FINAL REPORT

FOR

EXPLORATION LICENCE 5384

ZAPOPAN N L

MAY 1990

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1.0 SUMMARY

Anomalous BLEG samples have been isolated within the bounds of EL 5384. These results are centered on a quartzite knob central to the area.

Inconclusive results for the remainder of the licence prevent any definitive comments on the existence of further significant mineralization occurring, however, the north-east corner of the licence (at this stage) does not appear encouraging.

Further work is required within the NW quarter of the lease and along strike of the Britannia anticline.

The area has been pegged as Mineral Claims N3766 to N3774 (inclusive).

1.0 INTRODUCTION

This report summarises the results of investigations within the bounds of EL 5384, Northern Territory. A comprehensive stream sediment and rock chip sampling programme has been completed.

Initial exploration targets were the Gerowie Tuff and Koolpin Formations, however, the results of the survey has suggested another possible target within the licence.

The licence was granted to Grants Patch Mining Ltd for a period of two (2) years from 12th May, 1988 and transferred to Zapopan NL on 8th September, 1988.

1.2 PREVIOUS EXPLORATION

Apart from the previously active mining sites of the Britannia mine, little work has been conducted on the remainder of the licence other than regional mapping by the B.M.R. (1984)

1.3 LOCATION

EL 5384 is situated approximately 130 kilometres south east of Darwin. Locally the licence is positioned some seven kilometres west of the Fountain Head mine area and three kilometres north east of the old Zapopan mine, Brocks Creek. Access to the area is off the Stuart highway along five kilometres of all weather unsealed tracks. Access to the licence is severely restricted during the wet season as the unsealed tracks cross several small streams and soft soil plains. (Figure 1).

1.4 PHYSIOGRAPHY

Much of EL 5384 covers a broad flood plain of Cainozoic age alluvial gravels capped with lateritic and black soil horizons. Climatic variation of the region is restricted to two seasonal variations of the "Wet" season when rainfall may be as high as 1000mm through to the "Dry" season when virtually no rainfall is recorded. Temperature variation annually is minimal from a minimum of 20^0C to a maximum of 35^0C.

Vegetation of the area is primarily small shrubby trees to tall with a thick ground cover of spear grass up to one and a half metres tall.

2.0 REGIONAL GEOLOGY

Regionally the goldfield is situated within the Pine Creek

geosyncline (a macroscopic structure of some 40,000km2), in the Katherine and Darwin region of the Northern Territory. The regional geology was mapped in detail by Walpole et. al. (1968) and later Needham et. al. (1980). A good outline of the history of the syncline has been written by Eupene and Nicholson (1984) and may be summarised as follows:

Approximately 2400-2100mya, arkose, pelitic, carbonate and iron rich sediments were deposited upon a crystalline Archaean basement. This sequence suffered deformation and amphibolite facies metamorphism through to 2000mya. Uplift and erosion of these sediments led to the deposition of early Proterozoic sediments of arkose, conglomerates, carbonaceous mudstones, limestones and tuff beds as fluviatile sediments and turbidites with a final flysh sequence of greywacke and shales. Near the end of the deposition, igneous dykes and sills were intruded, followed by further deformation and lower greenschist facies metamorphism. The metamorphism is dated at approximately 1800mya. Extensive granitic intrusions occurred as a post metamorphic event.

The tectonic history has been detailed by Johnston (1984) in an unpublished Phd thesis and suggests four phases of deformation have occurred. D_1 and D_2 are related to the metamorphic development with D_2 developing low angle shear zones as a response to overthrusting and crustal shortening during basinal compression. D_3 is the development of F_3 folds which are tight to isoclinal N-S trending folds seem to dominate the syncline. A final folding episode D_4, refolded F_3 folds along an E-W axis.

2.1 LOCAL GEOLOGY, LITHOLOGY

The area is occupied by meta sediments of the Koolpin Formation, Gerowie Tuffs and Zamu Dolerite. (see Appendix 2)

Koolpin Formation

Koolpin facies rocks are located along the eastern and northern margins of the licence and comprise abundant fine grained carbonaceous shales and pale brown fine siltstones. These fine sediments may be argillic in part with a lesser pyritic content. The sediments are inferred to be originally of a low energy

environment and formed under anaerobic conditions attributing much of the pyritic development to the original sedimentation.

Gerowie Tuff

The Gerowie Tuff conformably overly the Koolpin Formation. The tuff beds constitute a major part of the licence area. They are

well exposed within MCN 147 and approximately two kilometres further north-east. The tuffs are commonly coarse grained pale grey to chalky white, quartz-feldspathic, strongly volcanogenic sediments (inferred to be of rhyolacitic parentage by Crick et al (1978)). The tuffs are interbedded with lesser Koolpin facies silts and minor sugary silicic (chert) beds up to five centimetres wide.

Float blocks of a haematitic/silicic/pyritic millimetre banded marker bed have been found within the tuffs although true in situ outcrop has not. This bed may be regarded as a B.I.F. horizon as defined by other workers within the geosyncline.

Zamu Dolerite

A suite of doleritic sills intrudes predominantly into Koolpin facies rocks. They are often seen as very weathered red/yellow clay-rich rocks with incipient foliation. Some float blocks towards the north-western corner of the licence are of an unfoliated fresh coarse quartz-dolerite with minor olivine phenocrysts. The variation in clay development and degree of foliation suggests two generations of dolerite may be present.

Central to the field area is a large quartzite/quartz veined zone. The origin of this and its stratigraphic relationship to the other lithologies is unknown, although minor outcrop of Koolpin facies silts are seen along its western flank.

2.2

LOCAL GEOLOGY, STRUCTURE

A complex development of intensive folding appears to dominate the area. The dip of the beds is consistently steep and predominantly to either the south-west or the north-east. A single penetrative foliation inferred to be an axial plane cleavage defines a series of tight folds plunging to the east, striking approximately south-east. This is further reinforced with the oldest rocks found adjacent to the granite intrusion to the west progressing to the younger rocks to the east. These folds are inferred to be equivalent to F_3 folds after Johnston (1984), and are now folded to an east-west trend from the D_4 episode.

Some low angle, quartz-filled shearing appears to have occurred (see Appendix 2 for location). This is inferred to be a relict of the D_2 phase and is preservn rough between two successive F_3 fold crests. Aerial photograph lineaments suggest a series of later stage faulting trending approximately north-south may have displaced the F^3 fold hinges regionally.

3.0 WORK COMPLETED

Exploration work has involved sketch mapping (1:10 000) from colour aerial photographs, reconnaissance field mapping and

geochemical sampling. An aeromagnetic survey has been carried out and no obvious anomalous signatures has been recorded.

Sampling has included the collection of 14 active stream sediment samples (2-3 kg weight), for BLEG (Bulk Leach Extractable Gold) analysis; 70, 1-2 kg soil samples along traverse lines with a point sample taken at every 25m; 15 rock chip samples taken from selected float and rock outcrop as discrete sampling; 14 rock chip samples collected along a single traverse as a 10m composite sample over each 10m interval.

All soil, stream and rock chip samples have been sent to Analabs Darwin. BLEG analysis has required method 328 (Au) and 114 (As) or 101 (As). Soils and rock chips have been analysed for Au and As with methods 313 (fire assays) 101 (AAS) respectively.

No preparation of the samples has been conducted prior to dispatch of the samples to the laboratory.

Analytical results are tabled in Appendix 1 and displayed in figure 4 and in Appendix 2.

4.0 DISCUSSION OF RESULTS

The results have been examined initially in three separate groups. The stream sediment analysis, traverse lines and rock chip samples.

Of the 14 BLEG samples collected, significant differences to the scale of one order of magnitude exists between those collected to the west of the area (18196 - 18116) and those collected to the east (18196 - 18200, 19101).

The western sampling all (but one) carried values greater than 1.0 ppb (18116 at 0.55 ppb Au), with a maximum value of 8.45 ppb (sample 18112). Similarly the arsenic values for these samples are elevated, with up to 880 ppm revealed (sample 18112). A close correlation exists between As and Au for these samples.

In contrast samples 18196-18208, 19101 collected from the west, in all but one case, returned values below detection limits (ie <0.5 ppb) with a similar trend for the As values (ie. <100 ppm).

The one anomalous value was sample 199 which returned low As but an Au value of 4.1 ppb.

This sample was collected from within the SE drainage of known gold mining (Britannia and associated workings) and would appear to be indicative of the mineralisation of the area of the old workings. It seems likely, then, that the westerly BLEG samples are of anomalous values too, in which case an highly prospective area may exist within the bounds of these drainages. The samples seem to be related to the large quartz hill in the W to NW of the area (see geology plan).

Three suites of traverses have been conducted in an attempt to isolate surface anomalies.

One suite crosses the quartz hill as two parallel traverses running NE/SE (or approximately perpendicular to the main structural trends of the licence). A second suite (also normal to the dominant structural trend) runs either side of the ridge of the major outcrop central to N of the licence. The third follows perpendicular to and along strike of previous workings. All sampling points are shown on the Sample Location Plan, with Au and As results (see figure 4 and Appendix 2).

The first suite of sampling across the quartz hill (NW quadrant of the lease), produced elevated values. No significant values were returned within the rock chip samples (the easterly of the two trenches), however, three arsenic values >500 (samples 18131 and 18134) plus one Au value >0.10 ppm were returned from the northern end of the trench.

The westerly trench returned two samples >0.10 ppm Au (samples 18137 and 18141), with 10 of the 11 samples returning >500 ppm As.

The remaining sampling traverses were surprisingly disappointing in their results as were rock chip samples. Even samples from within the old workings just west of Britannia failed to intersect any significant mineralisation.

5.0 CONCLUSIONS

The sampling work conducted across this licence combined with field observation, would appear to have defined a possible further target within the NW quadrant of the licence.

Extensive sampling over the more promising target of the Gerowie Tuff found to the very NE failed to locate any significant intersections and may be considered on the strength of this first pass work to be unlikely to contain extensive gold mineralisation.

Further exploration work could now continue along strike of the main Britannia workings. This is especially important with regards to the elevated values collected across the quartz hill.

These would appear to be approximately in line with the strike of the Britannia lode with the lode mineralisation.

Recommendations can only suggest that further sampling and trenching work is required within the NW quadrant of the licence.

The NE and SW quadrant of the licence do not appear favourable at this stage, and the SE quadrant could be further explored if only because the general trend of the main Britannia antiform passes through there.

6.0 EXPENDITURE TO DATE

	$
Geologist	3,000
Consultant Geologists	1,800
Field Assistant	1,200
Assays	529
Aeromagnetic Aquisition	2,500
Vehicle and Accommodation	2,350
Consumables	150
Fuel and Servicing	250
Drafting	600
Airphoto Aquisition	50
Administration	1,804
TOTAL	14,233

7.0 REFERENCES

Needham R and Stuart Smith P., (1984); Revised Stratigraphic numenclature and correlation of early Proterozore rocks of the Darwin-Katherine region.

Bur. Miner. Res. Geol. Geophys. J. No.9

Nicholson P Eupene G., (1984); Controls a Gold Mineralization in the Pine Creek Geosyncline.

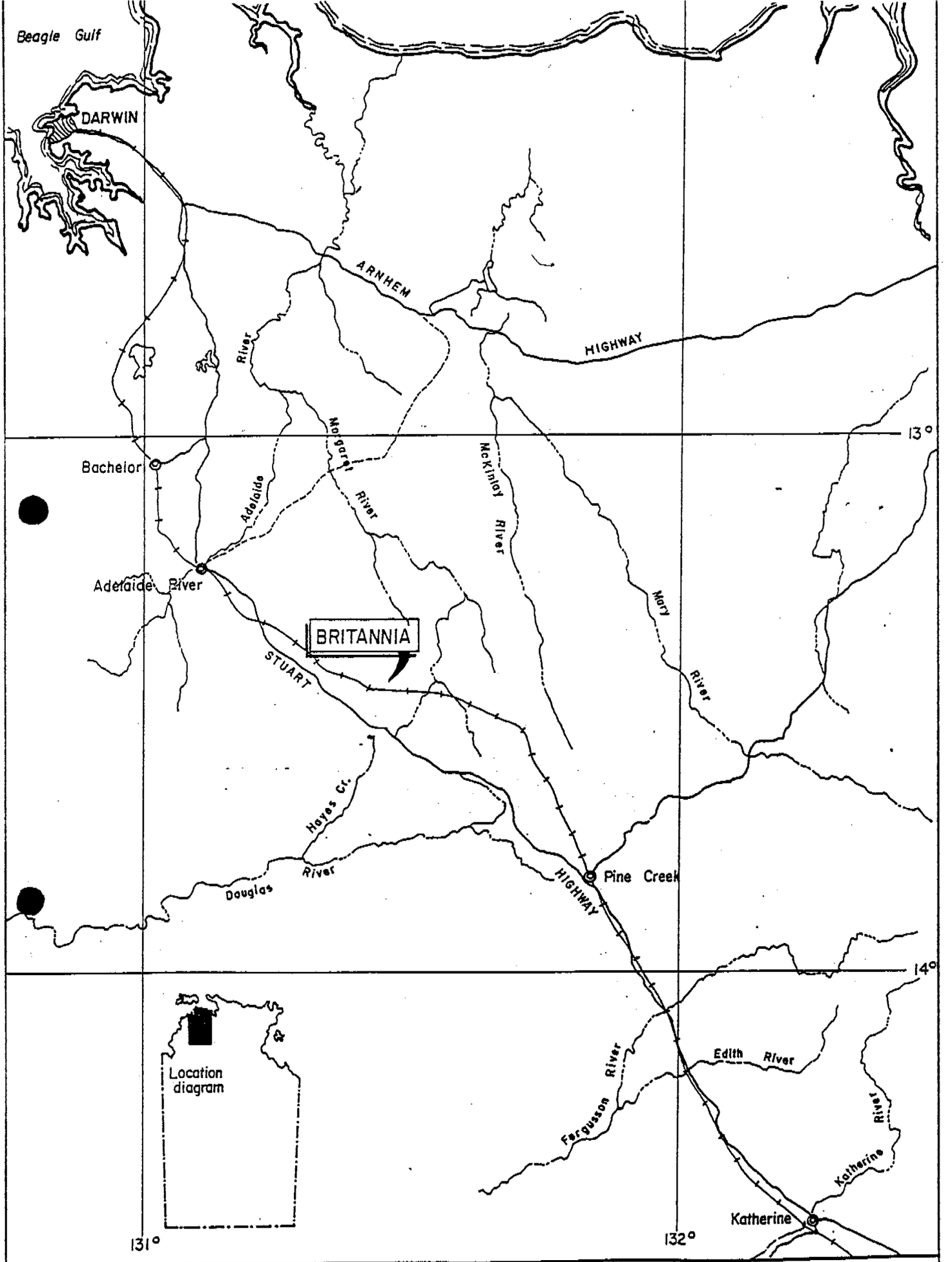
Proceedings of the Aus I.M.M. conference, Darwin, NT August 1984.

Johnston J. (1984); Structural Evolution of the Pine Creek inlier and mineralization therein Northern Territory, Australia.

Unpubl Phd thesis, Dublin.

Walpole, Crohn, Dunn, Randal (1968); Geology of the Katherine-Darwin region, NT;

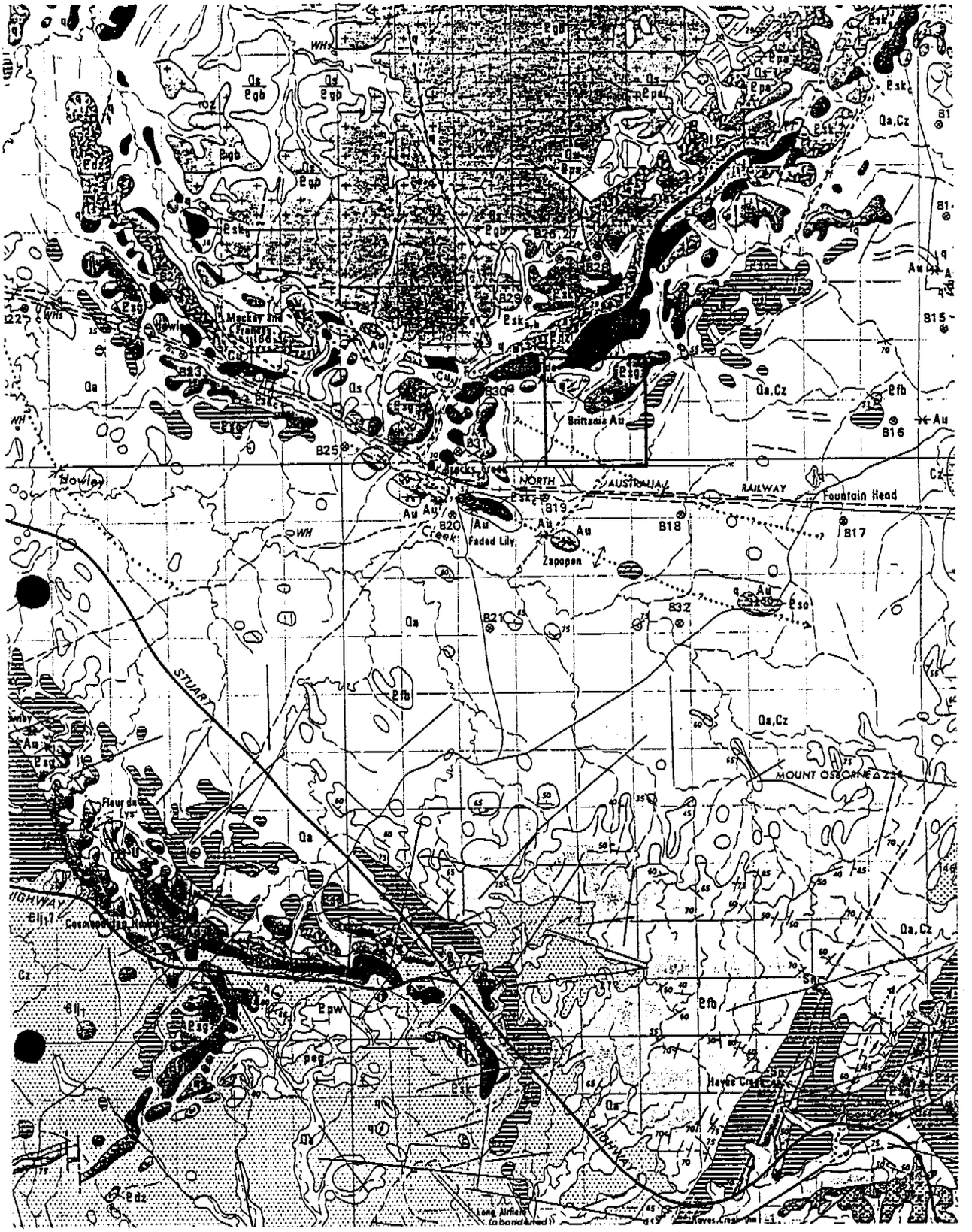
B.M.R. Bulletin number 82



Location Map
BRITANNIA

1000m 0 50 100 Km

FIG 1



Scale 1 : 100 000

Legend

Qa	Silt, clay, sand, black soil, alluvium
Cz	Lithosols, red soil, yellow earth
Pdz	Zamu Dolerite
Pso	Mount Bonnie Formation
Psg	Gerowie Tuff
Psk	Koolpin Formation

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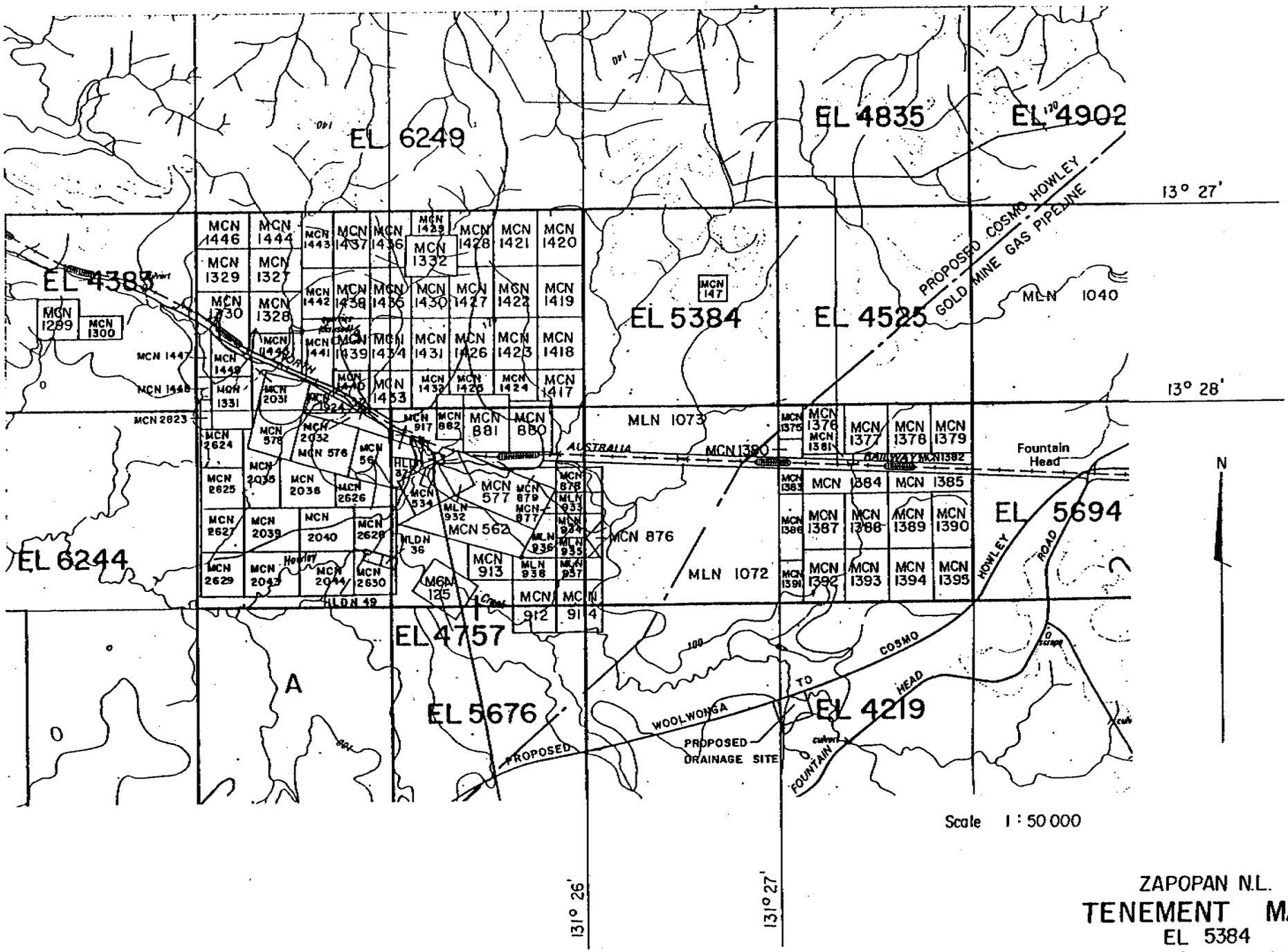
REGIONAL GEOLOGY

EL 5384

FIGURE 2



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TENEMENT MAP

EL 5384

FIGURE 3

Rock chip sample | Soil sample

R1

sample No	18117	18118	18119	18120	18121	18122	18123	18124	18125	18126	18127	18128	18129	18130	18131	18132	18133	18134
As	1000	<100	<100	<100	<100	<100	<100	100	<100	<100	400	200	200	100	600	500	300	1600
Au	0.195	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	0.009	<0.005	0.013	<0.005	0.020	0.006	0.042	0.107

S1

Soil sample

S2

sample No	18135	18136	18137	18138	18139	18140	18141	18142	18143	18144	18145
As	900	500	500	1000	1500	1500	2500	800	700	700	100
Au	0.026	0.030	0.274	0.057	0.035	0.054	0.172	0.057	0.019	0.064	0.050

Soil sample

S3

sample No	18146	18147	18148	18149	18150	18151	18152	18153	18154	18155	18156	18157	18158	18159	18160	18161	18162	18163	18164	18165
As	100	100	100	100	100	100	100	100	100	<100	100	100	100	100	100	100	100	100	100	<100
Au	<0.005	<0.005	<0.005	<0.005	0.035	<0.005	0.013	0.030	<0.005	<0.005	0.024	0.016	0.022	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005

Soil sample

S4

sample No	18166	18167	18168	18169	18170	18171	18172	18173	18174	18175	18176	18177	18178	18179	18180	18181	18182	18183	18184	18184
As	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	200	100	300	200	200	100	<100	<100	<100
Au	<0.005	<0.005	0.007	0.055	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	0.006	0.008	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005

Soil sample

S5

sample No	18186	18187	18188	18189	18190
As	100	100	200	100	<100
Au	0.019	0.011	0.013	0.155	0.010

Soil sample

S6

sample No	18191	18192	18193	18194	18195
As	100	100	100	100	100
Au	0.005	0.015	<0.005	0.024	0.007

ROCK CHIP AND SOIL SAMPLE TRAVERSE ASSAY RESULTS EL 5384

FIGURE 4

A P P E N D I X 1

ROCK CHIP DESCRIPTIONS

ANALYTICAL RESULTS

SAMPLE NO.	DESCRIPTION	Au ppm	As ppm
BMS11/01	Various chert frag. float, v.fine ? Sulphides	0.04	17
BMS11/03	B.I.F. horizon - float blocks	-	22
BMS11/04	Coarse milky qtz reef. ? pitted from erroded sulph	-	7
BMS11/05	Qtz stockwork from within addit. Minor malachite	-	4
BMS11/06	Sheared sltst adjacent to qtz reef at portal to adit.	0.01	48
BMS11/07	Weathered hem-rich B.I.F. float block	0.005	63
BMS11/08	Brecciated qtz in fault zone - cm clasts	0.028	67
BMS11/09	Massive dk carb hern/mag. siltstone	0.009	311
BMS11/10	Fully qtz invaded fault zone within Gerowie tuff	0.011	80
BMS11/11	Fully sil tuff adjacent to 11/03	0.010	26
19102	Metasediment (siltstone) between quartz stringers	0.012	-
19103	Quartz stringers within pit	0.008	-
19104	Quartz along strike of pit/vein system	0.030	-
19105	Silicic B.I.F. chert	0.072	-
19106	Fully sil Quartz reef - various samples along strike.	0.008	-

Note:

Samples BMS 11/04 - BMS 11/06 from workings approximately 500 m north of Britannia MCN 147.

Samples 19102 - 19105 from workings (pits and scrapes) 150 NE of Britannia.

A P P E N D I X 2

GEOLOGY MAP

SAMPLE LOCATION MAP

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ANALYTICAL REPORT No. 247.0.14.03368

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ORDER No.	PROJECT
2100/28097	

DATE RECEIVED	RESULTS REQUIRED
10/03/89	ASAP

RECEIVED 3-APR 1989

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
1	30/03/89	1	8

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
3109/16	RC Prep: 029	Au/328,As/114
3109/16	RC Prep: 029	Wt/9999

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	247.0.14.03368	30/03/89	2100/28097	1 OF 1

CASE No.	SAMPLE No.	As	As	Au	Wt					
1	18109	800	>100	3.67	3400					
2	18110	430	>100	0.97	3050					
3	18111	200	>100	3.21	2800					
4	18112	880	>100	8.45	3100					
5	18113	700	>100	2.35	3400					
6	18114	560	>100	2.87	2650					
7	18115	520	>100	1.20	2250					
8	18116	–	55	1.31	2500					
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	100	1	0.05	10					
24	UNITS	ppm	ppm	ppb	g					
25	METHOD	101	114	328	9999					

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

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ORDER No.	PROJECT
2084/28095	

DATE RECEIVED	RESULTS REQUIRED
12/12/88	ASAP

RECEIVED 22 DEC 1988

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES
5	20/12/88	1

TOTAL No. OF SAMPLES: 105

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
Various	MI Prep: 033	Au,Au(1),Au(2)/313
Various	MI	As/201

RESULTS TO:
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SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
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TUBE No.	SAMPLE No.	As	Au	Au(1)	Au(2)
1	BMS 11 1	17	0.043	–	–
2	BMS 11 2	<2	<0.005	–	–
3	BMS 11 3	<2	<0.005	–	–
4	BMS 11 4	7	<0.005	–	–
5	BMS 11 5	4	<0.005	–	–
6	BMS 11 6	48	0.011	–	–
7	BMS 11 7	63	0.005	–	–
8	BMS 11 8	67	0.028	–	–
9	BMS 11 9	311	0.009	–	0.013
10	BMS 11 10	80	0.011	–	–
11	BMS 11 11	26	0.010	–	–
12	BMS 11 12	SNR	SNR	–	–

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ORDER No.	PROJECT
1343	

DATE RECEIVED	RESULTS REQUIRED
19/04/89	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
4	03/05/89	1	90

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
19117/195,19102/106	SO Prep: 006,012,014,017	Au,Au(1),Au(2)/313
19117/195,19102/106	SO	As/101
19196/200,19101	SO Prep: 006,007	Au/328,As/114
19196/200,19101	SO Prep: 006,007	Wt/9999

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SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
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TUBE No.	SAMPLE No.	As	As	'Au	Au	Au(1)	Au(2)	Wt		
1	18117	1000	–	0.195	–	–	–	–		
2	18118	<100	–	<0.005	–	–	–	–		
3	18119	<100	–	0.008	–	–	–	–		
4	18120	<100	–	<0.005	–	–	–	–		
5	18121	<100	–	<0.005	–	–	–	–		
6	18122	<100	–	<0.005	–	–	–	–		
7	18123	<100	–	<0.005	–	–	–	–		
8	18124	100	–	0.007	–	–	–	–		
9	18125	<100	–	<0.005	–	–	–	–		
10	18126	<100	–	<0.005	–	–	–	–		
11	18127	400	–	0.009	–	–	–	–		
12	18128	200	–	<0.005	–	–	–	–		
13	18129	200	–	0.013	–	–	–	–		
14	18130	100	–	<0.005	–	–	–	–		
15	18131	1600	–	0.020	–	–	–	–		
16	18132	500	–	0.006	–	–	–	–		
17	18133	300	–	0.042	–	–	–	–		
18	18134	1600	–	0.107	–	–	0.107	–		
19	18135	900	–	0.026	–	–	–	–		
20	18136	500	–	0.030	–	–	–	–		
21	18137	500	–	0.255	–	0.293	–	–		
22	18138	1000	–	0.057	–	–	–	–		
23	18139	1500	–	0.035	–	–	–	–		
24	18140	1500	–	0.054	–	–	–	–		
25	18141	2500	–	0.172	–	–	–	–		

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

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SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	247.0.14.03414	03/05/89	1343	2 OF 4

...DE ...o.	SAMPLE No.	As	As	Au	Au	Au(1)	Au(2)	Wt		
1	18142	800	–	0.057	–	–	–	–		
2	18143	700	–	0.019	–	–	–	–		
3	18144	700	–	0.064	–	–	–	–		
4	18145	100	–	0.050	–	–	–	–		
5	18146	100	–	<0.005	–	–	–	–		
6	18147	100	–	<0.005	–	–	–	–		
7	18148	100	–	<0.005	–	–	–	–		
8	18149	100	–	<0.005	–	–	<0.005	–		
9	18150	100	–	0.035	–	–	–	–		
10	18151	100	–	<0.005	–	–	–	–		
11	18152	100	–	0.013	–	–	–	–		
12	18153	100	–	0.030	–	–	–	–		
13	18154	100	–	<0.005	–	–	–	–		
14	18155	<100	–	<0.005	–	–	–	–		
15	18156	100	–	0.024	–	–	–	–		
16	18157	100	–	0.016	–	–	–	–		
17	18158	100	–	<0.005	–	0.022	–	–		
18	18159	100	–	<0.005	–	–	–	–		
19	18160	100	–	<0.005	–	–	–	–		
20	18161	100	–	<0.005	–	–	–	–		
21	18162	100	–	<0.005	–	–	–	–		
22	18163	100	–	0.006	–	–	0.005	–		
23	18164	100	–	<0.005	–	–	–	–		
24	18165	<100	–	<0.005	–	–	–	–		
25	18166	<100	–	<0.005	–	–	–	–		

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
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A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	247.0.14.03414	03/05/89	1343	3 OF 4

BE o.	SAMPLE No.	As	As	Au	Au	Au(1)	Au(2)	Wt		
1	18167	<100	–	<0.005	–	–	–	–		
2	18168	<100	–	0.007	–	–	–	–		
3	18169	<100	–	0.055	–	–	–	–		
4	18170	<100	–	<0.005	–	–	–	–		
5	18171	<100	–	<0.005	–	–	–	–		
6	18172	<100	–	0.005	–	–	–	–		
7	18173	<100	–	<0.005	–	–	–	–		
8	18174	<100	–	<0.005	–	–	–	–		
9	18175	<100	–	<0.005	–	–	–	–		
10	18176	<100	–	0.006	–	–	–	–		
11	18177	200	–	0.008	–	–	–	–		
12	18178	100	–	<0.005	–	–	–	–		
13	18179	300	–	<0.005	–	–	–	–		
14	18180	200	–	<0.005	–	–	–	–		
15	18181	200	–	<0.005	–	–	–	–		
16	18182	100	–	0.007	–	–	–	–		
17	18183	<100	–	<0.005	–	–	–	–		
18	18184	<100	–	<0.005	–	–	–	–		
19	18185	<100	–	<0.005	–	–	–	–		
20	18186	100	–	0.019	–	–	–	–		
21	18187	100	–	0.011	–	–	–	–		
22	18188	200	–	<0.005	–	0.013	–	–		
23	18189	100	–	0.155	–	–	–	–		
24	18190	<100	–	0.010	–	–	–	–		
25	18191	100	–	0.005	–	–	–	–		

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	247.0.14.03414	03/05/89	1343	4 OF 4

JBE No.	SAMPLE No.	As	As	'Au	Au	Au(1)	Au(2)	Wt		
1	18192	100	–	0.015	–	–	–	–		
2	18193	100	–	<0.005	–	–	–	–		
3	18194	100	–	0.037	–	–	0.010	–		
4	18195	100	–	0.007	–	–	–	–		
5	19102	<100	–	0.014	–	–	–	–		
6	19103	<100	–	0.008	–	0.009	–	–		
7	19104	<100	–	0.030	–	0.029	0.018	–		
8	19105	<100	–	0.072	–	–	–	–		
9	19106	<100	–	0.008	–	–	–	–		
10	18196	–	40	–	<0.5	–	–	3640		
11	18197	–	26	–	<0.5	–	–	3080		
12	18198	–	56	–	<0.5	–	–	3370		
13	18199	–	39	–	4.1	–	–	3720		
14	18200	120	>100	–	<0.5	–	–	2880		
15	19101	–	80	–	<0.5	–	–	3030		
16	–									
17										
18										
19										
20										
21										
22										
23	DETECTION	100	1	0.005	0.5	0.005	0.005	10		
24	UNITS	ppm	ppm	PPM	ppb	PPM	PPM	g		
25	METHOD	101	114	313	328	313	313	9999		

Results in ppm unless otherwise specified
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A division of MacDonald Hamilton & Co. Pty. Ltd. (Inc NSW)

(089) 84 3849

Cnr Coonawarra & Mataram Rds, Winnellie

Fax: (089) 84 3984

ANALYTICAL REPORT No. 247.0.14.02538

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:

ZAPOPAN NL
PO BOX 4045

DARWIN NT 0801

ORDER No.	PROJECT
	BRITTANIA

DATE RECEIVED	RESULTS REQUIRED
08/06/88	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
4	15/08/88	1	90

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
6668/71,101/76,BT 01/10	MI Prep: 033	Au,Au(1),Au(2)/313
6668/71,101/76,BT 01/10	MI	As/401

REMARKS

RESULTS TO

MR ROD JOHNSON
ZAPOPAN NL
PO BOX 4045

DARWIN NT 0801

RESULTS TO

RESULTS TO

AUTHORISED OFFICER

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	247.0.14.02538	15/08/88		1 OF 4

TUBE No.	SAMPLE No.	As	As	Au	Au(1)	Au(2)		hole	depth	
1										
2										
3										
4										
5	101	35	–	0.091	–	–				
6	102	35	–	0.024	0.022	<0.005				
7	103	45	–	0.044	–	–				
8	104	20	–	0.012	–	0.020				
9	105	25	–	0.251	–	–				
10	106	35	–	0.011	–	–				
11	107	20	–	0.013	–	–				
12	108	15	–	0.016	–	–				
13	109	15	–	<0.005	–	–				
14	110	6	–	0.132	–	–				
15	111	2	–	0.009	–	–				
16	112	6	–	<0.005	–	–				
17	113	25	–	0.524	0.572	1.518				
18	114	5	–	0.041	–	–				
19	115	6	–	<0.005	–	–				
20	116	45	–	0.813	1.410	1.414				
21	117	4	–	0.014	–	–				
22	118	15	–	<0.005	–	–				
23	119	20	–	0.191	–	–				
24	120	8	–	2.300	2.969	1.334				
25	121	6	–	0.011	–	–				

Results in ppm unless otherwise specified
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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	247.0.14.02538	15/08/88		2 OF 4

TUBE No.	SAMPLE No.	As	As	Au	Au(1)	Au(2)				
1	122	15	–	1.386	1.936	1.291				
2	123	25	–	0.147	–	–				
3	124	50	–	0.021	–	–				
4	125	6	–	1.959	3.019	4.250				
5	126	55	–	0.068	0.080	0.933				
6	127	40	–	0.099	–	–				
7	128	25	–	0.027	–	–				
8	129	55	–	0.212	–	–				
9	130	45	–	0.026	–	–				
10	131	35	–	0.235	–	–				
11	132	50	–	12.900	16.610	7.600				
12	133	40	–	0.080	–	–				
13	134	80	–	0.249	–	–				
14	135	40	–	0.436	0.534	0.463				
15	136	40	–	0.105	–	–				
16	137	200	–	0.075	–	–				
17	138	180	–	0.399	–	–				
18	139	200	–	0.456	–	–				
19	140	140	–	0.073	–	–				
20	141	10	–	0.108	–	–				
21	142	80	–	0.084	–	–				
22	143	35	–	0.177	–	0.155				
23	144	55	–	1.531	1.243	1.009				
24	145	50	–	0.336	–	–				
25	146	15	–	1.672	1.356	0.960				

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	247,0.14.02538	15/08/88		3 OF 4

TUBE No.	SAMPLE No.	As	As	Au	Au(1)	Au(2)				
1	147	35	–	0.077	–	–				
2	148	45	–	0.104	–	–				
3	149	50	–	0.460	0.415	0.300				
4	150	10	–	0.189	–	–				
5	151	15	–	0.091	–	–				
6	152	50	–	3.260	2.268	5.550				
7	153	35	–	0.043	–	–				
8	154	8	–	1.040	0.659	0.346				
9	155	20	–	0.166	–	–				
10	156	45	–	1.076	1.404	1.177				
11	157	50	–	0.735	0.320	0.371				
12	158	25	–	0.370	–	–				
13	159	60	–	0.257	–	–				
14	160	280	–	0.496	–	–				
15	161	140	–	4.490	4.990	0.658				
16	162	25	–	0.027	–	–				
17	163	35	–	0.092	–	–				
18	164	460	–	1.008	0.950	10.310				
19	165	270	–	0.440	0.476	0.519				
20	166	40	–	0.018	–	0.020				
21	167	120	–	1.156	0.596	1.214				
22	168	300	–	0.317	–	–				
23	169	25	–	0.015	–	–				
24	170	45	–	0.323	–	–				
25	171	80	–	0.247	–	–				

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	247.0.14.02538	15/08/88		4 OF 4

TUBE No.	SAMPLE No.	As	As	Au	Au(1)	Au(2)				
1	172	110	-	0.666	0.349	0.461				
2	173	35	-	0.059	-	-				
3	174	35	-	0.026	-	-				
4	175	45	-	0.029	-	-				
5	176	25	-	0.075	-	-				
6	BT 01	6	-	0.020	-	-				
7	BT 02	60	-	0.033	-	-				
8	BT 03	15	-	0.052	-	-				
9	BT 04	4	-	0.035	-	-				
10	BT 05	15	-	1.475	1.496	1.470				
11	BT 06	<2	-	0.012	-	-				
12	BT 07	40	-	6.380	7.350	7.850				
13	BT 08	6	-	5.790	5.940	5.940				
14	BT 09	15	-	0.373	0.386	0.400				
15	BT 10	25	-	4.890	5.810	6.220				
16										
17										
18										
19										
20										
21										
22	COARSE GOLD FOUND IN MOST SAMPLES									
23	DETECTION	2	0.01	0.005	0.005	0.005				
24	UNITS	PPM	%	PPM	PPM	PPM				
25	METHOD	401	404	313	313	313				

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
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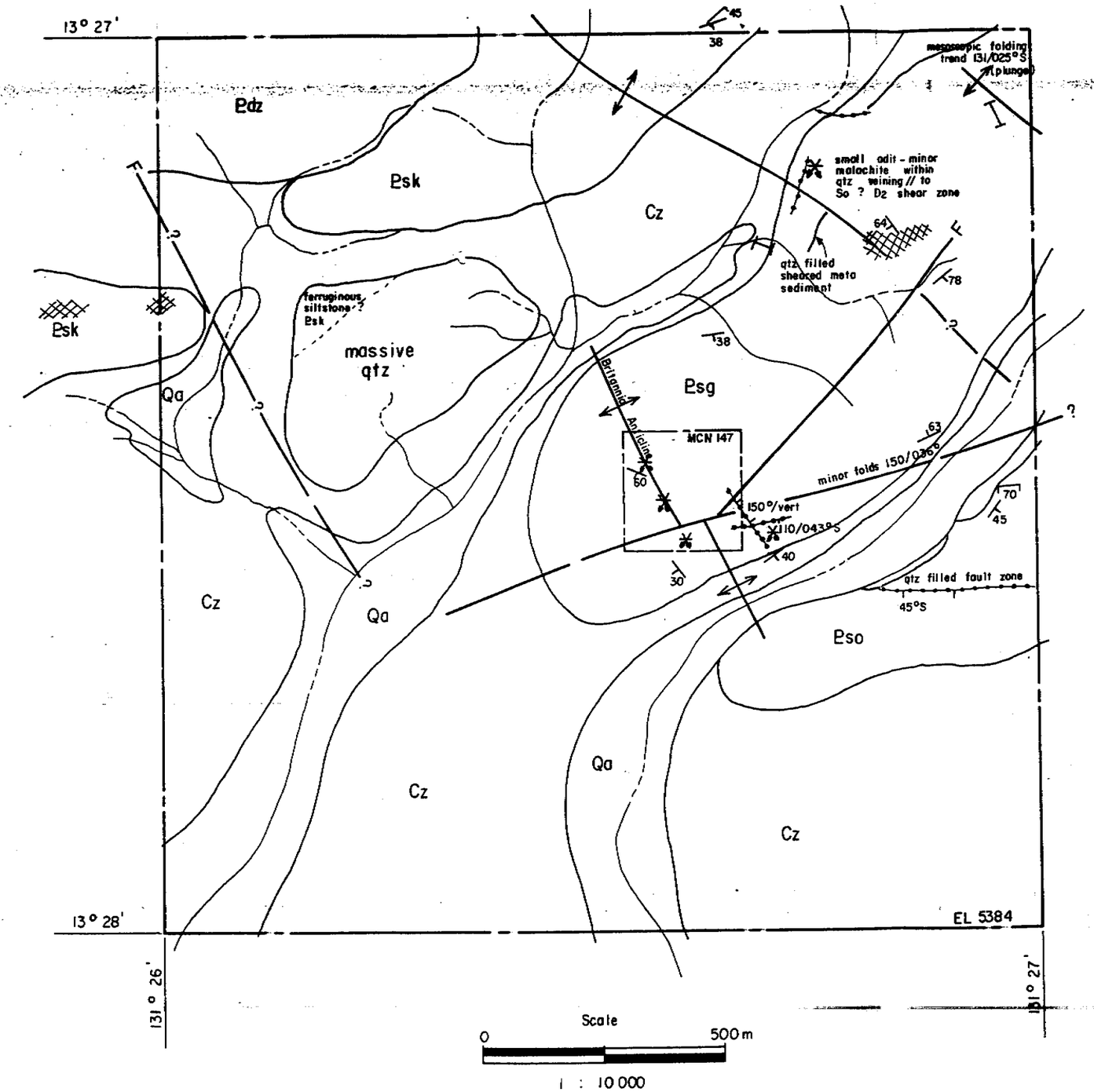
A P P E N D I X 2

GEOLOGY MAP

SAMPLE LOCATION MAP



Legend

Qa	Alluvium
Cz	Soil
Pdz	Zomu Dolerite
Pso	Mount Bonnie Formation
Psg	Gerowie Tuff
Psk	Koolpin Formation

Quartz vein, tick indicates dip

B.I.F float

Fault, inferred

Anticline, inferred

Cleavage strike and dip / vertical cleavage

Bedding strike and dip

Old workings

Geological boundary

Stream

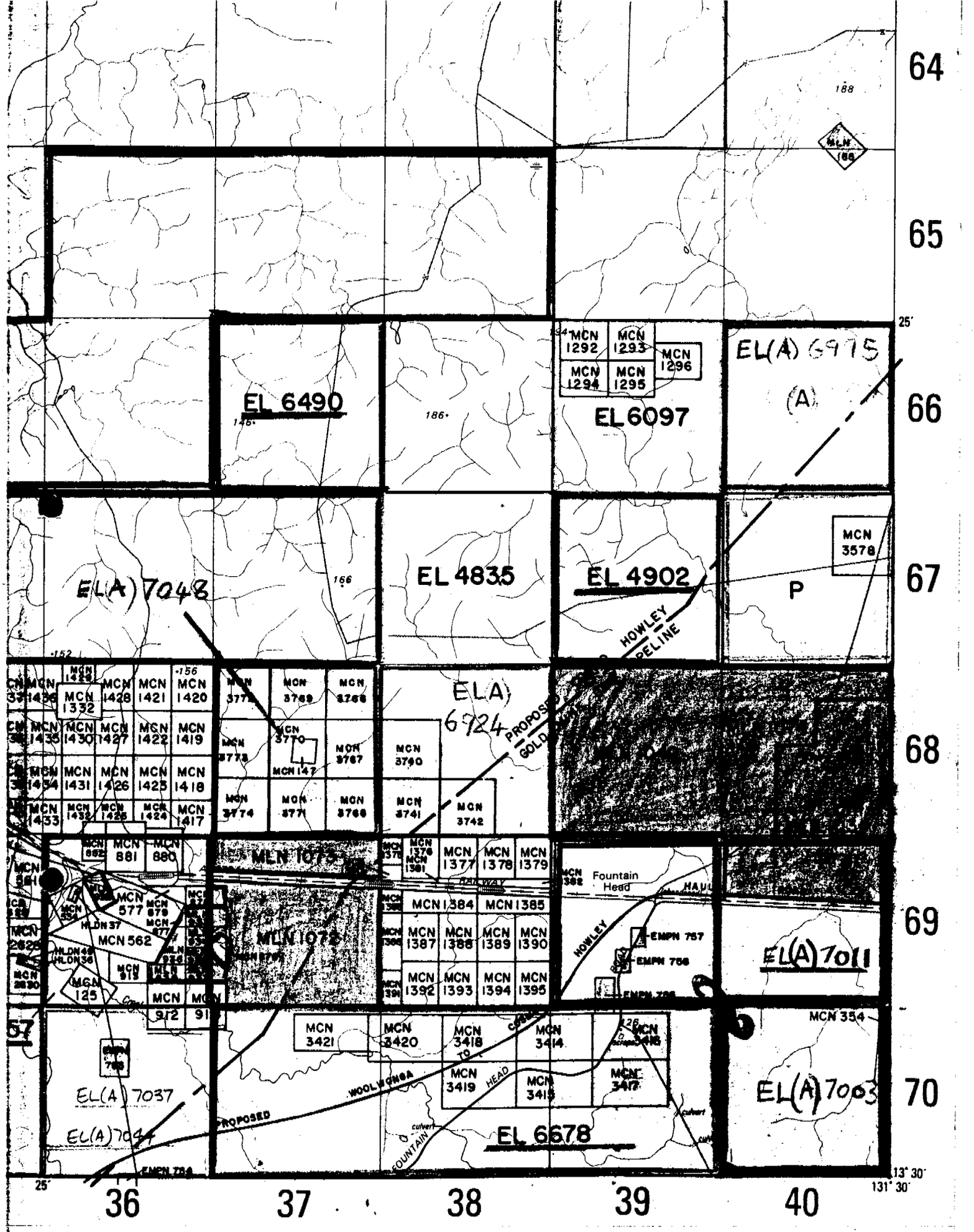
Tenement boundary

ZAPOPAN N.L.

GEOLOGY

EL 5384

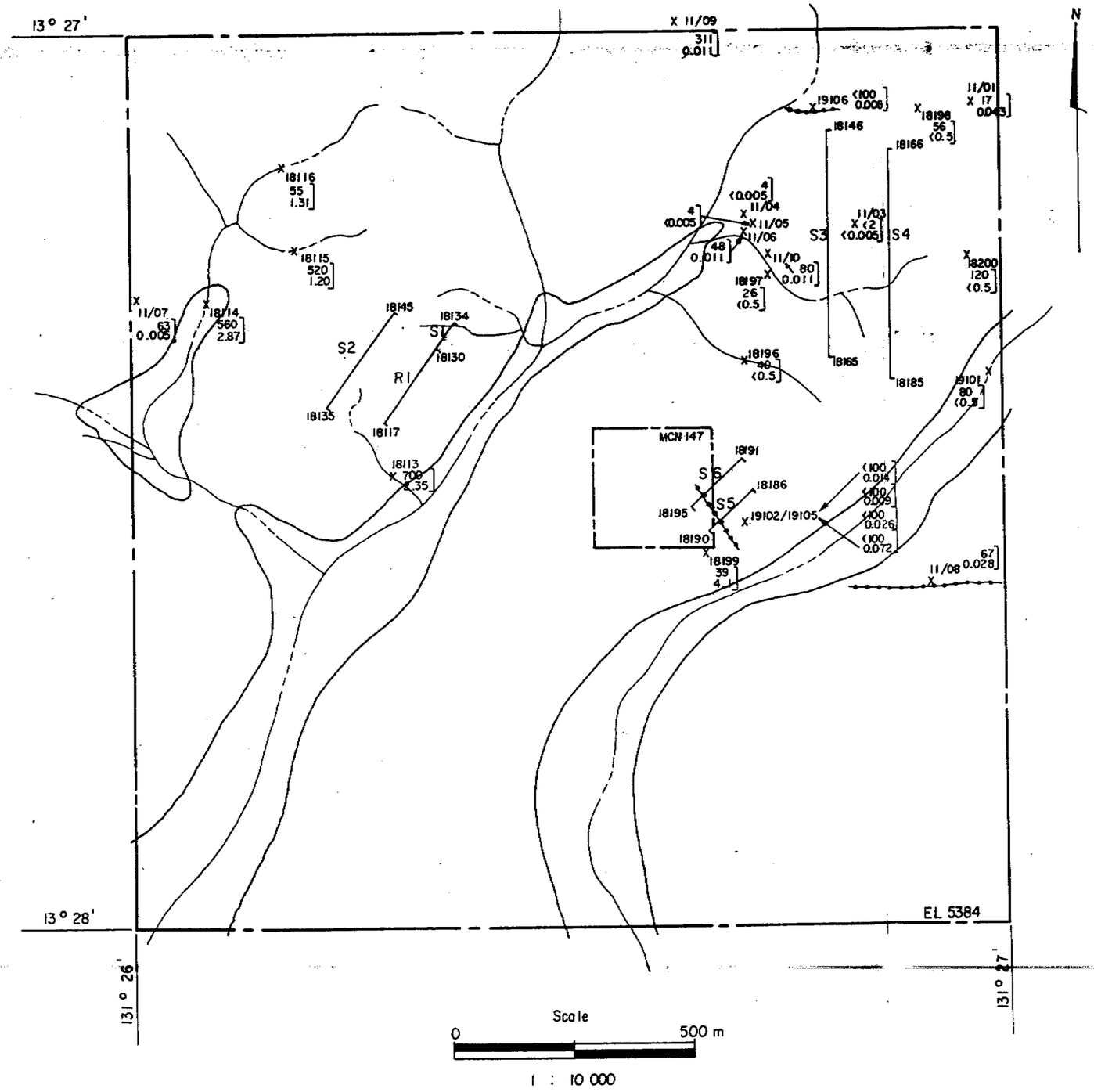
FIGURE



NATIONAL 1 : 50 000 SERIES SHEET No. 5171-II
PART OF 1 : 100 000 SHEET
BATCHELOR 5171

MAP REPLACED 4-5-94

INDEX TO ADJOINING MAPS



Legend

19102 – 19106, 11/01 – 11/10	Rock chip samples
18196 – 18200	Active stream sediment samples
18131 – 18195	Soil sample traverse
18117 – 18130	Rock chip traverse
	Quartz vein
	Old workings
	Geological boundary
	Stream
	Tenement boundary

Sample location: X 19104 — Sample number; <100 — Arsenic assay in ppm; 0.026 — Gold assay — sample 18109 - 18116, 18196 - 18200, 19101 in ppb, all other samples in ppm.

S2 — Sample traverse

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ASSAY VALUE AND SAMPLE LOCATIONS

EL 5384

FIGURE