

ANZECCO

Progress Report on Ew 3/76

Wilson River

77-1219

Q43/21

000

AUSTRALIA AND NEW ZEALAND EXPLORATION COMPANY

(INCORPORATED IN THE STATE OF DELAWARE, UNITED STATES OF AMERICA)
157-167 LIVERPOOL STREET, SYDNEY, N.S.W. 2000, AUSTRALIA

Q43/21
306002

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SYDNEY, N.S.W. 2001

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TELEX: AA20566

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DEPT OF MINES		
REF. No.	3393/77	

July 25, 1977.
Registrar
E & IL
JN file report & plans.

The Director of Mines,
Department of Mines,
G.P.O., Box 124 B,
HOBART, TASMANIA. 7001

Dear Sir,

Progress Report on Exploration Licence No. 3/76, Wilson River

Summary

During the 1976-77 summer field season, the mineral potential of the southern flank of the Meredith Granite and adjacent sediments was investigated using a stream sampling program. Both pan concentrates and -80 mesh sediments were collected at each site and analysed for W, Bi, Cr, Cu, Ir, Pb, Mo, Ni, Os, Pt, Sn, V and Zn. The target of a tungsten mineralized skarn deposit in the Ordovician sediments was not delineated, the only anomalism being detected in the Meredith Granite, a phenomena known from previous work.

Geology

The Meredith Granite intrudes a sequence of sediments and ultrabasics folded in a broad syncline which occupies the central part of the E.L. The reported mineralization at Mount Lindsay to the west and Mount Ramsay to the east is attractive from the point of view of tungsten and this, along with the known tin-tungsten affinity of the Meredith Granite, was the main reason for the choice of the target area.

Poor accessibility and outcrop prevented a detailed geological appraisal of the area and previous mapping has been heavily relied upon for geological control. Observations on the Gordon Limestone confirm the reported composition and attitude of this unit, and provided an excellent marker when outcropping. The Gordon Limestone is a grey-black limestone containing small pyrite cubes and sometimes veined with small quartz stringers. On the western side of the syncline, dips were consistently recorded at 70-75° to the west.

The Siluro-Devonian quartzites, siltstones and shales produced no anomalism from scheelite and are considered to be of low economic potential. Osmiridium and chromium analyses were undertaken to check the potential of the Cambrian serpentinites but no attractive areas were delineated.

The Meredith Granite showed variations from a fine grained, pink quartz to a coarse (almost pegmatitic) grained, grey granite. In these coarser grained phases, tourmaline splays and an enrichment of quartz is noted. It is not uncommon to have tin and tungsten anomalism associated with this phase.

AUSTRALIA AND NEW ZEALAND EXPLORATION COMPANY

100

The Director of Mines

July 25, 1977

Geochemistry

In total, 188 stream samples were collected at 94 different locations. Helicopter drops were the only means of deployment and river traverses were carried out using rubber dinghies.

Pan Concentrates

One pan (approximately 10 kg) was washed at each sample site to produce a heavy mineral concentrate. This was subsequently examined under short-wave ultra-violet light for the presence of scheelite. Subsequent assays were then corrected to a standard figure so a comparison of scheelite grain count and corrected W assay could be made. Because of the wide disparity in these results, it is thought that the tungsten collected in the samples is mostly in the form of wolfram rather than scheelite.

-80# Stream Sediment Samples

Due to the high cost of obtaining samples and the possibility of base metal sulphides in the area, a parallel program of -80 mesh stream sediment sampling was undertaken. To generalise, it was found that these samples either mirrored or were less sensitive than the pan concentrates, with the possible exception of Pb analyses which sometimes showed some marked variation.

Conclusions

Plotting of results has indicated that all anomalous Sn and W results can be attributed as emanating from mineralization within the Meridith Granite. From previous work (in E.L. No.11/75 - Mount Stewart area) this phenomena is to be expected with tin-tungsten (wolfram) mineralization occurring in quartz veins within the granite. These occurrences will not constitute an economic ore-body unless sufficiently concentrated to form a high tonnage, low grade deposit and, as the sampling gave no indication of this, the possibility is considered unlikely.

Yours sincerely,

J.D. Lockhart 17/7/77

J.D. Lockhart
Project Geologist

Attachments

Copies of Assay Results

Series of 3 Maps - Geology and Geochemistry of Wilson River Area, E.L.3/76

002

ADELAIDE

SYDNEY

Q43/21

A.C.S. Laboratories Pty. Ltd.

50 MARY STREET

UNLEY, S.A. 5061

P.O. BOX 3

UNLEY, S.A. 5061

PHONE: 272 2412

TELEX: AA82623

ANALYTICAL RESULTS

306004

Samples from: West & New Zealand Exp Coy.

Area: *Wilson River Samples*

Samples of: Sediments.

Preparation: Dried & Pulverised as required.

Sheet No.: 1.

Batch No.: A 1926

Date: 14.2.77.

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED

Sample Description	Wppm	Sample NOS.	Wppm
AD-- WR - 1	<2	DWR 51	<2
2	15	52	<2
3	<2	53	<2
4	<2	DWR 54	80
5	<2		
6	<2		
7	<2		
8	<2		
9	10		
10	<2		
11	<2		
12	5		
13	2		
14	<2		
15	5		
16	<2		
17	<2		
18	<2		
19	<2		
20	<2		
21	50		
22	40		
23	2		
24	<2		
25	<2		
26	<2		
27	20		
28	50		
29	<2		
30	<2		
31	<2		
32	<2		
33	5		
34	<2		
35	<2		
36	<2		
37	5		
38	<2		
39	5		
40	5		
41	5		
42	<2		
43	<2		
44	<2		
45	<2		
46	<2		
47	10		
48	<2		
49	<2		
50	<2		

Repeat and Check

DWR 9 10

DWR 30 <2

DWR 49 <2

ANALYTICAL METHODS:

W by modified Dithiol method following
Potassium pyrosulphate fusion of 0.1g sample.

DISTRIBUTION:

Signed.....

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

A.C.S. Laboratories Pty. Ltd.
 P.O. Box 111
 UNLEY, S.A. 5081
 PHONE: 272 2412, 272 2518
 TELEX: AA82623

Samples from: _____

Area: _____

Samples of: _____

Batch No.: A 1926

Sheet No.: _____

Date: 14. 2. 77

GROUP	SAMPLE IDENTIFICATION									
	ADWR-1	2	3	4	5	6	7	8	9	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	500	1000	1000	1000	3000	300	1000	200	1000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	<3	<3	<3	<3	<3	<3	<3	<3
	Nb (20)									
	Ni (3)	5	3	10	5	20	5	10	5	50
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	50	50	50	50	100	30	100	50	100
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	30	50	100	30	100	50	30	10	100
	Cd (3)									
	Cu (0.5)	10	10	10	10	100	10	10	10	30
	Ge (1)									
	In (5)									
	Pb (1)	10	10	30	10	100	20	10	10	100
	Sb (30)									
	Sn (1)	20	20	100	10	1000	100	50	3	1000
	Tl (1)									
	Zn (20)	<20	30	30	<20	50	30	30	50	100
ES 3	Ba (30)									
	Ca (20)									
	Ca (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED



Preparation: _____

Distribution: _____

Signed: _____

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

Samples from: *Adelaide Water Treatment Plant*Area: *Adelaide*Samples of: *Water*

Batch No.: A 1926

Sheet No.:

Date: 14.2.77

GROUP	SAMPLE IDENTIFICATION									
	ADWR10	11	12	13	14	15	16	17	18	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	300	500	100	300	100	500	500	1000	100
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	<3	<3	<3	<3	<3	<3	<3	<3
	Nb (20)									
	Ni (3)	10	10	30	5	5	30	30	30	5
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Ra (10)									
	V (10)	30	50	30	30	30	100	50	300	100
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	50	50	50	50	30	100	30	300	100
	Cd (3)									
	Cu (0.5)	10	50	30	30	30	100	30	50	100
	Ge (1)									
	In (5)									
	Pb (1)	50	30	10	200	30	200	50	100	100
	Sb (30)									
	Sn (1)	50	500	10	100	5	300	100	300	10
	Tl (1)									
	Zn (20)	30	30	30	30	30	300	100	300	100
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

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Preparation:

Distribution:



ADELAIDE

SYDNEY

306007

GEOCHEMICAL RESULTS

A.C.S. Laboratories Pty. Ltd.

P.O. BOX 3

UNLEY, S.A. 5061

PHONE: 272 2412, 272 2518

TELEX: AA82623

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

Samples from: [unclear]

Area: [unclear]

Samples of: [unclear]

Sheet No.:

Batch No.: A

Date: 14. 2. 77

GROUP	SAMPLE IDENTIFICATION									
	ADWR19	20	21	22	23	24	25	26	27	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	>10000	500	3000	500	>10000	2000	2000	300	3000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	<3	<3	<3	10	<3	<3	<3	<3
	Nb (20)									
	Ni (3)	30	5	5	3	50	20	5	10	20
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	100	50	50	30	300	50	30	20	50
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	30	30	50	30	100	50	30	10	50
	Cd (3)									
	Cu (0.5)	20	20	10	10	10	10	5	10	30
	Ge (1)									
	In (5)									
	Pb (1)	3	3	10	3	<1	<1	<1	<1	50
	Sb (30)									
	Sn (1)	30	30	1000	10	300	30	1000	<1	500
	Tl (1)									
	Zn (20)	300	30	300	300	50	<20	<20	<20	300
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

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Preparation:

Distribution:

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

A.C.S. Laboratories Pty. Ltd.

P.O. Box 11

UNLEY, S.A. 5001

PHONE: 272 2412, 272 2518

TELEX: AA82623

Samples from: [faint text]

Area: [faint text]

Samples of: [faint text]

Batch No.: A 1926

Sheet No.:

Date: 14. 2. 77

GROUP	SAMPLE IDENTIFICATION									
	ADWR 28	29	30	31	32	33	34	35	36	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	500	>10000	500	>10000	200	>10000	5000	3000	500
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	10	<3	20	<3	10	<3	<3	<3
	Nb (20)									
	Ni (3)	5	50	10	50	<3	30	10	10	5
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Ru (10)									
	V (10)	30	100	30	100	30	100	50	30	30
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	50	50	50	100	20	50	30	100	50
	Cd (3)									
	Cu (0.5)	30	10	30	10	10	10	20	20	10
	Ge (1)									
	In (5)									
	Pb (1)	30	30	10	3	<1	<1	30	5	<1
	Sb (30)									
	Sn (1)	300	300	100	1000	<1	1000	500	5000	300
	Tl (1)									
	Zn (20)	300	30	30	100	30	100	200	100	100
ES 3	Ba (30)									
	Ca (20)									
	Ca (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

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Preparation:

Distribution

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

A.C.S. Laboratories Pty. Ltd.
P.O.
UNLFD. G.A.
PHONE: 272 2412, 272 2413
TELEX: AARNDP

4007

Samples from: *Admiral's Bay, 1000m*

Area: *Admiral's Bay*

Samples of: *Seawater*

Batch No.: *A 1926*

Sheet No.:

Date: *14.2.77*

GROUP	SAMPLE IDENTIFICATION									
	ADM37	38	39	40	41	42	43	44	45	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	5000	500	>10000	5000	>10000	500	3000	500	>10000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	5	<3	30	3	<3	<3	<3	<3	5
	Nb (20)									
	Ni (3)	20	5	50	20	50	50	50	50	100
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	50	30	200	50	100	20	30	30	50
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	50	50	100	30	100	10	50	10	50
	Cd (3)									
	Cu (0.5)	10	10	10	10	20	10	10	10	5
	Ge (1)									
	In (5)									
	Pb (1)	<1	21	<1	<1	<1	<1	10	<1	<1
	Sb (30)									
	Sn (1)	1000	<1	500	500	1000	<1	500	10	300
	Tl (1)									
	Zn (20)	200	300	100	300	100	20	100	20	200
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

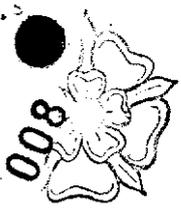
SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED

Preparation:

Distribution:

Signed:





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SYDNEY

306010

GEOCHEMICAL RESULTS

A.C.S. Laboratories Pty Ltd

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

UNLTY 1111

PHONE: 272 2412

TELEX: AAL211

All Values in ppm

Samples from: [unclear]

Area: [unclear]

Samples of: [unclear]

Batch No.: A 1926

Sheet No.:

Date: 14.2.77

GROUP	SAMPLE IDENTIFICATION									
	ADNR 46	47	48	49	50	51	52	53	54	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	2000	>10000	1000	>10000	3000	500	500	>10000	3000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	5	<3	5	<3	<3	<3	20	<3
	Nb (20)									
	Ni (3)	30	50	20	50	20	30	30	100	30
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	30	100	10	50	30	30	50	100	30
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	10	50	10	100	30	50	30	100	30
	Cd (3)									
	Cu (0.5)	10	20	10	10	10	10	10	20	20
	Ge (1)									
	In (5)									
	Pb (1)	<1	10	<1	<1	<1	5	5	<1	<1
	Sb (30)									
	Sn (1)	5	10	10	1000	300	30	10	300	20
	Tl (1)									
	Zn (20)	50	200	50	300	30	200	200	300	50
ES 3	Ba (30)									
	Ca (20)									
	Ca (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED



Preparation: [unclear]

Distribution: [unclear]

Signed:

[unclear]



ADELAIDE

SYDNEY

A.C.S. Laboratories Pty. Ltd.

306011

50 MARY STREET
UNLEY, S.A. 5061
P.O. BOX 3
UNLEY, S.A. 5061
PHONE: 272 2412
TELEX: AA82623

ANALYTICAL RESULTS

Samples from: Aust & New Zealand Exp Coy.

Area: W. Tasmania.

Samples of: Sediments

Preparation: Pulverised as required.

Batch No.: A 1936.

Sheet No.: 1.

Date: 18.2.77.

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED

Sample Description	Wppm*	Wppm**				
ADWR - 55	>200	570				
6	40					
7	>200	820 ✓		Repeat and Check		
8	90					
9	100					
60	70			Sample Nos.	Wppm*	Wppm**
1	80			84	40	
2	50			73	60	
3	>200	0.15%		83	200	690
4	40			100	40	
5	100					
6	20					
7	>200	0.18%				
8	50					
9	100					
70	90					
1	>200	430 ✓				
2	200					
3	20					
4	50					
5	200					
6	100					
7	>200	460 ✓				
8	70					
9	200					
80	40					
1	>200	0.44%				
2	80					
3	>200	690 ✓				
4	70					
5	80					
6	50					
7	200					
8	80					
9	200					
90	20					
1	40					
2	30					
3	20					
4	40					
5	2					
6	15					
7	90					
8	20					
9	5					
100	40					
1	20					
ADWR - 102	40					

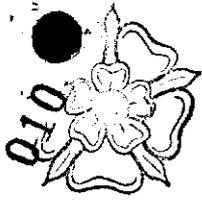
ANALYTICAL METHODS: *W by modified Dithio method following Potassium pyrosulphate fusion of 0.1g sample. AAS.
 ** W determined by GRF (Colorimetric values >220 ppm).



DISTRIBUTION: Aust & New Zealand Exp Coy - Sydney & Queenstown Tasmania

Signed.....

This Laboratory is registered by the National Association of Testing Authorities, Australia. The test(s) reported herein have been performed in accordance with its terms of registration. This document shall not be



ADELAIDE

SYDNEY

306012

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

A.C.S. Laboratories Pty. Ltd.

P.O. BOX 3

UNLEY, S.A. 5061

PHONE: 272 2412, 272 2516

TELEX: AA82623

Samples from: [Blank]

Area: [Blank]

Samples of: [Blank]

Batch No.: A 1936

Sheet No.:

Date: 18. 2. 77.

GROUP	SAMPLE IDENTIFICATION									
	ADDRESS	56	57	58	59	60	61	62	63	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	1000	2000	3000	2000	3000	500	3000	1000	1000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	<3	<3	<3	<3	<3	<3	<2	30
	Nb (20)									
	Ni (3)	20	50	50	30	50	30	100	10	30
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	30	50	50	30	50	30	50	10	50
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	30	50	100	50	50	30	50	30	50
	Cd (3)									
	Cu (0.5)	10	10	5	5	10	10	10	10	10
	Ge (1)									
	In (5)									
	Pb (1)	20	100	10	200	3	3	10	30	100
	Sb (30)									
	Sn (1)	500	1000	3000	500	2000	10	1000	200	300
	Tl (1)									
	Zn (20)	100	200	500	100	100	50	100	30	300
ES 3	Ba (30)									
	Ca (20)									
	Ca (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED



Preparation:

Distribution:

Signed:

THE LABORATORY IS ACCREDITED TO ISO 9001



ADELAIDE

SYDNEY

306013

GEOCHEMICAL RESULTS

A.C.S. Laboratories

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

UNILEY, P.A. 111
PHONE: 272 2412, 272 2413
TELEX: AA52633

Samples from: *...*

Area: *...*

Samples of: *...*

Batch No.: A 1936

Sheet No.: *...*

Date: 18.2.77

GROUP	SAMPLE IDENTIFICATION									
	ADWR 64	65	66	67	68	69	70	71	72	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	3000	2000	300	5000	500	>10000	3000	5000	1000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	<3	<3	5	<3	10	<3	<3	<3
	Nb (20)									
	Ni (3)	10	5	100	100	20	200	100	100	100
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	30	10	10	50	10	100	30	50	50
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	30	50	10	100	30	50	30	30	50
	Cd (3)									
	Cu (0.5)	10	10	10	5	5	3	10	10	5
	Ge (1)									
	In (5)									
	Pb (1)	50	50	5	10	5	5	30	5	5
	Sb (30)									
	Sn (1)	5	500	5	>10000	10	1000	500	5000	300
	Tl (1)									
	Zn (20)	50	300	20	500	50	500	300	300	50
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

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Preparation:

Distribution:

Signed:

This is a ...

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

A.C.S. Laboratories Pty. Ltd.

P.O. Box

UNLEY, S.A. 5001

PHONE: 272 2412, 272 2515

TELEX: AA52623

Samples from: *Admiral 73*

Area: *Admiral 73*

Samples of: *Admiral 73*

Batch No.: A 1936

Sheet No.:

Date: 18.2.77

GROUP	SAMPLE IDENTIFICATION									
	Admiral 73	74	75	76	77	78	79	80	81	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	5000	1000	>10000	3000	5000	3000	5000	2000	5000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	3	<3	30	<3	<3	<3	<3	<3	200
	Nb (20)									
	Ni (3)	100	20	200	50	50	100	100	100	100
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	50	20	100	20	30	30	30	30	300
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	100	30	100	50	50	50	30	30	50
	Cd (3)									
	Cu (0.5)	20	10	3	5	5	5	10	5	5
	Ge (1)									
	In (5)									
	Pb (1)	<1	3	<1	50	10	30	5	10	500
	Sb (30)									
	Sn (11)	500	50	1000	500	1000	500	500	300	3000
	Tl (1)									
	Zn (20)	500	30	500	300	500	200	100	100	500
ES 3	Ba (30)									
	Ca (20)									
	Ca (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
	B (10)									

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on:

on:

Sheet No.

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

A.C.S. Laboratories Pty. Ltd.
 UNLEY, SA 5008
 PHONE: 272 2412, 272 2413
 TELEX: AAN 003

013

Samples from: *[illegible]*

Area: *[illegible]*

Samples of: *[illegible]*

Batch No.: A 1936

Sheet No.:

Date: 18.2.77

GROUP	SAMPLE IDENTIFICATION									
	ADNR 82	83	84	85	86	87	88	89	90	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	500	5000	3000	3000	1000	3000	500	10000	1000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	5	<3	<3	<3	<3	<3	<3	<3	<3
	Nb (20)									
	Ni (3)	20	300	100	50	20	50	20	200	20
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	50	100	50	50	50	50	10	300	20
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	20	50	30	50	10	30	30	50	10
	Cd (3)									
	Cu (0.5)	30	30	10	5	5	5	10	5	20
	Ge (1)									
	In (5)									
	Pb (1)	100	10	30	5	10	5	10	30	5
	Sb (30)									
	Sn (1)	300	3000	500	1000	10	1000	20	1000	10
	Tl (1)									
	Zn (20)	50	300	100	300	<20	300	30	500	30
ES 3	Ba (30)									
	Ca (20)									
	Co (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED



Preparation:

Distribution:

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

UNLEY, SA

PHONE: 272 2412, 272 2411

TELEX: AAG 27

014

Samples from: ...

Area: ...

Samples of: ...

Batch No.: A 1936

Sheet No.:

Date: 18.2.77

GROUP	SAMPLE IDENTIFICATION									
	ADWR-91	92	93	94	95	96	97	98	99	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	5000	500	10000	2000	3000	3000	3000	5000	3000
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	5	<3	5	<3	<3	<2	<3	<3	<3
	Nb (20)									
	Ni (3)	50	10	100	20	100	100	50	20	30
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	50	30	100	30	100	100	200	50	50
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	100	3	100	20	100	50	50	30	50
	Cd (3)									
	Cu (0.5)	5	5	10	10	20	10	20	5	10
	Ge (1)									
	In (5)									
	Pb (1)	5	5	3	3	<1	<1	10	5	5
	Sb (30)									
	Sn (1)	1000	30	500	10	100	50	50	3	30
	Tl (1)									
	Zn (20)	500	<20	500	100	200	100	200	30	50
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

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Signed:

015



ADELAIDE

SYDNEY

306017

A.C.S. Laboratories Pty. Ltd.

P.O. Box 5

UNLEY, S.A. 5041

PHONE: 272 2412, 272 2518

TELEX: AA85623

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

Samples from: _____

Area: _____

Samples of: _____

Sheet No.: _____

Batch No.: A 1936

Date: 17. 2. 77

GROUP	SAMPLE IDENTIFICATION									
	ADWR 100	101	102							
ES 1	Be (1)									
	Co (5)									
	Cr (20)	5000	3000	2000						
	Ir (2)	<2	<2	<2						
	Mn (5)									
	Mo (3)	<3	<3	<3						
	Nb (20)									
	Ni (3)	50	30	30						
	Os (10)	<10	<10	<10						
	Pd (10)									
	Pt (10)	<10	<10	<10						
	Re (10)									
	V (10)	50	50	30						
	W (50)									
	Ta (100)									
Th (100)										
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	50	50	50						
	Cd (3)									
	Cu (0.5)	10	10	10						
	Ge (1)									
	In (5)									
	Pb (1)	10	5	10						
	Sb (30)									
	Sn (1)	50	100	5						
	Tl (1)									
Zn (20)	30	20	<10							
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED



Preparation: _____



306018

A.C.S. Laboratories Pty. Ltd.
50 MARY STREET
UNLEY, S.A. 5061
P.O. BOX 3
UNLEY, S.A. 5061
PHONE: 272 5733

ANALYTICAL RESULTS

016

Samples from: Aust. & New Zealand Exp Coy.

Area: Tasmania.

Samples of: Seds.

Preparation: --

Batch No.: A 1993 (Supplement).

Sheet No.: 1.

Date: 6.4.77.

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED

Sample Description	WPPM*	W%**				
AD-WR- 177	>200	0.13%				
8	>200	650				
9	>200	0.13%				
80	60					
1	>200	0.17%				
2	40					
3	>200	0.32%				
4	100					
5	>200	0.19%				
AD-WR-186	60					
<u>Repeat and Check</u>						
AD-WR-182 8	40					

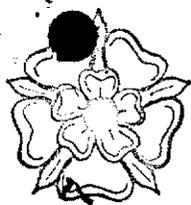
ANALYTICAL METHODS: *W by modified Dithiol method.
**W determined by XRF (Values >200 ppm).



DISTRIBUTION: Aust. & New Zealand Exp Coy.
Sydney & Burnie Tasmania.

Signed *[Signature]*

This Laboratory is registered by the National Association of Testing Authorities, Australia. The test(s) reported herein have been performed in accordance with its terms of registration. This document shall not be



ADELAIDE

SYDNEY

306019

GEOCHEMICAL RESULTS

A.C.S. Laboratories Pty. Ltd.

P.O. BOX 3

UNLEY, S.A. 5061

PHONE: 272 2412, 272 2518

TELEX: AA82623

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

Samples from: -

Area: -

Samples of: -

Sheet No.:

Batch No.: A 1993 (Supplement)

Date: 6. 4. 77

GROUP	AD-WR SAMPLE IDENTIFICATION									
	103	104	105	106	107	108	109	110	111	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	5000	500	500	500	500	500	1000	500	100
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	30	5	5	30	5	100	3	5	3
	Nb (20)									
	Ni (3)	100	50	30	30	50	20	100	30	5
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	100	30	50	30	20	50	50	50	30
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	50	30	100	30	50	30	100	30	50
	Cd (3)									
	Cu (0.5)	3	10	10	5	100	20	10	30	5
	Ge (1)									
	In (5)									
	Pb (1)	3	50	50	100	20	100	30	100	10
	Sb (30)									
	Sn (1)	1000	500	1000	500	3000	1000	3000	2000	200
	Tl (1)									
	Zn (20)	300	30	300	20	300	50	500	100	100
ES 3	Ba (30)									
	Ca (20)									
	Ca (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

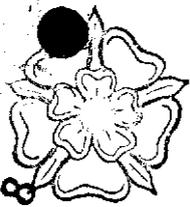
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Preparation:

Distribution:

Signed:



ADELAIDE

SYDNEY

306020

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

A.C.S. Laboratories Pty. Ltd.

P.O. BOX 3

UNLEY, S.A. 5001

PHONE: 272 2412, 272 2518

TELEX: AA82623

018

Samples from: [illegible]

Area: [illegible]

Samples of: [illegible]

Batch No.: A 1993

Sheet No.: [illegible]

Date: 6-4-77

GROUP	SAMPLE IDENTIFICATION									
	112	113	114	115	116	117	118	119	120	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	100	2000	300	300	2000	5000	1000	300	500
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	3	10	5	<3	30	30	10	<3	5
	Nb (20)									
	Ni (3)	20	10	20	20	100	100	100	20	20
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	50	30	50	50	20	100	30	30	30
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	30	100	30	100	50	30	30	50	30
	Cd (3)									
	Cu (0.5)	20	20	10	5	20	3	5	5	10
	Ge (1)									
	In (5)									
	Pb (1)	50	30	100	20	50	10	100	10	100
	Sb (30)									
	Sn (1)	300	3000	1000	5000	500	500	300	1000	300
	Tl (1)									
	Zn (20)	50	500	300	500	300	300	200	500	200
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED

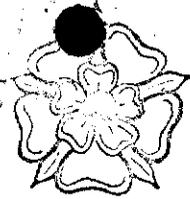


Preparation:

Distribution:

Signed:

[illegible signature line]



ADELAIDE

SYDNEY

306021

GEOCHEMICAL RESULTS

A.C.S. Laboratories Pty. Ltd.

P.O. Box 2

UNLEY, S.A. 5061

PHONE: 272 2412, 272 2518

TELEX: AA02623

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

Samples from: *[Handwritten: 101]*

Area: *[Handwritten: 101]*

Samples of: *[Handwritten: 101]*

Batch No.: A 1993

Sheet No.:

Date: 6. 4. 77

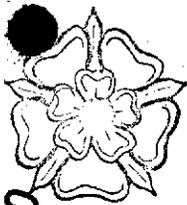
GROUP	SAMPLE IDENTIFICATION									
	121	122	123	124	125	126	127	128	129	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	300	500	300	100	100	300	500	100	200
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	5	<3	<3	<3	<3	<3	<3	<3
	Nb (20)									
	Ni (3)	30	30	50	5	20	20	100	30	10
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	50	50	50	30	30	50	50	50	30
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	100	30	30	30	50	30	100	30	50
	Cd (3)									
	Cu (0.5)	10	30	5	10	5	5	100	3	3
	Ge (1)									
	In (5)									
	Pb (1)	20	100	100	30	50	30	100	5	100
	Sb (30)									
	Sn (1)	3000	3000	50	30	30	30	100	10	20
	Tl (1)									
	Zn (20)	500	300	300	50	50	50	300	30	50
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED



Preparation:

Distribution:



ADELAIDE

SYDNEY

306022

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P.O. BOX 3

UNLEY, S.A. 5061

PHONE: 272 2412, 272 2518

TELEX: AA82623

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

020

Samples from: [illegible]

Area: [illegible]

Samples of: [illegible]

Batch No.: A1993

Sheet No.:

Date: 6.4.77

GROUP	SAMPLE IDENTIFICATION									
	130	131	132	133	134	135	136	137	138	
ES 1										
Be (1)										
Co (5)										
Cr (20)	50	300	100	2000	300	50	200	200	100	
Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Mn (5)										
Mo (3)	<3	<3	<3	<3	<3	50	5	<3	5	
Nb (20)										
Ni (3)	10	5	3	100	20	10	50	50	30	
Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Pd (10)										
Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Re (10)										
V (10)	30	30	30	100	30	30	50	50	30	
W (50)										
Ta (100)										
Th (100)										
ES 2										
Ag (0.1)										
As (50)										
Au (3)										
Bi (1)	10	50	50	50	30	30	20	10	10	
Cd (3)										
Cu (0.5)	3	10	10	5	10	50	30	3	5	
Ge (1)										
In (5)										
Pb (1)	5	100	10	100	100	200	100	20	100	
Sb (30)										
Sn (1)	5	50	30	30	30	10000	200	200	200	
Tl (1)										
Zn (20)	30	300	30	100	20	500	300	30	100	
ES 3										
Ba (30)										
Ca (20)										
Ce (300)										
La (100)										
Sc (50)										
Sr (30)										
Ti (100)										
Y (10)										
Zr (100)										
ES 4										
Hg (30)										
P (100)										
Te (20)										
ES 5										
K (5)										
Li (1)										
Na (50)										
Cs (30)										
Rb (10)										
ES 6										
B (10)										

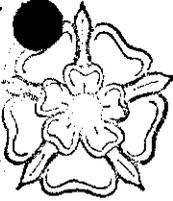
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Preparation:

Distribution:

Signed:



ADELAIDE

SYDNEY

306023

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

A.C.S. Laboratories Pty. Ltd.

P.O. BOX 3

UNLEY, S.A. 5061

PHONE: 272 2412, 272 2518

TELEX: AA82623

021

Samples from: [faded text]

Area: [faded text]

Samples of: [faded text]

Batch No.: A1093

Sheet No.:

Date: 6.4.77

GROUP	SAMPLE IDENTIFICATION									
	139	140	141	142	143	144	145	146	147	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	50	300	100	100	300	500	300	200	300
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	<3	<3	3	<3	<3	<3	<3	<3
	Nb (20)									
	Ni (3)	30	20	50	20	5	5	10	30	20
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	50	50	50	50	50	50	100	50	50
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	50	50	20	30	100	50	20	100	100
	Cd (3)									
	Cu (0.5)	100	50	3	50	30	30	5	30	10
	Ge (1)									
	In (5)									
	Pb (1)	100	100	30	100	100	30	<1	100	30
	Sb (30)									
	Sn (1)	50	50	1000	200	5000	300	100	500	500
	Tl (1)									
	Zn (20)	500	300	20	300	500	50	30	100	300
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Te (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

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Preparation:

Distribution:

Storage:



ADELAIDE

SYDNEY

306024

GEOCHEMICAL RESULTS

A.C.S. Laboratories Pty. Ltd.

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

UNLEY, S.A. 5001

PHONE: 272 2412, 272 2518

TELEX: AA82623

All Values in ppm

Samples from: [illegible]

Area: [illegible]

Samples of: [illegible]

Sheet No.:

Batch No.: A 1993

Date: 6.4.77

GROUP	SAMPLE IDENTIFICATION									
	148	149	150	151	152	153	154	155	156	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	300	100	500	300	30	500	50	300	50
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	<3	<3	<3	<3	<3	<3	<3	<3
	Nb (20)									
	Ni (3)	<3	5	10	3	<3	50	50	30	10
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Re (10)									
	V (10)	30	20	30	50	30	100	100	50	30
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	100	30	100	100	30	30	20	100	30
	Cd (3)									
	Cu (0.5)	10	10	30	30	20	30	20	30	30
	Ge (1)									
	In (5)									
	Pb (1)	50	5	50	50	<1	10	<1	100	3
	Sb (30)									
	Sn (1)	300	100	200	1000	5	100	5	3000	30
	Tl (1)									
	Zn (20)	300	30	100	300	20	20	<20	300	30
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (50)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Ta (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

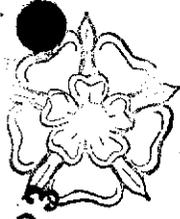
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Preparation:

Distribution:

Signed:



ADELAIDE

SYDNEY

306025

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UNLEY, S.A. 5061

PHONE: 272 2412, 272 2518

TELEX: AA82623

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

023 Samples from: [unclear] [unclear] [unclear] [unclear] [unclear]

Area: [unclear]

Samples of: [unclear]

Sheet No.: [unclear]

Batch No.: A [unclear]

Date: [unclear]

GROUP	SAMPLE IDENTIFICATION									
	157	158	159	160	161	162	163	164	165	
ES 1	Be (1)									
	Co (5)									
	Cr (20)	300	50	100	300	500	50	3000	500	50
	Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Mn (5)									
	Mo (3)	<3	<3	<3	<3	10	<3	100	<3	<3
	Nb (20)									
	Ni (3)	10	<3	50	50	<3	10	20	100	20
	Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Pd (10)									
	Pt (10)	<10	<10	<10	<10	<10	<10	40	<10	<10
	Re (10)									
	V (10)	50	20	50	50	30	30	100	100	50
	W (50)									
	Ta (100)									
	Th (100)									
ES 2	Ag (0.1)									
	As (50)									
	Au (3)									
	Bi (1)	50	20	100	30	50	30	100	20	50
	Cd (3)									
	Cu (0.5)	30	20	30	30	30	30	20	50	20
	Ge (1)									
	In (5)									
	Pb (1)	100	<1	50	4	100	<1	100	<1	100
	Sb (30)									
	Sn (1)	1000	30	300	10	1000	5	1000	10	1000
	Tl (1)									
Zn (20)	300	30	300	30	300	20	500	<20	30	
ES 3	Ba (30)									
	Ca (20)									
	Ce (300)									
	La (100)									
	Sc (50)									
	Sr (30)									
	Ti (100)									
	Y (10)									
	Zr (100)									
ES 4	Hg (30)									
	P (100)									
	Ta (20)									
ES 5	K (5)									
	Li (1)									
	Na (50)									
	Cs (30)									
	Rb (10)									
ES 6	B (10)									

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Preparation:

Distribution:

Sheet:

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

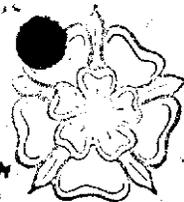
All Values in ppm

UNLBY 112

PHONE: 272 2422

TELEFAX:

024



Samples from: [faded text]

Area: [faded text]

Samples of: [faded text]

Sheet No.:

Batch No.: A1993

Date: 6.4.77

GROUP	SAMPLE IDENTIFICATION									
	166	167	168	169	170	171	172	173	174	
ES 1										
Be (1)										
Co (5)										
Cr (20)	500	20	500	200	50	50	300	200	50	
Ir (2)	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Mn (5)										
Mo (3)	10	<3	<3	<3	<3	<3	<3	<3	<3	
Nb (20)										
Ni (3)	50	5	30	10	10	5	30	10	5	
Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Pd (10)										
Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Re (10)										
V (10)	50	10	50	20	20	30	50	50	10	
W (50)										
Ta (100)										
Th (100)										
ES 2										
Ag (0.1)										
As (50)										
Au (3)										
Bi (1)	50	50	20	100	5	10	10	20	10	
Cd (3)										
Cu (0.5)	30	20	20	50	5	5		20	10	
Ge (1)										
In (5)										
Pb (1)	10	100	5	100	1	30	1	50	10	
Sb (30)										
Sn (1)	30	1000	50	3000	10	1000	30	1000	50	
Tl (1)										
Zn (20)	50	100	<20	300	<20	100	<20	50	30	
ES 3										
Ba (30)										
Ca (20)										
Ce (300)										
La (100)										
Sc (50)										
Sr (30)										
Ti (100)										
Y (10)										
Zr (100)										
ES 4										
Hg (30)										
P (100)										
Te (20)										
ES 5										
K (5)										
Li (1)										
Na (50)										
Cs (30)										
Rb (10)										
ES 6										
B (10)										

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Preparation:

Distribution:

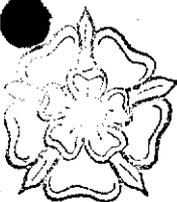
Signature:

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

025



Samples from: ...

Area: ...

Samples of: ...

Batch No.: A1993

Sheet No.:

Date: 6.4.77

GROUP	SAMPLE IDENTIFICATION						
	175	176					
ES 1	Be (1)						
	Co (5)						
	Cr (20)	500	200				
	Ir (2)	22	22				
	Mn (5)						
	Mo (3)	23	23				
	Nb (20)						
	Ni (3)	20	10				
	Os (10)	210	40				
	Pd (10)						
	Pt (10)	210	210				
	Re (10)						
	V (10)	30	30				
	W (50)						
	Ta (100)						
	Th (100)						
ES 2	Ag (0.1)						
	As (50)						
	Au (3)						
	Bi (1)	50	10				
	Cd (3)						
	Cu (0.5)	10	20				
	Ge (1)						
	In (5)						
	Pb (1)	50	10				
	Sb (30)						
	Sn (1)	2000	30				
	Tl (1)						
	Zn (20)	300	220				
ES 3	Ba (30)						
	Ca (20)						
	Ce (300)						
	La (100)						
	Sc (50)						
	Sr (30)						
	Ti (100)						
	Y (10)						
	Zr (100)						
ES 4	Hg (30)						
	P (100)						
	Te (20)						
ES 5	K (5)						
	Li (1)						
	Na (50)						
	Cs (30)						
	Rb (10)						
ES 6	B (10)						

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED



Preparation:

Distribution:



ANALYTICAL RESULTS

026

Samples from: Aust. & New Zealand Exp Coy.

Area: W. Tasmania.

Samples of: Seds.

Preparation: pulverised.

Batch No.: A 1993/.

Sheet No.: 1.

Date: 30.3.77.

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED

Sample Description	W _{pm} *	W _{mm} **		Sample Nos.	W _{pm} *	W _{mm} **
AD - WR - 103	60			153	60	
4	60			4	10	
5	>200	670		5	40	
6	80			6	20	
7	>200	390		7	80	
8	100			8	40	
9	>200	0.12%		9	40	
10	80			60	20	
1	40			1	>200	0.11%
2	40			2	40	
3	80			3	100	
4	40			4	40	
5	40			5	60	
6	20			6	40	
7	20			7	80	
8	40			8	20	
9	20			9	60	
20	60			70	40	
1	60			1	100	
2	80			2	20	
3	10			3	80	
4	40			4	40	
5	5			5	40	
6	40			176	60	
7	10					
8	20					
9	10					
30	5					
1	40					
2	10					
3	60					
4	40					
5	>200	0.57%		111	40	
6	80			134	40	
7	80			156	20	
8	40			168	20	
9	>200	0.15%				
40	40					
1	80					
2	80					
3	>200	370				
4	20					
5	10					
6	10					
7	20					
8	20					
9	10					
50	40					
1	60					
AD - WR 152	10					

REPEAT AND CHECK

ANALYTICAL METHODS: *W by modified Dithiol method. ** W determined by XRF. (Values >200_{pm}).



DISTRIBUTION: Aust. & New Zealand Exp Coy
 Sydney & Burnie Tasmania.

Signed

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ADELAIDE

SYDNEY

306029

GEOCHEMICAL RESULTS

A.C.S. Laboratories Pty. Ltd.

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UNLEY, S.A. 5061

PHONE: 272 2412, 272 2518

TELEX: AA82623

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

022

Samples from: ...

Area: ...

Samples of: ...

Batch No.: A 1993

Sheet No.: ...

Date: 30.3.77

GROUP	SAMPLE IDENTIFICATION									
	177	178	179	180	181	182	183	184	185	
ES 1										
Be (1)										
Co (5)										
Cr (20)	200	30	2000	100	500	300	3000	300	5000	
Ir (2)	12	22	22	22	22	22	22	22	22	
Mn (5)										
Mo (3)	5	<3	5	<3	<3	<3	10	<3	10	
Nb (20)										
Ni (3)	<3	<3	5	<3	<3	<3	<3	10	<3	
Os (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Pd (10)										
Pt (10)	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Ra (10)										
V (10)	100	50	300	30	50	100	300	30	300	
W (50)										
Ta (100)										
Th (100)										
ES 2										
Ag (0.1)										
As (50)										
Au (3)										
Bi (1)	30	10	300	30	10	20	30	300	300	
Cd (3)										
Cu (0.5)	20	10	30	30	5	10	20	20	10	
Ga (1)										
In (5)										
Pb (1)	200	300	200	100	200	200	300	300	200	
Sb (30)										
Sn (1)	1000	500	3000	300	1000	500	500	5000	5000	
Tl (1)										
Zn (20)	500	500	500	1000	200	500	300	500	1000	
ES 3										
Ba (30)										
Ca (20)										
Ce (300)										
La (100)										
Sc (50)										
Sr (30)										
Ti (100)										
Y (10)										
Zr (100)										
ES 4										
Hg (30)										
P (100)										
Te (20)										
ES 5										
K (5)										
Li (1)										
Na (50)										
Cs (30)										
Rb (10)										
ES 6										
B (10)										

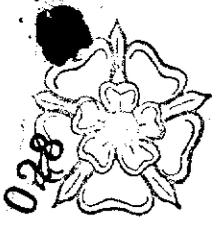
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Preparation:

Distribution:

Signed:



ADELAIDE

SYDNEY

306030

GEOCHEMICAL RESULTS

A.C.S. Laboratories Pty. Ltd.

P.O. Box 11

UNLEY, S.A. 5061

PHONE: 272 2412, 272 0518

TELEX: AA52623

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

All Values in ppm

Samples from: [Blank]

Area: [Blank]

Samples of: [Blank]

Batch No.: A 1993

Sheet No.:

Date: 30.3.77

GROUP	SAMPLE IDENTIFICATION							
	186							
ES 1	Be (1)							
	Co (5)							
	Cr (20)	500						
	Ir (2)	42						
	Mn (5)							
	Mo (3)	10						
	Nb (20)							
	Ni (3)	5						
	Os (10)	410						
	Pd (10)							
	Pt (10)	410						
	Re (10)							
	V (10)	100						
	W (50)							
	Ta (100)							
	Th (100)							
ES 2	Ag (0.1)							
	As (50)							
	Au (3)							
	Bi (1)	30						
	Cd (3)							
	Cu (0.5)	30						
	Ge (1)							
	In (5)							
	Pb (1)	200						
	Sb (30)							
	Sn (1)	1000						
	Tl (1)							
	Zn (20)	300						
ES 3	Ba (30)							
	Ca (20)							
	Ce (300)							
	La (100)							
	Sc (50)							
	Sr (30)							
	Ti (100)							
	Y (10)							
	Zr (100)							
ES 4	Hg (30)							
	P (100)							
	Te (20)							
ES 5	K (5)							
	Li (1)							
	Na (50)							
	Cs (30)							
	Rb (10)							
ES 6	B (10)							

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Preparation: [Blank]

Distribution: [Blank]

Signed: [Blank]

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029

D.W.H.
File

306031
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50 MARY STREET
UNLEY, S.A. 5061
P.O. BOX 3
UNLEY, S.A. 5061
PHONE: 272 5733

ANALYTICAL RESULTS

Samples from: Aust. & New Zealand Exp Coy.

Area: W. T-sm-ni-

Samples of: Seds & Rocks.

Preparation: Crushed & pulverised -s required.

Batch No.: A S. 436.

Sheet No.: 1.

Date: 15.4.77.

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED

Sample Description	WPPM.*	WPPM**				
AL-WR. - R.1.	20					
AL-WR. - R.2	20					
AL-WR. - 187	20					
AL-WR. - 188	>200	270				

ANALYTICAL METHODS: * W by Modified Dithiol method. W** by XRF.



DISTRIBUTION: Aust & New Zealand Exp Coy.
Sydney & Burnie T-s, -mi-

Signed.....

This Laboratory is registered by the National Association of Testing Authorities, Australia. The test(s) reported herein have been performed in accordance with its terms of registration. This document shall not be

GEOCHEMICAL RESULTS

SEMI-QUANTITATIVE EMISSION SPECTROSCOPY

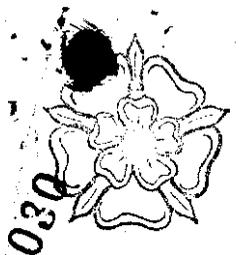
A.C.S. Laboratories Pty. Ltd.

UNILEY ROAD

PHONE: 272 2412, 272 2511

TELEX: AAR2023

All Values in ppm



Samples from: ...

Area: ...

Samples of: ...

Batch No.: A S. 436

Sheet No.:
Date: 15. 4. 77

GROUP	SAMPLE IDENTIFICATION							
	R. 1.	R. 2	187	188				
ES 1	Ba (1)							
	Co (5)							
	Cr (20)	500	100	>10000	5000			
	Ir (2)	<2	<2	<2	<2			
	Mn (5)							
	Mo (3)	<3	<3	100	50			
	Nb (20)							
	Ni (3)	20	20	100	100			
	Os (10)	<10	<10	<10	<10			
	Pd (10)							
	Pt (10)	<10	<10	<10	<10			
	Re (10)							
	V (10)	50	50	300	300			
	W (50)							
	Ta (100)							
	Th (100)							
ES 2	Ag (0.1)							
	As (50)							
	Au (3)							
	Bi (1)	50	50	300	200			
	Cd (3)							
	Cu (0.5)	30	30	50	50			
	Ge (1)							
	In (5)							
	Pb (1)	30	30	50	10			
	Sb (30)							
	Sn (1)	20	10	1000	1000			
	Tl (1)							
	Zn (20)	<20	<20	500	500			
ES 3	Ba (30)							
	Ca (20)							
	Ce (300)							
	La (100)							
	Sc (50)							
	Sr (30)							
	Ti (100)							
	Y (10)							
	Zr (100)							
ES 4	Hg (30)							
	P (100)							
	Te (20)							
ES 5	K (5)							
	Li (1)							
	Na (50)							
	Cs (30)							
	Rb (10)							
ES 6	B (10)							

SAMPLES WILL BE DISPOSED OF AFTER TWO MONTHS UNLESS WE ARE OTHERWISE ADVISED



Preparation: ...

Analysis: ...

Signed: ...

LEGEND

- River, creek
- Walking track
- Boundary of Exploration Licence
- Waterfall
- Bridge
- Syncline with plunge of major fold
- Fault
- Geological boundary
- Abandoned mine
- Abandoned alluvial workings
- Road (4WD only)
- Camp (Comstaff P/L)
- Stream sediment sample (a) panned concentrate
- Stream sediment sample (b) sediment sieved to -80 mesh
- Rock sample
- Trig station
- Elevation in metres
- Dip and strike

GEOLOGY

QUATERNARY

- Alluvium, sand, gravel, glacial and associated deposits

LOWER DEVONIAN - SILURIAN

- Siltstones, shales and quartzwacke
- Limestone sequences

ORDOVICIAN

- Conglomerate, quartzwacke and siltstone

CAMBRIAN

- Probably Cambrian sequences (greywacke)
- Middle - upper Cambrian sequences (greywacke)

IGNEOUS ROCKS

LOWER CARBONIFEROUS - UPPER DEVONIAN

- Adamellite - granite

CAMBRIAN

- Serpentine, peridotite and associated rocks

TN
MN
13°23'

-80 mesh SEDIMENT ASSAY RESULTS in p.p.m. W.

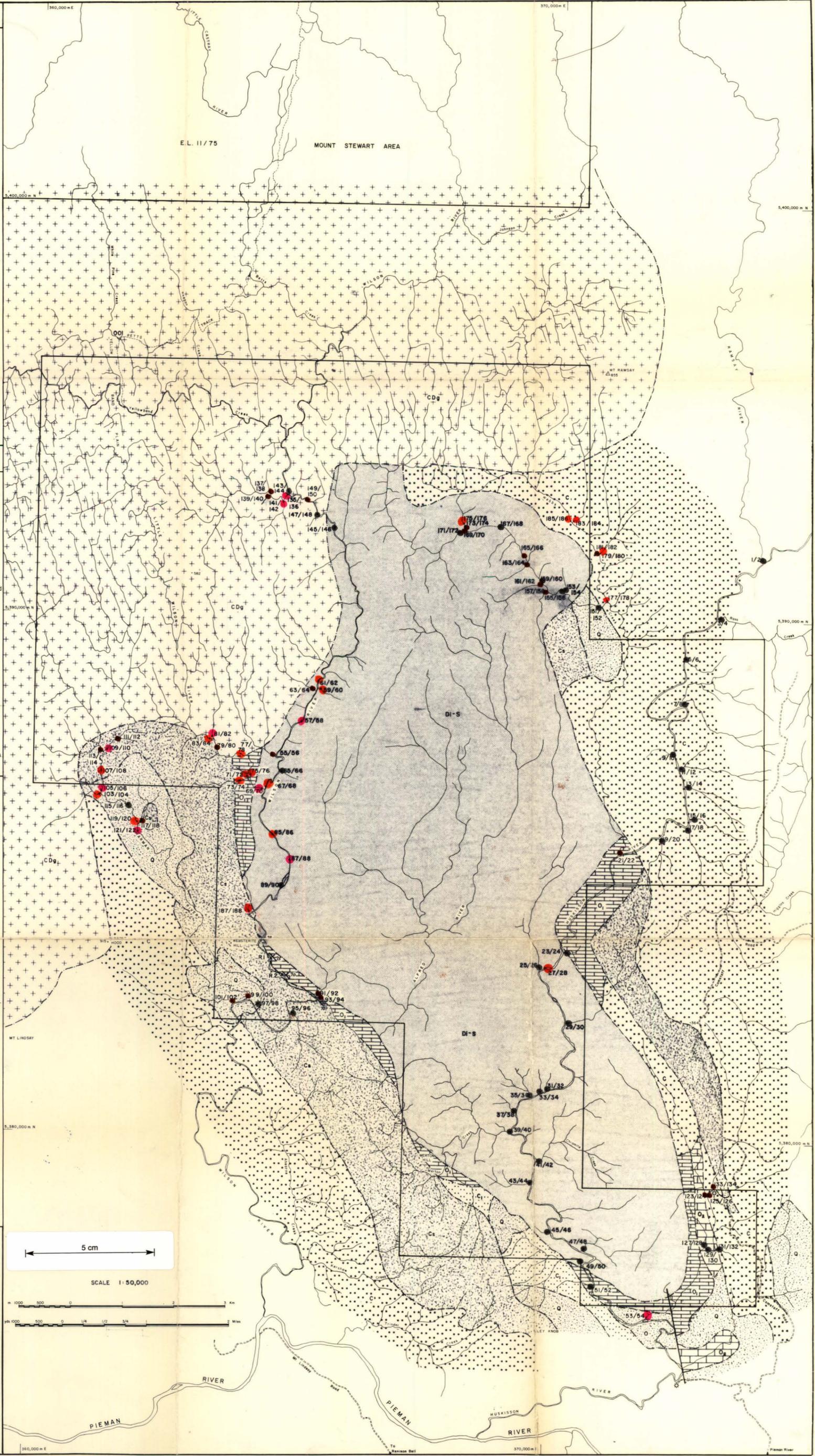
- 0-25
- 25-50
- 50-75
- 75-100
- >100

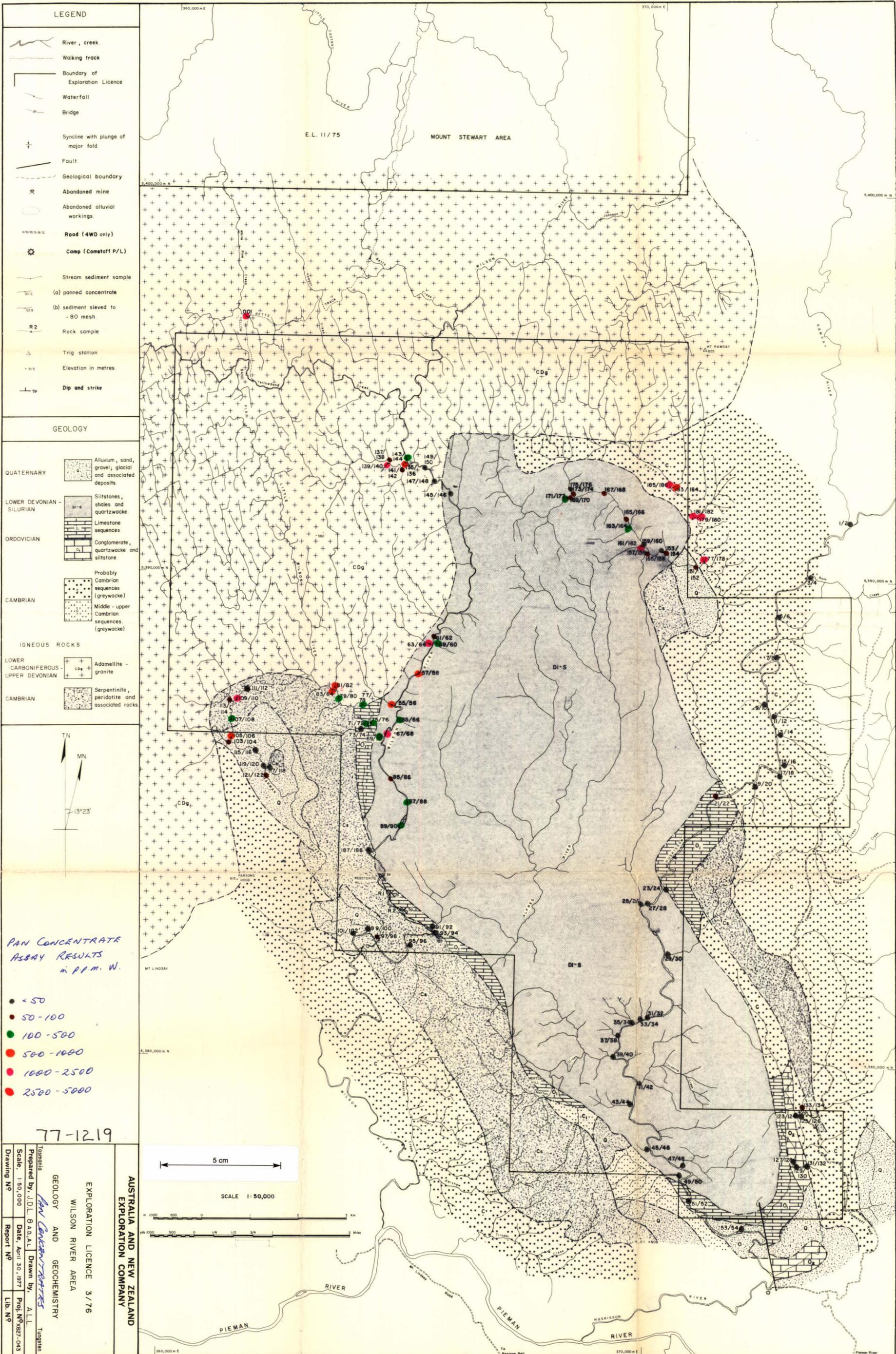
77-1219

AUSTRALIA AND NEW ZEALAND EXPLORATION AND NEW ZEALAND EXPLORATION COMPANY

EXPLORATION LICENCE 3/76
WILSON RIVER AREA
GEOLOGY AND GEOCHEMISTRY

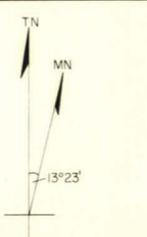
Tasmanian
Prepared by: J.D.L. B.A.O.A.L.
Scale: 1:50,000
Drawing No: [blank]
Date: April 30, 1977
Report No: [blank]
Drawn by: ALL
Prof: N9X827-043
Lib. No: [blank]





- LEGEND**
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- GEOLOGY**
- QUATERNARY**
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 - Middle-upper Cambrian sequences (greywacke)
- IGNEOUS ROCKS**
- LOWER CARBONIFEROUS - UPPER DEVONIAN**
- Adamellite-granite
- CAMBRIAN**
- Serpentinite, peridotite and associated rocks



*PAN CONCENTRATE
ASSAY RESULTS
in p.p.m. W.*

- < 50
- 50-100
- 100-500
- 500-1000
- 1000-2500
- 2500-5000

77-1219

5 cm

SCALE 1:50,000

0 500 1000 2000 3000 4000 5000 M

0 1/4 1/2 3/4 1 KM

0 500 1000 2000 3000 4000 5000 M

0 1/4 1/2 3/4 1 KM

**AUSTRALIA AND NEW ZEALAND
EXPLORATION COMPANY**

EXPLORATION LICENCE 3/76
WILSON RIVER AREA

GEOLOGY AND GEOCHEMISTRY

Prepared by: J.D.L. B.A.S.A.L.
Drawn by: ALL
Date: April 30, 1977
Proj. No. 7627-043
Drawing No. []
Report No. []
Lib. No. []

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032

LEGEND

- River, creek
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CAMBRIAN

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TN
MN
13°23'

CORRECTED PAN CONCENTRATE ASSAY VALUES in ppm W to 20 gram standard.

- < 50
- 50 - 100
- 100 - 500
- 500 - 1000
- 1000 - 2500
- 2500 - 5000
- > 5000

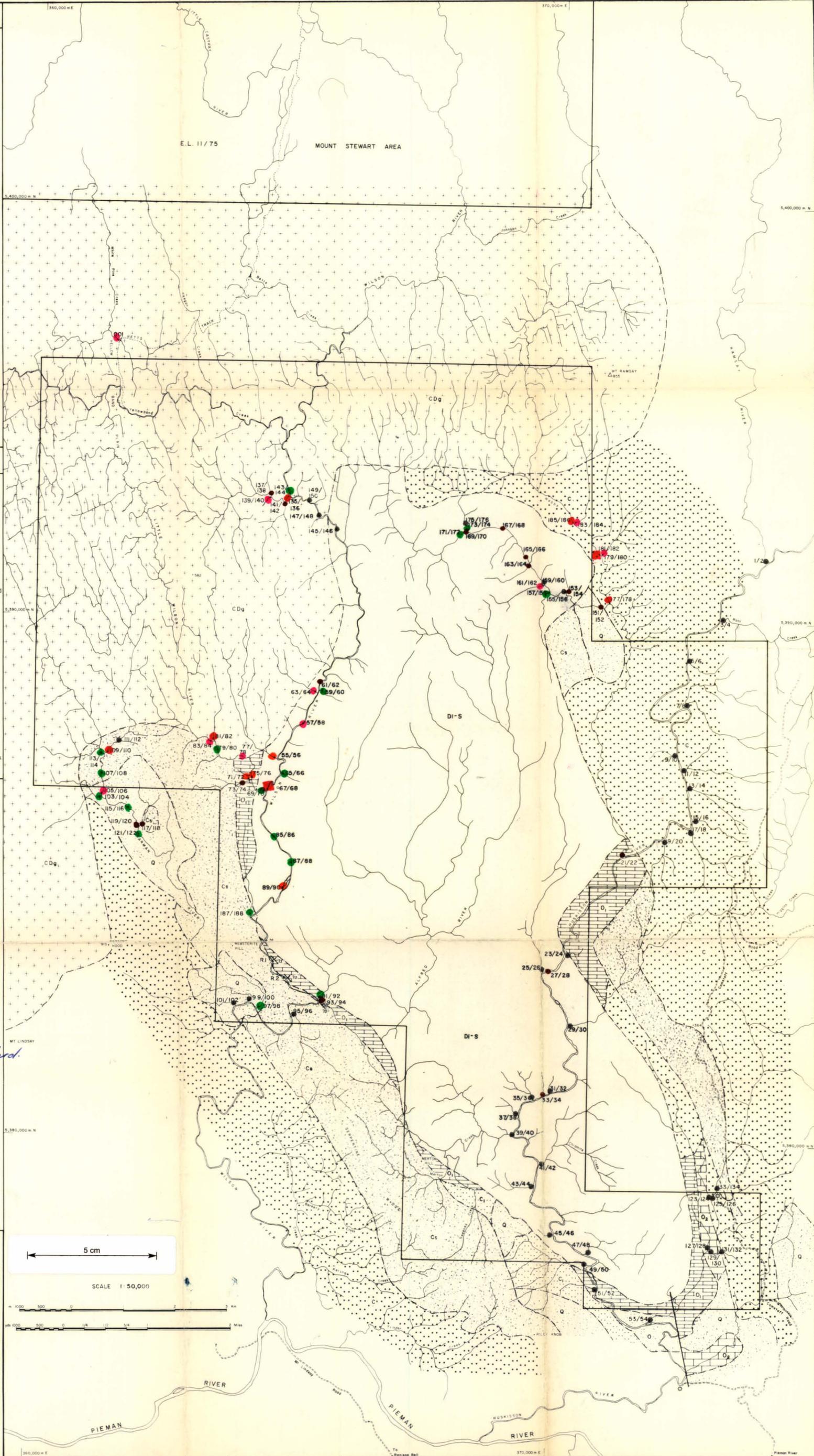
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AUSTRALIA AND NEW ZEALAND EXPLORATION COMPANY

EXPLORATION LICENCE 3/76
WILSON RIVER AREA

GEOLOGY AND GEOCHEMISTRY

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