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BP AUSTRALIA GOLD PTY LIMITED
EL6185 WATTS AND EL6186 MASSON
ANNUAL REPORT FOR THE PERIOD ENDING
23 OCTOBER 1989

M D WALKER
OCTOBER 1989

CR89/711

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1.0 INTRODUCTION

Exploration licences EL6185 and EL6186 located approximately 140km SE of Darwin, fall within the McKinlay River 1:100,000 map sheet area (Figure 1). The geology of the licence areas includes lithologies which host significant gold mineralisation within the Adelaide River - Pine Creek area of the Lower Proterozoic Pine Creek Geosyncline.

Numerous mines, prospects and workings occur in close proximity to the licence areas. Figure 2 shows the distribution of tin, gold, iron-manganese, copper, lead and zinc mineralisation in the areas immediate to the BP tenements. Brief documentation of these prospects is provided in the BMR a:100,000 Geological Map Commentary for the McKinlay River Sheet.

This report details the work undertaken during the 12 month period ending 23 October 1989.

2.0 TENEMENT STATUS

Exploration Licences 6185 and 6186 were granted to BP Australia Gold Pty Ltd on October 24, 1988, each for a five year period and with a year one expenditure commitment of \$50,000. By October 1990 a 50% land reduction will be required in accordance with the Mining Act. Table 1 summarises the data on each tenement.

3.0 TARGET CONCEPT

Gold deposits are being sought which are hosted in Lower Proterozoic sediments and located in quartz vein systems or disseminated in sediments adjacent to major faults or along anticlinal axes.

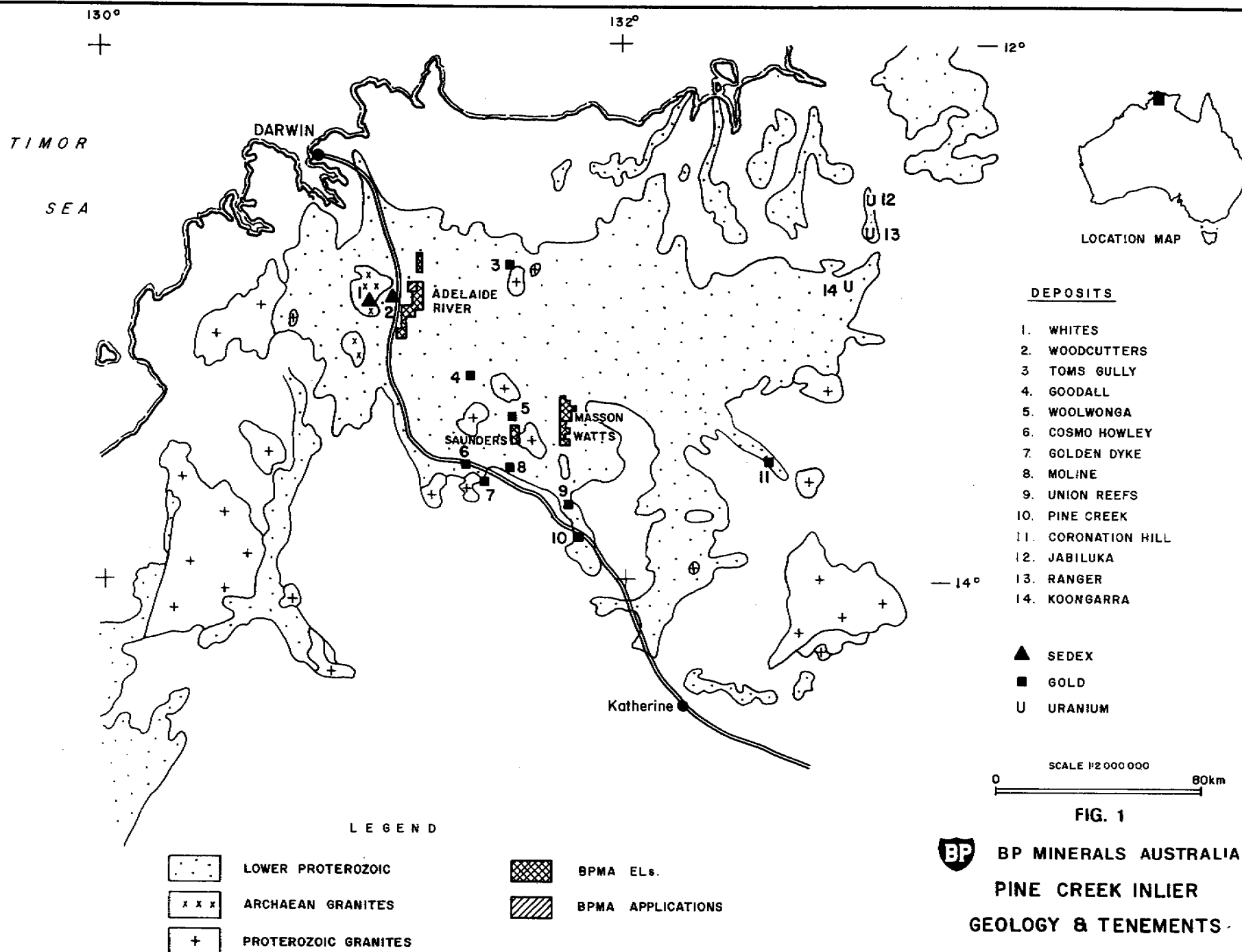


TABLE 1

SUMMARY TENEMENT DATAEL 6185, EL 6186

NAME	EL NUMBER	GRANTED DATE	NO. SUB-BLOCK	AREA (KM ²)	PERIOD (YRS)	YEAR 1 EXPENDITURE (\$)
Watts	6185	24.10.88	9	30	5	\$50,000
Masson	6186	24.10.88	10	32	5	\$50,000

4.0 REGIONAL AND TENEMENT GEOLOGY

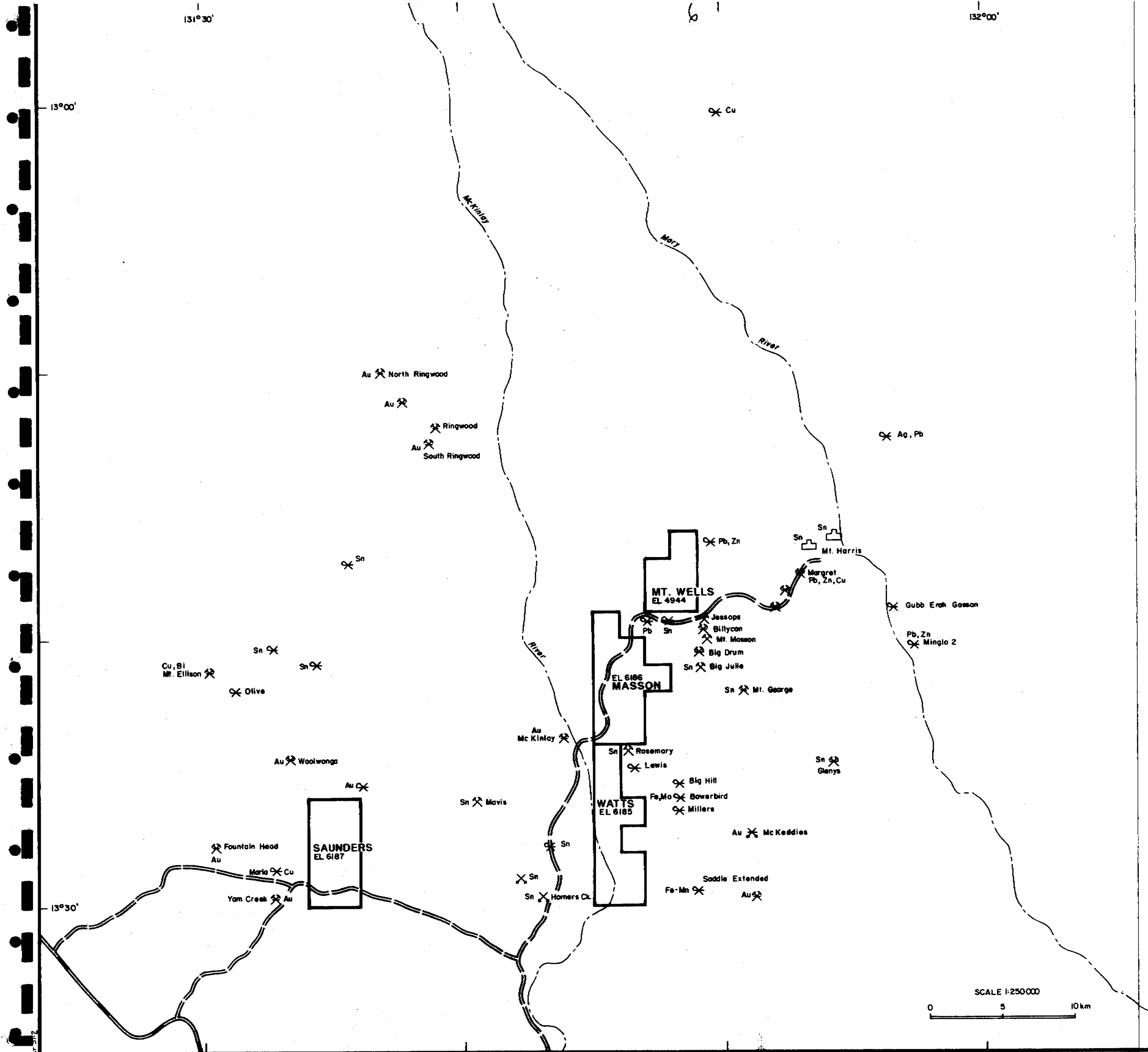
The licences lie close to the centre of the Pine Creek Geosyncline (Fig 1). The geosynclinal sequence of Early Proterozoic metasedimentary and metavolcanic rocks (Table 2) overlays a gneissic and granitic Archean basement which is exposed to the west and northeast of, but not within, the McKinlay River area.

The formations exposed within the licences are predominantly those of the South Alligator Group and the upper Mt Partridge Group. Pre-tectonic Zamu Dolerite sills, intruded into the metasediments, are also exposed.

Between 1800 Ma and 1870 Ma the Pine Creek Geosyncline sequence underwent a major period of deformation. This resulted in tight to isoclinal, non-cylindrical folding, extensive faulting and metamorphism (mostly to greenschist facies).

Post-tectonic granitic intrusions were emplaced in the period 1610my to 1590my and many of these bodies generated extensive contact metamorphic aureoles. Several gold deposits lie within metamorphic aureoles.

Recent studies emphasise the gold prospectivity of areas possessing one or more of the following features; proximity to regionally significant shear zones (e.g. Pine Creek shear zone), proximity to granitic metamorphic



- ✕ Mine
- ✕ Disused Mine
- ✕ Abandoned Prospect
- ✕ Alluvial Working
- ✕ Abandoned Alluvial Working
- ⌏ Abandoned Battery

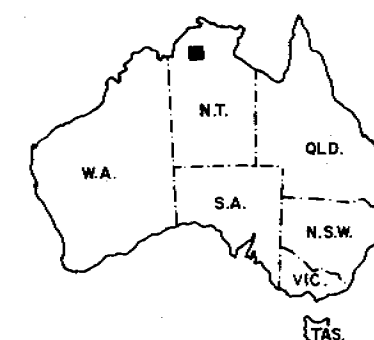


FIG. 2

BP BP MINERALS AUSTRALIA EXPLORATION DIVISION					
EL 6185 WATTS, EL 6186 MASSON, EL 6187 SAUNDERS & EL 4944 MT. WELLS					
LOCATIONS AND MINE DISTRIBUTION					
LOCATED ON		PINE CREEK		1:250 000 SHEET	
COMPILED	J. M.	March 1989	LAST REVISION		
DRAWN	J. C. L.	April 1989	ORIGINAL HELD	CAIRNS	
CHECKED			DRAWING NO.	MEL-3613	

aureoles, presence of major anticlinal fold axes, significant quartz veining, presence as potential host rocks, of Wildman Siltstone, Koolpin Formation or Mt Bonnie Formation.

TABLE 2

EARLY PROTEROZOIC STRATIGRAPHY OF THE ADELAIDE RIVER - PINE CREEK AREA

GROUP	FORMATION	MEMBER	LITHOLOGIES	THICKNESS (metres)
Finniss River	Burrell Creek		Greywacke, siltstone, mudstone, rare chert, iron formation and conglomerate	>3000
South Alligator	Mount Bonnie	Upper	Mudstone, siltstone chert, iron formation	10-250
		Lower	Greywacke, mudstone, siltstone, chert, carbonaceous mudstone, rare conglomerate	50-150
	Gerowie Tuff		Chert, mudstone, siltstone	200-400
	Koolpin	Upper	Carbonaceous mudstone,	50-150
		Middle	Iron formation, mudstone carbonaceous mudstone, siltstone	30-100
		Lower	Carbonaceous mudstone, mudstone, siltstone, limestone	0-250
Mount Partridge	Wildman Siltstone		Mudstone, phyllite, siltstone, carbonaceous mudstone, sandstone	200-400
	Mudogie Sandstone		Quartzite, arkose, pebble conglomerate, mudstone, siltstone	>500

(Nicholson and Eupene, 1984)

The geology of each tenement is shown at 1:50,000 scale in Figs 3 and 4, taken from the McKinley River 100,000 sheet and compared with the 1:25,000 compilation sheets published by the BMR.

EL 1685, Watts, contains outcrops of Koolpin Formation, and Mt Bonnie Formation and these, along with Gerowie Tuff, are included in several NW trending anticlines. The western half of the tenement is largely underlain by Quarternary deposits and is relatively flat and low-lying; this contrasts with the locally step and rugged outcrops of the Proterozoic sediments in the SW of the tenement.

Approximately 50% of the Masson tenement is underlain by Quaternary or Tertiary sediments. Wildman Formation, Koolpin Formation, Gerowie Tuff and Mt Bonnie Formation are all represented within the strongly folded sequence. A strand of the Francis Creek Fault passes through the eastern half of the tenement. A NNW trending anticline is definable in the NW of the licence and this is truncated to the south by an E-W striking fault highlighted by a 600m by 100m quartz blow. Hardies Prospect, a small gold show, is located just NW of the NW corner of the tenement.

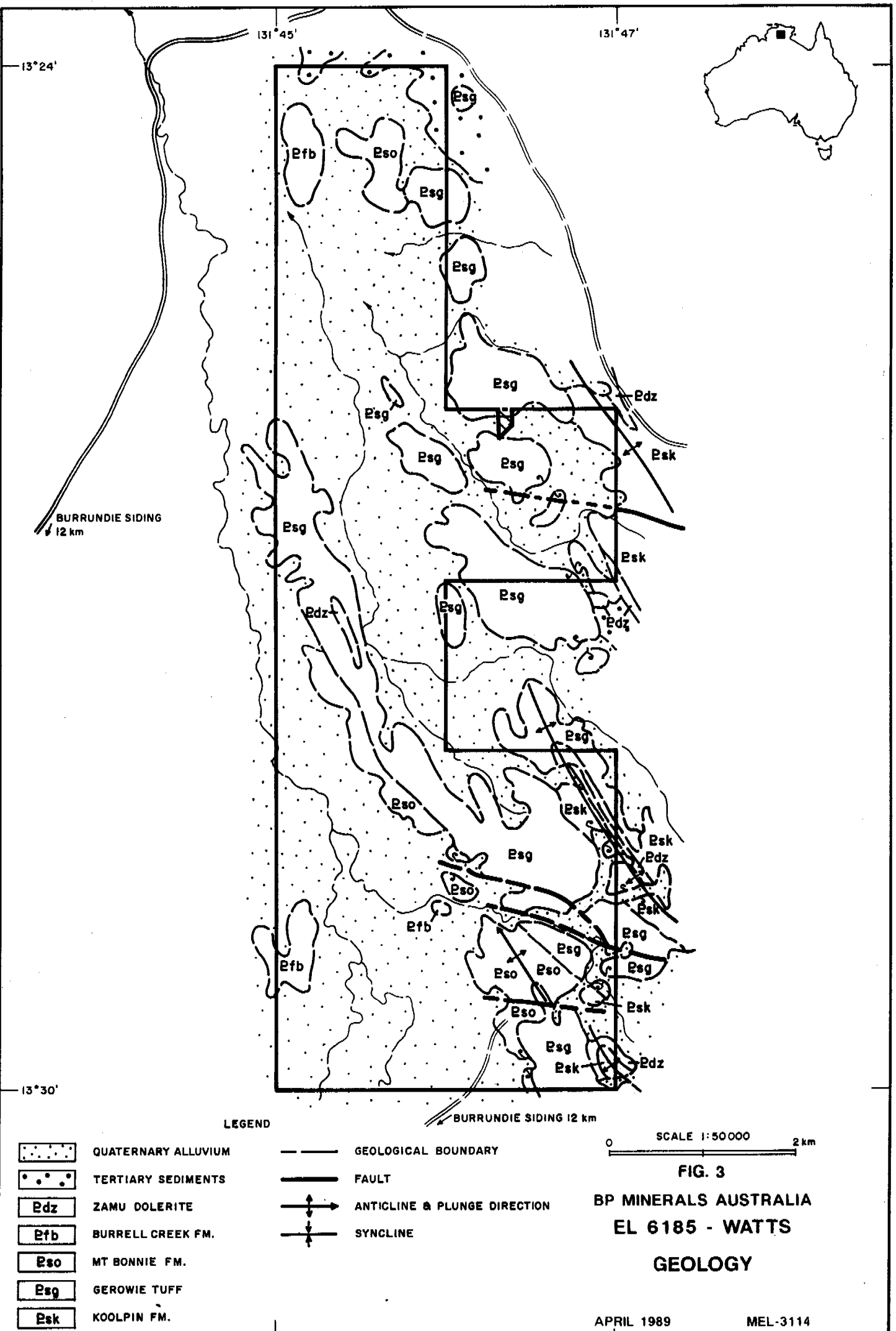
5.0 PREVIOUS EXPLORATION

ELs 6185 and 6186 fall within the now defunct Mt Wells Policy Reserve and documentation of the limited exploration activity is poor.

6.0 WORK CARRIED OUT BY BP

The principal elements of BP Gold's work programme can be summarised as follows:

- literature research including assessment of Landsat regional geological data and aerial photography
- completion of a detailed Bleg and stream silt drainage survey



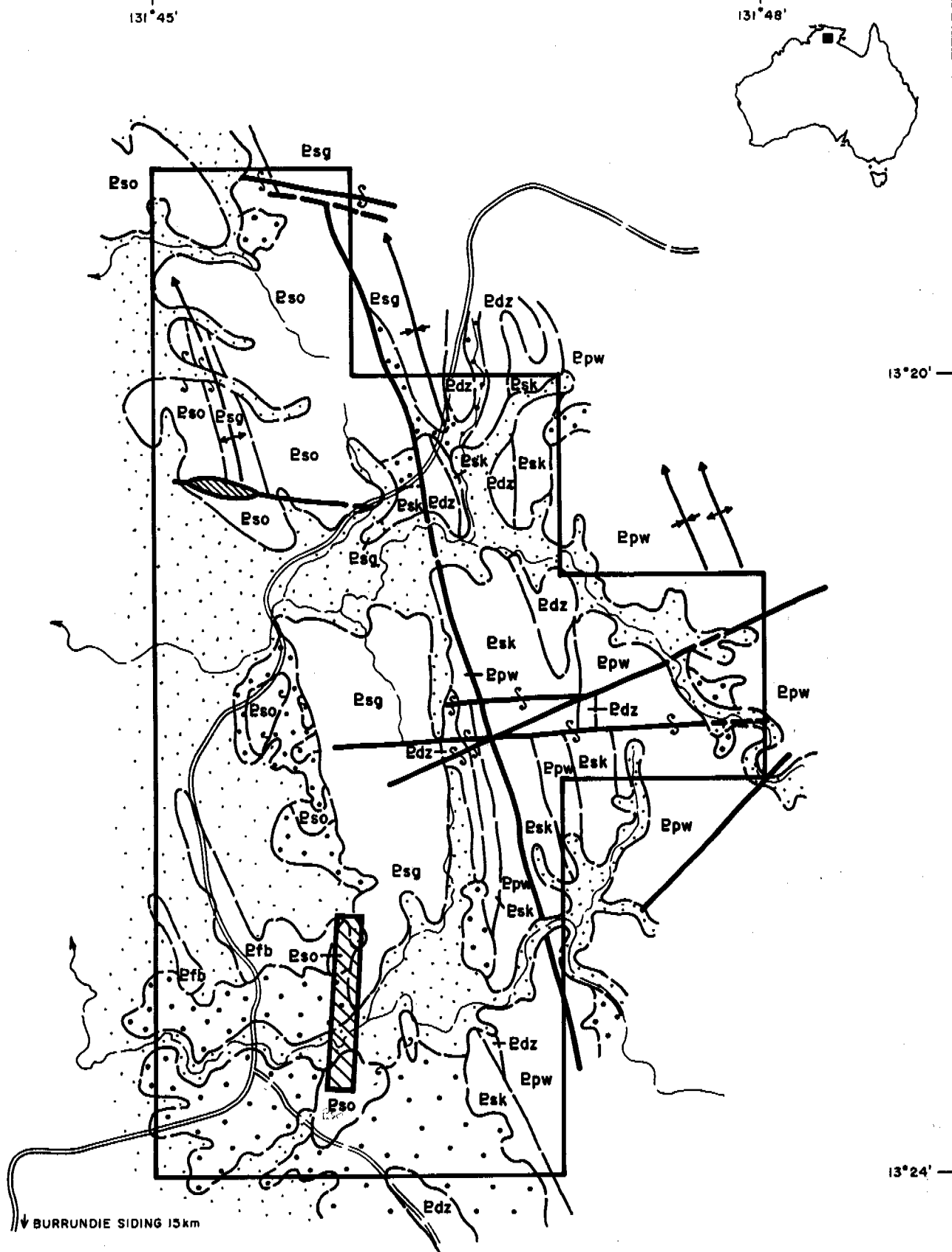
LEGEND

- QUATERNARY ALLUVIUM
- TERTIARY SEDIMENTS
- ZAMU DOLERITE
- BURRELL CREEK FM.
- MT BONNIE FM.
- GEROWIE TUFF
- KOOLPIN FM.

- GEOLOGICAL BOUNDARY
- FAULT
- ANTICLINE & PLUNGE DIRECTION
- SYNCLINE

0 SCALE 1:50000 2 km

FIG. 3
BP MINERALS AUSTRALIA
EL 6185 - WATTS
GEOLOGY



LEGEND

	QUATERNARY ALLUVIUM		GEOLOGICAL BOUNDARY
	TERTIARY SEDIMENTS		FAULT WITH CRUSH ZONE
	ZAMU DOLERITE		ANTICLINE
	BURRELL CREEK FM.		SYNCLINE WITH PLUNGE DIRECTION
	MT BONNIE FM		
	GEROWIE TUFF		
	KOOLPIN FM.		
	WILDMAN FM.		

SCALE 1:50000
0 2km

FIG. 4
BP MINERALS AUSTRALIA
EL 6186 - MASSON
GEOLOGY

- follow-up of drainage survey anomalies using rock chip sampling, soil sampling and reconnaissance geological mapping and prospecting
- report writing and assessment of results.

Many delays and additional costs were incurred because of adverse field conditions related to the wet season extending to the end of April 1989.

Bleg and stream silt samples were collected in the following manner:

- 5kg of -2mm material was collected. Material was taken from numerous points across the width of the creek and for 20-30m along the length of the creek
- a minus 80 mesh fraction was sieved from the 5kg -2mm sample.

Analyses were performed as follows by Comlabs, Darwin:

- Bleg samples were subjected to a 24hr static leach in a ph controlled dilute NaCN solution. Au was determined by an AAS carbon furnace technique and the concentration in the original sample calculated by weight ratios. Detection limit is 0.05ppb.
- As, Fe and Pb were analysed in stream silts; As (D.L. 20ppm) and Fe were analysed by XRF and Pb by standard AAS techniques.

Soil samples were analysed for Au (50g charge) by AAS using a carbon furnace finish to give a detection limit of 1ppb. As (D.L. 10ppm) and Fe were determined by XRF. One kg of -5mm of 'C' horizon material was collected from a depth typically between 10cm and 25cm below surface. The sample was reduced to minus 38 micron in a mixermill. Sample preparation for rock samples was similar to that used for the soil samples.

7.0 RESULTS

7.1 EL6185 Watts

All sample locations and analytical results for Au and selected other elements are plotted on Fig 5. Analytical results for all elements are presented in Appendix 1.

Five Bleg sites returned greater than 3ppb Au; two of these sites in the mid-east of the licence have Koolpin Formation cropping out extensively in the headwaters of the creek, but these outcrops lie outside the tenement boundary; three sites cluster around the southern end of the tenement in a zone dominantly underlain by Gerowie Tuff with subordinate Mt Bonnie Formation and Koolpin Formation.

The mid-east zone defined by samples L21723 and L21729 was followed up with limited rock chipping and foot prospecting along the N-S trending ridge located in the headwaters of the creeks, and by prospecting along the broad flat valley of the creeks. Rock chips returned below detection limit gold (<0.01ppm) and prospecting observations showed the headwaters ridge to comprise siliceous argillites and locally iron-rich sediments of Koolpin Formation, intruded by a thick (50m) Zamu Dolerite body. No quartz veining or structural complexity was observed to indicate the presence of a gold mineralised zone.

Initial rock chip sample follow-up of the southern zone returned encouraging values of 1.6ppm Au (L21559) and 0.34ppm Au (L21560) from small outcrops of siliceous pyritic-arsenopyritic sediments dipping steeply NE. A 200m by 20m zone located west of the anomalous rock chips contains several parallel quartz veins each up to 50cm thick. The anomalous rock chip zone and the quartz vein zone both strike SSE into EL5551 held by Geological and Management Services; the major potential in the area appears to lie south of EL6185.

Gold values in the follow-up soil samples reach a maximum of 37ppb within BP ground while the highest recorded value of 88ppb is from the ridge crest along strike from the anomalous rock chip values and outside of EL6185.

Prospecting observation did not discover any mineralised zones worthy of additional work.

7.2 EL 6186 Masson

Sample locations and gold results are shown on Fig 6 and all analytical results are presented in Appendix 2.

The maximum Au value obtained from the 47 Bleg samples was 1.93ppb. However, rock chip samples were collected and brief foot traverses completed across the higher value drainages. All but one rock chip returned less than 0.01ppm Au, including a sample from the prominent quartz blow in the NW of the tenement. Sample L21084 returned 0.12ppm Au. No additional work was considered warranted.

8.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The best result obtained from EL6185, Watts, is 1.6ppm Au from a rock chip. The mineralisation in this area is associated with several narrow quartz veins which probably reflect a small fault zone. The mineralisation appears to trend southwards from the southern boundary of EL6185 into EL5551 and to decrease in importance northwards as it cuts through EL6185. There is an absence of significant gold values in soils and rock chips taken more than 50m north of the southern boundary of EL6185. The mid-eastern Bleg anomalies are interpreted as reflecting enhanced background gold values in Koolpin Formation cropping out on competitor ground immediately east of EL6185. There could be gold mineralised rock buried beneath the broad flat valleys of the two anomalous drainages, but the probability of this is low.

Bleg sampling in EL6186, Masson, returned no gold values above 2ppb. Speculative follow-up of the higher Bleg gold values did not locate any evidence of gold mineralisation. The absence of gold mineralisation is consistent with the absence of profound regional structures.

9.0 EXPENDITURE

Expenditure on ELs 6185 and 6186 for the 12 month period ending 23 October 1989 is summarised as follows:

	EL 6185	EL 6186
Salaries	21,527	22,704
Logistics	13,295	12,570
Services	4,675	4,315
Tenement Costs	937	946
Depreciation	3,943	4,054
Administration	5,915	6,080
	50,292	50,669
	=====	=====

APPENDIX 1

GEOCHEMICAL RESULTS, WATTS EL 6185

STREAM SEDIMENT SAMPLES

GEOCHEMICAL ANALYSIS SHEET

	STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT	EP 51.3	Watts E.L. 6185	Regional	470
	NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	NT Masson 1:50,000	S271-2	A.M.G.	SSS	R.D.
					1/6/89
	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA					
	DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	BLEG 2				

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		OR NORTHING	OR EASTING	
1	L 21723	85 13200	800500	
2	25	85 13200	800500	
3	27	BLANK		
4	29	85 13000	800500	
5	31	85 12500	799750	
6	33	85 12200	800200	
7	35	85 11800	800300	
8	37	85 11700	799500	
9	39	85 12300	799500	
10	41	85 10500	795900	
11	43	85 10600	794100	
12	45	85 10100	799200	
13	47	85 09500	800200	
14	49	85 09400	799900	
15	51	85 08400	799800	
16	53	85 08100	800200	
17	55	85 07700	800300	
18				
19				
20				

BOX NO.
DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

PPB		ELEMENT			
TUBE No.					
	AJ				
	4.19				
	3.05				Duplicate as for L21723 BLANK
	1.20				
	3.18				
	0.83				
	0.97				
	1.26				
	1.09				
	1.61				
	1.31				
	1.79				
	1.67				
	1.18				
	0.62				
	0.50				
	0.53				
	1.11				
METHOD					
ANALYST					
DATE					

219947

BP BP MINERALS AUSTRALIA

GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
NT	EP 51.3	Watts E.L. 6185	Regional	470
NATMAP 1: 250 000 SHEET NO.		PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE
MT Masson 1:50,000		271-2	A.M.G.	SSS
HOLE I.D.		COLLAR N	COLLAR E	AZIMUTH
DRILLHOLE DATA		REPLICATE CODE SAMPLED BY DATE		
		R.D. 1/6/89		
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS - 80 # Fe, As, Pb				

SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
	OR NORTHING	OR EASTING	
1	24	24	
2	26	26	
3	28	28	
4	30	30	
5	32	32	
6	34	34	
7	36	36	
8	38	38	
9	40	40	
10	42	42	
11	44	44	
12	46	46	
13	48	48	
14	50	50	
15	52	52	
16	54	54	
17	56	56	
18			
19			
20			

TUBE No.	ELEMENT			
	As	Fe	Pb	
1	<20	4.94	18	
2	<20	4.62	20	Duplicate as for 221224 BLANK
3	20	3.34	12	
4	<20	5.05	20	
5	<20	3.00	16	
6	20	1.93	16	
7	20	3.30	24	
8	<20	1.54	8	
9	<20	2.68	14	
10	<20	1.83	16	
11	<20	2.72	18	
12	<20	2.82	16	
13	<20	2.00	32	
14	<20	1.36	20	
15	<20	0.96	4	
16	<20	1.45	10	
17	<20	2.36	40	
18				
19				
20				

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

METHOD

ANALYST

DATE

219948



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT		PROSPECT	COST CODE	
PROJECT	NT E P 51.3	Watts	E.L. 6185	Regional	470	
NATMAP 1 : 250 000 SHEET NO.		PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE	SAMPLED BY DATE
SAMPLE LOCATION	PINE CREEK	SD 52-8	AMG	SSS		R.D. 26/6/89
DRILLHOLE DATA	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP	COLLAR R.L.
DETAILS OF ANALYSIS REQUIRED						
ANALYSIS	BLEG					

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		OR NORTHING	OR EASTING	
1	L21757	8507750	800350	
2	59	8507750	800700	
3	61	8507750	800700	
4	63	BLANK	BLANK	
5	65	8507600	800750	
6	67	8508000	801250	
7	69	8508100	801200	
8	71	8506000	801500	
9	73	8506500	801300	
10	75	8506200	800200	
11	77	8506750	799900	
12	79	8507000	800500	
13				
14				
15				
16				
17				
18				
19				
20				

BOX NO. _____

DATE TO SAMPLE PREP. _____

DATE TO LAB. _____

DATE COMPLETED _____

DATE ENTERED

TUBE No.		ELEMENT			
1	ppb				
2	Au.				
3	0.67				
4	0.51				
5	1.22				
6	1.29				
7	1.11				
8	0.27				
9	0.81				
10	1.20				
11	3.71				
12	3.71				
13	1.44				
14	3.76.				
15					
16					
17					
18					
19					
20					
METHOD					
ANALYST					
DATE					

DUPLICATE AS FOR 121761
BLANK

217506

217506



GEOCHEMICAL ANALYSIS SHEET

	STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT	EP 51.3	Watts	EL 6185	Regional
					470
	NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	PINE CREEK	SD 52-8	A.M.G.	SSS	
					R.D. 26/6/89
	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA					
	DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	-80 #				

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		OR NORTHING	OR EASTING	
1	621758	8507750	800350	
2	60	8507750	800700	
3	62	8507750	800700	
4	64	BLANK	BLANK	
5	66	8508000	801350	
6	68	8509100	801700	
7	70	8506000	801500	
8	72	8506800	801300	
9	74	8506700	800700	
10	76	8506750	799900	
11	78	8506900	800800	
12				
13				
14				
15				
16				
17				
18				
19				
20				

BOX NO. _____

DATE TO SAMPLE PREP. _____

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

ELEMENT				
TUBE No.		As	Pb	Fe
1		20	80	1.83
2		20	40	3.52
3		<20	40	3.58
4		<20	<40	3.32
5		20	80	1.54
6		<20	40	2.36
7		<20	<40	2.38
8		20	50	4.04
9		<20	40	4.58
10		<20	40	1.13
11		<20	120	0.92
12				
13				
14				
15				
16				
17				
18				
19				
20				
METHOD				
ANALYST				
DATE				

217507

217507

SOIL SAMPLES



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	N.T. E P 51.3	8 Watts E.L 6185	South Watts	470
NATMAP 1: 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	SD 52-8	A.M.G.	SO L	R.D.
HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA				
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	AA49 - Au, 115 Fe xRF is Darwin Cont. 66.			

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		OR NORTHING	OR EASTING	
1	63	85 05 790	800500	
2	64	790	520	
3	65	780	540	
4	66	790	560	
5	67	780	580	
6	68	770	590	
7	69	770	600	
8	70	760	610	
9	71	760	620	
10	72	765	630	
11	73	770	660	
12	74	780	680	
13	75	85 05 790	800790	
14	76	790	710	
15	77	790	730	
16	78	580	770	
17	79	590	780	
18	80	580	790	
19	81	580	790	
20	82	580	800	

ELEMENT					
TUBE No.	As	Fe			
0.005	20	4.12			
0.009	30	4.26			
0.003	30	3.06			
0.027	40	5.65			
0.016	40	2.52			
0.013	30	1.81			
0.012	<20	2.12			
0.012	40	5.10	0.011		
0.088	30	1.84			
0.018	60	2.78			
0.010	70	2.34			
0.006	100	2.76			
0.016	80	2.12			
0.011	120	5.30			
0.011	160	6.15			
0.006	180	5.25			
0.009	210	5.95			
0.019	250	5.80	0.019		
0.024	250	5.55			
0.014	220	6.90			
METHOD					
ANALYST					
DATE					

217525

217525

2



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT	EP 51.3	Watts E.L. 6185	South Watts
				470
NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	SD 50-8		A.M.G.	SOL
				R.D.
				9/7/89
HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA				
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	AA's 9 - Au, As, Fe YRF 15 Jarwin Con 16 bs			

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		OR NORTHING	OR EASTING	
1	L 365 83	85 85 590	800 910	
2	84	590	920	
3	85	590	930	
4	86	85 85 590	940	
5	L 365 87	5960	700 730	
6	88	5970	740	
7	89	5980	750	
8	90	5990	760	
9	91	600000	770	
10	92	600000	780	
11	93	600	815	
12	94	600	820	
13	95	640	845	
14	96	600	860	
15	97	600	875	
16	98	620	890	
17	99	640	930	
18	L 26600	85 06 210	800 720	
19	601	210	920	
20	602	220	140	

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

ELEMENT					
TUBE No.	Au		As	Fe	
	0.024		350	7.30	
	0.009		420	5.90	
	0.018		400	4.28	
	0.009		180	6.70	
	0.025		90	5.40	
	0.014		110	5.45	
	0.012		80	7.15	
	0.010		90	8.85	
	0.022		90	5.20	
	0.010		20	6.00	
	0.008		30	3.84	
	0.008		20	2.44	
	0.007		30	4.36	
	0.006		40	4.34	
	0.009		20	3.26	
	0.012		20	2.68	
	0.011		20	4.56	
	0.014		20	6.50	} Duplicate.
	0.011	0.020	20	6.35	
	0.009		40	8.25	
METHOD					
ANALYST					
DATE					

217526

217526

24

BP BP MINERALS AUSTRALIA

GEOCHEMICAL
ANALYSIS
SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
NT	EP	51.3	Watts E.L. 6185	South Watts
470				
NATMAP 1: 250 000 SHEET NO.		PHOTOGRAPHY/TRVERSE	GRID	SAMPLE TYPE
SD 52-8			A.M.G.	SOL
HOLE I.D.		COLLAR N	COLLAR E	REPLICATE CODE
DRILLHOLE DATA		AZIMUTH		
DETAILS OF ANALYSIS REQUIRED		DATE		
ANALYSIS		R.D. 19/7/89		
ANS 9 - Au, As, Fe XRF IS Darwin Co 6.65				

SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
	OR NORTHING	OR EASTING	
1 126603	230	230	
2 604	240	240	
3 05	240	240	
4 06	250	250	
5 07	250	250	
6 08	260	260	
7 09	270	270	
8 10	280	280	
9 11	290	290	
10 12	300	300	
11 13	310	310	
12 14	320	320	
13 15	330	330	
14 16	340	340	
15 17	350	350	
16 18	360	360	
17 19	370	370	
18 20	380	380	
19 21	390	390	
20 22	400	400	

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

METHOD

ANALYST

DATE

ELEMENT

TUBE No.	Au	As	Fe
1	0.010	40	6.15
2	0.009	40	7.15
3	0.011	70	6.65
4	0.016	120	9.25
5	0.009	70	13.3
6	0.009	80	14.3
7	0.015	170	16.8
8	0.018	110	12.7
9	0.006	80	5.85
10	0.024	60	5.70
11	0.011	40	4.44
12	0.008	80	7.00
13	0.006	40	3.84
14	0.010	70	5.30
15	0.025	60	4.24
16	0.037	90	3.52
17	0.026	60	2.86
18	0.015	50	2.32
19	0.010	60	2.48
20	0.009	140	3.22

217527

BP BP MINERALS AUSTRALIA

GEOCHEMICAL
ANALYSIS
SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
NT	EP 51.3	Watts E.L. 6185	South Watts	470
NATMAP 1: 250 000 SHEET NO.		PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE
SD 52-8			A.M.G.	SOL
HOLE I.D.		COLLAR N	COLLAR E	REPLICATE CODE
DRILLHOLE DATA		SAMPLED BY DATE		
		R.D. 19/7/89		
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS				
NASS - Au, As, Fe NRE IS Darwin Conlabs				

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		OR NORTHING	OR EASTING	
1	126623	406280	500355	
2	24	385	385	
3	25	385	385	
4	26	385	385	
5	27	385	385	
6	28	400	405	
7	29	405	415	
8	30	410	435	
9	31	406750	500310	
10	32		230	
11	33		250	
12	34		220	
13	35		220	
14	36		240	
15	37		300	
16	38		310	
17	39		320	
18	40		330	
19	41		330	
20	42		340	

	TUBE No.	ELEMENT			
		Au	As	Fe	
1		0.009	260	4.04	
2		0.009	90	2.50	
3		0.009	100	2.58	
4		0.010	70	2.66	
5		0.019	120	3.30	
6		0.027	60	2.02	
7		0.011	50	2.42	
8		0.007	80	5.25	
9		0.011	40	3.40	
10		0.008	60	6.50	
11		0.008	0.009	60	9.50
12		0.008	70	6.70	
13		0.027	40	5.20	
14		0.008	40	5.05	
15		0.010	70	9.20	
16		0.011	100	8.40	
17		0.011	90	3.96	
18		0.019	60	4.00	
19		0.011	70	4.04	
20		0.012	130	6.95	

BOX NO.

DATE TO LAB.

DATE TO SAMPLE PREP.

DATE COMPLETED

DATE ENTERED

METHOD

ANALYST

DATE

217528

BP MINERALS AUSTRALIA

GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
NT	EP 51.3	Watts F.L. 6185	South Watts	470
NATMAP 1: 250 000 SHEET NO.		PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE
SD 52-8			AMS	SD L
REPLICATE CODE		SAMPLED BY DATE		
		R.D. 19/7/89		
HOLE I.D.		COLLAR N	COLLAR E	AZIMUTH
DIP		COLLAR R.L.		
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS AAS - Au, As, Fe YPFIS				

SAMPLE NO.	DEPTH FROM OR NORTHING	DEPTH TO OR EASTING	GEOCODE
1	L26643	9506750	906350
2	44	360	
3	45	370	
4	46	380	
5	47	390	
6	48	400	
7	49	800 420	
8	50	440	
9	51	460	
10	52	480	
11	53	500	
12	54	520	
13	55	540	
14			
15			
16			
17			
18			
19			
20			

ELEMENT

TUBE No.	Au	As	Fe
1	0.012	110	5.60
2	0.015	280	12.4
3	0.013	210	12.3
4	0.010	100	8.00
5	0.007	100	8.70
6	0.006	130	8.30
7	0.007	60	6.45
8	0.006	60	4.84
9	0.006	40	3.04
10	0.007	0.006 30	5.00
11	0.005	20	1.92
12	0.009	60	9.25
13	0.009	40	3.78
14			
15			
16			
17			
18			
19			
20			

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

METHOD

ANALYST

DATE

217529

ROCK CHIP SAMPLES



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT EP 51-3	Watts E.L. 6185	Regional	470
NATMAP 1: 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	PINE CREEK	SD 52-8	A.M.G.	CH
DRILLHOLE DATA	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH
ANALYSIS	DETAILS OF ANALYSIS REQUIRED			
	AAS 7 - Au As, Fe XRF			

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		^{OR} NORTHING	^{OR} EASTING	
1	121551	8507750	800300	
2	52	8507750	800300	
3	53	8507750	800500	
4	54	8507300	800500	
5	55	8506000	801500	
6	56	8506400	801200	
7	57	8506700	800700	
8	58	8505300	800400	
9	59	8505800	800700	
10	60	8505750	800700	
11	61	8506000	800700	
12	62	8507100	800500	
13	63	8507000	800300	
14	64	8506800	800300	
15	65	8506300	800400	
16	66	8513300	801200	
17	67	8513200	801300	
18	68	8512500	801500	
19				
20				

ELEMENT					
TUBE No.	Au		As	Fe	
	<0.01		100	1.80	
	0.05	0.10	290	5.25	
	<0.01		170	99	
	<0.01		40	3.04	
	<0.01		70	21.5	
	<0.01		70	15.9	
	<0.01		<20	3.66	
	<0.01		260	20.3	
	1.60		3650	4.50	
	0.34		370	5.15	
	<0.01		670	11.2	
	<0.01		40	4.10	
	<0.01		230	13.7	
	<0.01		30	2.76	
	<0.01		20	0.88	
	<0.01		<20	1.65	
	<0.01		<20	16.6	
	<0.01		20	14.5	
METHOD					
ANALYST					
DATE					

217508

217508



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT E P	51.3	WATTS E.L. 6185	SOUTH
				470
NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	PINE CREEK	SD 52-8	AMG	CHIP
				R.D. 12/7/89
HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA				
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	AAS F, As, Fe - XRF.			

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		OR NORTHING	OR EASTING	
1	47-581	5105400	799500	
2	52	5106100	799600	
3	53	5106600	799700	
4	54	5106700	799700	
5	55	5106900	799800	
6	58	5107300	799900	
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

ELEMENT					
TUBE No.	Au	As	Fe		
1	0.03	20	1.22		
2	0.01	60	3.76		
3	0.48	1180	8.40		
4	0.09	630	6.80		
5	0.03	100	4.22		
6	0.03	30	1.35		
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
METHOD					
ANALYST					
DATE					

217510

217510



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT EP 51.3	Wayys E.L 6185	Regional	470
NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	Masson 1:50,000	5271-2	A.M.G.	6h
DRILLHOLE DATA	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH
ANALYSIS	DETAILS OF ANALYSIS REQUIRED			
	AAS 7 Au Fe As XRF			

	SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
		OR NORTHING	OR EASTING	
1	621096	8512700	800600	
2	097	8511800	800300	
3	098	8512700	797900	
4	099	8511400	798100	
5	100	8511200	798200	
6	101	8511100	798300	
7	102	8510500	798700	
8	103	8510400	798300	
9	104	8510400	798400	
10	105	8510400	799200	
11	106	8510400	799300	
12				
13				
14				
15				
16				
17				
18				
19				
20				

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

ELEMENT					
TUBE No.	Au		As	Fe	
1	<0.01		50	1.68	State? di. py
2	<0.01	(<u><0.01</u>)	<20	0.53	py, H. py, yel, sil
3	<0.01		220	6.85	qtz / chert
4	<0.01		20	32.9	py, H. py, yel, sil
5	<0.01		80	10.9	py, H. py, yel, sil
6	<0.01		<20	6.20	py, H. py, yel, sil
7	<0.01		650	4.56	py, H. py, yel, sil
8	<0.01		130	1.08	py, H. py, yel, sil
9	<0.01		750	8.80	py, H. py, yel, sil
10	<0.01		280	11.3	py, H. py, yel, sil
11	<0.01		160	4.58	py, H. py, yel, sil
12					
13					
14					
15					
16					
17					
18					
19					
20					
METHOD					
ANALYST					
DATE					

219949

APPENDIX 2

GEOCHEMICAL RESULTS, MASSON EL 6186

210

STREAM SEDIMENT SAMPLES



GEOCHEMICAL ANALYSIS SHEET

STATE		PROJECT CODE		PROJECT		PROSPECT		COST CODE	
PROJECT		NT E P 51.4		Masson		Regional		471	
SAMPLE LOCATION		HATMAP 1 : 250 000 SHEET NO.		PHOTOGRAPHY/TRAVERSE		GRID		SAMPLE TYPE	
Mount Masson		5271-2				SS		R.D. 19.5.89	
DRILLHOLE DATA		HOLE I.D.		COLLAR N		COLLAR E		AZIMUTH	
ANALYSIS		DETAILS OF ANALYSIS REQUIRED		BLEG					

[illegible]

TUBE No.		ELEMENT			
1	Au ppb 1.36				
2	0.67				
3	0.18				
4	0.27				
5	0.38				
6	0.53				
7	0.36				
8	0.31				
9	0.20				
10	1.93				
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
METHOD					
ANALYST					
DATE					

219927



GEOCHEMICAL ANALYSIS SHEET

STATE		PROJECT CODE		PROJECT		PROSPECT		COST CODE	
PROJECT		NT EP 51.4		HASSON		REGIONAL		471	
SAMPLE LOCATION		NATMAP 1 : 250 000 SHEET NO.		PHOTOGRAPHY/TRAVERSE		GRID		SAMPLE TYPE	
HASSON								SSS	
								R.D. 20/5/89	
DRILLHOLE DATA		HOLE I.D.		COLLAR N		COLLAR E		AZIMUTH	
								DIP	
								COLLAR R.L.	
ANALYSIS		DETAILS OF ANALYSIS REQUIRED							
		ALG							

[illegible]

219930



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT	E P 51.4	Masson	Regional
471				
NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
MM Masson	5071-2		SSS	
SAMPLE LOCATION				R.D. 19 5 89
HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA				
COLLAR R.L.				
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	As XRF, Pb Fe AAS			

[illegible]

BOX NO. _____

DATE TO SAMPLE PREP. _____

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

ELEMENT %					
TUBE No.		^{PPM} As	Fe	Pb ^{PPM}	
1		< 20	2.26	26	
2		< 20	0.91	12	
3		< 20	0.67	8	
4		< 20	0.62	14	
5		< 20	0.78	22	
6		< 20	1.16	22	
7		< 20	1.15	24	
8		< 20	0.75	10	
9		< 20	0.75	8	
10		< 20	0.92	10	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
METHOD					
ANALYST					
DATE					

219928



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE		PROJECT		PROSPECT	COST CODE	
PROJECT	NT	EP	51.4	Masson	Regional	471	
SAMPLE LOCATION	NATMAP 1 : 250 000 SHEET NO.		PHOTOGRAPHY/TRAVERSE		GRID	SAMPLE TYPE	REPLICATE CODE SAMPLED BY DATE
	Masson 1:50,000		5271-2			SSS	R.O. 20/5/89
DRILLHOLE DATA	HOLE I.D.		COLLAR N		COLLAR E	AZIMUTH	DIP
ANALYSIS	DETAILS OF ANALYSIS REQUIRED						
	- 80 # As Fe Pb						

[illegible]

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

ELEMENT					
TUBE No.		As	Fe	Pb	
1					
2		<20	2.98	10	
3		<20	2.08	16	
4		<20	2.00	16	Duplicate as for L21534
5		<20	1.84	8	
6		<20	2.28	16	
7		<20	1.63	12	
8		<20	1.42	20	
9		<20	1.32	12	
0		<20	2.82	16	
1		<20	4.64	18	
2		<20	2.78	18	
3					
4					
5					
6					
7					
8					
9					
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
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8					
9					
0					
1					
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3					
4					
5					
6					
7					
8					
9					
0					
1					
2					
3					
4					
5					

219931



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT EP 51.4	Masson	EL 6186	Regional
				471
SAMPLE LOCATION	NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE
	1:50,000	5771-2	AMG	SSS
				R.D. 25/5/89
DRILLHOLE DATA	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH
				DIP
				COLLAR R.L.
ANALYSIS	DETAILS OF ANALYSIS REQUIRED			
	BIEG 2			
	Comlabs Darwin			

SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
	NORTHING	EASTING	
L 21653	85 23500	801000	
55	85 23000	801300	
57	85 22700	801200	
59	85 22300	801600	
61	85 22300	801600	
63	BLANK		
65	85 21300	801500	
67	85 21600	801500	
69	85 21300	801500	
71	85 21500	801700	
73	85 21200	801900	
75	85 208700	802100	
77	85 19200	800100	
79			
81	85 22800	799600	
83	85 22200	799200	
85	85 22700	799400	
87	85 22200	799600	
89	85 22700	799600	
91	85 21600	799750	

TUBE No.	AU (PPB)	As	Fe	Pb
1	1.46			
2	1.77			
3	0.82	20	3.88	28
4	0.73			
5	0.78			
6	1.11	=	CLANK	
7	1.48			
8	0.87			
9	0.46			
0	0.40			
1	0.38			
2	0.77			
3	1.58			
4	0.44			
5	0.60	<20	0.81	24
6	0.71			
7	1.08			
8	1.41			
9	0.54			
0	0.94			
METHOD				
ANALYST				
DATE				

219940



GEOCHEMICAL ANALYSIS SHEET

	STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT	EP 51.4	Masson	Regional	471
SAMPLE LOCATION	NATMAP 1 : 250 000 SHEET NO.		PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE
	MY Masson 1:50,000		5771-2	AMG	SSS
					REPLICATE CODE
					SAMPLED BY
					DATE
DRILLHOLE DATA	HOLE I.D.	COLLAR N		COLLAR E	AZIMUTH
					DIP
					COLLAR R.L.
ANALYSIS	DETAILS OF ANALYSIS REQUIRED				
	- 80 # As, Fe, Pb, Barium, Con 665				

SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
	OR NORTHING	OR EASTING	
121654	8523500	801000	
56	8522000	801300	
60	8522000	801600	
62	8522300	801600	
64	BLANK		2
66	8521500	801500	
68	8522000	802000	
70	8522300	802300	
72	8521500	802700	
74	8521750	802900	
76	8520700	802100	
78	8520500	801900	
80	8519200	800100	
82	8527500	799600	
84	8527200	799200	
86	8522200	799400	
88	8522200	799600	
90	8522200	799600	
92	8521600	799750	
94	BLANK		

ELEMENT					
TUBE No.		As	Fe	Pb	
		20	4.60	34	
		20	4.00	20	
		<20	4.32	26	
		<20	4.08	20	DUPPLICATE as for L71160
		20	3.32	17	
		<20	4.86	64	
		<20	3.72	40	
		<20	3.88	9	
		<20	2.14	6	
		<20	1.23	11	
		<20	0.96	7	
		<20	2.96	32	
		<20	1.25	36	
		-	-	-	
		<20	2.56	26	
		20	2.48	54	
		20	2.16	48	
		<20	1.11	28	
		<20	1.68	54	
		20	3.32	8	

BOX NO.

DATE TO SAMPLE PREP _____

DATE TO LAB _____

DATE COMPLETED _____

DATE ENTERED

METHOD

ANALYST

DATE _____

219941



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT E P 51.4	Masson	E.L. 6186	Regional
				471
NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	Mt Masson 1:50000	S271-2	AMG	SSS
				P.D. 25/5/89
MOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA				
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	BLEG 2 Conclusions Darwin.			

[illegible]

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

ELEMENT					
TUBE No.	AU (PPB)				
1	1.18			Σ	BLANK
2	0.53				
3	1.28				Duplicate as for 121675
4	0.51				
5	0.44				
6					
7					
8					
9					
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
0					
METHOD					
ANALYST					
DATE					

219942



GEOCHEMICAL ANALYSIS SHEET

	STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT	EP 51-4	Masson	E.L. 6186	Regional
					471
	NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE SAMPLED BY DATE
SAMPLE LOCATION	M4 Masson 1:50,000	S271-2	AMG	Ch	R.D. 25/5/89
	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA					
	DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	AAS 7 Au, VRF Fe, As. Darwin Comlabs				

[illegible]

BOX NO. _____

DATE TO SAMPLE PREP. _____

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

[illegible]

219939

BP MINERALS AUSTRALIA

GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
NT	E P 51.4	Manson E.L. 6186	Regional	471
NATMAP 1 : 250 000 SHEET NO.		PHOTOGRAPHY/TRaverse	GRID	SAMPLE TYPE
M4 Manson 1:50,000		5271-2	A.M.G	Ch
HOLE I.D.		COLLAR N	COLLAR E	REPLICATE CODE
DRILLHOLE DATA		SAMPLED BY DATE		
		R.D. 31/5/89		
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS AAS 7 Au XRF As Fe Darwin Comlabs				

SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
	OR NORTHING	OR EASTING	
✓ 1 L 21078	85 21000	799200	
✓ 2 79	85 21100	799300	
✓ 3 80	85 21250	799300	
✓ 4 81	85 20250	799200	
✓ 5 82	85 20300	799300	
✓ 6 83	85 20300	799300	
✓ 7 84	85 20400	799300	
✓ 8 85	85 20200	799600	
✓ 9 86	85 20200	799500	
✓ 10 87	85 17500	799300	
✓ 11 L 21093	85 19600	799700	
✓ 12 94	85 19300	799800	
✓ 13 95	85 17000	800900	
14			
15			
16			
17			
18			
19			
20			

TUBE No.	ELEMENT				
	Au	As	Fe		
1	<0.01	1500	11.1		
2	<0.01	650	12.8		
3	<0.01	1060	12.7		
4	<0.01	50	2.28		
5	<0.01	330	6.30		
6	<0.01	1180	8.90		
7	0.12	1320	9.45		
8	<0.01	50	0.91		
9	<0.01	370	4.28		
10	<0.01	30	5.60		
11	<0.01	770	8.50		
12	<0.01	1680	13.8		
13	<0.01	40	14.5		
14					
15					
16					
17					
18					
19					
20					

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

METHOD

ANALYST

DATE

219944



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	N.T. E P 51-4	Masson E.L. 6186	Regional	171
NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE
SAMPLE LOCATION	PINE CREEK	SD 52-8	A.M.G.	Ch
HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP
DRILLHOLE DATA				
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	AAS - 7 Fe A. xRF - Down.			

[illegible]

BOX NO. _____

DATE TO SAMPLE PREP. _____

DATE TO LAB. _____

DATE COMPLETED _____

DATE ENTERED

ELEMENT			
TUBE No.	As	Fe	
	<.01	30	6.9
	<.01	<20	2.1
	<.01	20	3.62
	<.01	80	9.35
	<.01	<20	2.08
	<.01	30	8.15
</			

217509



GEOCHEMICAL ANALYSIS SHEET

	STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT	EP 51.4	Masson	E.L. 6186	L21549 (Blfs 143 ppb) Follows up 471
	NATMAP 1 : 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE	REPLICATE CODE SAMPLED BY DATE
SAMPLE LOCATION	Pine Creek	SD 52-8	AMG	Ch	R.D. 13/7/89
	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH	DIP COLLAR R.L.
DRILLHOLE DATA					
	DETAILS OF ANALYSIS REQUIRED				
ANALYSIS	AAS - 7 - Au, Fe, As XRF - Comlabs Darwin.				

[illegible]

BOX NO. _____

DATE TO SAMPLE PREP. _____

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

ELEMENT					
TUBE No.	Au.	As	Fe		
1	<0.01	30	52.7		
2	0.05	50	26.7		
3	0.04	<20	3.98		
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
METHOD					
ANALYST					
DATE					

217511

217511

ROCK CHIP SAMPLES



GEOCHEMICAL ANALYSIS SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT E P 51.4	Masson	E.L. 6186	Regional
				471
SAMPLE LOCATION	NATMAP 1: 250 000 SHEET NO.	PHOTOGRAPHY/TRAVERSE	GRID	SAMPLE TYPE
	M4 Masson 1:50,000	5371-2	AMG	SSS
				REPLICATE CODE
				SAMPLED BY
				DATE
DRILLHOLE DATA	HOLE I.D.	COLLAR N	COLLAR E	AZIMUTH
				DIP
				COLLAR R.L.
ANALYSIS	DETAILS OF ANALYSIS REQUIRED			
	-80 # As Fe Pb.			

[illegible]

BOX NO. _____

DATE TO SAMPLE PREP. _____

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

ELEMENT				
TUBE No.	As	Fe	Pb	
1	<20	1.79	46	
2	<20	1.83	46	Duplicate an for 17-696
3	<20	1.61	48	
4	<20	0.86	30	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
METHOD				
ANALYST				
DATE				

219943

BP BP MINERALS AUSTRALIA

GEOCHEMICAL
ANALYSIS
SHEET

STATE	PROJECT CODE	PROJECT	PROSPECT	COST CODE
PROJECT	NT	EP 51.4	Masson E.L. 6186	Regional
471				
NATMAP 1: 250 000 SHEET NO.				
PHOTOGRAPHY/TRAVERSE				
GRID				
SAMPLE TYPE				
REPLICATE CODE				
SAMPLED BY				
DATE				
SAMPLE LOCATION				
Hf Masson 1:50000				
5271-2				
A.M.G.				
SSS				
R.D. 31/5/89				
HOLE I.D.				
COLLAR N				
COLLAR E				
AZIMUTH				
DIP				
COLLAR R.L.				
DRILLHOLE DATA				
DETAILS OF ANALYSIS REQUIRED				
ANALYSIS				
BLE 2				

SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
	OR NORTHING	OR EASTING	
✓1 L21703	SS 21000	798900	
✓2 05	SS 20600	798400	
✓3 07	SS 20000	799100	
✓4 09	SS 19500	799400	
✓5 11	SS 19700	799400	
✓6 13	SS 20300	800200	
✓7 15	SS 19400	800400	
✓8 17	SS 18000	801600	
✓9 19	SS 17400	800600	
✓10 21	SS 17000	800900	
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

BOX NO.

DATE TO SAMPLE PREP.

DATE TO LAB.

DATE COMPLETED

DATE ENTERED

TUBE No.	ELEMENT			
	AU			
1	1.33			
2	0.47			
3	1.39			
4	0.49			
5	0.82			
6	1.02			
7	0.98			
8	0.53			
9	0.27			
10	0.30			
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
METHOD				
ANALYST				
DATE				

219945

BP MINERALS AUSTRALIA

GEOCHEMICAL
ANALYSIS
SHEET

PROJECT

STATE

PROJECT CODE

PROJECT

PROSPECT

COST CODE

NT E P 51.4

Masson E.L. 6186

Regional

471

SAMPLE
LOCATION

NATMAP 1: 250 000 SHEET NO.

PHOTOGRAPHY/TRAVERSE

GRID

SAMPLE TYPE REPLICATE CODE SAMPLED BY DATE

Mt Masson 1:50000

5271-2

A.M.G.

SSS

T.D.

31/5/89

DRILLHOLE
DATA

HOLE I.D.

COLLAR N

COLLAR E

AZIMUTH

DIP

COLLAR R.L.

DETAILS OF ANALYSIS REQUIRED

ANALYSIS

- 80 #

ELEMENT

SAMPLE NO.	DEPTH FROM	DEPTH TO	GEOCODE
	OR NORTHING	OR EASTING	
✓ 1 L21704	85 21000	798900	
✓ 2 06	85 20600	798900	
✓ 3 08	85 20000	799100	
✓ 4 10	85 19500	799400	
✓ 5 12	85 19700	799400	
✓ 6 14	85 20300	800200	
✓ 7 16	85 19400	800400	
✓ 8 18	85 18000	801600	
✓ 9 20	85 17400	800600	
✓ 10 22	85 17000	800900	
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

TUBE No.	ELEMENT			
	As	Fe	Pb	
1	20	3.26	34	
2	<20	0.74	28	
3	<20	0.78	18	
4	<20	0.69	18	
5	20	1.88	40	
6	<20	2.20	44	
7	<20	2.36	16	
8	<20	2.48	8	
9	<20	0.63	6	
10	<20	0.85	10	
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

BOX NO.

DATE TO LAB.

DATE TO SAMPLE PREP.

DATE COMPLETED

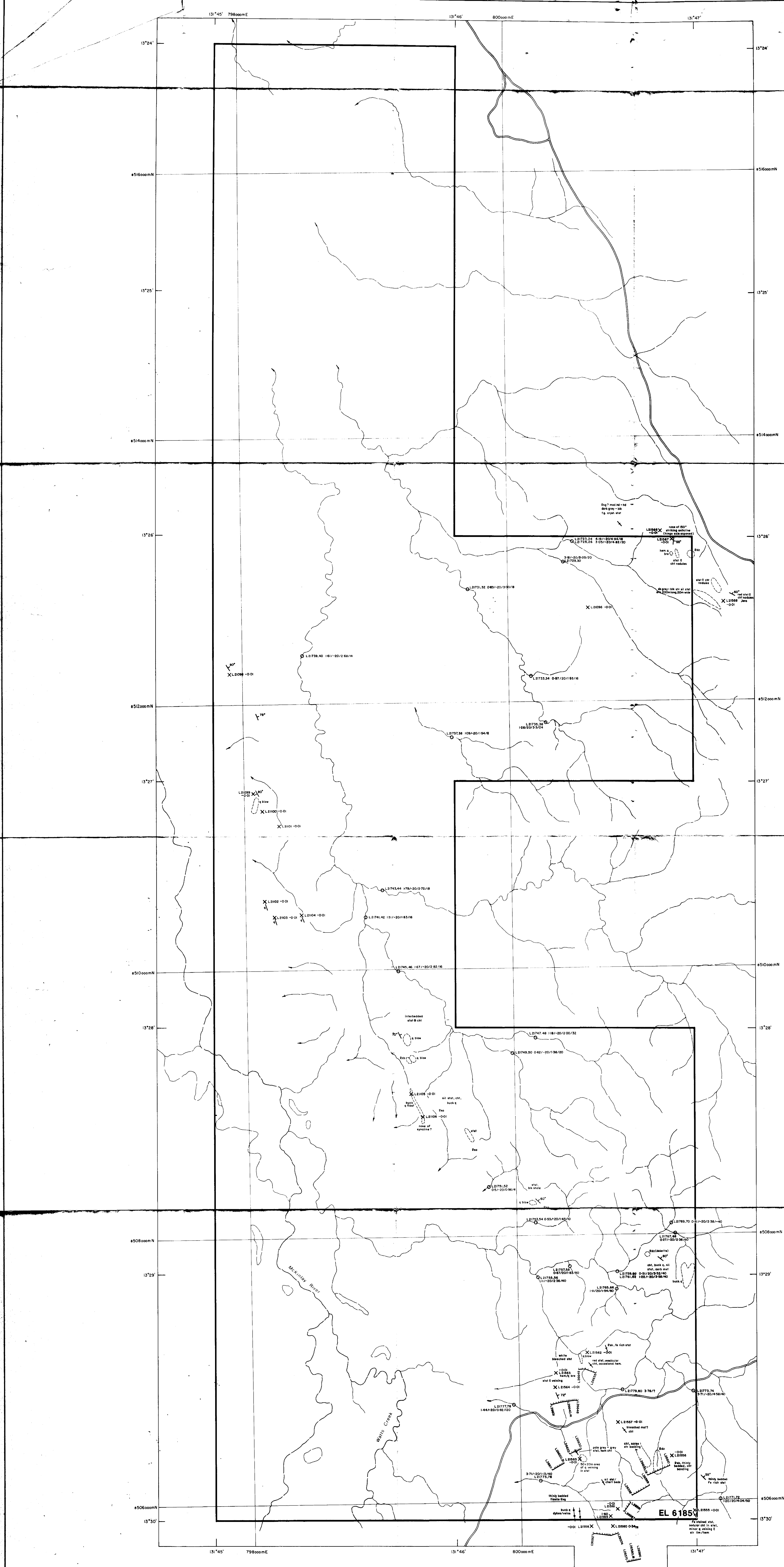
DATE ENTERED

METHOD

ANALYST

DATE

219946



BP MINERALS AUSTRALIA
EXPLORATION DIVISION

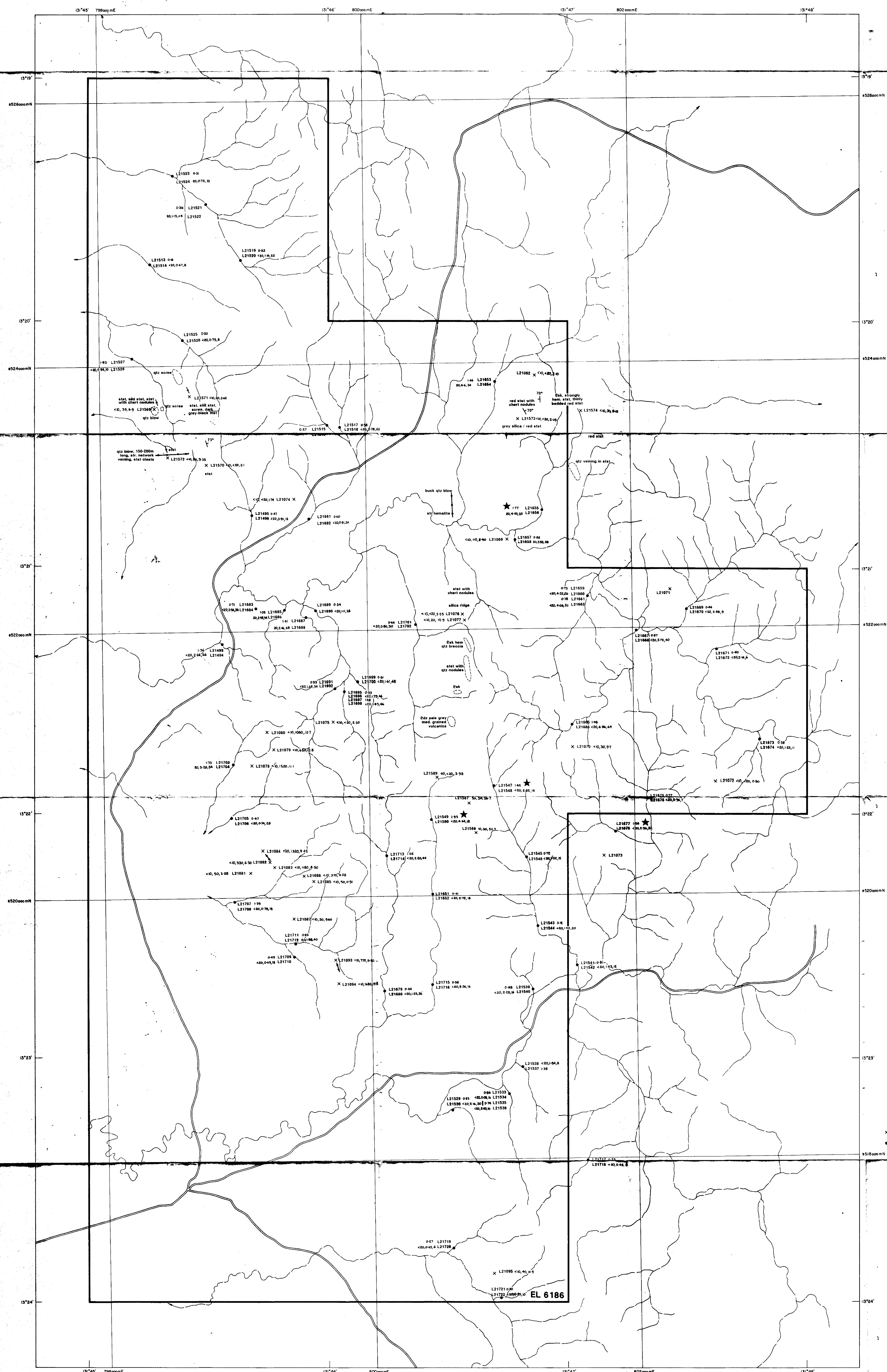
EL 6185 - WATTS
ROCK CHIP, BLEG & SILT STREAM
SEDIMENT SAMPLES & GEOLOGY

LOCATED ON: PINE CREEK 1:250 000 SHEET

COMPILED	M.D. WALKER	LAST REVISION	
DRAWN	S.P. WHEELER	JULY 89	ORIGINAL MELD MELBOURNE
CHECKED			DRAWING NUMBER MEL-3158

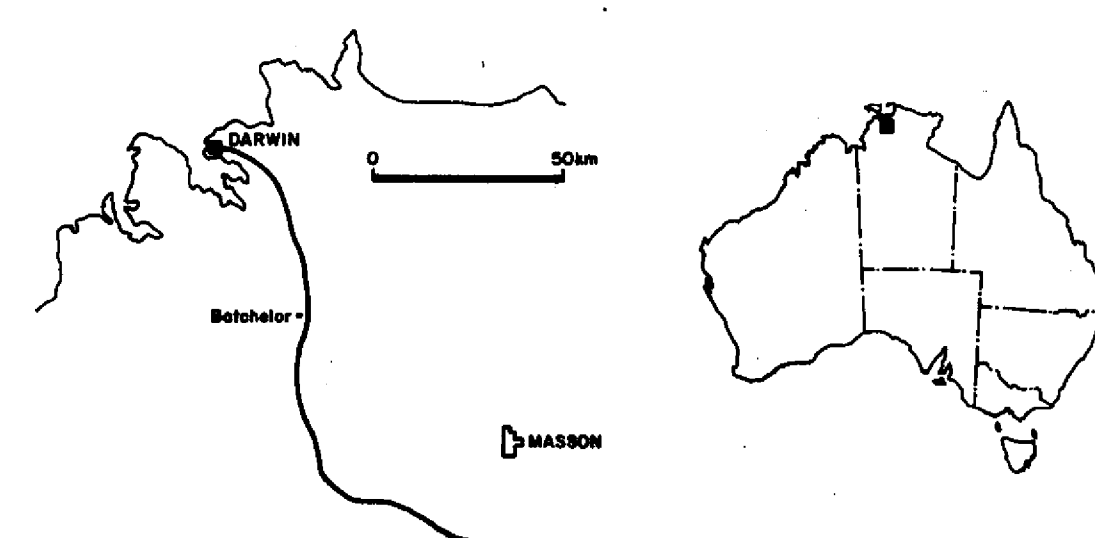
FIG. 5

CR 89/711



X L21587 50,50,267 Rock chip sample location, number & analysis: Au ppb, As ppm, Fe %
 L21547 142 BLEG sample number & analysis: Au ppb
 L21548 <20,288,16 Stream sample location: BLEG sample number & analysis: As ppm, Fe %, Pb ppm
 omN ★ BLEG sample 1.5-2.5 ppb Au

Edz	Zamu Dolerite
Ek	Koolpin Formation
hem	Hemattite
msl	Mudstone
qtz	Quartz
sld	Silicified
str	Strong
sst	Siltstone
	Quartz vein
70°	Bedding strike & dip
	Bedding strike & vertical dip



BP MINERALS AUSTRALIA

EL 6186 - MASSON

SAMPLE LOCATIONS & ANALYTICAL RESULTS

LOCATED ON		PINE CREEK		1 250 000 SHEET	
COMPILED	R. DUREU	6/89	LAST REVISION		
DRAWN	S.P. WHEELER		ORIGINAL HELD	MELBOURNE	
CHECKED			DRAWING NUMBER	MEL - 3182	

CR89/711

FIG. 6