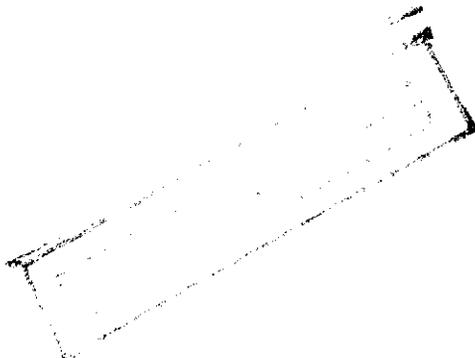


861001

PART PROJECT A-84-111

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TERMINATION REPORT

OCTOBER 1986 TO SEPTEMBER 1987

PRINCESS RIVER EL 32/83

TASMANIA

P.A. JONES

SEPTEMBER 1987

REPORT 541

PHIL JONES AND ASSOCIATES
FOR CYPRUS MINERALS AUSTRALIA COMPANY

MINES	
File Ref.	
23 OCT 1987	
Doc. Ref.	
Action Officer	Initials
COVER SHEET	
ON FILE -	
Resubmit to	Date

AMG REFERENCE POINTS ADDED

001

861002

DISTRIBUTION _____

- Mines Department
- Sydney
- Field
- Spare

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003

861004

FIGURE	1	LOCALITY DIAGRAM	
ENCLOSURES	1	GEOLOGY PRINCESS RIVER BASIN	1:10,000
	2	STREAM SEDIMENT LOCATIONS AND RESULTS	1:10,000
	3	SOIL GEOCHEMISTRY - LEAD	1:10,000
	4	SOIL GEOCHEMISTRY - ZINC	1:10,000
	5	SOIL GEOCHEMISTRY - MANGANESE/ BARIUM	1:10,000
APPENDIX	1	STATISTICAL CORRELATION OF EZ SOIL SAMPLE VALUES	
	2	SAMPLE DATA SHEETS POLTOCK SAMPLING	

004

SUMMARY AND CONCLUSIONS

Exploration Licence 32/83 was granted to Amoco Minerals Australia Company (now Cyprus Minerals) on 1 October 1987. The 249 square kilometre licence was later reduced to 100 square kilometres covering the Siluro-Devonian Princess River Basin.

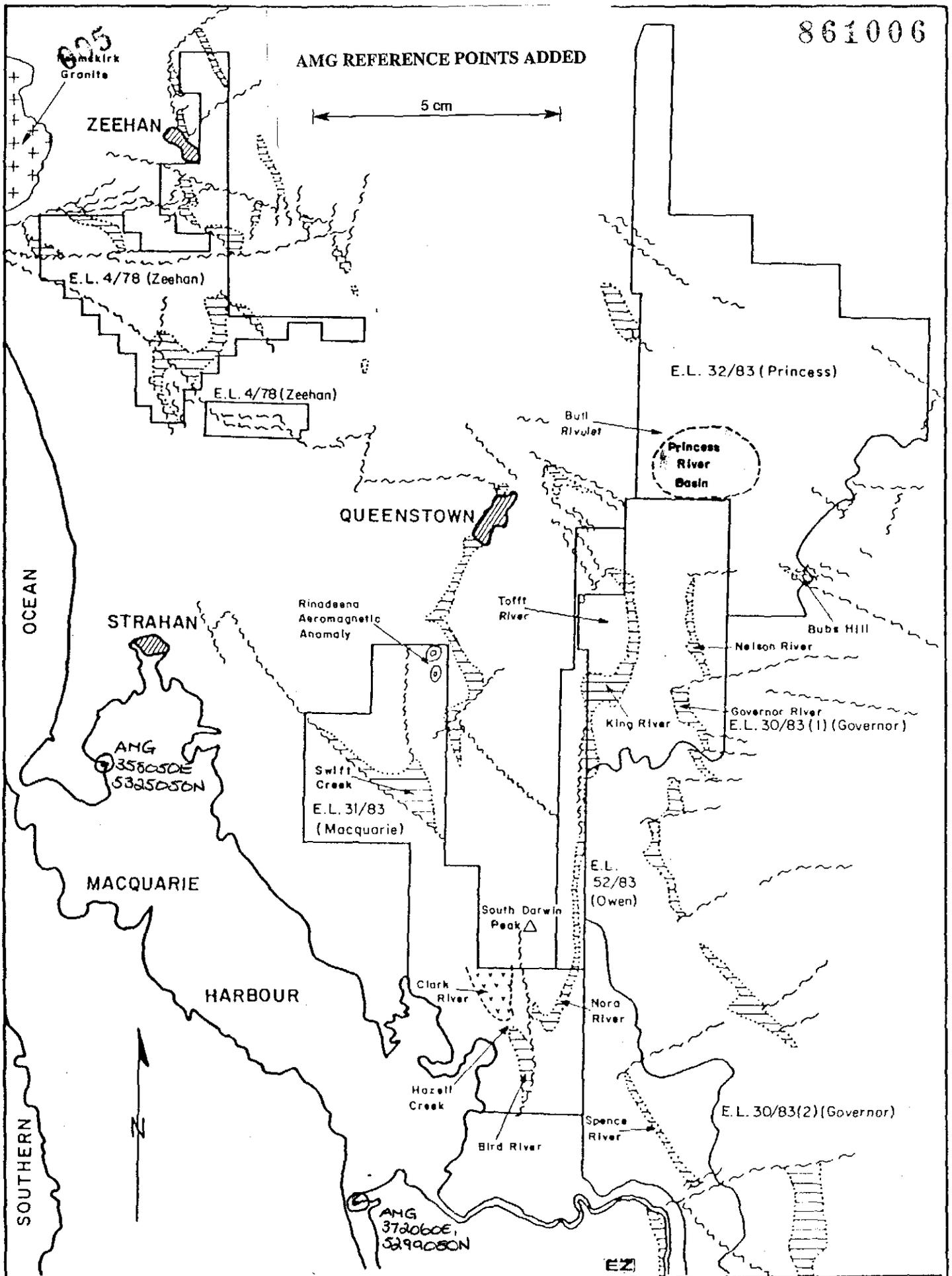
The tenement lies approximately 5 kilometres north of the Lyell Highway and 14 kilometres east of Queenstown and is well situated with respect to potential mine infrastructure.

The target of exploration is Selwyn Basin style lead-zinc-barium massive sulphide deposits.

The tenement covers Siluro-Devonian siliceous sediments and minor carbonate rich sediments overlain to the north by flat lying Permo-Carboniferous sediments and resistant Jurassic dolerite. The predominant sediment sequences are cut by a number of large north west trending fracture zones which may have acted as conduits for hydrothermal mineralised solutions.

AMG REFERENCE POINTS ADDED

5 cm



PROJECT GORDON LIMESTONE J.V.		
LOCATIONS		
Compiled S.T.	Date	PLATE NO
Drawn R.J.R.	Scale	Fig. 1

005

Work during the current period included line cutting, bedrock whacker, rock chip and soil sampling surveys and reconnaissance geological mapping. Surveys were designed to fill in gaps left after exploration surveys conducted by EZ were terminated. Anomalous stream geochemistry defined by EZ and later wide-spaced soil traverses failed to locate a source for this anomalism.

Further sampling by Cyprus also failed to produce a source for the anomalism, however, it is apparent that there is a concentration effect of basemetal values in the streams in comparison to that in bedrock/soil conditions. It is important to note that barium has not undergone the same concentration effect as that of the basemetals.

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RECOMMENDATIONS

The tenement is considered to have been effectively explored for Selwyn Basin type basemetal massive sulphides and as no significant results were obtained it is recommended the licence be relinquished.

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EXPLORATION TARGETS

The tenement has geologic similarities to the Selwyn Basin area of Canada and the target is for stratabound shale hosted Ba-Pb-Zn deposits.

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DESCRIPTION OF THE PROPERTY AND OWNERSHIP _____

Cyprus Minerals (formerly Amoco Minerals) Australia Company applied for a 249 square kilometre licence EL 32/83, embracing potential host rocks for carbonate and shale hosted lead-zinc mineralisation.

The tenement was granted on 1 October 1983 and became subject to a joint venture with EZ. In 1985, EZ declined to continue with the joint venture after conducting two summer programs at both Bubbs Hill and the Princess River prospects. Subsequently, Cyprus reduced the area of the licence to 100 km², centred on the prospective Princess River drainage anomaly inconclusively defined by EZ. The tenement is bounded by the following co-ordinates: commencing at the north-west angle of the area whose grid co-ordinates are 393 000 m E 5 352 000 m N thence grid east to 402 000 m E grid south to a point on the boundary of Franklin Lower Gordon Wild Rivers National Park by that National Park boundary in a general south westerly direction to

010

its intersection with grid 5 340 000 m N grid west to 394 000 m E grid north to 5 341 000 m N again grid west to 393 000 m E aforesaid thence again grid north to the point of commencement.

No pre-existing mining leases occur within the tenement.

011

LOCATION AND ACCESS

The Princess River area occupies approximately 35 km² of the upper reaches of the Princess River and Bull Rivulet drainages. Part of the drainage basin of the South Eldon River is also included. The Princess River basin lies 5 km north of the Lyell Highway and 14 km east of Queenstown. Access to the area is by helicopter. A walking track provides emergency foot access to the area. No difficulties would be anticipated with respect to power, water and transport should a mine be developed. The area has an annual rainfall of 250 cm.

012

HISTORY AND PREVIOUS EXPLORATION _____

See EZ Report T209 - Princess River Area for full details.

013

REGIONAL GEOLOGY AND MINERALISATION

The tenement covers the bulk of the Siluro-Devonian Princess River Basin (Enclosure 1) and is comprised of cleaved shales, siltstones, sandstones and minor thin marls and marly limestone. To the north of the basin the sequence is overlain by flat lying Permo-Carboniferous sediments and resistant Jurassic dolerites.

The shales and siltstones at the northern end of the Basin appear less cleaved, are more silicious (cherty) and break with a conchoidal fracture.

The predominant sediment sequences are cut by a number of large north-west trending fracture zones which may have acted as conduits for hydrothermal mineralised solutions.

Pyritic mineralisation was observed as thin units associated with siltstone beds in the northern portion of the tenement. No basemetal mineralisation is recorded.

01A

Dolerite and quartzite boulders observed in Bull Rivulet and mapped by EZ on middle hill are possibly reworked fluvio-glacial deposits derived from morainal material located further to the north.

Recent fluvial and Pleistocene glacial erosion have produced the present topography.

015

WORK CONDUCTED BY CYPRUS

During the period an attempt was made to identify the source of highly anomalous lead-zinc-barium stream sediment values (Enclosure 2) obtained by EZ, both from the Princess River and Bull Rivulet. Work by EZ failed to define the primary source of the Pb-Zn-Ba and suggested the anomalous basemetal values were of a secondary nature fixed downslope by a manganiferous soil profile. A correlation study by Cyprus (Appendix 1) of soil results from EZ's program showed very strong correlation between Pb-Mn, Zn-Mn and Ba-Mn, indicating a common source for all the elements. However, correlation values for the two soil traverses were markedly different. In light of this, further infill and extended sampling surveys were planned to identify the source of basemetal anomalism.

Nick Poltock was contracted to recut lines 44000 N, 45000 N and 46000 N of the EZ grid and sample these using the whacker percussive and Marlow flow through sampling techniques. Access to the area was gained via helicopter to a campsite near the eastern end of line 45000 N.

016

The program proved to be very slow due to poor weather conditions and exceptionally steep terrain towards line 46000 N. Allied to this was the slow going in re-establishing former EZ grid lines which turned out to be relatively non-existent and needed to be totally recut.

Approximately six kilometres of line cutting was completed, four of which were grid lines, the remaining two being access tracks to and from the grid lines. A total of 89 whacker, rock chip and soil samples were taken at 50 metre intervals along the following lines: 46000 N, 45000 N and 44000 N (Appendix 2, Enclosures 3, 4 and 5). The samples were despatched to Analabs in Burnie where they were dried, prepared and assayed by AAS for Cu Pb Zn and Ag. Barium was assayed for using XRF.

Overall the geochemical results were disappointingly low with maximum lead and zinc values to 60 and 350 ppm respectively. Barium ranged up to 0.36% and showed some affinity with elevated manganese values obtained by EZ. An elevated background for barium was delineated on lines 46000 N and 45000 N, returning values in the order of 1000 ppm to 2500 ppm. However, lower values in the range 500 to 2000 ppm were returned on line 44000 N. Weakly elevated zinc values, ranging between 50 and 200 ppm, were also delineated on the northern two lines. However, lead showed no anomalism on any of the lines with values ranging from 10 to 50 ppm.

Basemetal values obtained from Cyprus' soil and bedrock sampling programs are significantly lower than those obtained from the EZ stream sediment survey. The basemetal values appear to have been concentrated by the drainages, however, barium appears not to have undergone any equivalent concentration. Significantly, these concentration effects appear to be independent of the presence of manganese.

Sampling programs to date have shown that very weakly anomalous zinc and barium soil/bedrock results translate into moderate to

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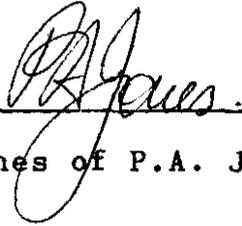
strongly anomalous lead/zinc/barium stream sediment values. EZ stated this concentration effect may be due to manganese scavenging in a suitable chemical environment. However, high lead stream values are also recorded draining areas of very low manganese concentrations. No satisfactory explanation for the basemetal concentration in stream sediments has been arrived at.

018

EXPLORATION POTENTIAL

Cyprus considers the wide spaced soil/bedrock sampling surveys conducted to date have adequately assessed the basinal sediments for Selwyn Basin type basemetal massive sulphide deposits. Sampling to date has shown weakly elevated zinc and barium soil/bedrock values which appear to be concentrated and upgraded to strongly anomalous stream sediment values.

Signed _____


P. Jones of P.A. Jones and Associates

019

CYPRUS MINERALS AUSTRALIA COMPANY

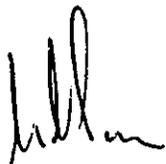
EXPENDITURE FOR THE PERIOD 12 MONTHS ENDED 30TH SEPTEMBER 1987

EXPLORATION LICENCE PRINCESS RIVER

SALARIES & WAGES	-
BENEFITS	-
DRAFTING	-
COOKERY	40.25
FIELD SUPPLIES - GEN.	2.76
AIRCRAFT CHARTER	4,662.00
TRAVEL	0.18
COMMUNICATIONS	1.67
CONTRACT GEOLOGICAL	1,517.51
OTHER CONTRACTORS	7,961.68
ASSAYS	758.38
PROPERTY PAYMENTS	-
EQUIPMENT OPERATION & MAINTENANCE	124.61

	15,069.04
OVERHEAD @ 10%	1,506.90

	16,575.94
	=====



M. BASS

ACCOUNTANT

020

861021

APPENDIX 1

Statistical Correlation of Princess River Geochemistry

021

Phil Jones and Associates Pty. Ltd.

861022

Geotechnical Personnel

MEMO TO BRYCE ROXBURGH

CYPRUS MINERALS

Re: Statistical Correlation of Princess River
Geochemistry.

EL'S 30/83 and 32/83

EZ/Amoco Joint Venture.

P. Jones

30th September, 1985.

9A WAIMEA AVENUE, SANDY BAY, TASMANIA, 7005.

PHONE: (002) 28 2256

22
Dear Byrce,

Re; Statistical Correlation of
Princess River Geochemistry.

Phil Jones and Associates was requested by Cyprus Minerals Australia Company to carry out a statistical analysis on geochemical data - both soil and stream sediment, from the Princess River Prospect, Western Tasmania. Fig 1.

To aid this study I approached the chief geochemist of the Mines Department - Bill Baker, who assisted the work by supplying computer facilities and a statistical program (fig 2.) as well as aiding in discussions of the results.

Two soil traverses (45000N and 43500N) as well as two stream, traverses were chosen in an area of highly anomalous geochemistry defined previously by Picklands Mather 1967-68 and EZI (Amoco - EZ Joint Venture) 1983-85. High tenor zinc, lead, barium and manganese values are found draining both the Princess River and Bull Rivulet, (Enclosure 1) however, no readily observable source for the anomalism was located. Soil traverses were conducted between the drainages in an attempt to define the basemetal source. (Enclosure 1) Results from this, coupled with regional mapping surveys outlined anomalous lead and zinc values coincident with a manganese capped low hill-Middle Hill (line 45000N)

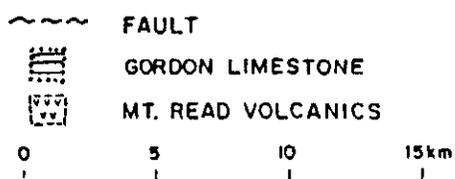
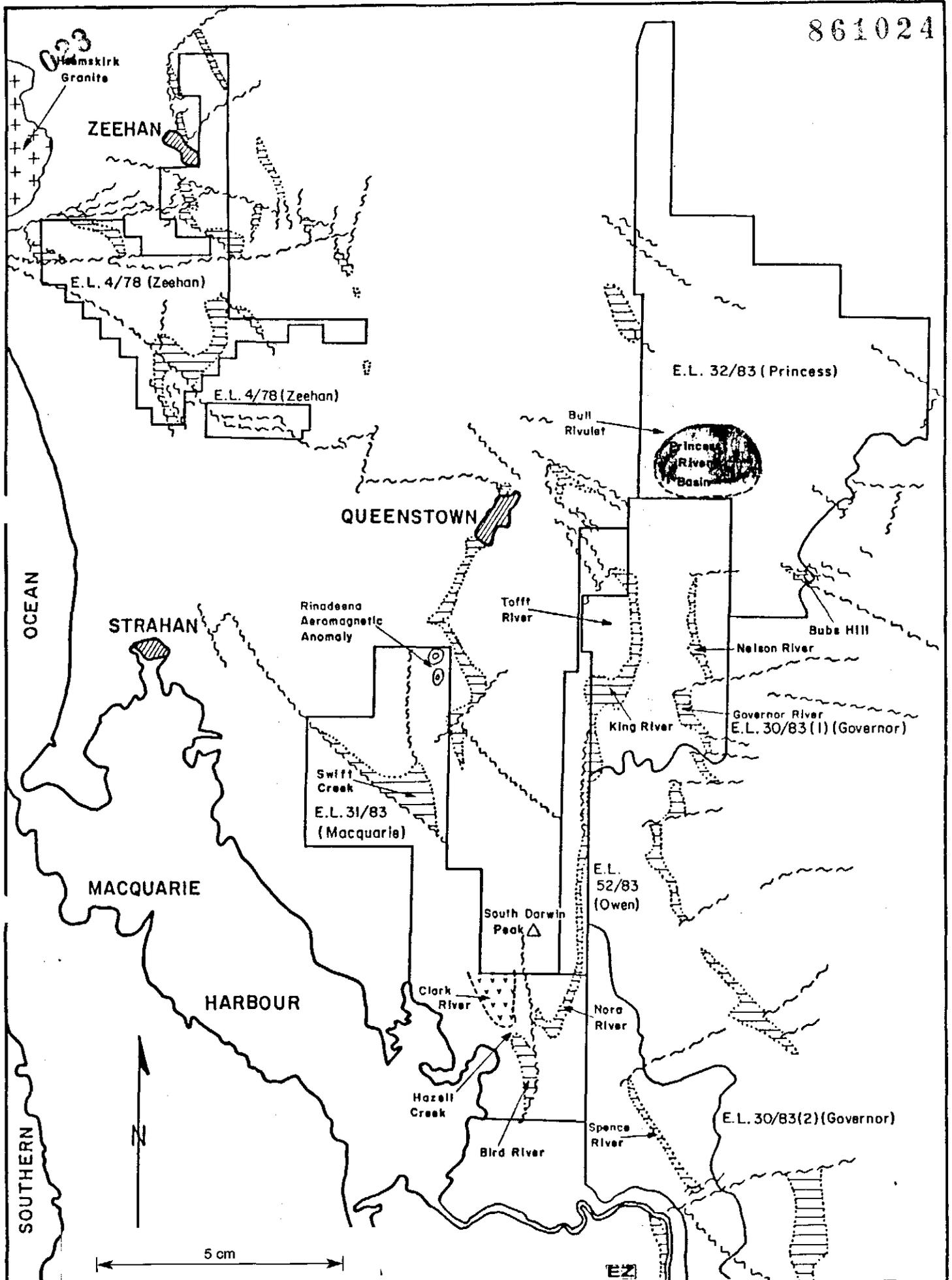
EZ suggested the anomalous basemetal values were of a secondary nature fixed downslope by a manganiferous soil profile. The primary source of the lead and zinc was not ascertained and EZ likened the anomaly to the White Spur Area (South Hercules) where there is a known hydromorphic basemetal anomaly with associated manganese geochemistry.

EZ felt sufficient work had been conducted to adequately explain the anomalous results obtained and later confirmed their intention to cease all exploration on the Princess River Licences.

Cyprus, formerly Amoco Minerals, felt the area remained unsatisfactorily tested and requested Phil Jones and Associates to conduct further massaging of data acquired by EZ to possibly arrive at a satisfactory answer to the geochemical dilemma.

Results from the correlation study on the two streams show very strong correlation between Pb - Mn, Zn-Mn, and Ba-Mn. This would seem to indicate a common source for both the manganese and basemetal values.

However, correlation values for the two soil traverses were markedly different, Table 1. Line 43500N showed a negative correlation with respect to Pb-Mn and an extremely low value for Zn-Mn. This is consistent with the geology as there is little manganese development observed along the traverse. Line 45000N on the other hand showed a moderate correlation for Pb-Mn and a very strong correlation between Zn-Mn.



PROJECT GORDON LIMESTONE J.V.	
LOCATIONS	
Compiled S.T.	Date
PLAN NO Fig 1	

025

Table 1.

Location:	Correlation Coefficient Pb-Mn	Correlation Coefficient Zn-Mn	Correlation Coefficient Ba-Mn
LN 4500N	0.37	0.85	N/Assayed
LN 43500N	0.05	0.09	N/Assayed
Princess River (s/seds)	0.69	0.94	0.91
Bull Rivulet (s/seds)	0.92	0.54	0.76

This would tend to suggest that the basemetal and manganese values indeed come from a primary source, possibly beneath the manganiferous capping to Middle Hill - pers comm. - Bill Baker. Alternatively the anomalous area may well be a relict, restricted drainage profile of possible Tertiary or Pleistocene age. In this case the manganese would have acted as a sponge to trap basemetal ions in a favourable restricted environment (muskeg of swamp). Middle Hill, as described by Mathison, is a low, rounded manganiferous capped ridge drained on all sides except the north where it gently rises to the headwaters of the Bull and Princess Rivers'. However, this may not have always been the case as Mathison states in the July 1985 Annual Report, that possible glacial derived material was found straddling the crest of Middle Hill. A similar type of anomaly was investigated by Bill Baker for the Mines Department, however, he suggests that a field inspection to ascertain both the geology and geography of Middle Hill should be conducted. In addition he suggested that an attempt should be made to trench through the manganiferous capping to ascertain a possible primary source for the basemetals in an area Mathison states; " siltstones are less cleaved, appear siliceous or cherty and break with a conchoidal fracture. Thin pyritic siltstones beds were sampled in this area". These descriptions are analagous to exhalitive type conditions found in most sedimentary type basemetal deposits.

To adequately test the entire Princess River anomaly I would recommend that Bill Bakers' ideas be acted on; that is, trenching and mapping surveys should be conducted over Middle Hill and that line 46000N previously cut and mapped but not sampled by EZ should be whacker sampled to assess the bedrock geochemistry. Mathison has delineated further areas of Manganiferous 'Wad' in this area as well as thin beds of massive pyrite.

It should also be noted that anomalous surface geochemistry may well reflect a much deeper source, (possibly a sygentic Pb/Zn/Ba + Mn deposit lying within Gordon Limestone) being tapped by major structures (faults!) which act as leakage paths for basemetal carrying fluids. A deposit of this type - "Irish style," generally has associated high manganese values as well as barium ie silvermines. A mineralized body may well have from 1000 - 1500 metres of Siluro - Devonian sediments overlying it, making recovery uneconomic but giving rise to highly interesting geochemistry.

P. Jones

027

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APPENDIX 2

Assay data sheets

028

sample data sheet

Cyprus Minerals

Despatch No 2708
Requested by P. JONESOrder No 18780
Date

Project Heemskirk Prospect Princess River Type Lead-zinc

Sample Number	Coordinates, depth or location	Interval Geology.	Cu	Pb	Zn	Ag	Ba		
1 224135	4400N - 4000E	gr/or Shale.	40	20	25	<0.5	1300		
2 224136	4400N - 4050E	bk/or Shale	10	10	35	<0.5	1900		
3 224137	4400N - 4100E	bk, pyritic shale	85	20	45	<0.5	1620		
4 224138	4400N - 4150E	bk Shale	45	25	30	<0.5	1930		
5 224139	4400N - 4200E	or/Br Clay	10	25	25	<0.5	1110		
6 224140	4400N - 4250E	Br/or/Gr Clay	10	25	30	<0.5	635		
7 224141	4400N - 4300E	or/Gr/Gr Shale.	5	15	15	<0.5	587		
8 224142	4400N - 4350E	Ferrug. bk Shale	55	35	45	<0.5	1340		
9 224143	4400N - 4400E	Gr/or Clay/Shale	5	25	25	<0.5	773		
10 224144	4400N - 4450E	Ferrug. Gr Siltstone	30	30	40	<0.5	1230		
11 224145	4400N - 4500E	Bk shale/ Siltstone	10	20	115	<0.5	1250		
12 224146	4400N - 4550E	Bk Siltstone	30	15	65	<0.5	1330		
13 224147	4400N - 4600E	Bk Siltstone	10	25	30	<0.5	1400		
14 224148	4400N - 4650E	Ye/Gr Clay	10	15	20	<0.5	600		
15 224149	4400N - 4700E	Gr Shale	5	15	20	<0.5	1180		
16 224150	4400N - 4750E	or/Gr Clay	10	25	15	<0.5	848		
17 224151	4400N - 4800E	Gr Clay	<5	<5	10	<0.5	443		
18 224152	4400N - 4850E	or/Gr Clay	15	25	45	<0.5	972		
19 224153	4400N - 4900E	or/Gr Clay/Shale	10	40	35	<0.5	1490		
20 224154	4400N - 4950E	Br Shale	40	20	75	<0.5	2010		
21 224155	4400N - 5000E	or clay/ Siltstone	40	30	95	<0.5	2880		
22 224156	4400N - 5050E	Gr/or/Ye Silt/Shale	40	25	95	<0.5	1490		
23 224157	4400N - 5100E	or clay/ Shale	35	25	105	<0.5	1450		
24 224158	4400N - 5140E	or gravelly Clay	30	15	80	<0.5	816		
25 224159	4500N - 5200E	Manganif. Shale	55	20	105	<0.5	2310		

029

861029

Page 2

sample data sheet

Cyprus Minerals

Despatch No 2708
Requested by P. JONESOrder No 18780
Date

Project Heemskirk Prospect Princess River Type Lead - Zinc

Sample Number	Coordinates, depth or location	Interval Geology	Cu	Pb	Zn	Ag	Ba		
1 224160	4500N - 5250E	Or/Ye Silt/Shale	80	20	150	<0.5	2650		
2 224161	4500N - 5300E	Gr Shale	10	30	70	<0.5	1970		
3 224162	4500N - 5355E	Gr Shale Siltstone	40	10	125	<0.5	1840		
4 224163	4500N - 5400E	Gr Shale	40	40	95	<0.5	2110		
5 224164	4500N - 5455E	Gr Shale	30	20	90	<0.5	2110		
6 224165	4500N - 5500E	Gr - Bk Shaley Shale	40	55	85	<0.5	1640		
7 224166	4500N - 5700E	Manganif. Shale	60	35	115	<0.5	2010		
8 224167	4500N - 5750E	Gr/Ye Shale	45	30	90	<0.5	1800		
9 224168	4600N - 3900E	Ferrug. Gr Shale	45	45	250	<0.5	2740		
10 224169	4600N - 3950E	Gr/Bk/Br Carbonac. Shale?	60	60	105	<0.5	3130		
11 224170	4600N - 4000E	Br Siltstone	30	50	35	<0.5	955		
12 224171	4600N - 4050E	Quartzite	5	<5	<5	<0.5	39		
13 224172	4600N - 4100E	Gr Shale	15	35	110	<0.5	205		
14 224173	4600N - 4150E	Gr Shale	80	30	185	<0.5	1920		
15 224174	4600N - 4200E	Gr/Br Pebbly Clay	55	30	80	<0.5	1830		
16 224175	4600N - 4250E	Gr Ferrug. Siltstone	50	25	90	<0.5	1280		
17 224176	4600N - 4300E	Gr Shale	65	40	90	<0.5	2230		
18 224177	4600N - 4350E	Gr Siltstone	70	25	140	<0.5	2150		
19 224178	4600N - 4400E	Gr Ferrug. Siltstone	25	35	65	<0.5	1360		
20 224179	4600N - 4450E	Gr Ferrug Siltstone	25	30	135	<0.5	750		
21 224180	4600N - 4500E	Gr Shaley Siltstone	65	30	125	<0.5	1990		
22 224181	4600N - 4550E	Gr/Ye/Or Siltstone	10	20	70	<0.5	2490		
23 224182	4600N - 4605E	Gr/Ye/Or Siltstone	30	35	50	<0.5	2110		
24 224183	4600N - 4650E	Gr/Br Carbonac. Siltstone	30	20	180	<0.5	2380		
25 224184	4600N - 4700E	Gr/Ye/Or Siltstone	35	25	100	<0.5	2080		

020

sample data sheet

Cyprus Minerals

Despatch No 2708
Requested by P. JONES

Order No 18780
Date

Project Heemskirk **Prospect** Princess River **Type** Lead - Zinc

Sample Number	Coordinates, depth or location	Interval Geology.	Cu	Pb	Zn	Ag	Ba		
1 224185	4600N - 4750E	Gr/Br Siltstone	20	25	55	<0.5	2440		
2 224186	4600N - 4800E	Gr/Bk Shale	15	20	30	0.5	2530		
3 224187	4600N - 4850E	Gr/Bk/Or Siltstone	70	25	175	0.5	1690		
4 224188	4600N - 4870E	Gr/Bk Shale	10	25	30	<0.5	3020		
5 224189	4600N - 4900E	Br/Gr Siltstone	20	30	50	<0.5	2200		
6 224190	4600N - 4950E	Bk Mangani. Ferrug. Shale Shale brecc.	45	15	85	0.5	2220		
7 224191	4600N - 5000E	Gr/Bk Shale	20	15	55	<0.5	2280		
8 224192	4600N - 5010 E	Bk Shale	25	30	35	<0.5	1280		
9 224193	4600N - 5050 E	Gr shale/ Siltstone	40	25	75	0.5	2070		
10 224194	4600N - 5090E	Gr/Bk Mangani. Shale	30	25	105	<0.5	1150		
11 224195	4600N - 5150 E	Br Ferrug Clay.	70	15	130	<0.5	1680		
12 224196	4600N - 5170 E	Br/Or Muddy Siltstone	25	15	165	<0.5	1220		
13 224197	4600N - 5210 E	Or/Br/Gr Siltstone	10	15	125	<0.5	1920		
14 224198	4600N - 5250E	Or/Gr Silty Clay	50	25	185	<0.5	1730		
15 224199	4600N - 5280E	Br/Gr Shaley Silt'n	20	20	110	<0.5	1890		
16 224200	4600N - 5300E	Or/Ye Clayey Shale	30	30	120	0.5	1290		
17 224201	4600N - 5350E	Or/Br/Ye Gritty Clay	20	10	120	<0.5	1410		
18 224202	4600N - 5375 E	Gr/Br micaceous silty shale	25	20	105	0.5	1870		
19 224203	4600N - 5400E	Br gritty Silts	40	25	190	0.5	1830		
20 224204	4600N - 5450 E	Br/Gr Silty clay/ Siltstone	30	25	115	<0.5	1760		
21 224205	4600N - 5510 E	Gr Siltstone	<5	<5	50	<0.5	2230		
22 224206	4600N - 5545 E	Bk Shale	20	30	65	<0.5	1780		
23 224207	4600N - 5600 E	Bk Carbonac shale	40	25	215	<0.5	1960		
24 224208	4600N - 5650E	Gr/Or Silty Shale	25	20	170	<0.5	3615		
25 224209	4600N - 5700E	Bk Shale	<5	20	70	<0.5	1870		

sample data sheet

Cyprus Minerals

 Despatch No 2708
 Requested by P. JONES

 Order No 18780
 Date

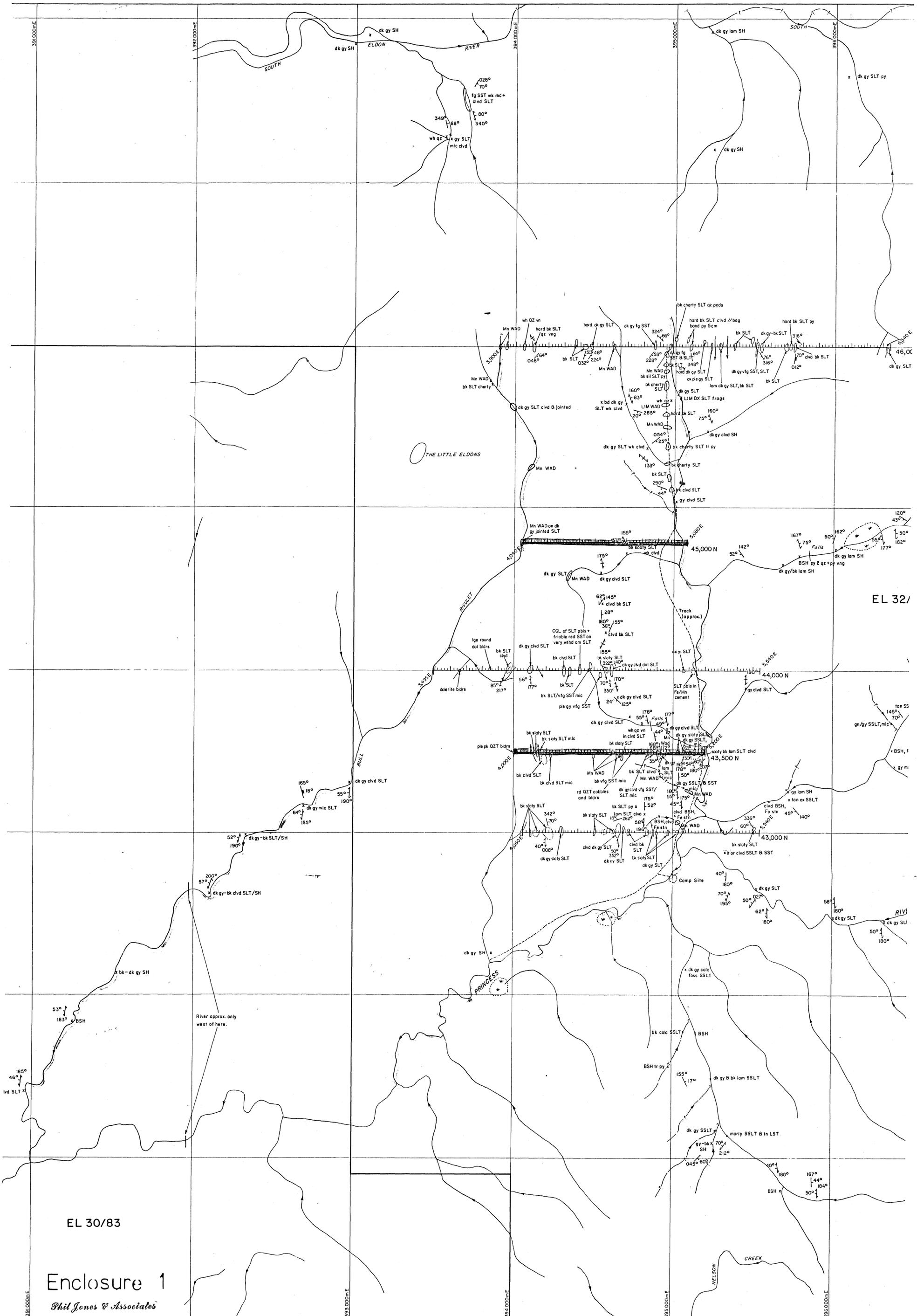
Project Heemskirk Prospect Princess River Type Lead - zinc

Sample Number	Coordinates, depth or location	Interval Geology	Cu	Pb	Zn	Ag	Ba		
1 224210	4600 N - 5750E	Gr/Bk Shale	15	30	65	<0.5	1130		
2 224211	4600 N - 5800E	Or/Yel/Br Clayey Silts	50	35	100	<0.5	1490		
3 224212	4600N - 5850E	Br/Ye Siltstone	30	5	105	<0.5	1610		
4 224213	4600N - 5905E	Br Silty Shale/Siltstn.	35	25	105	<0.5	1760		
5 224214	4600N - 5950E	Or/Yel/Br Shale	30	20	90	<0.5	1660		
6 224215	4600N - 6000E	Gr/Or Silty Shale	45	20	135	<0.5	1420		
7 224216	4600N - 6050E	Gr/Wh/Ye Shale	10	35	35	<0.5	1930		
8 224217	4600N - 6100E	Br/Gr Silty Shale	35	20	350	<0.5	649		
9 224218	4600N - 6160E	Bk Shale	35	30	85	<0.5	1090		
10 224219	4600N - 6200E	Gr/Gr/Br Shale	30	15	125	<0.5	1680		
11 224220	4600N - 6245E	Br Silty Shale	35	25	90	<0.5	1630		
12 224221	4600N - 6265E	Gr/Or/Br Silty Shale	35	20	65	<0.5	1720		
13 224222	4600N - 6285E	Br Silty Shale	25	20	95	<0.5	1590		
14 224223	4600N - 6340E	Gr/Br Silty Shale	45	25	70	<0.5	1820		
15									
16									
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24									
25									

032

861032

ENCLOSURES: 1, 2, 3, 4 and 5



EL 32/

EL 30/83

Enclosure 1
Phil Jones & Associates

5 cm

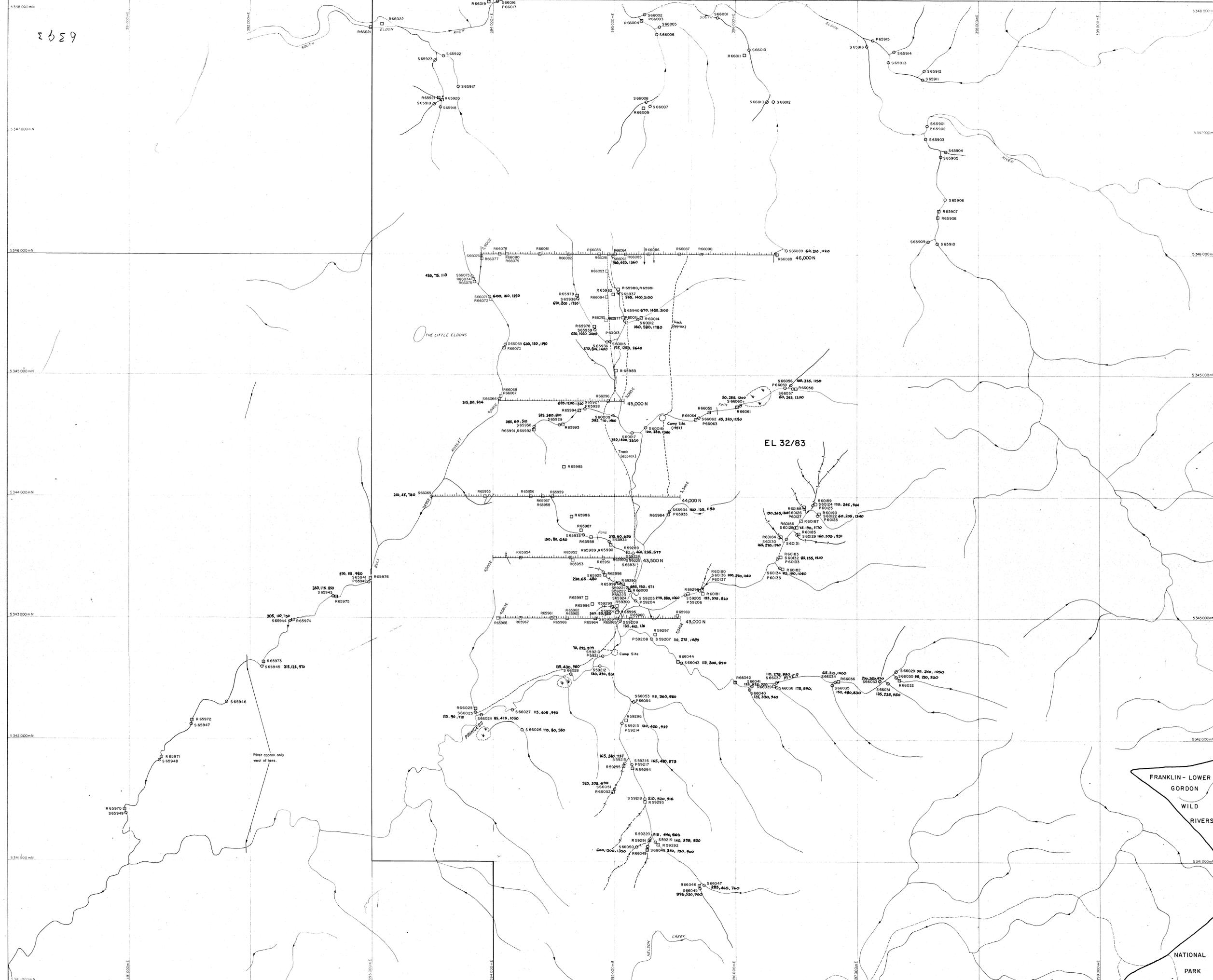
81-2726

861033

550

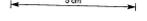
5359

6393



- Stream Sediment Sample
Sample No - S 59221 95,240,1050 (Pb, Zn, Ba)
- △ Ponded Concentrate - Stream Sediment Sample
Sample No - P 59202
- Rock Chip Sample
Sample No - R 59298

861035



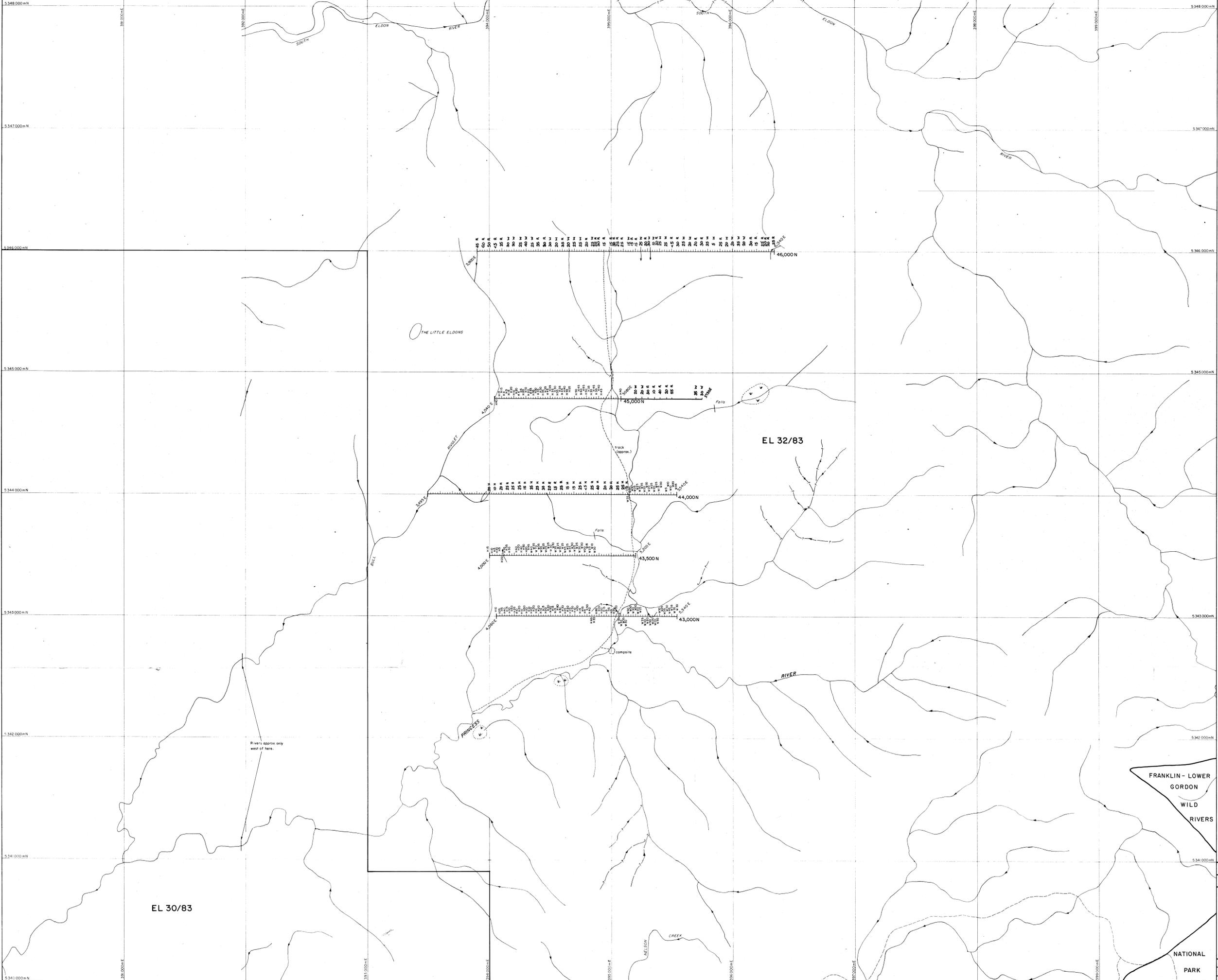
ENCLOSURE 2

ELECTROLYTIC ZINC CO. OF ASIA LTD.
PROJECT: PRINCESS RIVER EL32/83,TAS

87-2726

SAMPLE LOCATIONS,
NUMBERS and TYPES
Assays Pb, Zn, Ba

Scale: 1:10000	Survey: I.MAT	Revised: P.A.J
Reference: LD 8013	Date: 13-1-84	Ref No.
Drawn: R.J.R	Checked: L.W.I.MAT	AO-531-1005



W = Water Bedrock Samples.
 H = Hand Auger Soil Samples.
 X = Results Below 5 ppm.
 R = Rock chip.
 N.B. - All results are ppm.



ENCLOSURE 3

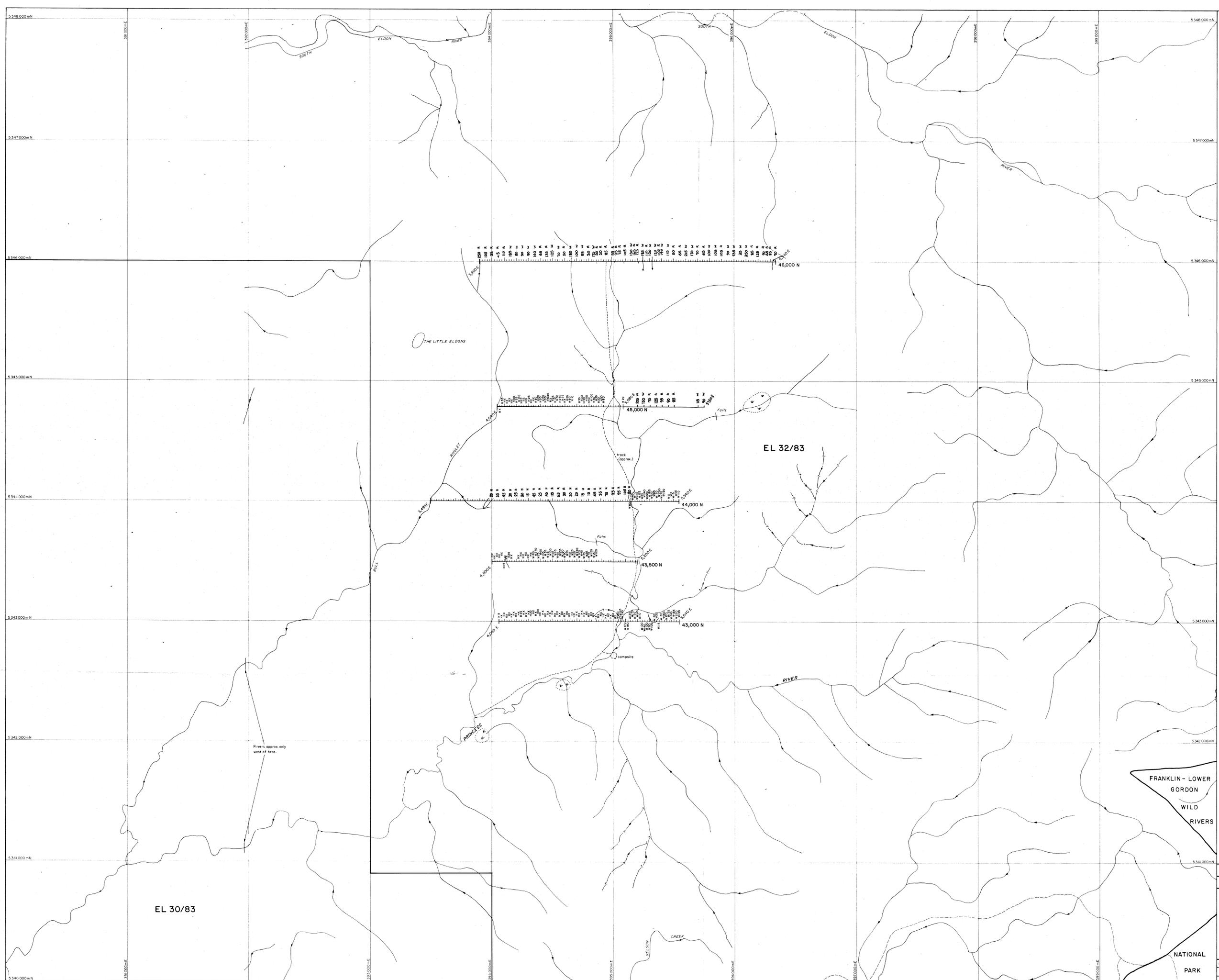
ELECTROLYTIC ZINC CO. OF ASIA LTD.
 PROJECT: PRINCESS RIVER EL 32/83, TAS.

861036
 GEOCHEMISTRY
 Pb

Scale: 1:10000	Survey: 1 MAT	Revised: P.A.J.
Reference: LD 8013	Date: 23-5-'85	Ref. No.
Drawn: R.J.R.	Checked:	AO-531-1010

6394

V



6395

W = Wacker Bedrock Samples.
 H = Hand Auger Soil Samples.
 X = Results Below 5ppm.
 R = Rock Chip.
 N.B. - All results are ppm.

5cm

ENCLOSURE 4 861037

ELECTROLYTIC ZINC CO. OF ASIA LTD.
 PROJECT: PRINCESS RIVER EL32/83.TAS.

57-2124

GEOCHEMISTRY

Zn

Scale: 1:10000	Survey: 1 MAT	Revised: P.A.
Reference: LD 8013	Date: 23-5-85	Ref. No.
Drawn: R.J.R.	Checked:	AO-531-1009

NATIONAL PARK

FRANKLIN - LOWER GORDON WILD RIVERS

EL 30/83

EL 32/83

THE LITTLE ELDONS

PRINCESS RIVER

RIVER

WELDON CREEK

Rivers approx only west of here.

campsite

Falls

Falls

Falls

SOUTH

385000m E

5348.000m N

5347.000m N

5346.000m N

5345.000m N

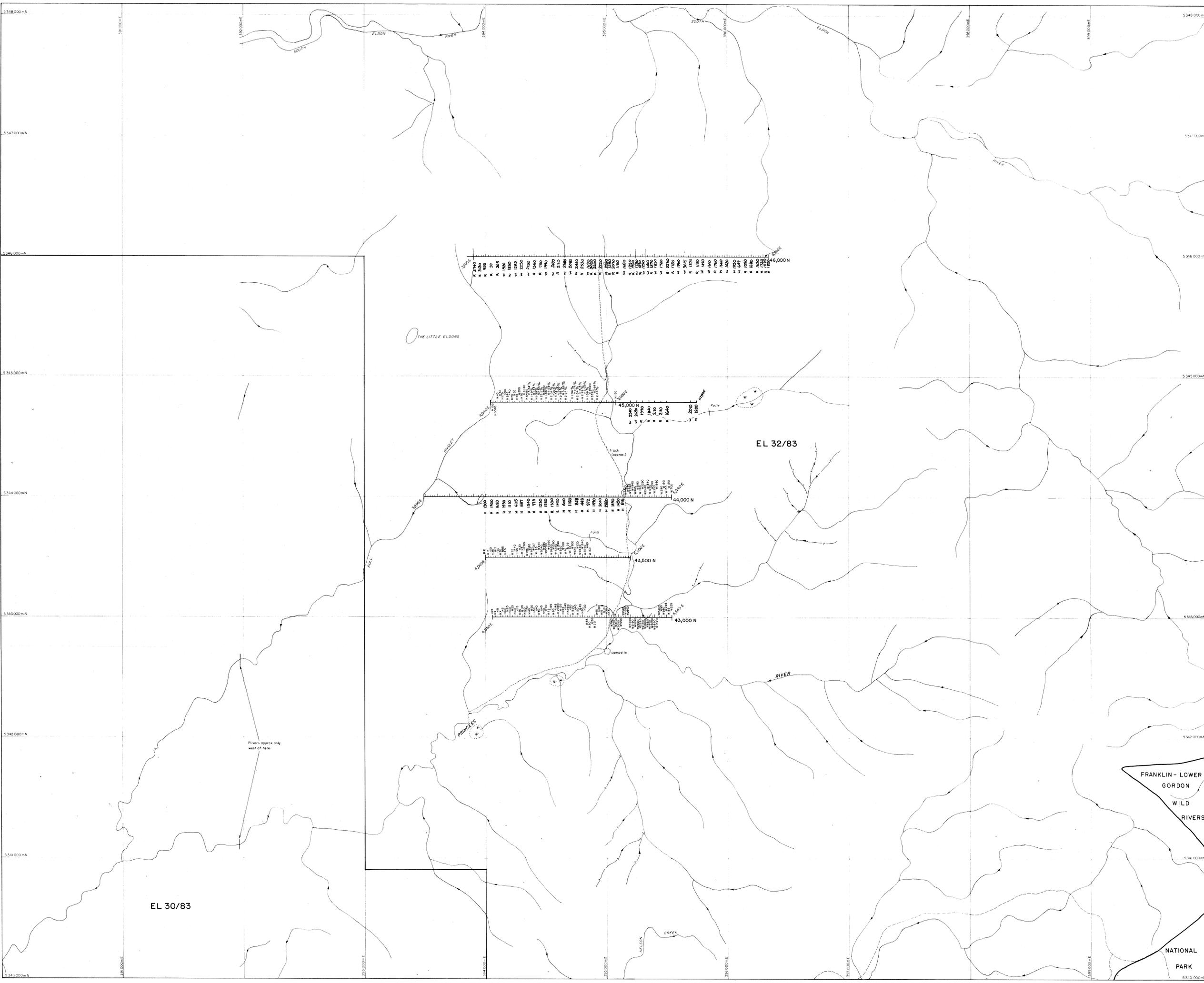
5344.000m N

5343.000m N

5342.000m N

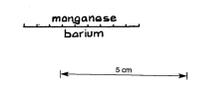
5341.000m N

5340.000m N



W = Wacker Bedrock Samples
 S = Stone Ager Soil Samples
 X = Results Below 5pm
 R = Rock Chip

N.B. - All results are ppm - unless otherwise shown.



ENCLOSURE 5 861035

ELECTOLYTIC ZINC CO. OF A'ASIA LTD.
 PROJECT: PRINCESS RIVER EL32/83TAS

87-2724
GEOCHEMISTRY
 Mn and Ba 0396

Scale: 1:10000	Survey: 1.M.A.T	Revised: P.A.J.
Reference: LD 8013	Date: 23-5-85	Ref. No.
Drawn: R.J.R.	Checked:	A0-531-1011