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EL 9583
1999/2000 ANNUAL REPORT

10/12/99 to 09/12/00

Mount Ringwood (14/3-IV) 1:50,000 scale map sheet and Mount Bundey (8/6-III) 1:50,000 scale map sheet

Title Holder:- Northern Gold N.L.

December 2000

OPEN FILE

Distribution

NTDME

Northern Gold N.L., Adelaide River

Northern Gold N.L., Perth Office

Compiled by:-

N. Mottram

Essential Data Services, W.A.

SUMMARY

EL 9583 is located approximately 100 kilometres southeast of Darwin and 60 kilometres northeast of the Cosmo Howley Mine, on the Mount Ringwood (14/3-IV) 1:50,000 scale map sheet and the Mount Bundey (8/6-III) 1:50,000 scale map sheet.

The licence area consists of units of the Burrell Creek Formation, Mount Bonnie Formation, Gerowie Tuff and Koolpin Formation. These sediments trend south southeast along anticlinal fold structures.

Carpentaria Gold completed a program of regional stream sediment sampling for gold and base metal analysis, followed by reconnaissance rock chipping over areas of interest. Prior to this Geopeko explored the area in the early seventies and defined the Quest group of prospects. Northern Gold N.L. completed literature reviews, soil sampling programs and scout RC drilling over EL 9583. The soil sampling programs identified gold and base metal anomalism along the Mount Bundey Anticline. The RC drilling, however, returned disappointing results.

EL 9583, originally consisting of 9 blocks, 29 square kilometres in area, was granted to Northern Gold N.L. on the 10th of December, 1996, for a period of 6 years. Due to compulsory relinquishment, EL 9583 was reduced to 5 blocks in October, 1998. A waiver of reduction was granted in January, 2000.

During the 1999/2000 exploration season, Northern Gold N.L. contracted Arnhem Exploration Services to complete an infill soil sampling program over EL 9583.

Samples were collected at 25 metre intervals and composited to 100 metres along three, 400 metre spaced lines. A total of 30, B-horizon, soil samples, including duplicates, were submitted to Assaycorp, in Pine Creek, for analysis of Au and Ag, using BLEG method, and As, Cu, Pb and Zn by ICP-MS technique. The samples were resubmitted to Assaycorp for further analysis of Au, using low level fire assay technique, and Ag, Cu, Pb and Zn, using MA4/G400M/ICP-MS analytical method.

The soil sampling program returned generally disappointing results. The peak value returned was 18 ppb Au (Low level fire assay, Sample No. 182287, 8564701N : 779450E).

Further soil sampling, rock chip sampling and geological mapping are required to fully assess the mineralisation potential within the licence.

The covenant for the 1999/2000 year of tenure was $6,000 and the expenditure totalled $9,725.

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1.0 INTRODUCTION

EL 9583 is located approximately 100 kilometres southeast of Darwin and 60 kilometres northeast of the Cosmo Howley Mine, on the Mount Ringwood (14/3-IV) 1:50,000 scale map sheet and the Mount Bundey (8/6-III) 1:50,000 scale map sheet. The licence, which consists of 5 blocks, 16 square kilometres in area, lies between latitudes 12°57' south and 13°02' south and longitudes 131°34' east and 131°38' east (Figure 1). EL 9583 is situated within Perpetual Pastoral Lease No. 1144, Mount Bundey Station, held by Barry Coulter and Lawnhold Pty. Ltd.

Access is via the Arnhem Highway and then via station tracks to the south.

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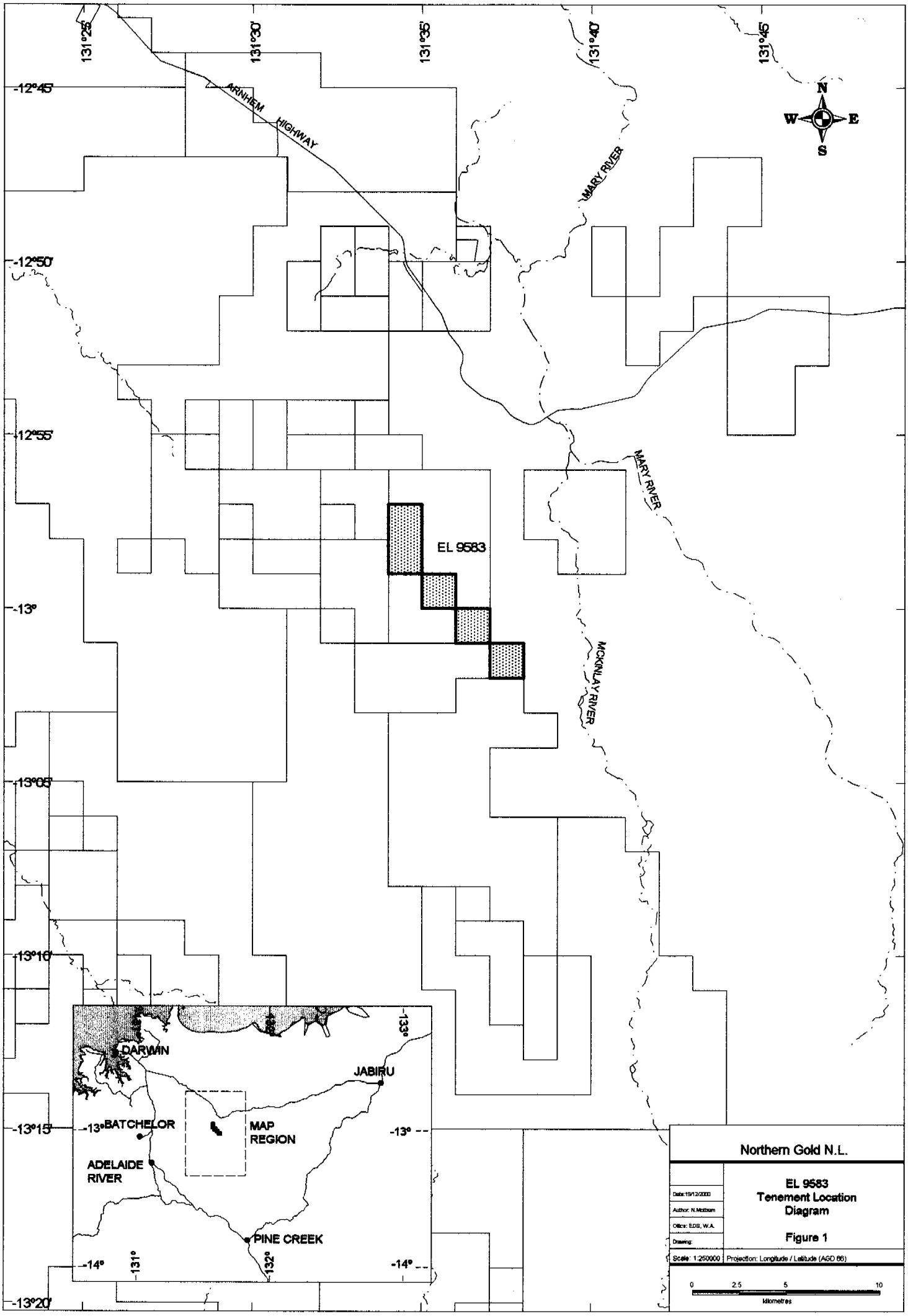
The covenant for the 1999/2000 year of tenure was $6,000 and the expenditure totalled $9,725.


131°25'
131°30'
131°35'
131°40'
131°45'
-12°45'
-12°50'
-12°55'
-13°
-13°05'
-13°10'
-13°15'
-13°20'
ARNHEM HIGHWAY
MARY RIVER
MARY RIVER
MCKINLAY RIVER
EL 9583
N
W
E
S
DARWIN
JABIRU
BATCHELOR
MAP REGION
ADELAIDE RIVER
PINE CREEK
-13°
-14°
131°
132°
133°
Northern Gold N.L.
EL 9583
Tenement Location Diagram
Figure 1
Date:19/12/2000
Author: N.Mottram
Office: EDS, W.A.
Drawing:
Scale: 1:250000
Projection: Longitude / Latitude (AGD 66)
0
2.5
5
10
kilometres

2.0 GEOLOGY

2.1 Regional Geology

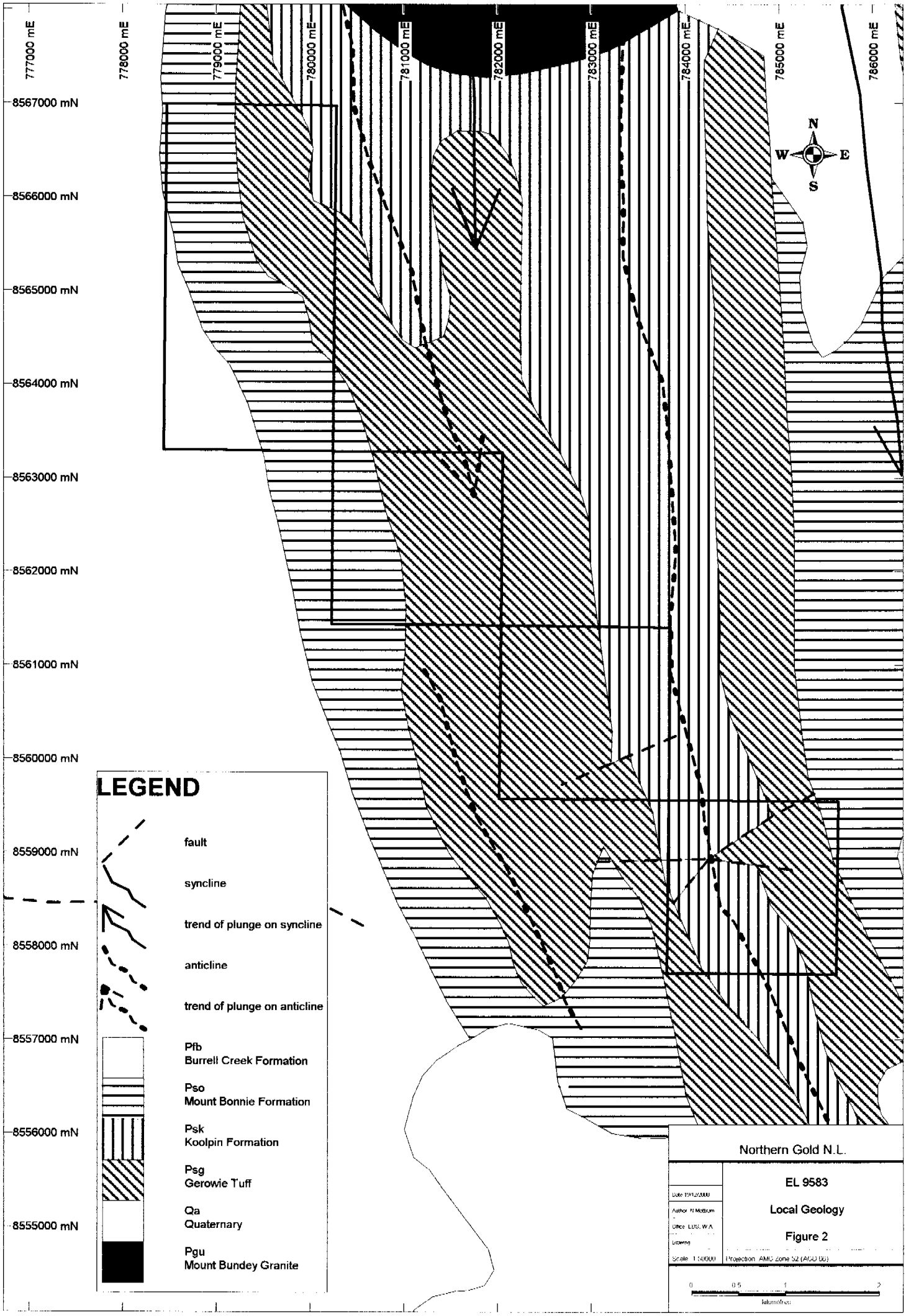
EL 9583 is situated within the Pine Creek Geosyncline, a tightly to isoclinally folded sequence of mainly pelitic and psammitic Lower Proterozoic sediments with interlayered tuff units. All the lithologies in the area have been metamorphosed to low, and in places, medium grade, metamorphic assemblages. For the purpose of this report, the prefix "meta-" is implied, but omitted from the rock names and descriptions (Socic, 1997).

The sequence has been intruded by pre-orogenic dolerite sills of the Zamu Dolerite and a large number of late syn-orogenic to post-orogenic Proterozoic granitoids. Largely undeformed Middle and Late Proterozoic, Palaeozoic and Mesozoic strata, as well as Cainozoic sediments and laterites, overly the Pine Creek Geosyncline (Socic, 1997).

2.2 Local Geology

The licence area is dominated by folded units of the Burrell Creek Formation, Mount Bonnie Formation, Gerowie Tuff and Koolpin Formation (Socic, 1997). The anticlinal fold structures trend south southeast through the tenement (Figure 2).

The Mount Bundey Granite intrudes the sediments to the north of the tenement (Socic, 1997).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778000 mE
779000 mE
780000 mE
781000 mE
782000 mE
783000 mE
784000 mE
785000 mE
786000 mE
8567000 mN
8566000 mN
8565000 mN
8564000 mN
8563000 mN
8562000 mN
8561000 mN
8560000 mN
8559000 mN
8558000 mN
8557000 mN
8556000 mN
8555000 mN
N
W
E
S
LEGEND
fault
syncline
trend of plunge on syncline
anticline
trend of plunge on anticline
Pfb
Burrell Creek Formation
Pso
Mount Bonnie Formation
Psk
Koolpin Formation
Psg
Gerowie Tuff
Qa
Quaternary
Pgu
Mount Bundey Granite
Northern Gold N.L.
EL 9583
Local Geology
Figure 2
Scale 1:50000
Projection AMG Zone 52 (AGD 66)
0
0.5
1
2
kilometres

3.0 PREVIOUS EXPLORATION

Carpentaria Gold carried out gold exploration over a large tract of land reaching from the Kakadu Highway to south of Eckerbone Waterhole. Initial work comprised a program of regional stream sediment sampling for gold and base metal analysis, followed by reconnaissance rock chipping over areas of interest. Prior to this, Geopeko explored the area in the early seventies and defined the Quest group of prospects (Morrison, 1994).

During the 1996/97 year of tenure, Northern Gold N.L. completed a regional soil sampling program, an MMI geochemical soil sampling program and an RC drilling program over EL 9583 (Socic, 1997).

The regional soil sampling program consisted of four, 400 metre spaced lines, 3,600 metres in length. Samples were collected at 25 metre intervals and composited to 100 metres. A total of 151 samples, including duplicates, were collected and submitted to Assaycorp, in Pine Creek, for Au, using BLEG method, As, Cu, Zn, and Pb analysis (Socic, 1997). The soil sampling was successful in identifying a gold and base metal anomaly along the Mount Bundey Anticline. The assay results returned a peak gold response of 84 ppb, with corresponding values of 100 ppm As, 63 ppm Cu, 28 ppm Pb and 37 ppm Zn (Socic, 1997).

The MMI geochemical soil sampling program was completed over the gold and base metal anomaly identified by the regional soil sampling program. Samples were collected at 25 metre intervals, along eight, 200 metre spaced lines. A total of 382 samples, including duplicates, were collected and submitted to AMDEL Laboratories Ltd. for WAMTECH partial digest A (Cu, Pb, Zn and Cd), and WAMTECH partial digest B (Au, Ag, Co, Ni and Pd) analysis (Socic, 1997). The sampling was successful in reproducing the anomalous gold and base metals trend, defining a coincident north northwest trending, elongate, gold anomaly, with a length of 800 metres and width of 100 metres. A maximum assay value of 14 ppb Au was returned. The MMI sampling also defined an 800 by 200 metre, elongate, north - south trending base metal anomaly, with maximum coincident assay values of 5,800 ppb Zn, 1800 ppb Pb, 820 ppb Cu, and 580 ppb Ni (Socic, 1997).

A program of scout RC drilling was completed over the MMI geochemical soil anomaly. A total 7 drill holes were completed for a total of 498 metres. All samples were submitted to Assaycorp for 50 gram fire assay, quartz flush, Au, As analysis (Socic, 1997). The drilling intersected narrow intervals of low grade,

uneconomic gold mineralisation, hosted by ironstone, shale, chert, greywacke and siltstone from the Koolpin Formation (Socic, 1997).

During the 1997/98 year of tenure, Northern Gold N.L. completed a comprehensive literature review and a regional soil sampling program over EL 9583 (Mottram, 1998).

A comprehensive literature review, aimed at evaluating the uranium mineralisation potential within project areas held and managed by Northern Gold N.L., was completed at the Northern Territory Department of Mines and Energy, during the 1997/98 exploration season (Mottram, 1998).

The review covered the known uranium deposits, depositional models within the Pine Creek Geosyncline, and previous exploration within the project areas, with the aim of farming out the ground to potential explorers (Mottram, 1998).

Regional soil sampling was completed over the southern blocks of EL 9583. The program consisted of six, 400 metre spaced lines, varying in length from 1,800 metres to 5,400 metres. Samples, consisting of approximately 2 kilograms of soil, sieved to a -6 millimetre size fraction, were collected at 25 metre intervals and composited to 100 metres. A total of 302 samples, including duplicates, were collected and submitted to Assaycorp, in Pine Creek, for analysis of Au, using BLEG method, and As, Cu, Zn, and Pb, using AAS/MA-3 technique (Mottram, 1998).

The regional soil sampling results were generally disappointing, with a peak response of 2.6 ppb Au (Sample No. 145509, 8559003.88N : 782473.96E) being returned (Mottram, 1998).

Northern Gold N.L. completed a regional soil sampling program over the northern blocks of EL 9583, during the 1998/99 field season (Mottram, 1999).

Samples were collected at 25 metre intervals and composited to 100 metres, along fourteen, 400 metre spaced lines. A total of 245, 'B' horizon, soil samples, including duplicates, were submitted to Assaycorp, in Pine Creek, for analysis of Au, using BLEG method, and As, Cu, Zn, and Pb, using AAS/MA-3 technique (Mottram, 1999).

The results were generally disappointing, with peak responses of 6.8 ppb Au (Sample No. 146529, 8566169N : 779783E), 5.8 ppb Au (Sample No. 146648, 8566968N : 779500E) and 5.6 ppb Au (Sample No. 146647, 8566969N : 779400E), being returned from within the northern-most block of the licence (Mottram, 1999).

4.0 1999/2000 EXPLORATION COMPLETED

During the 1999/2000 exploration season, Northern Gold N.L. contracted Arnhem Exploration Services to complete an infill soil sampling program over EL 9583.

4.1 Infill Soil Sampling Program

The infill soil sampling program was completed over the northern blocks of the licence, targeting a low tenor gold anomaly to the east of the Quest 29/Taipan Gold Prospect. The aim of the program was to confirm, and potentially up-grade the original anomaly.

Samples, consisting of approximately 4 kilograms of soil, sieved to a -5 millimetre size fraction, were collected at 25 metre intervals and composited to 100 metres along three, 400 metre spaced lines. A total of 30, B-horizon, soil samples (Sample Nos. 182263 - 182292), including duplicates, were submitted to Assaycorp, in Pine Creek, for analysis of Au and Ag, using BLEG method, and As, Cu, Pb and Zn by ICP-MS technique. The samples were resubmitted to Assaycorp for further analysis of Au, using low level fire assay technique, and Ag, Cu, Pb and Zn, using MA4/G400M/ICP-MS analytical method. The analytical methods and detection limits are listed in Table 1. The sample locations are shown on plan in Figure 3 and presented in Appendix 1.

4.1.1 Infill Soil Sampling Program Results

The soil sampling program returned generally disappointing results. The peak value returned was 18 ppb Au (Low level fire assay, Sample No. 182287, 8564701N : 779450E).

The results from the soil sampling program are presented in Appendix 1.

Table 1 **Infill Soil Sampling Program Analytical Methods and Detection Limits**

Element	Analytical Method	Digest	Technique	Detection Limit	Units
Au	BLEG	-	2Kg	0.1	ppb
Au(1)	FALL	FA	AAS	1	ppb
Au(2)	FALL	FA	AAS	1	ppb
Ag	BLEG	-	2Kg	0.1	ppb
Ag(1)	G400M	MA4	ICP-MS	0.05	ppm
Ag(2)	G400M	MA4	ICP-MS	0.05	ppm
As	G400M	MA4	ICP-MS	0.5	ppm
As(R)	G400M	MA4	ICP-MS	0.5	ppm
Cu	G400M	MA4	ICP-MS	0.2	ppm
Cu(R)	G400M	MA4	ICP-MS	0.2	ppm
Zn	G400M	MA4	ICP-MS	0.5	ppm
Zn(R)	G400M	MA4	ICP-MS	0.5	ppm
Pb	G400M	MA4	ICP-MS	0.2	ppm
Pb(R)	G400M	MA4	ICP-MS	0.2	ppm

778000 mE
778500 mE
779000 mE
779500 mE
780000 mE
780500 mE

N
W
E
S

8566000 mN
8565500 mN
8565000 mN
8564500 mN
8564000 mN

182264 182263 182265 182266/267 182268 182269 182270 182271 182272

182273 182274 182275 182276/277 182278 182279 182280 182281 182282

182283 182284 182285 182286/287 182288 182289 182290 182291 182292

8563500 mN
8563000 mN
8562000 mN
8561000 mN

775000 mE
780000 mE
785000 mE
790000 mE

8565000 mN

MAP
REGION

Northern Gold N.L.

EL 9583
1999/2000 Infill Soil
Sampling Program
Location Plan
Figure 3

Date: 19/12/2000
Author: N.Mottram
Office: EDS, W.A.
Drawing:

Scale: 1:10000
Projection: AMG Zone 52 (AGD 66)

0 100 200 400
metres

5.0 1999/2000 EXPENDITURE

Expenditure over EL 9583 during the 1999/2000 year of tenure totalled $9,725. Details of this expenditure are listed below in Table 2.

Table 2 **EL 9583 1999/2000 Expenditure**

COSTS	AMOUNT
Report and Plan Preparation	220
Tenement Management	100
Assays	1,280
Accommodation, Field, Travel Expenses	145
Consumables	235
Geological Contractors	985
Casual Wages	2,090
Salaries	3,050
Subtotal	**8,105**
Administration @ 20%	1,620
TOTAL	**$9,725**

6.0 2000/01 PROPOSED WORK PROGRAM

The proposed work program for the 2000/01 year of tenure will include further soil sampling, rock chip sampling and geological mapping.

These programs will be completed in the north of the licence, targeting previously defined gold and base metal mineralisation associated with the Mount Bundey Anticline.

An estimation of the cost of these programs is listed in Table 3.

Table 3 EL 9583 2000/01 Proposed Work Program

COSTS	AMOUNT
Soil Sampling	4,500
Rock Chip Sampling	500
Geological Mapping	500
Data Compilation and Reporting	1,000
TOTAL	**$6,500**

7.0 REFERENCES

MORRISON, D., (1994). EL 8243 - Mount Bundey South, Annual Report, Year One of Tenure. 18 October 1993 to 17 October 1994. Unpublished Report by Dominion Mining Limited to the NTDME.

MOTTRAM, N., (1998). EL 9583 1997/98 Annual Report, 10/12/97 to 09/12/98. Unpublished report by Northern Gold N.L. for the NTDME.

MOTTRAM, N., (1999). EL 9583 1998/99 Annual Report, 10/12/98 to 09/12/99. Unpublished report on behalf of Northern Gold N.L. for the NTDME.

SOCIC, N., (1997). EL 9583 1996/97 Annual Report, 10/12/96 to 09/12/97. Unpublished report by northern Gold N.L. for the NTDME.

APPENDIX 1

1999/2000 Infill Soil Sampling Program Locations and Assay Results

Sample No.	AMG52 East	AMG52 North	Au ppb	Au(1) ppb	Au(2) ppb	Ag ppb	Ag(1) ppm	Ag(2) ppm	As ppm	As(R) ppm
182263	778654	8565491	1.7	1		19.6	0.08	0.14	6.7	33.6
182264	778554	8565490	1.1	2		11.6	0.09	0.08	4.1	29.2
182265	778754	8565492	1.2	L	L	11.1	0.13	0.11	4.7	35.2
182266	778854	8565493	2.3	2		14	0.14	0.13	4.1	25.9
182267	778854	8565493	1.7	2		12.7	0.1	0.13	8.1	25.4
182268	778954	8565494	0.9	L		12.3	0.12	0.1	2.6	8.6
182269	779054	8565495	1.4	2		19.6	0.15	0.12	4.6	10.9
182270	779154	8565496	1.6	3		13.8	0.15	0.1	5.4	26.9
182271	779254	8565495	0.9	L		13.3	0.05	0.1	7.4	18.7
182272	779354	8565494	0.7	L		13.1	0.15	0.11	14.3	37
182273	778750	8565100	1.1	2		19.5	0.1	0.12	8	18.1
182274	778850	8565099	1.8	L		28.7	0.13	0.16	5.9	16.5
182275	778950	8565098	2.5	L	L	16.2	0.13	0.12	3.2	18.5
182276	779050	8565097	1	L		8.8	0.1	0.08	2.9	12.5
182277	779050	8565097	0.8	L	L	9.4	0.06	0.09	2.7	13.9
182278	779150	8565096	1.8	1		13.7	0.12	0.1	1.9	8.3
182279	779250	8565095	1.6	L		17.8	0.12	0.12	3.9	13.6
182280	779350	8565094	1.5	L	L	13.9	0.1	0.1	2.5	14.4
182281	779450	8565093	1.4	L		13.3	0.09	0.11	3	19.4
182282	779550	8565092	1.3	L		17.9	0.15	0.13	4	31.3
182283	779150	8564704	2.8	2		26.3	0.26	0.21	6.8	25
182284	779250	8564703	3	1		23.2	0.26	0.21	14.6	30.7
182285	779350	8564702	1.9	1		17.8	0.19	0.15	6	29
182286	779450	8564701	0.9	L		13.3	0.13	0.13	3.8	12.9
182287	779450	8564701	1.2	18	18	14.1	0.09	0.12	4.3	13.8
182288	779550	8564700	0.7	L		7.6	0.06	0.07	1.5	7.3
182289	779650	8564699	1	L		12.1	0.11	0.08	3.9	7
182290	779750	8564698	0.9	L		22.5	0.07	0.09	3.4	34
182291	779850	8564697	1.2	L	L	17.4	0.11	0.11	5.8	28.1
182292	779950	8564696	1.2	L		13.2	0.11	0.1	8.1	33.9

Note:- 'L' indicates result below detection limit.

Sample No.	AMG52 East	AMG52 North	Cu ppm	Cu(R) ppm	Pb ppm	Pb(R) ppm	Zn ppm	Zn(R) ppm	Laboratory
182263	778654	8565491	19.4	30.4	22.1	41.3	26.2	31.3	Assaycorp, Pine Creek
182264	778554	8565490	18.3	21.3	16.5	34.1	15.5	16.8	Assaycorp, Pine Creek
182265	778754	8565492	19.7	30.1	15.7	33.8	19.3	26.3	Assaycorp, Pine Creek
182266	778854	8565493	18.5	26.6	10.3	21.5	18.7	24	Assaycorp, Pine Creek
182267	778854	8565493	17.1	24.3	12.4	19	16.9	22.6	Assaycorp, Pine Creek
182268	778954	8565494	13.4	18.3	10.5	16.2	13.9	17.9	Assaycorp, Pine Creek
182269	779054	8565495	15	20.5	11.5	19.3	13.5	17.3	Assaycorp, Pine Creek
182270	779154	8565496	16.4	20	18.3	21.9	15	17.5	Assaycorp, Pine Creek
182271	779254	8565495	18.7	23.2	14.2	27.9	13.5	16.4	Assaycorp, Pine Creek
182272	779354	8565494	16.3	20.9	23.8	63.3	12.3	17.2	Assaycorp, Pine Creek
182273	778750	8565100	28.8	29.8	17.7	27.7	23.9	27.4	Assaycorp, Pine Creek
182274	778850	8565099	29.2	32.8	30.9	44.2	16.7	19.7	Assaycorp, Pine Creek
182275	778950	8565098	14.2	23.2	13	19.9	17.5	27.9	Assaycorp, Pine Creek
182276	779050	8565097	10.7	18.3	11.6	19.2	11.6	13.8	Assaycorp, Pine Creek
182277	779050	8565097	10.3	19.6	12.2	19.8	13.8	14.2	Assaycorp, Pine Creek
182278	779150	8565096	28	32.2	14.4	19.2	16.1	21.2	Assaycorp, Pine Creek
182279	779250	8565095	16.1	20.2	13.8	23.2	13.4	13.9	Assaycorp, Pine Creek
182280	779350	8565094	15.9	25.7	13.5	24.4	14.8	22.6	Assaycorp, Pine Creek
182281	779450	8565093	12.1	21	14	23.2	16.8	23	Assaycorp, Pine Creek
182282	779550	8565092	14.7	17	13.8	21.7	17.2	24.6	Assaycorp, Pine Creek
182283	779150	8564704	26.3	28.8	14.3	15.1	12.4	15.2	Assaycorp, Pine Creek
182284	779250	8564703	13.2	13.3	31.1	27.3	14.4	17.1	Assaycorp, Pine Creek
182285	779350	8564702	22.6	35.9	18.1	24	13.9	22.4	Assaycorp, Pine Creek
182286	779450	8564701	36.3	39.1	12.1	16.6	15.4	22	Assaycorp, Pine Creek
182287	779450	8564701	36	38.8	12.9	17.3	16.5	22.9	Assaycorp, Pine Creek
182288	779550	8564700	10.9	16.2	8.4	10.9	11.5	14.2	Assaycorp, Pine Creek
182289	779650	8564699	18.3	16.6	11.4	12.1	14.2	13.2	Assaycorp, Pine Creek
182290	779750	8564698	20.7	27.2	14.4	29	12.6	15.1	Assaycorp, Pine Creek
182291	779850	8564697	19.7	28.4	17.7	48.2	18.3	20.3	Assaycorp, Pine Creek
182292	779950	8564696	16.5	23.2	16.9	37.6	13.3	14.3	Assaycorp, Pine Creek

Note:- 'L' indicates result below detection limit.