quartz and malachite					
Wheal Danks	509		Cu						N .	Bu			* ,
Wheal Danks South	510	1	Cu	J			•		•	Bu			"
Empire	511		Cu	15	e %	.024	steep tabular body, N shear zone 1.2 m wide	chalcopyrite, arsenopyrite quartz	•	Bu	R	H	
	512		Cu	prospect			•		н	Bu	*		
Daly River	513	I	Cu	1200	20%	1.92	bunches & stringers in 10 m N shear zone	malachite, azurite chal- cocite in quartz & limonite. Minor sulphides	u	Bu		n	"
Knowles Farm	514	I	Ph,Zn,Gu, Au	prospect	thigh Ag-Pb assays, minor Cu & Aut			gossaneous lode	H	Bu	"	a	ıı
	515	J	A u.	prospect	,		shallow to steep, tabular & alluvial	auriferous quarts veins	•	Bga, Cz	•	hydrothermal veining near granite	
Fletcher's Gully	516	J	Sn, Au	3 Sn .07 Au		.0397 1.132	steep to shallow veins in shears or tension gashes <1 m in NW fold axis. Also alluvial	auriferous quartz veins	u	Bu, Cs	"	19	·H
Muldiva	517	J	Sn				mainly alluvial; several steep tabular lodes	quartz-mica-tourmaline cassiterite lodes	schist, granulite	Bgs, Bu, C Cs	s hornfels	extensive hydrothermal veining near granite contact	u
Buldiva	518	J	Sn	57		•755	mainly alluvial; also pegmatite stockwork	small pegmatite lenses	slate, granite	Egs, Bu, Kn, Cz	#	66	
Collia	519	J	Sn	J			alluvial			Cu		nearby stanniferous granite	
Pete*s	520	-	Cu	prospect			irregular shallow-dipping stockwork	quarts-chalcocite, chalcopyrite	granite, hornfels	AE1/AEh	hornfels	granite contact	hydrothermal