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MCN 4513, MCN 4514 and MCN 4515

2001 FINAL REPORT

12/10/93 to 05/04/01

Burrundie (14/6-IV) 1:50,000 scale map sheet

Title Holder:- Northern Gold N.L.

June 2001

Distribution

NTDME

Northern Gold N.L., Adelaide River

Northern Gold N.L., Perth Office

Compiled by:-

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Essential Data Services, W.A.

SUMMARY

MCNs 4513 - 4515 are located approximately 13 kilometres northwest of Emerald Springs, within the Cullen Mineral Field, on the Burrundie (14/6-IV) 1:50,000 scale map sheet.

Outcrop in the area of the Pickfords Prospect, consists of an alternating sequence of Zamu Dolerite and lithologies assigned to the Koolpin Formation.

The Pickfords workings are developed on a group of quartz veins, which at surface are rich in cerrusite and pyromorphite, and commonly exhibit boxwork textures. Primary ore-mineralogy is dominated by galena, with chalcopyrite common in the Cu workings to the southeast.

MCNs 4513 - 4515 were granted to Northern Gold N.L. on the 12th of October, 1993, for a period ending on the 31st of December, 1997. The mineral claims were renewed on the 9th of July, 1998, for a period expiring on the 31st of December, 2002. The tenements were surrendered on the 5th of April, 2001.

Northern Gold N.L. completed reviews of existing geological, geochemical and geophysical data from the grant date to the surrender date.

The expenditure, from the grant date to the surrender date, totalled $5,785.

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1.0 INTRODUCTION

MCNs 4513 - 4515 are located approximately 13 kilometres northwest of Emerald Springs, within the Cullen Mineral Field, on the Burrundie (14/6-IV) 1:50,000 scale map sheet. The mineral claims, which cover an area 115 hectares in size, lie between latitudes 13°32' south and 13°33' south and longitudes 131°36' east and 131°37' east.

Access is via the Stuart Highway and then along bush and station tracks.

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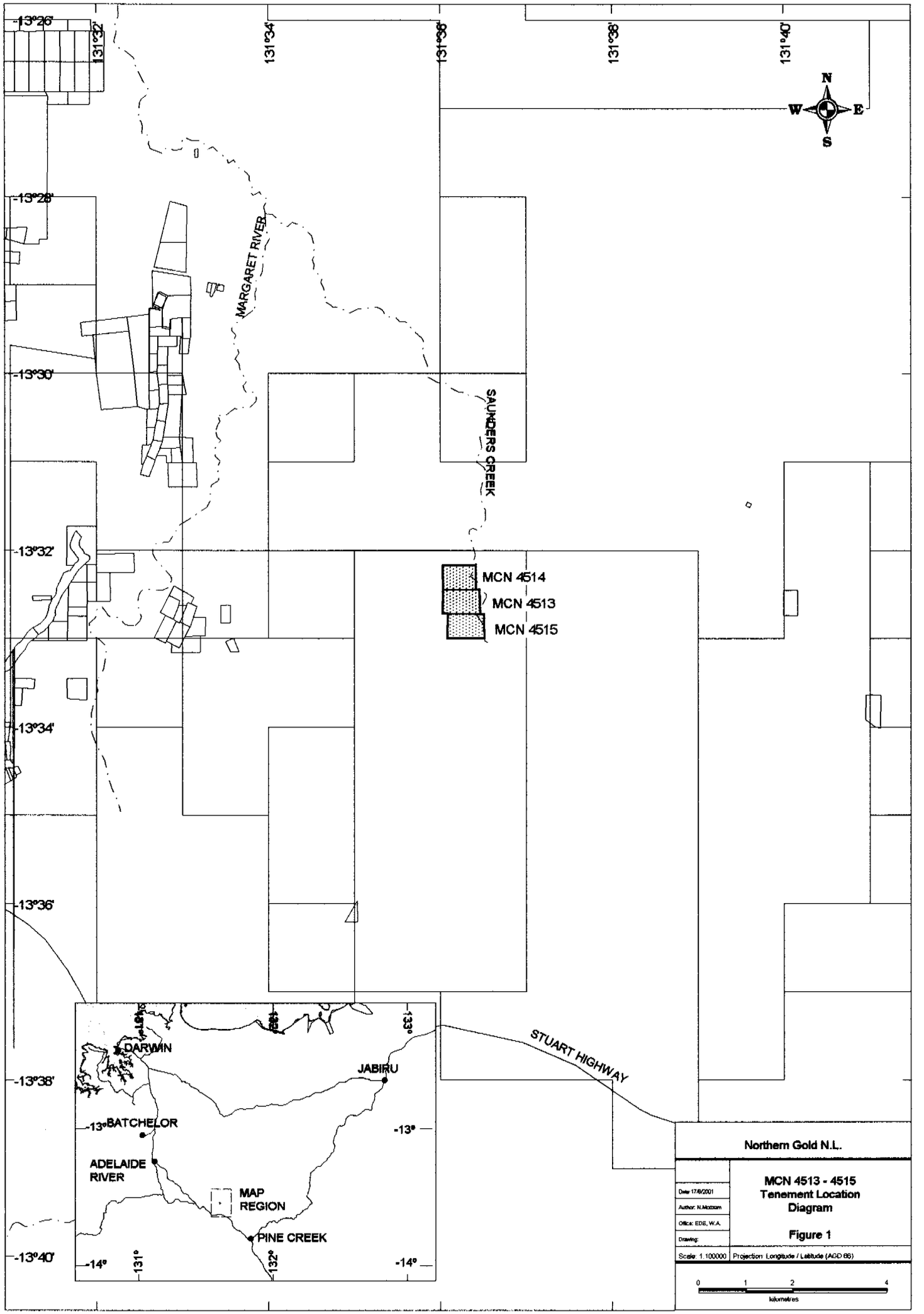
-13°26'
131°32'
131°34'
131°36'
131°38'
131°40'
N
W
E
S
-13°26'
MARGARET RIVER
-13°30'
SAUNDERS CREEK
-13°32'
MCN 4514
MCN 4513
MCN 4515
-13°34'
-13°36'
STUART HIGHWAY
-13°38'
DARWIN
JABIRU
-13°
BATCHELOR
-13°
ADELAIDE RIVER
MAP REGION
PINE CREEK
-13°40'
-14°
131°
132°
-14°
Northern Gold N.L.
MCN 4513 - 4515
Tenement Location
Diagram
Figure 1
Date: 17/8/2001
Author: N.Motzam
Office: EDS, W.A.
Drawing:
Scale: 1:100000
Projection: Longitude / Latitude (AGD 66)
0
1
2
4
kilometres

2.0 GEOLOGY

2.1 Regional Geology

The mineral claims are situated within the Pine Creek Geosyncline, a tight to isoclinally folded sequence of mainly pelitic and psammitic Lower Proterozoic sediments with interlayered tuff units. All rocks in the area have been metamorphosed to low, and in places medium grade, metamorphic assemblages. For the purposes 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 sills of the Zamu Dolerite and a number of late syn-orogenic to post-orogenic Proterozoic granitoids. Largely undeformed Middle and Late Proterozoic, Palaeozoic and Mesozoic strata as well as Cenozoic sediments and laterite overlie the Pine Creek Geosyncline rocks (Socic, 1997).

2.2 Local Geology

Outcrop in the area of the Pickfords Prospect consists of an alternating sequence of Zamu Dolerite and lithologies assigned to the Koolpin Formation. These lithologies are ferruginous shale, gray shale and recrystallised sandstone. The sequence trends 350° - 360°. The ferruginous shale is the form surface to two small synforms which have fold axis plunging 60° towards 180° (Socic, 1997).

The Pickfords workings are developed on a group of quartz veins, which at surface are rich in cerrusite and pyromorphite, and commonly exhibit boxwork textures. Primary ore-mineralogy is dominated by galena, with chalcopyrite common in the Cu workings to the southeast. The mineralised quartz veins are generally less than one meter wide, although underground in the footwall of the main workings, Pb mineralisation was recorded disseminated in crushed silicification over a width on 10 metres (Campbell and Thomas, 1956). The quartz veins generally strike 315° - 320°, and dip steeply to the northeast.

3.0 PREVIOUS EXPLORATION

The Pickfords Lead Prospect was first worked at the beginning of the 20th century when several pits were excavated on the main quartz vein. No further work was done until 1915, when a 20 metre shaft was sunk with a cross-cut to the lode (Campbell and Thomas, 1956). Official production was 9 tonnes Pb, 1.3 kilograms Ag, and 100 grams Au.

Small copper showings to the southeast were worked in 1955, yielding approximately 20 tonnes of ore.

Enterprise Exploration Co. inspected the Pickfords workings in 1956, but concluded that the property was too small for development (Campbell and Thomas, 1956).

Exploration at the Pickfords Prospect was completed by Northern Gold N.L. over MCN 148.

Northern Gold N.L. conducted rock chip and detailed soil sampling programs over MCN 148 as part of a joint venture with Knave Pty Ltd. (Monti and Stokes, 1989).

The rock chip sampling program consisted of the collection of 19 rock chips across the three claims. The best results obtained from the rock chip sampling included 20% Pb, 10 g/t Au, 64 g/t Ag, 0.2% Zn and 0.6% Cu (Monti and Stokes, 1989).

Soil sampling was completed over the mineral claim. The first phase of soil sampling consisted of the collection of 100 samples every 50 metres over twelve, 100 metre spaced by 500 metre long lines. The second phase of soil sampling consisted of the collection of 160 samples every 25 metres along nine, 100 metre spaced by 400 metre long lines. Both phases of the soil sampling confirmed the Pb-Au-Zn-Cu mineralisation (Monti and Stokes, 1989).

In 1990 a drilling program was completed over the prospect by Northern Gold N.L. (Stokes, 1990). Best intersections from the program included 8 metres at 1.0% Pb and 10 metres at 1.36% Zn in Hole P01,and 3 metres at 1.6% Pb in P02. The best Cu intersection was 1 meter at 1.6%.

4.0 EXPLORATION COMPLETED

No physical exploration was completed by Northern Gold N.L., over MCNs 4513 - 4515, from the grant date to the surrender date.

From 1995 to 2000, work was restricted to a review of existing geological, geochemical and geophysical data as part of a target generation and ranking exercise. This was followed up by field verification through a series of reconnaissance field visits across the tenements (Mottram, 1998, 1999, 2000, Stokes, 1997, Socic, 1997).

The Pickfords Prospect holds interest as part of a larger group of tenements with base metal anomalies and resources in the Burrundie area, such as Mount Bonnie and Iron Blow.

5.0 EXPENDITURE

The expenditure over the mineral claims, from the grant date to the surrender date, totalled $5,785. Details of this expenditure are listed in Table 1.

Table 1 1995 to 2000 Mineral Claim Expenditure

COSTS	AMOUNT
Report Compilation	925
Tenement Management	1,855
Data Review	205
Reconnaissance	680
Evaluation	1,270
Salaries and Wages	370
Administration	480
TOTAL	**$5,785**

6.0 REFERENCES

CAMPBELL, F. A., and THOMAS, W. N., (1956). Report on the Bonnie Jean Lead Prospect, Grove Hill District, N.T. Enterprise Exploration Company Pty. Ltd., company memorandum. NTGS, Open File Report CR 56/02.

MONTI, R., and STOKES, M., (1989). Pickfords Prospect (MCN 148), Annual Report to December 1989. Unpublished company report.

MOTTRAM, N., (1998). MCN 4513, MCN 4514 and MCN 4515, 1998 Annual Report to 11th October 1998. Unpublished report by Northern Gold N.L. for the Northern Territory Department of Mines and Energy.

MOTTRAM, N., (1999). MCN 4513, MCN 4514 and MCN 4515, 1998/99 Annual Report to 11th October 1999. Unpublished report on behalf of Northern Gold N.L. for the Northern Territory Department of Mines and Energy.

MOTTRAM, N., (2000). MCN 4513, MCN 4514 and MCN 4515, 1998/99 Annual Report to 11th October 2000. Unpublished report on behalf of Northern Gold N.L. for the Northern Territory Department of Mines and Energy.

SOCIC, N., (1997). MCN 4513, MCN 4514 and MCN 4515, 1997 Annual Report to 11th October 1997. Unpublished report by Northern Gold N.L. for the Northern Territory Department of Mines and Energy.

STOKES, M., (1990). MCN 148, Annual Report to 15th December 1990. Unpublished company report.

STOKES, M., (1997). MCN 4513, MCN, 4514 and MCN 4515, 1996 Annual Report. Unpublished report by Northern Gold N.L. for the Northern Territory Department of Mines and Energy.