NT EXPLORATION LICENCE 6662
WHITE HILL DAM

YEAR 3 EXPLORATION REPORT

21st November 1991 TO 20th November 1992

TENEMENT HOLDER ;
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Map Sheets: *1:250,000 Alice Springs*
1:100,000 Arltunga-Harts Range
1:100,000 Riddock
1:50,000 Riddock

CONSULTANT GEOLOGIST;
Ms. GRESLEY WAKELIN-KING
WAKELIN EXPLORATION CONTRACTORS
ALICE SPRINGS

AUTHOR ; Mr. Geoff K. Bogie

CONTENTS

Including the cover, 19 typed pages total this report.

1. SUMMARY

Year Three work at the White Hill Dam prospect has consisted of prospecting and further soil sampling as a follow up from identifying low level groupings of gold anomolies the previous licence year. Elevated gold values have now indicated a gold enrichment to the centre and west of the licence area. The prominence of this new discovery has been generated from the previous year's activities but also as a resultant of plotting existing aero magnetic contour data. Quite clearly, the zones of retrograde amphibolite's with migmatite clusters of greenschist, garnet and quartz pegmatites, have never offered any visual encouragement for mineral testing. The operator has again consulted with geologist Ms. Gresley Wakelin-King to further identify with and map a shear zone trending east-west, with particular interest focused on the northern contact. From this same low rise outcrop and within the gentle slopes of the altered host formation, clay fractions of soil samples fire assayed from Line 50 produced 1.442 ppm. central property location. Line 51 produced 10.80 ppm. and 2.177 ppm. from the western quarter of the property. The style of mineralisation may well be hydrothermal activity or alteration within the complex zone. The latest discovery of mineralisation appears co-related to the low level anomolous gold groups at the eastern sector of the property, all samples elevated in assay values above 0.01 ppm. have heavy plates of magnetite within the sequence. The black platey magnetite is generally in abundance at minus 3mm. at the western sector, noteworthy still visible at the eastern extention but pinching out somewhat to be replaced by garnet and chunky minus 5mm. zircon. Highest gold value from the eastern extention grids (previously) *line 23 ; 0.22 ppm.* In contrast, the western area grid samples have indicated the presence of chalcopyrite detected in localised sequence within the close quarters of greenschist facies. At Line 51, chalcopyrite has been observed in association with amphibolite at the ridge tops, gaining alloy strength with quartz and changing more yellowish in colour towards the lower reaches of the slopes. The general area surrounding Line 51 (approx. 1 sq. km.) has been traversed with the operators scintillation counter, little activity above a nominal 50 background count was recorded.

2. INTRODUCTION

Exploration Licence 6662, White Hill Dam, was granted to Mr. Geoff Bogie on 20th. November 1989. This report relates to exploration occuring during the tenement year from 21-11-1991 to 20-11-1992. The licence during this term consisted off 9 graticular blocks. The White Hill Dam prospect is some 200 kms. east north-east of Alice Springs in the Harts Ranges, Northern Territory. Access is via the Plenty Highway, turning south just east of Ongeva Creek crossing onto the Blackfellows Bones Bore road, then via pastoral tracks to White Hill Dam and taking the exploration track back west into the camp site. (About 40 kms. of dirt tracks). Camp site is located right at the Oneva Creek, south west of White Hill Dam.

...for location map see PLATE 1, page 7..
...for tenement map see PLATE 2, page 8.

3. GEOLOGY

The Harts Range is part of the Proterozoic Arunta Block: in this area, amphibolite and granulite grade metamorphics are cut by several generations of shear zones, pegmatites, quartz veins, and retrograde metamorphism. At least three episodes of deformation have occured. The latest of these was the Carboniferous Alice Springs Orogeny, during which folding and often retrogressive faulting has taken place, generally to an east-west trend. The Gough Dam Schist Zone covers the exploration licence and the resulting geology is complex.

The White Hill Dam licence consists of moderately high hills to the north and south (approx. 1050 mts. elevation), with a low lying central area of alluvium and poorly outcropping rock surrounded by colluvial soils..

Surface samples collected from colluvium have tended to produce stronger signals and have indicated a better strength in gold values than those typically collected from alluvium.

A band of retrogressive alteration cuts across the south of the low lying central area *...see PLATE 3, page 9.* The alteration zone is characterised by a dark grey tone on the air photographs, and on ground by generally low rounded outcrop. The rocks of the alteration zone are heavily epidotised, commonly intruded by large quartz veins (up to 1mt. wide and 5mts. long) which exdend en echelon over 100 to 200mts. Rare boxworks were found in the quartz veins.

4. WORK UNDERTAKEN

4.1. Aero Magnetic Contour Plotting has finally been possible from existing data made available by previous explorers Kinex P/L, sheet No.CR87-287, Year 1986. After receiving a third set of copy sheets from the Dept.of Mines & Energy, those received in this year term were legible. The operator has plotted stringers from the contour sheet as possible grid locations. Locations were selected where contours showed tight formation dipping from the shear into the alteration margin. Collectively, geologist Ms.Gresley Wakelin-King was consulted to view the air photo's and map the northern contact of the alteration zone, with particular attention on the western area in the Mt. Schaefer vacinity. Then a field check over selected locations along 4500mts.approx. of the alteration lense by the operator and geologist defined both the linear shear zone and the alteration margin on contact*. The alteration margin on contact* refeered to is perhaps better described as the "host formation".

WORK UNDERTAKEN CON'T.

4.2. Surface samples have been collected at various intervals along strike, east-west over 2000mts. approx. These were collected as per usual of 2kg. ea., taken back to Alice Springs and panned off for visual inspection only. Three of the 50 samples collected contained well above background boxworks of magnetite(identified also by M&E Alice Springs) and amounts of bronzy coloured chalcopyrite at Line 50, Line 51, and location SCRC-rockchip. No coarse gold as per such was seen in pan concentrates. *...see APPENDIX 1.*

4.3. Divining produced good signal response at Line 50 and increased in signal strength at Line 51. Both of these grids were then established. No divining was conducted at SCRC.

4.4 Grid Line 50 produced 17 soil samples collected 150mm. under surface, transverse to strike at various spacings over a distance of 500mts. Collected as 2kg. lots with cobbles above 25mm. rejected. Grid Line 51 produced 10 soil samples, collected typical as above. Rockchip samples at location SCRC were collected as 2kg. bag lots also to test the southern contact of the shear zone of which had been found to contain rare boxworks not previously seen at the property. In contrast, grid's 50 & 51 were testing the contact north from the northern shear zone. The width of the shear zone (between the north and south contact) is approx. 900mts.

4.5. Clay fractions were taken from all the samples, including rockchip which was reduced to powder by an impact mill. Clay fractions are yielded at about 6 off per hour. During days of say 30-35°Cel. temp. they require 48 hours each to naturally air dry. Coarse material is panned off for colours then discarded.

4.6. Sample Preperation has for the first time been given a trial run by the operator, after purchasing an impact mill, ring pulveriser, test sieves and other ancillery equipment from the closed down White Range Gold Mine laboratories. The total clays have been pulverised, sample split, with 100g. sieved and packaged. First batch to 500 micron. A duplicate 100g. split is retained and placed in storage until at least the assay results are to hand.

4.7. Geochemical analysis has been received from Assaycorp P/L, Pine Creek. All samples were forwarded to Assaycorp as 100g. clay fraction. Samples were fire assayed for Au at 50g. charges, with a detection level set at 0.001ppm.

4.8. Phase 1 grade assay data;
Line 50 samples; WH050B 0.123ppm, WH050C 1.442ppm, WH050P 0.151ppm, WH050Q 0.174ppm.
Line 51 samples; WH051B 10.80ppm, WH051H 2.177ppm, WH051J 0.816ppm.
SCRC samples; WH8100 0.185ppm. *...See APPENDIX 2 for assay results.*

4.9 Phase 2 follow up work included further grid lines established, with another 65 soil samples collected at locations; Line's 50 & 51 after the data set indicated a sharp increase in gold values, ...as per above. These grid lines were given special attention prior to running the stringers and setting the collection sites. The grids were all divined, producing good signal response both on a north- south trend and an east-west trend also. Collection points were identified where the detected lines crossed over. The configeration revealed quite straight lines.
At Line 50 the phase 2 grids were set around WH050C, and at Line 51 were set around WH051B. Line 59 is the only one plotted to include a drive into the alteration area of the shear zone, starting (50mts.in) with WH059A and with WH059D on edge of contact.

4.10 Sample Prep. by the operator has reduced the clay fractions of all phase 2 samples to 355 micron, 100g.ea. forwarded again to Assaycorp for geochemistry, a duplicate 100g split typically placed in storage.

WORK UNDERTAKEN CON'T.

4.11. Phase 2 grade assay data;
Line 50A; WHO50A-4 0.199ppm.
Line 52; WH052G 0.057ppm.
Line 53; WH053A 0.083ppm.
Line 54; WH054A 0.158ppm.
Line 56; WH056A 0.088ppm.
Pancon 1. 0.175ppm. (Pan coarse fraction concentrates Phase 2. Line's; 52 to 59).
Pancon 2. 2.430ppm. (Pan coarse fraction concentrates Phase 2. WH050 series Line's).
The latter assay is revealing no correlation when compaired with all other WH050 series assay results. Also the remainder (excluding Test 4 & 5) of Phase 2 assays in comparison appear very low in value. ...very difficult to understand.

5. CONCLUSIONS

Somewhere near the start of this report there was mention of the geology being complex. The interpretation of collective sample locations coupled with a rationale of assay values is also of complexity to the operator. In understanding the technique and principals adopted by Geoff Bogie, it is important to realise that the painstaking long drawn out method of clay seperation prior to assay has been necessary because of the high level of contamination emitted by chromium. Clay fractioning has definately been of great assistance in producing weak strength gold signals, as far as can ascertain, has placed weak gold on an even footing to register. Contamination is also thought to jeopardize gold signals from the abundence of mineral heavys, characteristic of this precinct and province, which includes the lanthanide series scattered over this precinct. Anomolies of weak gold strengths detected through clay fraction and plotted may well spell the timely usefullness of this technique. WH051B assayed 10.80ppm in phase 1. samples. The author cleaned out the very same collection hole three weeks later(phase 2. samples), collected another 2kg. underneath, clay fractioned same, TEST 2.- Nil registration. The same with WH050C-1.442ppm, but in phase 2. TEST 3.- Nil registration. No coarse gold was detected in pan cons. in any phase 1. samples. Two origional splits (phase 1) were reassayed. TEST 4 = WH051H TEST 5 = WH050C. These two indicated identical values second time around. After discussions with the assay lab. the author will repeat some samples by recollection and fire assay from acid digest 2kg.bulk batch's. This should determine suitable drill targets.

6. EXPENDITURE

Consulting geologist	750
Prospecting, divining, sample collection 300 hrs. @ 34	10,200
Wages 38 @ 15	570
Supplies for field work	2,205
Consumables (sample bags, timber pegs, marker paint, etc.)	698
Maps, stationary, photocopying	72
Office rental, electricity, insurance	1,928
Vechicle expenses	1,627
Vechicle fuel	2,619
Generator fuel	423
Management expenses	1,200
Telephone	441
Sample preperation (clay fraction, pulverising) 145 off @ 11.50	1,667
Freight	117
Assaying	725
Impact mill, ring pulveriser	1,000
TOTAL EXPENDITURE	$26,242

G. M. Bogie

PLATE 1. Location

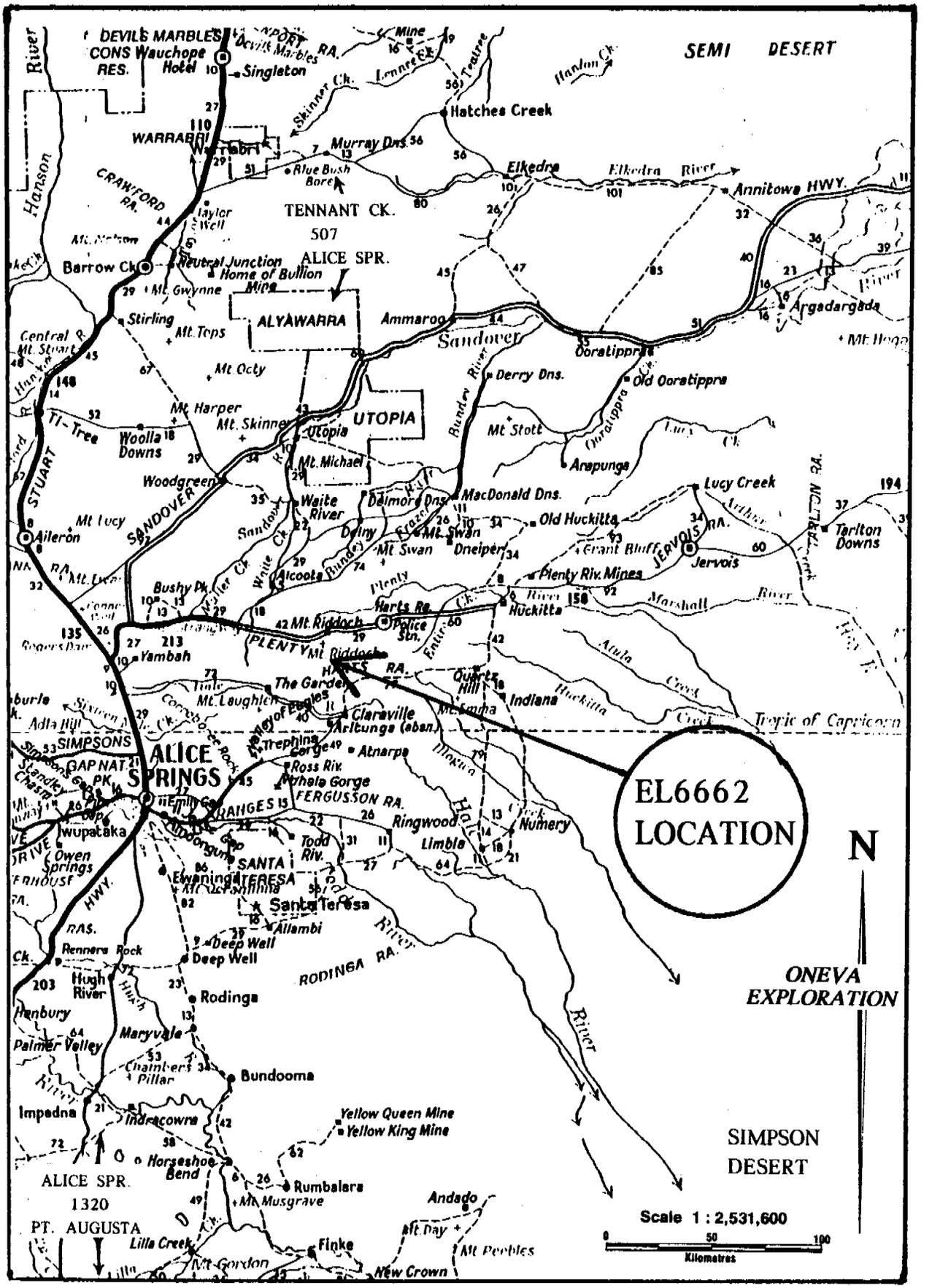
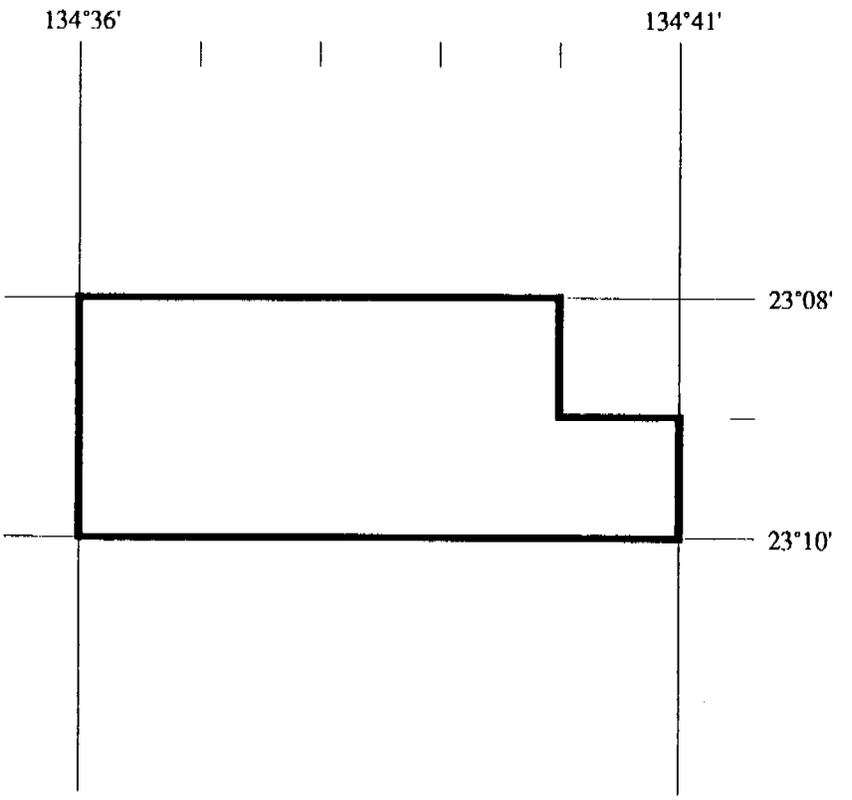


PLATE 2. Tenement Map



EL6662
9 BLOCKS
29 sq kms

PLATE 3. AREA OF ALTERATION

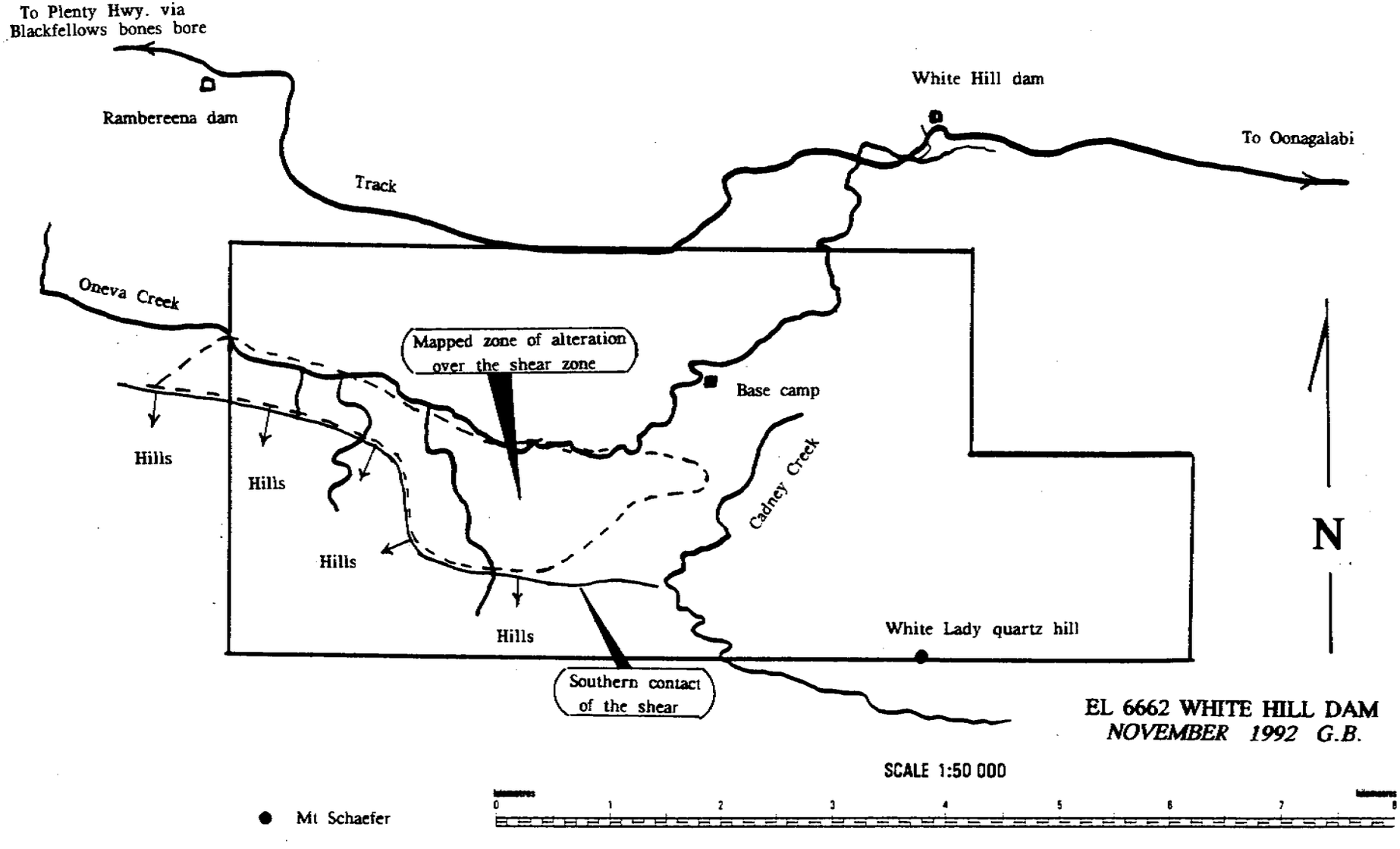
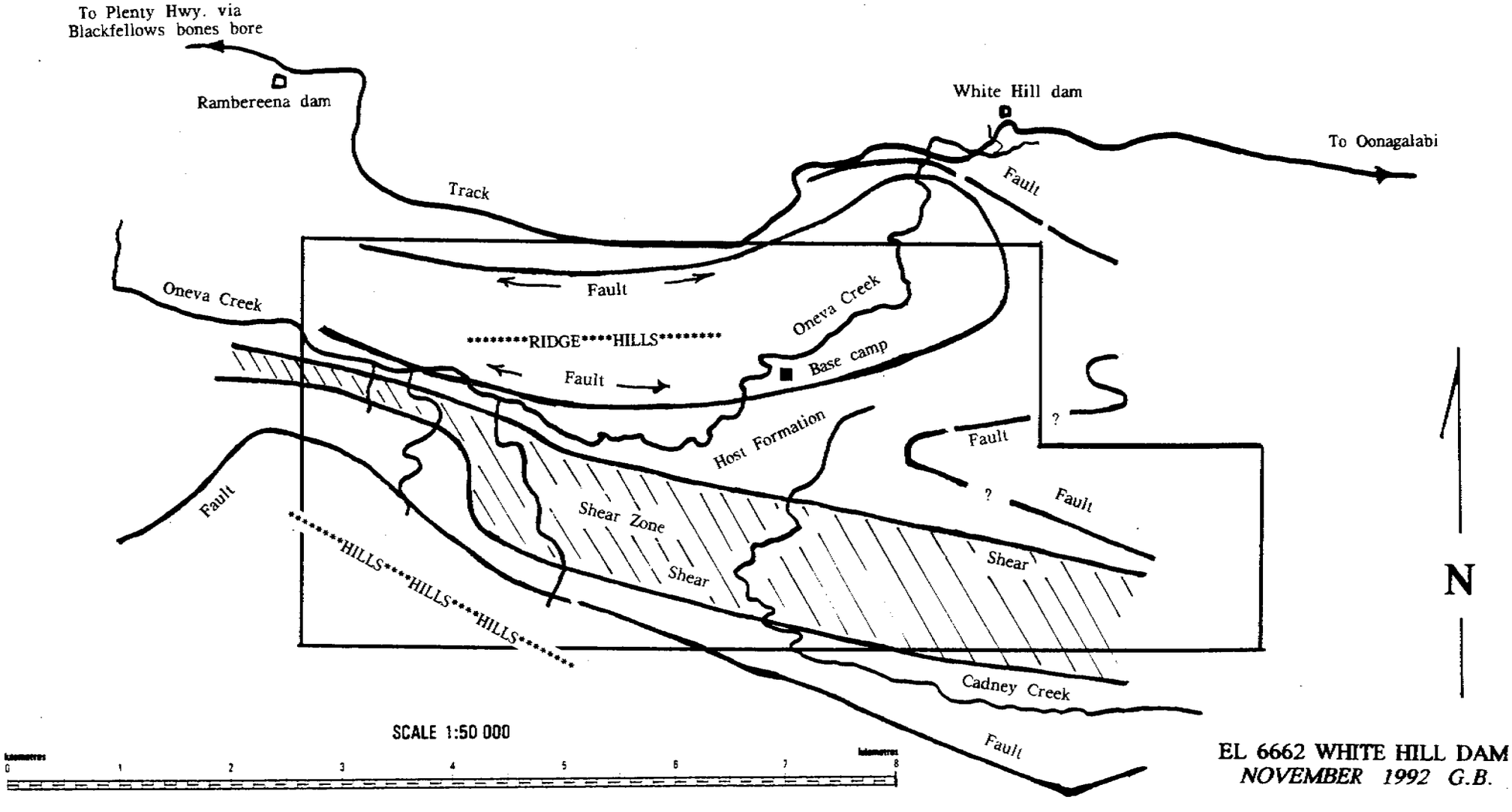
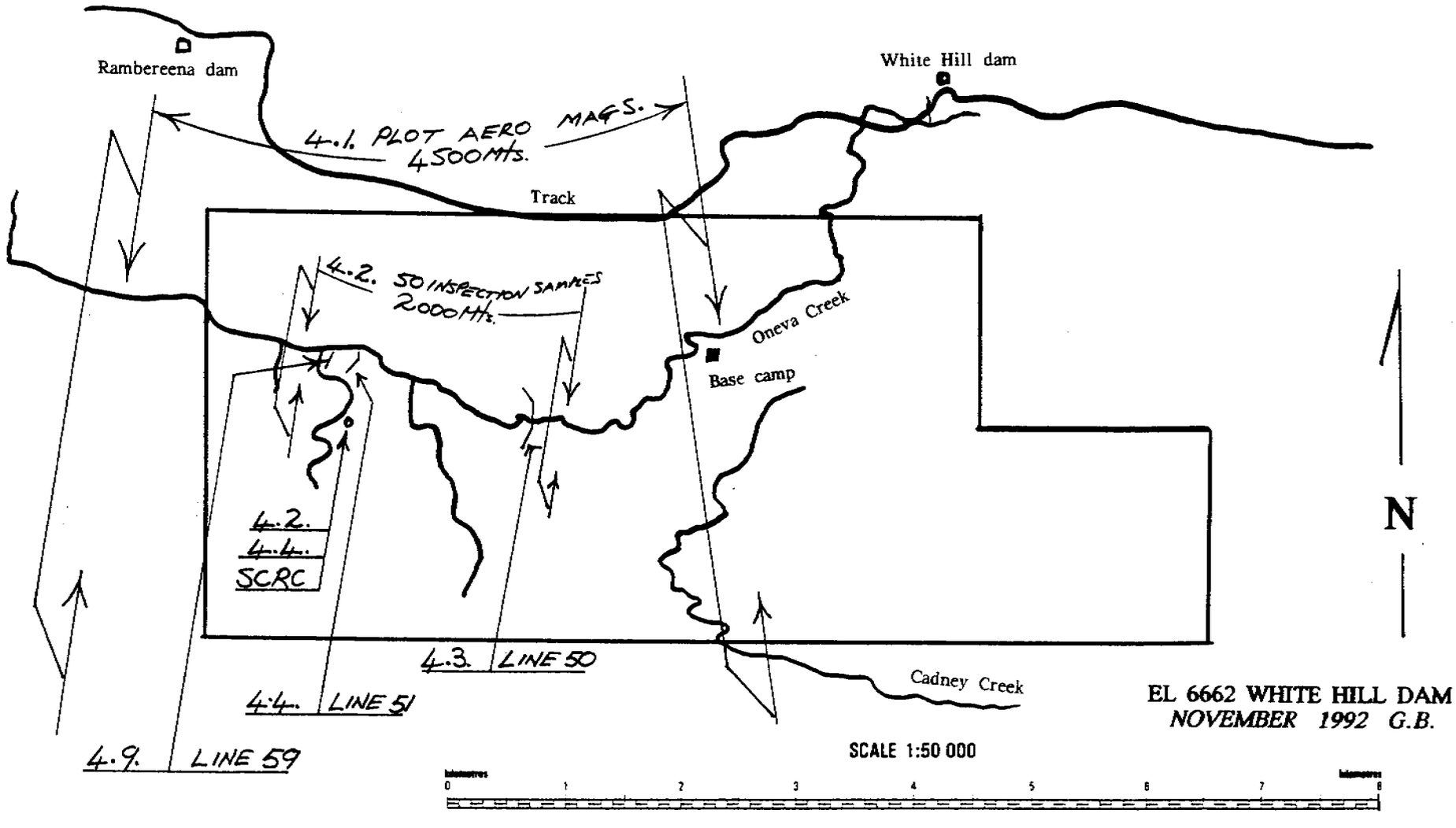


PLATE 4. SHEAR ZONE & FAULTS



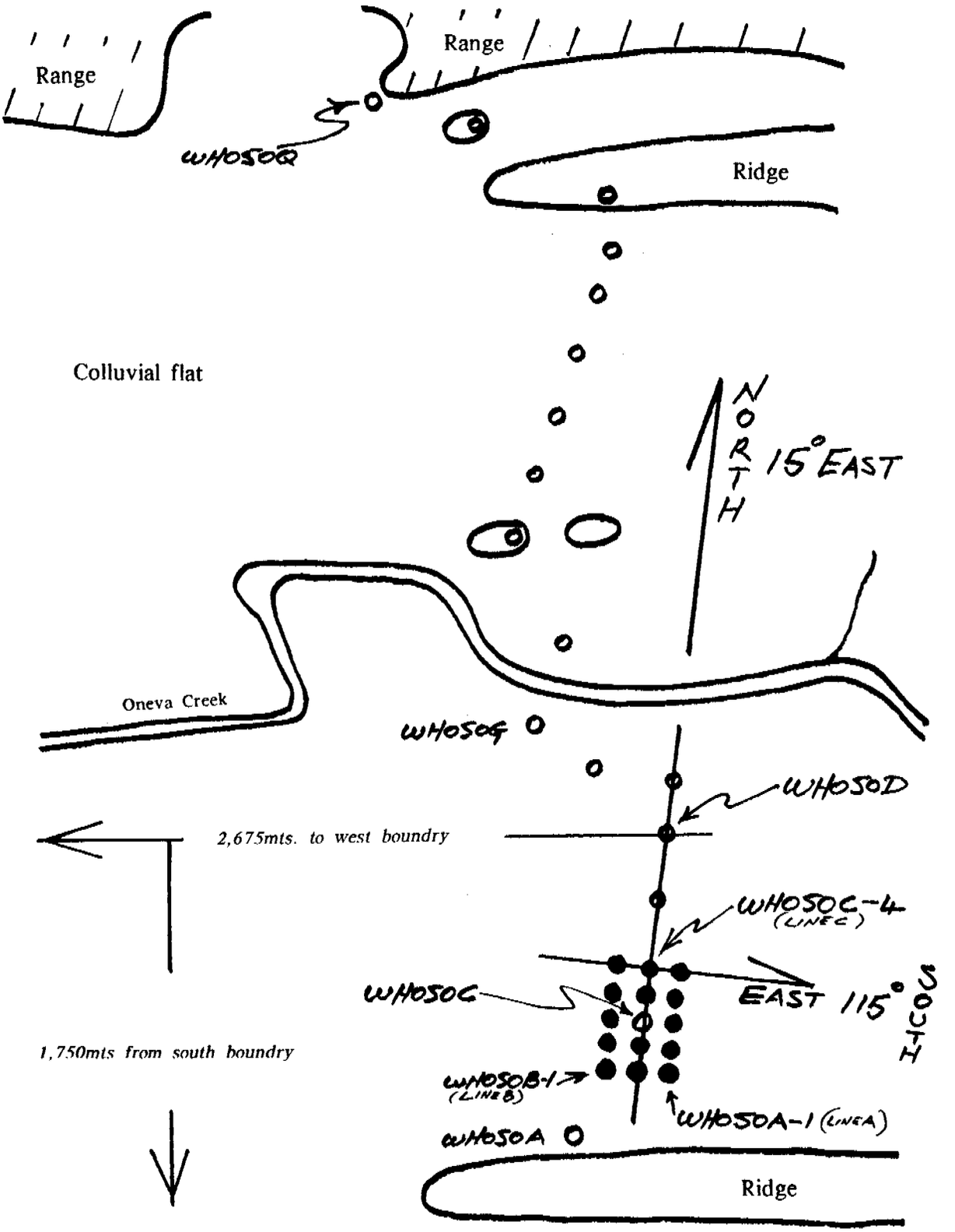
EL 6662 WHITE HILL DAM
NOVEMBER 1992 G.B.

Appendix 1. *SAMPLE LOCATIONS, Map (a)*



Appendix 1. *SAMPLE LOCATIONS, Map (b)*

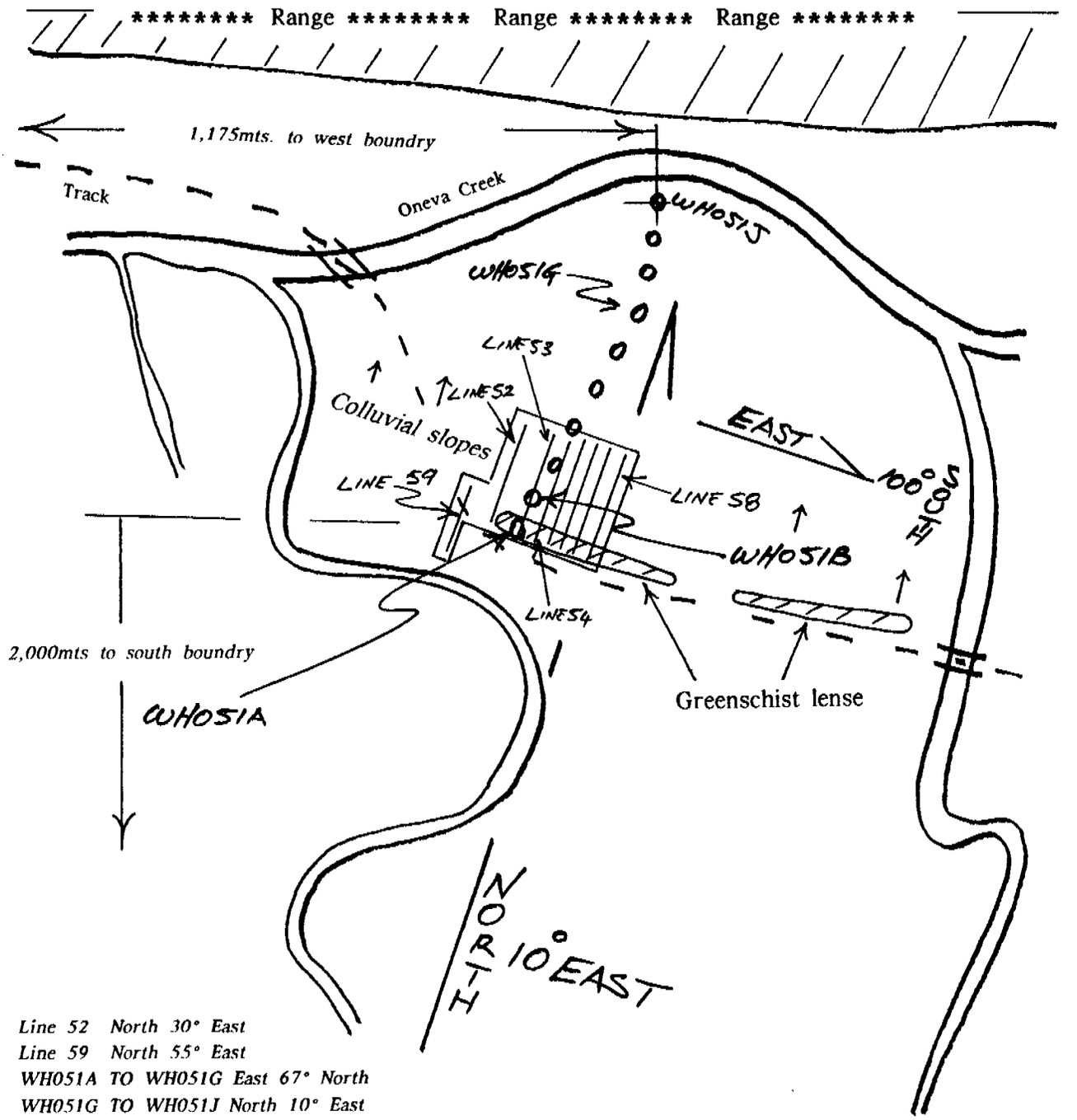
Line 50 ...17 Surface Samples. (Phase 1.)
Line 50A ...5 Surface Samples. (Phase 2.)
Line 50B ...5 Surface Samples. (Phase 2.)
Line 50C ...4 + 1 TEST Surface Samples. (Phase 2.)



Appendix 1. *SAMPLE LOCATIONS, Map (c)*

Line 51	*...10 Surface Samples. (Phase 1.)*	*Line 55*	*...6 Surface Samples (Phase 2)*
Line 52	*...7 Surface Samples. (Phase 2.)*	*Line 56*	*...6 Surface Samples (Phase 2)*
Line 53	*...4 Surface Samples. (Phase 2.)*	*Line 57*	*...5 Surface Samples (Phase 2)*
Line 54	*...4 Surface Samples. (Phase 2.)*	*Line 58*	*...7 Surface Samples (Phese 2)*
Repeats	*... WH051B (Phase 2)*	*Line 59*	*...7 Surface Samples (Phase 2)*

Photo Run 11E Alice Springs
1:50000 072-126 Sh. 089



ALL "A's" START FROM SOUTH GOING NORTH

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174 Ward Street, Pine Creek, N.T. 0847
P.O. Box 41, Pine Creek, N.T. 0847
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Assay Sample	Assay Re No's.	Au (ppm)	Au(R) (ppm)	
E8100	SCRC-1	0.185		(SOUTHERN
E8101	SCRC-2	0.035		CONTACT
E8102	SCRC-3	0.107		ROCKCHIP)
E8103	SCRC-4	0.055	0.066	
	LINE 50			
E8104	WH050A	0.048		
E8105	WH050B	0.123		
E8106	WH050C	1.442		
E8107	WH050D	0.038		
E8108	WH050E	0.057		
E8109	WH050F	0.024		
E8110	WH050G	0.040		
E8111	WH050H	0.040		
E8112	WH050I	0.049		
E8113	WH050J	0.029		
E8114	WH050K	0.018		
E8115	WH050L	0.028		
E8116	WH050M	0.032	0.039	
E8117	WH050N	0.054		
E8118	WH050O	0.029		
E8119	WH050P	0.151		
E8120	WH050Q	0.174	0.176	

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Assay Sample	Assay Re No's.	Au (ppm)	Au(R) (ppm)
	LINE 51		
E8121	WH051A	0.032	
E8122	WH051B	10.80	10.70
E8123	WH051C	0.084	
E8124	WH051D	0.054	
E8125	WH051E	0.035	
E8126	WH051F	0.044	
E8127	WH051G	0.037	
E8128	WH051H	2.177	2.133
E8129	WH051I	0.085	
E8130	WH051J	0.816	0.806

Code AC 04739
Analysis Au
Scheme FA50
Detection 0.001
Data ppm

Samples with E prefix were prenumbered (new stock) bags used. All spurious numbering was conformably changed.

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Sample	Assay Au	Assay Au(R)
WH050A-1	- 0.001	
WH050A-2	- 0.001	
WH050A-3	- 0.001	
WH050A-4	0.192	0.199
WH050A-5	- 0.001	
WH050B-1	- 0.011	0.016
WH050B-2	0.005	
WH050B-3	- 0.001	
WH050B-4	- 0.001	
WH050B-5	- 0.001	
WH050C-1	- 0.001	
WH050C-2	0.001	
WH050C-3	- 0.001	
WH050C-4	- 0.001	
WH052A	- 0.001	
WH052B	- 0.001	
WH052C	- 0.001	
WH052D	- 0.001	
WH052E	- 0.001	
WH052F	- 0.001	
WH052G	0.057	0.044

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Sample	Assay Au	Assay Au(R)
WH053A	0.006	
WH053B	- 0.001	- 0.001
WH053C	0.004	
WH053D	0.009	0.009
WH054A	0.158	0.118
WH054B	- 0.001	
WH054C	- 0.001	
WH054D	- 0.001	
WH055A	0.056	0.071
WH055B	- 0.001	
WH055C	- 0.001	
WH055D	- 0.001	
WH055E	- 0.001	
WH055F	- 0.001	
WH056A	0.088	
WH056B	- 0.001	
WH056C	- 0.001	
WH056D	- 0.001	
WH056E	- 0.001	
WH056F	- 0.001	

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Sample	Assay Au	Assay Au(R)	
WH057A	- 0.001		
WH057B	- 0.001		
WH057C	- 0.001		
WH057D	- 0.001		
WH057E	- 0.001		
WH058A	- 0.001		
WH058B	- 0.001	0.001	
WH058C	- 0.001		
WH058D	- 0.001		
WH058E	- 0.001		
WH059A	- 0.001		
WH059B	- 0.001		
WH059C	- 0.001		
WH059D	- 0.001		
WH059E	0.002		
WH059F	0.002		
WH059G	- 0.001		
TEST 1.	- 0.001		(WH055F Sediment, twice more than normal)
TEST 2.	- 0.001		(WH051B Phase 2 collection repeat)
TEST 3.	- 0.001		(WH050C Phase 2 collection repeat)
TEST 4.	2.340	2.840	(WH051H Phase 1 stored split)-(E8128)
TEST 5.	1.210	1.460	(WH050C Phase 1. stored split)-(E8106)

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Sample	Assay Au	Assay Au(R)
PANCON 1.	0.175	0.144 (Total coarse frac pan cons Lines; 52 to 59)
PANCON 2.	2.430	2.840 (Total coarse frac pan cons WH050 Series Phase 2.)

Code	AC05367
Analysis	Au
Scheme	FA50
Detection	0.001
Data	ppm