RELINQUISHMENT REPORT
EXPLORATION LICENCE 5589

ROSE QUARTZ MINING NL

ROSE QUARTZ MINING NL
APRIL 1990

TABLE OF CONTENTS

1. INTRODUCTION

2. SUMMARY

3. LOCATION, ACCESS AND TOPOGRAPHY

4. TENURE

5. GEOLOGY

6. EXPLORATION RESULTS

6.1 Stream Sediment Sampling (BLEG)

6.2 Regional Rock Chip Sampling

6.3 Grid Sampling

7. EXPENDITURE

8. REFERENCES

FIGURES

1. Location Plan

2. Geology Plan

3. Stream Sediment Sample Results

4. North Grid Sample Location Plan

5. Northeast Grid Sample Location Plan

TABLES

Table 1. Rock Chip Description

APPENDICES

A. Stream Sediment Results

B. Rock Chip and Soil Sample Results

1. INTRODUCTION

Exploration Licence 5589 is located approximately 120 km southeast from Darwin on the western margin of the Pine Creek Geosyncline (Fig. 1). The area is considered prospective for gold and base metal mineralisation due to its proximity to a number of identified gold bearing ore bodies in similar geological terrain nearby.

A preliminary geological investigation was carried out by Rose Quartz Mining NL during the first year of tenure in 1988. The results from this work (Georgees, 1989) identified some slightly anomalous gold and base metal localities in the northeast and southern portions of the licence.

Exploration during year two was carried out by Eupene Exploration Enterprises Pty Ltd on behalf of Zapopan NL who had an exploration agreement with Rose Quartz Mining NL.

Exploration concentrated on: completing the stream sediment sampling programme in the north and west portions of the licence, re-sampling the last years anomalous stream sediment localities and completed grid soil and rock chip sampling over three localities in the north, northeast and southern portions of the licence.

2. SUMMARY

The stream sediment and rock chip results from year two of exploration on EL 5589 identified one additional elevated gold stream sediment result in the western portion of the licence and confirmed anomalous gold and base metal values associated with the Olive prospect which are worth investigating further.

The grid sampling programme however did not reveaal any gold or base metal values of note.

3. LOCATION, ACCESS AND TOPOGRAPHY

The licence is located on the northest flank of Mount Ellison on Ban Ban Station, 86 km north of the homestead, some 19 km northeast from the Stuart Highway.

Access is via the sealed Fountain Head road and via Ban Ban Station tracks and fence lines. While access onto the licence area is assisted by cleared fence lines, the lack of gates hindred direct access tothe northern portion of the licence.

The topography of the licence is represented on the Ban Ban 1:50,000 scale topographic map sheet and the geology is represented on the McKinlay River 1:100,000 scale geological map sheet.

Terrain in the licence area consists of low-lying river floodpalins in th east, north and wes, tomoderately steep sided elongae ridgelines trending north-south through the centre. Drainage is to the north, east and south feeding the Margaret River, and also tothe west, feeding the McCallum Creek which eventually also flows into the Margaret River.

The average height of vegetation is 4 metres, consisting of open dry schlerophyll to monsoonal woodland species.

4. TENURE

Exploration Licence 5589 covers 3 blocks (19 km^2) and was granted to Rose Quartz Mining NL on 11 December, 1987 for three years.

5. GEOLOGY (Fig. 2)

Little new information on the geology of the licence can be added to the information presented in the report for year one by Georgees (1989), as emphasis was placed on stream sediment sampling and grid sampling rather than more detailed geological mapping. The geological interpretation by Georgees (1989) can, in the whole, be confimed however, and the geology in the northern portion of the licence added to the overall picture.

In brief, the Koolpin Formation outcrops in the western portion of the licence, while the Gerowie Tuff dominates the central portion of the licence with isolated rubble rises of Zamu Dolerite outcropping between the two units. The Mount Bonnie Formation outcrops directly to the east of the Gerowie Tuff and the latter two metasedimentary units give way to the Margaret Granite further to the north, represented by isolated rounded porphuritic granite outcrops.

6. EXPLORATION RESULTS

6.1 Stream Sediment Sampling (BCL)

Thirty bulk cyanide leach (BCL) stream sediment samples (designated ME1 to ME30) were taken over the licence; six were re-samples of the previous years anomalous localities and the rest covered the northern and central portions of the licence not previously sampled.

The results are listed in Appendix A and detailed on Figure 3.

The stream sediment results highlight the elevated gold zone in the region of Olive Prospect. The re-samle of ME9 re-recorded a result above 5ppb, while ME10 also recorded a reasonably high result of 3.33 ppb. Both are most likely a result of the runoff from the iron-rich quartz vein system which trends north-south through the Koolpin Formation directly to the west of the drainage area and which has been revealed further by costeans dug some years ago.

The northeast portion of the licence which previously recorded some elevated gold stream sediment results did not re-sample well. Results returned between 0.36 to 2.34 ppb with the slightly elevated results most likely resulting from the massive quartz vein which outcrops close by and from which the streaams drain. There is a possibility that a fault also terminates in this region, adding to the chance for some gold mobilization in the quartz vein along the fault zone.

Of the stream sediment sample localities, one sample, ME29 recorded 5.7ppb. The area from which this locality drains has very little outcrop, although quartz and dolerite rubble and scree is common along the drainage channel and overr the low rises near by. This area is worth investigating further.

6.2 Regional Rock Chip Sampling

Twenty one rock chip samples were taken from outcrops other than the three grid localities. The sample localities are detailed on Figure 2 (MER 1 to 4, 30, 31 and 42 to 56) and the results listed in Appendix B.

The mojority of rock chips were taken from the Gerowie Tuff, while the remainder were taken from the Mount Bonnie Formation and an iron-rich quartz vein in the Koopin Formation.

Table 1 details the rock chip descriptions.

The best gold results for the regional rock chip sampling programme were recorded from a flourite-rich quartz vein zone revealed by costeans and small shallow pits in the southwest portion of the licence. Results for samples MER51 and MER52 are also correspondingly high in base metals too. These samples were taken from the Olive Porpsect which lies in the Koolpin Formation near the contact with the Gerowie Tuff.

Samples further anorth along strike from the Olive Prospect in similar quartz vein material (no fiourite) have also recorded elevated base metal results, but disappoining gold results.

6.3 Grid Samples

Thirty five rock chip samples (designated MER) and 114 soil sampies (designated MES) were taken over three grids on previously identified elevated gold localities in the north, northeast and south of the licence.

The grid samples includes:

North Grid	- Lines 1 to 12
	- MES 1 to 58
	- MER 5 to 26
Northeast Grid	- Lines 1 to 4
	- MES 59 to 75
	- MER 27 to 29

The sample areas were set up on a north-south aligned grid consisting of 50 metre spaced sample localities of either soil or rock chips. Aluminium dropperrs werre placed every 100 metre, starting from 10000N, 10000E. The North Grid consists of 12 lines (Figure 5). Both grids are placed over quartz veined chert, siltstone and fine grained greywacke of the Mount Bonnie Formation.

EXPENDITURE

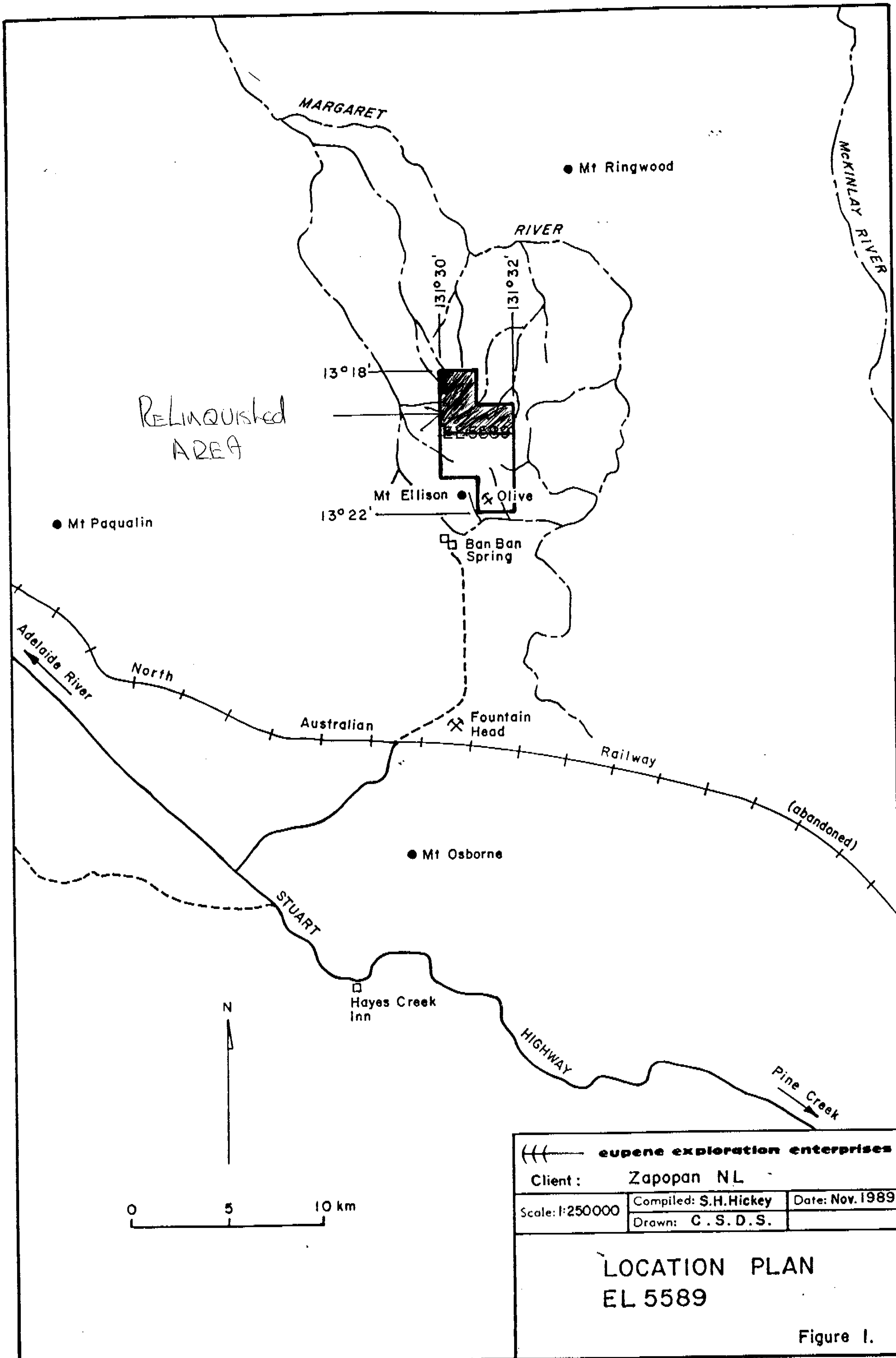
Consultant Geologist	$ 450.00
Reporting	275.00
Drafting	75.00
Overheads	220.00
TOTAL	$1,020.00

8. REFERENCES

George, C., 1989 Annual Report for EL 5589, 1988 Rose Quartz Mining NL Unpublished Report.

TABLE 1. **ROCK CHIP DESCRIPTION**

MER 1	Massive white quartz, well jointed
MER 2	Pale, purple to grey siltstone
MER 3	Steel grey chert
MER 4	Medium grey siltstone and cher rubble
MER 5	White quartz and quartz veined medium grey chert
MER 6	Medium grey chert
MER 7	Mediumgrey mischances schistose
MER 8	Light to medium grey mischances siltstone.



LOCATION PLAN
EL 5589

Figure 1.

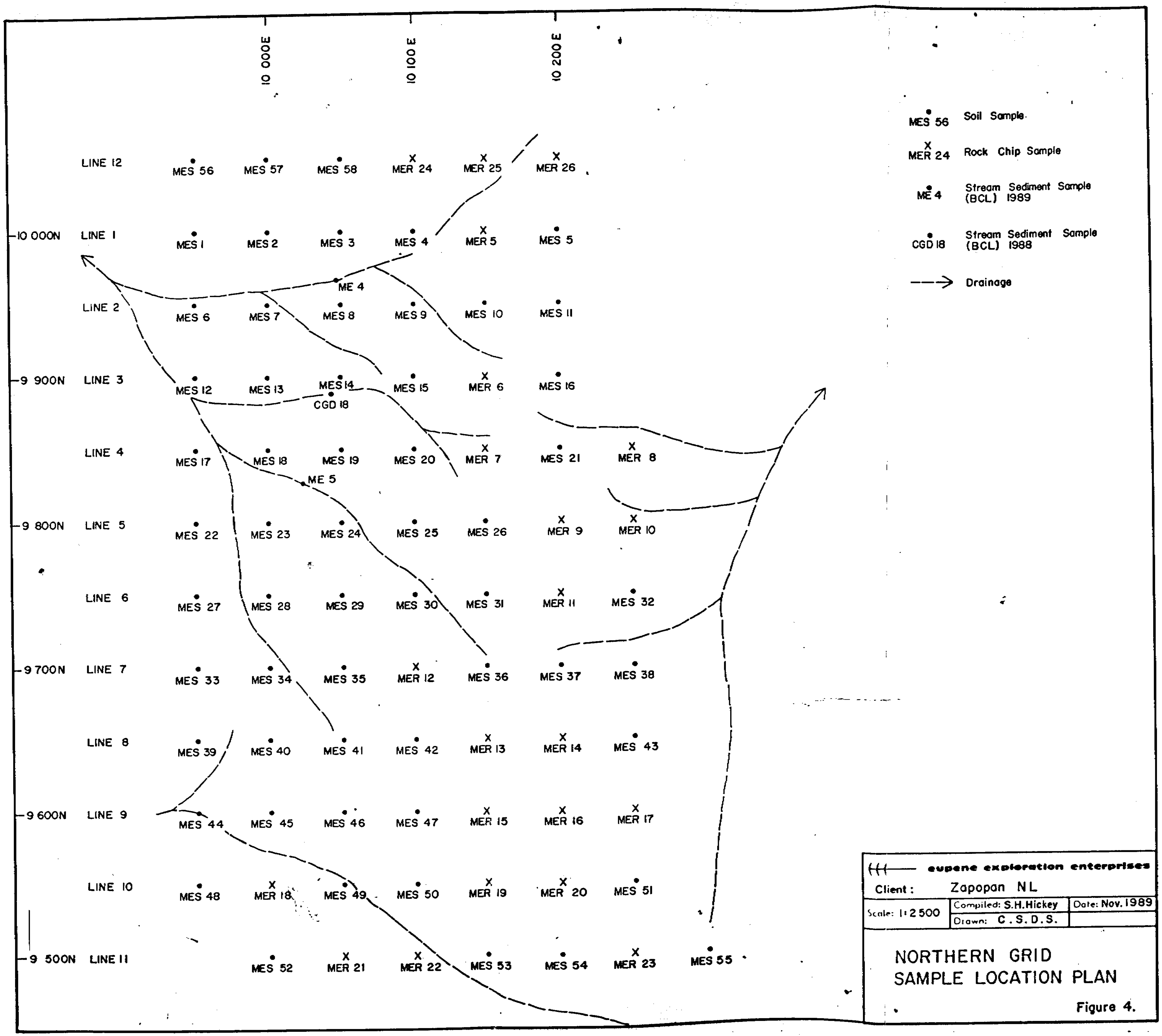

Isolated outcrops of pg
Mostly rubble strewn hills
Rubble strewn hill
GEROWIE TUFF
KOOLPIN FORMATION
MOUNT BONNIE FORMATION
NORTH GRID
NORTHEAST GRID
SOUTH GRID
Drainage flat + low rubble rises of d2
Low rubble rises of d2 minor k
Rubble scree hill d2
0 200 400 600 800 1000 metres
q Quartz Massive vughy white quartz blue tinge in places
pg Margaret Granite Coarse porphyritic granite
Zamu Dolerite
d2 Massive non-deformed dolerite, usually hard, fresh, dark green, rounded outcrops
d1 Deformed dolerite, dark brown, intensely oxidized, angular outcrops
z Mount Bonnie Formation Haematitic and sericitic siltstones slightly carbonaceous in places, chert with iron rich layers (BIF), laminated chert, rare hard fresh dark grey massive greywacke
g/z Gerowie Tuff Interbeds of green-black or grey chert, siliceous siltstone, minor pale tuffaceous argillite (g), haematitic siltstone (z)
k Koolpin Formation Iron rich carbonaceous siltstone and shale, often gossanous weakly pyritic in places, irregular patches and pods of quartz common
bk Black
carb Carbonaceous
cht, chty Chert, Cherty
form Formation
gwk Greywacke
gy Grey
hem Haematitic
lam Laminated
qtz Quartz
sil Siliceous
slst Siltstone
vns Veins
pg Granite
Inferred Syncline
Outcrop, Float
Dip and strike of bedding
Vertical bedding
Rock chip sample
Soil sample
Geological boundary
Inferred geological boundary
Inferred fault
Breccia
Costean
Drainage
Track
Fence
Gate
Bore
Exploration licence boundary
eupene exploration enterprises
Client: Zapopan NL
Scale: 1:10 000
Compiled: S.H.Hickey
Date: Nov. 1989
Drawn: C.S.D.S.
CR90/2_8
GEOLOGY & BASE MAP
Figure 2.

eupene exploration enterprises

Client: Zapopan NL		
Scale: 1:10 000	Compiled: S.H.Hickey	Date: Nov. 1989
	Drawn: C.S.D.S.	

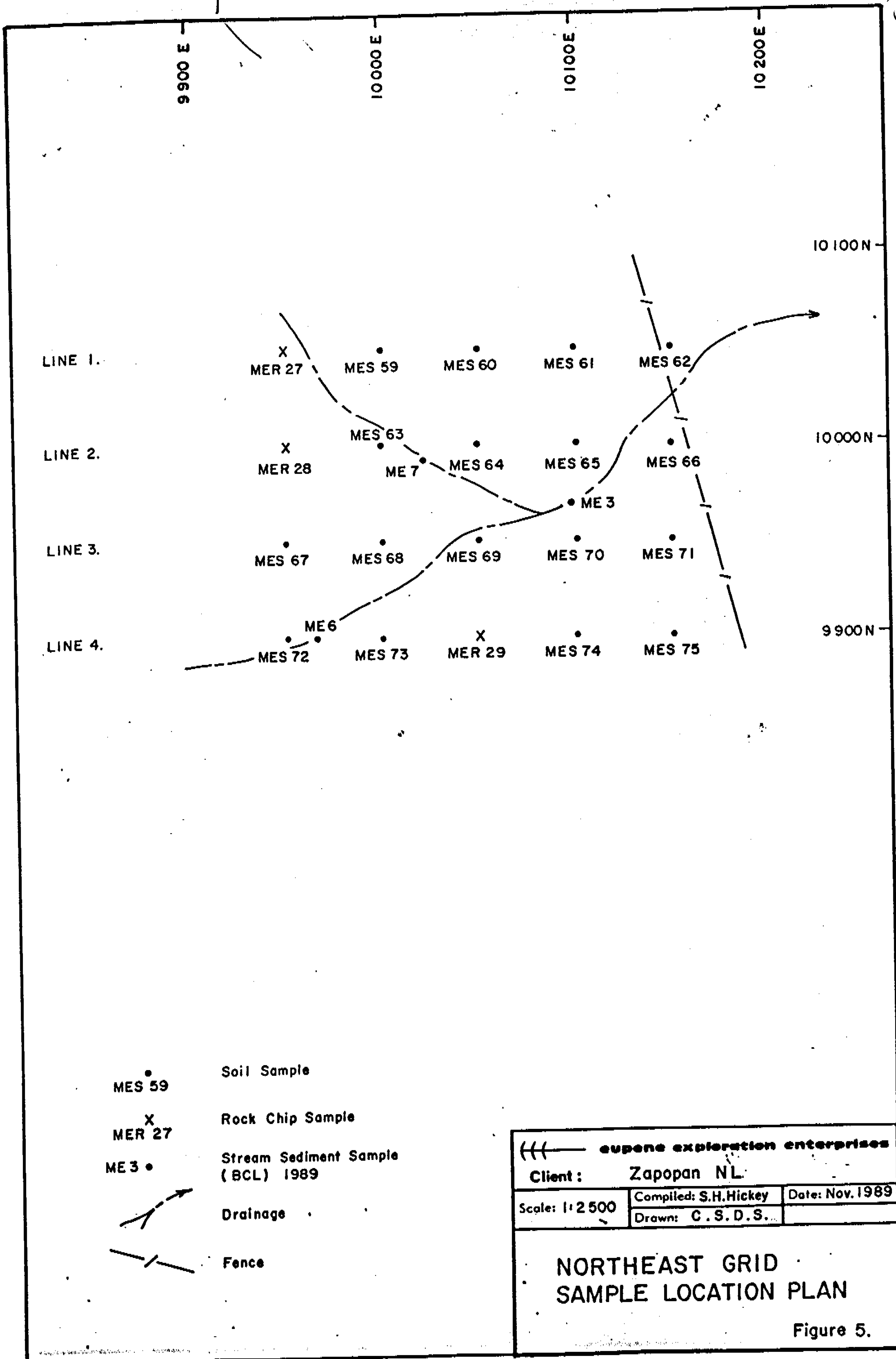
STREAM SEDIMENT SAMPLE RESULTS (BCL)

Figure 3.



NORTHERN GRID SAMPLE LOCATION PLAN

Figure 4.



NORTHEAST GRID
SAMPLE LOCATION PLAN

Figure 5.

APPENDIX A

STREAM SEDIMENT RESULTS (BCL)

089 32 3531

'89 11/14 07:46 ☎ 089 32 3531 Classic Amdel NT 02

17

amdel

REPORT AC 9DN1793

ANALYSIS PPB

SAMPLE NUMBER	Au							
ME01	0·33	/						
02	0·14	/						
03	1·55	/						
04	0·98	/						
05	0·36	/						
06	2·34	/						
07	1·54	/						
08	1·82							
09	5·76							
10	3·33							
11	1·86							
12	0·26							
13	0·70							
14	0·67							
15	0·44							
16	0·40							
17	0·41							
18	0·62							
19	0·34							
20	0·14							
21	0·29							
22	0·08							
23	0·11							
24	0·30							
ME25	0·17	✓						

METHOD: BLEG 2

amdel

REPORT AC 9DN1793
ANALYSIS PPB

SAMPLE NUMBER	Au							
ME 26	0·40							
27	1·17							
28	1·21							
29	5·76							
ME 30	1·14							

METHOD: BLEG 2

APPENDIX B

ROCK CHIP AND SOIL SAMPLE RESULTS

CLASSIC COMLABS LTD

Analysis code FA1
AAS1/2

Report 9DN1793

Order No. 3002

Page G1

Results in ppm

Sample		Au	Ag	Pb	Zn	Cu
MES01 -36#		<0.01	<1	11	24	70
MES02 -36#		<0.01	<1	6	12	52
MES03 -36#		<0.01	<1	<5	14	61
MES04 -36#		<0.01	<1	<5	10	31
MES05 -36#		<0.01	<1	<5	6	48
MES06 -36#		<0.01	<1	<5	7	27
MES07 -36#		<0.01	<1	<5	13	44
MES08 -36#		<0.01	<1	<5	4	15
MES09 -36#		<0.01	<1	<5	6	16
MES10 -36#	<0.01	<0.01	<1	7	9	67
MES11 -36#		<0.01	<1	6	10	83
MES12 -36#		<0.01	<1	<5	6	12
MES13 -36#		<0.01	<1	<5	8	14
MES14 -36#		<0.01	<1	<5	9	13
MES15 -36#		<0.01	<1	<5	7	12
MES16 -36#		<0.01	<1	<5	7	20
MES17 -36#		<0.01	<1	52	5	12
MES18 -36#		<0.01	<1	<5	8	24
MES19 -36#		<0.01	<1	7	13	21
MES20 -36#	<0.01	<0.01	<1	8	17	38
MES21 -36#		0.07	<1	<5	15	56
MES22 -36#		<0.01	<1	<5	8	14
MES23 -36#		<0.01	<1	<5	10	14
MES24 -36#		<0.01	<1	<5	14	14
MES25 -36#		<0.01	<1	6	19	27
MES26 -36#		<0.01	<1	<5	10	21
MES27 -36#		<0.01	<1	13	15	27
MES28 -36#		<0.01	<1	18	205	22
MES29 -36#		<0.01	<1	11	20	27
MES30 -36#		<0.01	<1	9	20	37
MES31 -36#		<0.01	<1	8	10	10
MES32 -36#		<0.01	<1	<5	10	7
MES33 -36#		<0.01	<1	16	26	40
MES34 -36#		<0.01	<1	14	12	25
MES35 -36#		<0.01	<1	10	19	29
MES36 -36#		0.03	<1	6	23	37
MES37 -36#		<0.01	<1	25	43	46
MES38 -36#		<0.01	<1	8	19	33
MES39 -36#	<0.01	<0.01	<1	12	22	29
MES40 -36#		<0.01	<1	13	16	24
Detn limit		(0.01)	(1)	(5)	(2)	(2)

CLASSIC COMLABS LTD

Analysis code FA1
AAS1/2

Report 9DN1793

Order No. 3002

Page G2

Results in ppm

Sample		Au	Ag	Pb	Zn	Cu
MES41 -36#		<0.01	<1	10	20	29
MES42 -36#		<0.01	<1	8	26	35
MES43 -36#	<0.01	<0.01	<1	12	28	40
MES44 -36#		<0.01	<1	8	20	24
MES45 -36#		<0.01	<1	<5	24	24
MES46 -36#		<0.01	<1	<5	23	44
MES47 -36#		<0.01	<1	<5	29	50
MES48 -36#		<0.01	<1	6	22	37
MES49 -36#		<0.01	<1	<5	16	34
MES50 -36#		<0.01	<1	<5	21	39
MES51 -36#		<0.01	<1	6	51	64
MES52 -36#		<0.01	<1	8	23	48
MES53 -36#		<0.01	<1	10	28	38
MES54 -36#		<0.01	<1	10	42	54
MES55 -36#	<0.01	<0.01	<1	7	31	39
MES56 -36#		<0.01	<1	<5	10	59
MES57 -36#		<0.01	<1	<5	10	130
MES58 -36#		0.01	<1	<5	12	140
MES59 -36#		0.04	<1	<5	4	29
MES60 -36#		0.04	<1	<5	4	14
MES61 -36#		0.06	<1	<5	5	10
MES62 -36#		0.04	<1	7	8	25
MES63 -36#		0.03	<1	7	8	33
MES64 -36#		<0.01	<1	6	6	27
MES65 -36#	<0.01	<0.01	<1	9	9	50
MES66 -36#		<0.01	<1	6	6	27
MES67 -36#		<0.01	<1	7	10	82
MES68 -36#		<0.01	<1	7	6	48
MES69 -36#		<0.01	<1	10	12	40
MES70 -36#		<0.01	<1	16	17	27
MES71 -36#		<0.01	<1	15	19	51
MES72 -36#		<0.01	<1	10	19	36
MES73 -36#		<0.01	<1	6	13	85
MES74 -36#		<0.01	<1	6	9	33
MES75 -36#		<0.01	<1	7	13	15
MES76 -36#		<0.01	<1	9	8	10
MES77 -36#		<0.01	<1	<5	7	10
MES78 -36#		<0.01	<1	8	8	12
MES79 -36#		<0.01	<1	6	5	10
MES80 -36#		<0.01	<1	8	10	10
Detn limit		(0.01)	(1)	(5)	(2)	(2)

CLASSIC COMLABS LTD

Analysis code FA1 AAS1/2 Report 9DN1793 Page G4

Order No. 3002 Results in ppm

Sample		Au	Cu	Pb	Zn	Ag	As
MER1		<0.01	18	<5	11	<1	<50
MER2		<0.01	7	9	6	<1	<50
MER3	<0.01	<0.01	7	11	25	<1	<50
MER4		<0.01	6	16	12	<1	<50
MER5		<0.01	28	<5	13	<1	<50
MER6		<0.01	4	6	5	<1	<50
MER7		<0.01	6	<5	11	<1	<50
MER8		<0.01	22	<5	6	<1	<50
MER9		<0.01	4	<5	6	<1	<50
MER10		<0.01	8	<5	8	<1	<50
MER11		<0.01	30	<5	11	<1	<50
MER12		<0.01	32	<5	9	<1	<50
MER13		<0.01	2	<5	29	<1	<50
MER14		<0.01	56	<5	28	1	80
MER15		<0.01	8	<5	6	<1	<50
MER16		<0.01	41	<5	13	<1	<50
MER17		<0.01	41	<5	6	<1	<50
MER18		<0.01	24	<5	<2	<1	<50
MER19		<0.01	28	<5	5	<1	90
MER20	<0.01	<0.01	16	<5	4	<1	<50
MER21		<0.01	16	<5	12	<1	60
MER22		<0.01	5	<5	3	<1	<50
MER23		<0.01	12	<5	6	<1	120
MER24		<0.01	11	<5	<2	<1	<50
MER25		<0.01	17	14	<2	1	<50
MER26		<0.01	5	<5	2	<1	<50
MER27		<0.01	5	<5	<2	<1	<50
MER28	<0.01	<0.01	60	<5	2	<1	<50
MER29		<0.01	130	10	3	<1	100
MER30		<0.01	7	<5	6	<1	<50
MER31		<0.01	6	10	35	<1	<50
MER32		<0.01	4	<5	2	<1	<50
MER33		<0.01	28	<5	<2	<1	<50
MER34		<0.01	6	13	16	<1	<50
MER35		<0.01	24	<5	2	<1	<50
MER36		<0.01	6	<5	<2	<1	<50
MER37		<0.01	115	66	4	<1	580
MER38		<0.01	6	<5	10	<1	<50
MER39		<0.01	25	9	<2	<1	70
MER40		<0.01	6	<5	<2	<1	<50
Detn limit		(0.01)	(2)	(5)	(2)	(1)	(50)

CLASSIC COMLABS LTD

Analysis code FA1
AAS1/2

Report 9DN1793

Order No. 3002

Page G5

Results in ppm

Sample		Au	Cu	Pb	Zn	Ag	As
MER41		<0.01	6	8	26	<1	<50
MER42		<0.01	10	<5	<2	<1	<50
MER43		<0.01	6	6	6	<1	<50
MER44		<0.01	16	11	11	<1	<50
MER45		<0.01	9	<5	5	<1	<50
MER46	<0.01	<0.01	7	<5	4	<1	<50
MER47		<0.01	5	9	32	<1	<50
MER48		<0.01	4	<5	12	<1	<50
MER49		<0.01	5	13	7	<1	<50
MER50		<0.01	23	120	36	<1	<50
MER51		0.28	215	3740	295	1	2760
MER52		0.40	295	8900	215	7	2720
MER53		0.02	115	1620	85	4	180
MER54	<0.01	0.03	73	620	67	1	2400
MER55		<0.01	29	620	31	<1	<50
MER56		<0.01	44	105	10	<1	140
Detn limit		(0.01)	(2)	(5)	(2)	(1)	(50)