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GEOPEKO

A DIVISION OF PEKO WALLSEND OPERATIONS LIMITED

A.C.N. 000 081 434

EL 45/89 SAVAGE RIVER

PARTIAL RELINQUISHMENT REPORT

INCLUDING REPORT ON

EXPLORATION ACTIVITY

DECEMBER 1991 TO JUNE 1992

TCR 92-3365

Ian Mathison
Dave Gardner
June, 1992

T272

[redacted]

Distribution: Geopeko, Parkes
Geopeko, Devonport
Department of Mines, Hobart

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Figure 1 Location and Access
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Appendix 1 Water Geochemistry - Sample Description
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Drawing	**Title**	**Scale**
2055A	Donaldson - Sample Locations and Numbers	25,000
2055B	Donaldson - Fact Geology & Interpretation	25,000
2313A	Donaldson - Comstaff Stream Sediment Sampling - Copper	25,000
2313B	Donaldson - Comstaff Stream Sediment Sampling - Lead	25,000
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1.0 INTRODUCTION

1.1 Location and Access (Fig. 1)

EL 45/89, Savage River, is located in NW Tasmania approximately 5 km north of the townships of Savage River and Luina.

Access within the eastern half of the EL is good and is provided by the Savage River Pipe Line Road, old exploration tracks and an unsealed logging road. The western half of the EL is relatively inaccessible and access requires the cutting of walking tracks.

1.2 Tenure and Land Usage

EL 45/89 of 239 km^2 was granted to Peko Exploration Ltd in January 1990.

The EL consists predominantly of The Savage River RAP with the western third being Deferred Forest Land. Approximately 30 km^2 on the Waratah 25,000 sheet is Multiple Use Forest Land. The EL includes part of the Savage River Australian Heritage Area.

1.3 Regional Geology

Geopeko's block of Arthur River ELs lies within the Rocky Cape Region of NW Tasmania. The most interesting rocks in the area are those of the Precambrian Arthur Lineament. The Arthur Lineament is a north-east trending metamorphic belt consisting of highly deformed sediments, basic volcanics and dolomite. To the west of this belt lies the Rocky Cape Group, a thick shallow marine shelf sequence. The Rocky Cape Group contains Precambrian dolerite/gabbro dykes which have been emplaced into north-north west trending faults.

Rocks assigned to the Oonah Formation and the Cleveland Waratah Association lie to the east of the Arthur Lineament. The Precambrian Oonah Formation is predominantly comprised of turbiditic quartz wacke and siltstone. The south eastern corner of the area is underlain by rocks of the Cleveland-Waratah Association that lie within the Dundas Trough. These rocks have been correlated with the Crimson Creek Formation and consist of basaltic, andesitic and tholeiitic lavas and volcaniclastic sediments of Eo-cambrian age.

The Precambrian-Cambrian rocks along the eastern edge of the area are in places overlain by Permian fluvio-glacial sediments and/or Tertiary basalt.

1.4 Known Mineral Deposits/Occurrences

There are a number of metallic mineral occurrences adjacent to the western, eastern and southern EL boundaries of Geopeko's Arthur River Project. (Green et Al 1988).

The deposits range from small, relatively insignificant workings, e.g. Victory Mine, Atlas Leases to large world class ore bodies e.g. Mt Bischoff, Savage River. In most cases, extensions of the prospective host formations can be continued into Geopeko's Arthur River EL's.

1.5 Previous Exploration

Geopeko report T251 (Virgoe and Mathison, 1990) summarizes previous exploration and describes results of Geopeko's 1990 Exploration program. Report T265 (Mathison, 1991) details 1991 exploration activity.

1.6 Scope of this report

The aim of Geopeko's exploration of EL 45/89, was to use water sampling, rock chip sampling, geological mapping and the results of previous exploration to delineate prospective and geochemically anomalous areas within the EL. Areas worthy of further investigation were to be followed up with more detailed exploration.

Due to major problems with the DMMR's analytical techniques for stream water geochemistry, little work was carried out in EL 45/89 in 1991. It was felt necessary to suspend exploration until these problems were corrected and consequently a waiver of expenditure commitment was sought and granted. Reconnaissance water sampling recommenced in December 1991 and was completed in February 1992. A temporary extension of the licence was negotiated to allow the results of 1992 sampling to be evaluated. A large part of the Arthur River Project area was selected for relinquishment after this interpretation. This report summarizes exploration activity in the relinquished portion of EL 45/89 from January 1990 to November 1991 and details exploration from December 1991 to June 1992.

2.0 EXPLORATION ACTIVITY UNDERTAKEN BY GEOPEKO - SUMMARY

2.1 January 1990 to November 1990 (Virgoe & Mathison, 1990)

Five water samples were collected from creeks near the Savage River Pipeline Road. No gold or base metal anomalies were detected. Previous exploration activity was reviewed and Dr.D.Leaman completed an interpretation of public domain aeromagnetic and gravity data. Three geophysical anomalies worthy of further exploration were identified.

2.2 December 1990 to November 1991. (Mathison, 1991)

No field work was attempted. Comstaff's geochemical data was compiled.

3.0 EXPLORATION IN THE RELINQUISHED AREA
December 1991 to June 1992.

3.1 Work Completed

Water Geochemistry - Sample Collection and Analysis

Water samples were collected from streams with a drainage area between 1 and 5 km^2. Occasional check samples were collected from streams with drainage areas up to 10 km^2 including two or more other samples. At each sample site pH of the water, water colour, float geology, outcrop geology, and vegetation type were recorded. Possible contamination from roads, forestry operations, mines, or farms was noted. Sample sites were marked with numbered aluminium tags and flagging tape. Three water samples were collected from each site:

1. A 100 ml sample of raw stream water was collected in a new 125 ml polyethylene sample bottle. Cu, Pb, Cd and Zn were determined by ICP-MS and As by graphite furnace AAS.

2. Au was extracted from one litre of water in the field onto a sachet of activated charcoal. Au was determined by neutron activation at Becquerel Laboratories.

3. Cu, Pb and Cd were preconcentrated on site by coprecipitation from one litre of water. Metal values were determined by CSIRO using voltammetry.(PDV)

All sample bottles were washed several times in the stream water before treating or collecting samples.

Geology

Geological observations of both outcrop and float were recorded at water sample points. Additional observations were recorded when changes in rock type or any possibly mineralized rocks were seen. These observations were plotted on a 25,000 scale base and used as the basis for a geological interpretation.

Rock Geochemistry

A large number of rock samples were collected for reference purposes. Nine of these were selected for analysis. Ag, As, Bi, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, P, V and Zn were determined by ICP - OES after perchloric digestion at Classic Labs, Adelaide. Au was determined by fire assay.

Comstaff Stream Sediment Sampling (Drawings 2313A, B, C).

Results of Comstaff's regional stream sediment (-80#) and panned concentrate sampling were obtained from the Mines Department, computerized and plotted on 1:25000 bases. Because of the different bases used by Comstaff and Geopeko there is a systematic shift of sample locations from the stream sampled of 200-300 metres. Rectification has not yet been attempted. The existing maps are quite useful and major drainage systems can be identified easily.

3.2 Results

Water Geochemistry (Drawing 2055A and Appendix 1)

Statistical Analysis of Results

Cumulative frequency plots were made for PDV.Cu, PDV.Pb, ICPMS.Zn and GFAAS.As using the results of almost 200 samples from the whole project area. The following anomalous levels were selected using inflexion points.

Element (DL)	1. Possibly Anomalous	% <1	2. Probably Anomalous	% <2
Cu (0.1)	1.5 ppb	85	3.0 ppb	95
Pb (0.05)	0.75 ppb	90	1.4 ppb	97
As (0.01)	0.16 ppb	80	0.30 ppb	97.5
Zn (0.1)	1.7 ppb	85	3.0 ppb	95
Au (0.1)	0.1 ppt	?		

Results (See Drawing 2055A and Appendix 2)

Locations of samples have been plotted onto 1:25,000 scale base maps. Print outs of sample details and results are appended as Appendix 1. Results are summarized below:

for 64 samples

Element	Possibly anomalous	Probably anomalous
Cu	10	4
Pb	5	1
Zn	7	3
As	6	2
Au	1	-

Discussion of Results

Most samples reporting anomalous values are anomalous in only one element. It is also difficult to delineate an area where most samples are anomalous. Sample 22063 which reported 1.8 ppb Cu and 3.9 ppb Zn and sample 22357 with 2.6 ppb Cu, 1,1 ppb Pb and 2.6 ppb Zn are exceptions - as are the group of anomalous Cu and As values from some of the streams draining IMI's "Central Copper Anomaly". This anomaly was defined by soil values from 500 to 900 ppm over a strike length of three kilometres.

Geology - by Dave Gardner (See Drawing 2055B & Appendix 2)

The reconnaissance mapping of creeks that were sampled gives a limited geological picture of the area. Separation of Precambrian and Cambrian rocks into stratigraphic units was not possible and only a lithological map is presented here.

The most notable feature of the mapping is the widespread Tertiary basalt cover. The basalt, both outcrop and inferred from float, is much more extensive than shown on previous maps. In areas such as the NE corner of EL 41/89 outcrop is very rare, but float mapping indicates a widespread cover of Tertiary basalts and gravels with a minor Precambrian-Cambrian component. The presence of Tertiary basalts and gravels in drainages is important to note for the water sampling programme because the basalts have slightly elevated Cu and Zn levels and the gravels are known to contain gold in places.

The other major post Cambrian unit is the Carboniferous-Permian Wynyard Tillite. This is a polymict poorly sorted clastic with a fine grey green argillaceous matrix and angular-round clasts up to 5cm in size. Bedding seen dipped shallowly. The unit is thought to be a fault slice? (H Shannon pers. comm.).

The Precambrian - Cambrian rocks fall into broad NNE trending zones. To the west are thinly bedded siltstones, slates and phyllites. Bedding and foliation strike NNE-NNW and have a variable dip. These were only seen on the Little Donaldson River and have been previously mapped as Rocky Cape Group.

Moving east from the slates and phyllites (which contain some ?mafic intrusives or ?volcanics eg. Rock chip sample 22169) the rocks are more mafic being greenschists, greenstones and volcanics as well as quartz mica schists and phyllites. The foliation in the rocks is very strong and strikes NE to NW dipping steeply. This zone is the Arthur Lineament or Arthur Metamorphic complex. No mappable units, within the broadly more mafic rocks, were defined (further south the Bowry Member a discrete unit with mafic volcanics and carbonates, hosts mineralization at a number of sites including Savage River). It is difficult even to put a boundary on either side of this zone, and the relationship between the lineament and the flanking rocks is probably complicated (see Leaman 1990).

The terms greenschist and greenstone are used here to denote metamorphic rocks that show intermediate to mafic affinities. In the field this is usually inferred from significant chlorite or iron staining. Rarely, in fresher rocks, feldspars and mafic minerals are seen with no quartz. For instance, along the old IMI exploration track some probable amphibolites (sample 22157) outcrop among greenschists.

To the east of the greenschist/greenstone zone is a parallel belt of quartz mica schists and quartzite with shales and slates. This roughly mirrors the situation to the west of the zone with more schistose looking rocks closer to the greenschists/greenstones tending more to slates, black shales and quartzites moving away from it.

Rock Geochemistry (Appendix 2 & Drawing 2055A)

No results indicative of significant mineralization were reported. Minor elevated Cu and Cr occur in greenstones and amphibolites, as would be expected. Arsenic values are generally elevated to high.(7 - 94 ppm)

Comstaff Stream Sediment Sampling (Drawings 2313A, B & C)

Over 150 samples were collected from the Donaldson sheet. Because of the close spaced sampling used, only a small portion of the sheet close to vehicle access was tested. Only samples within EL 45/89 are discussed here.

One small north flowing tributary of the Little Donaldson River (AMG 352,500E 5,417,500N) is anomalous in Zn (150 - 230 ppm) with minor support from Cu (40 - 48 ppm)

4.0 CONCLUSIONS

* Water sampling at the planned sample spacing has been achieved over most of the Arthur Lineament on the Donaldson sheet.

* The IMI Central Copper Anomaly, which is surrounded by EL 45/89 but not in the EL, is drained by several streams with anomalous Cu and As in water.

* Several rock samples from the Donaldson sheet contain elevated As levels. This is reflected in some stream waters.

* The stream draining the Specimen Reef gold prospect reported <1.0 ppt Au.

* While no indications of outcropping or near surface mineralization have been detected on the Donaldson sheet, the widespread low level geochemical anomalism suggest that economic mineralization could occur at depth. Current budget limitations do not allow the expensive exploration required to explore for deeply buried deposits.

5.0 RECOMMENDATIONS

That part of EL 45/89 lying on the Donaldson sheet should be relinquished.

6.0 ENVIRONMENTAL DISTURBANCE AND REHABILITATION

Exploration conducted by Geopeko between 1990 and 1992 has caused minimal environmental disturbance. Semi permanent samples markers left at sample sites are considered to be valuable reference points for future exploration. Walking tracks were cut to DMMR guidelines and should regenerate naturally. No rehabilitation has been necessary.

Ian Mathison

REFERENCES

GREEN, G.R., BOTTRILL, R.S., BACON, C.A., TURNER, N.J. (1988) - Mineral Deposits and Metallogenic Map of Tasmania 1:50 000, Tas. DMMR

MATHISON, I.J., VIRGOE, K. (1990) - Savage River EL 45/89 - Report on Exploration Activity - January 1990 to November 1990. Unpublished Geopeko report T251.

MATHISON, Ian (1991) - EL 45/89 Savage River - Report on Exploration Activity December 1990 to November 1991. Unpublished Geopeko report T265.

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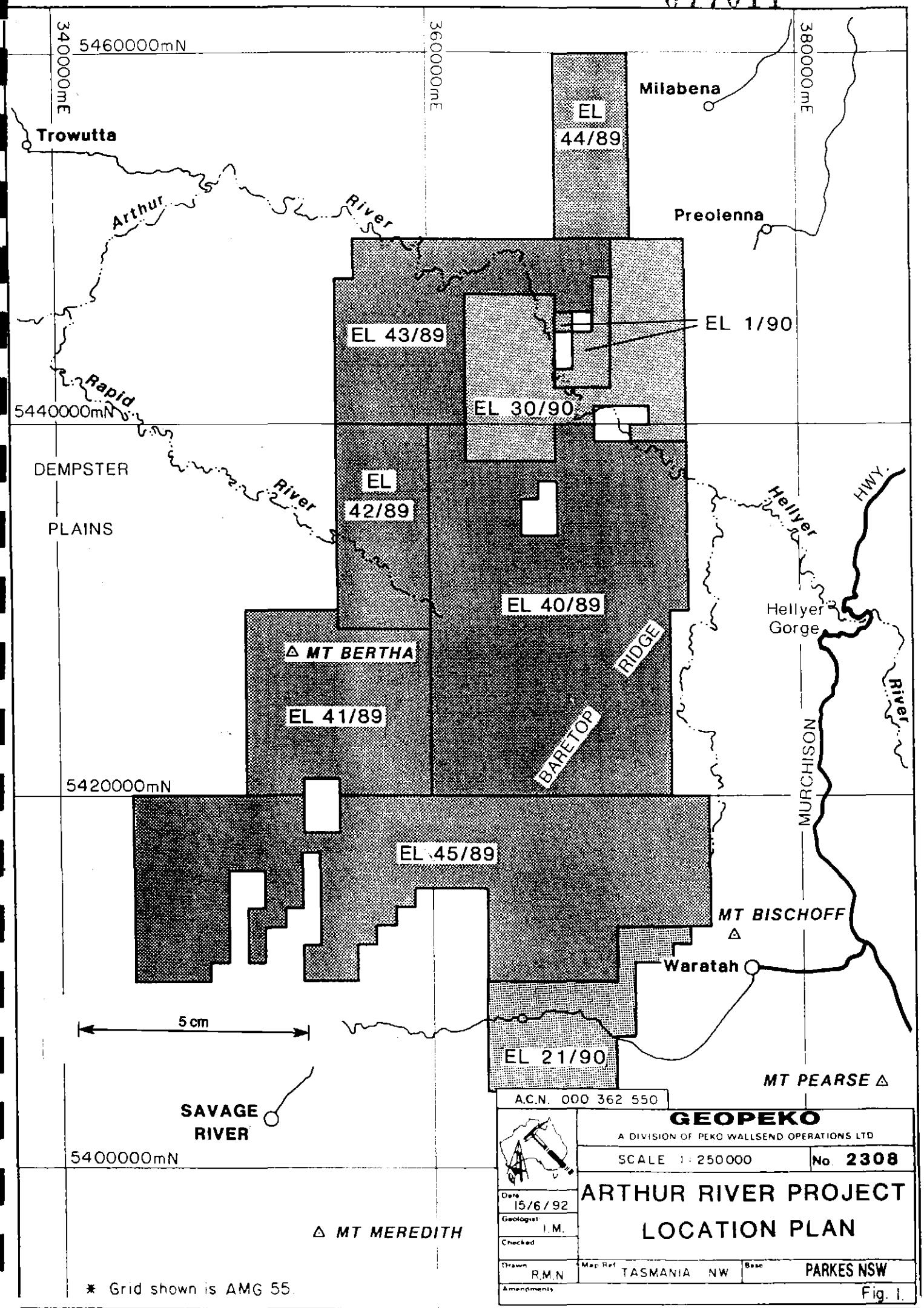

A.C.N. 000 362 550

GEOPEKO

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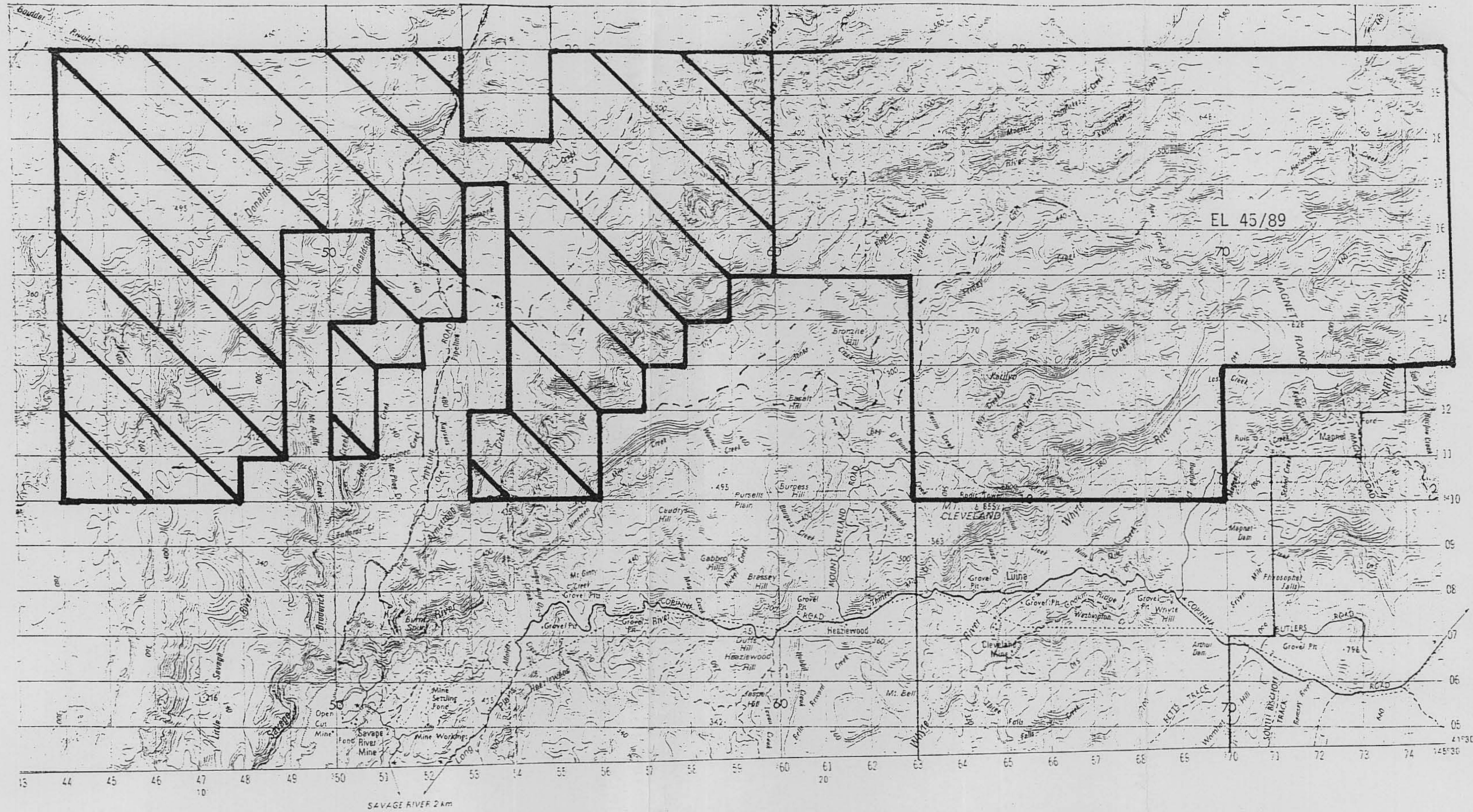
SCALE 1:250000 | No 2308

ARTHUR RIVER PROJECT
LOCATION PLAN

Date 15/6/92 | Geologist I.M. | Checked | Drawn R.M.N | Map Ref TASMANIA NW | Base PARKES NSW | Amendments

Fig. 1.

077012



AREA RELINQUISHED = 120 sq km

5 cm

GEOPEKO A.C.N. 000 081 434	A DIVISION OF PEKO WALLSEND OPERATIONS LTD	
EL 45/89 - SAVAGE RIVER		
Geo.	AREA RELINQUISHED	
Date		
App.	JUNE 1992	
Drawn.	Base DEVONPORT TAS.	No. Fig. 2

APPENDIX 1

WATER GEOCHEMISTRY

SAMPLE DETAILS AND RESULTS

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22018** DATE 12/12/1991 EL45/89 MAP DONALDSON

AMG COORDS. 359100 mE 5414225 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 2.0m
DIRECTION 230°

CONTAMINATION FROM NONE
WATER COLOUR WEAK BROWN
PH 6.00
DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP

FLOAT 30 % Msst
20 % Mgnsch
20 % Mgnst

SAMPLE NUMBER **22019** DATE 12/12/1991 EL45/89 MAP DONALDSON

AMG COORDS. 359100 mE 5414100 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 2.0m
DIRECTION 270°

CONTAMINATION FROM NONE
WATER COLOUR WEAK BROWN
PH 6.00
DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP Msha gy,bk Fe stn

FLOAT 30 % Mqzt
10 % Mgnst
10 % Mphy

SAMPLE NUMBER **22040** DATE 12/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 352625 mE 5418000 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 320°

CONTAMINATION FROM NONE
WATER COLOUR CLEAR
PH 0.00
DRAINAGE AREA 2.0 km²

GEOLOGY
OUTCROP

FLOAT 50 % Tertiary basalt
40 % Msch qtz mica
4 % Diorite?

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22041** DATE 12/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 353075 mE 5418625 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW
LEVEL LOW
WIDTH 0.5m
DIRECTION 240°

CONTAMINATION FROM NONE
WATER COLOUR VERY WEAK
PH 0.00
DRAINAGE AREA 1.5 km²

GEOLOGY
OUTCROP

FLOAT 80 % Msch qtz mica
10 % Qtz vn
2 % Mvolc tuffs?

SAMPLE NUMBER **22042** DATE 15/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 351500 mE 5418075 mN

VEGETATION RAIN FOREST

STREAM FLOW FAST
LEVEL HIGH
WIDTH 3.0m
DIRECTION 275°

CONTAMINATION FROM ROADS
WATER COLOUR WEAK BROWN
PH 0.00
DRAINAGE AREA 5.0 km²

GEOLOGY
OUTCROP Msch-sst qtz ser mic

rare pyritic Gnst? float

FLOAT 70 % Tertiary basalt
15 % Msch qtz mica
5 % Qtz vn

SAMPLE NUMBER **22043** DATE 15/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 351250 mE 5418400 mN

VEGETATION RAIN FOREST

STREAM FLOW FAST
LEVEL AFT.RAIN
WIDTH 1.0m
DIRECTION 135°

CONTAMINATION FROM NONE
WATER COLOUR CLEAR
PH 0.00
DRAINAGE AREA 0.6 km²

GEOLOGY
OUTCROP Qtz ser chl wk sch

FLOAT 30 % Tertiary basalt
20 % Msch qtz mica
20 % Msst-qzt

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ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22044** DATE 15/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 351300 mE 5418025 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE — CONTAMINATION FROM ROADS
LEVEL AVERAGE — WATER COLOUR CLEAR
WIDTH 1.5m — PH 0.00
DIRECTION 300° — DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP Msch-qzt qtz ser mic — FLOAT 30 % Msch qtz mica
20 % Tertiary basalt
mnr Mgnsch,Qtz vn,bk Ssha — 20 % Mslt? gn cherty

SAMPLE NUMBER **22045** DATE 20/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 356175 mE 5415875 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE — CONTAMINATION FROM NONE
LEVEL AVERAGE — WATER COLOUR DARK BROWN
WIDTH 1.5m — PH 4.30
DIRECTION 250° — DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP — FLOAT 50 % Msch qtz mica
40 % Qtz gravel
2 % Tertiary basalt

SAMPLE NUMBER **22046** DATE 20/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 356075 mE 5415875 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE — CONTAMINATION FROM ROADS
LEVEL AVERAGE — WATER COLOUR BROWN
WIDTH 2.0m — PH 5.50
DIRECTION 160° — DRAINAGE AREA 1.5 km²

GEOLOGY
OUTCROP — FLOAT 40 % Tb
40 % Qtz gravel
0 %

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22047** DATE 20/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 354575 mE 5413800 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 2.0m
DIRECTION 140°

CONTAMINATION FROM ROADS
WATER COLOUR WEAK BROWN
PH 0.00
DRAINAGE AREA 4.0 km²

GEOLOGY
OUTCROP Msch mica qtz

FLOAT 60 % Tb
30 % Qtz vn, gravel
10 % Msch mica

SAMPLE NUMBER **22048** DATE 20/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 354650 mE 5413825 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 200°

CONTAMINATION FROM ROADING
WATER COLOUR BROWN
PH 4.70
DRAINAGE AREA 1.2 km²

GEOLOGY
OUTCROP

FLOAT 0 % Tb
0 % Qtz gravel
0 % Sest-Mqzt-sch

SAMPLE NUMBER **22049** DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 349075 mE 5413825 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.0m
DIRECTION 185°

CONTAMINATION FROM NONE
WATER COLOUR CLEAR
PH 7.40
DRAINAGE AREA 0.9 km²

GEOLOGY
OUTCROP Mgnsch chl ser

FLOAT 80 % Mgnsch-gnst
10 % Qtz milky
0 %

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22050** DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 349600 mE 5413825 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 310°

CONTAMINATION FROM NONE
WATER COLOUR CLEAR
PH 7.30
DRAINAGE AREA 1.2 km²

GEOLOGY
OUTCROP Mgnsch Fe stn

FLOAT 30 % Mgnsch
30 % Qtz vn, gravel
1 % Tb

SAMPLE NUMBER **22051** DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 349375 mE 5413825 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.0m
DIRECTION 200°

CONTAMINATION FROM NONE
WATER COLOUR CLEAR
PH 7.60
DRAINAGE AREA 0.3 km²

GEOLOGY
OUTCROP Msch ser chl tuff?

FLOAT 70 % Msch ser chl
10 % Mgnsch
5 % Qtz

SAMPLE NUMBER **22052** DATE 22/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 345275 mE 5410950 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 280°

CONTAMINATION FROM NONE
WATER COLOUR WEAK BROWN
PH 5.20
DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP

FLOAT 50 % Sslt
30 % Qtz gravel, vn
0 %

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ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22053** DATE 22/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 344850 mE 5411325 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL AVERAGE WATER COLOUR WEAK BROWN
WIDTH 1.0m PH 5.50
DIRECTION 190° DRAINAGE AREA 0.8 km²

GEOLOGY
OUTCROP Sslt lam FLOAT 80 % Smst clvd
15 % Qtz gravel, vn
0 %

SAMPLE NUMBER **22054** DATE 22/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 344575 mE 5410950 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL AVERAGE WATER COLOUR WEAK BROWN
WIDTH 2.0m PH 5.00
DIRECTION 340° DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP Msla gy,bk FLOAT 55 % Qtz gravel
30 % Msla-shs
5 % Msch

SAMPLE NUMBER **22055** DATE 22/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 345525 mE 5411350 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL AVERAGE WATER COLOUR WEAK BROWN
WIDTH 1.0m PH 6.30
DIRECTION 180° DRAINAGE AREA 0.4 km²

GEOLOGY
OUTCROP Andesite? fs chl FLOAT 0 %
0 %
to darz to see float 0 %

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22056** DATE 22/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 345475 mE 5411100 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.0m
DIRECTION 0°

CONTAMINATION FROM NONE
WATER COLOUR WEAK BROWN
PH 6.00
DRAINAGE AREA 0.3 km²

GEOLOGY
OUTCROP Msha-sla bk py

tc dark to see float

FLOAT 0 %
0 %
0 %

SAMPLE NUMBER **22060** DATE 25/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 350375 mE 5415350 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 2.0m
DIRECTION 30°

CONTAMINATION FROM NONE
WATER COLOUR CLEAR
PH 8.00
DRAINAGE AREA 2.5 km²

GEOLOGY
OUTCROP Msch qtz mica

FLOAT 50 % Msch ser chl
30 % Qtz gravel
0 %

SAMPLE NUMBER **22062** DATE 06/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 359300 mE 5417200 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 3.0m
DIRECTION 180°

CONTAMINATION FROM NONE
WATER COLOUR WEAK BROWN
PH 6.70
DRAINAGE AREA 4.0 km²

GEOLOGY
OUTCROP Mgzt - qtz vn

FLOAT 90 % Msch qtz mica
5 % Qtz vn
0 %

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22063** DATE 06/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 358175 mE 5416075 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW
LEVEL LOW
WIDTH 1.5m
DIRECTION 155°

CONTAMINATION FROM NONE
WATER COLOUR BROWN
PH 5.30
DRAINAGE AREA 0.3 km²

GEOLOGY
OUTCROP Msch-qzt

FLOAT 60 % Msch qtz mica graph
30 % Sgwk
0 %

SAMPLE NUMBER **22064** DATE 06/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 357300 mE 5415150 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 2.0m
DIRECTION 80°

CONTAMINATION FROM NONE
WATER COLOUR WEAK BROWN
PH 6.50
DRAINAGE AREA 4.0 km²

GEOLOGY
OUTCROP Mqzt

FLOAT 60 % Mphy-sch
20 % Mqzt-gwk
10 % Qtz gravel

SAMPLE NUMBER **22065** DATE 07/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 356975 mE 5413625 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 4.0m
DIRECTION 270°

CONTAMINATION FROM NONE
WATER COLOUR
PH 7.30
DRAINAGE AREA 7.0 km²

GEOLOGY
OUTCROP Msch qtz mica

FLOAT 40 % Mqzt mas gy
40 % Mphy-sch mica
5 % Qtz vn

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22066** DATE 07/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 356500 mE 5412550 mN

VEGETATION RAIN FOREST

STREAM FLOW FAST
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 240°

CONTAMINATION FROM NONE
WATER COLOUR CLEAR
PH 7.40
DRAINAGE AREA 0.8 km²

GEOLOGY
OUTCROP Msch mica

FLOAT 50 % Msch-phy
30 % Mqzt
0 %

SAMPLE NUMBER **22067** DATE 07/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 355575 mE 5412350 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 345°

CONTAMINATION FROM NONE
WATER COLOUR
PH 6.50
DRAINAGE AREA 1.5 km²

GEOLOGY
OUTCROP Msch-phy qtz mica

FLOAT 40 % Mphy-sch
20 % Mqzt
20 % Qtz vn gravel

SAMPLE NUMBER **22068** DATE 07/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 355400 mE 5411825 mN

VEGETATION RAIN FOREST

STREAM FLOW FAST
LEVEL AVERAGE
WIDTH 2.0m
DIRECTION 270°

CONTAMINATION FROM NONE
WATER COLOUR CLEAR
PH 6.70
DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP Msch qtz mica

FLOAT 75 % Mphy-sch
10 % Mqzt
5 % Qtz vn

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22069** DATE 08/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 354625 mE 5411150 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL LOW
WIDTH 1.5m
DIRECTION 80°

CONTAMINATION FROM NONE
WATER COLOUR WEAK BROWN
PH 5.40
DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP Msch mica

FLOAT 60 % Msch mica qtz
20 % Qtz vn gravel
5 % Mqzt

SAMPLE NUMBER **22070** DATE 08/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 354550 mE 5410475 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL LOW
WIDTH 2.0m
DIRECTION 60°

CONTAMINATION FROM NONE
WATER COLOUR VERY WEAK
PH 6.00
DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP Msch mica Fe stn

FLOAT 50 % Mphy-sch
10 % Qtz vn gravel
10 % Mqzt mas

SAMPLE NUMBER **22322** DATE 16/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 353750 mE 5415950 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW
LEVEL LOW
WIDTH 1.0m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 0.00
DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP

FLOAT 30 % Qtz gravel
30 % Mphy-sch
40 % sand

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22326** DATE 19/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 351000 mE 5410950 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 2.0m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR CLEAR
PH 0.00
DRAINAGE AREA 2.0 km²

GEOLOGY
OUTCROP FLOAT 60 % Msch
20 % Mvolc
10 % Mqzt

SAMPLE NUMBER **22327** DATE 19/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 351075 mE 5410850 mN

VEGETATION REGROWTH EUC

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 3.0m
DIRECTION 0°

CONTAMINATION FROM MINING
WATER COLOUR
PH 0.00
DRAINAGE AREA 2.0 km²

GEOLOGY
OUTCROP FLOAT 60 % Msch
20 % Mvolc
10 % Mqzt

SAMPLE NUMBER **22328** DATE 19/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 350400 mE 5410200 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL HIGH
WIDTH 3.0m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 0.00
DRAINAGE AREA 7.0 km²

GEOLOGY
OUTCROP FLOAT 80 % Mgnsch
10 % Mvolc
5 % Qtz

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22329** DATE 20/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 355625 mE 5417500 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 1.0m PH 5.50
DIRECTION 0° DRAINAGE AREA 1.1 km²

GEOLOGY
OUTCROP FLOAT 60 % Msch
40 % Qtz pebbles
0 %

SAMPLE NUMBER **22330** DATE 20/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 355600 mE 5417625 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 1.5m PH 6.00
DIRECTION 0° DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP FLOAT 60 % Msch
40 % Qtz pebbles
2 % Volc

SAMPLE NUMBER **22331** DATE 20/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 354525 mE 5417100 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 1.0m PH 7.10
DIRECTION 0° DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP FLOAT 80 % Qtz sand, grave
20 % Msch mica
0 %

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ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER 22332 DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 348100 mE 5413325 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 1.0m PH 7.70
DIRECTION 0° DRAINAGE AREA 0.3 km²

GEOLOGY
OUTCROP FLOAT 0 %
0 %
0 %

SAMPLE NUMBER 22333 DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 348275 mE 5413400 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 1.0m PH 7.90
DIRECTION 0° DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP FLOAT 0 %
0 %
0 %

SAMPLE NUMBER 22334 DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 348675 mE 5413200 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM ROADS
LEVEL LOW WATER COLOUR
WIDTH 1.5m PH 7.90
DIRECTION 0° DRAINAGE AREA 0.6 km²

GEOLOGY
OUTCROP FLOAT 0 % Msch
0 % Mvolc
0 % Qtz

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22335** DATE 22/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 346850 mE 5412400 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL LOW
WIDTH 1.5m
DIRECTION 0°

CONTAMINATION FROM NONE
WATER COLOUR
PH 7.80
DRAINAGE AREA 1.0 km²

GEOLOGY
OUTCROP

FLOAT 99 % sand gravel
1 % Msch
0 %

SAMPLE NUMBER **22336** DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 346975 mE 5412225 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW
LEVEL LOW
WIDTH 1.5m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 7.60
DRAINAGE AREA 0.4 km²

GEOLOGY
OUTCROP

FLOAT 99 % sand gravel
1 % Msch
0 %

SAMPLE NUMBER **22337** DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 347775 mE 5412825 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW
LEVEL LOW
WIDTH 0.5m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 4.30
DRAINAGE AREA 0.7 km²

GEOLOGY
OUTCROP

FLOAT 60 % sand gravel
40 % Qtz gravel
0 %

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22338** DATE 21/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 347600 mE 5411950 mN

VEGETATION RAIN FOREST

STREAM FLOW
LEVEL
WIDTH 1.5m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 0.00
DRAINAGE AREA 0.7 km²

GEOLOGY
OUTCROP

FLOAT 75 % Tb
20 % Qtz conglomerate
5 % Mslt

SAMPLE NUMBER **22339** DATE 22/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 349650 mE 5410200 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 0.00
DRAINAGE AREA 3.5 km²

GEOLOGY
OUTCROP

FLOAT 40 % Qtz
40 % Msch chl mica
20 % Mslt

SAMPLE NUMBER **22340** DATE 22/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 349550 mE 5410050 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 0.00
DRAINAGE AREA 1.7 km²

GEOLOGY
OUTCROP

FLOAT 30 % Mslt-sst lam
30 % Mtuff-sch
30 % Mqzt

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER 22341 DATE 23/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 353025 mE 5410200 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 0.00
DRAINAGE AREA 1.8 km²

GEOLOGY
OUTCROP

FLOAT 60 % Mgnsch
10 % Mvolc
30 % Qtz

SAMPLE NUMBER 22342 DATE 23/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 353175 mE 5410075 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 2.0m
DIRECTION 0°

CONTAMINATION FROM NONE
WATER COLOUR
PH 0.00
DRAINAGE AREA 3.5 km²

GEOLOGY
OUTCROP

FLOAT 60 % Mgnsch
40 % Qtz pebbles
0 %

SAMPLE NUMBER 22343 DATE 23/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 353325 mE 5419300 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 0°

CONTAMINATION FROM NONE
WATER COLOUR
PH 0.00
DRAINAGE AREA 2.0 km²

GEOLOGY
OUTCROP

FLOAT 80 % Tb
20 % Msch
0 %

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22344** DATE 23/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 353250 mE 5419350 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL HIGH
WIDTH 5.0m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 0.00
DRAINAGE AREA 15.0 km²

GEOLOGY
OUTCROP

FLOAT 50 % Tb
40 % Msch-volc
10 % Qtz gravel

SAMPLE NUMBER **22345** DATE 23/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 353075 mE 5418625 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.0m
DIRECTION 0°

CONTAMINATION FROM NONE
WATER COLOUR
PH 0.00
DRAINAGE AREA 1.2 km²

GEOLOGY
OUTCROP

FLOAT 50 % Tb
40 % Msch-volc
10 % Qtz gravel

SAMPLE NUMBER **22346** DATE 24/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 350000 mE 5414225 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE
LEVEL AVERAGE
WIDTH 1.5m
DIRECTION 0°

CONTAMINATION FROM ROADS
WATER COLOUR
PH 0.00
DRAINAGE AREA 2.0 km²

GEOLOGY
OUTCROP

FLOAT 60 % gravels
30 % Tb
10 % Msit

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22347** DATE 24/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 349900 mE 5414525 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 2.5m PH 0.00
DIRECTION 0° DRAINAGE AREA 0.9 km²

GEOLOGY
OUTCROP FLOAT 60 % gravels
40 % Qtz cobbles
0 %

SAMPLE NUMBER **22350** DATE 30/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 350125 mE 5419525 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 1.5m PH 0.00
DIRECTION 0° DRAINAGE AREA 1.5 km²

GEOLOGY
OUTCROP FLOAT 90 % sand
9 % Qtz pebbles
1 % Mphy

SAMPLE NUMBER **22351** DATE 31/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 357825 mE 5418525 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL HIGH WATER COLOUR
WIDTH 1.5m PH 0.00
DIRECTION 0° DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP Msch graphitic FLOAT 70 % Msch mica qtz
10 % Msla bk py
20 % Qtz

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22352** DATE 31/01/1992 EL45/89 MAP DONALDSON

AMG COORDS. 357775 mE 5418500 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL HIGH WATER COLOUR
WIDTH 1.5m PH 0.00
DIRECTION 0° DRAINAGE AREA 1.1 km²

GEOLOGY
OUTCROP FLOAT 70 % Msch
10 % Msla
20 % Qtz

SAMPLE NUMBER **22358** DATE 06/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 358675 mE 5417225 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 0.5m PH 5.80
DIRECTION 0° DRAINAGE AREA 0.3 km²

GEOLOGY
OUTCROP Mslt FLOAT 70 % Ssst
20 % Mslt
10 % Qtz cobbles

SAMPLE NUMBER **22359** DATE 06/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 358075 mE 5415675 mN

VEGETATION WET EUCALYPT

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL AVERAGE WATER COLOUR
WIDTH 0.5m PH 5.60
DIRECTION 0° DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP FLOAT 70 % Ssst
20 % Msla
10 % Qtz

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22360** DATE 06/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 357725 mE 5415500 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL AVERAGE WATER COLOUR
WIDTH 1.0m PH 0.00
DIRECTION 0° DRAINAGE AREA 0.6 km²

GEOLOGY
OUTCROP FLOAT 20 % Mslt
20 % Qtz
60 % Mphy

SAMPLE NUMBER **22361** DATE 06/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 357500 mE 5414775 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL AVERAGE WATER COLOUR
WIDTH 2.5m PH 5.90
DIRECTION 0° DRAINAGE AREA 5.0 km²

GEOLOGY
OUTCROP Msla bk FLOAT 80 % Sest
10 % Qtz
10 % Msla

SAMPLE NUMBER **22362** DATE 07/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 356650 mE 5413450 mN

VEGETATION WET EUCALYPT

STREAM FLOW SLOW CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 1.0m PH 8.30
DIRECTION 0° DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP FLOAT 100% Msla gy
0 %
0 %

ARTHUR RIVER PROJECT - 1991-92 WATER SAMPLES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER **22363** DATE 07/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 356400 mE 5413250 mN

VEGETATION RAIN FOREST

STREAM FLOW SLOW CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 1.5m PH 7.00
DIRECTION 0° DRAINAGE AREA 0.5 km²

GEOLOGY
OUTCROP FLOAT 60 % Mqzt-sst
30 % Msla
10 % Lithic tuff?

SAMPLE NUMBER **22364** DATE 07/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 355375 mE 5412100 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL AVERAGE WATER COLOUR
WIDTH 3.4m PH 6.90
DIRECTION 0° DRAINAGE AREA 8.0 km²

GEOLOGY
OUTCROP FLOAT 40 % Qtz
40 % Msch mica
20 % Tb

SAMPLE NUMBER **22365** DATE 07/02/1992 EL45/89 MAP DONALDSON

AMG COORDS. 354925 mE 5411950 mN

VEGETATION RAIN FOREST

STREAM FLOW MODERATE CONTAMINATION FROM NONE
LEVEL LOW WATER COLOUR
WIDTH 0.5m PH 0.00
DIRECTION 0° DRAINAGE AREA 0.3 km²

GEOLOGY
OUTCROP Sst FLOAT 0 % Sst
0 % Msch qtz
0 %

ARTHUR RIVER PROJECT

WATER GEOCHEMISTRY - 1991-92 SAMPLES - CSIRO ANALYSES

EL 45/89 - DONALDSON SHEET

SAMPLE NUMBER	ICPMS - RAW WATER Cu ug/l	Pb ug/l	Cd ug/l	Zn ug/l	PDV - Preconcentrated Cu ug/l	Pb ug/l	Cd ug/l	GF AAS Ag ug/l	NAA Au ng/l	ICPABS Zn ug/l	LOCATION EL	MAP
22018	0.70	-0.50	-0.50	0.50	1.00	0.13	-0.05	0.07	-1.00	-10	45/89	DONALDSON
22019	-0.50	-0.50	-0.50	-0.50	0.80	-0.05	-0.05	0.06	0.10	-10	45/89	DONALDSON
22040	0.60	-0.50	-0.50	-0.50	1.00	0.20	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22041	0.62	-0.50	-0.50	-0.50	0.74	0.29	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22042	0.90	-0.50	-0.50	-0.50	1.20	0.20	1.00	-0.05	-1.00	-10	45/89	DONALDSON
22043	-0.50	-0.50	-0.50	-0.50	1.80	0.30	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22044	-0.50	-0.50	-0.50	-0.50	0.88	0.30	0.60	-0.05	-1.00	-10	45/89	DONALDSON
22045	-0.50	-0.50	-0.50	1.80	0.21	0.35	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22046	-0.50	-0.50	-0.50	1.10	0.35	0.31	-0.05	0.08	-1.00	-10	45/89	DONALDSON
22047	-0.50	-0.50	-0.50	0.86	1.50	0.08	-0.05	0.10	-1.00	-10	45/89	DONALDSON
22048	-0.50	-0.50	-0.50	0.99	0.36	0.45	-0.05	0.14	-1.00	-10	45/89	DONALDSON
22049	-0.50	-0.50	-0.50	-0.50	1.60	0.18	-0.05	0.08	-1.00	-10	45/89	DONALDSON
22050	-0.50	-0.50	-0.50	-0.50	1.30	0.20	-0.05	0.09	-1.00	-10	45/89	DONALDSON
22051	-0.50	-0.50	-0.50	0.82	1.00	0.06	-0.05	0.14	-1.00	-10	45/89	DONALDSON
22052	-0.50	-0.50	-0.50	2.10	0.56	0.68	-0.05	0.27	-1.00	-10	45/89	DONALDSON
22053	-0.50	0.51	-0.50	1.60	0.44	0.63	-0.05	0.19	-1.00	-10	45/89	DONALDSON
22054	-0.50	0.96	-0.50	2.70	0.63	1.10	-0.05	0.29	-1.00	-10	45/89	DONALDSON
22055	-0.50	-0.50	-0.50	1.40	1.00	0.80	-0.05	0.20	-1.00	-10	45/89	DONALDSON
22056	-0.50	1.20	-0.50	5.30	0.73	1.30	-0.05	0.30	-1.00	-10	45/89	DONALDSON
22060	-0.50	-0.50	-0.50	0.57	0.91	0.10	-0.05	0.09	-1.00	-10	45/89	DONALDSON
22062	0.68	-0.50	-0.50	0.58	0.31	0.20	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22063	-0.50	-0.50	-0.50	3.90	1.60	0.49	0.20	0.06	-1.00	-10	45/89	DONALDSON
22064	-0.50	-0.50	-0.50	0.70	0.41	0.29	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22065	0.58	-0.50	-0.50	0.74	0.61	-0.05	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22066	-0.50	-0.50	-0.50	0.75	0.48	0.40	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22067	0.81	-0.50	-0.50	1.60	1.10	0.38	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22068	0.55	-0.50	-0.50	0.73	0.90	0.23	0.50	-0.05	-1.00	-10	45/89	DONALDSON
22069	0.53	-0.50	-0.50	1.10	1.30	0.12	0.10	-0.05	-1.00	-10	45/89	DONALDSON
22070	0.59	-0.50	-0.50	1.10	2.00	0.45	-0.05	0.07	-1.00	-10	45/89	DONALDSON
22322	-0.50	-0.50	-0.50	1.50	0.72	0.35	-0.05	0.06	-1.00	-10	45/89	DONALDSON
22326	-0.50	-0.50	-0.50	1.00	0.88	0.41	-0.05	0.12	-1.00	-10	45/89	DONALDSON
22327	0.55	-0.50	-0.50	2.10	2.10	0.12	-0.05	0.14	-1.00	-10	45/89	DONALDSON
22328	0.80	-0.50	-0.50	0.51	0.72	0.80	-0.05	0.12	-1.00	-10	45/89	DONALDSON
22329	-0.50	-0.50	-0.50	0.95	0.50	0.88	-0.05	0.04	-1.00	-10	45/89	DONALDSON
22330	0.61	-0.50	-0.50	1.60	0.79	0.38	-0.05	0.13	-1.00	-10	45/89	DONALDSON
22331	0.53	-0.50	-0.50	2.20	0.73	0.50	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22332	-0.50	-0.50	-0.50	-0.50	4.40	0.40	-0.05	0.06	-1.00	-10	45/89	DONALDSON
22333	0.77	-0.50	-0.50	2.90	1.10	0.45	-0.05	0.08	-1.00	-10	45/89	DONALDSON
22334	0.64	-0.50	-0.50	-0.50	1.20	0.20	0.50	0.09	-1.00	-10	45/89	DONALDSON
22335	0.85	-0.50	-0.50	0.95	2.70	0.46	-0.05	0.05	-1.00	-10	45/89	DONALDSON
22336	1.10	-0.50	-0.50	0.61	1.00	0.20	-0.05	0.08	-1.00	-10	45/89	DONALDSON
22337	0.99	-0.50	-0.50	0.66	0.34	0.29	-0.05	0.47	-1.00	-10	45/89	DONALDSON
22338	5.60	-0.50	-0.50	1.40	4.70	0.73	-0.05	0.04	-1.00	-10	45/89	DONALDSON
22339	1.40	-0.50	-0.50	-0.50	-5.00	-5.00	-5.00	0.13	-1.00	-10	45/89	DONALDSON
22340	2.00	-0.50	-0.50	-0.50	4.30	0.47	0.15	0.09	-1.00	-10	45/89	DONALDSON
22341	2.40	-0.50	-0.50	1.20	1.40	0.57	-0.05	0.30	-1.00	-10	45/89	DONALDSON
22342	2.00	-0.50	-0.50	1.00	2.30	0.35	0.40	0.24	-1.00	-10	45/89	DONALDSON
22343	1.00	-0.50	-0.50	-0.50	0.55	0.14	-0.05	0.08	-1.00	-10	45/89	DONALDSON
22344	2.00	-0.50	-0.50	0.58	0.70	0.26	-0.05	0.08	-1.00	-10	45/89	DONALDSON
22345	2.60	-0.50	-0.50	-0.50	0.34	0.13	-0.05	0.06	-1.00	-10	45/89	DONALDSON
22346	2.70	-0.50	-0.50	0.58	0.46	0.16	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22347	2.20	-0.50	-0.50	-0.50	0.78	-0.05	-0.05	-0.05	-1.00	-10	45/89	DONALDSON

ARTHUR RIVER PROJECT

WATER GEOCHEMISTRY - 1991-92 SAMPLES - CSIRO ANALYSES

EL 45/89 - DONALDSON SHEET

SAMPLE	ICPMS - RAW WATER				PDV - Preconcentrated			GF AAS	NAA	ICPAES	LOCATION	
NUMBER	Cu ug/l	Pb ug/l	Cd ug/l	Zn ug/l	Cu ug/l	Pb ug/l	Cd ug/l	As ug/l	Au ng/l	Zn ug/l	EL	MAP
22350	3.20	-0.50	-0.50	0.79	1.10	1.90	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22351	2.30	-0.50	-0.50	1.40	2.60	0.26	0.60	-0.05	-1.00	-10	45/89	DONALDSON
22352	3.60	-0.50	-0.50	1.30	3.60	1.00	-0.05	-0.05	-1.00	-10	45/89	DONALDSON
22357	4.50	-0.50	-0.50	2.60	2.60	1.10	-0.05	0.07	-1.00	-10	45/89	DONALDSON
22358	-0.50	-0.50	-0.50	1.10	1.10	0.31	-0.05	0.09	-1.00	-10	45/89	DONALDSON
22359	-0.50	-0.50	-0.50	1.00	0.74	0.34	0.70	-0.05	-1.00	-10	45/89	DONALDSON
22360	0.63	-0.50	-0.50	1.00	1.00	0.29	0.70	0.07	-1.00	-10	45/89	DONALDSON
22361	-0.50	-0.50	-0.50	0.60	0.94	0.28	0.25	0.09	-1.00	-10	45/89	DONALDSON
22362	0.50	-0.50	-0.50	0.90	1.30	0.40	0.30	0.05	-1.00	-10	45/89	DONALDSON
22363	0.55	-0.50	-0.50	5.00	0.63	0.13	0.30	0.08	-1.00	-10	45/89	DONALDSON
22364	1.00	-0.50	-0.50	1.40	0.95	0.24	-0.05	0.06	-1.00	-10	45/89	DONALDSON
22365	0.69	-0.50	-0.50	1.30	1.00	0.38	-0.05	0.07	-1.00	-10	45/89	DONALDSON

APPENDIX 2

ROCK SAMPLING

Sample Descriptions and Results

ARTHUR RIVER PROJECT - EL 45/89

DESCRIPTIONS OF ROCK SAMPLES - DONALDSON SHEET

EL	MAP	NUMBER	TYPE	LITHOLOGY	DESCRIPTN
45/89	DONALDSON	22117	FLOAT	Msst-slt	Msst-slt some schistose chloritic rocks.
45/89	DONALDSON	22118	ROCK CHIP	Msha	Msha gy-bk Fe stn fol 040-060/45NW.
45/89	DONALDSON	22147	FLOAT	-	Tb, Msch mica qtz to Mqzt Diorite?
45/89	DONALDSON	22149	ROCK CHIP	C-Pwt	Tillite angular-round clasts (polymict - 1cm) in fine matrix.
45/89	DONALDSON	22150	ROCK CHIP	C-Pwt	Tillite angular-round clasts polymict-1.5cm in fine matrix.
45/89	DONALDSON	22151	ROCK CHIP	Msch-qzt	Quartz mica ser schist and quartzite fol 345/90.
45/89	DONALDSON	22152	ROCK CHIP	Msch-sst	Quartz mica ser schist to meta sandstone fol 010/90.
45/89	DONALDSON	22153	ROCK CHIP	Mphy	Phyllites gy-gn Fe stn fol 000-040/90-70E.
45/89	DONALDSON	22154	ROCK CHIP	Mvolc?	Quartz ser (chl?) rock wk schistose Fe stn Volc?, fol 040/90.
45/89	DONALDSON	22155	FLOAT	-	Tb, Mphy, Mqzt.
45/89	DONALDSON	22156	ROCK CHIP	C-Pwt	Tillite polymict angular-round clasts to 2cm, silty gn matrix.
45/89	DONALDSON	22157	FLOAT	M amphibolite - gnsch	Amphibolite v with some Mgnsch fol 355/90.
45/89	DONALDSON	22158	ROCK CHIP	"Ferricrete"	"Ferricrete" binding qtz gravel.
45/89	DONALDSON	22159	ROCK CHIP	Mphy-sla + bk, sha, py.	Phyllite-slate micaceous, some py bk shale fol 010.
45/89	DONALDSON	22160	ROCK CHIP	Msch	Mica schist (sometimes chloritic) some quartz rich bands fol 000/90.
45/89	DONALDSON	22161	ROCK CHIP	Mgnsch	Greenschist, volc? some Kf or

ARTHUR RIVER PROJECT - EL 45/89

DESCRIPTIONS OF ROCK SAMPLES - DONALDSON SHEET

EL	MAP	NUMBER	TYPE	LITHOLOGY	DESCRIPTN
					lithic fragments fol 325-350.
45/89	DONALDSON	22162	ROCK CHIP	Msch	Sericite chlorite schist fol 345/90.
45/89	DONALDSON	22163	ROCK CHIP	Msch	Ser (chl) qtz schist, some lithic? fragments fol 350/90.
45/89	DONALDSON	22164	ROCK CHIP	Msha - sla	Black shales/slates pyritic in places fol 345/50E.
45/89	DONALDSON	22165	FLOAT	Sslt	Siltstone bk-buff thinly bedded 355/70E fol 355/60W.
45/89	DONALDSON	22166	ROCK CHIP	Sslt	Siltstone, tuftaceous? m-ck gn schistose fol 010/90 bedding 045/45NW.
45/89	DONALDSON	22167	ROCK CHIP	Sslt-phy	Siltstone thin bedded dips 30 to S, fol 355/90 phyllitic in places.
45/89	DONALDSON	22168	ROCK CHIP	Mslt-sla	Mslt-sla pyritic, + qtz py vn fol 020-040/90-70W.
45/89	DONALDSON	22169	ROCK CHIP	Andesite/Diorite?	Shallow intermediate intrusive? Fs and chl.
45/89	DONALDSON	22175	ROCK CHIP	Msch-sst	Quartz mica schist - meta - sandstone fol 340-360/90
45/89	DONALDSON	22176	ROCK CHIP	Msla-phy	slates/phyllites gy-gn mica some graphitic.
45/89	DONALDSON	22177	ROCK CHIP	Mqzt	Quartzite mas, abundant qtz (+ carbonate?) vn.
45/89	DONALDSON	22178	ROCK CHIP	Msst	Meta arenite, qtz rich, mas, some possible Mvolc?
45/89	DONALDSON	22179	ROCK CHIP	Msch	Quartz mica schist grey fol 010/75E.
45/89	DONALDSON	22212	ROCK CHIP	META PELITE	Dark grey to black, non laminated, massive.
45/89	DONALDSON	22213	ROCK CHIP	SCHIST	Moderately foliated. musc-chl-qtz. Qtz is clear and occurs as "eyes" within folia.

ARTHUR RIVER PROJECT - EL 45/89

DESCRIPTIONS OF ROCK SAMPLES - DONALDSON SHEET

EL	MAP	NUMBER	TYPE	LITHOLOGY	DESCRIPTN
45/89	DONALDSON	22214	ROCK CHIP	META VOLCANIC	Hard, massive outcrop, well jointed, siliceous, grey green. Remnant or M.M. Biotite <or=to 10% <or=to 1% disseminated subhedral pyrite.
45/89	DONALDSON	22215	FLOAT	PORPHYRITIC VOLCANIC	Mid green, porphyritic, fine grained volcanic. 1-3mm randomly orientated clots of darker green subhedral phenocrysts (amphibole?). Weakly foliated.
45/89	DONALDSON	22216	ROCK CHIP	TERTIARY CLASTIC (?)	Gossanous, strongly brecciated rock with sst/slt angular clasts to 2mm. Has a limonitic-guethitic matrix.
45/89	DONALDSON	22217	ROCK CHIP	DOLOMITE	Mid to pale orange weathering. Fresh surface shows good crystal faces. Fresh colour is a very light pastel orange.
45/89	DONALDSON	22218	PANNED CON	-	Pan concentrate sample of well rounded, poor to mod sorted qtz pebble conglomerate. Poorly indurated "Browns Plain Formation". Negligible heavy mineral content observed.
45/89	DONALDSON	22219	PANNED CON	-	Overlying 3 metre thick, well washed, very well sorted, poorly stratified qtz sands. Minor Haematite observed (same outcrop as 22218).
45/89	DONALDSON	22220	FLOAT	SLATE	Dense, strongly cleaved, pyritic black slate. Pyrite occurs as v.f.g disseminated and laminations.
45/89	DONALDSON	22221	ROCK CHIP	SLATE	Mid grey to dk grey slate, moderately cleaved, 1% pyrite as distinct dots. <or=to 1cm wide qtz veins with 3-5m alteration halo.

ARTHUR RIVER PROJECT - EL 45/89

DESCRIPTIONS OF ROCK SAMPLES - DONALDSON SHEET

EL	MAP	NUMBER	TYPE	LITHOLOGY	DESCRIPTN

CLASSIC LABORATORIES

Osman Place, Thebarton, South Australia 5031
Telephone: (08) 416 5300 Facsimile: (08) 234 0321

077042

D. Gardner
Geopeko
PO Box 162
DEVONPORT
TAS 7310

FINAL ANALYSIS REPORT

Your Order No: 50081 Our Job Number : 2AD0622

Samples received : 02-MAR-1992 Results reported : 10-MAR-1992
No. of samples : 29
Report comprises a cover sheet and pages 1 to 3

This report relates specifically to the samples tested in so far as that the samples as supplied are truly representative of the sample source.

Note:
If you have any enquiries please contact Miss Anne Reed quoting the above job number.

Approved Signatory:

John Waters
Laboratory Manager - Adelaide

Report Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficent Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

CLASSIC LABORATORIES

077043

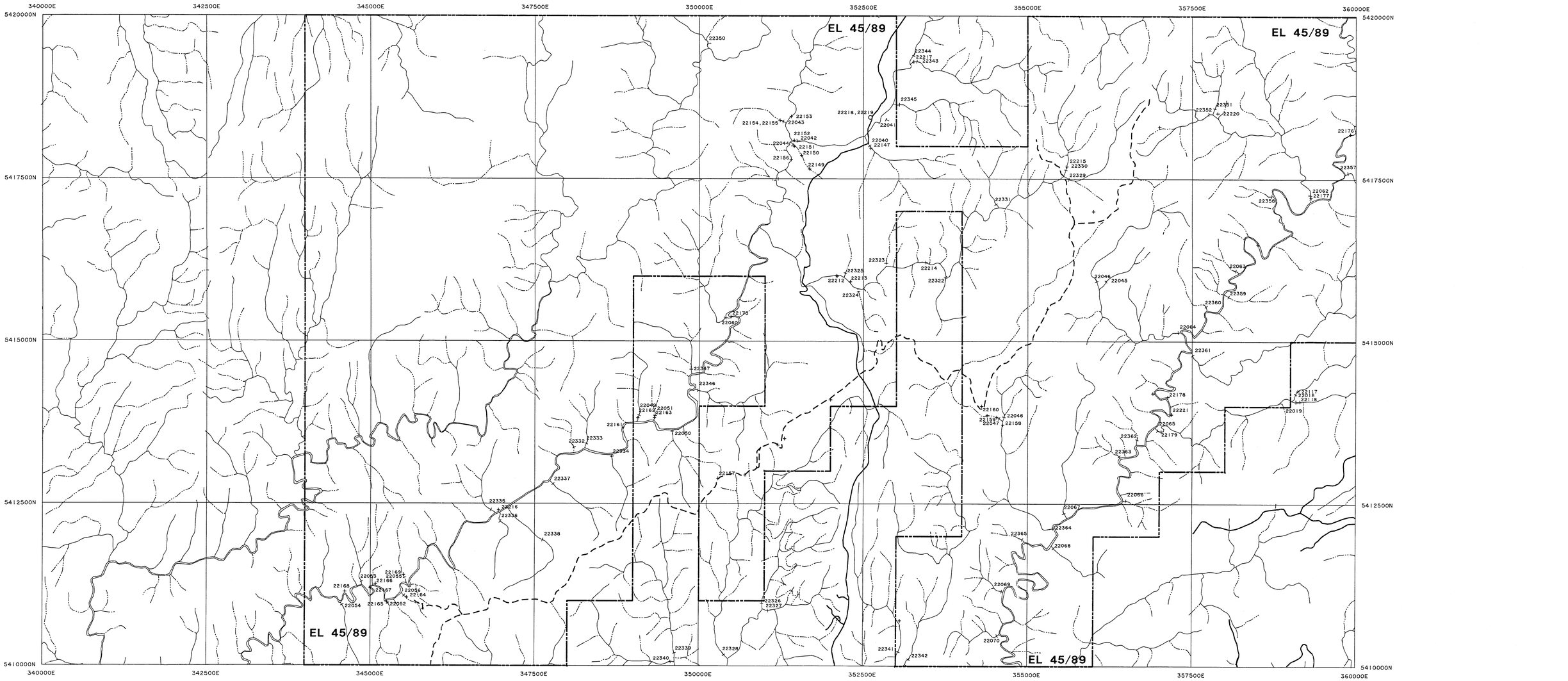
Job: 2AD0622
O/N: 50081

ANALYTICAL REPORT

Sample	Ag	As	Bi	Cd	Co	Cr	Cu
22154	<1	6	<5	<2	10	66	10
22158	<1	94	<5	<2	3	105	8
22161	<1	<3	<5	<2	26	210	58
22164	<1	78	<5	<2	12	48	19
22168	<1	14	<5	<2	22	82	38
22169	<1	7	<5	<2	18	350	12
22214	<1	7	<5	<2	26	62	44
22216	<1	48	<5	<2	78	30	78
22221	<1	7	<5	<2	8	22	11
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DL	1	3	5	2	2	2	2
Scheme	IC1	IC1	IC1	IC1	IC1	IC1	IC1

Sample	Fe	Mn	Mo	Ni	Pb	P	V
22154	2.20	440	<3	34	10	380	26
22158	5.25	80	<3	6	<5	1020	22
22161	5.45	930	<3	90	15	700	98
22164	5.60	55	14	32	120	810	16
22168	3.72	310	8	40	30	590	22
22169	7.45	450	<3	100	20	460	175
22214	3.06	195	<3	9	10	260	34
22216	37.7	2500	9	155	<5	1980	94
22221	2.02	310	<3	10	5	210	6
Units	%	ppm	ppm	ppm	ppm	ppm	ppm
DL	0.01	5	3	2	5	5	2
Scheme	IC1	IC1	IC1	IC1	IC1	IC1	IC1

Sample	Zn	Au Avg	Au	Au Rpl	Au SS1
22154	110	<0.01	<0.01	--	--
22158	11	<0.01	<0.01	--	--
22161	84	0.01	0.01	--	--
22164	15	<0.01	<0.01	--	--
22168	32	<0.01	<0.01	--	--
22169	58	<0.01	<0.01	--	--
22214	16	<0.01	<0.01	--	--
22216	180	<0.01	<0.01	--	--
22221	24	<0.01	<0.01	--	<0.01
Units	ppm	ppm	ppm	ppm	ppm
DL	2	0.01	0.01	0.01	0.01
Scheme	IC1	FA1	FA1	FA1	FA1



5 cm

LOCATION SYMBOLS

+ Location of outcrop with description

80 Mynech
10 Weste
5 Grit
Location of stream float with percentages of each float type in stream

O Location of stream sediment sample

1:25000 SHEET LAYOUT

3242	3442	3642
3241	3441	3641
3240	3440	3640

92-3365

077044

PARKES

GEOPEKO
A DIVISION OF PEKO WALLSEND OPERATIONS LTD
A.C.N. 000 081 434

Scale 1:25000
500 0 500 1000 1500 2000 2500m

Project / Tenure

Geo. Client.	D.G
Carto.	R.M.N.
Checked	
Date	12/3/92
Appended	
Job No.	82-93

DONALDSON 3441

SAMPLE LOCATIONS & NUMBER

IOOK, Sheet 7915

DWG No. 2055A

340000E 342500E 345000E 347500E 350000E 352500E 355000E 357500E 360000E

5420000N 5417500N 5415000N 5412500N 5410000N

EL 45/89

Mgnsch-Msch

C-Pwt

Mgnsch

Tb

Msch-sst
Msla-phy

Mgnsch-sch

Ssst-slt

Msla-slt

Mgnsch?-sch

Ultramafic
Complex

GEOLOGICAL LEGEND

TERTIARY

Tb Basalt

CARBONIFEROUS - PERMIAN

C-Pwt Wynyard Tillite

PRE CAMBRIAN -

SEDIMENTS

Ssst	sandstone
Sgwk	greywacke
Sslt	siltstone
Sdol	dolomite
Ssha	shale

METAMORPHICS

Msch	schist
Mphy	phyllite
Mgnst	greenstone
Mgnsch	greenschist
Mqzt	quartzite
Msla	slate

COLOURS

bk	black
wh	white
gn	green
gy	grey
pl	pale
dk	dark
bn	brown

VOLCANICS

Volc	volcanic
tuff	tuff

OTHER

U/m	ultramafic

MINERALOGY

qtz	quartz
fs	feldspar
Fe	iron
py	pyrite
ser	sericite
chl	chloride
si	siliceous

TEXTURES

Vn	vein, veining
lam	laminated
stn	stain
wth	weathered
clvd	cleaved
foln	foliation
mas	massive

STRUCTURES

- 40 bedding
- foliation
- definite contact
- approximate contact
- possible contact

LOCATION SYMBOLS

- + Location of outcrop with description
- 80 Mgnsch 10 Mvolc 5 Qtz — Location of stream float with percentages of each float type in stream
- O Location of stream sediment sample

5 cm

1:25000 SHEET LAYOUT

3242	3442	3642
3241	3441	3641
3240	3440	3640

92-3365

077045

GEOPEKO — A DIVISION OF PEKO WALLSEND OPERATIONS LTD A.C.N. 000 081 434

PARKES

Scale 1:25000

500 0 500 1000 1500 2000 2500m

Project / Tenure

Geo. Client.	D.G
Cartc.	R.M.N
Checked	
Date	12/3/92
Appended	
Job No.	82_92

DONALDSON 3441
FACT GEOLOGY & INTERPRETATION

100k. Sheet 7915

DWG No. 2055B

340000E 342500E 345000E 347500E 350000E 352500E 355000E 357500E 360000E

5420000N
5417500N
5415000N
5412500N
5410000N

EL 45/89

EL 45/89

EL 45/89

EL 45/89

5cm

077046

92-3365

SAMPLE LEGEND

- • Location of Panned Concentrate sample
- ○ Location of Strean Sediment sample

Note: 9999 equals >10000ppm

1:25000 SHEET LAYOUT

3242	3442	3642
3241	3441	3641
3240	3440	3640

PARKES

GEOPEKO
A DIVISION OF PEKO WALLSEND OPERATIONS LTD A.C.N. 000 081 434

Scale 1:25000
500 0 500 1000 1500 2000 2500m

Project / Tenure

Geo. Client.	D.G
Carto.	R.M.N
Checked	
Date	25/6/92
Appended	
Job No.	201_92

DONALDSON 3441
COMSTAFF STREAM SEDIMENT SAMPLING
COPPER (ppm)

100k Sheet 7915

DWG No. 2313A

340000E 342500E 345000E 347500E 350000E 352500E 355000E 357500E 360000E

5420000N
5417500N
5415000N
5412500N
5410000N

EL 45/89

EL 45/89

EL 45/89

EL 45/89

5 cm

077047

92-3365

SAMPLE LEGEND

- • Location of Panned Concentrate sample
- ∘ Location of Strean Sediment sample

Note: 9999 equals >10000ppm

1:25000 SHEET LAYOUT

3242	3442	3642
3241	3441	3641
3240	3440	3640

PARKES

GEOPEKO
A DIVISION OF PEKO WALLSEND OPERATIONS LTD A.C.N. 000 081 434

Scale 1:25000
500 0 500 1000 1500 2000 2500m

Project / Tenure

Geo. Client.	D.G
Carto.	R.M.N
Checked	
Date	25/6/92
Appended	
Job No.	201_92

DONALDSON 3441
COMSTAFF STREAM SEDIMENT SAMPLING
LEAD (ppm)

100k. Sheet 7915

DWG No. 23138

340000E 342500E 345000E 347500E 350000E 352500E 355000E 357500E 360000E

5420000N
5417500N
5415000N
5412500N
5410000N

EL 45/89

EL 45/89

EL 45/89

EL 45/89

5 cm

077048

92-3365

SAMPLE LEGEND

- Location of Panned Concentrate sample
- Location of Strean Sediment sample

Note: 9999 equals >10000ppm

1:25000 SHEET LAYOUT

3242	3442	3642
3241	3441	3641
3240	3440	3640

PARKES

GEOPEKO A DIVISION OF PEKO WALLSEND OPERATIONS LTD A.C.N. 000 081 434

Scale 1:25000
500 0 500 1000 1500 2000 2500m

Project / Tenure

DONALDSON 3441
COMSTAFF STREAM SEDIMENT SAMPLING
ZINC (ppm)

Geo. Client.	D.G.
Carto.	R.M.N.
Checked	
Date	25/6/92
Appended	
Job No.	201_92
100k Sheet	7915
DWG No.	2313C