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REF: R/S				

PROGRESS REPORT E.L. 1/79

1980 SEASON

by

R.R. LARGE

R. POLTOCK

DEVONPORT,

3rd September, 1981.

PROGRESS REPORT E.L. 1/79: 1980 SEASONCONTENTS

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FIGURES

- Figure 1: Locality map 1:500,000 (with areas surveyed)
- Figure 2: Geology map 1:250,000
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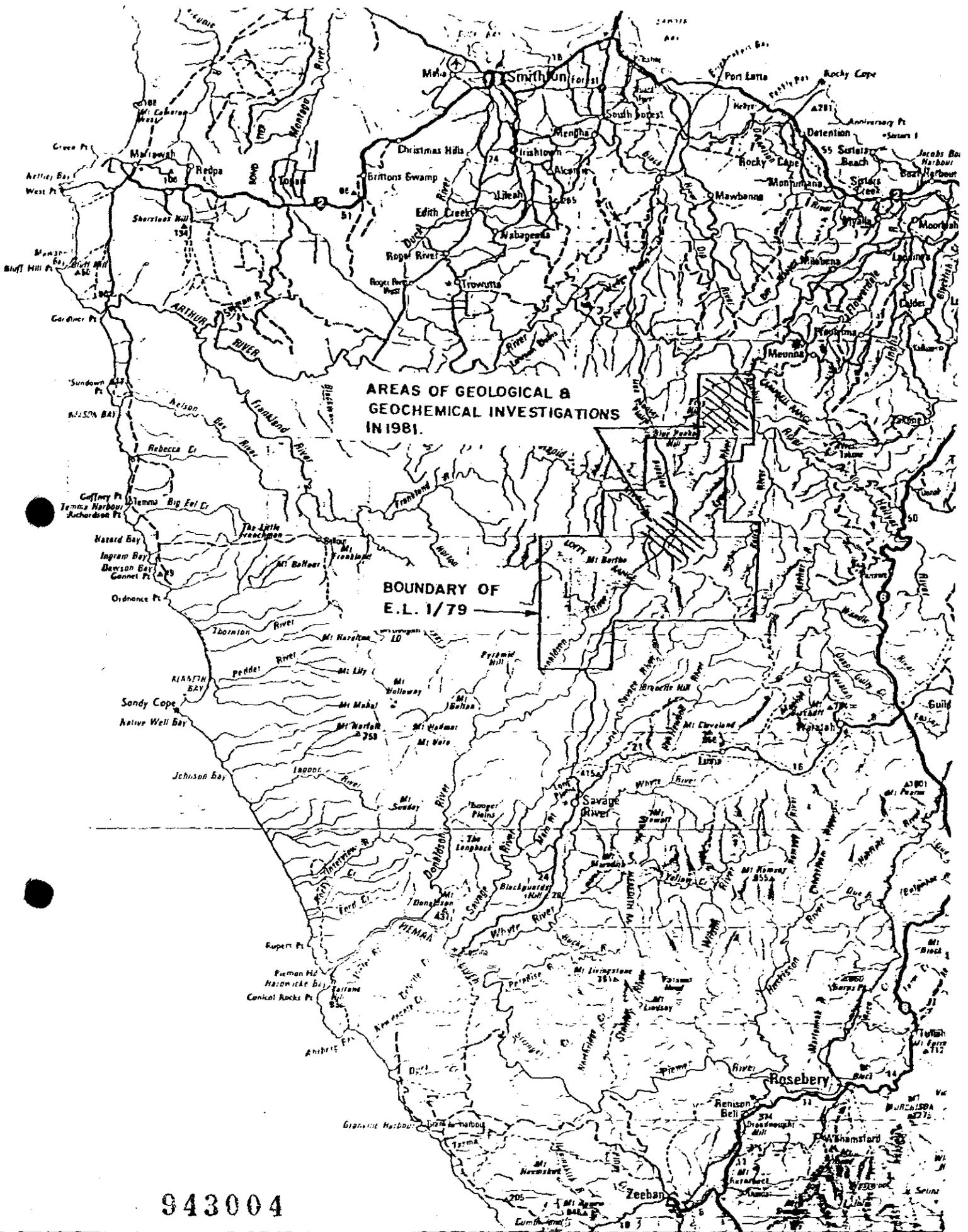
PLANS

- Plan 1: Geology E.L. 1/79, Sheet 1, 1:10,000
- Plan 2: Drainage Geochemistry, E.L. 1/79, Sheet 1 1:10,000

1. INTRODUCTION

Exploration Licence 1/79 was granted to Geopeko in April 1979. The Licence covers an area of 365 square kilometers in north-western Tasmania (figure 1) including Mt. Bertha and the upper reaches of Rapid River.

Geopeko's primary objective in this area is stratiform tungsten mineralization of the Mittersill type. Except for a literature study of previous investigations, little work was carried out in the area in 1979, because of the lack of staff and pressure of work on other areas. In 1980 a contract geologist Mr. R. Poltock was assigned the project of regional mapping and stream sediment sampling over the northern and central sections of the Licence. This report details Mr. Poltock's investigations and Geopeko's appraisal of the area.



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GEOPEKO LIMITED

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EXPLORATION LICENCE 1/79
LOCALITY MAP

FIG. 1

2. SUMMARY AND CONCLUSIONS

1. Mapping in the northern section of the E.L. has defined the following lithologies within the Keith Beds (Older Precambrian ?) and the Neasey Formation (Younger Precambrian).

Keith Beds - Phyllites (rarely pyritic) with minor quartzite interbeds.

Neasey Formation

- Phyllite and silty quartzites. 500m+
- Phyllites with basic volcanic sills or flows. ~ 1000m
- Quartzites. ~ 250m
- Siliceous carbonate and phyllites. ~ 400m
- Quartzites with conglomerates at base. ~ 500m

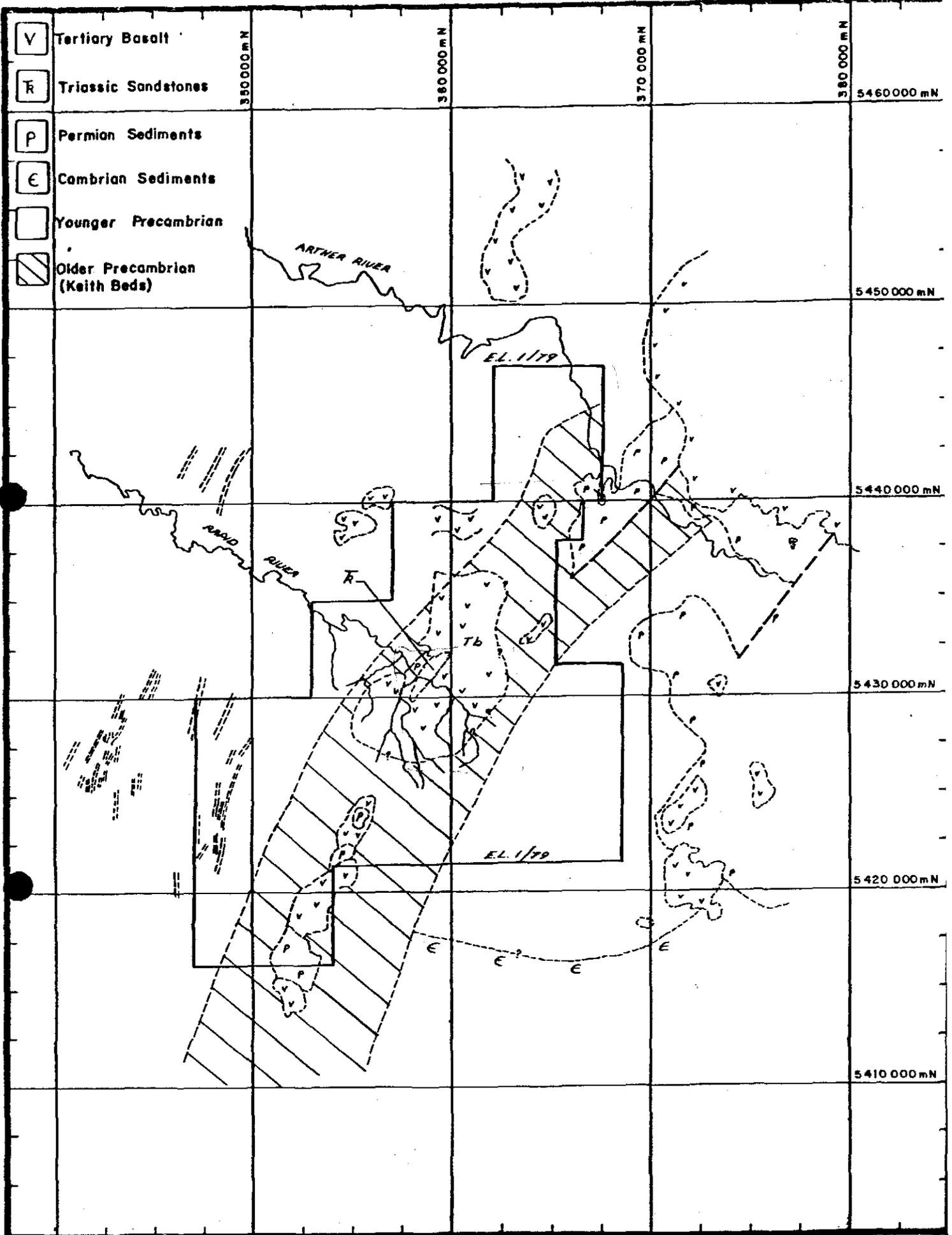
2. In this area the division between the Keith beds and the Neasey Formation is based on lithology rather than deformation intensity.
3. Mapping in the upper reaches of Rapid River in the central portion of the E.L. indicates that the cover of Tertiary basalt is far more extensive than previously recognised (fig 2).

4. Stream sediment sampling was completed over an area of 35 square kilometres in the northern part of the E.L. with samples analysed for Cu, Pb, Zn, Sn, W, Ag, Fe and Au.
5. One significant Cu, Pb, Zn anomaly was defined, but resampling showed this to be in error (probably laboratory contamination). No significantly anomalous Sn, W, Au or Ag values were revealed.
6. Although the geology within the Neasey Formation appears favourable for a stratiform tungsten environment the general paucity of basic volcanics (amphibolites) and lack of stream sediment anomalies for tungsten down-grades the area.

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3. RECOMMENDATIONS

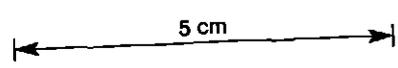
1. No further work is recommended for the northern section of the E.L.
2. Further mapping and stream sediment sampling is required in the southern portion of the E.L. particularly in the area of the airborne EM anomalies previously defined by the ESSO Input Survey.



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GEOPEKO LIMITED

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GEOLOGY E.L. 1/79

MODIFIED FROM BURNIE 1:250 000 SHEET

4. THE MINERALIZATION MODEL

The objective within E.L. 1/79 is a stratabound tungsten deposit similar to those occurrences defined from the Austrian Alps by Holl (1977) and Maucher (1976), such as the Felbertal and Klemartal deposits. The typical characteristics of these deposits are given below;

1. The tungsten mineralization occurs as scheelite in a stratabound configuration within deep-water sequences containing quartzites, meta-pelites, chert, minor carbonate and basic volcanics.
2. The sequence is typically deformed to amphibolite grade or above.
3. The scheelite is generally restricted to particular horizons, commonly quartzites, carbonates or sometimes black shales.
4. The quartzites are interpreted as metamorphosed deposits of silica gel and commonly show tectonic brecciation.
5. Basic volcanics within the sequence are intimately associated with the ore horizons and metamorphosed to amphibolites (or hornblendites).
6. Associated trace elements are Sn, B, F, Be, Li, Mo Bi, Sb Hg, Pb and Zn.

7. The tungsten mineralization is considered to be exhalative and to relate to episodes of basic volcanism within the deep water environment.

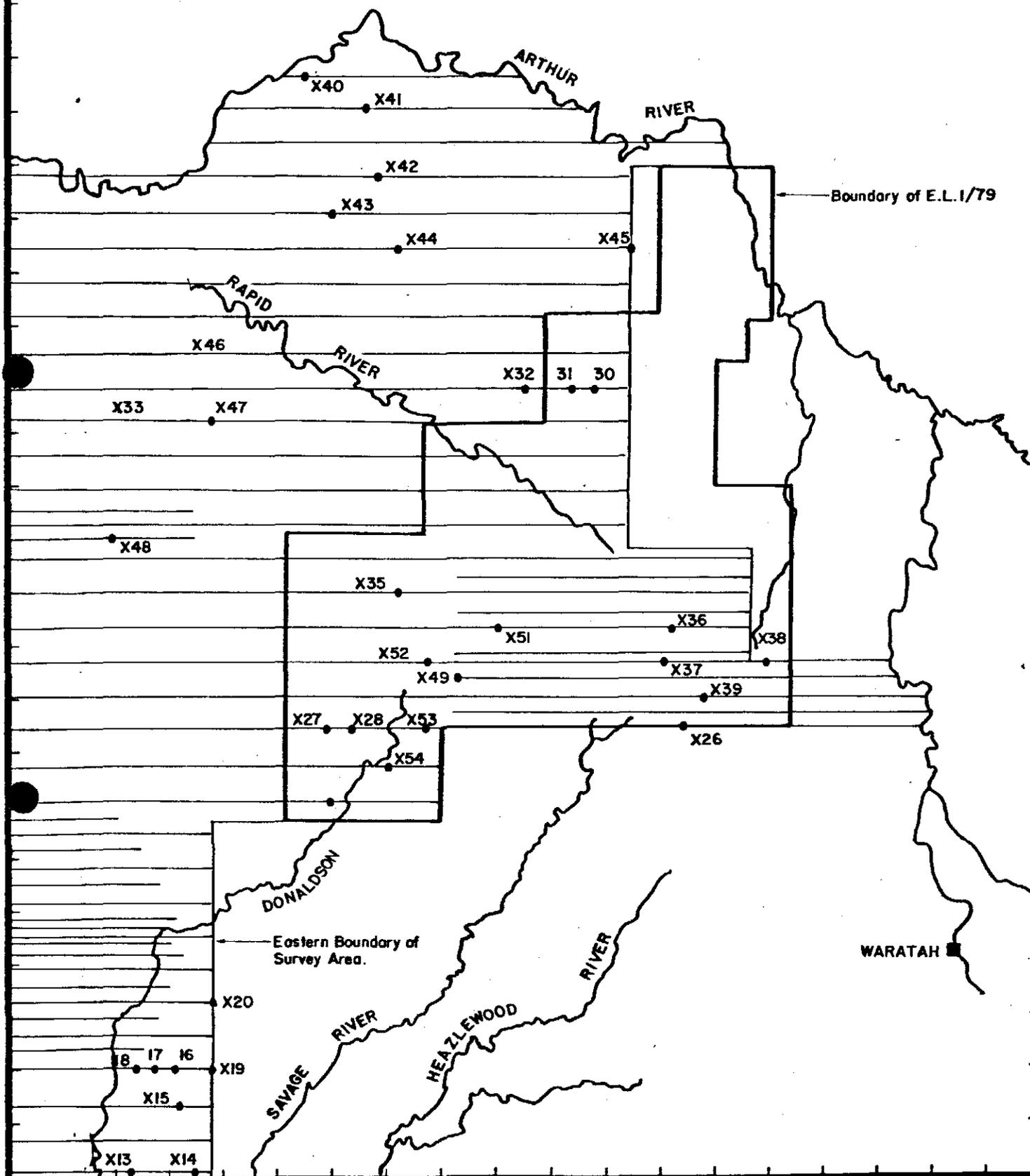
The lithologies of the Arthur Lineament and adjacent Younger Precambrian include quartzites, phyllites, carbonates, amphibolites and black shales of possible deep water origin and therefore this sequence was considered to represent an environment with potential for stratabound tungsten deposits. It was decided that regional mapping and stream sediment sampling for tungsten and tin was the best exploration approach for the initial investigation.

5. PREVIOUS INVESTIGATIONS

Very little geological investigation has been carried out in the area. Reconnaissance geological mapping covering the northern corner of the E.L. is reported by Longman and Matthews (1962) however no geological information is published on the central or southern portions of the E.L.

An airborne EM survey carried out by ESSO is reported on by Neale (1973). Neale listed 63 EM anomalies worthy of ground follow up in the total survey area. Of these, 35 were not explained. These 35 anomalies were either not visited (rugged topography and dense forest) or no outcrop found where visited. Some of the anomalies have both an EM and magnetic response. Of the total 35 unexplained anomalies, seventeen lie within E.L. 1/79. Their locations are shown in figure 3.

A regional stream sediment sampling programme carried out by Pichards Mather in 1966 covers part of the western side of the E.L. This data has been collected but is yet to be plotted and assessed.



LEGEND:

- Flight line showing EM anomaly and designation
- 5 cm



DATE: _____

GEOLOGICAL: _____

DWN: _____

GEOPEKO LIMITED

Scale: 1 : 250,000

Nº K

E.L.1/79

AIRBOURNE EM ANOMALIES
FROM ESSO INPUT SURVEY

1972

943014

Introduction.

The lease is located approx. 35 km. south of Port Latta in N.W. Tasmania, covering 365 km² of Pre cambrian sediments which strike N.-N.E.

Approx. 30 km² of this lease was covered by stream sediment sampling - two broad traverses across Arthur Lineament rocks, one in northern section of the lease in vicinity of the Arthur and Lyons Rivers and a second further south in the head waters of the Rapid River. Sampling in the latter area was limited by the extent of Tertiary and Permo-Triassic cover.

Access to the stream sediment areas via. the Savage River pipe line road and by a system of logging roads developed during 1950's? from Meunna. The latter are frequently overgrown, blocked by fallen trees and bridges washed out. However they provide adequate access for trial bikes which were used in collecting the stream samples.

Previous geological work in the area is limited to alluvial gold mining in vicinity of Folly's Hill, no sign of earlier regional exploration was seen in course of collecting samples. Regional mapping carried out by Longman and Mathews 1960-1961.

Two basic geological units recognised in the area, the Pre cambrian dominated by phyllites, quartzite with minor carbonate horizons and narrow gabbroic intrusives. These unconformably overlain by Permo-Triassic sediments and Tertiary basalts in the Rapid River area.

Sampling

A total of 70 stream sediment samples collected at an overall density of 2-3 km²., all sieved to -20# excepting 4760-62 which were sieved to -80#. Sieves and collecting dishes used were plastic.

Sample sites marked with yellow flagging tape and permatags, sample No. 4701-4770. In sampling recent gravels were avoided where possible.

GEOLOGYPre Cambrian

Regional mapping by Longman & Mathews 1960-1961 divided the Pre Cambrian rocks into two units on the basis of deformation.

- Keith Beds - Older Pre Cambrian, these a schistose sequence outcropping to the east of the Folly Hill - Frog Hill quartzite ridge.

- Neasey Formation - Younger Pre Cambrian quartzites and argillites with a slaty cleavage, outcropping in the N.W. sector of the lease. These divisions shown on the 1:250,000 Burnie sheet, the schistose unit being part of the Arthur Lineament rocks.

From present field work little confirmation of a division on the basis of deformation was found however a change in sedimentation corresponds to the boundary between Keith Beds and Neasey Formation. Deformation is similar throughout the area, restricted to a well developed slaty cleavage, which strikes N-N.E. sub parallel to the bedding. Schists were only seen in the S.E. corner of the licence. Plan 1.

Sediments belonging to the Keith Beds outcropping to the S.E. of Folly Hill - Frog Hill are dominated by phyllites with minor quartzite interbeds, the former are sometimes pyritic and in places quartz veined. The regional strike for these and all other sediments is N.E.

Sediments of the Neasey Formation are more varied, the sequence from S.E. - N.W. is:-

Quartzites, these dip to the N.W. at 70-80°, quartzose grits with scattered subrounded quartzite pebbles occur near the base (or eastern side). These grits weather, are soft and friable which may suggest that they have a carbonate cement.

Siliceous carbonate and phyllites overly the quartzite, the former approx. 40 m. thick, outcrop is poor. These sediments form a valley between two quartzite ridges in which the Folly Hill workings are located.

These are overlain by a second quartzite ridge 200-300m. thick, this well exposed where it is cut by Chuckling Creek.

Phyllites similar to those to the S.E. of Folly Hill but in this area in the headwaters of Chuckling Creek sill like bodies < 5m thick of fine grained foliated and slightly altered basic rocks occur. These probably fine gabbro's, outcrops seen were non magnetic.

Sediments in the N.W. corner are similar but contain silty quartzite horizons and lack the basic intrusives. The relationship between slaty cleavage and bedding is well exposed in phyllites in vicinity of 4767-70 on the Arthur River.

In the Rapid River Pre Cambrian exposures were seen limited to 100m. immediately down stream of the Clearwater Creek junction approx. 3 km. N.W. of the pipe line road Plan 2. Here phyllites and siliceous carbonates outcrop similar to above. Bedding strikes E-W with vertical dips, foliation strikes N.E. dipping 60° to N.W.

Permo-Triassic

Permian sediments occur in the extreme S.E. corner in vicinity of Lyon's River (Burnie Sheet 1:250,000) and in the headwaters of the Rapid River where Permian-Triassic sediments are overlain by Tertiary basalts and unconformably overly Pre Cambrian sediments.

From topographic maps a sharp N.E. striking ridge can be seen 1-2 km. N.W. of the pipe line road near Rapid River. Plan 2. This is a thick unit of coarse quartzose, micaceous grits and sandstones, which are frequently cross bedded and dip 35-50° to S.E. These are shallow water sediments, probably Triassic, they appear to conformably overly Permian micaceous siltstones and sandstones which contain pelecypod and brachiopod fossils.

Tertiary

Tertiary basalts outcrop extensively along the Savage River pipeline road from Rapid River to approx 10 km. to the north. Basalt soils support myrtle dominated rain forest which contrasts sharply with the scrubby vegetation on the Pre Cambrian sediments in this area.

In Rapid River the basalt immediately overlies brown semiconsolidated carbonaceous mudstones.

In the northern sample area basalts have been eroded away, but outcrop to the N.E. of the lease along the road to Meunna. Inside the lease blocks of greybilly conglomerates and breccias were the only tertiary sediments seen.

The most extensive outcrop occurring in Cann Creek just prior to its junction with the Arthur River, here semiconsolidated, coarse angular, quartzite and basaltic blocks are set in a clayey matrix, these sediments are flat lying.

Remnants of hard quartzose grey billy outcrops occur 500 m. N.E. of Folly Hill workings, near 4716 and 4743, at the first site the conglomerates are associated with a siliceous iron formation (Tertiary). The grey billies are closely associated with the two quartzite ridges.

Recent

These quartz-quartzite gravels occur mainly in the Arthur-Lyons River valleys, remnants of gravel beds also occur just to the north of Bird Creek, the latter may be tertiary sub-basaltic.

In vicinity 4719, and 4731-33 near the Arthur River cobbles of pyritic quartz porphyry and granite occur in the gravels. This material may have come directly from the outcrop source via the Arthur River or indirectly being shed from Permian tillites into the river system.

Mineralization

Outcropping mineralization restricted to minor pyrite in dark grey siltstones and to a lesser extent in quartzites.

Quartz veining is common but not developed to any extent, occurring in shears and on cleavages parallel to the regional strike. Quartz chlorite vein fragments seen in tributary of Easton's Creek at 4738, and quartz hematite blocks occur in gravels at the mouth of Chuckling

Creek. The latter are angular, probably close to outcrop.

Mining restricted to alluvial gold workings, most extensive of these are situated on a low saddle between the two quartzite ridges. Trenches 2-3m. deep have been sunk in angular quartzose gravels which overly phyllites. Stream workings to the south of these - the Folly Hill workings are non existent, to the north stream gravels, have been worked up to 500 m. away. Dispersion of gold from these gravels which may be of tertiary or recent age is very limited.

An isolated alluvial-gold working is located downstream of 4715-16, stream gravels here have been recently worked.

A local bedrock source for the gold seems likely evidence for this

- auriferous gravels are quartzitic, angular to slightly rounded.

- all workings located adjacent to quartzite ridges.

- the Frog Hill quartzite ridge has been prospected by trenching.

References:

1960-61 M.J. Longman & W.L. Mathews.

The Geology of the Bluff Point and Trowutta Quadrangles.

Appendices.Rock Sample Descriptions and Locations

<u>Coord's</u>	<u>Stream Sample No.</u>	<u>Description</u>
5444,000N 365,250E	4716	Coarse sandstone, foliated, weathered, very soft. Base of alluvial gold workings.
5441,100N 367,100E	4734	Schist.
5442,800N 364,400E	4738	Grey phyllite, slightly pyritic and quartz chlorite veining.
5442,800N 364,150E	4740	Quartzite pyritic Quartz grit, foliated with scattered subrounded quartzose pebbles.
5442,600N 363,750E	4741	Greybilly conglomerate, quartzite pebbles in a white sand matrix. Tertiary basalt, fine grained black. Both occur in cobbles only.
5442,600N 363,500E	4743	Quartzite white
5442,800N 363,350E	4744-5	Carbonate siliceous, grey-pink fine grained, characteristic weathering surface.
5442,800N 363,350E	4745	Iron, manganese? crust on gravels.
5444,350N 363,200E	-	Phyllites dark grey-black with minor pyrite.
	-	Micro-gabbro? foliated, slightly altered, grey green weathering to red brown.
5445,250N 364,400E	4757	Phyllite black pyritic.
5444,200N 364,150E	-	Siliceous iron formation associated with tertiary greybilly.
5445,800N 362,550E	4765	Micro-gabbro weathered.

<u>Coord's</u>	<u>Stream Sample</u> <u>No.</u>	<u>Description</u>
5445,550N 365,050E	4774	Quartz hematite block occurring in gravels.
5443,800N 363,700E		Folly Hill pan concentrate from alluvial workings (2 40cm. dishes of gravel)
5430,900N 358,600E		Sandstone, quartzose grit and fine conglomerate. Triassic?
5431,100N 358,200E		Siltstone-sandstone micaceous with brachiopod fossil
5431,800N 357,800E		Carbonate siliceous grey-pink

EL 1/79

RAPID - LYONS RIVER N.W. TASMANIASTREAM GEOCHEMISTRY DISCUSSION

December 1980

by R. Poltock

PART 2.

Plan 3. -80 Stream Geochemistry

This report covers 75 -80# stream sediment samples No. 4701-4775, all with the exception of three (headwaters of Rapid River) were collected in a 30 km² area, the northern most block of EL 1/79 (total area 365 km²). Sediments were analyzed by Australian Laboratory Services P/L for Cu, Pb, Zn, Sn, W, Ag, Fe and Au, all results in p.p.m. except Fe% and Au p.p.b.

The sample area was centred on the Folly Hill gold prospects, however -80# sampling didn't locate the workings. Highest gold values of 100 p.p.b. associated with Sn up to 100 p.p.m. occurring adjacent to recent gravel beds of the Arthur River.

Anomalous Cu 220 p.p.m., Pb 0.14% and Zn 22% located in Cann Creek in the N.E. corner of the EL, this may be due to contamination and has been resampled.

W, Sn Ag gave practically no response, with the exception of tin as mentioned above and three scattered tungsten values of 20 and 30 p.p.m.

Back ground values for gold ranged from 3-15 p.p.b., four areas with slightly higher values occur.

1. Headwaters of Chuckling Creek samples 4748 & 9, values up to 35 p.p.b., here phyllites with minor quartz veins and micro gabbros outcrop.

2. Easton's Creek, scattered values of 25-40 p.p.b. the highest (4738) occurring in a stream with abundant quartz chlorite vein fragments and black pyritic phyllites outcropping near by.
3. S.E. corner near Arthur River.
 - (a) 45-100 p.p.b. gold associated with 10-90 p.p.m. Sn, samples 4732-33, these values have probably been shed from recent river gravels which contain cobbles of pyritic quartz porphyry and granite.
 - (b) 25 p.p.b. gold associated with 2.20% Fe sample 4734, here schists outcrop.
4. Rapid River sample No. 4760 25 p.p.b. Au this associated with 80 p.p.m. Zn, the stream sediments here are derived from quartzose micaceous grits and sandstones of probably Triassic age.

On the basis of lead background values the area could be split into two, the Folly Hill quartzite ridge being the dividing line.

1. N.W. background values 5-15 p.p.m., coinciding with the Neasey Formation?

2. S.E. background 25-35 p.p.m., coinciding with the older preCambrian Keith Beds. The only geological difference between the two areas is the presence of micro gabbros in the N.W.

Anomalous Pb 70 p.p.m. & .14% associated with Cu 220 p.p.m. and Zn.22% occurs in Cann Creek the locations were resampled and the sampling extended further upstream (No. 4776-4784). The only mineralization seen in this vicinity was magnetite grains in micro gabbro cobbles.

An interesting feature of the two different backgrounds for lead is that the highest corresponds to sample Nos. 4701-4735, these analysis may be suspect.

Copper-zinc background values for the area range from 2-15, 2-35 p.p.m. respectively. Other than the Cann Creek anomaly mentioned above maximum values for

Cu are 20-25 p.p.m. in headwaters of Chuckling Creek and for Zn 40-75 p.p.m. at 4763-64 just W. of EL boundary and 4755 just upstream of quartzite ridge in Chuckling Creek.

Summary

Failure of the sampling program to detect anomalous gold and to highlight known auriferous gravels may be due to the fact that -80# was an ineffective technique. But the results of this program does reflect the limited extent of prospecting and mining that has been carried on in this area. After traversing the streams in vicinity of the Folly Hill mine it is surprising how the auriferous gravels were located, workings on stream gravels leading up to the prospect were absent to the south in vicinity of 4746 & 47 and commencing 800m downstream in the northern drainage.

The area sampled may be representative of the Arthur lineament rocks, but is only a small proportion of the 365 km² EL 1/79, sampling in the Rapid River area was in sediments derived from Permian and younger sediments and Tertiary basalts.

** Noted added by R.R. Large

The anomalous sample (TS 4702) in the far north-east corner of E.L. was checked by further sampling (samples TS 4776 to 4784). The results are given in Appendix I where it is evident that no anomalous values were received. It is presumed that the original analysis of TS 4702 was in error, possibly due to contamination at the laboratory.

Samples KD 4701 - 4759 were subsequently analysed for arsenic as a tracer for further gold mineralization of the Folly Hill type. The results are listed in Appendix I. No anomalous values were received.

REFERENCES

Longman, M.J., and Matthews, W.L., 1962, Geology of the Bluff Point and Trowutta Quadrangles; Tech. Rep. Dept. Mines Tasm. 6, p48-54.

Holl. R., 1977, Early Palaeozoic ore deposit of the Sb-W-Hg formation in the Eastern Alps and their genetic interpretations, in; Kleimm, D.D., Schneider, H.J., eds, Time and stratabound ore deposits. Springer, Berlin, p169-198.

Maucher, A., (1976) The stratabound cinnabar-stibnite-scheelite deposits, in: Wolf, K.H. ed; Handbook of stratabound and stratiform ore deposits, Vol. 10., Elsevier, p477-503.

Neale, R.C., Pieman River Exploration Licence 2/73 - Tasmania Progress Report for the period Jan 31 - July 31 1973. Unpub. report by Esso Aust. Ltd.

APPENDIX I

Laboratory Report of drainage geochemical
analyses.

Cu, Pb, Zn, Ag, Fe, As by Atomic Absorption
Spectrometry .

Au by AAS-Carbon rod furnace.

Sn, W by XRF.

CONSULTING CHEMISTS & ANALYSTS

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 WOOLLOONGABBA Q 4102
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 TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: K006 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE
 Address: P.O. BOX 217, GORDON, N.S.W. Address: P.O. BOX 598, DLVONPORT, TAS. 7310
 Date Received 01/10/80
 Date Completed 29/10/80
 Order No.: KP 2443 Sample Type: SLUDGE No. of Samples: 36

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	Sn	W
	m	m	m	m	%	b	m	m
1	1	1	1	1	1	120-A	XRF 1A	XRF 1A
KD 4731	15	35	10	1	2.16	15	15	<10
KD 4732	5	25	25	<1	0.34	100	90	<10
KD 4733	10	30	30	<1	1.44	45	10	<10
KD 4734	25	35	25	1	2.20	25	<5	<10
KD 4735	10	30	30	<1	0.90	5	<5	<10
KD 4736	10	35	30	<1	1.08	5	5	<10

UNITS LEGEND --- m - Parts per million b - Parts per billion % - percent
 g - Grams o - Absorbance

Signature: *A. J. [unclear]*

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CONSULTING CHEMISTS & ANALYSTS

OFFICE & LABORATORY

44 Balaclava Street
 WOOLLOONGABBA Q 4102
 PH (07) 391 4799
 A/H 353 2830
 TELEX ALSEU 42344

LABORATORY REPORT

Batch No.: K211 Client: GEOPRO LIMITED Area Contact: DR. ROSS LARGE
 Date Received: 20/10/80 Address: P.O. BOX 217, GORDON, N.S.W. Address: P.O. BOX 598, BUNENPORT, TAS. 7310
 Date Completed: 21/11/80

Order No.: KP 2451 Sample Type: -S01 No. of Samples: 16

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	Sn	W
	m	m	m	m	m	b	m	m
	1	1	1	1	1	120-A	XRF 1A	XRF 1A
KD 4760	15	10	80	<1	0.24	% 25	5	<10
KD 4761	10	10	55	<1	1.48	% 3	<5	<10
KD 4762	10	15	55	1	2.20	% 3	<5	<10
KD 4763	10	10	50	1	1.24	% <3	5	<10
KD 4764	10	15	40	1	1.44	% <3	5	<10
KD 4765	10	10	20	<1	0.52	% <3	<5	20
KD 4766	10	10	15	1	1.00	% <3	<5	<10
KD 4767	10	10	20	<1	0.50	% <3	<5	<10
KD 4768	5	10	10	<1	0.48	% <3	<5	<10
KD 4769	10	10	15	<1	1.32	% 3	5	30
KD 4770	10	15	20	<1	1.16	% 15	<5	10
KD 4771	5	10	10	<1	0.96	% 10	<5	<10
KD 4772	10	10	10	<1	0.48	% 10	<5	<10
KD 4773	10	5	10	<1	0.52	% 5	<5	20
KD 4774	10	10	10	<1	0.76	% 10	<5	<10
KD 4775	5	5	5	<1	0.52	% 5	<5	<10

UNITS LEGEND --- m - Parts per million b - Parts per billion % - percent
 g - Grams a - Absorbance

Signature: *A. J. Finlayson*

RAP IT

943029 24.

CONSULTING CHEMISTS & ANALYSTS

OFFICE & LABORATORY

44 Balaclava Street
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 TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: L052 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
 Date Received 07/11/80 Address: P.O. BOX 217, Address: P.O. BOX 598,
 Date Completed 12/12/80 GORDON, N.S.W. DEVONPORT, TAS. 7310.
 Order No.: TLX. 6/11/80 Sample Type: PLPS X.K006,K088 No. of Samples: 59

SAMPLE NO.	As	m	5-B
(EX K006) KD4701	12		
(EX K006) KD4702	4		
(EX K006) KD4703	1		
(EX K006) KD4704	1		
(EX K006) KD4705	8		
(EX K006) KD4706	1		
(EX K006) KD4707	5		
(EX K006) KD4708	1		
(EX K006) KD4709	2		
(EX K006) KD4710	1		
(EX K006) KD4711	2		
(EX K006) KD4712	2		
(EX K006) KD4713	2		
(EX K006) KD4714	(1		
(EX K006) KD4715	1		
(EX K006) KD4716	2		
(EX K006) KD4717	5		
(EX K006) KD4718	1		
(EX K006) KD4719	1		
(EX K006) KD4720	1		
(EX K006) KD4721	2		
(EX K006) KD4722	1		
(EX K006) KD4723	1		
(EX K006) KD4724	1		
(EX K006) KD4725	1		
(EX K006) KD4726	1		
(EX K006) KD4727	2		
(EX K006) KD4728	4		
(EX K006) KD4729	4		
(EX K006) KD4730	2		

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
 g - Grams a - Absorbance

Signature: *A. J. Finlayson*

RAPID

943031 26.

CONSULTING CHEMISTS & ANALYSTS

OFFICE & LABORATORY
 44 Balaclava Street
 WOOLLOONGABBA Q 4102
 Ph (07) 391 6799
 A/H 353 2830
 TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: L052 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE
 Address: P.O. BOX 217, Address: P.O. BOX 598
 Date Received: 07/11/80 GORDON, DEVONPORT, TAS, 7310.
 Date Completed: 12/12/80 N.S.W.
 Order No.: TLX 6/11/80 Sample Type: PLPS X K006, K088 No. of Samples: 59

SAMPLE NO. As
 M
 S-B

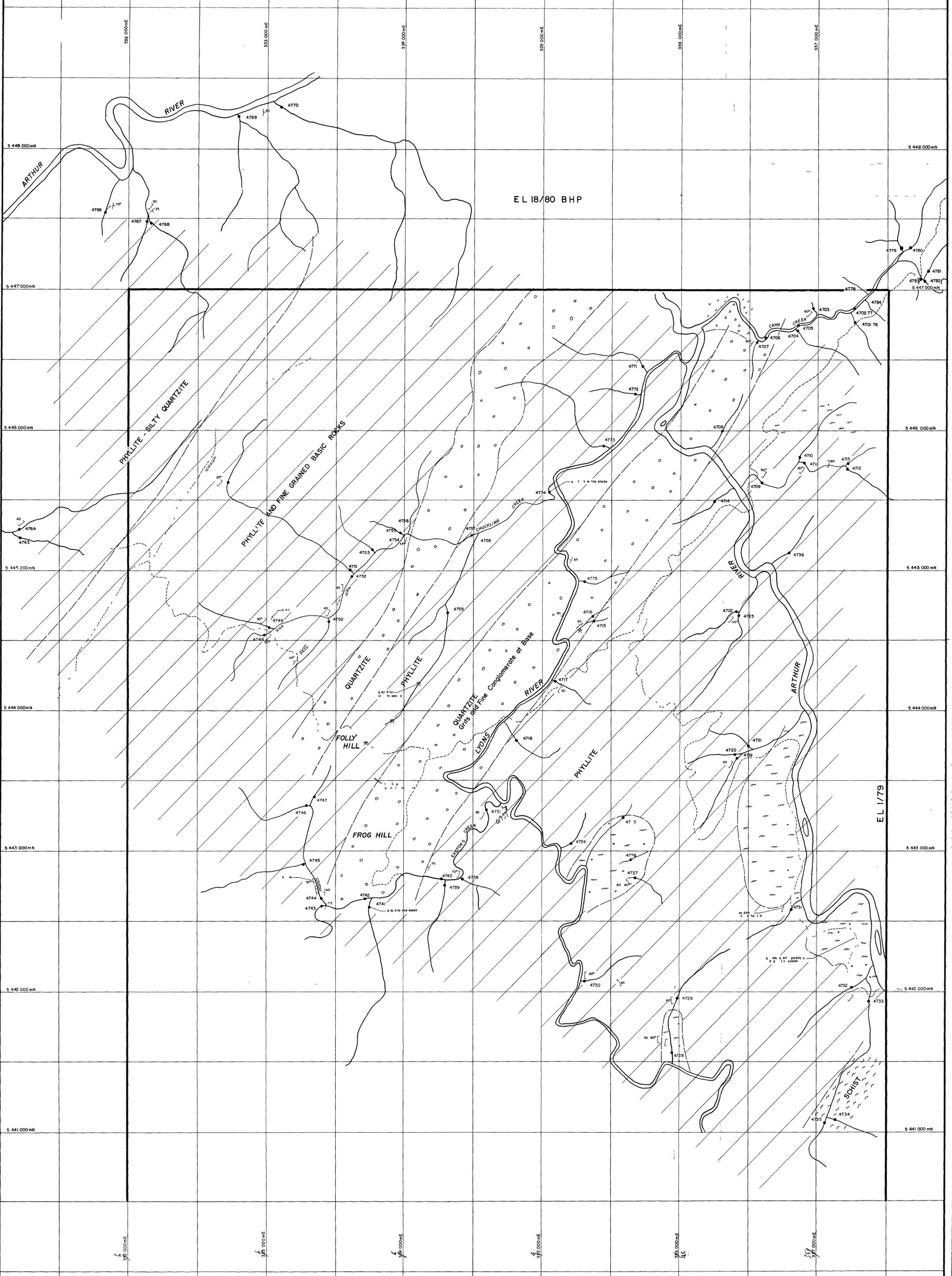
- (EX K006) KD4731 2
- (EX K006) KD4732 2
- (EX K006) KD4733 1
- (EX K006) KD4734 <1
- (EX K006) KD4735 2
- (EX K006) KD4736 1
- (EX K088) KD4737 5
- (EX K088) KD4738 9
- (EX K088) KD4739 2
- (EX K088) KD4740 <1
- (EX K088) KD4741 2
- (EX K088) KD4742 <1
- (EX K088) KD4743 2
- (EX K088) KD4744 4
- (EX K088) KD4745 <1
- (EX K088) KD4746 <1
- (EX K088) KD4747 2
- (EX K088) KD4748 8
- (EX K088) KD4749 2
- (EX K088) KD4750 2
- (EX K088) KD4751 2
- (EX K088) KD4752 2
- (EX K088) KD4753 1
- (EX K088) KD4754 8
- (EX K088) KD4755 1
- (EX K088) KD4756 2
- (EX K088) KD4757 <1
- (EX K088) KD4758 <1
- (EX K088) KD4759 <1

UNITS LEGEND ----- m - Parts per million ----- b - Parts per billion ----- % - percent
 g - Grams a - Absorbance

Signature: *R. J. Tunney*



943032 27.



LEGEND		PRECAMBRIAN		STRUCTURAL	
	Recent gravels		Phyllite		cleavage
	Basalt		Sandstone quartzite		bedding
	Gravels		Fine grained basic rocks gabbro silt like bodies		schistosity
			Grits and fine conglomerates		4WD access
					20m sediment location
					geological boundaries
					alluvial gold workings

366 000
546 000

DATE _____
 GEOLOGIST _____
 DRAWN R TOGNONI
 CHECKED _____

GEOPEKO
 A DIVISION OF PEKO WALLSEND OPERATIONS LTD 943033

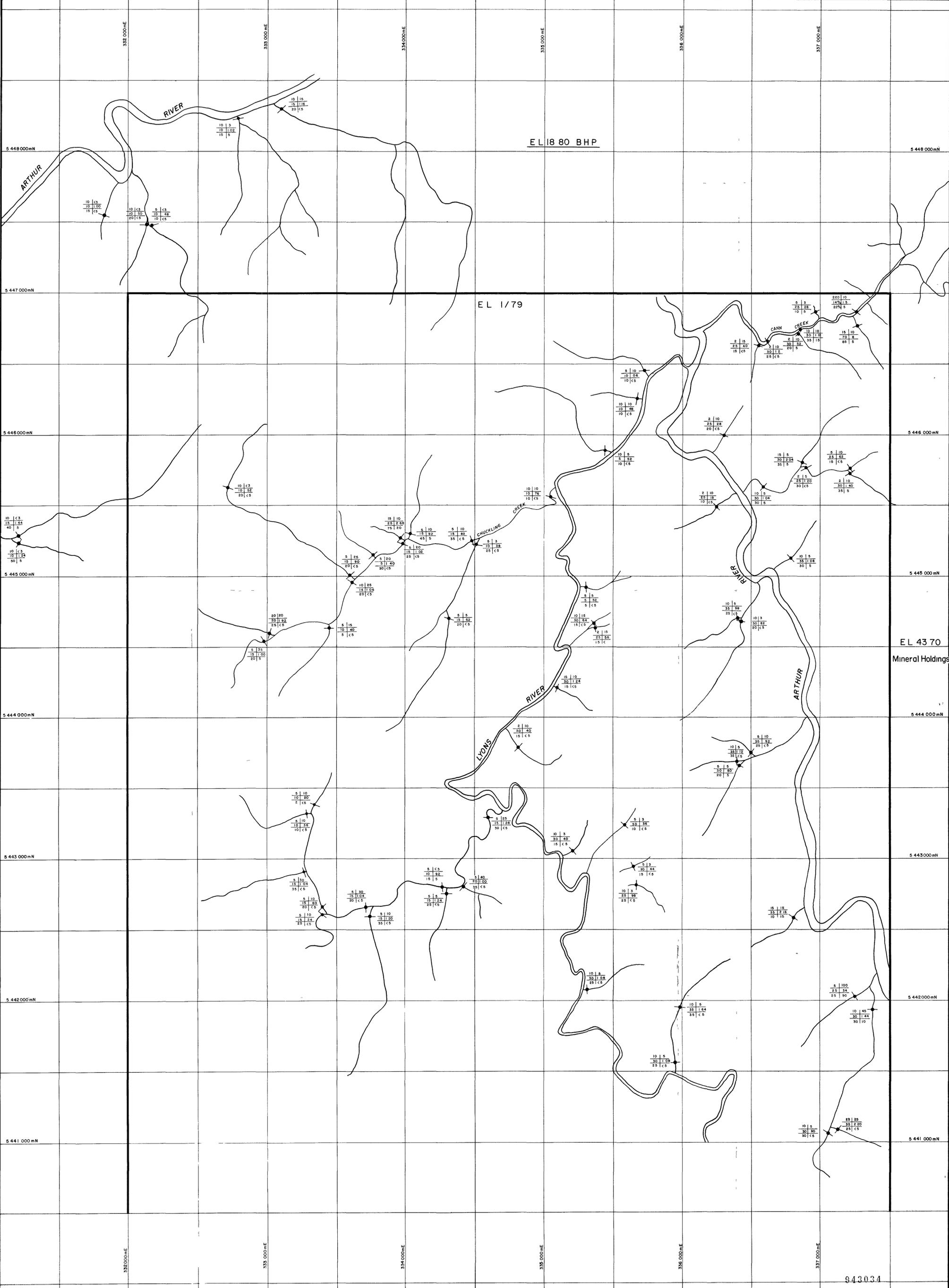
No PLAN 1

**EL 1/79 RAPID RIVER
 GEOLOGY-SAMPLING LOCATION
 LYONS-ARTHUR RIVER**

SCALE 1:10,000

5 cm

81-1584



EL 43 70
Mineral Holdings

943034

KEY

Cu	Au	ppm except	Fe %
Pb	Fe		Au ppb
Zn	Sn		

TN



DATE
GEO R Poltech
DRAWN M vds
CHECKED

GEOPEKO
A DIVISION OF PEKO WALLSEND OPERATIONS LTD

No PLAN 2

SCALE 1:10,000

EL 1/79 RAPID RIVER
-80# Stream Sediment Sampling
Cu, Pb, Zn, Au, Fe and Sn Results

81-1584

5 cm

81-1584