ACACIA RESOURCES

FINAL REPORT FOR EXPLORATION ON E.L. 7598 - SERBIA 24.12.1991 - 23.12.1994

AUTHOR: J DETHERIDGE

REPORT NO: 08.7477

DATE: MARCH 1995

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1.0 INTRODUCTION

Exploration Licence 7598 is located in the southern part of the Pine Creek Geosyncline, approximately 50km NNW of Katherine. Topography is fairly rugged with incised streams and medium savannah forest. Access is via bush tracks (Figure 1).

The tenement was granted to Acacia Resources formerly Billiton Australia, on December 24, 1991, for three (3) years. The tenement originally consisted of two (2) blocks 45/21 and 45/22 (Figure 1).

A reduction of the tenement took place in March 1994, whereby block number 45/21 was relinquished and block number 45/22 was retained (Figure 2). A relinquishment report on block 45/21 was submitted in March 1994 (08.6529).

2.0 REGIONAL GEOLOGY

The area is underlain by the Early Proterozoic Burrell Creek Formation which comprises interbedded greywackes, siltstones and shales, with minor volcanic units. In terms of structure, the Burrell Creek Formation displays tight to isoclinal F_1 folding about north to northwest trending axes, in which an axial plane cleavage is strongly developed (Figure 2).

3.0 MINERALISATION

The Burrell Creek Formation is host to numerous quartz vein hosted Gold occurrences including the Mt Todd deposit. The Serbia tenement is located directly south of the N/S trending Driffield gold workings. Gold is hosted by sheeted to stockwork quartz veins with chlorite, sericite alteration selvedges.

Tin is also a significant commodity in the district, with the NNW trending Horseshoe tin field being extensively exploited at the turn of the century.

Tin in the area occurs in cassiterite bearing quartz-kaolin lodes which generally occupy NNW trending breccia pipes and bedding parallel shear zones.

4.0 WORK COMPLETED

4.1 STREAM SEDIMENT AND ROCKCHIP SAMPLING

The Serbia EL was systematically stream sediment sampled using a sample density of approximately 3-4 samples per sq km, during 1992. BLEG (5kg) and -80# samples were collected. The samples were sent to Assaycorp, Pine Creek where BLEG samples were assayed for Au and -80# samples assayed for Cu, Pb, Zn, Ag, As by AAS. Ridge and spur reconnaissance mapping and sampling was carried out in conjunction with the stream sampling. Rock chip samples were analysed for Au by fire assay and Cu, Pb, Zn, Ag, As by AAS.

A number of anomalous values where obtained at or above the district threshold (3-4ppb). A further phase of stream sampling was undertaken to repeat and infill these anomalous catchments (refer to Figures 3 and 4).

Two anomalies (3.0 and 7.0ppb) were obtained in major streams draining the Driffield gold workings 1.5km to the north of the tenement. Repeat and infill sampling of four remaining anomalous drainage's (3,8,4,9 ppb) tended to downgrade them.

4.2 RIDGE BASED SOIL AND ROCKCHIP SAMPLING

The grid started at "Ridge G" consists of a 775m baseline following the orientation of the ridge. Three (3) traverse lines, two (2) of 600m and one (1) 800m were then sampled. The BLEG samples were collected as four (4) samples composited over 100m. The aim of the BLEG soil survey was to follow up two (2) anomalous rockchip samples (1.4ppm and 4.5ppm Au) that were collected from an area known as "Ridge G", during the first phase of sampling, from parallel North-South striking limonitic buck quartz veins hosted by greywacke. The veins ranged from 10cm to 1m in width and up to 30m in length.

The highest value of 18ppb is located in a saddle 500m along the ridge and may be related to a pair of 10-20cm wide quartz veins noted during mapping. Values of 3.5 and 6 ppb were returned from lines crossing the anomalous veins.

A 9m channel sample across a laminated quartz vein on the southern end of the grid returned a grade of 4m @ 2.85g/t. These samples were bulked up from six (6) rockchip samples, five (5) of which were collected across the channel. A description of rockchip samples 254207-254212 is in Table 1, with locations and assays in Figures 5 and 6.

TABLE 1

SAMPLE NUMBER	LGTH	DESCRIPTION	ASSAY Au ppm
254207	3m	Greywacke containing 5% quartz stringers.	0.03
254208	2m	Greywacke containing one 10cm wide buck quartz vein and one 10cm wide laminated quartz vein.	4.5
254209	2m	Greywacke subcrop with ,5% buck quartz veinlets.	1.19
254210	2m	Greywacke and siltstone subcrop.	0.02
254211	10cm	Laminated quartz vein noted in 254208.	11.3
254212	Float	Buck quartz float 25m downslope to south of anomalous samples.	0.88

4.3 AIRBORNE MAGNETIC SURVEY

A detailed aeromagnetic survey was flown over the Katherine area in 1988 to cover the Mt Todd deposit and surrounding areas including (Serbia Licence). Survey specifications are detailed on the total magnetic intensity contour map in Figure 7.

5.0 ENVIRONMENTAL

All regional and grid based exploration was conducted in a fashion that restricted environmental disturbance to a minimum. During grid based exploration disturbance was limited to base and cross lines in which the absolute minimum of vegetation was cleared, so as to allow vehicle access and line of site along the grid line. All grid traverses were found to rehabilitate quite effectively naturally.

6.0 EXPENDITURE - YEAR AND TERM 3 OF LICENCE

EXPLORATION LICENCE 7598 - SERBIA
Expenditure for the period 24.12.91 to 23.12.94

	Year Ending 23.12.94	Term of Licence 23.12.94
Regional Office/Staffing	209.00	14 000.00
Geochemical Analyses		
Geophysical Surveys		1 886.00
Geological Studies	946.00	2 609.00
Overheads	115.50	1 849.50
TOTAL	**$1 270.50**	**$20 344.50**

7.0 REFERENCES

- Harley, B F, Capp S C, *Annual Report for Exploration on EL 7598 - Serbia*, Billiton Australia, the Metals division of the Shell Company of Australia Limited, January 1993.

- Capp, S C, *Annual Report for Exploration on EL 7598 - Serbia*, Billition Australia, The Metals Division of the Shell Company of Australia Limited, March 1994

- Capp, S C, *Partial Relinquishment Report on EL 7598 - Serbia*, Billiton Australia the Metals Division of the Shell Company of Australia Limited, March 1994.

ACACIA RESOURCES
DATA INPUT SHEET

CHAPTER
NAME: ______________________
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TITLE : **FINAL REPORT FOR EL 7598 - SERBIA**

DATE : March 1995

AUTHOR: J Detheridge

SOURCE : N.A.

DESCRIPTOR : N.A.

(Not indexed)

PROSPECT/PROJECT : Serbia - Exploration Licence 7598

KEYWORDS : Early Proterozoic, Burrell Creek Formation, Stream Sediment Sampling,

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LOCATION : NORTHERN TERRITORY

SHEET NAME :

REPORT NO. : (Not Indexed) 08.7477

APPENDIX 1

ANALYTICAL RESULTS

SERBIA EL 7598

SEDIMENT SAMPLES

Sample No.	BCL	Minus 80 Mesh					
	Au ppb	Au ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
241907	3						
241912	9						
241935	1.2	<0.01	10	9	21	<0.5	9
241937	0.9						
241938	0.9						
241939	0.5						
241940	0.9						
241941	0.8						
241950	0.6						
241951	0.3						
241952	0.5						
241953	0.7	<0.01	11	12	11	<0.5	7
241954	0.8						
241955	0.5						
241956	15.5	<0.01	8	11	16	<0.5	19
241957	1.2						
241958	2.9						
241959	12.9	<0.01	14	11	18	<0.5	9
241960	6.2						
241961	1.2						
241962	1.3						
241963	1.8						
241965	2.6						
241966	0.5	<0.01	9	9	13	<0.5	5
241967	0.8						
241968	0.6						
241970	0.6						
241971	0.4						
241972	1.2						
241973	1.7						
241974	0.8	<0.01	11	12	21	<0.5	11

ROCK CHIPS

Sample No.		Au ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm
241936		<0.01	9	3	6	<0.5	16
241942		<0.01	17	6	7	<0.5	11
241943		<0.01	13	17	15	<0.5	4
241944		<0.01	10	27	20	<0.5	110
241945		<0.01	8	23	9	<0.5	24
241946		<0.01	6	14	6	<0.5	25
241947		4.6	30	38	9	1.2	637
241948		0.07	5	14	4	<0.5	116
241949		1.41	22	22	22	<0.5	1045
241964		[illegible]	17	71	15	<0.5	1086
241969		[illegible]	[illegible]	7	18	<0.5	21

ASSAYCORP PTY LTD
A.C.N. 052 982 911
174 Ward Street, Pine Creek, N.T. 0847
P.O. Box 41, Pine Creek, N.T. 0847
Telephone (089) 76 1262
Facsimile (089) 76 1310

ASSAY CODE: AC 05060

Sample	Au (ppb)
170409	0.4
170410	0.8
170411	3.5
170412	1.0
170413	0.3
170414	0.4
170415	18.0
170416	0.7
170417	0.7
170418	0.6
170419	5.9
170420	3.1
170421	0.9
170422	6.0
170423	0.9
170424	1.0
170425	1.8

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Sample	Au (ppb)
170426	2.4

14 SEP 1992
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ASSAY CODE: AC 03817

Sample	Au (ppm)	Au(C) (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
241936	<0.01			9	3	6	<0.5
241942	<0.01			17	6	7	<0.5
241943	<0.01			13	17	15	<0.5
241944	<0.01			10	27	20	<0.5
241945	<0.01	<0.01		8	23	9	<0.5
241946	<0.01			6	14	6	<0.5
241947	4.42	4.78		30	38	9	1.2
241948	0.07	0.08		5	14	4	<0.5
241949	1.42	1.40		22	22	22	<0.5
241964	0.19	0.18		17	71	15	<0.5
241969	<0.01			7	7	18	<0.5

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ASSAY CODE: AC 03817

Sample	As (ppm)
241936	16
241942	11
241943	4
241944	110
241945	24
241946	25
241947	637
241948	116
241949	1045
241964	1086
241969	21

14 SEP 1992

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ASSAY CODE: AC 03818

Sample	Au (ppb)
241935	1.2
241937	0.9
241938	0.9
241939	0.5
241940	0.9
241941	0.8
241950	0.6
241951	0.3
241952	0.5
241953	0.7
241954	0.8
241955	0.5
241956	15.5
241957	1.2
241958	2.9
241959	12.9
241960	6.2
241961	1.2
241962	1.3
241963	1.8
241965	2.6
241966	0.5
241967	0.8
241968	0.6
241970	0.6

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Facsimile (089) 76 1310

1 4 SEP 1992

ASSAY CODE: AC 03818

Sample	Au (ppb)
241971	0.4
241972	1.2
241973	1.7
241974	0.8

1 4 SEP 1992

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Facsimile (089) 76 1310

ASSAY CODE: AC 03817

Sample	Au (ppm)	Au(C) (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
-80# 241935	<0.01			10	9	21	<0.5
-80# 241953	<0.01			11	12	11	<0.5
-80# 241956	<0.01	<0.01		8	11	16	<0.5
-80# 241959	<0.01			14	11	18	<0.5
-80# 241966	<0.01			9	9	13	<0.5
-80# 241974	<0.01			[illegible]	12	21	<0.5

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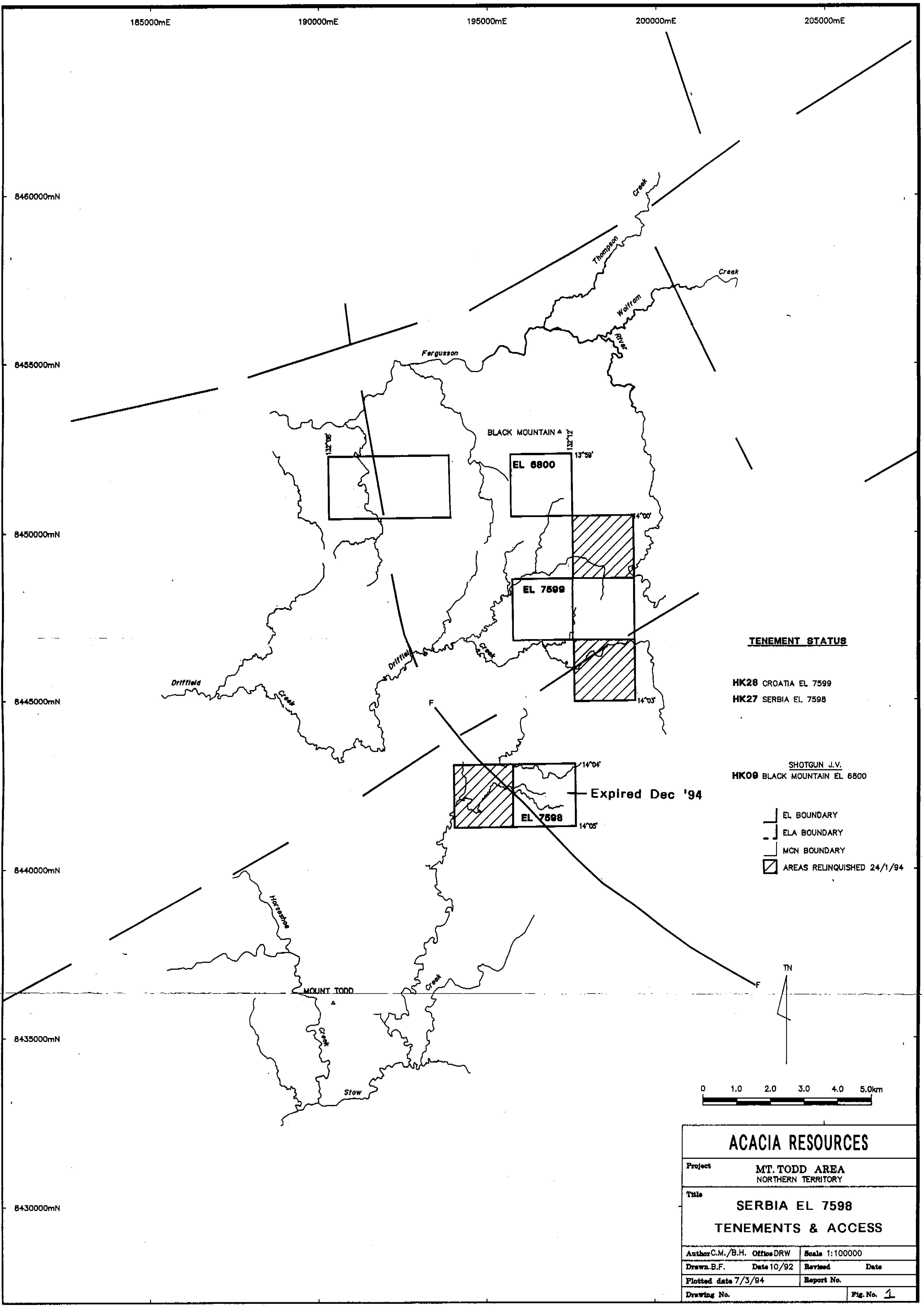
Facsimile (089) 76 1310

ASSAY CODE: AC 03817

Sample	As (ppm)
-80# 241935	9
-80# 241953	7
-80# 241956	19
-80# 241959	9
-80# 241966	5
-80# 241974	11[illegible]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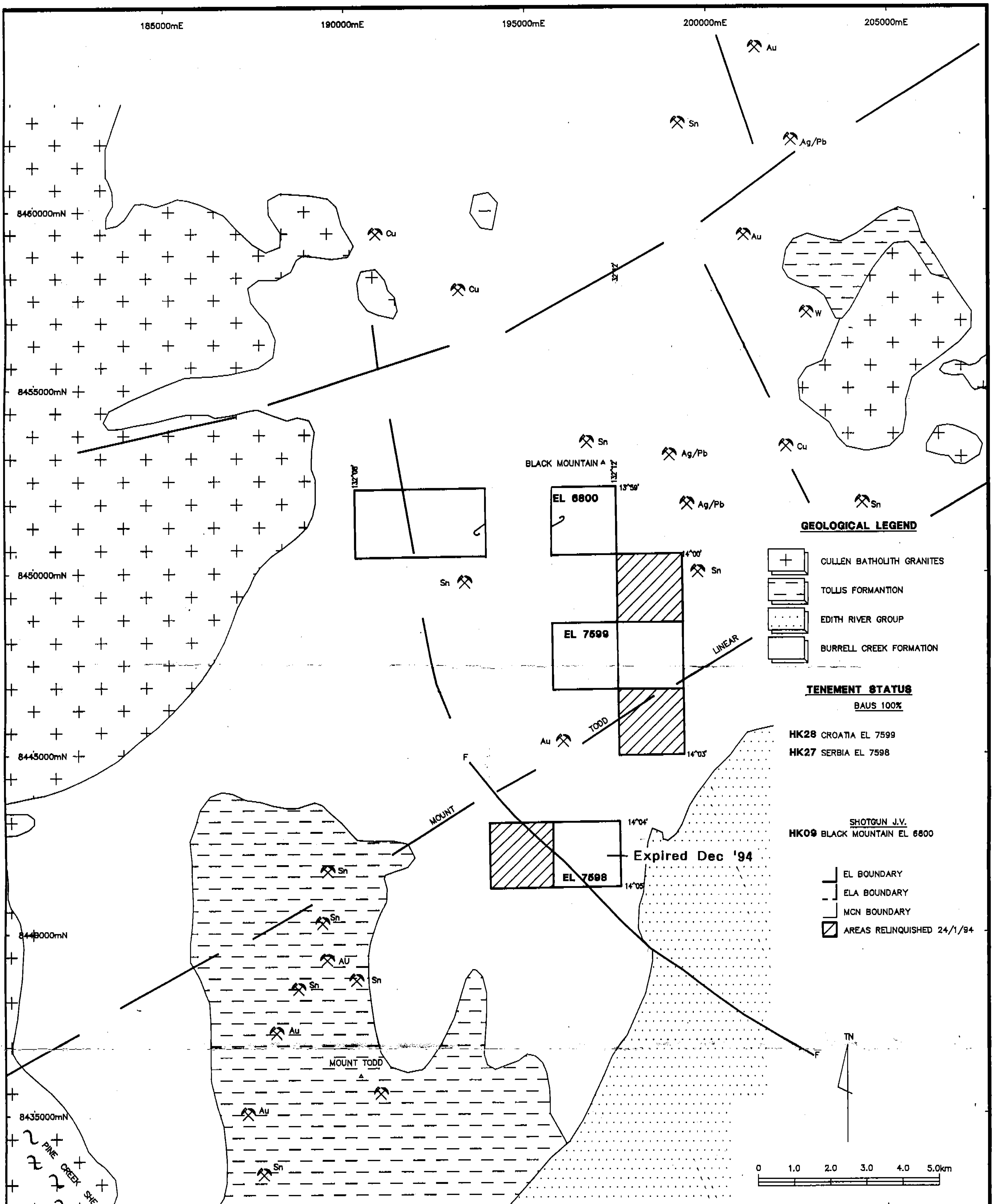
8435000mN
8430000mN
Creek
Thompson
Creek
Wolfram
River
Fergusson
BLACK MOUNTAIN
132°08'
132°12'
13°59'
EL 6800
4°00'
EL 7599
Creek
Driffield
Driffield
Creek
14°03'
F
14°04'
Expired Dec '94
EL 7598
14°05'
Horseshoe
MOUNT TODD
Creek
Creek
Stow
F
TN
TENEMENT STATUS
HK28 CROATIA EL 7599
HK27 SERBIA EL 7598
SHOTGUN J.V.
HK09 BLACK MOUNTAIN EL 6800
EL BOUNDARY
ELA BOUNDARY
MCN BOUNDARY
AREAS RELINQUISHED 24/1/94
0 1.0 2.0 3.0 4.0 5.0km
ACACIA RESOURCES
Project MT. TODD AREA
NORTHERN TERRITORY
Title SERBIA EL 7598
TENEMENTS & ACCESS
Author C.M./B.H. Office DRW
Scale 1:100000
Drawn B.F. Date 10/92
Revised Date
Plotted date 7/3/94
Report No.
Drawing No.
Fig. No. 1



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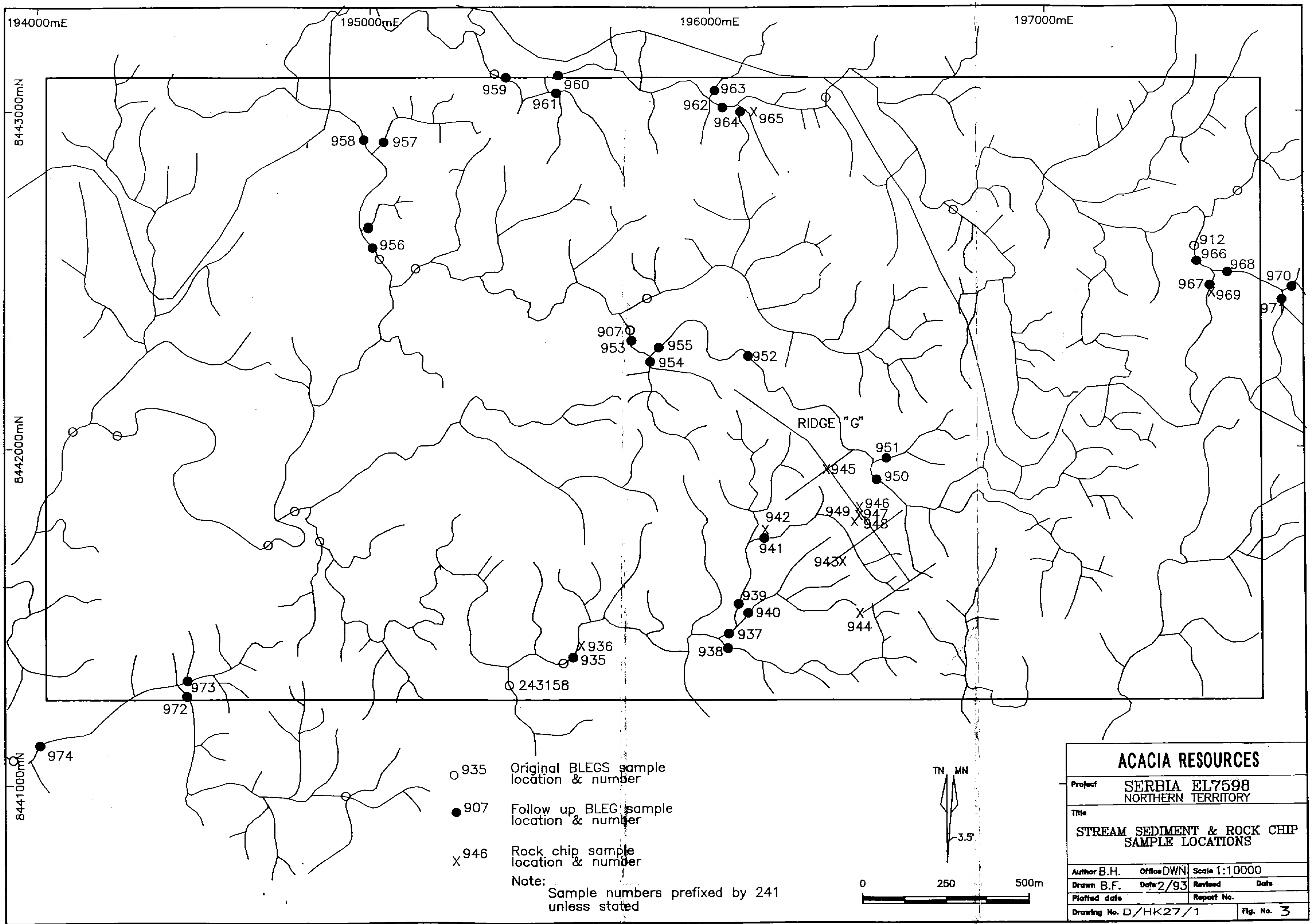
Drawn B.F. Date 10/92	Revised Date
Plotted date	Report No.
Drawing No.	Fig. No. 2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195000mE
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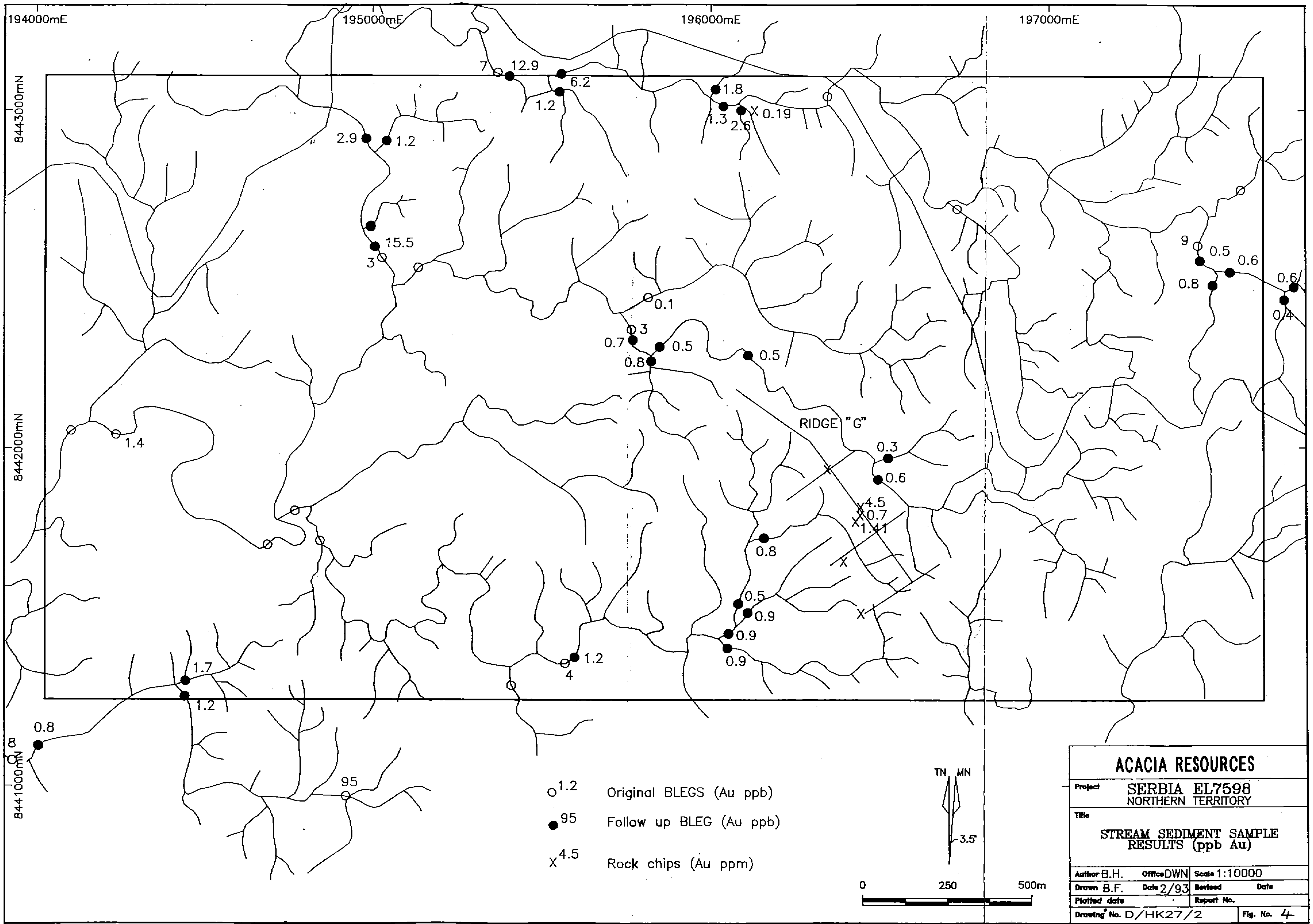
971
907
953
955
954
952
RIDGE "G"
951
945
950
942
949
946
947
948
941
943X
939
940
944
937
938
936
935
973
972
243158
974
935 Original BLEGS sample location & number
907 Follow up BLEG sample location & number
X 946 Rock chip sample location & number
Note:
Sample numbers prefixed by 241 unless stated
TN MN
3.5°
0
250
500m
ACACIA RESOURCES
Project SERBIA EL7598 NORTHERN TERRITORY
Title STREAM SEDIMENT & ROCK CHIP SAMPLE LOCATIONS
Author B.H.
Office DWN
Scale 1:10000
Drawn B.F.
Date 2/93
Revised
Date
Plotted date
Report No.
Drawing No. D/HK27/1
Fig. No. 3



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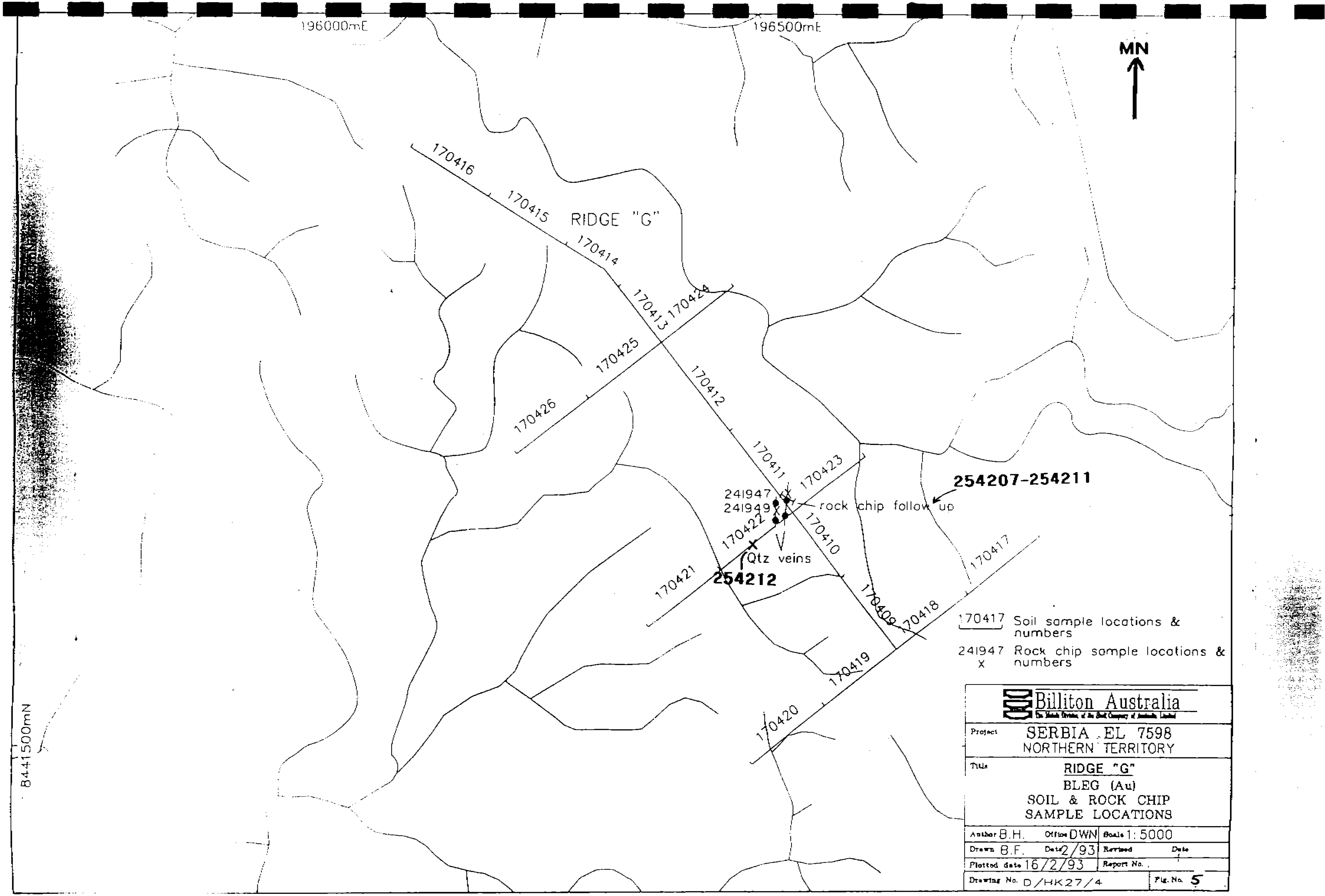
Author B.H.	Office DWN	Scale 1:10000
Drawn B.F.	Date 2/93	Revised / Date
Plotted date		Report No.
Drawing No. D/HK27/2		Fig. No. 4



196000mE
196500mE
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8441500mN
RIDGE "G"
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170415
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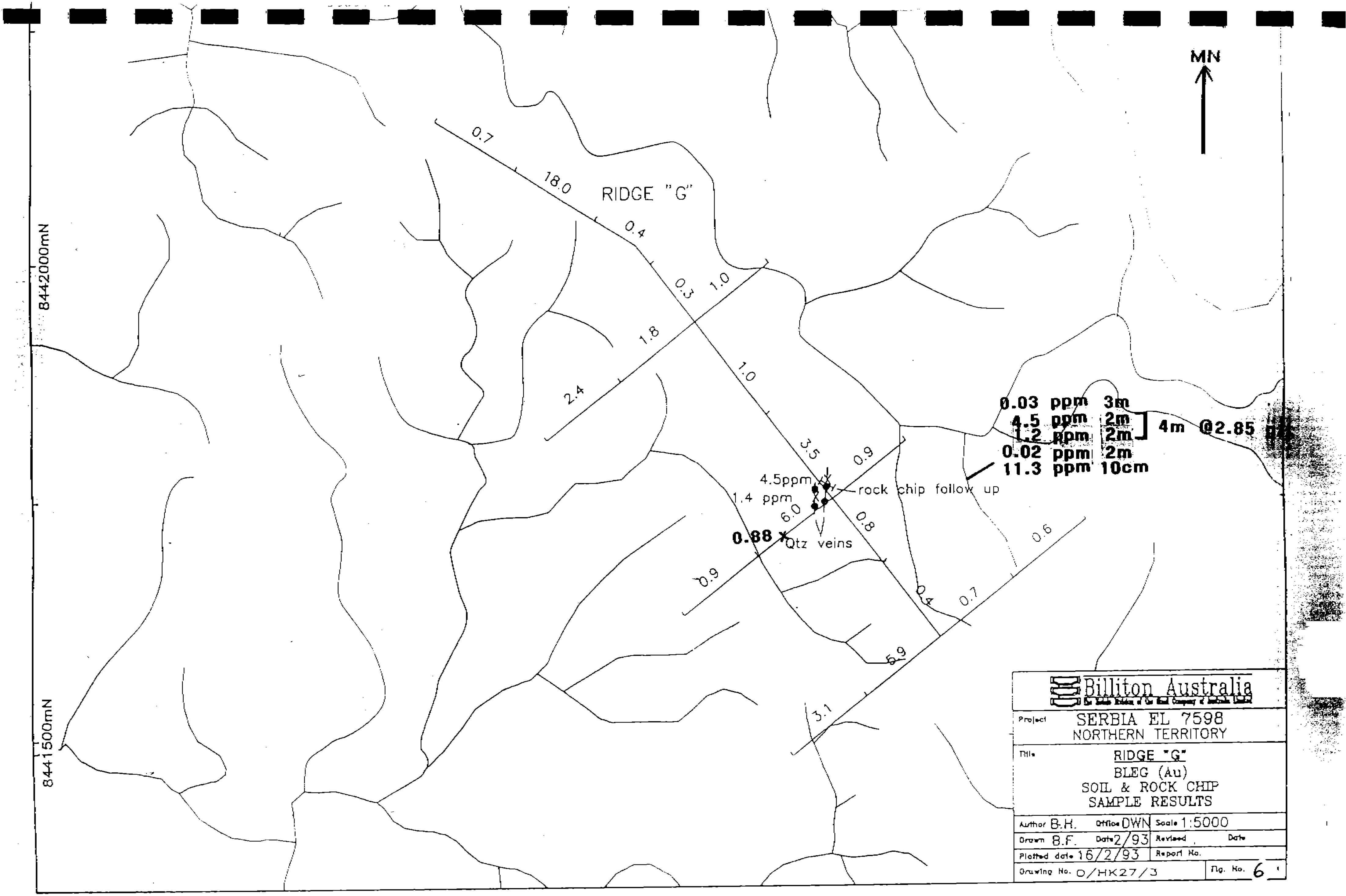
170410
170409
170424
170425
170426
170423
170422
170421
170417
170418
170419
170420
241947
241949
254207-254211
rock chip follow up
Qtz veins
254212
170417 Soil sample locations & numbers
241947 x Rock chip sample locations & numbers
Billiton Australia
Project SERBIA EL 7598 NORTHERN TERRITORY
Title RIDGE "G" BLEG (Au) SOIL & ROCK CHIP SAMPLE LOCATIONS
Author B.H.
Office DWN
Scale 1: 5000
Drawn B.F.
Date 2/93
Revised
Date
Plotted date 16/2/93
Report No.
Drawing No. D/HK27/4
Fig. No. 5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8442000mN
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RIDGE "G"
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18.0
0.4
0.3
1.0
1.8
2.4
1.0
3.5
0.9
4.5ppm
1.4 ppm
6.0
rock chip follow up
0.88
Qtz veins
0.8
0.9
0.6
0.4
0.7
5.9
3.1
0.03 ppm 3m
4.5 ppm 2m
1.2 ppm 2m
0.02 ppm 2m
11.3 ppm 10cm
4m @2.85
Billiton Australia
Project SERBIA EL 7598
NORTHERN TERRITORY
Title RIDGE "G"
BLEG (Au)
SOIL & ROCK CHIP
SAMPLE RESULTS
Author B.H.
Office DWN
Scale 1:5000
Drawn B.F.
Date 2/93
Revised
Date
Plotted date 16/2/93
Report No.
Drawing No. O/HK27/3
Fig. No. 6

8445000mN

195000mE

200000mE

AEROMAGNETIC AND RADIOMETRIC SURVEY
KATHERINE AREA - NORTHERN TERRITORY

BILLITON AUSTRALIA

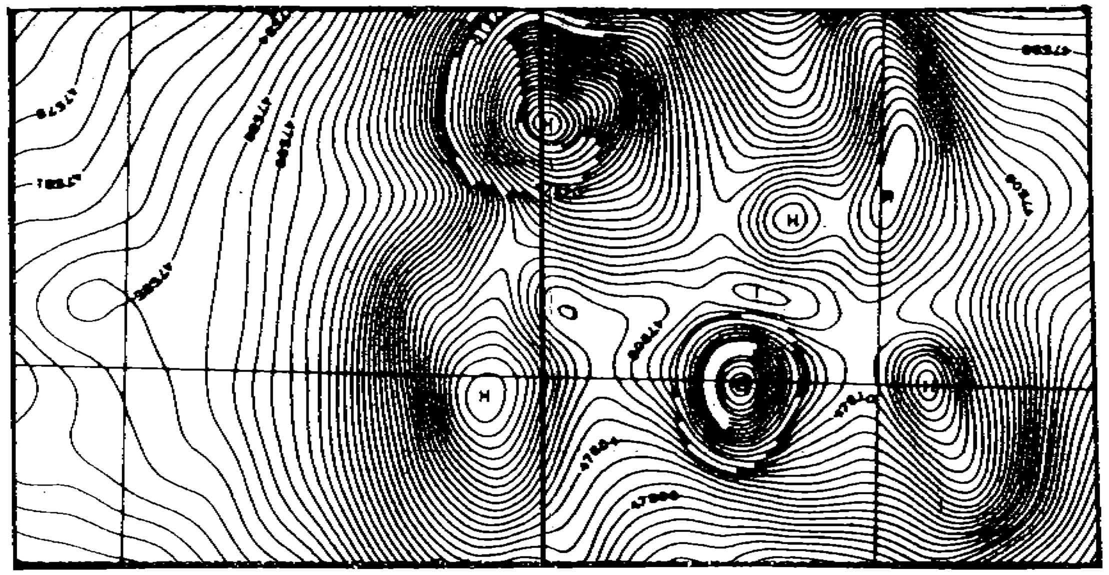
SURVEYED AND COMPILED by AERODATA HOLDINGS LIMITED
1988
JOB NUMBER - U43

AERODATA

TOTAL MAGNETIC INTENSITY CONTOUR MAP

DATA PROCESSING

REGIONAL FIELD	The effect of the IGRF model 1985 and secular variation model 1985-1990 has been removed
GRID CELL SIZE	75 metres.
CONTOUR INTERVAL	1 nanotesla.
PARALLAX CORRECTION	2.50 fiducials.



Expired Dec 94

SURVEY SPECIFICATIONS

AIRCRAFT

~~VH-ADH~~ Cessna 206g Stationair II

MAGNETOMETER

Split beam cesium scintrex v201

RESOLUTION	0.04 nanotesla
CYCLE RATE	0.3 second
SAMPLE INTERVAL	15 metres

SPECTROMETER

Geometrics exploranium GR800B

VOLUME	16.78 litres
CYCLE RATE	1.2 seconds
SAMPLE INTERVAL	62 metres

DATA ACQUISITION

8 channel watanabe mc 6700 chart recorder
aerodata digital acquisition system
hewlett packard 9825 computer

FLIGHT LINE SPACING

TRAVERSE LINES	300 metres
TIE LINES	3000 metres

FLIGHT LINE DIRECTION

TRAVERSE LINES	090-270 degrees
TIE LINES	000-180 degrees

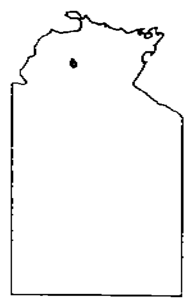
SURVEY HEIGHT

80 metres - mean terrain clearance

FLIGHT PATH RECOVERY

onto a.m.g. controlled recovery photos

TN



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Project	MT. TODD AREA NORTHERN TERRITORY
Title	SERBIA EL 7598
Author J.O	Office DRW
Scale 1:25000	
Drawn	Date 3/95
Revised	Date
Plotted date	Report No.
Drawing No.	FIG-7

8440000mN

scale 1:25000