

**ANNUAL REPORT FOR YEAR ONE
EXPLORATION LICENCE 7430
WEAVER'S CUT AREA N.T.**

17 JUNE 1991 TO 18 JUNE 1992

BY

**ANDREW D. GROVE BENG
(MINERAL EXPLORATION & MINING GEOLOGY)**

FOR

AZTEC MINING COMPANY LIMITED

**BATCHELOR 5171
Pine Creek SD52-8**

**DARWIN, NT
JULY 1992**

CR 92 / 399

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1. INTRODUCTION

Exploration Licence 7430 comprises one graticular block (3km²) and is located on the Burnside (5171-2) 1:50000 map sheet, approximately 30km south of Adelaide River (Figure 1). The licence intersects the Stuart Highway at Weaver's Cut.

The licence was taken up to explore for gold and base metal mineralisation.

This report details the work conducted during the first year of tenure, and proposed expenditure for Year Two of tenure.

2. SUMMARY

Exploration Licence 7430 has previously been explored by W.R. Grace, Western Mining Corporation Ltd and Kakadu Resources Ltd. Anomalous gold and lead values were returned from rock chipping and soil sampling programmes conducted by these groups.

Work carried out during the first year of tenure included literature research, base map preparation and rock chip sampling.

Results from the first year of exploration indicates that further follow-up work is warranted.

3. CONCLUSIONS

- 1) Extensive rock chipping has identified minor low level anomalous Au, Pb, As and Ag values, predominantly associated with quartz veining..
- 2) Follow-up work is warranted to test anomalous veining identified during the first year of tenure.
- 3) -40# stream sediment sampling of all active drainage within the licence would aid in its systematic evaluation.

4. TENURE

Exploration Licence 7430 comprises one graticular block (3km²) which was granted to the Aztec Mining Company Ltd (100%) on the 18th of June 1991 for a period of two years. Exploration is managed by Aztec Mining Company Ltd, the owners and operators of the Woodcutters Pb-Zn mine.

5. PREVIOUS EXPLORATION

Exploration between 1981 and 1985 was conducted by Zapopan Consolidated Pty Ltd (1982, 1983, and Shields, 1985) and consisted of airphoto structural analysis and soil sampling to test the potential of griesen-type tin mineralisation. Soil samples were analysed for As and Pb, however, no samples were taken from the ground now covered by EL7430.

W.R. Grace (Aust) Ltd (McDonald, 1985) later acquired the ground and collected 14 rock chip samples. The best samples were 0.365g/t of gold and 2,600ppm As. In 1985 a stream sediment survey was conducted over EL2478, but no anomalies were recognised.

Kakadu Resources Ltd (Giacomo, 1988 and Holden, 1989) later took up the ground under EL4938. They conducted a rock chipping and reconnaissance soil sampling programme. Twenty-nine rock chip samples were taken from within the present licence area, the best results being 5.47, 2.04 and 0.5g/t of gold. Soil sampling revealed a minor lead anomaly (maximum 301ppm Pb).

6. GEOLOGY

Exploration Licence 7430 lies within Early Proterozoic sediments of the Pine Creek Geosyncline. Burrell Creek Formation mudstones, siltstones and feldspathic greywackes outcrop within the licence (Figure 2).

Siltstones and mudstones are typically thinly bedded, fissile and laminated. They display a wide variation in colour due to differing degrees of alteration and relative oxidation states. Colours range from cream, tan, pink, red to olive green and mustard yellow.

Greywacke beds are green to tan brown, moderately sorted and massively textured with bedding ranging from 0.5 to 10's of metres.

Contact are generally sharp with occasional graded bedding defined by lithological changes from very coarse clastic to fine silty greywacke.

The dominant structures within the licence are north-south trending tightly folded ridges.

The eastern boundary runs along one of the fault lines which forms part of the north-south striking Shoobridge Fault system (Crick, 1985). Quartz veins related to this fault system occur along the north-eastern margin of the licence and are associated with localised breccias.

Northerly strike of bedding is predominant with moderate to steep dips to both east and west. Cleavage is parallel to bedding and best defined in the more pelitic mudstone units.

7. WORK CONDUCTED & RESULTS

Work carried out during the first year of tenure included literature research, base map preparation and rock chipping.

7.1 Rock Chipping

An extensive rock chip sampling programme was conducted over the licence. All prospective quartz veins, ferruginous material and structures were sampled and 5m channel samples were taken across the entire length of Weaver's Cut. The programme involved the collection of 124 rock chip samples, each weighing between 3 and 5kg. Samples were dispatched to Assay Corporation in Pine Creek, Northern Territory, for analysis of gold (fire assay, 0.01ppm detection limit) and Cu, Pb, Zn, As and Ag (AAS).

7.2 Results

Low level ($\geq 0.1\text{g/t}$) gold was detected in only 6 of the 124 rock chip samples (maximum 0.28ppm Au). Of these samples, three (577083-577085) occur along a north-south striking, slightly ferruginous quartz vein which was previously identified by Kakadu Resources Ltd as being anomalous. Kakadu Resources Ltd collected 5 rock chip samples from along this vein and 2 were anomalous (0.178 and 5.47g/t Au). Elevated levels of lead, arsenic and silver are also associated with this quartz vein (8500, 8400, 222ppm Pb and 5800, 2600, 564ppm As and 4.6, 3.2, 1.3ppm Ag).

The remaining anomalous results are low level Au, As or Pb values generally associated with discontinuous quartz veining.

8. EXPENDITURE - YEAR ONE

Geological Consultants	\$3,050
Field Assistant	750
Vehicle Hire	640
Drafting	310
Consumables, maps, photocopying	725
Analysis	1,488
Tenement lease payments	11
Administration (15%)	<u>1,046</u>
	<u>\$8,020</u>

The expenditure for Year One was \$10,000.

9. PROPOSED WORK PROGRAMME & BUDGET - YEAR TWO

- 1) Follow-up rock chip sampling of anomalous veining identified during Year One.
- 2) Further rock chip sampling of prospective areas within the licence.
- 3) -40# stream sediment sampling all active drainage with follow-up work if warranted.

The estimated budget for this programme is \$7,000.

10. REFERENCES

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By: Andrew D. Grove BEng

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APPENDIX I

ROCK CHIP SAMPLE ASSAY RESULTS

ASSAYCORP PTY LTD

A.C.N. 052 982 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 02979

Woodcutters Joint Venture

Distribution

Andrew Grove

Client Reference: 11808

Date Received: 19/06/1992

Project :

Number of Samples: 124

Cost Code:

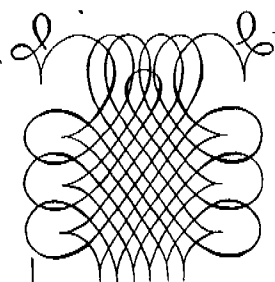
Sample Preparation

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Au	FA/GC	Acc. \pm 15%	0.01	ppm
Au(R)	FA/GC	Acc. \pm 15%	0.01	ppm
Cu	AAS/MA-3	Prec. \pm 10%	2	ppm
Pb	AAS/MA-3	Prec. \pm 10%	2	ppm
Zn	AAS/MA-3	Prec. \pm 10%	2	ppm
As	AAS/MA-3	Prec. \pm 10%	2	ppm
Ag	AAS/MA-3	Prec. \pm 10%	0.2	ppm

*** NO CHARGE FOR Ag ***

Authorisation: Ray Wooldridge

Report Dated: 28/06/1992



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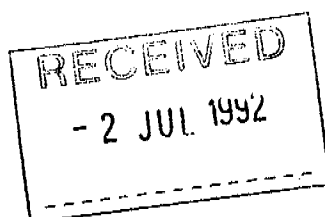
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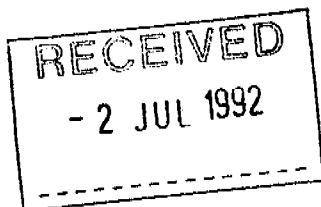
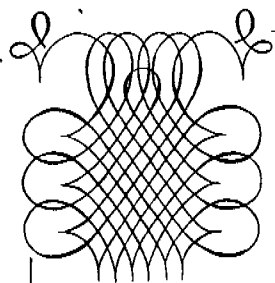
Facsimile (089) 76 1310



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Sample	Au (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ag (ppm)
577001	0.18	0.16	24	1210	103	978	4.4
577002	0.02		38	375	12	392	2.5
577003	<0.01		25	89	39	227	1.7
577004	0.03		40	202	73	432	1.6
577005	<0.01		26	394	119	89	1.4
577006	0.02		19	445	67	107	1.6
577007	0.03		14	81	33	306	0.3
577008	0.02	0.01	8	114	4	311	0.6
577009	0.01		21	16	6	161	0.5
577010	<0.01		65	792	145	49	0.8
577011	<0.01		84	404	42	167	0.8
577012	<0.01		23	265	113	44	0.6
577013	0.01		28	81	28	232	
577014	<0.01		16	24	9	39	
577015	<0.01	<0.01	49	224	54	169	
577016	<0.01		15	9	4	13	
577017	<0.01		17	3	4	8	
577018	0.01		21	<2	3	4	
577019	<0.01		11	3	9	4	
577020	<0.01		16	<2	8	3	
577021	<0.01		19	<2	2	3	
577022	<0.01		20	<2	3	3	
577023	<0.01		23	<2	2	4	
577024	<0.01		19	<2	2	3	
577025	0.01		8	<2	18	9	



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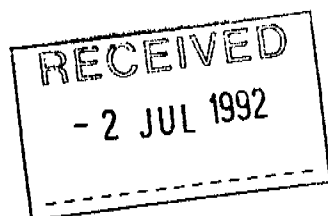
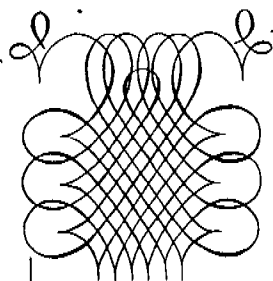
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Sample	Au (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ag (ppm)
577026	<0.01		20	<2	3	5	
577027	<0.01		19	<2	2	4	
577028	0.01		17	<2	<2	3	
577029	0.01	0.01	23	<2	2	3	
577030	<0.01		18	<2	<2	4	
577031	<0.01		21	<2	25	12	
577032	<0.01		47	6	6	18	
577033	<0.01		50	8	6	11	
577034	0.01		39	<2	5	16	
577035	0.01		66	<2	13	18	
577036	0.02		35	10	8	4400	
577037	0.01		43	17	13	69	
577038	0.01		41	<2	258	256	
577039	0.01	0.01	46	121	253	64	
577040	<0.01		29	28	139	39	
577041	0.01		33	67	214	109	0.3
577042	0.02		38	334	91	102	1.9
577043	0.01	0.02	29	34	54	33	
577044	<0.01	<0.01	26	23	46	26	
577045	<0.01		24	15	35	20	
577046	<0.01		25	11	55	27	
577047	<0.01		38	43	69	54	
577048	<0.01		27	23	41	44	
577049	<0.01		25	10	64	35	
577050	<0.01		62	84	84	108	



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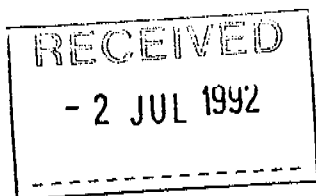
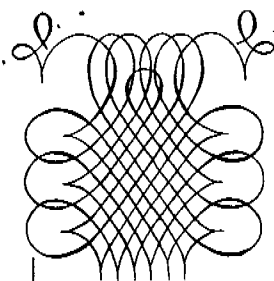
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Sample	Au (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ag (ppm)
577051	0.01		52	72	50	243	
577052	0.03		28	13	72	47	
577053	0.04	0.03	49	33	28	448	
577054	<0.01		51	69	114	235	
577055	0.04		77	333	162	449	
577056	<0.01		26	11	41	44	
577057	<0.01		75	79	64	209	
577058	0.01		47	44	31	53	
577059	<0.01		31	51	17	105	
577060	<0.01		100	567	49	87	0.6
577061	<0.01	<0.01	41	13	28	32	<0.2
577062	<0.01		43	18	112	31	0.2
577063	0.01		114	264	72	55	0.8
577064	<0.01		165	1530	172	883	8.1
577065	<0.01		88	176	126	101	1.9
577066	0.02		35	35	67	50	
577067	<0.01		35	40	54	34	
577068	0.01		81	322	35	97	0.8
577069	<0.01		41	146	38	160	0.5
577070	0.01		42	402	227	45	0.5
577071	0.01		45	162	59	62	0.6
577072	<0.01	<0.01	45	62	23	52	0.4
577073	<0.01		40	22	16	31	0.3
577074	<0.01		47	48	32	40	0.3
577075	0.01		41	225	33	49	0.6



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Sample	Au (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ag (ppm)
577076	0.04		40	151	49	66	0.5
577077	<0.01		52	46	29	48	0.8
577078	0.02		158	3800	1910	558	2.3
577079	0.05		26	84	39	59	0.4
577080	0.01		25	107	28	466	0.7
577081	0.01		20	90	19	99	0.4
577082	0.01		31	1590	47	387	0.7
577083	0.22	0.21	43	222	441	5800	1.3
577084	0.12		72	8500	246	2600	3.2
577085	0.11	0.10	63	8400	34	564	4.6
577086	<0.01		27	256	15	26	0.5
577087	<0.01		61	179	21	33	
577088	<0.01		423	160	144	863	
577089	<0.01		43	184	16	98	
577090	<0.01		32	21	3	11	
577091	<0.01		28	11	2	5	
577092	<0.01		24	26	2	8	
577093	<0.01		15	13	11	7	
577094	<0.01	<0.01	54	3	12	27	
577095	<0.01		59	5	13	275	
577096	<0.01		567	44	44	333	
577097	<0.01		48	<2	6	17	
577098	<0.01		62	1180	548	65	1.0
577099	<0.01		33	75	255	28	
577100	<0.01		22	23	44	7	

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Sample	Au (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Ag (ppm)
577101	<0.01		41	39	51	26	
577102	<0.01	<0.01	34	67	48	18	
577103	0.20	0.16	166	93	53	519	
577104	<0.01		32	49	11	208	
577105	<0.01		44	14	8	18	
577106	0.30	0.26	75	120	5	458	
577107	<0.01		155	10	5	32	
577108	<0.01		69	<2	4	11	
577109	<0.01		23	3	6	26	
577110	<0.01		508	<2	8	44	
577111	<0.01		31	<2	3	24	
577112	0.01		63	<2	7	56	
577113	<0.01		59	12	8	523	
577114	<0.01		15	<2	5	43	
577115	<0.01		28	6	8	17	
577116	<0.01		40	2	6	101	
577117	<0.01		70	<2	10	23	
577118	<0.01		99	11	11	96	
577119	<0.01		44	6	7	31	
577120	<0.01		24	7	6	20	
577121	<0.01		48	87	28	195	
577122	<0.01		36	99	142	17	
577123	<0.01		22	8	41	7	
577124	<0.01		25	<2	20	13	

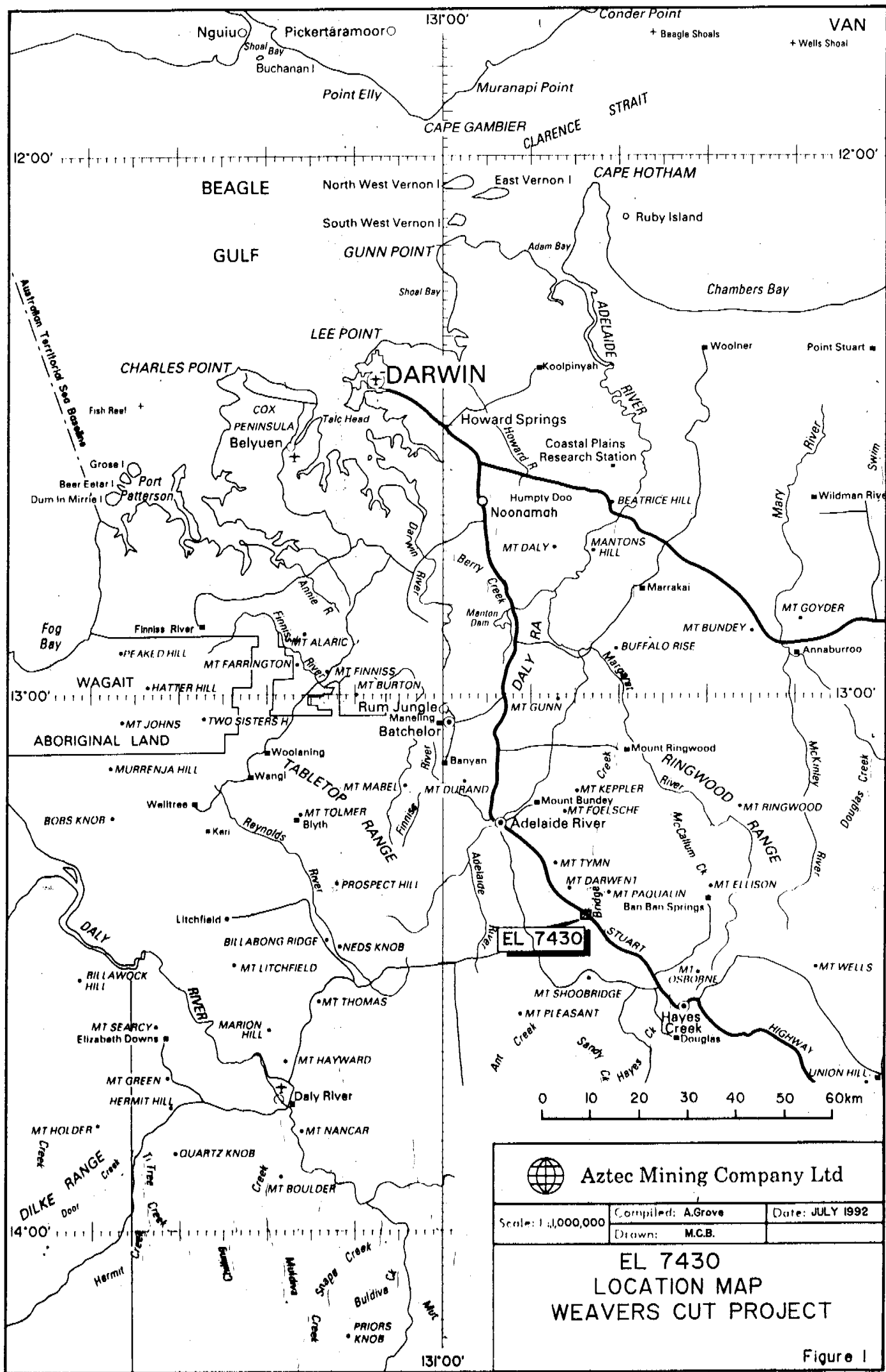
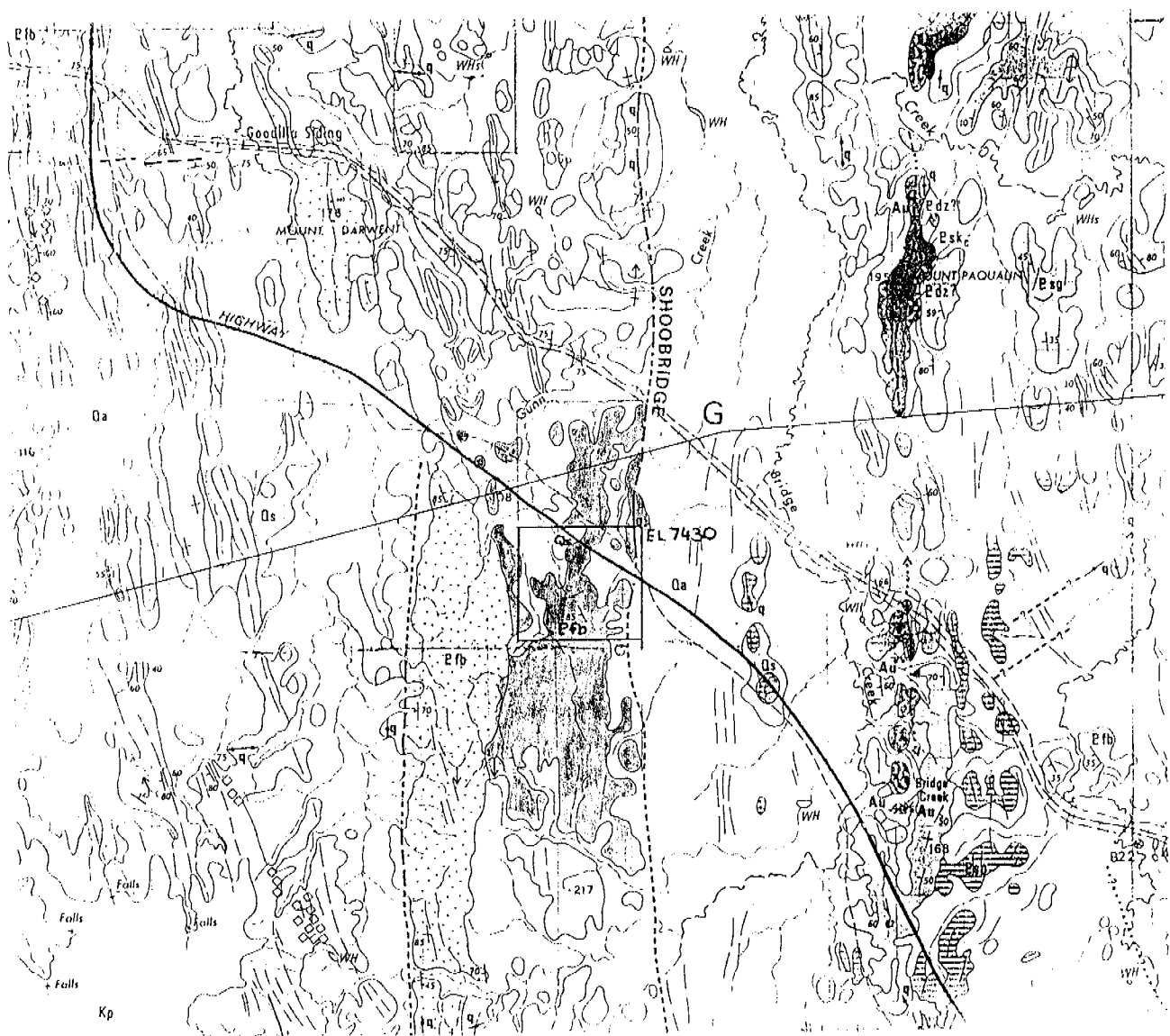


Figure 1



Pfb - Burrell Creek Sediments

REGIONAL GEOLOGY

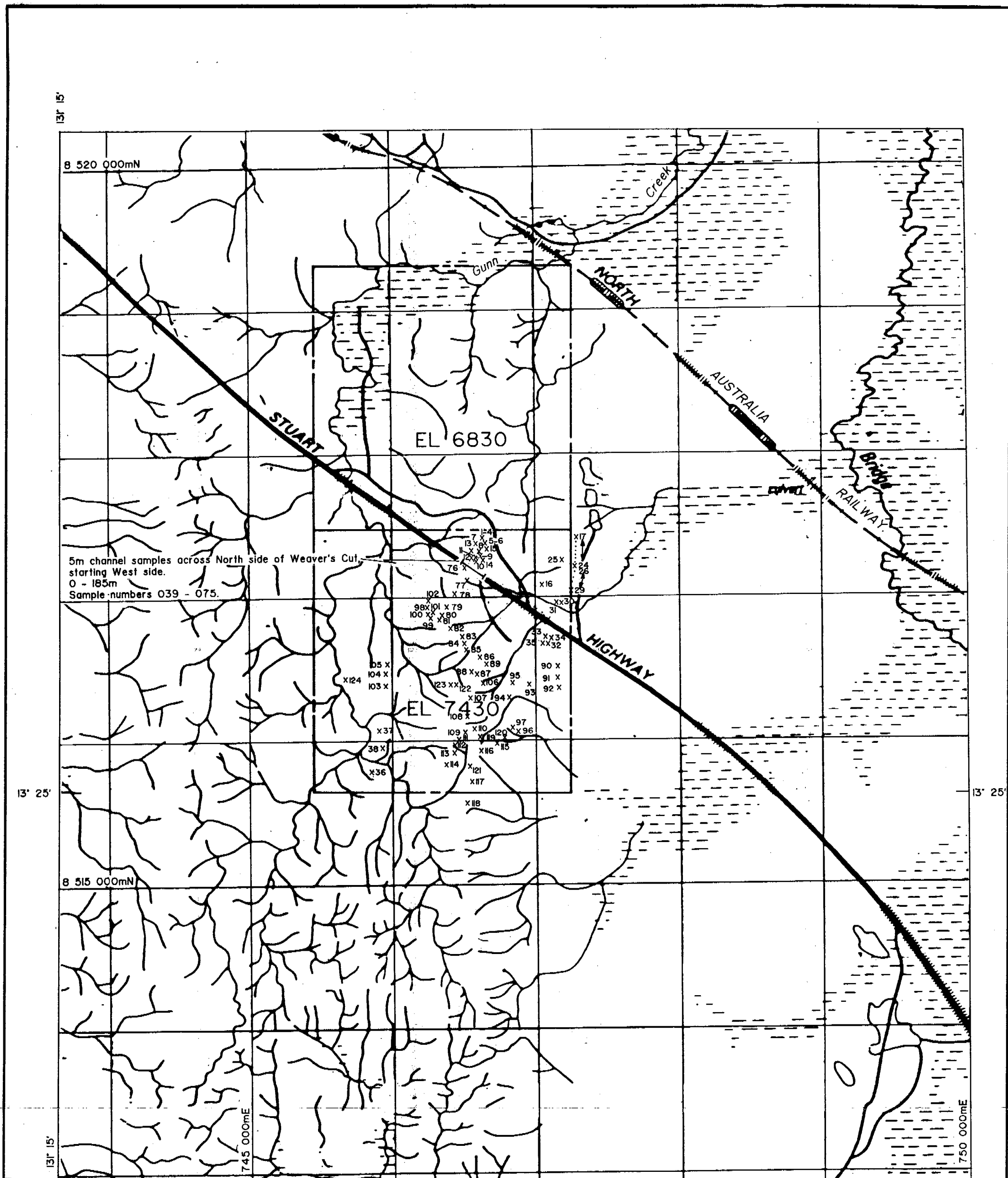
EL 7430

WEAVERS CUT

Figure 2.

FROM: Crick, I.H., 1985

Geology of the Batchelor-Hayes Creek Region
N.T., 1:100000 Geological Special



x 15 Rock Chip sample location
Sample numbers prefixed by 683(0)



Aztec Mining Company Ltd

EL 7430
WEAVER'S CUT PROJECT
ROCK CHIP SAMPLE LOCATIONS

Figure 3

PROJ. NAME: WEAVERS CUT NO. 7430-02

COMPILED: A.Grove

SCALE 1 : 25,000

DRAWN: M.C.B.

DATE: JUNE 1992