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REPORT ON FIELD INVESTIGATIONS

WITHIN EXPLORATION LICENCE 4/61

WEST COAST, TASMANIA

C H C SHANNON

23 August 1984 - 22 February 1985

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INDUSTRIAL AND MINING INVESTIGATIONS PTY. LIMITED

Incorporated in the A.C.T.

REPORT ON FIELD INVESTIGATIONS

WITHIN EXPLORATION LICENCE 4/61

WEST COAST, TASMANIA

C H C SHANNON

23 August 1984 - 22 February 1985

Distribution:

1. Master - IMI Library
2. Director of Mines
3. J G Symons
4. P S Forwood
5. Savage Office
6.
7.
8.
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10.

GENERAL INFORMATION

PERSONNEL

IMI's exploration personnel who were engaged on the licence during the period included:

Henry Shannon	Senior Geologist
Robert Annett	Project Geologist
Luke Vanzino	Junior Project Geologist
Frank Enzmann	Junior Project Geologist
Bonny Green	Senior Field Assistant
Simon Roberts	Junior Field Assistant
Casual Field Assistant	

CONTRACTORS

Contractors engaged on the licence during the period included:

A.M.D.E.L.	- Assays
Analabs	- Assays
CSIRO,Division of Mineral Chemistry	- Mineralogical and geostatistical analysis
Diamond Laboratory Services Pty.Ltd	- Heavy mineral content analysis
John Dart	- Line cutting
John Dicker Investments Pty. Ltd	- Earthmoving and track clearance
Peter Forwood	- Consulting Geologist
Hookway Aviation	- Helicopter access

EXPLORATION STATISTICS

Reported Expenditure (1.7.84 - 31.12.84)	$129,686
Reported Man Years (1.7.84 - 31.12.84)	2.5

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Map 2 - Rocky River Grid - Geochemical Sampling - soil sample locations

Map 3 - Rocky River Grid - Geochemical sampling Soils: Gold in pan concentrates of superficial quartz gravel.

1. INTRODUCTION

This report is intended to complete technical coverage of activities for the six months to 22 February 1985. The Department of Mines requires an exploration licence holder to submit, amongst other things, a yearly report from the date of each licence renewal. IMI's practice has been to submit reports on a June to June cycle which corresponds with the field season. Hence this report which covers six months will enable February to February reporting. With field work in progress, several projects are incomplete, and full interpretation will be deferred to the winter. The previous year's activities prior to 22 November 1984 are contained in reports previously issued, including:

1.1 "Report on Field Investigations Within Exploration Licence 4/61, West Coast, Tasmania: Summer Field Season 1983-84"

1.2 "Exploration Licence 4/61, West Coast, Tasmania; Quarterly Resume, 23 August 1984 to 22 November 1984.

1.3 "Additional Report on the Soils Geochemistry of the Northern Area of Exploration Licence 4/61".

This procedure has been adopted with the object of shifting write-up work out of the field season as far as it is compatible with reporting requirements.

Weather was a problem in December when the rivers were usually too high for safe crossings to be made.

Work has proceeded in the fields of re-examination and assay of old core, soil sampling and stream sediment sampling.

2. DRILL CORE

The encouraging results from the Rocky River drillholes previously reported stimulated some further sampling of core from the Specimen Reef drillholes before some re-assays of the promising Rocky River drillhole results showed the first set of assays to be false. It is suspected that the value first quoted as 5.00ppm (RR 1008) was mistyped and should have been 0.005 ppm.

Assay values for the remainder of SPC1, and SPC2 and SPC4 at Specimen Reef, contain no gold values of interest. In the case of SPC4, the presence of the elevated gold halo apparent in SPC1 was expected, at least in the area where the boreholes SPC1 and SPC4 come close to intersecting, and also in the vicinity of the point where the old workings were intersected where there is a big zone of alteration.

Material has been collected for assay from drillholes in the Long Plains South area but samples are not yet submitted.

3. SOIL SAMPLING

Areas of activity are mainly on the Northern area grid where areas considered prospective on the basis of arsenic anomaly have been re-sampled and analysed for gold and several other potential indicators. Results have been received but show no areas with gold anomaly. Portions of 14 lines were examined in this project.

Three additional lines (89.3, 89.7, 90.1) have been sampled at the Rocky River grid. Results are not available from 90.1.

Results from an experimental programme of sampling the angular quartz superficial gravel at the Rocky River grid have now been received. In this programme the transported residual quartz gravel overlying the "C" horizon was collected and a pan concentrate prepared from which the gold content was extracted by mercury amalgamation. Despite starting with a sample volume of the order of 20 litres, the ultimate sample volume was small so, on the advice of the laboratory, samples were amalgamated into batches of (generally) four. The method had the virtue of detecting background gold concentration, but the anomalies relative to the background and in absolute terms are not particularly large, nor do they correspond well to the anomalies of indicator elements previously defined.

The strongest anomaly is in a composite from three sample points, ie, approximately sixty litres of quartz gravel producing 67.5 micrograms of gold. It does not correspond with any indicator element anomaly.

4. STREAM SEDIMENT SAMPLING

The adopted procedure for collection of stream sediment samples produces both a pan concentrate and a sludge sample at each site.

An orientation exercise using samples from the previous season's pan concentrates was designed to give semi-quantitative assessment of free gold content. One strong gold anomaly was detected in Bound's Creek. This appears to be genuine in that it forms one of a cluster of elevated values, but may represent a pocket never worked over by prospectors. Worked out creeks such as Specimen Creek contain anomalous gold but so does the Little Savage River, selected as an example of Browns Plain Formation sourced gold.

One batch of samples have results back from the laboratory (see Appendix 3).

5. ROCK CHIP SAMPLING

Samples were collected from the dump outside the adit of the Rocky River Mine, which overlooks the Whyte River. Results are given in the table of chip samples 1 to 8.

6. GEOLOGY

A provisional version of a geological map of the area has been compiled. (but not included).

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APPENDIX 1.1.1

ROCKY RIVER DRILL HOLE LOGS

ROCKY RIVER No. 1 D.D.H.
and No. 2 D.D.H.

Log by C.H.C. Shannon

October 1984

Rocky River No.1 D.D.H. log by CHC Shannon, October 1984. Depths in feet.

0 -62 pink weathered granular greenschist,rare non-fissile chlorite bands.

62 -120 green chlorite schist and green and white metamorphic banded feldspar chlorite schist. Bands 1-5 mm.

120-146 granular greenschist,with rare globular quartz/carbonate segregations to 3 cm.

146-172 granular greenschist with carbonate. Granular character due to albite? porphyroblasts.

172-300 mostly fissile chlorite schist with intervals of green and white banded schist.

300-324 as above, less fissile.

324-376 grey magnetite rich greenschist with carbonate. Intervals of coarsely crystalline pyrite and of green/white banded greenschist.

376-432 mostly fissile chlorite schist; pyrite, magnetite bearing.

432-442 non-fissile greenschist with carbonate-quartz segregations; minor magnetite rock.

442-443 coarsely crystallinecarbonate rock with segregations of non-fissile chlorite and of pyrite.

443-465 fissile chlorite schist; magnetite, pyrite bearing.

465-475 feldspar-quartz-carbonate-chlorite schist with pyrite and magnetite.

475-491 fissile chlorite schist.

491-518 feldspar-chlorite schist; feldspar as coarse porphyroblasts and as metamorphic segregation bands 2-5mm.; also pyrite and magnetite porphyroblasts; rare magnetite rock bands.

518-521 carbonate rock with segregations of pyrite 5cm. and magnetite 3cm.

521-532 feldspar-chlorite schist; feldspar as porphyroblasts and as metamorphic segregation bands.

532-553.5 spindle banded chlorite schist, chlorite-feldspar schist and carbonate schist grading to carbonate rock. generally pyritic and with some magnetite; clots of massive pyrite to 3cm.

553.5-565.5carbonate rock (probably magnesite) with pyrite clots.

565.5-599 pyritic laminated feldspar-chlorite schist with feldspar and magnetite porphyroblasts; minor carbonate.

end of hole.

(core split in the original sampling, i.e. from 153 to 489 feet, is shattered and was not logged in the detail possible for the remainder.)

Rocky River No 2 D.D.H. log by CHC Shannon, October 1984.

0- 31 poor recovery; laminated greenschist with limonite stain, some gossan.

31- 62 non-fissile laminated greenschist with quartz segregations.

62- 83 non fissile, banded feldspar-chlorite schist.

83- 89 non-fissile, laminated feldspar-chlorite schist; some gossan.

89-342 mostly fissile chlorite schist.

342-364 leached, dark brown weathering talc/haematite earth and schist; probably after interbanded carbonate (magnesite)-talc-chlorite schist.

364-380 feldspar-chlorite schist with some talc-haematite earth after magnesite.

380-400 leached, dark brown weathering talc/haematite earth and schist; probably after interbanded magnesite-talc chlorite schist.

end of hole

(core split in the original sampling, i.e. from 90 to 340 feet, is shattered and could not be logged in the detail possible for the remainder.)

APPENDIX 1.1.2

ROCKY RIVER DRILL CORE ANALYSIS

ROCKY RIVER No. 1
and No. 2

November 1984

Rocky River drill core analysis.

Rocky River No.1.

Depth in ft. Sample number. Element

		Cu	Pb	Zn	Mn	Ag	As	Se	Sn	W	Sb	Te	Au	Hg	S	Fe	Ca	Mg	LoI
8- 21	RR1010	100	45	160	1750	0.2	1		x	x			x		2050				
21- 41	RR1011	135	25	330	2100	x	x		x	x			x		2030				
41-52.5	RR1012	205	15	445	1750	0.1	x		x	x			x		1675				
52.5-62	RR1013	225	x	365	2550	x	x		x	x			x		2530				
62- 71	RR1014	180	10	490	2050	x	x		x	x			x		1460				
71-78.5	RR1015	115	x	550	3550	0.1	x		x	x			x		730				
78.5-88.5	RR1016	105	5	575	6000	0.5	x		x	x			x		980				
88.5-99	RR1017	115	5	515	6250	0.9	x		x	x			x		910				
99-110	RR1018	85	x	490	2850	0.7	x		x	x			x		390				
110-119	RR1019	130	x	475	2750	0.4	x		x	x			x		490				
119-138	RR1020	105	10	1500	2600	0.5	x		x	x			x		1530				
138-153	RR1021	60	x	860	1.4%	0.1	x		x	x			x		2530				
153-169	661519	150	10	850	2.5%	0.4	24	x	x		x	x	0.008	0.110					
89-189	661520	495	x	200	1.7%	0.1	8	x	x		6	x	x	0.040					
189-209	661521	345	x	135	1550	x	x	x	7		7	x	0 017	0.045					
209-229	661522	445	5	160	2550	x	x	x	6		x	x	0 008	0.040					
229-249	661523	190	x	150	3850	x	x	x	x		x	x	x	0.015					
249-269	661524	455	x	135	2750	x	x	x	4		x	x	x	0.005					
269-289	661525	170	x	135	2500	x	x	x	3		4	x	x	0.030					
289-309	661526	35	x	135	2400	x	x	x	3		x	x	x	0.180					
309-365	no samples																		
365-377	selective sample pyrite rich.																		
	RR1001	120	5	105	1300	0.5	6		x				x		16.5%				
377-395	no samples																		

395-405 selective sample pyrite rich.

RR1002	25	5	95	1550	0.4	3	x		x		13.3%				

405-442 no samples

442-443 RR1003	20	x	65	2200	0.3	12	x		x		9.9%				

443-518 no samples

518-519 carbonate/pyrite/magnetite

RR1004	975	25	35	6850	0.4	39	x		x		11.1%				

519-520 carbonate, minor pyrite and magnetite

RR1005	910	25	25	8700	0.4	19	x		x		5.3%				

520-540 no samples

540-543 greenschist with carbonate schist

RR1006	30	20	85	2.45%	0.3	17	x		x		2.2%				

543-553 no samples

553-553.5 carbonate,non-fissile chlorite and pyrite

RR1007	1100	25	100	1.25%	0.3	37	x		x		10.3%				

553.5-562.5 carbonate rock, some pyrite

RR1008	185	20	65	1.85%	0.3	5	x		5.00		1.33%	6.25%	12.1%	5.15%	30.35%

562.5-586 no samples

586-601 representative greenschist

RR1009	90	5	370	3800	0.4	2	x		0.03		0.65%				

td of hole.

Rocky River No 2

Depth in feet Sample number Element

xxx-yyy	nnnnnn	Cu	Pb	Zn	Mn	Ag	As	Se	Sn	W	Sb	Te	Au	Hg	S

0-18 no samples

18-30 20 cm. selective for gossan in greenschist

RR2001	70	10	95	255	0.3	13	x		1.24		0.05%				

30-64 no samples

64-65 20 cm. control greenschist

RR2002	20	5	110	940	0.3	3	x		0.08		4.1%				

65-85 no samples

85-89 20 cm. gossan and wallrock

	RR2003	135	15	105	530	0.3	13		x			0.18		2.0%

89-104 no samples

104-113	662467	20	x	125	1700	x	x	x	4	3	x	x	0.510	

113-130 no samples

130-150	662469	20	5	130	895	x	x	x	3	4	x	x	0.210	
150-170	662470	150	5	145	1100	x	2	x	4	x	x	x	0.140	
170-190	662471	100	5	175	2500	x	x	x	x	6	x	x	0.090	
190-210	662472	110	5	155	2200	x	x	x	3	x	x	0.008	0.260	

210-230 no samples

230-250	662474	170	5	140	2600	x	x	x	4	x	x	x	0.150	

250-270 no samples

270-290	662476	230	10	275	4450	x	x	x	3	x	x	x	0.100	
290-310	662477	540	x	125	1400	x	x	x	x	x	x	x	0 075	
310-330	662478	325	x	145	1500	x	x	x	3	6	x	0 008	0.100	
330-340	662479	610	10	150	1700	x	2	x	4	x	x	x	0.170	

340-362 no samples

362-366 leached carbonate/greenschist

	RR2004	60	x	505	1.5%	0.3	x		x			0.82		0.01%

366-374 no samples

374-377 feldspathic greenschist

	RR2005	35	10	940	3450	0.6	x		x			0.29		0.01%

377-400 no samples

end of hole

APPENDIX 1.1.3

ROCKY RIVER CORE ANALYSIS

December 1984 Revised

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ANALABS
A division of Macdonald Hamilton Pty. Ltd.
Perth Head Office.
52 Murray Road Welshpool, Western Australia 6106.
Tel: (09) 458 7999, 458 7154. Telex: Analab AA92560.
P.O. Box 210 Bentley, W.A. 6102.

21st December, 1984.

Dear Henry,

As a result of our request to check sample Nos. RR 1008. Job No. 236.1 08 2733. I had the whole job re assayed for Au by Method 309, at our Perth laboratory, were as the original assay was carried out in the Cairns laboratory.

The results are different. The results from Perth laboratory were assayed on a split of the samples. These results have been checked and confirmed.

At the present we are looking at the results from Cairns to see if there is a splitting error or an assay error. Untill further information is obtained all work will be sent to Perth for assay.

I am sorry that our assays do not agree, but we make every effort to give you the correct result to every sample that you submitt for assay.

Yours faithfully,

P. Dzwonczyk
MANAGER, Tas.

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2733	22.10.84		1 OF 2

NUM	SAMPLE		Cu	Pb	Zn	Ag	Sb	Fe	Au	
1	RR 1001		120	500	105	1800	600	6.25%	0.5	
2	RR 1002		250	50	950	1550	8	-	0.4	
3	RR 1003		20	X	65	2200	12	-	0.3	
4	RR 1004		975	25	35	6850	39	-	0.4	
5	RR 1005		910	25	25	8700	19	-	0.4	
6	RR 1006		30	20	85	2.45%	17	-	0.3	
7	RR 1007		1100	25	100	1.25%	37	-	0.3	
8	RR 1008		185	20	65	1.85%	5	6.25%	0.3	
9	RR 1009		90	5	370	3800	2	-	0.4	
10	RR 2001		70	10	95	255	13	-	0.3	
11	RR 2002		20	5	110	940	3	-	0.3	
12	RR 2003		135	15	105	530	13	-	0.3	
13	RR 2004		60	X	505	1.50%	X	-	0.3	
14	RR 2005		35	10	940	3450	X	-	0.6	
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION		5	5	5	5	1	[illegible]	0.1	
24	DIGESTION									
25	[illegible] THOD		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

AUTHORISED SIGNATURE

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ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
AR.	236.1 08 2733C	21.12.84		2 OF 2

TUBE No.	SAMPLE No.	Au	Sn	S
1	1001	0.025	X	16.5%
2	1002	0.008	X	13.3%
3	1003	X	X	9.90%
4	1004	0.025	X	11.1%
5	1005	0.017	X	5.30%
6	1006	X	X	2.20%
7	1007	0.042	X	10.3%
8	1008	X	X	1.33%
9	1009	0.017	X	0.65%
10	2001	0.017	X	0.05%
11	2002	X	X	4.10%
12	2003	0.008	X	2.00%
13	2004	0.017	X	0.01%
14	2005	X	X	0.01%
15				
16				
17				
18				
19				
20				
21				
22				
23	DETECTION	0.008	3	0.01%
24	DIGESTION			
25	METHOD	309	402	402

APPENDIX 1.1.4

ATOMIC ABSORPTION SPECTROPHOTOMETRY

Atomic Absorption Spectrophotometry

Code

101 Dissolution of samples — Perchloric acid digestion.
Where Ag, Mo, Fe, Mn, V are determined special procedures are used to ensure dissolution. Partial extraction of Cr and Zn spinels occurs. All values are corrected simultaneously for spectral background absorption at no additional charge. Where values exceed the upper limit of the method, analyses will be repeated using method 104 unless instructions to the contrary are given. We would appreciate prior indication of the presence of sulphides or high element contents where possible.

Dissolution Cost/Sample $1.00

Elements (range)

Ag (0.5, 20)	As (100, 10,000)	Bi (10, 10,000)	Cd (0.5, 10,000)
Co (5, 10,000)	Cr (5, 10,000)	Cu (5, 5,000)	Fe (5, 10,000)
Mn (5, 10,000)	Mo (10, 1,000)	Ni (5, 10,000)	Pb (5, 5,000)
Tl (10, 5,000)	V (20, 1,000)	Zn (5, 10,000)	

Air Acetylene	Cost/Element	0.60
Nitrous Oxide Acetylene	Cost/Element	1.00

102 Dissolution of samples as above.

Ag (0.1, 4)	As (50, 2,000)	Bi (1, 2,000)	Cd (0.1, 2,000)
Co (1, 2,000)	Cr (1, 2,000)	Cu (1, 2,000)	In (4, 2,000)
Mo (2, 200)	Ni (1, 2,000)	Pb (1, 2,000)	Tl (2, 1,000)
V (4, 200)	Zn (1, 2,000)		

Air Acetylene	Cost/Element	0.60
Nitrous Oxide Acetylene	Cost/Element	1.00

103 Dissolution of samples — nitric perchloric hydrochloric and hydrofluoric acids.
Total digestion of sample for trace determination.

Dissolution Cost/Sample 3.50

Element range and costs same as 101

104 Dissolution of samples — hydrofluoric acid as above.
Total digestion for ore — body evaluation.

Ag (2.5, 250)	Bi (0.003, 5%)	Cd (2.5, 5%)	Co (0.003, 5%)
Cu (0.003, 5%)	Fe (0.003, 5%)	Mn (0.003, 5%)	Ni (0.003, 5%)
Pb (0.003, 5%)	Zn (0.003, 5%)		

Dissolution Cost/Sample		3.50
	Cost/Element	2.00

For values higher than 5% see Metallurgical analyses.

Other Dissolution Procedures

105	*hydrochloric* acid	Cost/Sample	1.10
106	nitric acid		1.10
107	aqua regia		1.10
108	nitric/perchloric acids		1.10
109	teflon bomb (HF under pressure)		3.50
110	fusion		2.50
111	cold acid		1.10
112	sulphide minerals		1.10
113	volatilisation		1.10

Special Techniques (Digestion cost included)

Code			
114	As by vapour Hydride generation		$2.50
	If carried out in conjunction with digest 101		1.65
115	Se (0.1) by vapour hydride generation		2.50
116	Te (0.1) by vapour hydride generation		2.50
117	Sb (1) by vapour hydride generation after ammonium chloride sublimation		2.50
118	Sn (1) by vapour hydride generation after ammonium iodide sublimation		2.50
119	Be by AAS after fusion (1 - 10,000)		3.00
120	Ba (5 - 10,000) special acid digestion AAS		1.35
121	Mo by extraction/AAS after digestion 102		1.65
	If carried out in conjunction with other elements using digestion 102		1.00
122	Hg by flameless AAS (0.005 - 100)		4.50
123	P (5 - 1,000) by perchloric acid (101) extraction, colorimetry		2.30
	If done in conjunction with other elements using digestion 101		1.65
124	W (0.5 - 200) by total digestion extraction colorimetry		3.30
125	B (5 - 1,000) by colorimetry after fusion		5.50
126	U (0.1 - 100) by laser excited fluorimetry Total U		4.70
127	Perchloric acid soluble		3.15
129	F by fusion/specific ion electrode (standard addition)		6.70
130	Cl by fusion/specific ion electrode (standard addition)		8.80
131	Dissolution of samples — Hydrofluoric acid. Element range and cost as 103.		
133	AAS scan of any element capable of being determined by AAS.	Cost/Element	0.30*
134	Ag method 103 using nitric/perchloric acids for digestion.	Cost/Sample	3.00

* Does not include cost of digest.

Inductively Coupled Plasma Emission Spectroscopy

Tetchem have two Labtest ICP units. One in Tasmania and one in Perth.

The advantage of ICP over other techniques is its ability to measure many elements simultaneously over a short time period. The question posed by many people is when should ICP be used in preference to AAS. We use the following criteria for making that decision:—

1. *When the number of analyte elements being determined is nine or more.*
2. *When the sample matrix is known to us and appropriate matrix corrections are in our computer or if we have time to develop matrix corrections.*
3. *When requirements are semi quantitative.*
4. *When extremely low detection limits are not required. (use electro-thermal AAS).*
5. *When result is not required to be obtained by a "primary" technique (approved technique by one of the world Standards Associations) and a "Certificate of Analysis" is not required.*
6. *When this method is the most cost effective.*
7. *When refractory elements or rare earth elements are required. In this instance ICP or XRF could be used, the choice dependent on difficulty of dissolution and matrix effects.*
8. *When dynamic range of concentrations encountered is large, e.g. metallurgical analyses.*

The greatest problem ICP poses for the analyst is the scrutinising of data for quality control purposes. Producing results at a rate of up to 3000 determinations per hour makes it impossible to do anything apart from using computer oriented checking system with alarms.

Precious Metals

Geochemical

Code	Sample weight (g)	Digestion	Element (detection)	Cost/ Element
301	5	aqua regia	Au (0.1)	$2.20
302	10	aqua regia	Au (0.03)	3.30
303	20	aqua regia	Au (0.02)	4.00
304	40	aqua regia	Au (0.02)	5.00
305	50	aqua regia	Au (0.02)	5.50
307	100	cyanide	Au (0.01)	4.50
308	250	cyanide	Au (0.01)	5.00
309	30	fire assay fusion/AAS	Au (0.005)	8.00
310	30	fire assay fusion/GRAV	Au (0.1)	10.00
311	30	fire assay fusion carbon rod AAS	Pt (0.002)	10.00
312		If analysed in conjunction with Pt	Pd (0.001)	2.00
313	50	Au fire assay fusion/AAS		12.00
314	100	Au fire assay fusion/AAS		15.00
315		Screened fire assay		20.00
316		As appropriate digestion		50.00
		Ag Au Ir Pd Pt Os Rh Ru		50.00
317		Fineness of gold bullion		50.00
318		CN Solution reading direct/AAS	Au	2.00
319		CN Solution Chiddy Method	Au	8.00
320		CN Solution Denver Method	Au	8.00
321	5	As 301 with carbon rod finish	Au (0.01)	4.30
322	10	As 302 with carbon rod finish	Au (0.003)	5.40
323	20	As 303 with carbon rod finish	Au (0.002)	6.00
324	40	As 304 with carbon rod finish	Au (0.002)	7.00
325	50	As 305 with carbon rod finish	Au (0.002)	7.50
326	30	As 309 with carbon rod finish	Au (0.001)	12.00
327	150	fire assay fusion/AAS	Au (0.003)	18.00
328	5 Kg	As 308 but absorbing on zinc	Au (0.00005)	20.00

X-RAY Fluorescence Spectroscopy

Trace Element Determinations

Code		Cost/Element
401	Basic set up charge $2.00/sample. Range — detection to 1% Accuracy ± 5%	
	Pressed powder x-ray fluorescence. As (2) Ba (10) Bi (4) In (15) La (20) Mo (4) Nb (4) Pb (4) Rb (2) Sb (3) Sn (3) Sr (5) Ta (10) Th (4) U (4) W (10) Y (4) Zr (4)	$2.00
	i.e. 1st element $4.00 subsequent elements $2.00	
402	No set up charge — pressed powder x-ray fluorescence. Ce (20) Cr (5) Cs (20) Ga (4) Ge (4) Hf (10) Hg (5) I (10) K (50) Mg (50) P (30) S (30) Se (5) Tl (5) Te (3)	4.00
403	Low level concentrations — glass fusion XRF Range — detection to 5%. Accuracy ± 5%	
	Sn (0.003%) Ta (0.005%) Nb (0.005%) W (0.005%)	7.50
404	Quartz dilutions — used to overcome matrix effects on samples with complex matrices. Can be carried out on all elements listed in 401/402.	
	Element concentration less than 5% Element concentration greater than 5%	5.00 10.00
405	High level concentrations — glass fusion XRF. Used for tungsten, niobium, tantalum ores where element concentration exceeds 10%.	
	Set up charge Cost per element	5.00 5.00
	i.e. cost first element $10.00 subsequent elements $5.00	
406	High level concentrations — glass fusion XRF. Used for cassiterite, baryte, rutile, zircon, manganese ores.	
	Set up charge Cost per element	10.00 5.00
	i.e. cost first element $15.00 subsequent elements $5.00	
407	Silicate Analyses — total A12O3 SiO2 TiO2 Fe203 (total Fe) FeO MnO MgO CaO K2O Na2O CO2 SO3 P205 H2O±	59.00
	FeO, SO3, CO2, Na2O are chemical methods.	

APPENDIX 1.2.1

SPECIMEN REEF

LOG D.D.H. - SPC 1

Logged by F.Enzmann, December 1984 - February 1985

Sample Number	Interval	Description
SP 1001	48 - 50	Slightly foliated mica greenschist; moderate hematite; trace of disseminated pyrite and pyritic casts; minor quartz carbonate veins to foliation.
SP 1002	50 - 52	Slightly foliated mica greenschist; hematite rich zones, trace of disseminated pyrite; numerous ptygmatic quartz veins.
SP 1003	52 - 54	As above but with silicified zones.
SP 1004	54 - 56	Slightly silicified meta-andesite; minor quartz veins with traces of carbonate; moderate hematite, trace of pyrite.
SP 1005	56 - 58	Meta-andesite grading into greenschist, minor quartz veins, traces of pyrite.
SP 1006	58 - 60	Foliated greenschist with meta-andesite bands; thick quartz veins with traces of carbonate; moderate disseminated pyrite.
SP 1007	60 - 62	Meta andesite with silicic zones and quartz-carbonate veins; minor greenschist with ptygmatic vein quartz; disseminated pyrite and chalcopyrite.
SP 1008	62 - 64	Meta-andesite with narrow silicified-carbonate zones; disseminated pyrite; thin quartz-pyrite stringers; minor greenschist.
SP 1009	64 - 66	Meta-andesite with thin cross-cutting quartz-carbonate veins; moderate disseminated pyrite and chalcopyrite.
SP 1010	66 - 68	Meta-andesite with silicic and greenschist zones, minor thin ptygmatic quartz veins; minor thin foliated and cross-cutting quartz-carbonate veins; disseminated pyrite and a trace of pyritic stringers.
SP 1011	68 - 70	Foliated greenschist with minor as above and moderate hematite.

Sample Number	Interval	Description
SP 1012	70 - 72	Zonated greenschist and meta-andesite. Narrow ptygmatic quartz veins occur in the greenschist. Thick (2cm) quartz-carbonate veins with associated pyrite occur in the andesite. Minor disseminated pyrite.
SP 1013	72 - 74	Greenschist grading into a meta-andesite. A quartz vein with carbonate blebs and pyritic selvages forms a contact between the andesite and schist. Pyrite accumulates in fractures and in a narrow zone to foliation.
SP 1014	74 - 76	Meta-andesite with minor quartz stingers and a thick (1/2cm) quartz-carbonate vein; traces of disseminated pyrite.
SP 1015	76 - 78	Meta-andesite with minor greenschist; containing silicic zones and a 5cm quartz band; ptygmatic quartz veins with associated carbonate blebs; minor disseminated pyrite.
SP 1016	78 - 80	Meta-andesite; numerous quartz-carbonate-hematite veins to foliation and along fractures; pyrite also forms accumulated blebs within fractures. Minor disseminated pyrite; minor ptygmatic quartz within greenschist zones.
SP 1017	80 - 82	Meta-andesite, with quartz-carbonate zones, ptygmatic vein quartz and a zone 2-5cm thick containing two bands of massive pyrite and chalcopyrite.
SP 1018	82 - 84	Meta-andesite grading into greenschist; numerous small ptygmatic quartz veins containing carbonate blebs and hematite; minor 2-3cm thick quartz-carbonate veins; trace of disseminated pyrite.
SP 1019	84 - 86	Meta-andesite; slightly silicic; moderate hematite; minor quartz veins; moderate disseminated pyrite.
SP 1020	86 - 88	As above, but with quartz-carbonate veins which lack specific orientations and a zone of disseminated pyrite.
SP 1021	88 - 90	As above.
SP 1022	90 - 92	Meta-andesite with minor greenschist and a silicic zone; minor thin quartz-carbonate veins and one 2-5cm thick quartz vein.

Sample Number	Interval	Description
SP 1023	92 - 94	Meta-andesite with minor greenschist; contains a 2-5cm quartz vein and several quartz-carbonate-hematite fracture filling veinlets. Several fractures contain pyrite and large pyritic blebs are common.
SP 1024	94 - 96	Meta-andesite, minor quartz veinlets, moderate pyritic blebs and some fracture filling pyrite.
SP 1025	96 - 98	Meta-andesite, containing a zone of greenschist rich in ptygmatic quartz veinlets; and a 5cm zone with vein quartz, fuchsite?, pyrite and carbonate.
SP 1026	98 -100	Meta-andesite with disseminated pyrite; containing 1-2cm thick quartz-carbonate veins and fracture filled quartz veinlets; some veins contain large pyritic accumulates.

APPENDIX 1.2.2

SPECIMEN REEF

LOG D.D.H. - SPC 2

Logged by F. Enzmann December 1984 - February 1985

Sample Number	Interval	Description
SP 2001	33 - 37	Leached material, includes sericite schist, quartz clots, quartz-mica-carbonate? schist.
SP 2002	37 - 39	Leached material, includes sericite schist with ptygmatic quartz veinlets.
SP 2003	39 - 41	As above.
SP 2004	41 - 43	Leached material, includes sericite schist with carbonate bands.
SP 2005	43 - 45	As above.
SP 2006	45 - 49	Leached material, includes micaceous greenschist with ptygmatic vein quartz.
SP 2007	49 - 51	Graphitic phyllite with alternating bands of albite and minor pyrite in adjacent quartz veins.
SP 2008	51 - 53	As above
SP 2009	53 - 55	As above but chloritic; minor chlorite-albite-talc greenschist; minor pyrite.
SP 2010	55 - 57	Chlorite-albite greenschist; numerous ptygmatic quartz veins; yellow FeO staining from pyrite.
SP 2011	57 - 59	As above.
SP 2012	59 - 61	As above.
SP 2013	61 - 63	As above.
SP 2014	63 - 65	Chlorite-ablite greenschist; small ptygmatic quartz veinlets; pyrite and chalcopyrite occurs in numerous leached albite-carbonate veins.
SP 2015	65 - 67	As above with large chalcopyrite and pyrite inclusions, minor silicic andesite, minor disseminated pyrite.
SP 2016	67 - 69	Meta-andesite and chlorite-albite greenschist containing ptygmatic quartz and pyritic pseudomorphs.

Sample Number	Interval	Description
SP 2017	69 - 71	Meta-andesite with patches of ptygmatic vein quartzed sericite-chlorite-albite greenschist.
SP 2018	71 - 73	Chlorite-albite greenschist with bands of meta-andesite; ptygmatic quartz veins, minor pyrite; moderate carbonate alteration within quartz veins.
SP 2019	73 - 75	Meta-andesite containing ptygmatic quartz veins, pyritic inclusions and minor carbonate veins.
SP 2020	75 - 77	As above.
SP 2021	77 - 79	Chlorite-albite greenschist, with ptygmatic vein quartz, silicic zones, disseminated pyrite, leached carbonate blebs and pyrite in foliation bands.
SP 2023	81 - 82.2	Clorite-albite greenschist with FeO staining, ptygmatic vein quartz, containing zones of silicic and carbonate alteration; disseminated pyrite and pyritic blebs.
SP 2024	82.2 - 84	Meta-andesite, silicified with zones rich in vein quartz and minor disseminated pyrite.
SP 2025	84 - 85	Meta-andesite, with large pyritic blebs; numerous quartz veins and silicic-carbonate alteration.
SP 2026	85 - 87	Meta-andesite, strongly foliated near quartz veins, with numerous small quartz veins containing carbonate blebs.
SP 2027	87 - 89	Meta-andesite with numerous quartz veins (40% ptygmatic; minor carbonate and elongated pyrite.
SP 2028	89 - 91	As above.
SP 2029	91 - 93	Meta-andesite with desseminated pyrite; numerous quartz veins and minor pyrite-carbonate zones.
SP 2030	93 - 94.45	Meta-andesite with disseminated pyrite, silicic with zones of vein quartz containing pyrite and carbonates.
SP 2031	94.45-95.45	Meta-andesite, silicic, with pyritic and pink tinted carbonate zones.
SP 2032	95.45 - 97	As above.
SP 2033	97 - 98	As above with minor chlorite-albite schist.

Sample Number	Interval	Description
SP 2034	98 -100	Silicic meta-andesite, containing desseminated pyrite, ptygmatic vein quartz and minor carbonates.
SP 2035	100-102	Silicic meta-andesite, with zones of vein quartz, minor carbonates; chalcopyrite and pyrite disseminations and inclusions.
SP 2036	102-104	Meta-andesite containing numerous quartz veins with carbonate and pyrite, minor greenschist, moderate disseminated pyrite.
SP 2037	104-106	Meta-andesite, with numerous quartz veins, minor carbonates and disseminated pyrite.
SP 2038	106-108	Meta-andesite, with small greenschist zones; numerous quartz veins containing carbonate and plagioclase. Minor zones with disseminated chalcopyrite and pyrite.
SP 2039	108-109.525	Meta-andesite with desseminated pyrite, vein quartz carbonate and minor greenschist.
SP 2040	109.525 - 109.675	White carbonate vein.
SP 2041	109.675-112	Meta-andesite; disseminated pyrite; vein quartz, carbonate and minor greenschist.
SP 2042	112-114	As above
SP 2043	114-116	Meta-andesite, with desseminated pyrite, numerous small quartz veins and carbonate blebs.
SP 2044	116-118	Meta-andesite; numerous small quartz veins, pyritic zones with large pyrite crystan]ls close to quartz veins; moderate disseminated pyrite.

APPENDIX 1.2.3

SPECIMEN REEF

LOG D.D.H. - SPC 4

Logged by F. Enzmann December 1984 - February 1985

Sample Number	Interval	Description
SPC 4000	25 - 27	Brown-yellow FeO stained foliated greenschist containing narrow lensoid quartz and pyritic patches; grading into a green-grey meta-andesite with pyritic casts in band like zones and fractures.
SPC 4001	27 - 29	Green-grey meta-andesite, with aligned mafics and disseminated pyrite casts; moderate FeO staining.
SPC 4002	29 - 31	Meta-andesite, with mafic-acidic banding; moderate FeO staining; disseminated pyrite and minor thin cross-cutting quartz veins.
SPC 4003	31 - 33	As above.
SPC 4004	33 - 35	Chloritic meta=andesite; with cross-cutting quartz veins, some associated with specular hematite; disseminated pyrite; minor FeO staining.
SPC 4005	35 - 37	Meta=andesite, with ptygmatic quartz veins, pyrite and hematite zones and minor cross-cutting quartz veins.
SPC 4006	37 - 39	Greenschist with ptygmatic quartz veins and disseminated pyrite. Grades into a meta-andesite with disseminated pyrite and cross-cutting quartz veins.
SPC 4007	39 - 41	Meta-andesite with disseminated pyrite, contains minor thin cross cutting quartz veins with pyrite casts and specular hematite.
SPC 4008	41 - 43	Meta-andesite with disseminated pyrite, contains minor thin cross cutting quartz veins with pyrite casts and specular hematite.
SPC 4009	43 - 45	Meta-andesite with disseminated pyrite and 1cm thick cross cutting quartz-pyrite veinlets. Grades into foliated, hematitic greenschist with minor pyrite and magnetite.
SPC 4010	45 - 47	Greenschist with ptygmatic vein quartz; minor disseminated pyrite, minor quartz-carbonate veins and minor hematicic bands.

Sample Number	Interval	Description
SPC 4011	47 - 49	Foliated greenschist, ptygmatic vein quartz; several large quartz-carbonate-pyrite veins with hematitic selvages; moderate hematite bands, minor pyrite and pyrite casts.
SPC 4012	49 - 51.5	Foliated greenschist with ptygmatic vein quartz. Minor pyrite and some large quartz lenses.
SPC 4013	51.5 - 62	Foliated greenschist with large pyritic blebs; 1-2cm thick quartz-carbonate veins and pyrite casts.
SPC 4014	62 - 64	foliated greenschist grading into a meta-andesite; contains metasomatic pyritic vein quartz, some large quartz lenses and traces of disseminated pyrite.
SPC 4015	64 - 66	Greenschist containing a 10-15cm thick silicic zone with carbonate blebs and minor disseminated pyrite.
SPC 4016	66 - 68	Greenschist, partly silicic with carbonate blebs, disseminated pyrite, minor quartz veinlets and a carbonate-chlorite vein.
SPC 4017	68 - 70	Greenschist with apparant original bedding, ptygmatic vein quartz, minor disseminated pyrite and minor cross-cutting quartz-carbonate veins.
SPC 4018	70 - 72	Greenschist, containing lensoidal quartz veins with carbonate blebs; moderate disseminated pyrite and traces of fracture filled veinlets.
SPC 4019	72 - 74	As above.
SPC 4020	74 - 76	Greenschist with quartz-carbonate alteration, disseminated pyrite and quartz rich zones with hematite-pyrite selvages.
SPC 4021	76 - 78	Greenschist with disseminated pyrite; quartz-carbonate-pyrite zones; hematite stained fractures and hematitic selvage alteration.
SPC 4022	78 - 80	As above with highly fractured meta-andesite between 78.5 and 79m; the fractures contain carbonate and hematite.
SPC 4023	80 - 82	As avove grading into a pink-grey-white carbonate alteration zone 1-1.5cm thick.

Sample Number	Interval	Description
SPC 4024	82 - 84 1.5m core missing	quartz-carbonate altered greenschist with talc rich zones, highly fractured. Grades into a greenshcist containing pink carbonate in fractures.
SPC 2025	84 - 86	Greenschist with thick boudin quartz veins; carbonate filled fractures and traces of disseminated pyrite.
SPC 2026	86 - 88	As above with a thick cross-cutting carbonate vein, chlorite rich zones and minor talc.
SPC 4027	88 - 90	Greenschist containing a 2- cm thick zone of vein quartz; lensoidal vein quartz and several cross-cutting carbonate veins; fractures are carbonate and quartz rich.
SPC 4028	90 - 92	Greenschist, containing minor lensoidal vein quartz and minor cross-cutting carbonate veins.
SPC 4029	92 - 94	Greenschist, containing a silicic-carbonate altered zone; minor thin carbonate veins; minor ptygmatic vein quartz and minor disseminated pyrite.

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APPENDIX 1.2.4

ANALABS ANALYTICAL DATA

236.1 08 2885A

236.1 08 2885A

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2824B	27.12.84		1 OF 3

TUBE No.	SAMPLE No.	Sn	Ba	Au	Se					
1	SP 1001	X	170	0.002	X					
2	SP 1002	X	40	X	X					
3	SP 1003	X	20	0.006	0.04					
4	SP 1004	X	25	X	0.08					
5	SP 1005	X	90	0.002	X					
6	SP 1006	X	20	X	X					
7	SP 1007	X	X	0.002	0.04					
8	SP 1008	X	X	X	0.08					
9	SP 1009	X	X	0.003	X					
10	SP 1010	X	X	0.003	X					
11	SP 1011	X	X	X	X					
12	SP 1012	X	X	X	0.16					
13	SP 1013	X	X	0.017	X					
14	SP 1014	X	X	0.003	X					
15	SP 1015	3	35	0.004	X					
16	SP 1016	4	40	X	0.12					
17	SP 1017	X	140	X	X					
18	SP 1018	X	95	X	0.04					
19	SP 1019	X	70	0.003	X					
20	SP 1020	X	40	0.002	X					
21	SP 1021	X	60	0.004	X					
22	SP 1022	X	35	0.007	X					
23	SP 1023	X	X	0.002	X					
24	SP 1024	3	X	0.002	X					
25	SP 1025	X	X	0.002	X					

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2824B	27.12.84		2 OF 3

BE o.	SAMPLE No.	Sn	Ba	Au	Se					
1	SP 1026	X	25	0.003	X					
2	SP 2001	7	280	0.003	X					
3	SP 2002	5	280	0.003	0.06					
4	SP 2003	X	420	0.017	X					
5	SP 2004	X	240	0.004	X					
6	SP 2005	3	440	X	X					
7	SP 2006	3	450	X	X					
8	SP 2007	X	580	X	0.24					
9	SP 2008	X	520	0.002	X					
10	SP 2009	X	300	X	X					
11	SP 2010	X	30	X	0.08					
12	SP 2011	X	55	0.003	X					
13	SP 2012	X	35	0.003	X					
14	SP 2013	4	45	0.002	X					
15	SP 2014	X	50	0.003	X					
16	SP 2015	X	360	0.002	0.04					
17	SP 2016	X	200	0.002	X					
18	SP 2017	X	180	0.002	0.04					
19	SP 2018	X	290	0.004	X					
20	SP 2019	X	560	X	X					
21	SP 2020	3	490	X	X					
22	SP 2021	X	460	X	0.08					
23	SP 2022	X	500	0.002	X					
24	SP 2023	3	280	0.002	0.04					
25	SP 2024	X	X	0.004	X					

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2824B	27.12.84		3 OF 3

TUBE No.	SAMPLE No.	Sn	Ba	Au	Se					
1	SP 2025	X	20	0.003	X					
2	SP 2026	X	45	0.008	X					
3	SP 2027	X	50	0.002	X					
4	SP 2028	X	X	0.003	X					
5	SP 2029	X	X	0.002	0.04					
6	SP 2030	X	X	0.002	X					
7	SP 2031	X	X	X	0.12					
8	SP 2032	X	X	X	X					
9	SP 2033	5	55	0.002	0.04					
10	SP 2034	X	470	0.004	X					
11	SP 2035	X	340	0.002	X					
12	SP 2036	X	540	0.003	0.08					
13	SP 2037	X	500	X	X					
14	SP 2038	X	340	X	X					
15	SP 2039	X	210	X	X					
16	SP 2040	3	X	0.002	X					
17	SP 2041	4	450	X	X					
18	SP 2042	X	80	X	0.04					
19	SP 2043	X	330	X	X					
20	SP 2044	X	400	X	X					
21	SP 2045	X	140	X	X					
22										
23	DETECTION	3	20	0.002	0.02					
24	DIGESTION									
25	METHOD	402	401	322	115					

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2885A	29.1.85		1 OF 3

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ni	Fe%	Mn	Ag	As	
1	SPC 4000	20	X	50	40	4.05	205	X	5	
2	SPC 4001	35	X	25	35	2.80	130	X	5	
3	SPC 4002	40	X	25	50	2.45	130	X	3	
4	SPC 4003	85	X	20	40	2.85	170	X	5	
5	SPC 4004	70	X	25	70	3.35	245	X	2	
6	SPC 4005	50	X	20	40	3.50	285	X	4	
7	SPC 4006	35	X	20	80	3.05	280	0.1	4	
8	SPC 4007	40	X	20	80	2.80	245	0.1	9	
9	SPC 4008	75	X	25	40	3.25	285	0.1	7	
10	SPC 4009	SAMPLE	NOT	SUBMIT	TED	-	-	-	-	
11	SPC 4010A	170	X	30	45	3.60	295	X	8	
12	SPC 4011	115	X	35	75	3.50	225	X	17	
13	SPC 4012	90	X	40	35	2.70	130	X	5	
14	SPC 4013	20	5	65	65	4.80	285	X	6	
15	SPC 4014	5	X	70	65	4.20	310	X	2	
16	SPC 4015	5	X	55	45	3.25	250	X	X	
17	SPC 4016	10	10	30	60	2.70	275	X	5	
18	SPC 4017	15	5	20	45	2.20	370	X	7	
19	SPC 4018	5	5	40	65	4.10	300	X	4	
20	SPC 4019	15	5	45	65	4.25	315	X	2	
21	SPC 4020	65	X	30	45	2.40	170	X	7	
22	SPC 4021	15	X	30	80	3.15	220	X	4	
23	SPC 4022	10	5	25	95	3.20	345	X	10	
24	SPC 4023	10	X	20	55	4.60	610	X	9	
25	SPC 4024	20	X	15	140	2.85	615	X	4	

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2885A	29.1.85		2 OF 3

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ni	Fe%	Mn	Ag	As	
1	SPC 4025	65	X	75	55	3.90	510	X	2	
2	SPC 4026	95	X	70	110	3.90	475	X	11	
3	SPC 4027	125	10	60	110	4.10	490	X	13	
4	SPC 4028	35	5	40	50	4.90	685	X	4	
5	SPC 4029	140	X	70	80	5.10	875	X	21	
6	SPC 4010B	135	5	40	55	4.45	345	X	5	
7										
8										
9										
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11										
12										
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14										
15										
16										
17										
18										
19										
20										
21										
22										
23		5	5	5	5	50	5	0.1	1	
24										
25	METHOD	101	101	101	01	101	101	102	114	

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2885A	13.2.85		1 OF 2

TUBE No.	SAMPLE No.	Se	Te	Ru						
1	SPC 4000	X	X	X						
2	SPC 4001	X	X	X						
3	SPC 4002	X	X	0.005						
4	SPC 4003	X	X	X						
5	SPC 4004	X	X	X						
6	SPC 4005	X	X	X						
7	SPC 4006	X	X	X						
8	SPC 4007	X	X	0.003						
9	SPC 4008	X	X	0.002						
10	SPC 4009	N/L	N/L	N/L						
11	SPC 4010A	X	X	X						
12	SPC 4010B	X	X	0.003						
13	SPC 4011	X	X	0.002						
14	SPC 4012	X	X	X						
15	SPC 4013	X	X	X						
16	SPC 4014	X	X	0.003						
17	SPC 4015	X	X	0.002						
18	SPC 4016	X	X	0.002						
19	SPC 4017	X	X	X						
20	SPC 4018	X	X	0.002						
21	SPC 4019	X	X	0.002						
22	SPC 4020	X	X	0.003						
23	SPC 4021	X	X	X						
24	SPC 4022	X	X	X						
25	SPC 4023	X	X	0.003						

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2885A	13.2.85		2 OF 2

TUBE No.	SAMPLE No.	Se	Te	Au						
1	SPC 4024	X	X	X						
2	SPC 4025	X	X	X						
3	SPC 4026	X	X	0.002						
4	SPC 4027	X	X	X						
5	SPC 4028	X	X	X						
6	SPC 4029	X	X	X						
7										
8										
9										
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14										
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16										
17										
18										
19										
20										
21										
22										
23	DETECTION	0.04	0.02	0.001						
24	DIGESTION									
25	METHOD	115	116	325						

APPENDIX 2.1.1

NORTHERN AREA - ARSENIC ANOMALY SERIES

SAMPLE DESCRIPTIONS

LOCATION N	LOCATION E	DEPTH (m)	HORIZON	COLOUR	ROCK CHIPS	REMARKS
16.7	50825	0.80	C	grey brown	slate	
	50800	0.50	C	pale green	green phyllile	
	50775	0.60	C	yellow orange brown	slate	
	50750	0.60	C	" " "	"	
	50725	0.50	C	" " "	"	
	50700	1.30	C?	cream brown	"	
	50675	0.80	C	orange brown	"	
	50650	0.50	C	grey yellow	"	
	50625	0.40	C	yellow orange brown	"	
	50600	0.80	C	cream brown	no chips present	laminated clay
	50575	0.40	C	yellow brown	slate	
	50550	1.50	B	orange clays		max depth of auger
16.4	51000	0.40	C	pale blue grey	blue slate	vein quartz present
	50975	0.40	C	yellow grey	slate	
	50950	0.50	C	pale blue grey	blue slate	
	50925	0.40	C	yellow blue grey	" "	
	50900	0.80	C	blue grey	no chips present	
	50875	1.25	C	orange blue grey	blue slate	
	50850	0.70	C?	dark yellow brown	no chips	
	50825	0.40	C	yellow blue grey	slate and quartzite	
	50800	0.60	C	blue grey	blue slate	
	50600	0.50	C	blue grey	blue slate	
	50575	0.30	C	cream grey yellow	slate	
	50550	0.60	C	blue grey	blue slate	Fe stained chips
	50525	0.70	C	cream grey	slate	
	50500	0.30	C	blue grey	blue slate	
	50250	0.50	C	cream blue	slate	
	50225	0.30	C	cream blue	"	
	50200	0.40	C	blue grey	blue slate	heavily Fe stained
14.8	50150	0.40	C	cream grey	grey slate	
	50125	0.20	C	blue grey	" "	sample taken 10m south of line
	50100	0.80	C	orange brown	" "	
	50075	1.00	C	" "	" "	
	50050	0.80	C	" "	" "	
	50025	0.90	C	" "	light grey slate	
	50000	0.90	C	" "	light grey slate	
	49975	0.30	C	grey brown	green grey slate	
	49950	0.80	C	brown	grey slate	
	49925	0.90	C	red brown	slate	specular hematite in joints

LOCATION N	LOCATION E	DEPTH (m)	HORIZON	COLOUR	ROCK CHIPS	REMARKS
14.8	49900	1.00	C	grey brown	green grey slate	
	49875	0.70	C	" "	grey slate	
	49850	1.00	C	" "	blue grey slate	
14.7	50125	0.20	C	grey yellow	black slate	
	50100	0.25	C	blue yellow	blue slate	
	50075	0.90	C	orange brown	grey slate	
	50050	0.80	C	yellow blue	blue slate	
	50025	0.70	C	grey yellow	grey slate	
	50000	1.20	C	red brown	slate	
	49975	1.15	C?	orange brown	grey slate	
	49950	1.10	C	green brown	pale green slate	
	49925	1.10	C	" "	green grey slate	
	49900	0.80	C	yellow green	pale green slate	
	49875	0.90	C	deep red brown	slate	
	49850	0.80	C	" " "	slate	
	49825	0.60	C	red brown	red yellow slate	
	49800	0.80	C	brown	black/blue slate	
	49550	1.00	C	red brown	Fe stained slate	
	49525	0.50	C	brown green	grey slate	
	49500	1.10	C	mottled red brown	slate	foliated clays
	49475	0.30	C	brown grey	grey slate	
	49450	1.00	C	brown	blue/grey slate	relict texture in quartz vein float
	49425	0.80	C	red brown	Fe stained slate	
	49400	1.20	C	green	green slate	
	49375	1.20	C	brown-grey		
	49350	0.60	C	orange	slate	
	49325	0.60	C	purple brown	schist	
	49200	0.50	C	tan & green	chlorite-mica schist	
	49175	0.80	C	tan & red	" "	
	49150	0.70	C	tan & green	" "	
	49125	0.70	C	" "	" "	
	49100	0.30	C	" "	" "	heavily weathered sample
	49075	0.70	C	" "	" "	
	49050	0.90	C	" "	" "	
	49025	0.80	C	orange brown	schist	
14.6	50000	1.20	C	cream brown		light & crumbly
	49975	1.10	C	orange red green	green grey schist	
	49950	1.10	C	orange brown	brown schist	black horizons
	49925	0.90	C	brown grey green	blue grey schist	
	49900	0.70	C	green orange brown	buff schist	
	49875	0.70	C	yellow orange		crumbly
	49850	1.40	C	orange red	blue grey schist	
	49825	1.40	C	light brown	schist	micaceous
	49800	1.25	C	" "	-	crumbly
	49775	0.90	C	brown orange green	purple shale	

LOCATION N	E	DEPTH (m)	HORIZON	COLOUR	ROCK-CHIPS	REMARKS
14.6	49600	1.40	C	red green	grey orange schist	
	49575	1.25	C	red black		clayed
	49550	0.80	C	tan	purple yellow schist	
	49525	0.60	C	green orange	green grey schist	
	49500	0.80	C	green brown	green schist	
	49475	0.60	C	orange red	red green schist	
	49450	0.90	C	yellow pink		
	49425	0.50	C	brown orange	grey schist	trace quartz
	49400/1	0.30	B-C	brown		hit boulder
	/2	0.50	C	brown orange	grey schist	
	49375	0.60	C	yellow orange	grey schist	
	49350	1.00	C	yellow orange	grey schist	quartz chips
	49325	0.80	C	brown green	green schist	
	49300	0.70	C	blue green yellow		
	49275	0.90	C	green orange	green schist	
	49250	0.60	C	orange brown	green schist	yellow banding
	49225	1.00	C-B	yellow blue green	blue green schist	
	49200	1.20	C	green & tan	chlorite-mica schists	
	49175	0.70	C	" "	" "	
	49150	1.50	B	orange brown	" "	
	49125	0.80	C	green grey tan	" "	
	49100	1.80	C	cream tan	" "	
	49075	0.50	C	" "	" "	
	49050	0.80	C	cream grey	grey schist	
	49025	0.50	C	grey tan	grey schist	
14.5	49600	1.10	C	light friable sandy clay	green grey schists	purple red in C horizon
	49575	0.80	C	brown grey	grey schist	
	49550	1.10	C	pink red	dark green grey tuff	
	49525	0.90	C	orange grey	grey brown schist	
	49500	1.40	B	red brown	grey green phyllite	
	49475	1.40	C	orange green	green grey schist	
	49450	0.60	C		light grey phyllite	
	49425	0.70	C	blue grey	blue grey schist	
	49400	1.10	C		light grey phyllite	crumbly
	49375	1.30	C	brown green	green grey schist	
14.4	49525	0.30	C	grey blue brown	micaceous grey blue schist	
	49500	1.00	C	brown	light grey phyllite	numerous rock chip horizons
	49475	1.50	C	tan cream	cream white slate	
	49450	0.40	C?		grey green phyllite	
	49425	0.80	C	grey & blue red	grey blue schist	
	49400	0.60	C?		dark grey phyllite	banded phyllite
	49375	0.70	C	brown grey	grey schist	
	49350	1.40	B/C	orange brown	light grey phyllite	

LOCATION N	E	DEPTH (m)	HORIZON	COLOUR	ROCK-CHIPS	REMARKS
14.3	49500	0.80	C	orange green/grey	green grey schist	
	49475	0.80	C		light grey green phyllite	dkr carbonaceous horizon
	49450	1.10	C	red brown	phyllites	
	49425	0.60	C	orange tan	cream grey schist	
	49400	0.50	C	orange green grey	blue grey schist	
	49375	0.50	C	grey blue	grey blue schist	
	49350	0.80	C	light brown	dark blue black phyllites	
	49325	0.90	C	cream green	green schist	
14.2	49450	0.90	C	orange red	green grey schist	
	49425	0.85	C	light brown red	red phyllites	
	49400	0.80	C	tan	grey schist	
	49375	0.30	"Two holes unable to penetrate past 0.30m. Banded green phyllites with cross cutting Fe oxide laminae."			
	49350	0.70	C	blue grey brown	blue grey schist	
14.1	50325	(				
	50300	(TERTIARY SAND LAYER (QUARTZ/MICA) UNABLE TO PENETRATE				
	50275	(				
	50250	1.40	C?	mottled cream yellow	No chips	
	50225	1.40	C	pale blue	pale blue slate	tertiary sand layer
	50200	1.10	C	dark grey	dark grey schist	carbonaceous?
	50175	0.30	C	white pale blue	pale blue slate	
	50150	0.30	C	" " "	" " "	
	50125	0.20	C	" " "	" " "	
	50100	0.80	C	dark grey	dark grey schist	carbonaceous?
	50075	1.50	B	orange		max depth of auger
	49475	0.40	C	brown grey	grey schist	
	49450	0.60	C	cream brown	shale	vein quartz
	49425	0.50	C	cream brown	shale	
	49400	0.70	C	tan cream	green schist	
	49375	0.80	C	" "	cream shale	
	49100	1.50	C?	red brown	phyllite	
	49075	1.50	C	red brown	light grey phyllite	
	49050	1.30	C?	red brown		
14.0	40550	0.50	C	purple red brown	grey slate	
	49525	1.00	C	orange red	grey slate	
	49500	0.50	C	green tan	grey slate	
	49475	0.60	C	grey green	grey blue schist	
	49450	0.60	C	cream grey	cream grey schist	
	49425	0.50	C	cream brown	cream brown schist	
	49400	0.60	C	brown grey	grey schist	
	49375	1.00	C	cream grey	grey schist	

LOCATION N	E	DEPTH (m)	HORIZON	COLOUR	ROCK CHIPS	REMARKS
	49125	1.20	C	orange brown		
	49100	0.85	C		grey green phyllite	
	49075	1.40	C?		light green chips	
	49050	0.90	C	bright red	chloritic flakes	
	48025	0.75	C		grey green phyllite	
13.6	49900	1.40	C	brown green		
	49875	1.50	C/B	green tinge clays		
	49850	1.35	C?			
	49825	1.30	C	brown green	no chips	white powdery material present
	49800	0.75	B	orange clay		
ROAD TRAVERSE						
	1250	0.70	C	light sandy brown	weathered quartzite	sandy texture
	1225	0.20	C	light sandy brown	weathered quartzite	
	1200	0.40	C	orange brown		
	1175	0.60	C	orange brown		sandy texture
	1150	0.60	C	light grey	light grey phyllites	quartz veining
	1125	0.15	C	brown red	Fe stained ochre shales	friable soil
	1100	0.30	C	brown red	dark red brown shale	" "
	1075	0.10	C	brown red	light grey phyllite	" "
	1050	0.20	C	red	Fe stained brown shales	" "
	1025	0.85	C	grey green	black shale	purple horizons
	1000	0.35	C	grey green	ochre shale chips	
	0925	0.20	C	brown green	micaceous shales	
	0800	0.90	C	brown orange	dark grey shales	
	0575	0.60	C	ochrous	micaceous	friable
	0550	0.20	C	ochrous	blocky shales	friable
11.1	49700	1.50	B	brown clays	no chips	max depth of auger
	49675	1.50	C	brown clays	phyllite/schist	
	49650	1.30	C	light grey blue	no chips	
	49625	1.20	C	tan orange	Fe stained quartz	green clay blebs
	49600	1.20	C	orange clay with green & pink horizons		
	49400	1.50	B/C	grey clays	no chips	minor pink clays
	49300	1.20	C	grey clays	light green chips	minor pink clays
	49275	1.30	B/C	brown clays	light green tuff?	
	49250	1.30	C?	6 holes augered, only 1 penetrated Fe encrusted quartz pepples.		
	49225	1.20	C?	light ochre brown	no chips	float rock of siliceous grey shales
	49200	0.60	C	light ochre brown	no chips	
	49375					rock chip sample

LOCATION N	LOCATION E	DEPTH (m)	HORIZON	COLOUR	ROCK CHIPS	REMARKS
10.1	49350	0.20	C	green brown	laminated green phyllites	
	49325	0.20	C	green brown	" "	
	49300	0.30	B	orange brown	light grey chips	
	49275	0.25	C	folded & laminated	phyllites	
	49250	0.70	C	light grey	no chips	friable soil
	49225	0.90	C	green brown	no chips	
	49200	0.90	C?	green brown	light green tuff?	probably float
	49175	1.20	C	orange red	grey green shale	
	49150	1.20	C	green brown	light green tuff?	rock chip sample taken
	49125	0.90	B/C	brown clays	light green phyllites	probably float
	49100	1.00	B/C	orange grey	black slate	
	49075	1.50	B	brown	light grey slates	
	49050	1.20	B/C	cream/orange		rock chip taken
	49025	1.20	B/C		light grey slates	rock chip taken probably float
	49000	1.40	C		light grey phyllites	
	48975	1.00	C	cream/grey	grey phyllite	
	48950	0.60	C	orange brown	grey slate	rock chip taken
	48925	0.50	B	brown		
	48900	0.50	C	grey brown	grey slate	
	48875	0.60	C	grey brown	grey slate	
	48850	1.00	C	grey brown	grey slate	

APPENDIX 2.1.2

NORTHERN AREA

ARSENIC ANOMALY SERIES

SAMPLE ANALYSES

LOCATION		ELEMENTS (PPM)										REMARKS
N	E	Cu	Pb	Zn	Mn	Ag	As	Ba	Sb	U	Au	
16.7	50825	160	x	60	260	x	10	90	x	0.2	x	
	50800	130	x	45	280	x	3	140	x	1.0	x	
	50775	65	5	20	65	x	96	125	x	1.6	x	
	50750	80	x	15	45	0.1	51	85	x	1.9	x	
	50725	170	5	10	60	x	84	80	x	2.0	x	
	50700	145	x	45	535	x	45	160	2	1.0	x	
	50675	115	10	50	670	0.1	100	70	x	1.5	x	
	50650	100	x	45	395	x	100	20	x	1.3	x	
	50625	120	x	30	115	x	82	15	3	1.9	x	
	50600	245	x	20	35	x	49	70	3	1.9	x	
	50575	155	15	45	85	x	3	25	x	1.2	x	
	50550	160	x	30	170	x	5	35	x	1.0	x	
16.4	51000	5	x	x	5	0.1	x	30	x	0.6	x	
	50975	10	x	x	x	0.1	14	120	x	1.6	x	
	50950	20	x	x	x	0.1	2	90	x	0.9	x	
	50925	30	x	5	5	x	53	155	x	1.2	x	
	50900	5	x	5	15	x	6	55	x	0.5	x	
	50875	45	45	20	30	x	78	80	x	1.5	x	
	50850	185	5	75	1500	x	14	65	x	1.6	0.005	
	50825	10	x	x	x	0.1	15	115	x	0.8	x	
	50800	5	x	x	x	0.1	x	115	x	1.3	0.002	
	50600	5	x	x	x	0.1	1	110	x	1.7	x	
	50575	5	x	x	x	0.1	x	85	x	1.4	x	
	50550	15	x	x	x	0.1	44	80	x	1.4	x	
	50525	x	x	x	x	x	1	35	x	0.2	0.006	
	50500	x	x	x	5	x	3	45	x	0.7	x	
	50250	215	5	45	125	x	43	35	x	1.6	0.002	
	50225	285	x	65	85	x	85	10	x	0.8	0.003	
14.8	50150	30	5	x	x	0.2	45	75	x	1.5	x	
	50125	10	x	x	0.1	x	110	x	1.3	x	x	
	50100	40	5	10	25	x	44	140	x	0.7	x	
	50075	115	5	10	305	x	32	145	x	1.2	x	
	50050	90	x	10	65	x	12	*	x	2.5	x	
	50025	550	x	10	75	x	37	*	x	4.0	x	
	50000	130	x	45	875	x	2	150	x	0.6	x	
	49975	160	5	70	330	x	23	155	x	2.3	x	
	49950	220	x	55	455	x	10	155	x	0.7	x	
	49925	225	5	70	705	x	2	55	x	1.9	I/S	

LOCATION		ELEMENTS (PPM)									REMARKS
N	E	Cu	Pb	Zn	Mn	Ag	As	Ba	Sb	U	Au	
14.8	49900	190	x	100	1150	0.1	x	40	x	x	0.002	
	49875	310	x	35	260	x	9	*	x	x	0.001	
	49850	380	40	65	570	x	78	*	x	1.1	1.1	
14.7	50125	15	10	15	5	x	2	90	x	1.5	x	
	50100	5	5	5	10	x	2	95	x	1.2	x	
	50075	325	5	20	830	x	43	95	x	1.5	0.001	
	50050	85	15	25	65	x	45	90	x	0.5	0.001	
	50025	20	x	20	65	x	x	105	x	2.5	0.002	
	50000	195	x	115	1150	x	x	30	x	0.2	0.002	
	49975	205	5	80	635	x	2	65	x	0.3	0.001	
	49950	165	x	100	520	x	1	120	x	0.1	0.002	
	49925	185	5	60	885	x	3	120	x	0.2	x	
	49900	300	x	60	930	x	x	50	x	x	x	
	49875	345	x	25	365	x	x	55	x	1.6	x	
	49850	175	10	15	1900	x	42	35	x	x	0.001	
	49825	260	5	70	425	x	17	*	x	1.0	0.001	
	49800	135	5	45	270	x	1	*	x	0.4	x	
	49550	355	5	80	3950	x	x	20		0.60	x	
	49525	170	10	110	580	x	x	30	x	0.7	0.003	
	49500	405	x	40	4800	x	x	70	x	0.7	0.003	
	49475	85	10	110	450	x	8	55	x	1.3	0.003	
	49450	85	15	105	525	x	56	60	x	1.6	0.003	
	49425	170	25	91	385	x	58	125	x	16.5	0.004	
	49400	340	5	215	1150	x	12	90	x	9.5	0.001	
	49375	200	10	100	990	x	34	115	x	17.5	x	
	49350	295	5	480	2350	x	2	40	x	1.5	x	
	49325	130	10	100	640	x	x	55	x	1.6	0.001	
	49200	230	x	90	775	x	x	25	x	0.5	0.001	
	49175	310	x	135	2050	x	x	55	x	0.3	0.001	
	49150	125	5	5	365	x	x	130	x	1.1	x	
	49125	95	25	100	400	x	x	*	x	1.5	x	
	49100	85	15	70	765	x	2	*	x	1.3	x	
	49075	95	160	300	265	x	3	*	x	0.4	0.001	
	49050	120	10	115	345	x	x	115	x	0.5	x	
	49025	170	20	135	810	x	x	60	x	0.4	x	
14.6	50000	130	x	75	735	0.1	x	75	x	x	0.002	
	49975	185	x	65	255	x	1	95	x	0.2	x	
	49950	330	x	135	5950	0.1	23	*	x	0.3	x	
	49925	230	x	105	1950	x	x	50	x	0.1	x	
	49900	280	x	120	1100	0.1	x	40	x	x	x	
	49875	170	x	130	1100	0.5	x	35	x	x	x	
	49850	235	5	45	875	x	3	30	x	0.8	x	
	49825	130	x	110	295	x	x	90	x	0.4	0.002	
	49800	265	x	120	1050	0.1	21	*	x	1.2	x	
	49775	175	x	55	1550	x	x	45	x	0.2	0.001	

LOCATION		ELEMENTS (PPM)									REMARKS
N	E	Cu	Pb	Zn	Mn	Ag	As	Ba	Sb	U	Au	
	49600	250	x	70	1350	x	x	100	x	x	0.001	
	49575	300	x	90	3250	x	x	35	x	x	x	
	49550	205	x	25	715	x	x	65	x	x	0.003	
	49525	185	x	75	435	0.1	1	65	x	0.2	0.001	
	49500	85	x	80	620	0.1	x	50	x	0.2	0.001	
	49475	481	8	98	4700	x	6	45	x	x	x	
	49450	130	x	40	425	x	38	60	x	0.2	0.001	
	49425	75	5	60	250	0.9	11		x	0.4	0.001	
	49400/1	5	5	95	475	0.2	18	130	x	x	0.002	
	/2	65	x	80	460	x	15	730	x	x	0.001	
	49375	105	10	90	450	x	5	150	x	0.8	0.001	
	49350	70	5	75	425	0.1	12	165	x	0.4	0.002	
	49325	270	5	175	1300	0.1	x	22	x	0.3	0.002	
	49300	385	5	145	2550	x	x	160	x	x	0.002	
	49275	175	5	115	3650	0.1	3	110	x	0.6	0.003	
	49250	310	5	110	2150	x	x	80	x	0.4	0.004	
	49225	170	10	130	2400	x	2	100	x	0.7	0.003	
	49200	155	5	105	800	x	x	25	x	0.2	0.003	
	49175	135	10	110	1250	x	x	64	x	0.3	0.008	
	49150	95	10	105	645	x	4	160	x	x	0.008	
	49125	110	5	95	640	x	1	70	x	0.8	0.003	
	49100	130	15	120	800	x	4	*	x	x	0.002	
	49075	70	15	90	470	x	1	*	x	0.2	0.003	
	49050	90	10	85	465	x	1	*	x	0.7	0.001	
	49025	55	15	94	490	x	5	*	x	0.1	x	
14.5	49600	370	x	75	2250	x	x	35	x	x	0.002	
	49575	395	x	100	1400	x	x	105	x	x	0.003	
	49550	280	x	85	1850	x	x	80	x	x	0.001	
	49525	175	x	90	470	x	44	70	x	0.2	0.001	
	49500	445	x	115	1950	x	4	50	x	0.7	0.003	
	49475	70	x	65	170	0.1	15	135	x	x	0.003	
	49450	45	x	90	400	x	9	*	x	x	x	
	49425	40	x	110	525	x	3	95	x	x	0.003	
	49400	350	x	145	2050	x	2	55	x	0.1	0.003	
	49375	315	x	110	2450	x	x	40	x	0.2	0.006	
14.4	49525											
	49500	210	x	90	1000	x	5	110	x	0.2	0.004	
	49475	130	10	90	770	x	27	*	x	0.4	0.002	
	49450	70	10	130	420	x	17	65	x	x	0.003	
	49425	130	x	115	1050	x	3	80	x	0.2	0.003	
	49400	80	x	120	950	x	5	90	x	0.4	0.004	
	49375	130	x	110	735	0.1	3	115	x	0.3	0.003	
	49350	280	x	125	1700	x	x	80	x	0.1	0.001	
14.3	49500	390	x	125	805	x	x	30	x	0.2	x	
	49475	260	5	90	1050	x	1	60	x	0.2	x	
	49450	285	5	145	2050	x	4	45	x	0.2	0.003	
	49425	100	15	80	300	0.1	16	75	x	x	x	
	49400	NOT SUBMITTED									NOT SUBMITTED	

LOCATION		ELEMENTS (PPM)									REMARKS
N	E	Cu	Pb	Zn	Mn	Ag	As	Ba	Sb	U	Au
14.3	49375	60	5	105	840	x	3	70	x	0.3	x
	49350	120	5	100	730	x	4	95	x	0.7	0.002
	49325	235	x	135	1350	x	1	40	x	0.4	0.002
14.2	49450	320	10	95	1450	x	5	75	x	0.3	0.00
	49425	260	x	45	505	x	7	75	x	1.4	0.002
	49400	225	5	130	1450	x	19	105	x	1.7	0.002
	49375	85	x	110	180	x	18	40	1	0.2	0.002
	49350	110	x	150	775	x	5	75	x	x	0.004
1401	50325	QUARTZ-MICA SAND LAYER UNABLE TO PENETRATE									
	50300	"							"		
	50275		"					"			
	50250	15	20	5	10	x	4	80	x	0.9	x
	50225	20	x	10	10	x	7	150	x	1.0	0.002
	50200	50	x	10	5	x	13	60	2	1.1	x
	50175	x	x	10	5	x	7	135	x	1.8	0.002
	50150	x	x	x	5	x	14	100	2	3.0	x
	50125	160	x	60	260	x	7	115	x	1.1	x
	50100	NOT SUBMITTED							NOT SUBMITTED		
	50075	15	x	5	5	x	26	50	x	0.5	x
	49475	450	x	140	665	x	x	125	x	0.1	x
	49450	160	x	55	255	x	15	*	x	0.8	0.002
	49400	110	x	125	1250	x	14	75	x	1.2	0.005
	49375	130	10	120	355	0.1	13	130	x	4.2	x
	49100	175	x	125	1300	x	3	140	x	1.0	x
	49075	175	15	125	1550	x	3	175	x	1.1	0.001
	49050	145	30	105	590	x	6	165	x	1.9	0.002
14.0	49550	245	x	70	1550	x	1	80	x	x	x
	49525	320	15	85	675	x	18	105	x	x	0.004
	49500	415	5	160	1050	x	7	40	x	0.1	0.002
	49475	295	20	130	605	x	7	85	x	0.6	0.002
	49450	115	20	45	460	x	12	*	x	33.5	x
	49425	255	25	120	1250	x	18	95	x	4.5	0.008
	49400	115	5	60	490	x	7	70	x	0.9	x
	49375	190	x	120	1100	x	5	40	x	1.0	x
	49125	220	x	140	1750	x	1	65	x	0.6	0.002
	49100	175	x	110	705	x	1	55	x	0.4	0.001
	49075	195	x	85	1250	x	x	30	x	0.3	0.001
	49050	235	x	55	1100	x	3	25	x	0.4	x
	49025	145	x	75	970	x	1	30	x	x	x
13.6	49900	275	x	120	880	x	x	20	x	0.2	0.004
	49875	220	x	90	210	x	1	40	x	1.0	0.001
	49850	180	x	65	1300	x	1	25	x	2.1	0.001
	49825	405	x	35	1050	x	24	30	x	11.5	x
	49800	130	5	25	725	x	71	110	x	6.8	0.001

LOCATION		ELEMENTS (PPM)									REMARKS
N	E	Cu	Pb	Zn	Mn	Ag	As	Ba	Sb	U	Au	
Road	1250	10	10	5	25	x	12	45	x	0.7	x	
Traverse	1225	45	x	10	95	x	25	35	x	1.4	x	
	1200	20	x	x	10	x	17	75	x	1.1	x	
	1175	35	5	5	125	x	35	15	x	1.4	0.001	
	1150	80	x	20	105	x	25	65	x	0.8	x	
	1125	340	5	75	1800	x	1	35	x	0.6	0.006	
	1100	130	5	95	345	x	7	70	x	0.9	x	
	1075	220	10	105	1250	x	26	70	x	1.1	x	
	1050	300	5	105	675	x	48	60	x	1.9	x	
	1025	80	15	40	550	x	21	115	x	0.7	x	
	1000	90	15	30	65	x	12	60	x	1.0	0.003	
	0925	90	x	25	215	x	11	670*	x	0.7	0.006	
	0800	175	x	70	675	x	6	660*	x	1.3	0.002	
	0575	105	40	70	25	x	7	45	x	1.2	x	
	0550	175	10	60	45	x	40	30	x	1.5	0.003	
11.1	49700	10	5	10	15	x	8	100	x	0.8	x	
	49675	45	5	20	55	x	65	85	x	2.1	x	
	49650	105	5	40	630	x	1	30	x	1.3	0.005	
	49625	5	5	10	15	x	16	65	x	0.8	x	
	49600	60	x	20	90	x	10	65	x	0.6	0.003	
	49400	230	5	110	1750	x	x	75	x	0.7	0.004	
	49300	60	x	35	810	x	x	50	x	1.1	x	
	49275	330	5	45	150	x	22	100	x	4.6	0.006	
	49250	135	x	40	190	x	14	95	x	1.9	x	
	49225	215	x	70	750	x	16	130	x	1.5	x	
	49200	150	x	115	1650	x	7	0.5	x	1.1	0.001	
10.1	49375											(rock chip
	49350	175	x	115	2150	x	9	130	x	1.0	0.002	(sample
	49325	170	x	150	1100	x	1	55	x	0.8	0.004	
	49300	140	x	75	1900	x	22	135	x	1.4	x	
	49275	120	x	85	555	x	12	95	x	0.7	0.001	
	49250	145	x	80	1200	x	1	30	x	0.4	x	
	49225	190	x	65	370	x	1	30	x	0.4	0.003	
	49200	160	x	90	1150	x	x	45	x	x	0.001	
	49175	125	x	50	555	x	8	115	x	0.2	0.002	
	49150	230	x	50	475	x	7	55	x	0.6	0.002	(rock chip
	49125	180	x	35	190	x	12	180	x	1.2	0.002	(sample
	49100	125	x	35	1200	x	15	150	x	0.7	0.002	
	49075	135	x	70	230	x	17	195	x	0.6	0.001	
	49050	105	x	60	195	x	17	600*	x	0.3	0.003	
	49025	160	x	60	85	x	26	100	x	0.3	0.001	
	49000	150	5	110	585	x	9	540*	x	1.6	0.001	
	48975	70	10	125	200	x	4	60	0	0.4	0.001	
	48950	95	10	85	225	x	14	160	x	2.0	0.003	
	48925	80	10	90	870	x	4	70	2	0.5	0.004	
	48900	100	10	145	800	x	1	45	x	0.1	0.002	
	48875	130	x	130	805	x	1	50	x	0.2	0.002	
	48850	195	x	110	490	x	1	45	x	1.0	0.002	

LOCATION		ELEMENTS (PPM)										REMARKS
N	E	Cu	Pb	Zn	Mn	Ag	As	Ba	Sb	U	Au	
Rock Chips												
10.1	49375	140	5	70	205	x	38	180	x	x	x	
	49150	290	5	70	820	x	x	20	x	x	0.001	
	49050	35	25	55	195	x	21	1150*	x	0.2	0.001	
	49025	70	5	65	160	x	8	2400*	x	0.2	0.001	
	48950	80	5	145	530	x	9	2650*	x	x	0.001	
METHOD		101	101	101	101	102	114	120 *	117	126	325	
DETECTION		5	5	5	5	0.1	1	5	1	0.1	0.001	

* Denotes sample assayed by 401

I/S Insufficient Sample

x Element concentration is below detection limit

APPENDIX 2.2.1

ROCKY RIVER ARSENIC ANOMALY SERIES

LOCATION N	E	DEPTH (m)	HORIZON	COLOUR	ROCK CHIPS	REMARKS
89300	51200	0.70	C	mottled yellow brown	grey mica schist	
	51175	1.50	B	orange brown	angular quartz gravels	maximum depth of auger
	51150	0.50	B	light brown	grey mica shists	
	51125	1.10	C	cream brown	white mica schist	black slate present
	51100	1.10	C	cream brown	micaceous schist	
	51075	1.80	C	cream brown	micaceous	vein quartz present
	51050	0.20	C	cream blue/brown	mica schist	outcrop near by
	51025	0.50	C	cream grey/brown	mica shicst	
	51000	0.60	C	cream grey brown	mica schist	
	50950	0.70	C	blue grey	grey mica schist	
	50925	0.70	C	cream/brown	sandy schist	
	50900	0.30	C	cream blue	grey slate	15m south of line
	50875	1.10	C	cream brown	dark grey mica schist	10m north of line
	50850	0.80	C	cream grey/ yellow brown	mica schist	
	50825	0.60	C	cream blue grey	grey mica schist	
	50800	0.80	C	cream blue	grey slate	
	50775	1.10	C	cream grey	grey mica schist	grey slate also
	50750	0.60	C	cream light brown	sericitic schist	green orange clay
	50725	1.25	C	cream dark brown	micaceous clayed schist	
	50700	1.4	C	mottled cream brown	miceous	
	40675	1.00	C	cream brown	micaceous schist	
	50650	1.50	C	dark brown	blue grey mica schist	
	50625	1.00	B	cream grey light brown		
*	50600)	1.5	C	dark chockolate brown		
*	40575)	IMPENETRABLE QUARTZ GRAVELS				
*	50550)	1.60	C	blue grey	micaceous	
	40425	0.80	C	blue grey brown	micaceous schist	
	50500	0.60	C	blue grey	micaceous schist	
	50475	0.20	C	blue grey	micaceous schist	
	50450	0.70	C	blue grey brown	micaceous schist	
	40425	0.60	C	cream blue grey	micaceous schist	
	50400	0.80	C	cream grey	micaceous schist	
	50375	0.70	C	green	dark green non schis- tose dense chips	amphibolite dyke?
	50350	0.80	C	cream grey	micaceous schist	
	50325	1.00	C	cream brown	blue mica schist	
	50300	0.60	C	cream grey brown	mica schist	
	50275	1.00	C	grey brown	mica schist	
	50250	0.90	C	dark brown orange	schist	
	50225	0.90	C	cream grey brown	mica schist	

LOCATION N	E	DEPTH (m)	HORIZON	COLOUR	ROCK CHIPS	REMARKS
89300	50200	0.80	C	silvery orange brown	mica schist	slightly sandy
	50175	0.40	C	grey yellow orange	mica schist	
	50150	1.00	C	cream grey brown	mica schist	
	50125	1.00	C	cream grey	mica schist	
	50100	1.0	C	cream grey brown	mica schist	
89.7	51200	1.50	C	light cream grey		
	51175	1.40	C	light cream grey		
	51150	0.60	C	light cream grey		
	51125	0.70	C	light cream grey		
	51100	0.50	C	light cream grey		
	51075	0.60	C	light orange brown		
	51050	0.90	C	creamy green		
	51025	0.76	C	dark grey blue	banded dark shales	
	51000	0.90	C	chocolate brown	tanarenites	
	50975	0.95	C	dark grey green		
	50950	0.80	C	light brown orange		
	50925	0.60	C	light grey green		
	50900	1.20	C	light orange brown		
	50875	0.70	C	light orange brown		
	50850	1.00	C	light orange brown		
	50825	0.35	C	light grey	grey blue phyllite	
	50800	1.70	C	light orange brown		quartz fragments
	50775	0.80	C	light orange brown		
	50750	0.75	C	light orange brown		
	50725	1.20	C	light orange brown		crumbly
	50700	0.90	C	light orange brown		crumbly
	50675	1.15	C	light grey green		
	50650	0.50	C	light brown yellow		
	50625	0.50	C	green grey	green grey slates	
	50600	1.60	C?	tan		crumbly
	50575	2.00	C	chocolate brown		
	50550	1.20	C	grey green	phyllite	
	50525	1.00	C	grey green	phyllite	
	50500	1.00	C	grey green	phyllite	
	50475	0.70	C	dark grey green	slate	crumbly
	50450	1.20	C	yellow brown		schistose clay
	50425	1.60	C	yellow brown		schistose clay
	50400	1.00	C	light grey brown		
	50375	1.30	C	light grey brown	dark grey black schist	
	50350	1.10	C	light grey brown	light grey schist	
	50325	1.20	C	dark grey brown	grey schist	
	50300	1.20	C	dark grey brown	grey schist	
	50275	0.75	C	dark grey brown	grey schist	
	50250	1.00	C		light grey schist	
	50225	0.50	C	light grey	quartz mica schist	
	50200	0.60	C	light grey	quartz mica schist	
	50175	0.50	C	light grey	quartz mica schist	
	50150	0.80	C	light grey	quartz phyllite	
	50125	0.60	C	light grey	grey phyllite	
	50100	0.90	C	light grey	light grey brown phyllite	minor quartz

LOCATION N	E	DEPTH (m)	HORIZON	COLOUR	ROCK CHIPS	REMARKS
90.1	51200	0.85	C	light grey		friable
	51175	0.80	C	light grey		friable
	51150	1.50	C	light yellow		
	51125	0.60	C	light grey/green		
	51100	1.50	C	light cream brown		
	51075	0.60	C	light grey green		
	51050	0.50	C	creamy orange		
	51025	0.45	C	light grey		friable
	51000	1.20	C	chocolate brown		
	50975	0.50	C	dark blue grey	slate	
	50950	0.76	C	light grey		
	50925	0.70	C	light grey		friable
	50900	1.50	C	chocolate brown		
	50875	1.50	C	light yellow brown		
	50850	0.70	C	light grey		friable
	50825	1.50	C	light yellow brown		
	50800	0.75	C	light grey		friable
	50775	0.60	C	light chocolate brown		
	50750	1.00	C	chocolate brown		
	50725	1.00	C	chocolate brown		friable
	50700	1.20	C	light yellow brown		
	50675	1.55	C	light yellow brown		
	50650	0.85	C	light brown		
	50625	2.0	B			creek gravels
	50600	0.55	C	light chocolate brown		
	50575	1.10	C	light cream		
	50550	1.00	C	light cream		
	50525	1.0	C	light cream		
	50500	0.60	C	grey green		friable
	50475	1.00	C	light yellow brown		
	50450	1.80	C	light orange brown		
	50425	1.00	C	light orange brown		
	50400	1.40	C	light orange brown		
	40375	0.30	C		dark grey phyllite	
	50350	1.40	C	light green brown		
	50325	0.76	C	green chocolate brown		
	50300	0.60	C	light chocolate brown		phyllite
	50275	1.70	C	dark chocolate brown		
	50250	1.20	C	dark chocolate brown		
	50225	1.20	C	grey brown		
	50200	0.70	C	cream grey	phyllite	
	50175	1.25	C	blue grey	phyllite	banded
	50150	0.80	C	brown grey micaceous		
	50125	0.70	C	blue grey	slate	
	50100	NO SAMPLE TAKEN - GRAVELS				

APPENDIX 2.2.2

ANALABS ANALYTICAL DATA

236.1 08 2885C

061

186062 52.

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 28850	13.2.85		1 OF 3

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	As	Ba	Sb	Au
1	89.3 50100	40	15	5	X	X	40	X	X
2	89.3 50125	X	10	5	X	X	45	X	X
3	89.3 50150	X	10	X	X	X	60	X	X
4	89.3 50175	10	10	60	X	2	40	X	X
5	89.3 50200	5	X	20	X	5	40	X	0.002
6	89.3 50225	X	X	5	X	1	40	X	X
7	89.3 50250	5	5	X	0.2	X	40	X	X
8	89.3 50275	X	X	X	X	X	45	X	X
9	89.3 50300	X	X	5	X	X	65	X	X
10	89.3 50325	X	X	X	X	X	40	X	X
11	89.3 50350	X	X	5	X	X	40	X	X
12	89.3 50375	50	20	115	X	3	10	2	X
13	89.3 50400	X	5	5	X	1	120	3	X
14	89.3 50425	45	10	10	X	4	135	2	0.001
15	89.3 50450	55	X	30	X	1	95	I/S	I/S
16	89.3 50475	X	5	10	X	X	80	X	X
17	89.3 50500	X	X	35	X	X	60	X	X
18	89.3 50525	5	10	10	0.2	1	150	X	X
19	89.3 50550	Not	Submit	ted	-	-	-	-	-
20	89.3 50575	Not	Submit	ted	-	-	-	-	-
21	89.3 50600	Not	Submit	ted	-	-	-	-	-
22	89.3 50625	X	X	X	X	X	65	X	X
23	89.3 50650	X	X	X	X	X	40	X	X
24	89.3 50675	X	X	5	X	X	20	1	X
25	89.3 50700	10	X	X	X	100	35	X	X

[illegible] parts per million [illegible]
[illegible] concentration is below [illegible]
[illegible] not analysed

AUTHORISED SIGNATURE

062

186063 53.

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 28850	13.2.85		Of 2 3

JBE No.	SAMPLE No.		Cu	Pb	Zn	Ag	As	Ba	Sb	Au
1	89.3 50725		X	X	X	X	3	30	X	X
2	89.3 50750		X	10	X	X	52	60	X	X
3	89.3 50775		X	X	X	X	2	30	X	X
4	89.3 50800		5	5	X	X	1	25	X	X
5	89.3 50825		X	X	X	X	X	95	X	X
6	89.3 50850		5	X	X	X	1	45	2	X
7	89.3 50875		X	X	X	X	X	90	1	X
8	89.3 50900		X	X	5	X	X	125	3	0.001
9	89.3 50925		X	X	X	X	X	60	X	X
10	89.3 50950		X	X	X	X	1	120	X	X
11	89.3 50975		X	5	10	X	3	60	X	X
12	89.3 51000		5	5	X	X	8	50	X	X
13	89.3 51025		X	X	X	X	6	50	X	0.002
14	89.3 51050		20	X	5	X	3	85	X	X
15	89.3 51075		X	X	X	X	1	40	X	0.002
16	89.3 51100		5	10	X	0.1	1	130	2	0.001
17	89.3 51125		5	10	5	X	2	100	3	X
18	89.3 51150		X	10	X	X	1	180	I/S	I/S
19	89.3 51175		35	55	20	X	38	50	15	X
20	89.3 51200		25	15	10	X	9	60	13	X
21										
22										
23										
24										
25										

Results in ppm unless otherwise specified
X = element present but concentration too low to measure
— = element not determined

AUTHORISED OFFICER

063

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

186064

54.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2885C	13.2.85		3 OF 3

TUBE No.	SAMPLE No.		Cu	Pb	Zn	Ag	As	Ba	Sb	Au
1	STD 3036		165	580	250	1.8	590	180	-	-
2	RPT 50100		40	20	5	X	1	40	-	-
3	STD 3036		165	570	235	1.7	600	180	-	-
4	RPT 51100		5	10	5	0.1	1	140	-	-
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION		5	5	5	0.1	1	5	1	0.001
24	DIGESTION									
25	METHOD		101	101	101	102	114	120	117	325

064

186065

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
99.7	236.1 08 2924	18.2.85	L. Vanzino	1 OF 3

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Ba	As			
1	50100	5	X,	15	X	55	X			
2	50125	5	5	20	X	40	X			
3	50150	5	X	20	X	60	X			
4	50175	20	25	145	X	50	8			
5	50200	45	130	75	X	70	89			
6	50225	20	25	40	X	70	3			
7	50250	40	190	90	X	55	18			
8	50275	5	10	5	X	45	X			
9	50300	X	X	5	X	15	X			
10	50325	5	5	5	X	30	1			
11	50350	X	5	5	X	105	X			
12	50375	5	5	5	X	100	1			
13	50400	30	10	5	X	85	2			
14	50425	50	5	5	X	110	15			
15	50450	245	25	5	X	45	38			
16	50475	25	5	5	X	85	16			
17	50500	X	X	X	X	35	X			
18	50525	X	X	X	X	40	1			
19	50550	X	X	X	X	35	X			
20	50575	5	10	5	X	20	1			
21	50600	25	45	5	X	20	99			
22	50625	10	10	20	X	85	21			
23	50650	5	5	10	X	20	19			
24	50675	X	5	X	X	25	22			
25	50700	30	X	5	X	60	630			

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

065

56.

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

186066

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
89.7	236.1 00 2924B	19.2.85	L.Vanzino	5 OF 5

TUBE No.	SAMPLE No.	Au
1	50725	0.001
2	50750	0.001
3	50775	0.003
4	50800	0.001
5	50825	0.002
6	50850	0.001
7	50875	0.002
8	50900	X
9	50925	X
10	50950	0.003
11	50975	0.002
12	51000	X
13	51025	X
14	51050	0.002
15	51075	0.001
16	51100	X
17	51125	0.001
18	51150	0.001
19	51175	0.004
20	51200	0.001
21		
22	NOTE: I/S - Insufficient Sample	
23	DETECTION	0.001
24	DIGESTION	
25	METHOD	325

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

066

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

186067

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
89.7	236.1 08 2924	18.2.85	L. Venzino	3 OF 3

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Ba	As			
1	STD 3036	175	615	255	1.9	165	690			
2	RPT 50100	5	X	15	X	55	2			
3	RPT 50575	5	5	10	X	25	1			
4	STD 3036	175	605	245	1.9	170	690			
5	RPT 51100	10	5	5	X	55	1			
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	0.1	5	1			
24	DIGESTION						101			
25	METHOD	101	101	101	102	120	114			

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

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186068

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
.7	236.1 08 2924B	19.2.85	L. Vanzino	4 OF 5

TUBE No.	SAMPLE No.	Au
1	50100	0.003
2	50125	X
3	50150	0.002
4	50175	0.001
5	50200	I/S
6	50225	0.002
7	50250	X
8	50275	0.003
9	50300	0.095
10	50325	0.004
11	50350	0.004
12	50375	X
13	50400	X
14	50425	0.005
15	50450	0.002
16	50475	X
17	50500	0.001
18	50525	0.004
19	50550	0.002
20	50575	0.004
21	50600	0.002
22	50625	X
23	50650	0.001
24	50675	0.001
25	50700	0.002

Results in parts per billion unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

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186069

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
9.7	236.1 00 2924	18.2.85	L. Vanzino	2 OF 3

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Ba	As			
1	50725	45	10	35	X	60	65			
2	50750	25	5	5	X	75	37			
3	50775	15	X	5	X	115	19			
4	50800	20	15	5	X	80	29			
5	50825	10	15	X	X	55	7			
6	50850	30	20	X	X	80	88			
7	50875	10	10	X	X	100	24			
8	50900	15	10	X	X	70	14			
9	50925	10	5	X	X	65	15			
10	50950	20	X	40	X	60	5			
11	50975	20	20	5	X	75	6			
12	51000	X	X	X	X	60	X			
13	51025	X	X	X	X	85	1			
14	51050	20	15	15	X	85	22			
15	51075	25	X	5	X	65	11			
16	51100	5	5	X	X	55	1			
17	51125	30	5	20	X	75	5			
18	51150	5	5	X	X	150	X			
19	51175	110	145	X	X	215	28			
20	51200	60	45	5	X	145	16			
21										
22										
23										
24										
25										

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

APPENDIX 2.3

ROCKY RIVER GOLD IN PAN CONCENTRATES

1000.0.01.36377

070

186071

Sample Number	Interval	Description
SP 2034	98 -100	Silicic meta-andesite, containing desseminated pyrite, ptygmatic vein quartz and minor carbonates.
SP 2035	100-102	Silicic meta-andesite, with zones of vein quartz, minor carbonates; chalcopyrite and pyrite disseminations and inclusions.
SP 2036	102-104	Meta-andesite containing numerous quartz veins with carbonate and pyrite, minor greenschist, moderate disseminated pyrite.
SP 2037	104-106	Meta-andesite, with numerous quartz veins, minor carbonates and disseminated pyrite.
SP 2038	106-108	Meta-andesite, with small greenschist zones; numerous quartz veins containing carbonate and plagioclase. Minor zones with disseminated chalcopyrite and pyrite.
SP 2039	108-109.525	Meta-andesite with desseminated pyrite, vein quartz carbonate and minor greenschist.
SP 2040	109.525 - 109.675	White carbonate vein.
SP 2041	109.675-112	Meta-andesite; disseminated pyrite; vein quartz, carbonate and minor greenschist.
SP 2042	112-114	As above
SP 2043	114-116	Meta-andesite, with desseminated pyrite, numerous small quartz veins and carbonate blebs.
SP 2044	116-118	Meta-andesite; numerous small quartz veins, pyritic zones with large pyrite crystan]ls close to quartz veins; moderate disseminated pyrite.

186072

ANALABS
A division of Macdonald Hamilton Pty. Ltd.

Perth Head Office.
52 Murray Road Welshpool, Western Australia 6106.
Tel: (09) 458 7999, 458 7154. Telex: Analab AA92560.
P.O. Box 210 Bentley, W.A. 6102.

IGS:sc

18 January 1985

Industrial & Mining Investigation
Suite 3709
Australia Square
SYDNEY NSW 2000

OUR REF : 1000.0.01.36377
ATTENTION : Mr H. Shannon
REGARDING : Mercury Amalgamations of Pan Concentrate Samples

Dear Sir

Enclosed are the results of amalgamations carried out on the sink fractions of pan concentrates. A number of the samples were so small that they were grouped in threes and fours for analysis. Results are expressed as micrograms of recoverable gold, so results will have to be related back to the original sample weights.

Yours faithfully

IAN G. SMITH
Manager - Metallurgical Division

186073

ANALABS

Mercury Amalgamation Results

on Sink Fractions

Sample No.	Total weight (g)	Sinks Weight (g)	Gold Recovered From Sinks (µg)
89900 N -			
50100 E	1.5	0.11	
50125 E	20.3	0.17	
50150 E	11.5	0.08	
50175 E	9.8	0.06	1.0
50200 E	14.2	0.25	
50225 E	8.0	0.04	
50325 E	24.9	0.15	
50350 E	0.8	0.02	0.5
50450 E	14.2	0.01	
50500 E	1.6	0.09	
50525 E	0.9	-N.A	
50550 E	0.7	-N.A	0.25
50575 E	1.4	-N.A	
50600 E	1.2	-N.A	
50675 E	1.1	-N.A	
50700 E	4.4	0.18	0.50
50725 E	1.7	0.29	
50750 E	1.7	0.07	
50775 E	1.7	0.06	
50800 E	1.6	0.07	7.0
50825 E	0.5	-N.A	
50850 E	0.7	-N.A	
50875 E	2.7	0.11	
50900 E	2.3	0.10	0.5
50950 E	1.5	-N.A	
50975 E	1.8	0.02	
51000 E	4.1	0.02	
51025 E	0.5	-N.A	0.5
51050 E	1.0	-N.A	
51075 E	3.4	0.08	
51100 E	NOT LOCATED		
51125 E	NOT LOCATED		0.5
51150 E	0.4	-N.A	
51175 E	1.0	-N.A	
51200 E	2.6	0.06	0.5

Sample No.	Total Weight (g)	Sinks Weight (g)	Gold Recovered From Sinks (µg)
89100-			
50200	1.4	N.A	
50250	2.1	0.07	
50275	1.7	0.08	
50300	29.6	0.4	1.25
50325	NOT LOCATED		
50350	1.3	N.A	
50375	7.6	0.15	
50400	0.7	N.A	0.5
50425	0.9	N.A	
50450	0.9	N.A	
50475	0.6	N.A	
50525	1.7	0.06	0.75
50550	1.1	N.A	
50575	1.9	0.12	
50600	1.1	N.A	
50625	3.9	0.20	0.5
50650	1.7	0.08	
50675	1.0	N.A	
50700	1.9	0.11	
50725	2.3	0.19	1.0
50775	4.0	0.11	
50800	1.0	N.A	
50825	3.6	0.19	
50850	0.8	N.A	0.5
50875	2.1	0.07	
50900	1.6	0.05	
50925	6.0	0.33	
50950	1.9	0.07	0.5
50975	1.7	0.06	
51000	0.6	N.A	
51075	3.7	0.15	5.00
89500-			
50100	0.4	N.A	
50125	2.7	0.08	
50150	4.2	0.07	
50175	1.9	N.A	1.75
50200	NOT LOCATED		
50225	6.0	0.17	
50250	1.2	N.A	
50275	5.0	N.A	0.5
50300	0.2	N.A	
50320	0.6	N.A	
50325	0.5	N.A	
50350	10.1	0.46	1.5

Sample No.	Total Weight (g)	Sinks Weight (g)	Gold Recovered From Sinks (μg)
50375	0.9	N.A	
50400	0.3	N.A	
50425	0.4	N.A	
50475	3.2	0.05	0.25
50500	0.8	N.A	
50550	0.4	N.A	
50575	1.7	0.12	
50600	0.9	N.A	4.50
50625	1.5	N.A	
50650	4.5	0.24	
50675	2.6	0.16	
50700	1.1	N.A	2.00
50725	0.8	N.A	
50750	1.0	N.A	
50775	0.7	N.A	
50800	0.9	N.A	0.50
50825	1.0	N.A	
50850	2.5	0.02	
50875	1.9	N.A	
50900	1.5	N.A	0.50
50925	1.9	0.06	
50950	NOT LOCATED		
50975	NOT LOCATED		
51000	1.8	0.02	0.75
51025	5.4	0.04	
51050	8.7	0.04	
51075	0.8	0.01	
51100	NOT LOCATED		57.5
51125	0.6	0.01	
51150	1.5	0.01	
51175	1.1	0.02	
51200	0.7	0.01	3.50
51225	0.6	0.01	
51250	0.4	N.A	
51275	NOT LOCATED		
51300	0.5	0.07	3.75

NOTE 1. Samples were treated in groups of 3-4. The gold recovered applies to the 3-4 samples in each group.

NOTE 2. N.A indicates that no sink was produced so the entire sample was processed.

APPENDIX 3.1

SAMPLE INDEX - H. M. SERIES

Plate 1 of 3

(a) GOLD IN PAN CONCENTRATES - 1983/84

Old Samples
H.M. 18; 22; 305; 306.

(b) SLUDGE SAMPLES - 1984/85

New Samples
H.M. 313; 314; 315; 316; 319; 320; 321; 322; 323; 334; 343;
H.M. 344; 345; 346; 347; 348; 349; 350; 351; 352; 353.

PLATE 2 OF 3 Sample Index

(a) GOLD IN PAN CONCENTRATES - 1983/84

Old Samples
H.M. 142

(b) SLUDGE SAMPLES - 1984/85

New Samples
H.M. 310; 311; 312; 317; 318; 324; 325; 326; 327; 355.

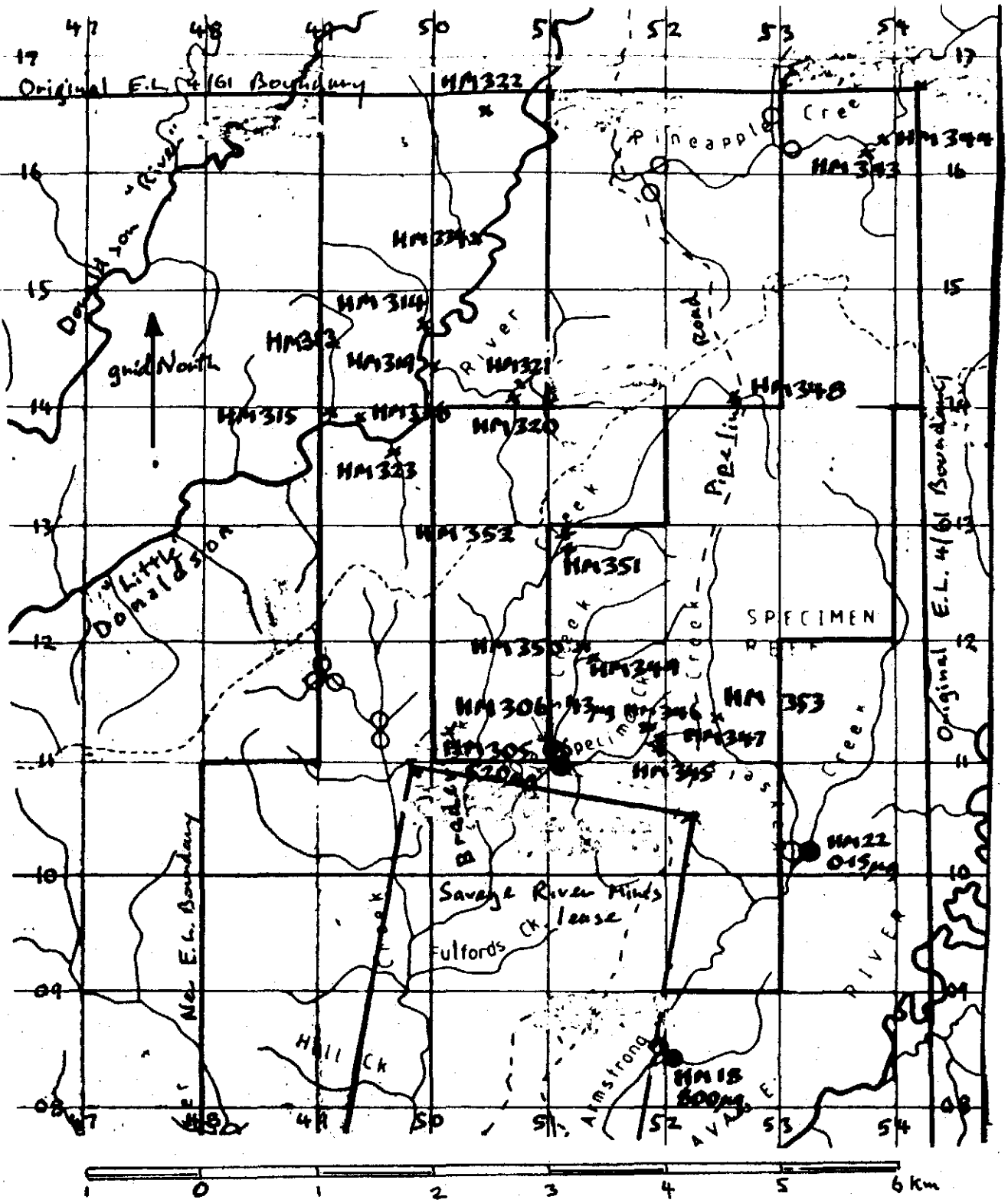
PLATE 3 OF 3 Sample Index

(a) GOLD IN PAN CONCENTRATES - 1983/84

Old Samples
H.M. 50; 95; 96; 107; 108; 144; 146; 147; 172; 173; 178.
H.M. 179; 187; 240; 241; 242; 243.

(b) SLUDGE SAMPLES - 1984/85

New Samples
H.M. 307; 308; 309; 328; 329; 330; 331; 332; 333; 335; 336;
H.M. 337; 338; 340; 341; 342; 354.



SAMPLE LOCATIONS PLATE 1 of 3

H.M. Series program.

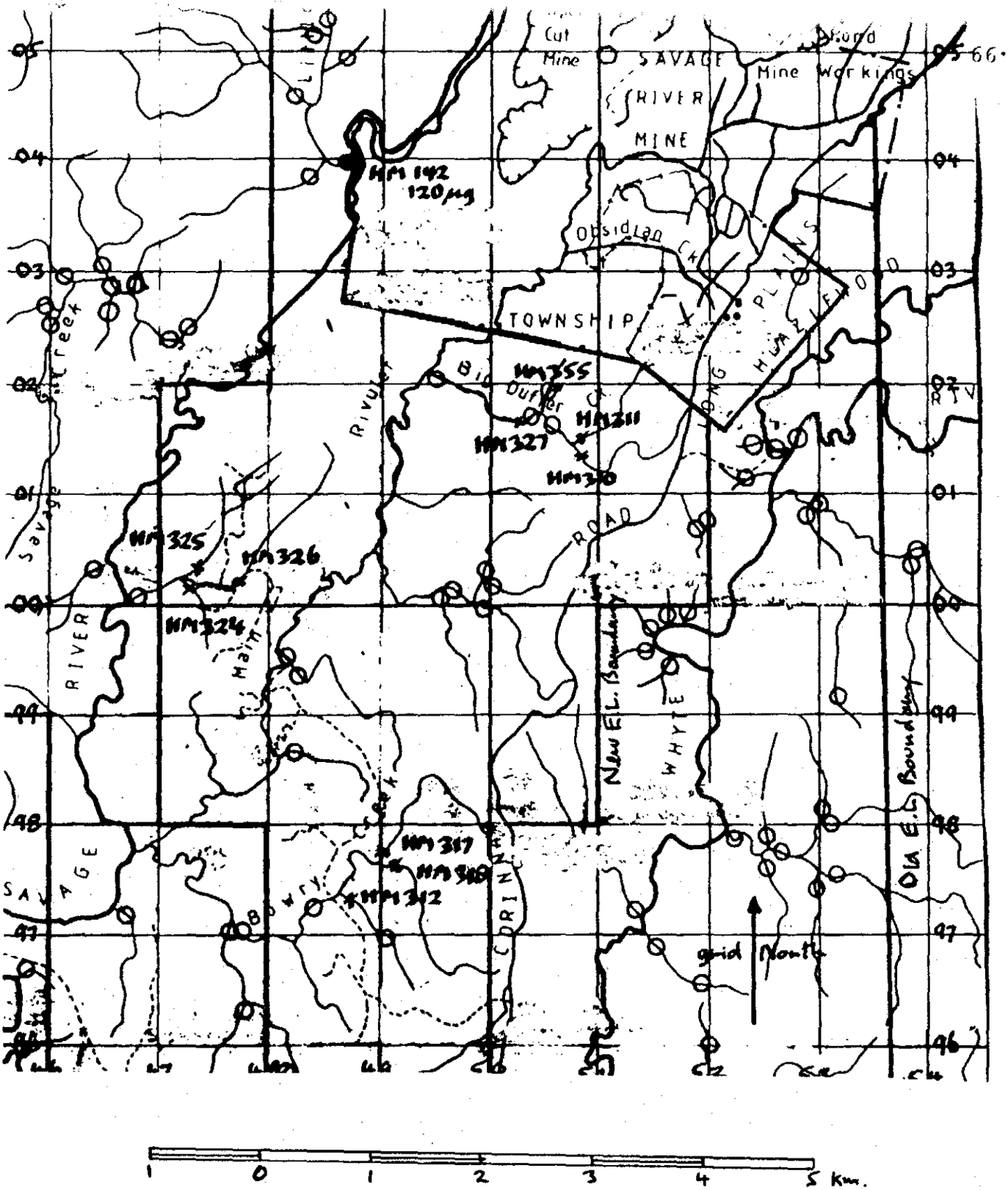
5 cm

- (a) gold content of heavy mineral concentrate standardized for 3 pan fills (c. 20 litres) per sample. Samples collected last season.

x (b) Samples collected this season: 22-11-84 to 22-2-85

077

1860 78



1 0 1 2 3 4 5 Km.

SAMPLE LOCATIONS

H.M. Series program

PLATE 2 of 3

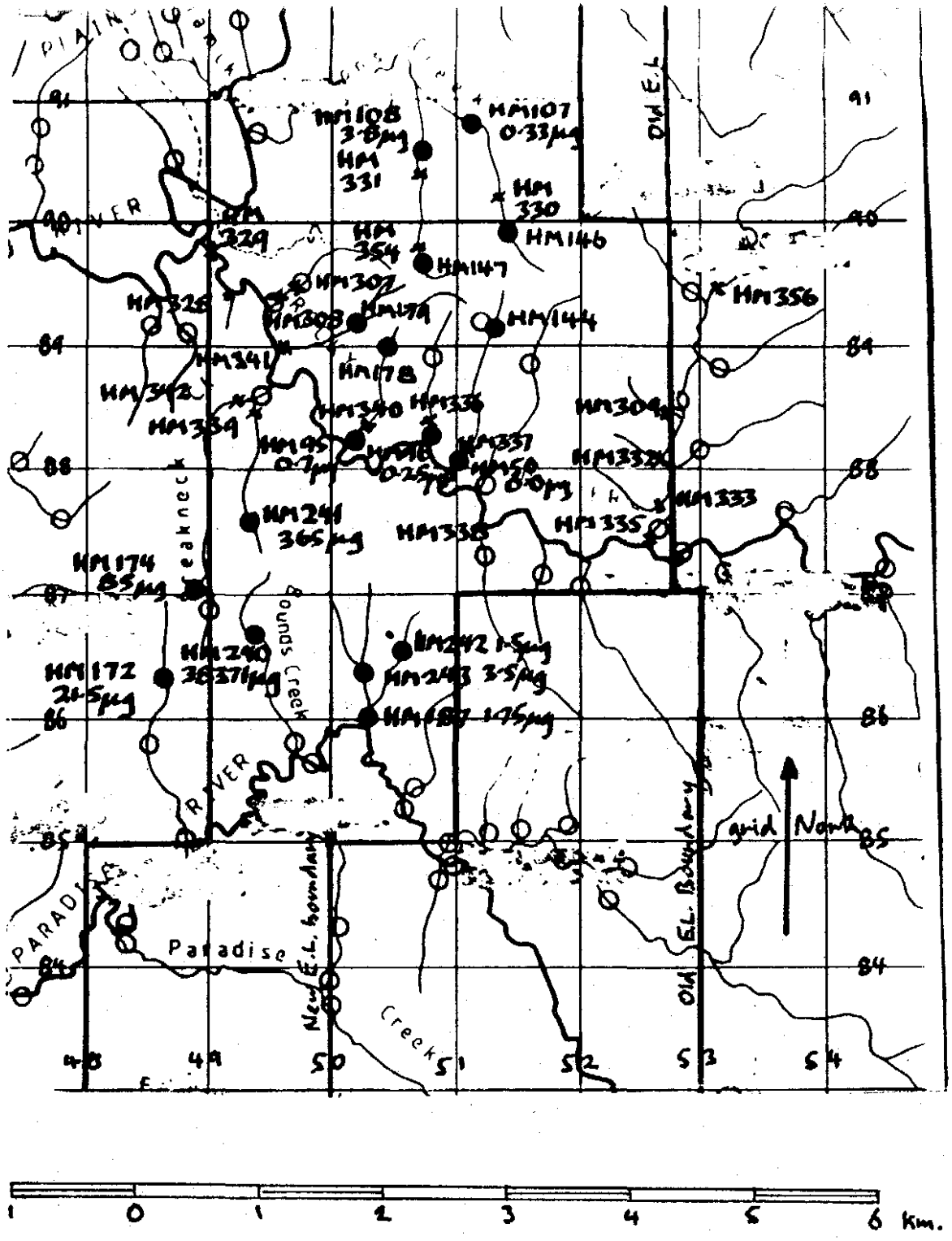
5 cm

- (a) gold content of heavy mineral concentrate standardized for 3 pan fills (c. 20 litres) per sample. Samples collected last season.

- (b) Samples collected this season: 22-11-84

078

186079



SAMPLE LOCATIONS PLATE 3 of 3

H.M. series program

5 cm

- (a) gold content of heavy mineral concentrate standardized for 3 pan fills (c.20 litres) per sample. Samples collected last season

x (b) Samples collected this season: 22-11-84 to 22-2-85

APPENDIX 3.2

STEAM SEDIMENT SAMPLE DATA

HEAVY MINERAL SERIES

1984/85 FIELD SEASON

SAMPLE NUMBER	CREEK/RIVER	LOCATION N	LOCATION E	REMARKS
307	Cataract Creek (trib of Rocky)	89.40	49.65	repeat of H.M.67
308	" "	89.30	49.43	repeat of H.M.47 Gold present
309	Trib of Upper Rocky River	88.65	52.55	
310	Big Duffer Creek	01.15	50.10	
311	Trib of Big Duffer Creek	01.45	49.80	
312	Trib of Bowry Creek	97.30	47.85	Rocky Creek bed downstream of small waterfall
313	Trib of Little Donaldson River	49.15	14.50	Rocky Creek bed
314	" "	49.90	14.80	Rocky Creek bed
315	" "	49.10	13.90	Boulder cascade
316	" "	49.35	13.85	Rocky Creek bed downstream of small waterfall
317	Bowry Creek	38.05	97.70	Rocky Creek bed downstream of small waterfall
318	Trib of Bowry Creek	48.10	97.60	Rocky Creek bed downstream of small waterfall
319	Trib of Little Donaldson	50.00	14.35	Boulder cascade
320	" "	50.70	14.10	" "
321	" "	50.80	14.20	" "
322	" "	16.50	50.39	Base of small waterfall
323	" "	13.70	49.70	Basal cascade
324	Trib of Savage River	00.20	46.20	Base of waterfall
325	" "	00.25	46.30	Boulder cascade
326	" "	00.15	46.60	Gravelly Creek Bed
327	Big Duffer Creek	01.65	49.30	Boulder cascade
328	Trib of Rocky River	89.30	49.25	Base of waterfall
329	Rocky River			Rocky Creek bed
330	Trib of Wilson's Creek	90.25	51.35	
331	" "	90.25	50.70	
332	Trib of Rocky River	87.80	52.70	
333	" "	87.78	52.70	
334	Trib of little Donaldson	15.50	50.40	Gravelly Creek bed
335	Trib of Rocky River			Plunge pool
336	" "	88.15	50.70	repeat (H.M.96) Rocky Creek bed
337	" "	87.93	50.98	repeat H.M.50
338	" "	87.45	51.25	
339	Trib of Breakneck Creek	88.50	49.35	

SAMPLE NUMBER	CREEK/RIVER	LOCATION N	LOCATION E	REMARKS
340	(repeat H.M.95) Trib of Rocky River	88.10	50.05	Rocky Creek bed
341	Nolan Creek	89.00	49.54	Bench between very large waterfalls
342	Breakneck Creek	88.55	49.30	
343	Trib of Pineapple Creek	16.25	53.75	Gravelly Creek bed
344	Pineapple Creek	16.30	63.80	" "
345	Trib of Specimen Creek	11.06	51.90	" "
346	" "	11.12	51.35	" "
347	Specimen Creek	11.11	51.50	Rocky Creek bed
348	Headwaters of Broderick Creek	14.10	52.85	" " (pan conc 100m W of road - p silt 100m E of road)
349	Trib of Davis			Rocky Creek bed
350	Davis creek			Rocky Creek bed
351	Trib of Broderick Creek			rocky Creek bed
352	Broderick Creek			Boulder cascade
353	Kaysers Creek			Boulder cascade
354	Trib of Wilsons Creek			No sludge taken
355	Trib of Little Duffer at Cox's Face			Downstream of plunge pool

APPENDIX 3.3

FIELD OBSERVATIONS

H.M. - PAN CONCENTRATE SERIES

Sample Number

H.M.313	Hematite (Magnetite), Epidote, No visible gold
314	" " "
315	" " "
316	" " "
317	Hematite, Gold
318	" "
319	Magnetite, no visible gold
320	" "
321	" "
322	Magnetite, Hematite, Epdote
323	Magnetite
324	Magnetite
325	Hematite Magnetite, Ruby Tin)
326	Magnetite, Ruby Tin) Tertiary Gravels
327	?
328	Magnetite
329	
330	Oonah. Assemblage
331	Oonah. Assemblage
332	Monatile, Ruby Tin
333	Monazite
334	Magnetite, Hemitite, Epidose
335	Monazite, Tourmaline
336	Oonah. Assemblage
337	Oonah. Assemblage
338	Oonah. Assemblage
339	
340	Oonah
341	Magnetite
342	
343	Magnetite
344	Minor Magnetite
345	Magnetite, Hematite
346	Magnetite, Hematite
347	Magnetite, Hematite
348	Magnetite (BASALT DRAINAGE)
349	Magnetite, Hematite
350	Magnetite, Hematite
351	Magnetite, Hematite
352	Magnetite, Hematite
353	Magnetite, Hematite
354	Pyrite
355	Gold and Pyrite

APPENDIX 3.4

H.M. SERIES FREE GOLD IN PAN CONCENTRATES BY MERCURY AMALGAMATION

SAMPLE NO.	WEIGHT (g)	SINKS WEIGHT (g)	GOLD CONTENT (mg)	GOLD CONTENT PER 3 PANS SAMPLE (mg)
HM 18	40.6	17.3	4000.00	800.00
HM 22	5.2	1.6	0.75	0.15
HM 50	7.1	0.6	0.00	0.00
HM 95	13.2	2.9	3.50	0.70
HM 96	19.3	0.5	1.25	0.25
HM107	1.5	0.1	1.50	0.33
HM108	2.4	1.2	19.00	3.80
HM142	38.2	23.1	120.00	120.00
HM144	0.8	0.2	1.75	1.75
HM146	0.7	0.3	1.00	1.00
HM147	2.9	0.4	1.00	1.00
HM172	1.8	1.2	21.50	21.50
HM173	2.7	1.5	85.00	85.50
HM178	0.6	0.1	0.50	0.50
HM179	0.9	0.1	1.00	1.00
HM187	2.7	1.0	1.75	1.75
HM240	17.4	10.4	38371.00	38371.00
HM241	68.7	34.0	365.00	365.00
HM242	7.8	5.3	1.50	1.50
HM243	9.8	4.8	3.50	3.50
HM305	142.4	26.9	120.00	520.00
HM306	36.3	29.1	43.00	43.00

APPENDIX 4.1

ROCK SAMPLE LEDGER

SAMPLE NUMBER	AREA	LOCATION N	LOCATION E	OUTCROP FLOAT OR MINE TAILINGS	DESCRIPTIONS
85/0001	White River Adit	89.97	49.25	M.T.	Magnetite/pyrite rich rock with minor chlorite & malachite
85/0002	" "	"	"	M.T.	'as above' with calcitic veins.
85/0003	" "	"	"	M.T.	Talcose, white carbonate rock with minor pyrite
85/0004	" "	"	"	M.T.	Hematite/Calcite vein rock
85/0005	" "	"	"	M.T.	Overhang dump. Magnetite Carbonate rich rock with pyrite & malachite
85/0006	" "	"	"	M.T.	'as above'
85/0007	" "	"	"	M.T.	Magnetite pyrite bearing greenschist 'riddled' with carbonate veins
85/0008	" "	"	"	O/C	Adit sample. Secondary minerals (zeolites?) encrusted on dark brown rock (siderite?) from shear zone
85/0009	Easting 49 Baseline	10.15	49.00	O/C	Green phyllite with quartz vein parallel to foliation/bedding

APPENDIX 4.2

ANALABS ANALYTICAL DATA

236.1 08 2784

085

186086
73.

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2784B	23.11.84		1 OF 2

TUBE No.	SAMPLE No.	Bi	Mo	Se	Sb	Te				
1	WRA 1	X	X	0.72	X	X				
2	WRA 2	X	X	1.48	1	0.04				
3	WRA 3	X	X	0.72	X	0.08				
4	WRA 4	X	X	X	1	0.04				
5	WRA 5	X	X	2.08	4	0.12				
6	WRA 6	X	X	0.16	1	X				
7	WRA 7	X	X	X	X	0.08				
8	WRA 8	X	0.5	2.00	2	X				
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

086

186087
74.

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2784	23.11.84		1 OF 2

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ni	Mn	Co	Cr	Ag	As
1	WRA 1	240	5	75	910	145	158	7	X	5
2	WRA 2	2300	10	80	810	495	199	8	X	6
3	WRA 3	90	X	10	75	25	44	8	0.1	X
4	WRA 4	35	5	20	130	1100	36	64	X	9
5	WRA 5	950	20	40	835	2000	201	29	0.3	470
6	WRA 6	340	X	95	210	655	52	9	X	14
7	WRA 7	10	15	35	90	5550	21	6	X	17
8	WRA 8	330	15	125	350	525	84	50	0.1	17
9										
10										
11										
12										
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14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

087

186088

75

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2784C	26.11.84		1 OF 1

TU No.	SAMPLE No.	Sn	Ba	W	Au					
	WRA 1	7	20	X	0.004					
2	WRA 2	6	40	X	0.004					
	WRA 3	X	X	X	0.003					
	WRA 4	4	X	X	0.002					
	WRA 5	X	20	X	0.009					
	WRA 6	5	40	15	0.003					
7	WRA 7	3	X	X	0.005					
	WRA 8	X	25	X	0.007					
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	3	20	10	0.002					
24	DIGESTION									
25	METHOD	402	401	401	322					

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

088

186089

APPENDIX 5.1

ANALABS ANALYTICAL DATA

236.1 08 2918

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2918	19.2.85		1 OF 3

TYPE	SAMPLE No.	Cu	Pb	Zn	Mn	Ag	As	Sn	W	Au
1	307	75	25	170	3100	X	12	-	-	X
2	308	100	30	245	3500	X	12	-	-	X
3	309	10	25	25	75	-	22	5	3.0	X
4	310	15	20	30	70	-	4	-	-	0.001
5	311	40	25	10	70	-	15	-	-	X
6	312	85	10	145	1600	-	4	-	-	X
7	313	115	15	175	835	X	3	-	-	X
8	314	140	5	145	1200	X	10	-	-	X
9	315	140	15	155	1200	X	3	-	-	0.001
10	316	170	15	165	1000	X	5	-	-	0.003
11	317	150	10	195	1850	-	7	-	-	0.007
12	318	120	35	160	235	-	X	-	-	0.003
13	319	15	20	50	625	X	10	-	-	0.001
14	320	10	10	40	2100	X	5	-	-	0.004
15	321	10	15	35	455	X	5	-	-	0.003
16	322	60	30	85	505	X	40	-	-	X
17	323	115	20	105	765	X	12	-	-	0.001
18	324	40	15	160	3500	-	5	3	0.5	0.003
19	325	65	40	270	3500	-	3	X	0.5	X
20	326	60	20	215	760	-	3	X	X	0.001
21	327	30	10	170	125	-	7	-	-	0.003
22	328	25	15	25	390	X	17	-	-	X
23	329	35	20	65	275	X	10	-	-	0.003
24	330	15	15	40	135	X	14	-	-	0.001
25	331	10	30	30	330	X	110	-	-	0.005

090

186091

77.

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2918	19.2.85		2 OF 3

TYPE No.	SAMPLE No.	Cu	Pb	Zn	Mn	Ag	As	Sn	W	Au
1	332	5	20	20	70	-	23	8	21.0	0.012
	333	X	20	10	30	-	17	5	2.0	0.006
	334	100	15	105	795	X	10	-	-	X
4	336	15	35	35	430	X	54	5	1.5	0.004
	337	10	25	35	235	X	25	-	-	0.001
6	338	10	15	35	125	X	17	-	-	0.009
	339	45	10	130	1600	X	7	-	-	0.002
	340	25	60	85	785	X	85	-	-	0.002
	341	85	45	130	2900	X	50	-	-	0.002
	342	30	10	35	460	-	6	-	-	X
11	343	35	15	30	200	-	9	-	-	0.001
	344	15	5	10	125	-	3	-	-	0.003
13	345	105	25	105	755	-	13	-	-	0.003
	346	70	25	195	2900	-	6	-	-	0.003
	347	145	30	545	6750	-	12	-	-	0.005
16	348	25	10	60	550	X	4	-	-	X
18										
21										
23										

091

186092

78.

ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	236.1 08 2916	19.2.85		3 OF 3

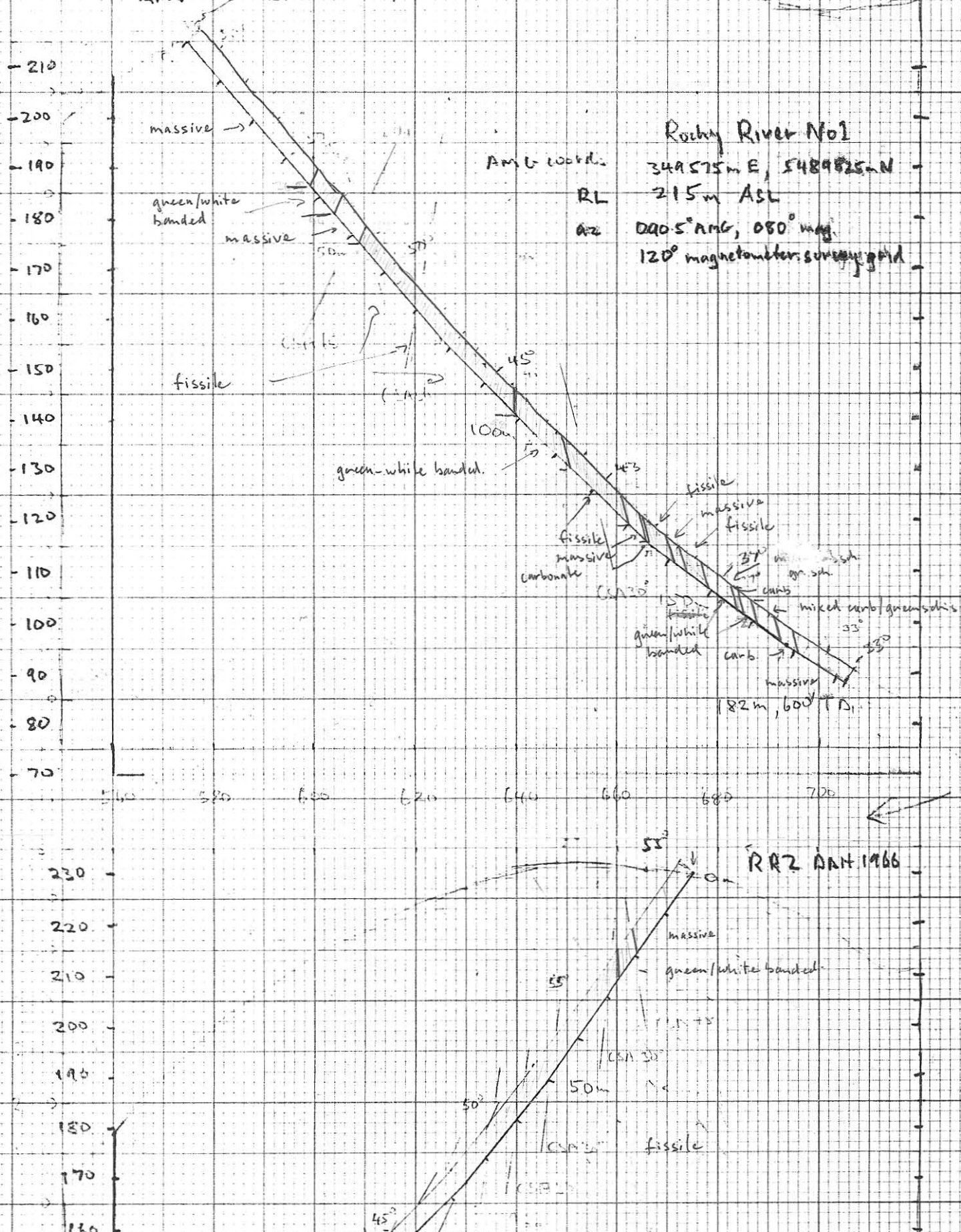
USE No.	SAMPLE No.	Cu	Pb	Zn	Mn	Ag	As	Sn	W	Au
1	STD 3036	175	610	265	795	1.9	600	-		
2	RPT 307	75	30	170	3000	X	13	-		
3	RPT 326	65	20	220	780	-	3	-		
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	5	0.1	1	3	0.5	0.001
24	DIGESTION									
25	METHOD	101	101	101	101	102	114	402	124	325

102

186093

make this
2 A4 Pages

RR1 DDH 1966



Rocky River No1

AMG coords. 349575mE, 5489825mN

RL 215m ASL

Az 000·5° AMG, 080° mag.

120° magnetometer survey grid

ROCKY RIVER
IRON DEPOSIT AREA
DRILLHOLE PROFILE
ROCKY RIVER 1

Drawing N Shannon July 1985

RR2 DDH 1966

Rocky River No 2

coords: AMG 349675mE, 5490000mN

RL 230m ASL

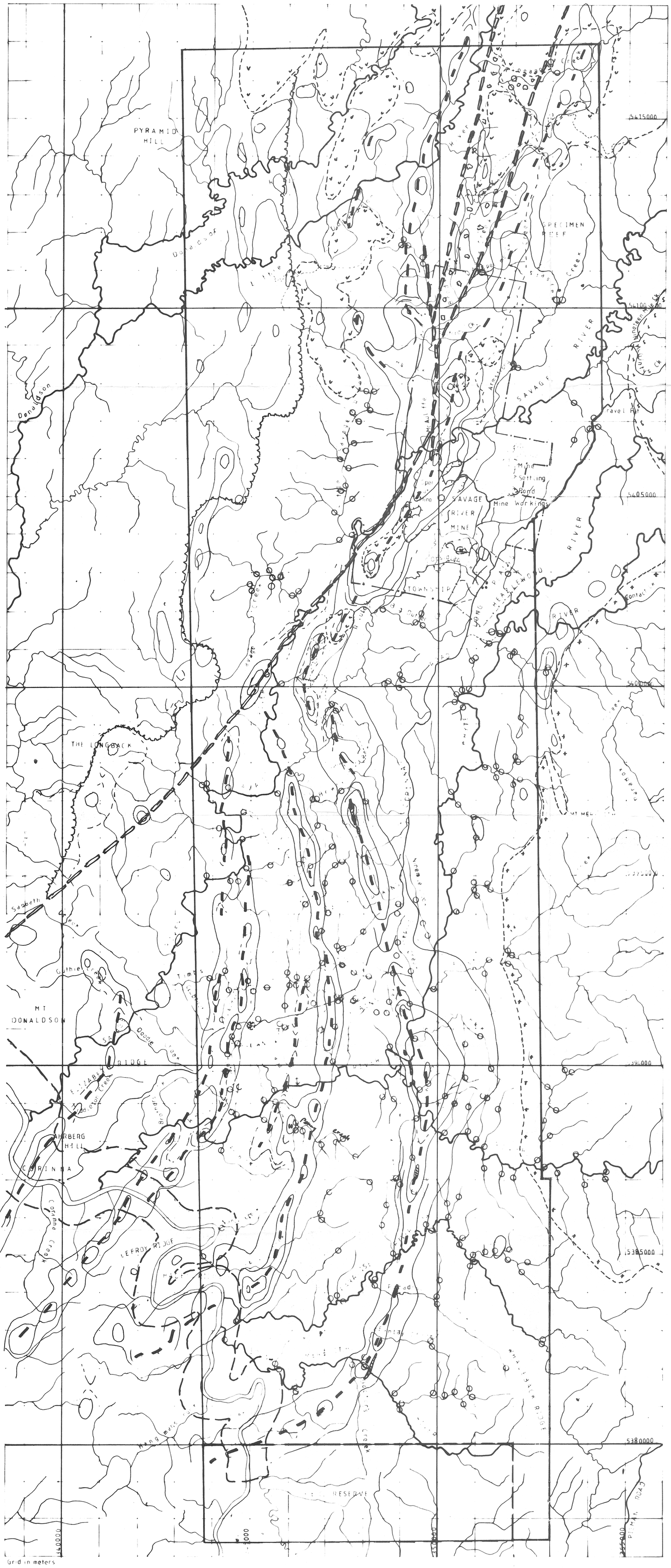
Az 275·5° AMG, 265° mag

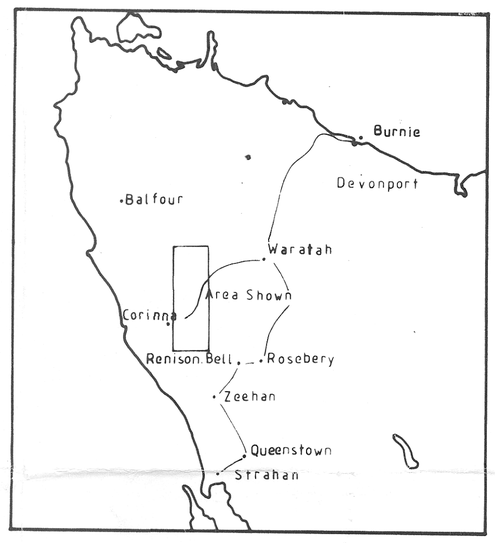
ROCKY RIVER
IRON DEPOSIT AREA
DRILLHOLE PROFILE
ROCKY RIVER 2

Drawing N Shannon July 1985

preliminary sketch for draftsman only

.ACK GRAPH PAPERS . CHRISTCHURCH N.Z. C052X 40 cm x 28 cm x 2 mm.





85-2380

LEGEND

- Road
- Track
- River
- Creek
- Town Lease
- Mine Lease
- E L Boundary
- H E C Reserve, Scenic Reserve
- Sample Point — O 1983-84
- geological boundary
- unconformity ("Whyte Group" over Rocky Cape Gp.)
- magnetic contours
- magnetic high axis
- fault
- magnetite
- basalt
- Wynyard Tillite
- Meredith Granite
- Bald Hill Serpentinite
- "Whyte Group"
- Rocky Cape Group

TN GN MN
1·2 11·0

INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.
E.L. 4/61 SAVAGE RIVER

OUTLINE OF MAGNETIC AND MAJOR GEOLOGICAL FEATURES PLAN

DATA COLLECTED, 1983 - 84 by B.P., L.V., B.G., H.S., P.C.
COMPILED, H. Shannon
DRAWN, B. Green, H. Shannon

5 cm

1 0 1 2 3 4 5km.

Scale 1: 50,000 June 1984

Plan ref. I.M.I - E.L. 4/61 - 11/84 - 3

186094 119

093

KDC:VS

(51)

E.L. 4/61.

186095

Dr K.D. Corbett 6504

24 JUL 1985

Mr C.H.C. Shannon,
Industrial and Mining Investments Pty Ltd.,
SAVAGE RIVER,
Tasmania. 7321

Dear Sir,

REPORT ON EXPLORATION LICENCE 4/61

I refer to your report entitled "Report on Field Investigations Within Exploration Licence 4/61, West Coast Tasmania" for the period 23 August 1984 to 22 February 1985. 85-2380

Could you please provide plans, co-ordinates, azimuths and sections for the five drill holes mentioned in this report, and ensure that such data is included for all diamond drill holes in future reports.

RC

Yours faithfully,

(H. Murchie)
DIRECTOR OF MINES

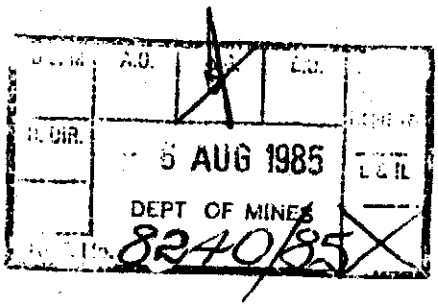
099

186096

(1)

INDUSTRIAL AND MINING INVESTIGATIONS PTY. LIMITED
Incorporated in A.C.T.
SUITE 3709 AUSTRALIA SQUARE SYDNEY 2000 AUSTRALIA TELEX: AA74071 TELEPHONE: (02) 27 8145

P.O. Box 178,
Savage River, 7321
5-8-1985



Director of Mines
Mines Department
P.P. Box 56, Rosny Park, 7018

Dear Sir,

REPORT ON E.L. 4/61 — 85-2380
attention Dr K.D. Corbett

Concerning your request for proper location data, etc. in your letter of 24-7-1985. Data for the Specimen Reef area drillholes referred to are included in a report in press at the moment which includes results from a comprehensive surface survey. This provides adequate fixes to the A.M.G. previously lacking.

The Rocky River data is from old drillholes for which critical location data is described in ambiguous terms. My interpretation and profiles and location maps for R.R. 1 and R.R. 2 are included.

I am working on a project of replotting all drillholes in the E.L. on to metric scale and the Australian Map Grid to produce a uniform format and comprehensive guide to the drilling data but this information will be complete too late to be included in the end-of-season report currently in press. Thus the end-of-season report (which includes new assay data from 1965 vintage drilling, Long Plain South area) will not have all the location and profile data you requested. It had been assumed that the data had been submitted soon after the drilling and was not therefore needed.

Yours faithfully,

C.H.C. Shannon,
Senior Geologist, I.M.I. P/L

100

186097

This must be a classic of its kind!

Location of drillholes, Rocky River Drilling Program.

There is a problem with the location of these drillholes largely because of the confused terms in which the location of Rocky River 1 is given in the log

An important source for location data is an annotated early draft of the magnetometer survey map,- a large scale version of what became Fig 15 in Urquhart (1964) which appears to be the field copy used by a geologist involved in the drilling program. Geological data has been added, plus some annotations including the following remarks -

No 1 80 (degrees)

No 2 dir 265 dip 55
225'Bg 150 from corner Base line and traverse C.L.
then 30' in dir 265.

In the same biro hand dots numbered 1400 on line 4S and 1350 on line 8S are marked and the contours are heavied in.
These figures make sense as peg positions in feet, taken from zero marks on the old water race, not the original baseline.

Shown in pencil are two circled dots with (multiple) lines drawn from them. In the case of the more northerly site the heaviest line is marked: 265 (degrees) it is at 740' by the map's contours. The other point is at 700' by the map's contours and the heaviest line is not marked in degrees but is oriented 115 degrees magnetic.

On the ground, the northern site contains a drillhole interpreted as RR 2; the southern site is contained on an artificial platform and this is now considered to be the site of RR 1.

Logs were prepared by T.D. Hughes. The log for R.R.2 is reasonably straightforward in terms of location data, so long as the "centre line" is line zero of the original baseline grid. The hole is stated as commenced on 4-4-66; completed 2-5-66.
For R.R.1 no dates are given, but it seems probable that most of the drilling was done in March 1966. The big problem is with the location data. It is possible to locate the site on the 700' map contour if the annotations mentioned above are correct so long as "south" is taken tobe defined in terms of the magnetometer grid which is oriented 40 degrees west of magnetic north. If this assumption is made the azimuth of the R.R.1 drillhole given in the log as 120 degrees (Magnetometer survey grid) coincides with the (magnetic) azimuth of 80 degrees in the annotatations. This is the preferred interpretation. It places the borehole perpendicular to the axis of the anomaly.
But the most confidently drawn line on the annotated map is at 115 degrees magnetic, and it is also possible that the true orientation is 120 degrees magnetic.

References:

Atkinson, W.J.; 1960: Report on the Rocky River Area Iron Deposits, N.W. Tasmania. Rio Tinto Australian Exploration Pty. Limited unpublished report.

Hughes, T.D.; 1966: Logs of Rocky River 1 and Rocky River 2 diamond drillholes. Tasmania Department of Mines diamond drill core records?

Shannon, C.H.C.; 1984: Logs and new assay data R.R.1 and R.R.2. I.M.I. internal memo.

Urquhart,G.; 1966: Magnetite Deposits of the Savage River - Rocky River Region. Tasmania Department of Mines, Geological Survey Bulletin No 48.

186099

095

Little

Donaldson

River

14·8
14·7
14·6
14·5
14·4
14·3
14·2
14·1
14·0
13·6

14

50·35

50·6

15·05

15·0

5 cm

Insert: 1:2,500 scale

Lead Anomaly, 82/83 data

Central Copper Anomaly

1
2
3
4

NORTHERN AREA - ARSENIC ANOMALY
SAMPLE LOCATIONS in which REPEAT SAMPLES were collected

plan 1 of 4

85-2380

094

186100

13·6

13·1

13

49

50

1 ☐
2 ▨
3 ☐
4 ☐

NORTHERN AREA - ARSENIC ANOMALIES

SAMPLE LOCATIONS in which REPEAT SAMPLES were collected

plan 2 of 4

TN GN Mag.

grid magnetic angle (11.0°)

grid convergence 1·2°

I.M.I. Access Track Line R

INDUSTRIAL & MINING INVESTIGATIONS P/L

E.L. 4/61 NORTHERN AREA

CENTRAL COPPER ANOMALY, LEAD ANOMALY

SOIL GEOCHEMISTRY

DATA COLLECTED BY H. SHANNON, J. WOODMAN 81/82
M. EDWARDS, L. VANZINO, H. SHANNON 82/83
COMPILED B. GREEN, JUNE 1983
DRAWN H. SHANNON

200 100 0 500m

1:5,000

85-2380

093

186101

Line 11.3

Line 11.2

49200 49225 49250 49275 49300 49400 49600 49625 49650 49675 49700

Line 11.1

Line 11.0

Line 10.9

Line 10.8

Line 10.7

Line 10.6

Line 10.1

4 NORTHERN AREA - ARSENIC ANOMALIES

1 2 3 VII

SAMPLE LOCATIONS in which REPEAT SAMPLES were collected

plan 3 of #

48850 48875 48900 48925 48950 48975 49000 49025 49050 49075 49100 49125 49150 49175 49200 49225 49250 49275 49300 49325 49350 49375

Creek

092

85-2380

186102 17

LINE 16·7

LINE 16·4

DONALDSON RIVER

LITTLE

50550
50575
50600
50625
50650
50675
50700
50725
50750
50775
50800
50825

50200
50225
50250

9

5 0

16

TN GN MN

1
2

4

PLAN 4 of 4

INDUSTRIAL AND MINING INVESTIGATIONS
E.L. 4/61 NORTHERN AREA

Rocky River Grid

50100

51200

Line 90-1*

90

Line 89-9

Line 89-7*

Line 89-5

Line 89-3*

Line 89-1

89

* denotes line sampled in 1984-85 program

• S1000 sample point

50

50150

51

51100

5130

5 cm

50 25 0 100 200 300 400 500 metres

Scale 1:5000

186103

ROCKY RIVER GRID
GEOCHEMICAL SAMPLING - SOILS
SAMPLE LOCATIONS -

Rocky River Grid

50,000

51200

Line 90·1*

grid North

1·0 0·5 0·25 0·5 7·0 0·5 0·5 0·5 0·5

90

Line 89·9

Road line

Line 89·7*

1·75 0·5 1·5 0·25 4·50 2·00 0·5 0·5 0·75 57·5 3·5 3·75

Line 89·5

Line 89·3*

1·25 0·5 0·75 0·5 1·0 0·5 0·5 5·00

Line 89·1

89

* denotes lines sampled in 1984-85 program.

0·5 denotes cluster of sample points combined to give 0·5 micrograms of gold

x denotes no sample

51

50150

51100

51300

Feb 1985 HS.

85-2380

50 25 0 100 200 300 400 500 metres

Scale 1:5000

5 cm

ROCKY RIVER GRID

GEOCHEMICAL SAMPLING — SOILS:

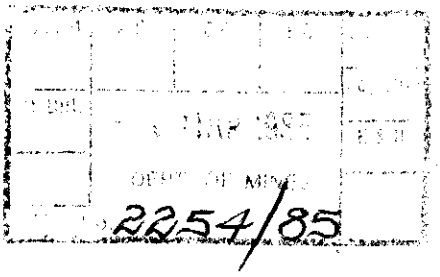
GOLD IN PAN CONCENTRATES OF SUPERFICIAL QUARTZ GRAVEL

18614

960

103

186105



EXPLORATION LICENCE 4/61

WEST COAST, TASMANIA

QUARTERLY RESUME

23.8.84 - 22.11.84

Hard Copy file in Annex File

APPENDIX 6 OF 85-2380

INDUSTRIAL AND MINING INVESTIGATIONS PTY LIMITED
Incorporated in the A.C.T.

104

186106

INDUSTRIAL AND MINING INVESTIGATIONS PTY. LIMITED

Incorporated in the A.C.T.

EXPLORATION LICENCE 4/61

WEST COAST, TASMANIA

QUARTERLY RESUME

23.8.84 - 22.11.84

Distribution:

1. Master - Library
2. EL 4/61 file via GKH
3. Department of Mines, Tasmania via DSA
4. JGS via DSA
5. Savage Office via DSA
6. PS Forwood via DSA
7. Extra

1. INTRODUCTION

Field work was delayed by wet weather until late October after which a fine spell intervened sufficiently long to allow the re-opening of access tracks which had all been blocked over the winter by fallen trees and/or landslips.

2. ROCKY RIVER SOIL SAMPLING

Line cutting and pegging work was undertaken
(a) to re-open access to the Little Donaldson area
(b) to expand the grid at the Rocky River arsenic anomaly areas. Lines 89.3 and 89.7 are interpolated between the lines of the grid established previously and Lines 90.1 and 88.9 extend the area covered. Line 89.3 has been extended westwards to the Rocky River in order to examine the zinc anomaly indicated in the adjacent creek and in the road traverse.

3. SPECIMEN REEF CORE ASSAYS

Prior to the start of field work, analysis information on sections of the Specimen Reef core for which analyses had been delayed, owing to prior examination at CSIRO for petrological material, became available and has been integrated with the data reported in the preceeding quarterly report to produce the record shown below. (See Table 1).

4. ROCKY RIVER CORE ASSAYS

An examination of the core from the Rocky River Drillholes RR1 and RR2 was undertaken, involving analyses of surviving material from pulps preserved in the Launceston Mines Department Laboratory, plus check sampling of parts of the core from which either (a) the pulps had been lost or (b) no analyses had been taken. Results are shown in Table 2. Of particular interest is the association of gold with a carbonate rock which incorporates distinct clots of pyrite, chlorite and iron oxides.

The relation to arsenic is not direct, although an arsenic halo is possible. Pyrite rich specimens appear to be generally low in gold. High manganese and/or zinc appear to be the most useful indicators on the sparse evidence available.

The projected horizon of the carbonate on the surface is in the area of zinc anomaly on the road traverse soils line.

The new log information is shown in Table 3.

5. NORTHERN AREA SOIL ANALYSES

During the early part of the quarter, the data collected from assays for Ni, As and Ag became available for the Northern part of the area, being material received from the 1981-83 investigations and the data has been plotted and interpreted (See Appendix 1 - "Additional Report on the Soils Geochemistry of the Northern Area of Exploration Licence 4/61, West Coast, Tasmania, Summer Field Season, 1984-85", L. Vanzino, November 1984.)

6. GENERAL

Also, a stratigraphic interpretation of the magnetic data available from the Mines Department aeromagnetic survey has been prepared (See map 1 - Outline of magnetic and major geological features.) The essential concept illustrated is of a NE trending fault with right lateral offset which truncates the sequence in the north of the area but leaves it intact in the south.

TABLE 1

Specimen Reef - Analysis of Drill Core

Core has been cut for all drillholes of the 1981-82 programme below the leached zone. (Some portions of leached zone material have also been sectioned.) Assay results in hand are shown below.

DDH.SPC 1

Depth (m)	Element													
	Cu	Pb	Zn	Co	As	Ag	Au	Hg	Se	Sb	Te	Fe%	Mn	S
00-38	no assays													
38-42	105	x	50	25	19	x	.017	x	x	x	x	3.20	220	.413%
42-44	200	x	80	25	10	x	.017	x	x	x	x	5.8	330	
44-46	145	x	50	30	19	x	.032	x	x	x	x	5.4	305	
46-48	345	x	55	25	9	x	.100	x	x	x	x	4.95	330	
48-63.15	no assays													
63.15-63.4	5	5	48	35	5	.3	.017	x	x	x	x	3.05	390	.413%
63.4-100	no assays													
100-102	85	5	195	25	15	x	.032	.015	x	x	x	4.50	615	
102-104.2	625	5	190	40	34	x	.032	x	x	x	x	4.60	425	
104.2-106	100	x	180	20	9	x	.017	x	x	x	x	4.25	520	
106-108	45	x	100	30	21	x	.017	x	x	x	x	2.80	450	
108-108.9	80	x	150	30	5	x	.017	x	x	x	x	3.25	420	
108.9-110	85	5	50	45	15	x	.032	x	x	4	x	4.20	430	
110-111	85	5	75	55	7	x	.032	.025	x	x	x	4.40	560	
111-112	65	5	325	25	2	x	.032	.030	x	x	x	3.85	500	
112-114	25	x	50	15	1	x	.017	x	x	x	x	3.10	405	
114-116	90	5	115	25	10	x	.017	x	x	x	x	4.20	465	
116-118	70	5	695	35	2	x	.017	.040	x	x	x	4.30	525	
118-120	75	x	320	25	1	x	.017	.015	x	x	x	4.00	520	
120-122	105	5	45	20	1	x	.017	x	x	x	x	3.95	410	
122-124	40	x	45	35	5	x	.017	x	x	x	x	4.75	510	
124-125.9	80	x	45	30	6	x	.017	x	x	x	x	4.70	540	

DDH.SPC 1 (cont'd)

Depth (m)	Element													
	Cu	Pb	Zn	Co	As	Ag	Au	Hg	Se	Sb	Te	Fe%	Mn	S
125.9-127	50	x	30	25	17	x	.017	x	x	x	x	2.90	580	
127-128	45	5	75	20	9	x	.017	x	x	x	x	3.05	430	
128-130	75	5	40	35	5	x	.017	x	x	x	x	4.00	430	
130-132	140	x	65	25	28	x	.017	x	x	x	x	4.05	455	
132-134	100	5	135	25	4	x	.017	x	x	x	x	4.55	500	
134-136	50	x	85	20	7	x	.017	x	x	x	x	4.15	435	
136-137	190	5	320	30	12	x	.017	x	x	x	x	5.05	620	
137-138	90	15	435	40	17	x	.017	.025	x	x	x	3.95	600	
138-139	110	55	400	35	20	x	.017	.025	x	x	x	4.45	450	
139-140	80	x	70	25	14	0.4	.875	x	x	x	x	2.85	735	.507%
140-140.85	10	x	70	25	1	0.3	.008	x	x	x	x	3.85	575	.294%
140.85-141.05	20	195	30	65	2	1.7	922	.085	4	x	x	5.60	1150	1.192%
			Repeat assay for gold				901							
141.05-142	75	x	25	45	2	0.3	.758	.010	x	x	x	4.65	1050	1.137%
142-144	80	x	128	35	10	x	.025	.015	4	x	x	5.10	530	
144-145.2	155	x	30	30	7	x	.032	.010	x	x	x	4.65	690	
145.2-147	50	x	45	25	2	x	.025	x	x	x	x	4.30	410	
147-149	20	x	35	25	1	x	.025	x	x	x	x	4.05	330	
149-150	10	x	30	30	1	x	.017	.010	x	x	x	6.75	1450	
End of Hole														
Detection	5	5	5	5	1	0.5	.008	.005	3	3	3	50	5	

Method Code 101 101 101 101 114 101 309 122 402 402 402 402 101 101 402
All results in p.p.m. unless indicated. Prepared by Analabs, Burnie Laboratory.

Report No's 236.1 08 2598, Date 24.8.84: Cu, Pb, Zn, Co, Ag, Au, Hg, Se, Sb, Te

236.1 08 2713, Date 8.10.84: As, Fe (in %), Mn

236.1 08 2734, Date 23.10.84: Cu, Pb, Zn, Co, Mn, Fe (in %), Ag*, As

236.1 08 2734B, Date 30.10.84: S (in %), Se, Sb, Te, Au

*Ag by method 102, detection limit 0.1 p.p.m.

Comments on Table 1

The aim of these analyses was firstly to check if there was potential for open cuttable disseminated gold mineralisation. Indications are unfavourable in this respect and values would need to be of the order of 100 times richer for this to be possible. The gold values are nonetheless well above average and if compared with data from the Lamaque Mine, Quebec (in Perrault, Trudel and Bedard 1984) in which a greenstone hosted gold area is described which appears comparable with Savage River, all gold values would be classified as ore zone halo range. They are substantially above average for a shale or mafic volcanic terrain given in Rose, Hawkes and Webb 1979 (0.004 and 0.0032 p.p.m. respectively). About one third of the values are 10 times average.

For the other analyses, copper values above 300 and cobalt above 40 generally correlate with elevated gold; mercury registrations correspond with elevated zinc and/or gold; lead, zinc, mercury, and to a degree cobalt and gold, appear to participate in a halo about the 139-142 gold intersection.

The intersection itself is in the 140.65-141.05 interval. Here there is elevated lead, silver and cobalt and to a lesser degree iron and manganese. Copper, zinc and (surprisingly) arsenic are depleted. The bleached alteration zone around the vein is also depleted in arsenic, iron, copper, lead and zinc.

Silver, selenium, antimony and tellurium results are practically featureless at the detection limits used. Selenium would appear to have some potential as an indicator element if a more sensitive technique were used.

The peak copper value occurs in the one interval where visible chalcopyrite was detected in a carbonate vein at 103.66 during logging (Woodman, Shannon and Edyvean 1982). The high gold/copper value 42-44m may relate to a chlorite rich zone with core loss possibly representing a leached out carbonate vein. There does not seem to be a direct correlation of gold with pyrite but there does appear to be a relation to talcose alteration zones associated with carbonate veins. Zinc values are usually up in the more pyritic rocks.

As a gold prospect the area probably depends on the high grade vein potential alone, despite the presence of gold in values approaching 1 g/t in the wall rock. The value of gold in a thin vein has to be very rich to be of much interest because nugget effects can be very deceptive. Still the intersection averages down to, say 60 g/t over a width of 3m. This is still definitely rich enough to maintain life in the prospect.

Other factors to be considered in the assessment are that the intersection is oblique, which downgrades the vein on a true width basis. Insofar as selection of the sample was done it was the less rich-looking half that was selected for petrological and analysis work, so that if further assays were done higher values would be expected. But the evidence of alteration adjacent to the mined out area intersected in SPC 4, which did

intersect what is interpreted as the same vein in a near perpendicular intersection, is that the gold bearing vein can be substantially wider. The best grades would normally be expected in the zone of maximum vein development. The favoured interpretation of the gold bearing vein in SPC 1 is that it is an exceptionally thin section of a normally wider vein.

TABLE 2

ROCKY RIVER DRILL CORE ANALYSIS

Rocky River No. 1

Depth (ft)	Sample Number	Element																
		Cu	Pb	Zn	Mn	Ag	As	Se	Sn	W	Sb	Te	Au	Hg	S	Fe	Ca	Mg	Loi
8-21	RR1010	100	45	160	1750	0.2	1		x	x			x		2050				
21-41	RR1011	135	25	330	2100	x	x		x	x			x		2030				
41-52.5	RR1012	205	15	445	1750	0.1	x		x	x			x		1675				
52.5-62	RR1013	225	x	365	2550	x	x		x	x			x		2530				
62-71	RR1014	180	10	490	2050	x	x		x	x			x		1460				
71-78.5	RR1015	115	x	550	3550	0.1	x		x	x			x		730				
78.5-88.5	RR1016	105	5	575	6000	0.5	x		x	x			x		980				
88.5-99	RR1017	115	5	515	6250	0.9	x		x	x			x		910				
99-110	RR1018	85	x	490	2850	0.7	x		x	x			x		390				
110-119	RR1019	130	x	475	2750	0.4	x		x	x			x		490				
119-138	RR1020	105	10	1500	2600	0.5	x		x	x			x		1530				
138-153	RR1021	60	x	860	1.4%	0.1	x		x	x			x		2530				
153-169	661519	150	10	850	2.5%	0.4	24	x	x		x	x	.008	.110					
169-189	661520	495	x	200	1.7%	0.1	8	x	x		6	x	x	.040					

Rocky River No. 1 (cont'd)

Depth (ft)	Sample Number	Element																
		Cu	Pb	Zn	Mn	Ag	As	Se	Sn	W	Sb	Te	Au	Hg	S	Fe	Ca	Mg	LoI
189-209	661521	345	x	135	1550	x	x	x	7		7	x	.017	.045					
209-229	661522	445	5	160	2550	x	x	x	6		x	x	.008	.040					
229-249	661523	190	x	150	3850	x	x	x	x		x	x	x	.015					
249-269	661524	455	x	135	2750	x	x	x	4		x	x	x	.005					
269-289	661525	170	x	135	2500	x	x	x	3		4	x	x	.030					
289-309	661526	35	x	135	2400	x	x	x	3		x	x	x	.180					
309-365	no samples																		
365-377	selective sample pyrite rich																		
	RR1001	120	5	105	1300	0.5	6		x				x		16.5%				
377-395	no samples																		
395-405	selective sample pyrite rich																		
	RR1002	25	5	95	1550	0.4	3		x				x		13.3%				
405-442	no samples																		
442-443	RR1003	20	x	65	2200	0.3	12		x				x		9.9%				
443-518	no samples																		
518-519	carbonate/pyrite/magnetite																		
	RR1004	975	25	35	6850	0.4	39		x				x		11.1%				

Rocky River No. 1 (cont'd)

Depth (ft)	Sample Number	Element																
		Cu	Pb	Zn	Mn	Ag	As	Se	Sn	W	Sb	Te	Au	Hg	S	Fe	Ca	Mg	LoI
519-520	carbonate, minor pyrite and magnetite																		
	RR1005	910	25	25	8700	0.4	19		x				x		5.3%				
520-540	no samples																		
540-543	greenschist with carbonate schist																		
	RR1006	30	20	85	2.45%	0.3	17		x				x		2.2%				
543-553	no samples																		
553-553.5	carbonate, non-fissile chlorite and pyrite																		
	RR1007	1100	25	100	1.25%	0.3	37		x				x		10.3%				
553.5-562.5	carbonate rock, some pyrite, magnetite																		
	RR1008	185	20	65	1.85%	0.3	5		x				5		1.33%	6.25%	12.1%	5.15%	30.35%
562.5-586	no samples																		
586-601	representative greenschist																		
	RR1009	90	5	370	3880	0.4	2		x				.03		0.65%				
End of Hole																			

Rocky River No. 2

Depth (ft)	Sample Number	Element												
		Cu	Pb	Zn	Mn	Ag	As	Se	Sn	W	Sb	Te	Au	Hg	S
0- 18	No samples														
18- 30	20cm selective for gossan in greenschist														
	RR2001	70	10	95	255	0.3	13		x				1.24		0.05%
30- 64	No samples														
64- 65	20cm control greenschist														
	RR2002	20	5	110	940	0.3	3		x				0.08		4.1%
65- 85	No samples														
85- 89	20cm gossan and wallrock														
	RR2003	135	15	105	530	0.3	13		x				0.18		2.0%
89-104	No samples														
104-113	662467	20	x	125	1700	x	x	x	4		3	x	x	.510	
113-130	No samples														
130-150	662469	20	5	130	895	x	x	x	8		4	x	x	.210	
150-170	662470	150	5	145	1100	x	2	x	4		x	x	x	.140	
170-190	662471	100	5	175	2500	x	x	x	x		6	x	x	.090	
190-210	662472	110	5	155	2200	x	x	x	3		x	x	.008	.260	
210-230	No samples														

Rocky River No. 2 (Cont'd)

Depth (ft)	Sample Number	Element													
		Cu	Pb	Zn	Mn	Ag	As	Se	Sn	W	Sb	Te	Au	Hg	S
230-250	662474	170	5	140	2600	x	x	x	4		x	x	x	.150	
250-270	No samples														
270-290	662476	230	10	275	4450	x	x	x	3		x	x	x	.100	
290-310	662477	540	x	125	1400	x	x	x	x		x	x	x	.075	
310-330	662478	325	x	145	1500	x	x	x	3		6	x	.008	.100	
330-340	662479	610	10	150	1700	x	2	x	4		x	x	x	.170	
340-362	No samples														
362-366	Leached carbonate/greenschist														
	RR2004	60	x	505	1.5%	0.3	x		x				.82		0.01%
366-374	No samples														
374-377	Feldspathic greenschist														
	RR2005	35	10	940	3450	0.6	x		x				.29		0.01%
377-400	No samples														
End of Hole															

TABLE 3

ROCKY RIVER DRILLHOLE LOGS

Rocky River No. 1 D.D.H. Log by C.H.C. Shannon, October 1984

Depth (ft)	Description
0- 62	Pink weathered granular greenschist, rare non-fissile chlorite bands.
62-120	Green chlorite schist and green and white metamorphic banded feldspar chlorite schist. Bands 1-5 mm.
120-146	Granular greenschist, with rare globular quartz/carbonate segregations to 3cm.
146-172	Granular greenschist with carbonate. Granular character due to albite? porphyroblasts.
172-300	Mostly fissile chlorite schist with intervals of green and white banded schist.
300-324	As above, less fissile.
324-376	Grey magnetite rich greenschist with carbonate. Intervals of coarsely crystalline pyrite and of green/white banded greenschist.
376-432	Mostly fissile chlorite schist; pyrite, magnetite bearing.
432-442	Non-fissile greenschist with carbonate-quartz segregations; minor magnetite rock.
442-443	Coarsely crystallinecarbonate rock with segregations of non-fissile chlorite and of pyrite.
443-465	Fissile chlorite schist; magnetite, pyrite bearing.
465-475	Feldspar-quartz-carbonate-chlorite schist with pyrite and magnetite.
475-491	Fissile chlorite schist.
491-518	Feldspar-chlorite schist; feldspar as coarse porphyroblasts and as metamorphic segragation bands 2-5mm; also pyrite and magnetite porphyroblasts; rare magnetite rock bands.
518-521	Carbonate rock with segregations of pyrite 5cm and magnetite 3cm.
521-532	Feldspar-chlorite schist; feldspar as porphyroblasts and as metamorphic segregation bands.

Rocky River No. 1 D.D.H (cont'd)

Depth (ft)	Description
532 -553.5	Spindle banded chlorite schist, chlorite-feldspar schist and carbonate schist grading to carbonate rock. Generally pyritic and with some magnetite; clots of massive pyrite to 3cm.
553.5-565.5	Carbonate rock (probably magnesite) with pyrite and Fe oxide? clots.
565.5-599	Pyritic laminated feldspar-chlorite schist with feldspar and magnetite porphyroblasts; minor carbonate.
End of Hole	

(Core split in the original sampling, ie, from 153 to 489 feet, is shattered and was not logged in the detail possible for the remainder.)

Rocky River No. 2 D.D.H. Log by C.H.C. Shannon, October 1984.

Depth (ft)	Description
0- 31	Poor recovery, laminated greenschist with limonite stain, some gossan.
31- 62	Non-fissile laminated greenschist with quartz segregations.
62- 83	Non-fissile, banded feldspar-chlorite schist.
83- 89	Non-fissile, laminated feldspar-chlorite schist; some gossan.
89-342	Mostly fissile chlorite schist.
342-364	Leached, dark brown weathering talc/haematite earth and schist; probably after interbanded carbonate (magnesite)-talc-chlorite schist.
364-380	Feldspar-chlorite schist with some talc-haematite earth after magnesite.
380-400	Leached, dark brown weathering talc-haematite earth and schist; probably after interbanded magnesite-talc chlorite schist.
End of Hole	

(Core split in the original sampling, ie, from 90 to 340 feet, is shattered and could not be logged in the detail possible for the remainder.)