

000

818001

88-2771

MINES	
File Ref. EL 4/61	
21 JAN 1988	
Doc. Ref.	
Action Officer	Initials
LETTER	
20-1-88	
REFERS.	
Resubmit to	Date

ANNUAL REPORT

ON INVESTIGATIONS WITHIN

EXPLORATION LICENCE 4/61

WEST COAST, TASMANIA

(June 1987 - December 1987)

**REPRODUCTION**

BY

R.W. ANNETT & C.H.C. SHANNON

DECEMBER 1987

VOLUME 3

- ONLY 1 VOL TO THIS REPORT

VOLS 1 & 2 = 87-2683

SAVAGE RESOURCES LIMITED.  
Incorporated in Tasmania.  
L 12, M.L.C. Centre,  
Martin Place, SYDNEY 2000.

DISTRIBUTION

- Copy No. :
1. Master - Savage Resources Library.
  2. Director of Mines.
  3. J.G. Symons.
  4. C. Stevens.
  5. P.S. Forwood.
  6. Savage Office.
  7. C.H.C. Shannon - Launceston.
  8. J. Hosking.
  - 9.
  - 10.

A. GENERAL INFORMATION

Field staff were accommodated at the company's Savage River house.

## Personnel:

Henry Shannon	Senior Geologist
Robert Annett	Project Geologist
Casual Field Assistants.	

## Contractors:

Analabs, Burnie	Assays
Denzil Radford	Traxcavator
Tas. Geological Drafting Service	Drafting
Marafield Pty. Ltd.	Industrial Mineral Assessment.

Batty Joint Venture.

Work on this project was conducted by E.Z. staff under the direction of I.J. Mathison.

B. SUMMARY

In the limited period since the report to June 1987 work has continued on gold and industrial minerals projects.

The major industrial minerals projects and the Specimen Reef gold prospect are subject to negotiations for continuing tenure and are to be reported on separately, (Vol. 2), closed file material. However the results of the recent gold work that are available are relevant to the assessment of the ground to be relinquished and so are reported here.

SPECIMEN REEF:

Drilling work was conducted on two essentially separate targets:-

- (a) Specimen Reef East, the follow up of a soil geochemical anomaly independent of Specimen Reef which was subjected to a 5 percussion hole drilling program, with only one marginally anomalous assay result.
- (b) Specimen Reef proper, where a second attempt was made to locate the White's Winze ore shoot.

DOZER TRACK:

Work on this project tested the hypothesis that the creek bed gold anomalies were related to gold in the Bullocks Head Formation gravel (i.e. below the basalt capping). Gravel samples obtained by traxcavator were treated to produce concentrates using a goldwheel.

BATTYS BEND:

The report of the winter exploration program for this area is now available, but interested parties should note that most of the area disappears into the Exploration Licence to the West under the new rules.

C. TABLE OF CONTENTS

	<u>Page</u>
A. General Information	1
B. Summary	2
C. Table of Contents	3
D. Table of Appendices	4
E. Table of Figures	5
1. Introduction	6
2. Summary of Work Projects, June-December 1987	6
3. Specimen Reef East Prospect	6-7
4. Specimen Reef Prospect	7
4.1. Discussion	7-8
4.2. Proposals for future work	8
5. Dozer Track area	8-9
6. General comments of E.L. 4/61 gold mineralisation	9
7. Rocky River area "white rocks"	10
8. References	11

D. TABLE OF APPENDICES

<u>No.</u>	<u>Title</u>	<u>Page</u>
1.	Specimen Reef Drilling Oct/Nov 1987. Core Log SPC 12. Sequence of Events/Times.	A.1.1.1. - A.1.1.10.
2.	Rock Sample Analysis Sample numbers, locations, descriptions and analyses.	A.2.1.1. - A.2.1.2.
3.	Heavy Mineral Concentrate Analysis. Sample number and analyses.	A.3.1. & A.3.2.

E. TABLE OF FIGURES.

- 2.4. Rocky River, White Rock Project.
- 6.1. Geology interpretation and Continuing Tenure application areas.
- 7.1. Specimen Reef, Grid pegs, Drillholes and workings (Revision Dec. 1987).
- 7.2. Specimen Reef, Structural Contours and Prospective Zone (Revision Dec. 1987).
- 7.3. Specimen Reef, in relation to Drillholes and workings, Cross section 2 (Revision Dec. 1987).
- 7.4. Profile Line 11.200N, Drillholes SPC 10 and SPC 11.
- 7.5. Profile Line 11.225N, Drillhole SPC 9.
- 7.6. Profile Line 11.250N, Drillholes SPC 7 and SPC 8.
- 7.7. Longitudinal Profile.

818008

1. INTRODUCTION

Work has been proceeding on the assumption that prospects of interest to Savage Resources could be leased at the termination of the exploration licence, and that work would then be continued on the leased areas. A recent policy change in the department is intended to discourage the use of leases in this fashion, but has left open possibilities for other forms of continuing tenure. This report was intended to describe work done June-December on the area to be relinquished without contention, and to define the boundary of the area within which continuing tenure is requested (see Map 1). The opportunity has been taken however, to report on gold oriented work which is relevant to the assessment of ground to be dropped although lying inside the "provisional continuing tenure claim", and to outline where work has been done during the period under review, most of which is to be reported in a volume to remain on closed file.

2. Summary of Work Projects, June - December 1987.

1. Percussion drilling on Specimen Reef East prospect.
2. Pre-collar percussion plus 20m core drilling on Specimen Reef Prospect.
3. Traxcavator excavations, Long Plains South - Bowry Creek - Main Creek - Dozer Track prospects.
4. Assessment of white rock suite at Rocky River.
5. (By E.Z. staff) write up of winter soil sampling project, Batty joint venture area.

3. Specimen Reef East Prospect.

Although this prospect is not on the line of Specimen Reef and shows a bedding control trend, it has survived as an anomalous area after hand pit sampling and later on, continuous channel sampling of bulldozer costeans. The host rock is unusual in containing abundant pits with iron oxide staining in its surface exposure in the costeans. A similar rock was found West of Cox's Face prospect at Golden Ridge and is interpreted as a basic tuff with abundant disseminated coarse pyrite.

008

Five percussion drillholes, SPC 7 - SPC 11 were drilled so as to cover the stratigraphic interval of the anomalous samples, with all holes facing west owing to the difficulty of the site. Results (see Table 1) were disappointing with the peak value being 0.44ppm *Am* over a 2m section.

An alternative hypothesis, that the gold values in the surface reflected an ore shoot in Specimen Reef itself, was not tested.

4. Specimen Reef Prospect.

One vertical hole, SPC 12 was put down to intercept the reef from the old drill pad used for SPC 4 and SPC 5, which was not the site originally planned. A prominent carbonate vein complex was intersected at the point predicted from the 1985 structure contour interpretation (see Map 2 and sections reprinted from the 1985 E.L. 4/61 report, with annotations). The core (see core log) shows extensive alteration but the vein material shows no indications of gold and the assays are totally dead. Rig breakdown forced a halt at 90.2m. The predicted depth to the lower vein which was gold bearing in SPC 1 is 91.5m.

4.1. Discussion.

The annotated structure contour map shows the points where there is information on Specimen Reef, either from drill holes or old records. It can be seen that it is possible for the original ore shoot of No. 1 level to continue at depth. The direction of the inferred potential productive ground is compatible with strong wall rock control of the shoots.

The intercepts on Specimen Reef proper in SPC 1 and SPC 4 are quite close together and in both cores the vein is so weak as to be ambiguous. SPC 11 intersects the vein complex close to these two. In SPC 6 the vein system has broken up but the presence of some magnetite in some of the veins makes it a more promising hole. The remarkably rich vein in SPC 1 cannot be the original reef but it can be a vein that was being followed by the drive intersected by SPC 4 in which an alteration zone was followed by open space and a piece of

mine timber in the core. This drive is considered off line from the reef proper as followed by the inferred location of the drive from No. 3 adit, and could have been found if exploratory drives had been put in. A possible reason for putting in such a drive would be if the dead patch in the main vein was encountered.

#### 4.2. Proposals for future work.

For the original ore shoot the appropriate target zone is now obvious although the target is rather a small one. **Two more holes in the zone between SPC 6 and SPC 12 are proposed.** Also, a search for further ore shoots particularly SW to the boundary of the S.R.M. lease, and a hole to test the concept of an ore shoot below the Specimen Reef East anomaly is contemplated. Some future exploration drillholes can be shallow affairs since there will not be the need to avoid potentially stoped out ground.

The soil sampling coverage for the Specimen Reef area is less good than that for the Davis Creek grid and this should be rectified. It consists largely of old data from before low level gold analysis was in common use.

#### 5. Dozer Track area.

This area is contemplated for a site for a treatment plant for the magnesite project, so it was considered that it should first be checked for its gold/platinoids potential. One hypothesis that has been suggested was that the Golden Ridge field may have been provided with its alluvial gold not from a local bedrock source, but from Tertiary cover. The gravels from beneath the basalt cover were a possibility in this respect.

Pan concentrates from pick and shovel excavations along the dozer track (the 50's base for the magnetometer survey) found mainly pebble gravels with heavy mineral concentrates surprisingly rich in chromite but little gold. Assays for these samples are now available. One representative sample was assayed for platinoids which showed a platinoid content equalling the (rather low) gold content.

The goldwheel concentrates from the excavator work have been examined visually but are obviously low in gold relative to the size of the sample treated.

Were this material a significant contribution to the Golden Ridge alluvials, a higher proportion of chromite and some platinoids would be expected. This is not the case.

6. General Comments on E.L. 4/61 gold mineralisation.

The style of the gold mineralisation at Golden Ridge turn of the century workings give the impression of being the equivalents of modern unsuccessful drillholes. One exception is an area of still enterable open stope in the complex inside the Savage River Mines ground which links the "Big Tunnel" of Twelvetrees (1902) to later workings at two lower levels. The shallow dipping "rusty smears" lacking quartz can be interpreted as the leached remnants of carbonate veins such as that in the SPC 1 drillhole at Specimen Reef.

The alluvial gold which contributed nearly all the supposed production of the field could be provided from eroding enough veins of similar character, with the gold tending to remain close to its original source.

It is possible that wall rock lithology has a strong control on productive shoots, since the open stope is in a "basic tuff" unit with affinities to the Bowry Formation whereas the accessible barren tunnels are mostly in the normal Oonah Formation grey mica schist with thin quartzwacke beds and quartz veins. This "basic tuff" tentatively matched with weathered rock of the same nature as the Cox's Face prospect.

Extensive soil sampling work around both areas indicates that even quite close sample spacing doesn't reveal much and indicator elements - with the possible exception of high Cu values - show too many patterns unrelated to gold mineralisation to be much help. At Specimen Reef coinciding arsenic and copper anomalies following the reef trend are possible indicators of ore shoots.

7. Rocky River area "white rocks".

During the gold oriented work in this area the suite of white rocks was noticed and some samples were examined petrologically (see June report). Several more samples have been taken since for analysis (see Rock sample ledger, this report).

There appears to be more than one of these beds and/or intrusions. The "Sawpit Lode" (Wilks 1899) is provisionally identified with the one furthest west.

Fully leached forms of the white rock were thought to be mainly kaolin plus talc from the petrological work. The analyses imply major content of alkali feldspar, usually albite but in one case a potash feldspar. The content of free quartz could be quite low, but there is substantial  $Fe_2O_3$  and  $TiO_2$  content.

It is intended to experiment with physical beneficiation to see if industrial applications are practical e.g. low hardness high reflectivity white powders for fillers or pigment extenders, and ceramic grade albite concentrate.

The "Sawpit Lode" appears to be a tuff with keratophyre affinities. From the description of the Rocky River Associated mine in Twelvetrees (1900) there is a white carbonate either West of or confused with the Sawpit Lode. The location of this potentially valuable adit is uncertain. There is a shaft at 4960 8935 which matches the description of the adit entrance 10m above the Rocky River, and it is now suspected that this shaft is an air shaft for the Rocky River Associated adit which was originally at the present river level, and is now lost. A dredge prospector working the river complained that 2 - 3 metres of tailings obscured the true alluvial gravels.

8. REFERENCES

- Annett, R.W., Shannon, C.H.C.,  
and Vanzino, L. 86-2511  
restricted
- Report on Investigations within E.L.  
4/61, West Coast, Tasmania. Savage  
Resources Ltd. unpub. rep. Aug. 1986.
- Annett, R.W., and Shannon, C.H.C.  
87-2683
- Annual Report on Investigations within  
Exploration Licence 4/61, West Coast,  
Tasmania. Vol. 1 and 2. Savage  
Resources Ltd. unpub. rep. June 1987.
- Mathison, I.J.
- Part E.L. 4/61 Batty Joint Venture -  
Report on Geochemical Sampling of the  
Batty Bend Grid, Feb. to June 1987.  
Electrolytic Zinc Company of Aust. Ltd.  
E.Z. Report No. T231, Sept. 1987.
- Penny, B.G., Shannon, C.H.C.  
and Vanzino, L. 84-2662  
2262
- Report on Field Investigations within  
E.L. 4/61, West Coast, Tasmania.  
Savage Resources Ltd. unpub. rep.  
August 1984.
- Shannon, C.H.C., Annett, R.W.,  
Enzmann, F., and Vanzino, L.  
85-2502
- Report on Field Investigations within  
E.L. 4/61, West Coast, Tasmania.  
Savage Resources Ltd. unpub. rep.  
May 1985.
- Twelvetrees, W.H.
- Report of the Mineral Fields between  
Waratah and Corinna Sec. for Miners  
Rep. 1899 - 1900. Tas. Journals  
of Papers of Parliament 1900.
- Twelvetrees, W.H.
- Report on Mineral Fields between  
Waratah and Long Plains. Publication  
Dept. of Mines, Tasmania, 1903.
- Urquhart, G.
- Magnetite Deposits of the Savage  
River - Rocky River Region. Tas.  
Dept. of Mines, Geol. Surv. Bull.  
No. 48, 1966.
- Wilkes, J.
- Report on the Rocky River Mining Co.  
N.L., August 14, 1899.

APPENDIX 1

A.1.1.

SPECIMEN REEF DRILLING OCT/NOV 1987

818014

Specimen Reef 7, SPC 7.

Percussion : 6½ 0-3m, 4½" 3-44m.

Co-ordinates: 11.250N 52350E; AMG 5411256N  
352317mE.

Drilled : October 27, 1987.

Inclination : -62°.

Declination : 077° magnetic.

Depth of hole: 44m.

Water Table : approx. 20 - 22m.

Wet drilling: after 24m.

Sample Number	Interval	Au assay/checks	
SPC 7 / 1	0 - 3	x	.02
2	3 - 4		.01
3	4 - 6		.01
4	6 - 8		.04
5	8 - 10	x	
6	10 - 12	x	
7	12 - 14	x	
8	14 - 16	x	
9	16 - 18	x	
SPC 7 /10	18 - 20	x	
11	20 - 22	x	
12	22 - 24	x	
13	24 - 26	x	←--- wet drilling
14	26 - 28	x	
15	28 - 30	x	
16	30 - 32	x	
17	32 - 34	x	
18	34 - 36	x	
19	36 - 38	x	
20	38 - 40	x	
21	40 - 42	x	
SPC 7 /22	42 - 44	x	x/x

014

818015

Specimen Reef 8, SPC 8.

Percussion : 6½" 0-3m, 4½" 3-42m.  
 Co-ordinates : 11.250N 52340E; AMG 5411256mN  
 352307mE.  
 Drilled : 27-28 October, 1987.  
 Inclination : -65°.  
 Declination : 077° magnetic.  
 Depth of hole : 42m.  
 Water table : 28 - 30m.  
 Wet drilling : after 30m.

Sample Number	Interval	Au assay/checks	
SPC 8 / 1	0 - 3	x	x
2	3 - 4	x	
3	4 - 6	x	
4	6 - 8	x	
5	8 - 10	x	
6	10 - 12	x	
7	12 - 14	x	
8	14 - 16	x	
9	16 - 18	x	
SPC 8 /10	18 - 20	.03	
11	20 - 22	x	
12	22 - 24	x	
13	24 - 26	x	
14	26 - 28	x	
15	28 - 30	.01	
16	30 - 32	.03	<---- wet drilling
17	32 - 34	.01	
18	34 - 36	.02	
19	36 - 38	x	
SPC 8 /20	38 - 40	.01	

015

A.1.1.3.

818016

Specimen Reef 9, SPC 9.

Percussion : 6½" 0 - 3, 4½" 3 - 36m.  
 Co-ordinates : 11.225N 52342E: AMG 5411231mN  
 352309mE.  
 Drilled : 28 October, 1987.  
 Inclination : -60°.  
 Declination : 071° magnetic.  
 Depth of hole : 36m.  
 Water table : -  
 Wet drilling : -

Sample Number	Interval	Au assay / checks	
SPC 9 / 1	0 - 3	x	
2	3 - 4	x	
3	4 - 6	x	
4	6 - 8	x	x
5	8 - 10	x	.04
6	10 - 12	x	
7	12 - 14	.01	
8	14 - 16	x	
9	16 - 18	x	
SPC 9 / 10	18 - 20	x	
11	20 - 22	x	
12	22 - 24	x	
13	24 - 26	x	
14	26 - 28	x	
15	28 - 30	x	x
16	30 - 32	x	
17	32 - 34	x	
SPC 9 / 18	34 - 36	x	

016

818017

Specimen Reef 10, SPC 10. Percussion : 6½" 0-3m, 4½" 3-34m,  
 Co-ordinates : 11.200N 52365E; AMG 5411205mN  
 352313mE.  
 Drilled : 28 October, 1987.  
 Inclination : -60<sup>o</sup>.  
 Declination : 080<sup>o</sup> magnetic.  
 Depth of hole : 34m.  
 Water table : 24 - 26m.  
 Wet drilling : 26m.

Sample Number	Interval	Au assay/checks
SPC 10/ 1	0 - 3	.05
2	3 - 4	.04
3	4 - 6	x
4	6 - 8	x
5	8 - 10	x
6	10 - 12	x
7	12 - 14	x
8	14 - 16	x
9	16 - 18	x
SPC 10/10	18 - 20	x
11	20 - 22	x
12	22 - 24	x
13	24 - 26	.44
14	26 - 28	x
15	28 - 30	x
16	30 - 32	.03 x
SPC 10/17	32 - 34	x

<---- wet drilling





818020

019

Specimen Reef 12, SPC 12.

Sample Number	Interval	Au Assay		
SPC 12/24	46 - 48	x		
25	48 - 50	x		
26	50 - 52	x		
27	52 - 54	x		
28	54 - 56	x		
29	56 - 58	x		
SPC 12/30	58 - 60	x		
31	60 - 62	x		
32	62 - 64	x		
33	64 - 66	x		
34	66 - 68.8	x	Au fire assay	Interval
SPC 12/35	68.8 - 69.7	x	x <--diamond core	0.90
36	69.7 - 70.1	x	x	0.40
37	70.1 - 71.8	x	x	1.70
38	71.8 - 74.4	x	x	2.60
39	74.4 - 77.7	x	x	3.30
SPC 12/40	77.7 - 79.2	x	x	1.50
41	79.2 - 80.7	x	x	1.50
42	80.7 - 83.8	x	x	3.10
43	83.8 - 84.6	x	x	0.80
SPC 12/44	84.6 - 90.2	x	x	5.60

020

CORE LOG - SPC 12 - H. SHANNON

- 0 - 68.8 percussion drilling.
- 68.8 - 69.5 banded chlorite / quartz feldspar schist with minor blobs of quartz C.S.A. 10<sup>0</sup>.
- 69.5 - 71.9 light greenish grey massive, sandy greenschist speckled with carbonate porphyroblasts, alteration zones (yellowish pink) associated with hairline carbonate veins C.V.A. Set 1 35<sup>0</sup>, Set 2 70<sup>0</sup>.
- 71.9 - 74.7 greenish grey massive greenschist, few veins and minimal wall rock alteration.
- 74.7 - 76.5 mainly pale grey "wall rock alteration" phase with relics of unaltered greenish grey massive greenschist. Pink carbonate veins normally <1cm, C.V.A. 60<sup>0</sup>. Carbonate porphyroblasts present.
- 76.5 - 76.65 cluster of 3 veins with approximately equal amount of altered greenschist. The vein material consists of white carbonate (dolomite?) 80% pink carbonate (magnesite, ankerite?) 15% quartz 5% plus a trace of pyrite. C.V.A. 45<sup>0</sup>.
- 76.65 - 77.7 c.f. 74.7 - 76.5 "wall rock alteration" etc.
- 77.7 - 78.5 dark green massive greenschist hairline veins without wall rock alteration minor pyrite along joints.
- 78.5 - 79.9 pinkish grey "wall rock alteration" phase, massive greenschist associated with <3mm thickness pink carbonate veins, C.V.A. 45<sup>0</sup>. Relict cores of grey-green massive greenschist.
- 79.9 - 83.7 dark greenish grey banded schist including a 0.1m bed of massive grey-green massive greenschist, C.B.A. 75<sup>0</sup>.

021

818022

- 83.7 - 87.4 greenish grey massive greenschist speckled with carbonate porphyroblasts (probably dolomite) quartz blob at 84.6m.
- 87.4 - 90.2 massive to foliated grey green greenschist with chlorite dominant bands at 87.4, 88.2 and 88.5m (dark green). Remainder contains C 20% carbonate with quartz-feldspar. Quartz blobs at 87.5, 88.6, 88.8 minor pyrite. Pyrite + chalcopyrite to 5% 90.1 - 90.2.

372

SEQUENCE OF EVENTS / TIMES

Arrive late Monday 26th October from Launceston.

Tuesday 27th Oct. 08.00 - 11.00 hours moving rigs to SPC7 and setting up.  
 Drilling SPC7 0 - 44 metres.  
 Then  $\frac{1}{2}$  hour setting up/moving to SPC 8.  
 Drilling SPC8 0 - 40 metres - end of day 19.00 hours.

Wednesday 28th Oct. 08.00 hours start drilling 2m of SPC8 (ie end of hole at 42m).  
 08.10 - 09.10 pulling rods.  
 Then  $\frac{1}{2}$  hour moving here.  
 Set up and drilling on SPC9 at 13.45 hours, SPC9 0-36m, finishing at 15.30 hours.  
 15.30 - 16.30 standby/moving.  
 Drilling SPC10 0-34m - end of day 18.15 hours.

Thursday 29th Oct. 08.00 - 08.30 pulling rods.  
 08.30 - 09.00 moving and setting up on SPC11.  
 SPC11 0-39 finishing at 11.20 finished pulling rods at 11.45 hours.  
 11.45 - 13.00 shifting and setting up on SPC12.  
 SPC12 0-68.8m percussion to 18.00 hours - pulling rods to 18.30 hours - end of day.

Friday 30th Oct. 08.00 - 10.20 pulling rods, pulling down casing.  
 10.20 - 12.00 diamond drilling 68.8 - 74.6 metres - end of day.

Tuesday 3rd Nov. 12.00 - 18.30 diamond drilling 74.6 - 83.8m.  
 1 hour 20 minutes of standby for water.  
 @ 17.20 hours head broke.

Wednesday 4th Nov. 08.00 - 10.30 drilling SPC12 to 90.2 metres.  
 pulling rods to 11.00, out of mine by 11.30 hours.

023

APPENDIX 2ROCK SAMPLE ANALYSIS

## A.2.1. Geochemical Reports:

Analabs	236.1.08	04729	87 / 1512 - 1517
Analabs	236.1.08	04901	SPC 10 / 01 - 17 SPC 11 / 01 - 19 SPC 12 / 01 - 34 SPC 7 / 01 - 22 SPC 8 / 01 - 20 SPC 9 / 01 - 18
Analabs	236.1.08	04913	SPC 12 / 35 - 44

818025

024

E.L. 4/61 SAVAGE RIVER.ROCK CHIP LEDGER 1987-88 SEASON.

SAMPLE NUMBER	AREA	LOCATION		Outcrop float etc	DESCRIPTION
		N	E		
87/1512	Rocky-White divide	89.73	49.10	O/C	felsite, water race 380 mark.
87/1513	"	90.00	49.05	O/C	felsite, lower costean
87/1514	"	89.98	49.10	O/C	" "
87/1515	"	90.00	49.00	O/C	felsite 25m S of Hay's tin shed.
87/1516	"	89.85	49.08	O/C	felsite - hairpin corner.
87/1517	"	89.88	49.10	O/C	felsite - " " (duplicate to marafield).

025

818026

E.L. 4/61 SAVAGE RIVER.ANALYTICAL RESULTS

SAMPLE NUMBER	Na <sup>2</sup> O	Al <sup>2</sup> O <sup>3</sup>	CaO	Fe <sup>2</sup> O <sup>3</sup>	K <sup>2</sup> O	MgO	MnO	P <sup>2</sup> O <sup>5</sup>	SiO <sup>2</sup>	TiO <sup>2</sup>	LOI
87/1512	53500	14.9	0.04	7.90	0.10	18000	0.01	0.037	63.9	1.06	4.31
87/1513	81000	16.9	0.06	2.45	0.16	26500	0.01	0.030	62.2	1.44	5.64
87/1514	2400	18.8	0.03	1.92	5.10	11500	<0.01	0.016	65.8	1.16	4.16
87/1515	49000	28.4	0.04	2.48	0.25	1300	0.02	0.023	48.9	1.62	12.21
87/1516	<del>40000</del> 110,000	20.8	0.05	11.90	0.11	1200	<0.01	0.023	52.2	1.62	5.15
87/1517	41000	31.6	0.05	3.50	0.15	25500	0.01	0.211	40.5	1.44	16.58

03

818027

APPENDIX 3

HEAVY MINERAL CONCENTRATE ANALYSIS

Analabs	236.1.08	04498	HM 434.
	(update)		
	908.0.01	51252	HM 434 - polished section (sample 52273)

for ledger see report to June 1987, p A.5.1.2. assays for platinoids plus gold, in ppb.

SAMPLE	ELEMENT						
	Ru	Rh	Pd	Os	Ir	Pt	Au
HM 434	70	10	<50	165	155	110	440.0

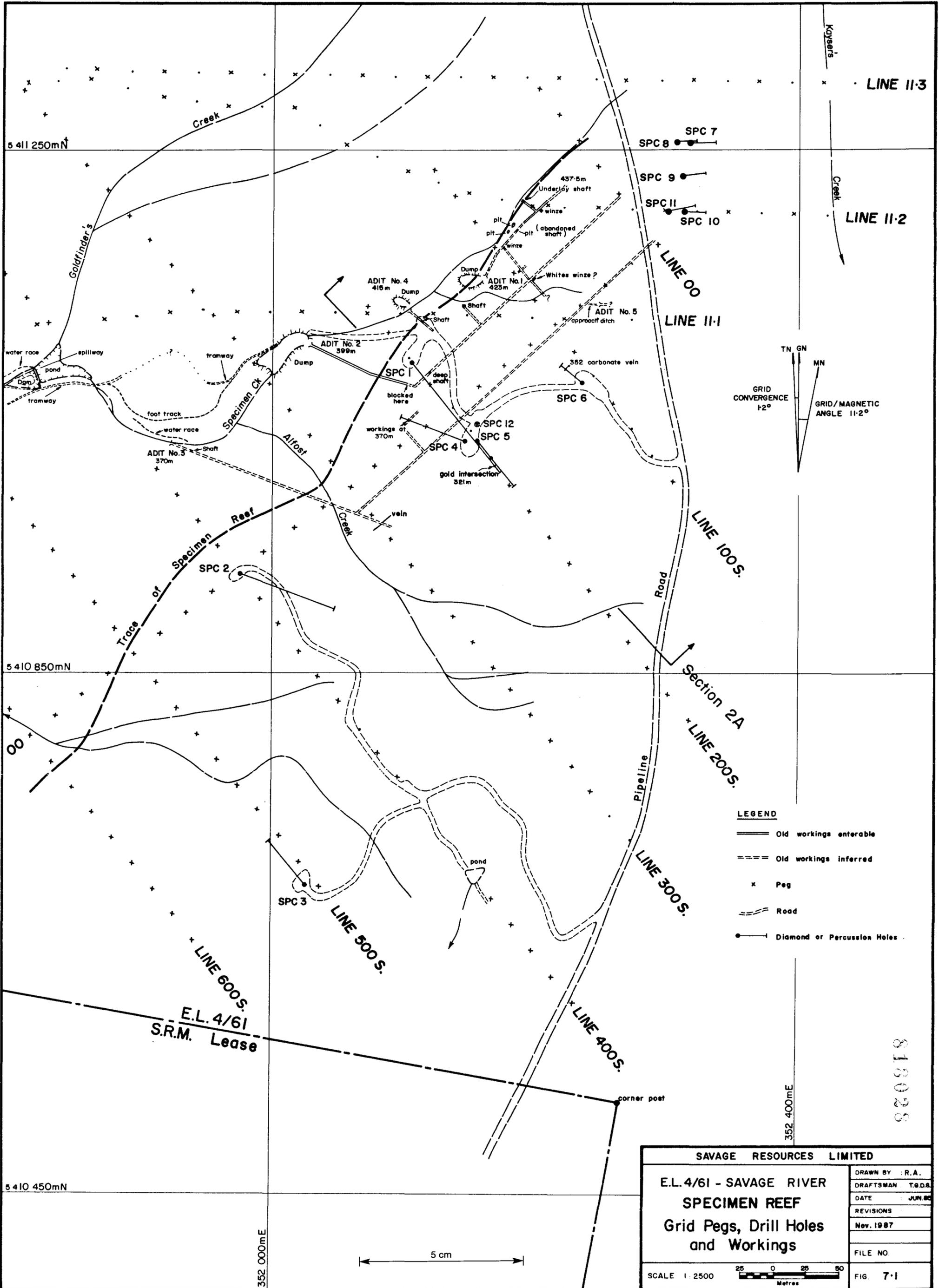
Microscopic examination of polished section 52273 prepared from HM 434.

dominant: chromite

minor: quartz

accessory: limonite, ilmenite, rutile, tourmaline.

trace: zircon, xenotime, anatase, pyrite, amphibole, cassiterite?, chalcopyrite.



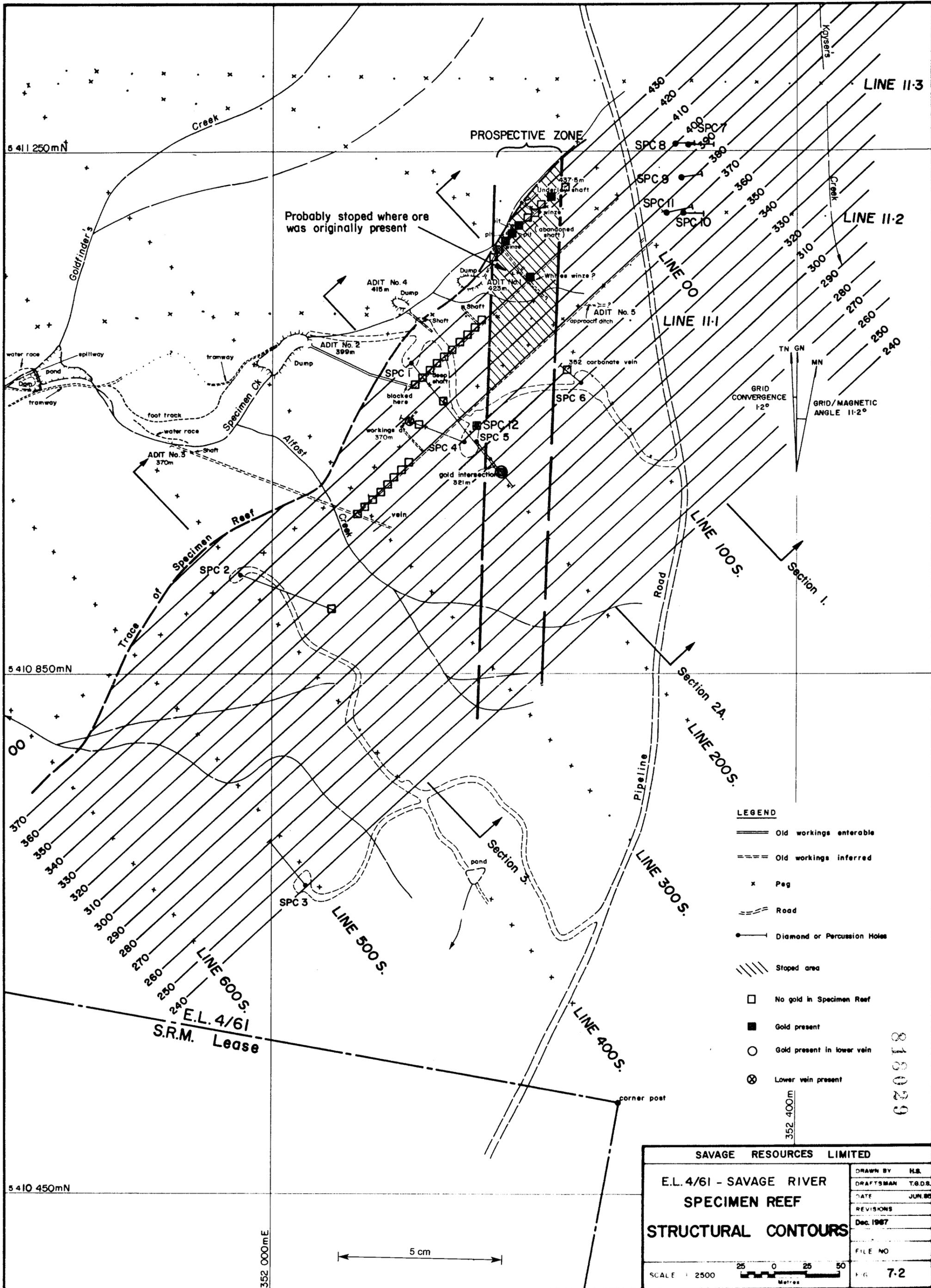
**LEGEND**

- Old workings enterable
- - - Old workings inferred
- x Peg
- Road
- Diamond or Percussion Holes

TN GN  
MN  
GRID CONVERGENCE 12°  
GRID/MAGNETIC ANGLE 112°

SAVAGE RESOURCES LIMITED	
E.L. 4/61 - SAVAGE RIVER SPECIMEN REEF Grid Pegs, Drill Holes and Workings	
DRAWN BY : R.A.	DRAFTSMAN T.G.D.S.
DATE : JUN. 88	REVISIONS
	Nov. 1987
FILE NO.	
SCALE 1:2500	FIG. 7-1

818023



**LEGEND**

- Old workings enterable
- - - Old workings inferred
- x Peg
- - - Road
- ◆ Diamond or Percussion Holes
- ▨ Stopped area
- No gold in Specimen Reef
- Gold present
- Gold present in lower vein
- ⊗ Lower vein present

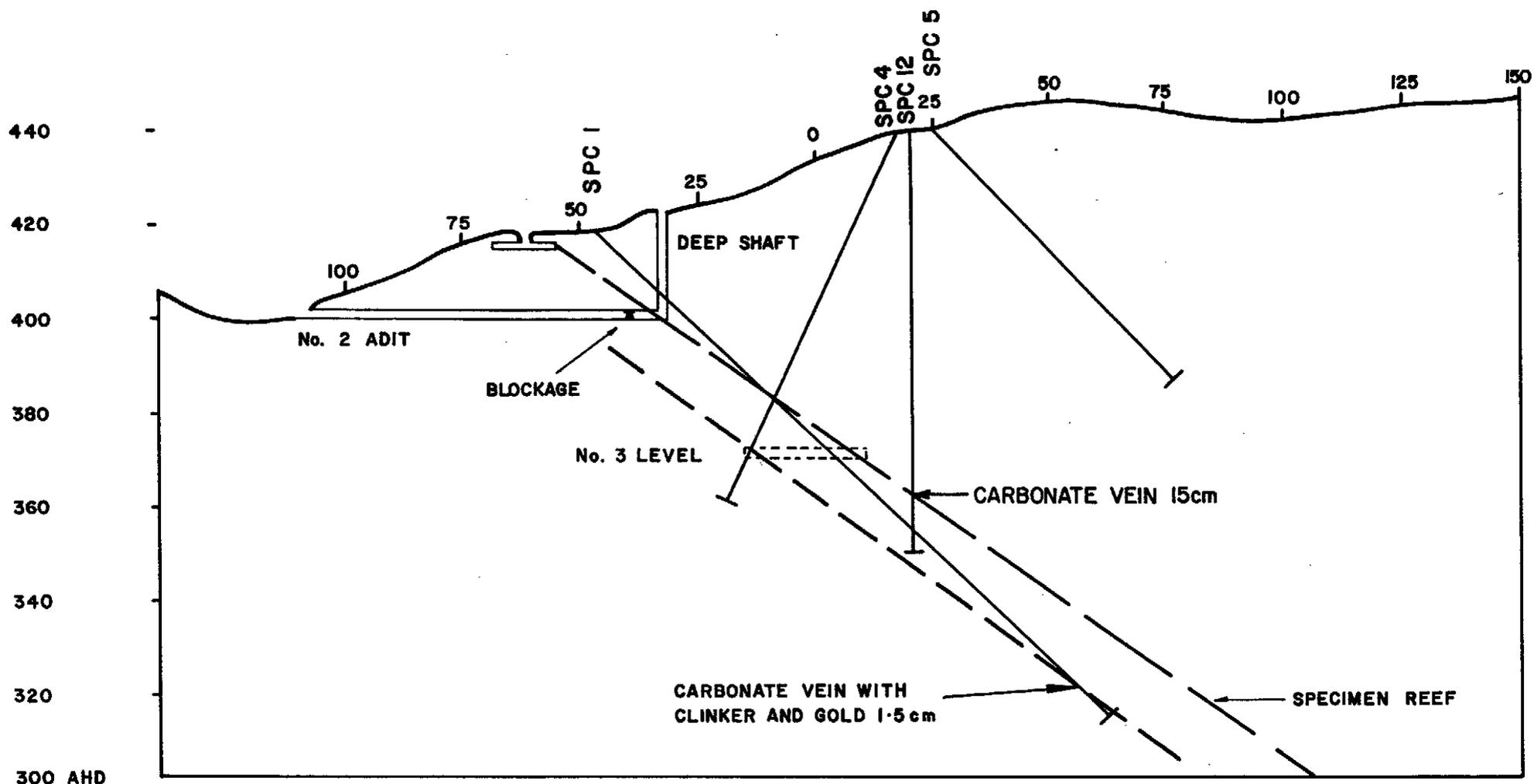
**SAVAGE RESOURCES LIMITED**

**E.L. 4/61 - SAVAGE RIVER  
SPECIMEN REEF  
STRUCTURAL CONTOURS**

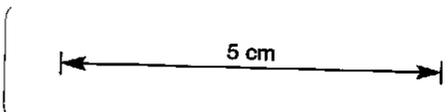
DRAWN BY H.S.	DATE JUN 80
DRAFTSMAN T.G.D.S.	REVISIONS
Dec 1987	FILE NO
SCALE 1:2500	FIG 7-2

818029

029



818030



<b>SAVAGE RESOURCES LIMITED</b>													
<b>E.L.4/61 - SAVAGE RIVER SPECIMEN REEF Cross Section 2 A (Looking North East)</b>													
SCALE 1:1250													
<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;">DRAWN BY :</td> <td></td> </tr> <tr> <td>DRAFTSMAN: T.G.D.S.</td> <td></td> </tr> <tr> <td>DATE : Dec '87</td> <td></td> </tr> <tr> <td>REVISIONS :</td> <td></td> </tr> <tr> <td> </td> <td></td> </tr> <tr> <td>FILE NO</td> <td></td> </tr> </table>		DRAWN BY :		DRAFTSMAN: T.G.D.S.		DATE : Dec '87		REVISIONS :				FILE NO	
DRAWN BY :													
DRAFTSMAN: T.G.D.S.													
DATE : Dec '87													
REVISIONS :													
FILE NO													
<b>FIG.7-3</b>													

WEST

EAST

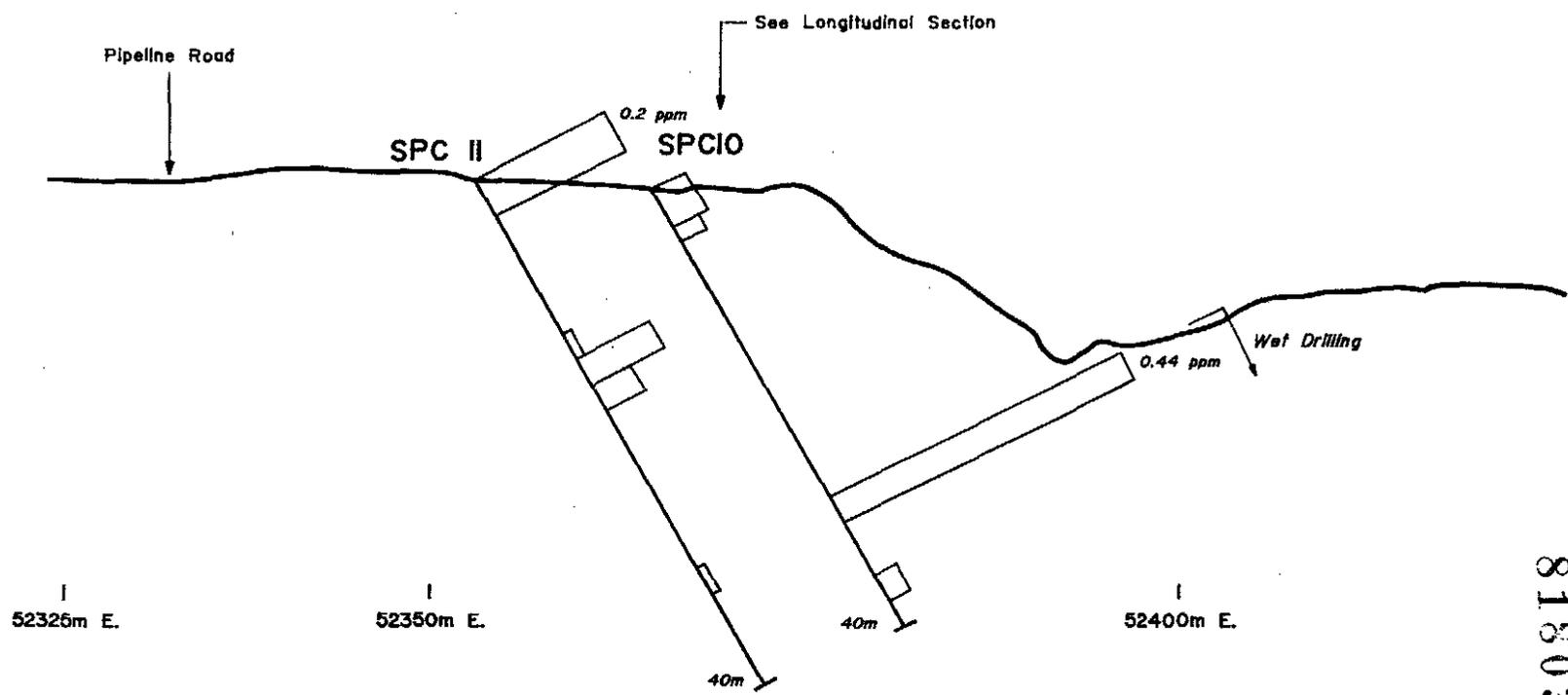
- 460 m

- 450 m

- 440 m AHD

- 430 m

- 420 m



52325m E.

52350m E.

52400m E.

0 0.1 p.p.m.  
GOLD SCALE

5 cm

818031

SAVAGE RESOURCES LIMITED	
E.L. 4/81 - SAVAGE RIVER	DRAWN BY : R.A.
SPECIMEN REEF	DRAFTSMAN: T.G.D.S.
PROFILE LINE II.200mN.	DATE : Dec. '87
DRILLHOLES SPC IO & SPC II	REVISIONS :
SCALE 1:500	FILE NO.
5 0 5 10 METRES	FIG. 7.4

031

WEST

EAST

- 460 m

Pipeline Road

See Longitudinal Section

- 450 m

SPC 9

- 440 m AHD

- 430 m

- 420 m

52300m E.

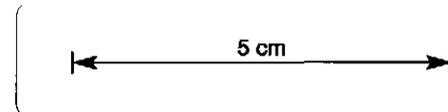
52325m E.

52375m E.

36m

818032

0 0.1 p.p.m.  
GOLD SCALE



SAVAGE RESOURCES LIMITED	
<b>E.L. 4/81 - SAVAGE RIVER</b>	
<b>SPECIMEN REEF</b>	
<b>PROFILE LINE II.225mN.</b>	
<b>DRILLHOLE SPC 9</b>	
DRAWN BY : R.A.	
DRAFTSMAN: T.G.D.S.	
DATE : Dec.'87	
REVISIONS :	
FILE NO.	
SCALE 1:500	 METRES
	<b>FIG. 7.5</b>

WEST

EAST

- 460 m

Pipeline Road

See Longitudinal Section

- 450 m

SPC 8

SPC 7

- 440 m AHD

- 430 m

Wet Drilling

- 420 m

52300m E.

52325m E.

52375m E.

52400m E.

40m

44m

818033

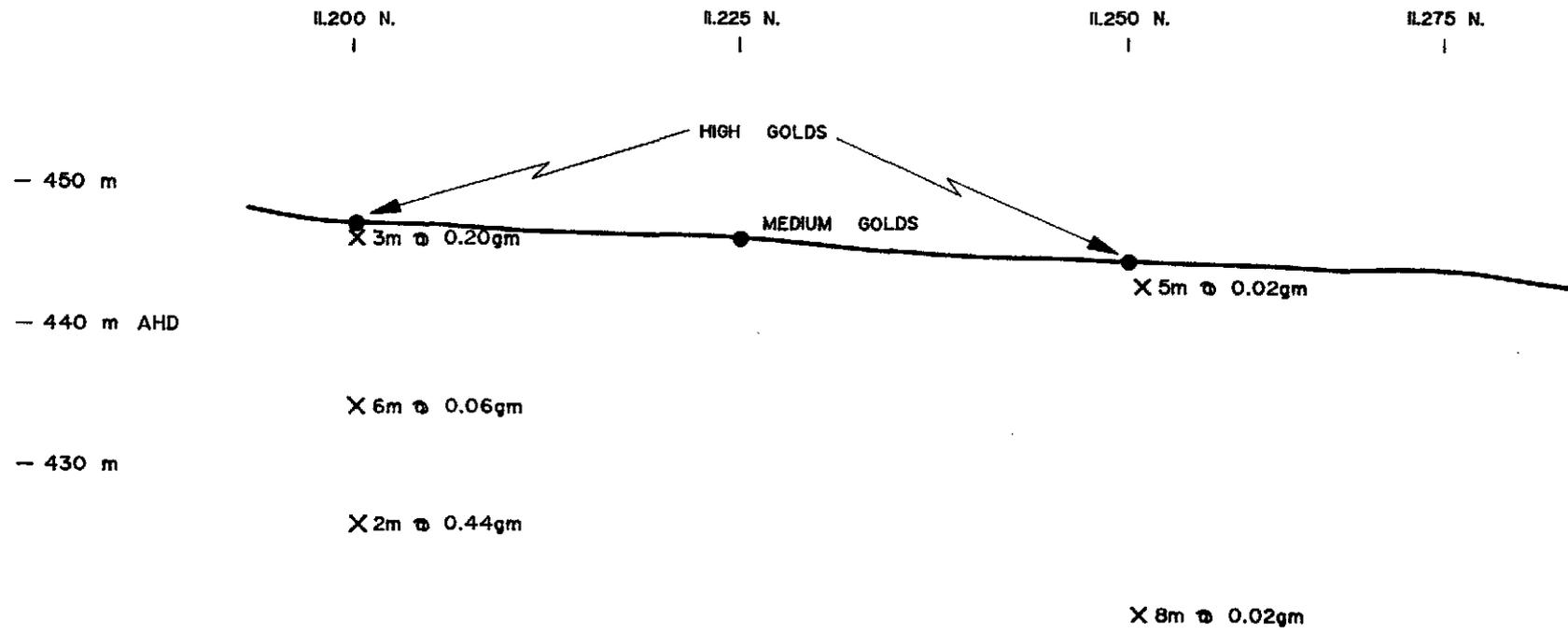
0 0.1 p.p.m.  
GOLD SCALE

5 cm

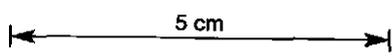
SAVAGE RESOURCES LIMITED	
B.L 4/81 - SAVAGE RIVER	
SPECIMEN REEF	
PROFILE LINE II.250mN.	
DRILLHOLES SPC 7 & 8	
SCALE 1:500	 METRES
DRAWN BY : R.A. DRAFTSMAN: T.G.D.S. DATE : Dec.'87 REVISIONS : FILE NO.	FIG. 7.6

SOUTH

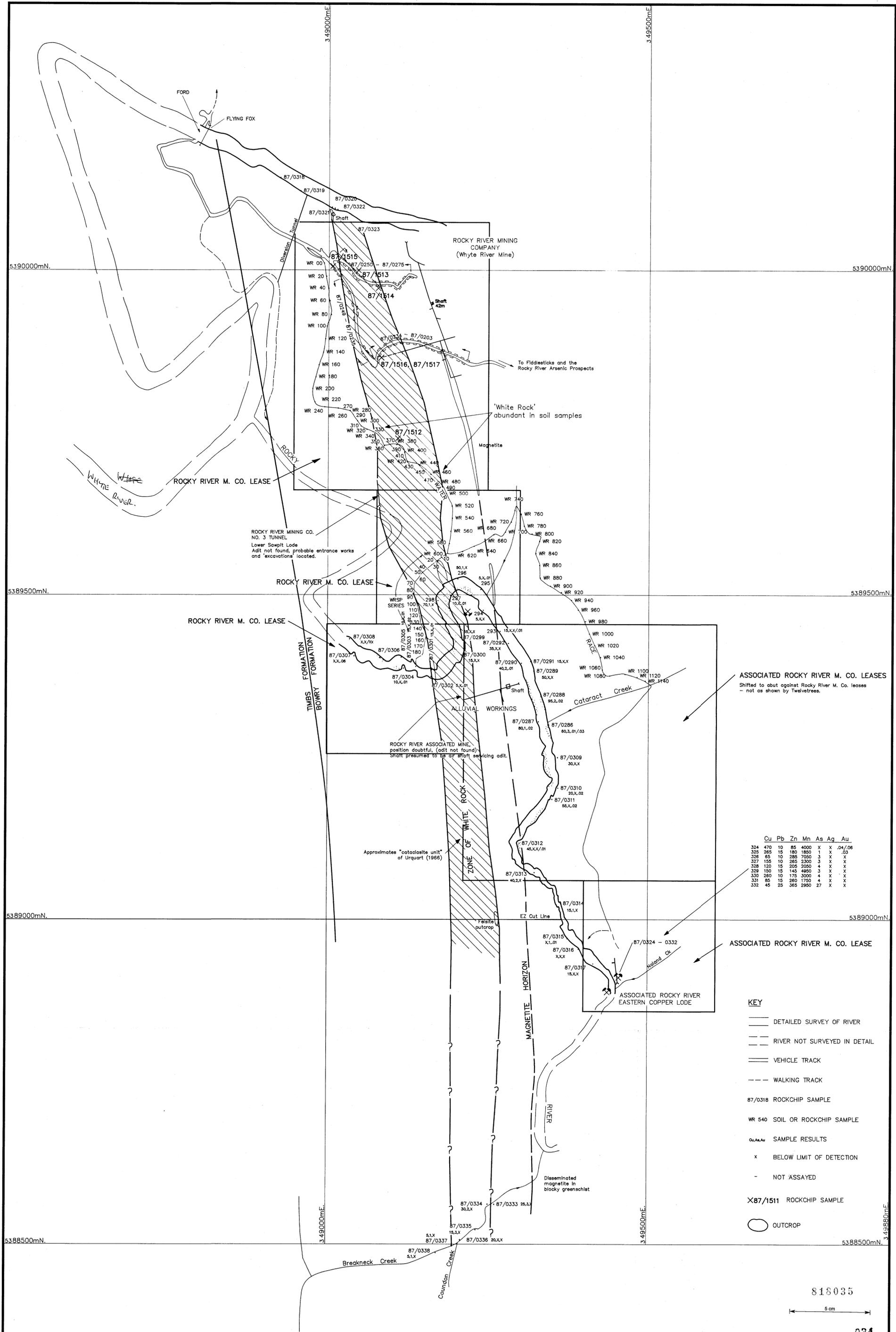
NORTH



818034



SAVAGE RESOURCES LIMITED	
<b>E.L. 4/61 - SAVAGE RIVER</b>	
<b>SPECIMEN REEF</b>	
<b>LONGITUDINAL PROFILE</b>	
<b>(LOOKING WEST)</b>	
SCALE 1:500	<p>5 0 5 10 METRES</p>
DRAWN BY : R.A. DRAFTSMAN: T.G.D.S. DATE : Dec.'87 REVISIONS : FILE NO.	
<b>FIG. 7.7</b>	



ASSOCIATED ROCKY RIVER M. CO. LEASES  
Shifted to abut against Rocky River M. Co. leases  
- not as shown by Twelvrees.

	Cu	Pb	Zn	Mn	As	Ag	Au
324	470	10	85	4000	X	X	.04/.06
325	265	15	180	1850	1	X	.03
326	65	10	285	7050	3	X	X
327	155	10	285	2300	3	X	X
328	150	15	205	2050	4	X	X
329	150	15	145	4950	3	X	X
330	260	10	175	3000	4	X	X
331	85	15	265	1750	4	X	X
332	45	25	365	2950	27	X	X

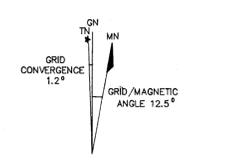
ASSOCIATED ROCKY RIVER M. CO. LEASE

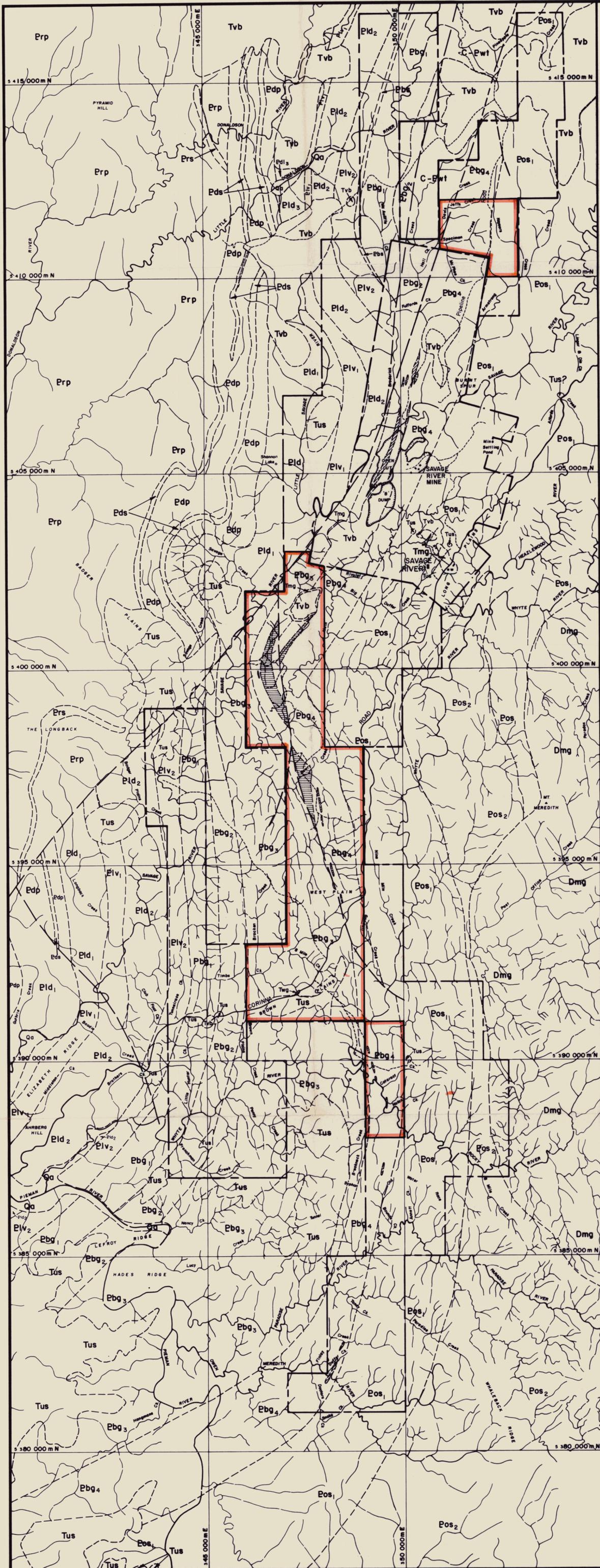
- KEY**
- DETAILED SURVEY OF RIVER
  - - - RIVER NOT SURVEYED IN DETAIL
  - VEHICLE TRACK
  - - - WALKING TRACK
  - 87/0318 ROCKCHIP SAMPLE
  - WR 540 SOIL OR ROCKCHIP SAMPLE
  - Cu, Pb, Zn, Mn, As, Ag, Au SAMPLE RESULTS
  - x BELOW LIMIT OF DETECTION
  - NOT ASSAYED
  - X87/1511 ROCKCHIP SAMPLE
  - OUTCROP

818035  
5 cm

034

SAVAGE RESOURCES LIMITED	
SAVAGE RIVER E.L. 4 / 61	DRAWN BY: R.A.
WHYTE - ROCKY RIVER PROSPECT	DRAFTSMAN: T.G.D.S.
WHITE ROCK PROJECT	DATE: June '87
GEOLOGY, SAMPLE LOCATIONS AND RESULTS	REVISIONS:
	H.S. Dec. 1987
	FILE No.
SCALE 1:2500	FIG. 2.4





**LEGEND**

**QUATERNARY:**

**Qa** Alluvium

**TERTIARY:**

"BROWN PLAIN FORMATION"

**Tus** Poorly rounded oligomictic pebble to cobble gravel and sand.

**Tvb** Basalt

"BULLOCKS HEAD FORMATION"

**Tmg** Well rounded polymictic cobble gravel and sand.

**PERMO-CARBONIFEROUS:**

WYNARD TILLITE

**C-Pwt** Tillite, mudstone with ice-rafted clasts, sandstone and varved mudstones.

**DEVONIAN:**

MEREDITH GRANITE

**Dmg** Porphyritic granita, porphyritic microgranite, gneiss and quartz tourmaline rock.

**PRECAMBRIAN:**

"WHITE GROUP"

OONAH FORMATION

**Eos<sub>2</sub>** Upper - greywacke and mudstone.

**Eos<sub>1</sub>** Lower - schistose quartzwacke and associated mica-chlorite pelites with some graphite schist; abundant quartz veins and minor green tuff

"BOWRY FORMATION"

**Ebg<sub>4</sub>** Greenschist, amphibolite and sandstone. Magnetite (indicated by horizontal bars). Magnetite (indicated by diagonal bars).

"TIMBS FORMATION"

Grey and green basal mudstone, liable sandstone, phyllite, greenschist, amphibolite, turbidite sandstone, minor carbonates and magnetite near top. Divisions indicated: -

**Ebg<sub>3</sub>** Greenschist, turbidite sandstone, amphibolite and minor carbonate. thinbedded sandstone at top.

**Ebg<sub>2</sub>** Quartz rich greenschist.

**Ebg<sub>1</sub>** Greenschist, grey and green phyllite and amphibolite.

**Pbs** Green and grey mudstone and minor turbidite sandstone.

"LONGBACK SUBGROUP"

Slate; dolomite; fragmental and massive volcanics. Divisions indicated: -

**Plv<sub>2</sub>** Tunnelrace Volcanics; mudstone, phyllite, green tuff with flattened pumice clasts, amphibolite and volcanic breccia.

**Pld<sub>2</sub>** Doodle Dolomite and Corinna Slate; dolomite common in the south only. Quartz veins and distinctive laminated texture common in dolomite; minor chert.

**Plv<sub>1</sub>** Bernafal Volcanics; mudstone-like tuffs, breccia, massive volcanics (Ignimbrite ?), grey tuff with flattened pumice clasts (in north).

**Pld<sub>1</sub>** Savage Dolomite; slate expands at the expense of dolomite in the north. Distinctive dolomite textures include stromatolitic and brecciated stromatolitic dolomite and oolitic dolomite; chert.

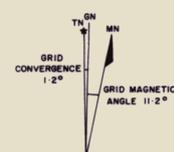
"MOUNT DONALDSON FORMATION"

**Pdp** Black phyllite and sandstone/conglomerate; resistant sandstone beds indicated.

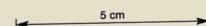
ROCKY CAPE GROUP

**Erp** Slate and sandstone; prominent sandstone beds indicated.

**CONTINUING TENURE APPLICATION AREA**



818036



035

<b>Savage Resources Limited</b>	
E.L. 4/61 - SAVAGE RIVER 88-2771	
<b>GEOLOGY INTERPRETATION AND CONTINUING TENURE APPLICATION</b>	
DRAWN BY : H.S.	REVISIONS :
DRAFTSMAN : T.G.D.S.	H.S. July 1987
DATE : Aug '88	H.S. December 1987
FILE NO.	FIG. 6-1
SCALE 1:50,000  METRES	