

EL 1/98 - SCAMANDER

PARTIAL

RELINQUISHMENT REPORT

1998/1999

MICROFILMED
FICHE No.014932 -

GENERAL PURPOSE
EL1/98 PT 1
25 MAR 1999
See folio 33

ANSON GRIFFITH

1 March 1999

GRIFFITH GEOLOGICAL CONSULTANTS PTY LTD
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ABSTRACT

Exploration Licence EL 1/98 comprising 202 square kilometres, was granted to Griffith Geological Consultants Pty Ltd on 24th April 1998 for a period of five years.

Exploration activities during year one of the exploration licence were initially directed towards the reassessment of the alluvial tin deposits, developed in the north of the licence to support a small scale alluvial tin mining operation.

Additional exploration activities included the completion of a regional geochemical sampling program to assess the potential of the Scamander Tier to host previously unrecognised gold mineralisation.

Results of exploration of the alluvial tin and the potential of the Scamander Tier Dyke to host economic gold mineralisation proved disappointing. Consequently, the licence is to be reduced in size to 40 square kilometres.

Exploration within the retained area is to focus on the reassessment of the remaining prospects to support a small tonnage, high-grade mining operation.

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1.0 Introduction

Exploration Licence EL 1/98 comprising 202 square kilometres was granted to Griffith Geological Consultants Pty Ltd on 24th April 1998 for a period of five years.

Following completion of regional geochemical sampling and assessment of mineralised prospects contained within EL 1/98, the exploration licence is to be reduced in size to 40 square kilometres at the end of year one (Figure 1).

The following report summarises exploration activities and results conducted within the area to be relinquished during the period 1998/1999.

595000E

600000E

605000E



5425000N

St. Helens

5420000N

EL 1/98

5415000N

Area To Be Retained

5410000N

Area To Be Retained

Scamander

5 cm

Area to be relinquished



SCAMANDER EL 1/98

RELINQUISHMENT MAP

Scale 1:100,000

February 1999

2.0 Exploration Philosophy and Objectives

Exploration activities during year one of the exploration licence were directed towards

- the reassessment of the alluvial tin deposits developed in the north of the licence to support a small scale alluvial mining operation. The establishment of a small mining operation could provide additional cash flow for funding additional exploration activities.
- the completion of a regional geochemical sampling program to assess the potential of the Scamander Tier Dyke and the Mathinna Beds in the west of the exploration licence to host previously unrecognised gold mineralisation.
- the reassessment of the potential of previously identified prospects within the licence area to support a small tonnage, high grade mining operation.

3.0 Location and Access

Exploration Licence EL 1/98 is located between the coastal townships of St Helen's and Scamander situated on the north-eastern coast of Tasmania.

The licence is largely situated within State Forest and is serviced by an excellent network of all weather, graded roads and fire trails.

Topographic relief varies from undulating to steep hills and ridges developed in the central area of the licence changing to gentle slopes and flat laying areas associated with the coastal regions.

Vegetation within the licence is dominated by light, open eucalypt forest with dense undergrowth generally restricted to areas adjacent to established drainages. The central area of the licence from Scamander through to the Loila Tier contains established radiata pine plantations.

4.0 Regional Geology

The geology of the exploration licence is dominated by the Silurian-Devonian Mathinna Beds, which comprise an alternating sequence of bedded quartzites, sandstones, siltstones and slates. The quartzites have a lithic component and display graded structures locally. The sequence has been interpreted to represent turbidites from previous studies.

The Mathinna Beds have been regionally folded during the Tabberabberan Orogeny around north northwest trending fold axes to produce open folds with two to four kilometre wavelengths and gentle southeast plunges. Deformation intensity may vary locally to produce tight folding and over-turned bedding has been recognised at both the Great Pyramid Prospect and Scamander Tier area.

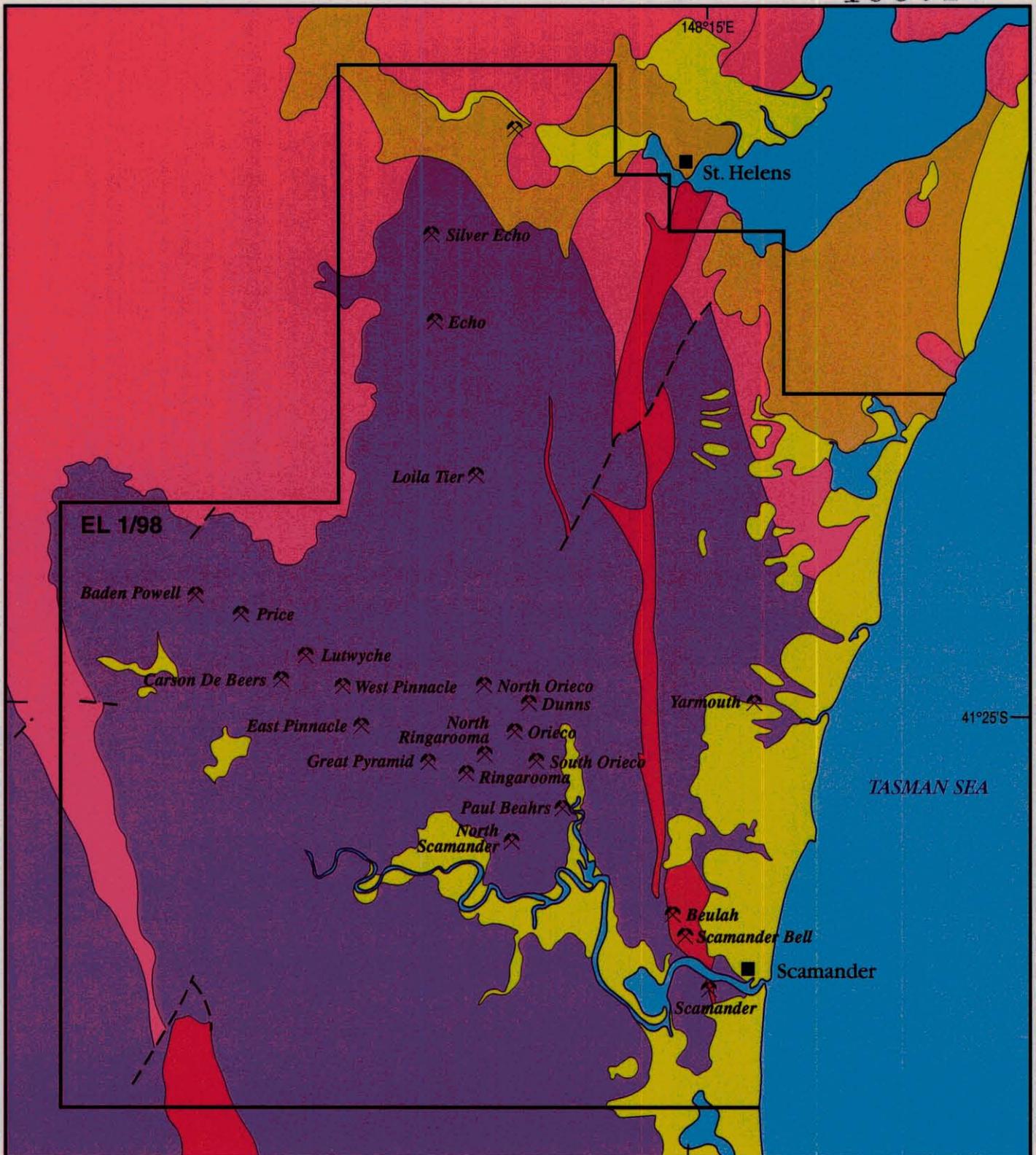
A number of north northwest trending faults and shear zones transect the Mathinna Beds and act as the focus of significant mineralisation at a number of prospect localities e.g. Orieco.

A suite of granitic intrusives, which form the southern region of the Blue Tier Batholith and may be broadly classified into two categories, has intruded the Mathinna Beds. These include non-tin bearing hornblende-biotite granodiorites-adamellites, which may occur as narrow dykes e.g. Scamander Tier, and the tin bearing biotite adamellite-granites.

Metamorphism of the sedimentary sequence adjacent to intrusive contacts has lead to the formation of spotted hornfels and quartzites in the west and northwestern areas of the exploration licence.

A complex cycle of erosion and deposition has continued from the Tertiary leading to the deposition of fluvial and marine clays, sands and gravels. Continued erosion of the tin bearing granites during the Quaternary resulted in the deposition in a number of economically important tin bearing alluvial deposits including Thureau's Lead, Transit and Constables Creek in the north of the licence area.

The regional geology and significant prospects developed within the exploration licence including relinquished areas is given in Figure 2.

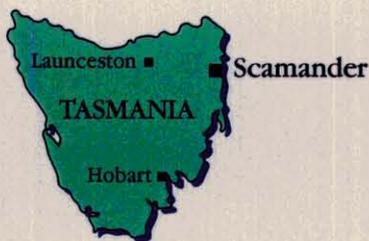


Source : Geological Survey of Tasmania
 Dept. Mines - Hobart

Prospect locations from St Helens 1:50,000 map.

LEGEND

- Quaternary alluvium
- Tertiary conglomerate
- Devonian-Silurian (?) Turbidite sandstone & mudstone
- Devonian Horneblende granodiorite
- Devonian undifferentiated granodiorite

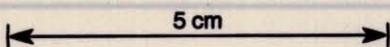


SCAMANDER EL 1/98

GEOLOGY MAP

Scale 1:100,000

July 1998



5.0 Previous Work

5.1 Mining History

The St Helen's and Scamander district contains numerous metal occurrences including gold, silver, lead, zinc, tungsten, wolframite and tin which have been subjected to varying degrees of exploration and development since the turn of the century.

Early exploration and prospecting focussed on the tin bearing Quaternary gravels and wash developed in the St Helen's district associated with Thureau's Deep Lead. The Lead has been described in detail previously by Montgomery in 1893 and will not be repeated here.

Numerous No Liability companies and mining syndicates were formed to prospect and develop the alluvial tin deposits in the district. Traditional mining methods including sluicing, gravel pumps and hydraulic methods were employed to recover the tin. The potential of the district to sustain a dredging operation was assessed by the Siamese Tin Syndicate during the 1930's. However, disappointing results prevented the project progressing further.

Exploratory workings were developed at a number of prospects within the district including Beulah, Scamander Bell, Yarmouth, and Silver Echo. More detailed development and mining occurred at the Orieco Mine and the Great Pyramid Tin Mine. Eighty five tons of copper with silver credits was won from the Orieco Mine and 2.9 tons of tin worked from Great Pyramid.

5.2 Previous Exploration

A number of exploration companies including Mt Lyell and EZ, Austminex, Geophoto, BHP, RTZ, Shell-Billiton and Scamander Mining have employed modern systematic exploration techniques to the district dating back to the 1950's.

Exploration work completed previously includes geochemical, ground and airborne magnetic geophysical surveys, mapping, trenching, costeaning, reverse circulation and diamond drilling employed at many of the prospects contained within the exploration license.

To date, no economically viable prospect has been developed within the area to be relinquished despite the high level of exploration undertaken within the district.

6.0 Exploration Completed During the Period

6.1 Geochemical Sampling

A regional scale geochemical sampling program of the creek drainages contained within the licence area was conducted during the first half of 1998.

The aim of the program was to test the potential of the Scamander Tier Dyke to host economic gold and base metal mineralisation based on the occurrences of gold, silver, lead and zinc at Beulah, Scamander, Scamander Bell and Yarmouth Prospects located in the southern area of the licence.

A total of fifteen drainage localities were sampled during the program. The locality of each sample position was recorded using a hand held Garman GPS 2000 recorder. The sample type collected from each locality included a stream sediment (-80 mesh), panned concentrate and rock grab or outcrop samples where applicable.

Each sample was assigned a unique sample number and assayed for gold, silver, copper, lead, and zinc. All samples were submitted to Genalysis Laboratories, 15-17 Davison Road, Maddington, Western Australia for chemical analysis.

6.2 Fern Tree Creek Sampling

Reassessment of the potential of the Fern Tree Creek Prospect to contain sufficient alluvial tin to support a profitable, small-scale mining operation was undertaken during the period.

Historically, the prospect was reported to contain high quality Ruby Tin in a payable wash of approximately three feet that was overlain by six to eight feet of loam and sand. A paddock measuring 19 feet by 10 feet was reported to yield two bags and 20 pounds of tin.

Assessment involved the collection of vertical channel samples from a number of exposed faces from the eroded gully terrain resulting from previous mining activities. The channel samples from each locality were subsequently panned and visually assessed for resultant tin content.

7.0 Discussion of Results

7.1 Geochemical Sampling

Results from the geochemical sampling of the Scamander Tier Dyke proved disappointing. No anomalous geochemistry for gold or other base metal assemblages was detected during the program.

However, geochemical sampling at Johnny Fitz Creek located in the west of the licence area returned anomalous gold values. A high of 140 parts per billion from a panned concentrate sample is considered worthy of additional follow-up exploration.

The area is to be retained for more detailed assessment during year two.

The assay results are given in Tables 1 to 3 and copies of the laboratory reports are given in Appendix 1.

Table 1
Stream Sediment Assay Results

Sample Number	Northing (AMG)	Easting * (AMG)	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
P121201	5423987	55602405	1	0.1	9	25	31
P121203	5422490	55600966	1	0.1	10	19	32
P121205	5422080	55600350	1	0.1	18	21	41
P121207	5421838	55605645	1	0	15	31	62
P121209	5419283	55606494	2	0.2	12	25	52
P121211	5414778	55605498	2	0	11	9	6
P121213	5416124	55606112	5	0	4	8	6
P121214	5417195	55606047	2	0	9	15	18
P121218	5414367	55605406	1	0	17	27	34
P121223	5416442	55602664	1	0	5	7	9
P121226	5416141	55602300	0	0.1	11	17	33
P121228	5416191	55601246	3	0.2	22	29	52
P121232	5415201	55594982	1	0.1	25	16	43
P121234	5412475	55595665	11	0.1	20	11	22
P121236	5412500	55595500	1	0	20	11	19

* Note drop the first two digits (ie 55) to get the correct Easting *

**Table 2
Panned Concentrate Assay Results**

Sample Number	Northing (AMG)	Easting * (AMG)	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
P121202	5423987	55602405	1	0	7	32	33
P121204	5422490	55600966	1	0	11	14	20
P121206	5422080	55600350	1	0.1	10	6	18
P121208	5421838	55605645	1	0.1	7	6	11
P121210	5419283	55606494	1	0.2	17	5	47
P121212	5414778	55605498	2	0	8	4	3
P121215	5417195	55606047	1	0	4	8	8
P121219	5414367	55605406	1	0	3	5	4
P121224	5416442	55602664	1	0.1	9	5	6
P121227	5416141	55602300	1	0.1	4	12	19
P121229	5416191	55601246	1	0.2	15	34	46
P121233	5415201	55594982	2	0.1	13	12	38
P121235	5412475	55595665	1	0	4	5	13
P121237	5412500	55595500	140	0.1	3	3	6

**Table 3
Rock Assay Results**

Sample Number	Northing (AMG)	Easting * (AMG)	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
P121216	5417195	55606047	0	0.1	3	13	35
P121217	5417195	55606047	1	0	15	24	22
P121220	5414367	55605406	0	0	5	2	3
P121221	5414367	55605406	1	0	3	76	3
P121222	5414367	55605406	0	0	4	6	5
P121225	5416442	55602664	0	0	18	10	120
P121230	5416191	55601246	1	0	56	14	68
P121231	5416191	55601246	1	7.2	32	8	62

* see previous page.

7.2 Fern Tree Creek Sampling

A total of ten samples were collected from the exposures in Fern Tree Creek and panned to produce a concentrate for visual assessment of tin content.

The total tin contents for all of the samples collected proved disappointing and are not considered worthwhile for further expenditure and assessment.

8.0 Conclusions

Based on the results of the exploration completed during year one the following conclusions are drawn:

- The alluvial tin mineralisation developed at FernTree Creek offers little encouragement to support a small scale, alluvial tin mining operation.
- The alluvial areas developed in the north of the exploration licence are to be relinquished.
- The Scamander Tier Dyke does not contain any significant gold mineralisation or potential to host significant mineralisation either within the granodiorite host or adjacent Mathinna Bed sediments in the central and northern areas of the exploration licence.
- The gold, silver and lead occurrences developed at Beulah, Scamander, Scamander Bell and Yarmouth are of limited extent and do not offer the potential to host small to medium scale tonnages.
- The licence area encompassing the Scamander Tier Dyke is to be relinquished.

Exploration within the area to be retained is to focus on the reassessment of the potential of the prospects to support a small tonnage, high-grade mining operation.

9.0 Environment

All exploration activities completed during the year were conducted in accordance with the Exploration Code of Practice and Guidelines issued by the Mineral Resources of Tasmania.

The first pass regional assessment of the exploration licence caused no environmental disturbance during the course of the program. Access to the sample localities and prospect areas utilised existing track and road access.

No rehabilitation work is required from exploration activities conducted during the year.

10.0 Expenditure

The total expenditure for EL 1/98 Scamander as at 31 December 1998 is \$53,461.41.

11.0 References

- COLMAN, W.R.G., 1934. Prospecting and Development of an Alluvial Tin Mining Area in Tasmania. Proceedings Aus. I.M.M. (Inc).,93.
- CROMER, W.C., 1990. EL 76/87. Partial Relinquishment Report (End Year 3) Seabed Resources NL.
- MONTGOMERY, A.M., 1893. Report on Thureau's Deep Lead, Near George's Bay

12.0 Keywords

Scamander, St Helen's, Fern Tree Creek, Johnny Fitz Creek, Beulah, Scamander Bell, Yarmouth, Orieco, Gold, Silver, Copper, Lead, Zinc, Tin.

13.0 Acknowledgments

I would like to thank the following people from a number of organisations for their assistance in the exploration activities undertaken during the year;

Mr David Gatehouse and Mr Michael "Jake" Jacobsen- Mineral Resources Tasmania,

Mr Dan Ryan-State Forestry Commission,

Mr Andrew McGregor-East Coast Surveying,

Mr Michael Dunham and Mr Lance Stebbings-Low Impact Diamond Drilling Services.

193021

MAP SUPPLEMENT

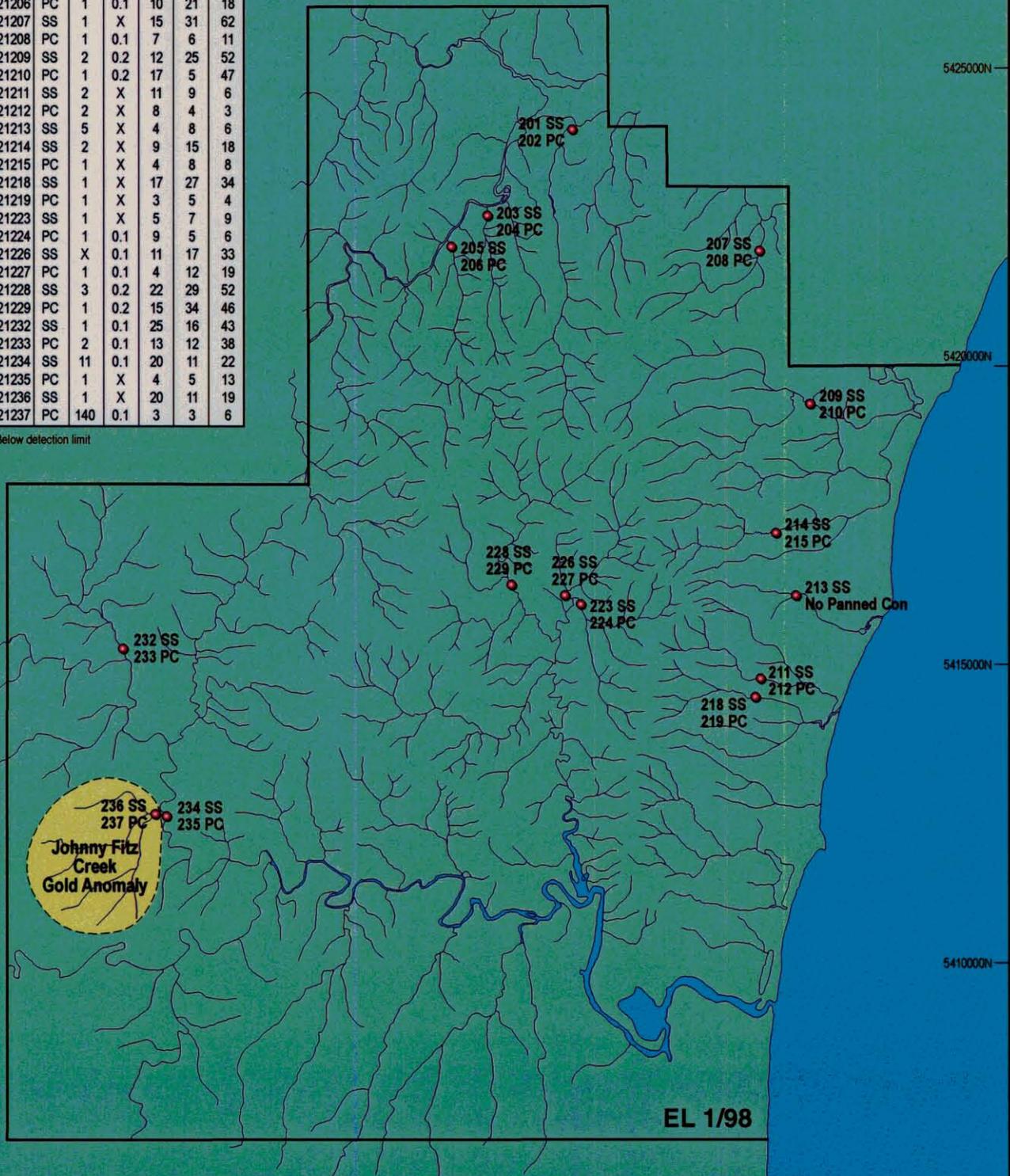
595000E

600000E

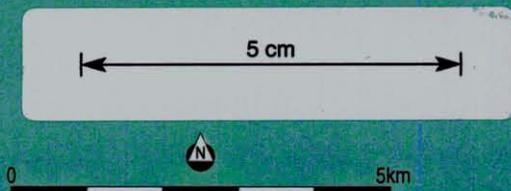
605000E

SAMPLE NUMBER	TYPE	Au ppb	Ag ppb	Cu ppm	Pb ppm	Zn ppm
P121201	SS	1	0.1	9	25	31
P121202	PC	1	X	7	32	33
P121203	SS	1	0.1	10	19	32
P121204	PC	1	X	11	14	20
P121205	SS	1	0.1	18	21	41
P121206	PC	1	0.1	10	21	18
P121207	SS	1	X	15	31	62
P121208	PC	1	0.1	7	6	11
P121209	SS	2	0.2	12	25	52
P121210	PC	1	0.2	17	5	47
P121211	SS	2	X	11	9	6
P121212	PC	2	X	8	4	3
P121213	SS	5	X	4	8	6
P121214	SS	2	X	9	15	18
P121215	PC	1	X	4	8	8
P121218	SS	1	X	17	27	34
P121219	PC	1	X	3	5	4
P121223	SS	1	X	5	7	9
P121224	PC	1	0.1	9	5	6
P121226	SS	X	0.1	11	17	33
P121227	PC	1	0.1	4	12	19
P121228	SS	3	0.2	22	29	52
P121229	PC	1	0.2	15	34	46
P121232	SS	1	0.1	25	16	43
P121233	PC	2	0.1	13	12	38
P121234	SS	11	0.1	20	11	22
P121235	PC	1	X	4	5	13
P121236	SS	1	X	20	11	19
P121237	PC	140	0.1	3	3	6

X = Below detection limit



Note : All sample numbers prefixed by P121



SCAMANDER EL 1/98
STREAM SEDIMENT & PANNED CONCENTRATE
SAMPLE LOCATIONS
& ASSAY RESULTS
 Scale 1:100,000
 December 1998

595000E

600000E

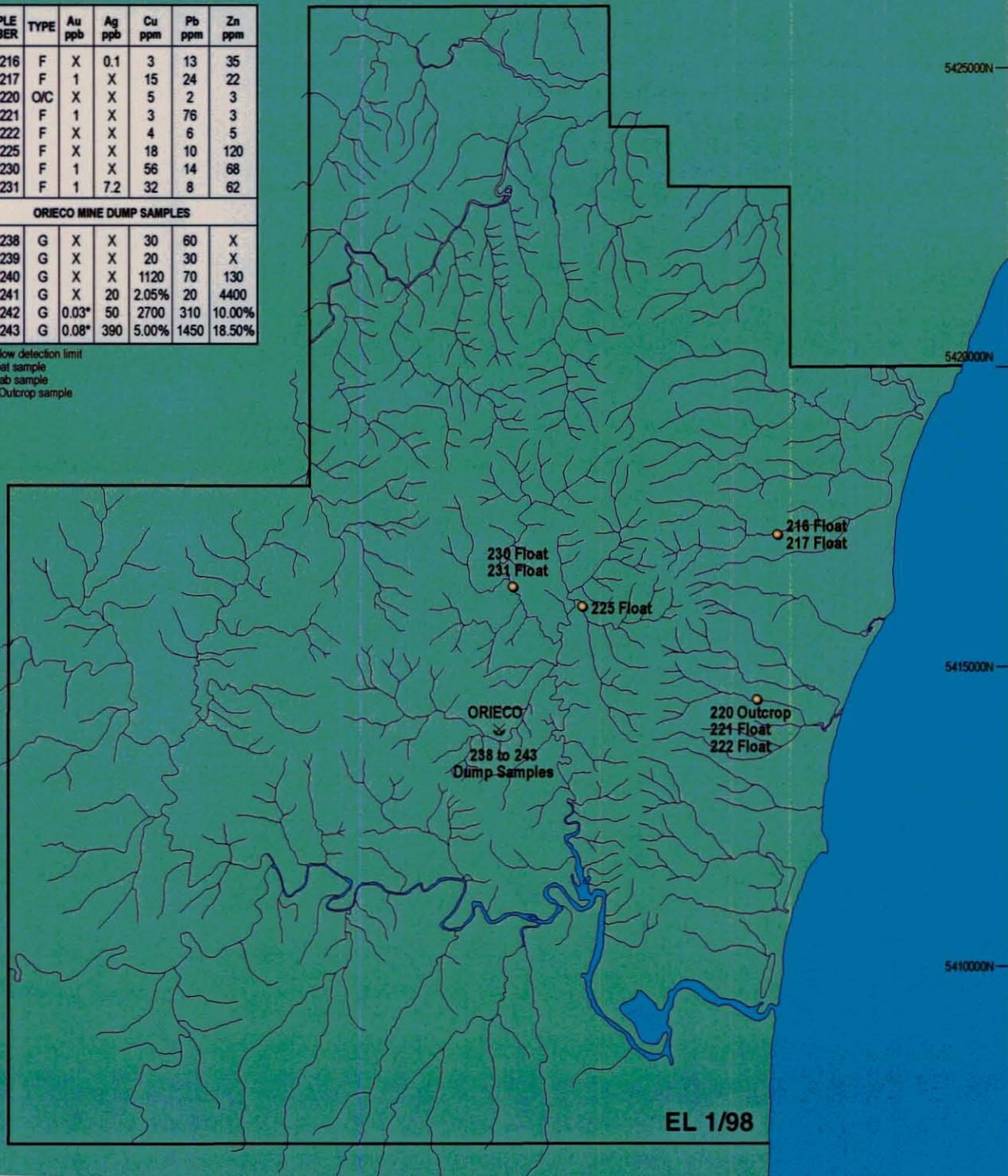
605000E

SAMPLE NUMBER	TYPE	Au ppb	Ag ppb	Cu ppm	Pb ppm	Zn ppm
P121216	F	X	0.1	3	13	35
P121217	F	1	X	15	24	22
P121220	O/C	X	X	5	2	3
P121221	F	1	X	3	76	3
P121222	F	X	X	4	6	5
P121225	F	X	X	18	10	120
P121230	F	1	X	56	14	68
P121231	F	1	7.2	32	8	62

ORIECO MINE DUMP SAMPLES

P121238	G	X	X	30	60	X
P121239	G	X	X	20	30	X
P121240	G	X	X	1120	70	130
P121241	G	X	20	2.05%	20	4400
P121242	G	0.03*	50	2700	310	10.00%
P121243	G	0.08*	390	5.00%	1450	18.50%

X = Below detection limit
 F = Float sample
 G = Grab sample
 O/C = Outcrop sample



EL 1/98

Note: All sample numbers prefixed by P121

SCAMANDER EL 1/98

ROCK SAMPLE LOCATIONS & ASSAY RESULTS

Scale 1:100,000

December 1998

APPENDICIES

APPENDIX 1

Genalysis Laboratory Services Pty. Ltd.

ANALYSTS AND CONSULTING CHEMISTS
ACN: 008 787 237

ATTENTION A GRIFFITH
47 LAWLER STREET
NORTH PERTH WA 6006
AUSTRALIA

Analytical Report

COMMENTS

ATTENTION: A GRIFFITH ..
SOIL....

JOB INFORMATION

JOB CODE :6.3/982582
No. SAMPLES :37
ELEMENTS :7
CLIENT O/N :00297|SOIL
DATE RECEIVED :08/06/98
DATE COMPLETED :19/06/98

LEGEND

'X' = LESS THAN DETECTION LIMIT
'N/R' = SAMPLE NOT RECEIVED
'*' = RESULT CHECKED
'()' = RESULT STILL TO COME
'I/S' = INSUFFICIENT SAMPLE FOR ANALYSIS
'E6' = RESULT x 1,000,000

MAIN OFFICE AND LABORATORY
15 DAVISON ST, MADDINGTON, WA 6109
P.O. BOX 144 GOSNELLS WA 6990
Tel: (08) 9459 9011 Fax: (08) 9459 5343

KALGOORLIE SAMPLE PREPARATION DIVISION
12 KEOGH WAY, KALGOORLIE WA 6430
P.O. BOX 388 KALGOORLIE WA 6430
Tel: (08) 9021 2881 Fax: (08) 9021 3476



SAMPLE DETAILS

SAMPLE STATE(S) & SAMPLE PREPARATION(S)

SOIL SAMPLES

Dry, Single Stage Mix & Grind (chrome-steel bowl)

Rock Chip Sample(s)

Dry, Crush, Single Stage Mix & Grind(chrome-steel bowl)

SAMPLE STORAGE DETAILS

GENERAL CONDITIONS :

SAMPLE STORAGE OF SOLIDS

Bulk Residues and Pulps will be stored for 60 DAYS without charge. After this time all Bulk Residues and Pulps will be stored at a rate of \$1.20/cubic metre/day until your written advice regarding collection or disposal is received. Expenses related to the return or disposal of samples will be charged to you at cost.

SAMPLE STORAGE OF SOLUTIONS

Samples received as liquids, waters or solutions will be held for 60 DAYS free of charge then disposed of , unless written advice for return or collection is received.



6.3/982582(19/06/98)

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ANALYSIS

ELEMENTS	Au	Au-Rp1	Au-Rp2	Cu	Zn	Ag	Pb
UNITS	ppb	ppb	ppb	ppm	ppm	ppm	ppm
DETECTION	1	1	1	1	1	0.1	1
METHOD	B/ETA	B/ETA	RO/ETA	B/AAS	B/AAS	B/AAS	B/AAS
SAMPLE NUMBERS							
1 P121201	1			9	31	0.1	25
2 P121202	1			7	33	x	32
3 P121203	1			10	32	0.1	19
4 P121204	1			11	20	x	14
5 P121205	1			18	41	0.1	21

6 P121206	1			10	18	0.1	6
7 P121207	1			15	62	x	31
8 P121208	1			7	11	0.1	6
9 P121209	2			12	52	0.2	25
10 P121210	1			17	47	0.2	5

11 P121211	2			11	6	x	9
12 P121212	2			8	3	x	4
13 P121213	5	7		4	6	x	8
14 P121214	2			9	18	x	15
15 P121215	1			4	8	x	8

16 P121216	x			3	35	0.1	13
17 P121217	1			15	22	x	24
18 P121218	1			17	34	x	27
19 P121219	1			3	4	x	5
20 P121220	x			5	3	x	2

21 P121221	1			3	3	x	76 *
22 P121222	x			4	5	x	6
23 P121223	1			5	9	x	7
24 P121224	1			9	6	0.1	5
25 P121225	x			18	120	* x	10

26 P121226	x			11	33	0.1	17
27 P121227	1			4	19	0.1	12
28 P121228	3			22	52	0.2	29
29 P121229	1			15	46	0.2	34
30 P121230	1			56	* 68	x	14

31 P121231	1	x		32	62	7.2 *	8
32 P121232	1			25	43	0.1	16
33 P121233	2			13	38	0.1	12
34 P121234	11		14	20	22	0.1	11
35 P121235	1			4	13	x	5

36 P121236	1			20	19	x	11
37 P121237	140	180		3	6	0.1	3
Ch. 0001 (P121201) 1			10	34	0.1	27
Ch. 0026 (P121226) 1			11	31	0.1	17
STD: NGL-13	12						



6.3/982582(19/06/98)

ANALYSIS

ELEMENTS	Au	Au-Rp1	Au-Rp2	Cu	Zn	Ag	Pb
UNITS	ppb	ppb	ppb	ppm	ppm	ppm	ppm
DETECTION	1	1	1	1	1	0.1	1
METHOD	B/ETA	B/ETA	RO/ETA	B/AAS	B/AAS	B/AAS	B/AAS
SAMPLE NUMBERS							
STD: NGL-13				14	23	0.5	27



METHOD CODE DESCRIPTIONS

B/ETA

Aqua-Regia digest.

Analysed by Graphite Furnace Atomic Absorption Spectrometry.

RO/ETA

Pre-Roast followed by an Aqua-Regia digest.

Analysed by Graphite Furnace Atomic Absorption Spectrometry.

B/AAS

Aqua-Regia digest.

Analysed by Flame Atomic Absorption Spectrometry.



APPENDIX 2