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176001 79-13474

DKSG

PROGRESS REPORT

TO

TASMINEX N.L.

**MICROFILMED**

EXPLORATION WITHIN EL 17/78

MATHINNA, TASMANIA

30TH OCTOBER 1978 TO 30TH APRIL 1979.

**OPEN FILE**

*Gustav C. Wolff*  
Gustav C. Wolff.

12th April, 1979.

INDEX

	<u>Page</u>
Introduction	1
Land Titles	2-3
Dump Sampling	3-4
Drainage Sampling	4-5
Proposed Exploration	5-6
Appendix 1	Tabulation of Assay Results.
Appendix 2	Expenditure to 30th April 1979.
Plan No. 17/78-1	Stream Sediment Assays, Cu Zn Pb As.

INTRODUCTION.

Exploration Licence 17/78 covering the Mangana-Mathinna goldfields was granted on 30th October 1978 for a period of 6 months to 30th April 1979. This report summarizes exploration during the above period, and proposes an ongoing programme in support of an application for renewal of the licence. Preliminary work has confirmed marginally economic gold values in the Golden Gate tailings dumps, and demonstrated the application of drainage sampling in confirming the surface expression of mineralization zones and their extension beyond known limits. Completion of these projects and the sampling of accessible mines in the Mangana area form the basis of exploration during the coming six months.

LAND TITLES.

Six mineral leases are current within EL 17/78.

The only leases of significance are 100M/68 and 20M/74, which cover the northern end of the New Golden Gate tailings dump.

Current titles are as follows:

Title:	2M/68	5 hectares
	101M/74	21 hectares
	7M/75	21 hectares
Holder:	Jointly - D.A. & C.M. Beswick, c/o Sunnyside, Branzholm.	

Title:	100M/68	8 hectares
Holder:	J.M. Dwyer, 9 Dangenong Road, Trevallyn.	

Title:	55M/64	1 hectare
Holder:	A.E. Hughes, 122 Forest Road, West Hobart.	

Title:	20M/74	1 hectare
Holder:	H.T. Moses, P.O. Box 14, St. Helens.	

Four leases have been surrendered subsequent to grant of EL 17/78 and have reverted to the Crown. These areas are specifically excluded from the licence, and cover the remaining tailings dumps.

Titles:	Former 57M/74	2 hectares
	Former 56M/74	1 hectare
	Former 47M/74	0.25 hectare
	Former 63M/76	41 hectares

Following discussion with the Mining Registrar, Hobart, an exploration licence covering this vacant ground was pegged on 18th December 1978 in the name of Tasminex N.L. Application has been made for this area to be included within EL 17/78.

Contact has been made with the holders of 100M/68 and 20M/74. Mr. J.M. Dwyer, holder of 100M/68, has replied with a formal cash

004

purchase offer for plant on his lease, upon which he will transfer title to Tasminex N.L. The plant is of little or no use to Tasminex but a lesser offer for the lease alone with the vendor retaining existing plant may be successful. Mr. H.T. Moses, lessee of 20M/74, has shown a negative response to approaches to date. However, this small area of 1 hectare is not critical to operations at this stage, and given that little or no work has been performed to date a good case may be made for forfeiture of the title for non-compliance.

DUMP SAMPLING.

Two tailings dumps, the Golden Gate at Mathinna and the main dump at Mangana, were bulk sampled using a hand held power auger and casing to minimise contamination. Samples were taken of material representative of grade and size ranges determined by Departmental drilling in 1948. The Golden Gate bulks, representing 250,000 tonnes of tailings, assayed as follows:

<u>Reg. No.</u>	<u>Description</u>	<u>As%</u>	<u>Au g/t</u>
790236	Hole 1 0-2.4m	0.38	1.9
790237	2 0-2.5m	0.64	1.3
790238	3 0-3.6m	0.31	1.3
790239	4 0-3.6m	0.55	1.2
790240	5 0-2.0m	0.40	0.98
790241	6 0-1.8m	0.40	0.68
790242	7 0-1.2	0.41	0.54
790243	8 0-2.4m	0.17	0.59

While some of these samples represent clearly uneconomic material, grades in others are at levels currently economic in plants in Victoria. Of note are the high arsenic levels which may indicate a high cyanide consumption during leaching.

All samples above 0.6 g/t have been submitted to the Departmental Metallurgical Laboratories, Launceston, for detailed leach testing. Results of this work will determine the next approach.

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Two bulk samples were taken from the Mangana dump. These consisted of clean coarse-grained unmineralized quartz, which appears to have originated largely in the oxidised zone. Assays were as follows:

<u>Reg. No.</u>	<u>Description</u>	<u>As%</u>	<u>Au g/t</u>
790576	1.0-2.4m	0.07	0.7
790577	2. 0-2.5m	0.07	0.8

No further work is recommended on this dump. The low grade, coupled with the limited tonnage available (less than 20,000 tonnes) makes this dump an unattractive exploration proposition.

#### DRAINAGE SAMPLING.

A pilot drainage sampling programme was completed over the Mangana goldfield. This area was chosen because of the widespread alluvial deposits which have no obvious hard rock source, and the richness of the ores treated in the last century. Surface contamination from hard rock mining operations is minimal in the Mangana field and is localised in a few steep gullies.

The object of drainage sampling was to locate the dispersion trains of metals associated with gold mineralization, which occurs both in quartz veins and in haloes around veining. The programme required the sampling of active stream sediments and assay of the -80 mesh fraction for Cu, Zn (by A.A.S.) and Pb, As (by X.R.F.) Results of this programme are plotted on Plan No. 17/78-1, and also attached as Appendix 1.

Good correlation exists between Pb, As, and mineralized quartz reefs. Statistical analysis of the results has not been attempted at this stage but a preliminary study suggests values greater than 25 ppm Pb and 15 ppm As are significant. Cu - Zn values are erratic but generally follow the higher Pb-As. Extensions of the known mineralized area are suggested which will require follow-up work.

006

The technique should be extended to cover the remainder of the licence, and the neighboring area EL 22/78 to the north. Sample density of 4-5/square kilometre is warranted in view of the small size of the targets. A direct result of this work will be the reduction in area of the licence as unfavourable zones are located.

PROPOSED EXPLORATION.

An ongoing exploration programme is proposed for EL 17/78.

(1) Tailings Dumps:

On completion of the current metallurgical testwork a feasibility study should be commissioned to evaluate the economic alternatives of dump leaching. Some degree of collaboration with Wattle Gully Gold Mines N.L., Chewton, Victoria, is desirable. This group are successfully treating dump material similar to that of the Golden Gate, and have expertise in design and operation of such plants. No budget estimates are possible for this work but an allocation of \$10,000 for feasibility and, as necessary, plant design studies is desirable.

(2) Drainage Sampling:

The pilot programme completed over the southern portion of the licence should be extended to cover the whole area. Particular caution should be used in selecting sample points in the Mathinna area where surface contamination is locally severe. A sample density of 4-5 per square kilometre should be maintained. This work should be used as a basis of area reduction at the next renewal date of October 30th, 1979.

Anomalous areas defined by stream sediment sampling should be detailed by geological mapping and by close-spaced "B" horizon soil sampling. Trenching or pitting may be required to expose veins or source areas. A budget of \$10,000 is recommended for completion of this programme, which will require an additional 3000 sample points for complete cover of the licence.

(3) Reappraisal of Old Mines:

Accessible mine workings at Mangana should be sampled and mapped in detail to test the possibility that lower grade vein material abandoned in previous mine operations may now be economic.

Several vein systems have been exposed by long adits which are readily accessible and safe. This work will be carried out in April, May.

Gustav C. Wolff.

12th April, 1979.

008

APPENDIX 1

STREAM SEDIMENT SAMPLE ASSAY RESULTS.

BULK SAMPLE ASSAY RESULTS.

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176010



**amdel**

# The Australian Mineral Development Laboratories

Flemington Street, Frewville, South Australia 5063  
Phone Adelaide 79 1662, telex AA 82520

Pilot Plant: Osman Place, Thebarton, Sth. Aust.  
Phone Adelaide 43 8053  
Branch Offices: Perth and Sydney  
Associated with: Professional Consultants Australia Pty Ltd

Please address all correspondence to Frewville  
In reply quote: AC 37493/0 - 3746/79

REPORT COMPLETE

## NATA CERTIFICATE

29 March 1979,

The Manager,  
Tasminex N.L.,  
P.O. Box 815,  
BURNIE TAS 7320

### REPORT AC 3746/79

YOUR REFERENCE:	Order No. 1004.
IDENTIFICATION:	As listed.
DATE RECEIVED:	19 March 1979.

Enquiries quoting AC 3746/79 to the Manager please

D. K. Rowley  
Manager  
Analytical Chemistry Division

for Norton Jackson  
Managing Director

RECEIVED
3 APR 1979
Ans'd.....

dg



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NATA CERTIFICATE

XRF ANALYSIS CODE B1

RESULTS IN PPM

SAMPLE	PB	AS	DATA BASE NOS	DATA BASE NO	SAMPLE	PB	AS
1	15	4	4101	4151	51	14	<2
2	9	6	4102		52	20	3
3	20	7	4103		53	22	<2
4	10	<2			54	18	7
5	16	<2			55	30	2
6	5	2			56	22	2
7	28	7			57	32	9
8	26	11			58	17	8
9	15	2			59	30	22
10	70	22			60	15	22
11	20	7			61	34	28
12	28	4			62	28	12
13	17	3			63	34	17
14	17	10			64	13	7
15	15	5			65	16	3
16	24	7			66	20	26
17	26	4			67	24	20
18	26	12			68	24	28
19	22	10			69	20	12
20	18	11			70	16	7
21	24	7			71	30	19
22	16	7			72	24	8
23	22	4			73	26	4
24	26	30			74	30	6
25	<2	10			75	24	3
26	18	5			76	26	10
27	17	<2			77	5	5
28	8	8			78	60	34
29	2	10			79	24	6
30	15	5			80	19	<2
31	7	5			81	24	13
32	8	<2			82	<2	2
33	24	4			83	28	10
34	24	12			84	24	9
35	20	22			85	26	9
36	20	2			86	26	7
37	26	<2			87	20	8
38	32	140			88	16	2
39	32	50			89	40	7
40	34	95			90	22	10
41	34	22			91	20	5
42	26	11			92	28	2
43	22	5			93	22	5
44	20	4			94	28	2
45	30	<2			95	24	5
46	24	<2			96	100	9
47	15	<2					
48	22	2					
49	22	4					
50	11	<2	4150				

DETN LIMIT (2) (2)

DETN LIMIT (2) (2)



**amdel**

# The Australian Mineral Development Laboratories

Flemington Street, Frewville, South Australia 5063  
Phone Adelaide 79 1662, telex AA 82520

Pilot Plant, Osman Place, Thebarton, Sth. Aust.  
Phone Adelaide 43 8053  
Branch Offices: Perth and Sydney  
Associated with Professional Consultants Australia Pty. Ltd.

Please address all correspondence to Frewville.  
In reply quote:

AC 3/493/0 - 3746/79

176012

PART REPORT 1

**NATA CERTIFICATE**

22 March 1979

The Manager,  
Tasminex N.L.,  
P.O. Box 815,  
BURNIE. TAS. 7320

REPORT AC 3746/79

YOUR REFERENCE:	Order No. 1004
IDENTIFICATION:	As listed
DATE RECEIVED:	19 March 1979

Enquiries quoting AC 3746/79 to the Manager please

D.K. Rowley  
Manager  
Analytical Chemistry Division

*Art. Bouditch*  
for Norton Jackson  
Managing Director

RECEIVED  
28 MAR 1979  
Ans'd.....

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012

FORM 6

JOB 3746/19

AMDEL ANALYTICAL SERVICE  
Results in ppm unless otherwise stated

BATCH NO. 1/2

TT	Sample No.	DATE PASS No	Cu	Zn					
									76013
1	1	4101	10	45					
2	2	4102	8	35					
3	3	403	5	65					
4	4	4104	20	28					
5	STD								
6	5	4105	35	32					
7	6		10	12					
8	7		25	55					
9	8		22	50					
10	9		5	5					
11	10		32	55					
12	11		15	75					
13	12	✓	65	60					
14	13	4113	12	18					
15	14	4114	12	40					
16	15		5	25					
17	16		12	45					
18	17	✓	15	55					
19	18	4118	22	60					
20	14	x							

FORM 6

JOB 3746/19

AMDEL ANALYTICAL SERVICE  
Results in ppm unless otherwise stated

BATCH NO. 2

TT	Sample No.	DATE PASS	Cu	Zn					
1	19	4119	12	50					
2	20		12	55					
3	21		12	55					
4	22		12	30					
5	23		12	35					
6	24		15	42					
7	25	✓	7	18					
8	26	4126	18	48					
9	STD								
10	27	4127	18	70					
11	28		15	80					
12	29		12	50					
13	30	x	10	60					
14	31		18	75					
15	32		12	30					
16	33		12	38					
17	34		20	60					
18	35	✓	20	50					
19	36	4136	22	45					
20	30	x							

013

FORM 6

JOB 3746/79

AMDEL ANALYTICAL SERVICE  
Results in ppm unless otherwise stated

BATCH NO. 3/4

TT	Sample No.	DATA BASE	Cu	Zn	176014			
1	37	4137	18	45				
2	38		28	75				
3	39		25	55				
4	40		30	70				
5	41	y	30	50				
6	42		25	60				
7	43		22	60				
8	44		15	55				
9	45		25	65				
10	46		18	60				
11	47	↓	15	60				
12	48	4148	25	55				
13	STD							
14	49	4149	18	42				
15	50		10	22				
16	51		8	20				
17	52		15	45				
18	53	↓	15	40				
19	54	4154	25	48				
20	41	x						

FORM 6

JOB 3746/79

AMDEL ANALYTICAL SERVICE  
Results in ppm unless otherwise stated

BATCH NO. 4

TT	Sample No.		Cu	Zn				
1	55	4155	25	80				
2	56		18	38				
3	57		20	70				
4	58	x	12	28				
5	59		22	60				
6	60		10	25				
7	61		30	80				
8	62		28	90				
9	63		30	70				
10	64		15	45				
11	65		5	12				
12	66		18	50				
13	67		20	45				
14	68		22	50				
15	69	↓	20	48				
16	70	4170	10	32				
17	STD							
18	71	4171	35	70				
19	72	4172	25	50				
20	58	x						

014 FORM 6

JOB 3746/79

AMDEL ANALYTICAL SERVICE  
Results in ppm unless otherwise stated

BATCH NO. 5/6

TT	Sample No.	DATA BASE NO	Cu	Zn			176015
1	73	4173	28	75			
2	74	4174	38	90			
3	75	4175	25	65			
4	STD						
5	76	4176	28	90			
6	77		5	8			
7	78		12	25			
8	79		20	80			
9	80		15	32			
10	81		30	110			
11	82	x	10	32			
12	83		12	45			
13	84		20	75			
14	85		25	50			
15	86		22	60			
16	87		10	45			
17	88		15	30			
18	89	↓	32	80			
19	90	4190	32	65			
20	82	x					

FORM 6

JOB 3746/79.

AMDEL ANALYTICAL SERVICE  
Results in ppm unless otherwise stated.

BATCH NO. 6.

TT	Sample No.		Cu	Zn			
1	91	4191	20	60			
2	92	↓	25	80			
3	93	↓	18	55			
4	94	↓	18	50			
5	95	4195	15	70			
6	STD						
7	96	4196	70	120	RECEIVED	NOT LISTED	
8	91						
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							



## DEPARTMENT OF MINES—TASMANIA

LAUNCESTON OFFICES  
287 WELLINGTON STREET  
SOUTH LAUNCESTON 7250

## TELEPHONES:

Metallurgical Research .. .. }  
Laboratory .. .. } 44 2431-2  
Mines Inspection .. .. } (2 lines)  
Explosives & Inflammable Liquids }

26th February 1979

Tasminex N.L.,  
P.O. Box 815,  
Burnie 7320  
TASMANIA

Reg. Nos. 790236-43      Mathinna Dumps

Dear Sir,

The following are the results from eight composite borehole samples drilled into the Mathinna dumps by Mr. G. Wolff consultant to Tasminex.

The results are:-

<u>Reg. No.</u>	<u>Your Description</u>	<u>Assay</u>	
		<u>As%</u>	<u>Au g/t</u>
790236	Hole 1 0 - 2.4m	0.38	1.9'
790237	2 0 - 2.5m	0.64	1.3'
790238	3. 0 - 3.6m	0.31	1.3'
790239	4 0 - 3.6m	0.55	1.2'
790240	5. 0 - 2.0m	0.40	0.98'
790241	6 0 - 1.8m	0.40	0.68'
790242	7 0 - 1.2m	0.41	0.54'
790243	8 0 - 2.4m	0.17	0.59

Yours faithfully,

Analyses by...

*L. M. Hay*  
*J. F. ...*

*H. K. Wellington*  
(H. K. Wellington)  
Chief Chemist & Metallurgist.

RECEIVED

27 FEB 1979

Ans'd.....



DEPARTMENT OF MINES—TASMANIA

LAUNCESTON OFFICES  
287 WELLINGTON STREET  
SOUTH LAUNCESTON 7250

TELEPHONES:

Metallurgical Research .. .. .	} 44 2431-2 (2 lines)
Laboratory .. .. .	
Mines Inspection .. .. .	
Explosives & Inflammable Liquids	

26th March 1979

Tasminex N.L.,  
(G. Wolff)  
P.O. Box 815,  
Burnie 7320  
TASMANIA

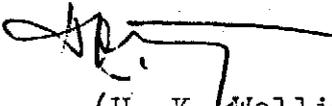
Reg. Nos 790576-77

Dear Sir,

Please find below results of samples submitted to this laboratory on the 14th March 1979 and stated to be from Mangana Tailings Dump.

<u>Reg. Nos</u>	<u>Description</u>	<u>Ag g/tonne</u>	<u>Au g/tonne</u>	<u>%As</u>
790576	1. 0 - 2.4m	<10	0.7	0.07
790577	2. 0 - 2.5m	<10	0.8	0.07

Yours faithfully,

  
(H. K. Wellington)  
Chief Chemist & Metallurgist.

Analyses by *J. Furst*

017

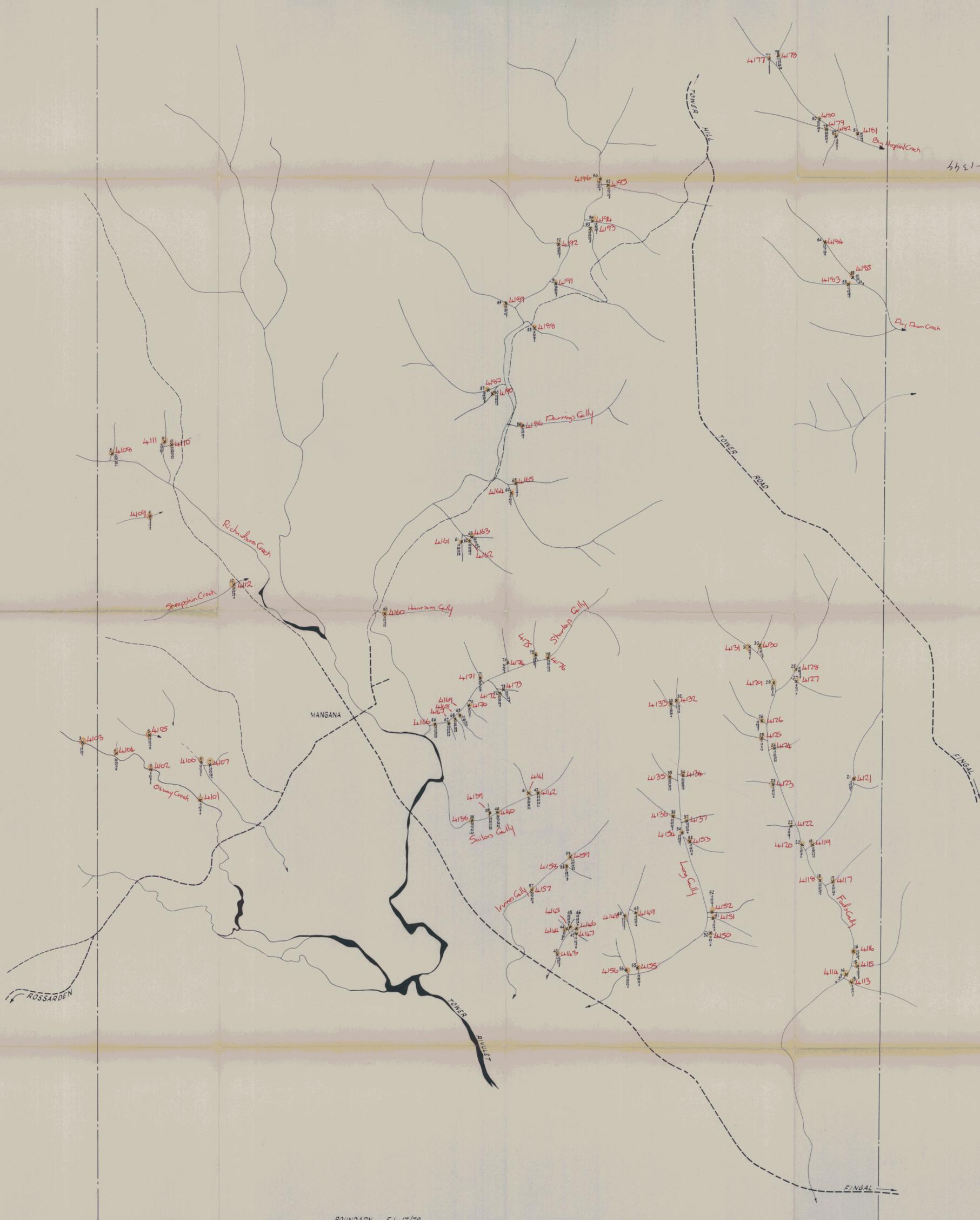
APPENDIX 2

EXPLORATION EXPENDITURE 30/10/78 TO 30/4/79.

E.L. 17/78

## EXPENDITURE FOR SIX MONTHS ENDING 30TH APRIL, 1979

Wages & Salaries	4,761.12
Assays	745.30
Services & Rental	3,262.83
Accomodation	<u>410.92</u>
Total	<u><u>\$9,180.17</u></u>



3781-6L

BOUNDARY E.L. 17/78

176020 

TASMINEX N. L.

E.L. 17/78

STREAM SEDIMENT ASSAYS  
- 80 MESH

COPPER, ZINC, LEAD AND ARSENIC

**KEY**  
 Sample No. 15  
 X Cu  
 28 Zn  
 18 Pb  
 32 Ag  
 40 As  
 Order of assays (p.p.m.)  
 \* Less than detection limit  
 DATA PAGE NUMBERS IN RED

**NOTE:** THIS PLAN IS AN UNCONTROLLED PHOTO OVERLAY SCALE IS APPROXIMATE ONLY.

DRAWN: G.W.	DATE: 29/3/79	PLATE No
TRACED: R.G.W.	SCALE: 1:10,000 Approx.	17/78-1

019 79-1344