

# **OTTER GOLD N L**

## **3<sup>rd</sup> ANNUAL REPORT**

**FOR**

**EXPLORATION LICENCE 7911**

**GARDINER RANGE**

**TANAMI REGION**

**10 JUNE 2000 TO 9 JUNE 2001**

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**TITLE:** 3<sup>rd</sup> ANNUAL REPORT FOR EXPLORATION LICENCE 7911,  
GARDINER RANGE, TANAMI REGION

**PERIOD:** 10 JUNE 2000 TO 9 JUNE 2001

**AUTHOR:** C. P. LARGE

**LOCATION:** TANAMI 1: 250,000 Map Sheet

**COMMODITY:** GOLD

**DATE:** JUNE 2001

**KEYWORDS:** GARDINER RANGE, TANAMI COMPLEX, KILLI KILLI BEDS,  
PARGEE SANDSTONE, MT CHARLES BEDS,

### **SUMMARY**

Exploration Licence 7911 was granted to Otter Gold NL on 10<sup>th</sup> June 1998 for a period of six years. EL7911 is located some 80 km northwest of the Tanami Mine. This is the third year of tenure.

The prospectivity of EL 7911 is enhanced by the proximity (within 20 km) to the Kookaburra/Sandpiper cluster and similarities in the aeromagnetic data.

Exploration during the third term has focused on surface sampling in areas of shallow to moderate cover.

Expenditure for the year has totaled \$20,891.77.

Ongoing tenure of the land by Otter Gold NL means this report should remain a **CLOSED FILE**.

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## 1.0 INTRODUCTION

Exploration Licence (EL) 7911 was granted to Otter Gold NL (OGNL) on 10<sup>th</sup> June 1998 for a period of six years. The 63 blocks cover 203km<sup>2</sup> and is wholly owned by Otter Gold NL (100%).

### 1.1 Location and Access

Exploration Licence 7911 is situated 80 kilometres northwest of the Tanami Mine (Figure 1). The western boundary of the licence is the Northern Territory / Western Australian border.

### 1.2 Tenement Status

Exploration Licence 7911 was granted to Otter Gold NL on 10<sup>th</sup> June 1998 for a period of six years. The Gardiner Range Deed of Exploration covers two Els, EL7911 (OGNL) and EL 7997 (STJV) under the management of Otter Gold NL. In the case of EL 7911 the agreement is between the Central Land Council and Otter Gold NL.

## 2.0 GEOLOGY

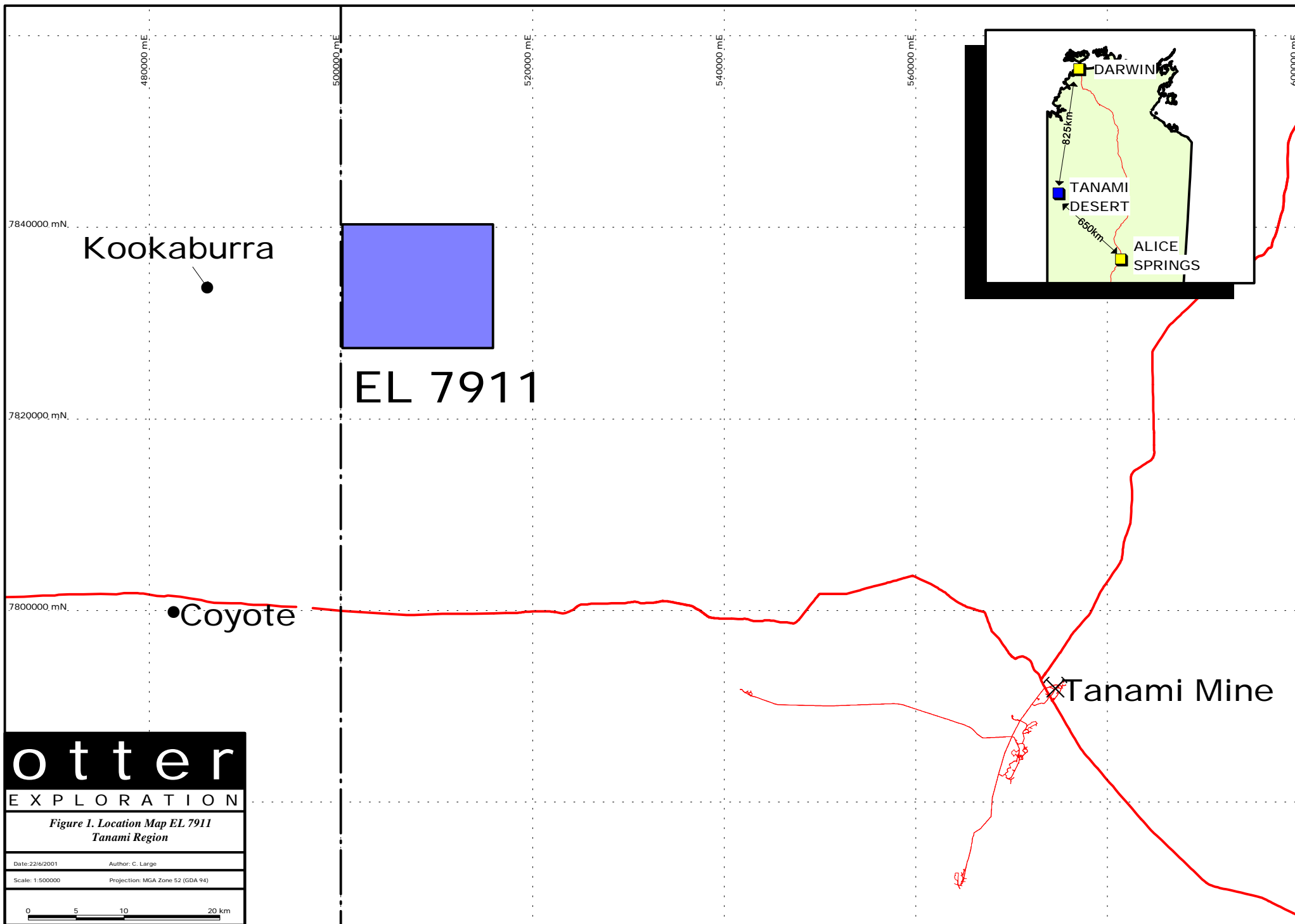
### 2.1 Regional Geology

The Granites-Tanami Block is bound to the west by the Canning Basin, and to the east by the Wiso Basin. It is considered to be one of the western-most Palaeoproterozoic inliers of the North Australian Orogenic Province, developed during the Barramundi Orogeny (Blake et al., 1979).

The stratigraphy of the Tanami Region has been revised as a result of an intensive study recently completed by the NTGS (Hendrickx et al., 2000). The stratigraphy outlined by Blake et al (1979) has had some significant modifications (Table 1).

Blake et al (1979)						Hendrickx et al (2000)			
Birrindudu Group		Coomarie Sandstone				Birrindudu Group	Coomarie Sandstone		Supplejack Downs Sandstone
		Talbot Well Formation					Talbot Well Formation		
		Gardiner Sandstone					Gardiner Sandstone		
Supplejack Downs Sandstone						Nanny Goat Creek Volcanics Mount Winnecke Group Mount Charles Formation  Pargee Sandstone			
Mount Winnecke									
Pargee Sandstone									
Tanami Complex	Mt. Charles Beds	Killi Killi Beds	Nanny Goat Creek Beds	Nongra Beds	Helena Creek Beds	Tanami Group	Killi Killi Formation		Twigg Formation
							Dead Bullock Formation		
						MacFarlane Peak Group			
Archean						Browns Range Metamorphics “Billabong Complex”			

**Table 1.** Comparison of stratigraphic nomenclature (Hendrickx et al, 2000).



The oldest rocks of Archean age belong to the Billabong Complex and the Browns Range Metamorphics.

Lying unconformably above the Archean basement is the palaeoproterozoic MacFarlane Peak Group. These rocks are characterised by a thick sequence of mafic volcanic, volcanoclastic and clastic sedimentary rocks, which possess a distinctive magnetic and gravity signature.

The Tanami group is subdivided into three formations:

Twigg Formation:	purple siltstone with minor sandstone and chert
Killi Killi Formation:	turbiditic sandstone
Dead Bullock Formation:	siltstone, mudstone, chert and banded iron formation

The Pargee Sandstone unconformably overlies the Tanami Group and is exposed on the western side of the Coomarie Dome extending into Western Australia. The Pargee Sandstone comprises thick-bedded quartz arenite, lithic arenite and conglomerate with pebbly sandstone and conglomerate at the base.

The Mount Charles Formation comprises an intercalated package of basalts and turbiditic sediments, which occur on the western side of the Frankenia Dome. The Mount Charles Formation is host to structurally controlled vein hosted gold mineralisation in the Tanami Mine Corridor.

The Mt Winnecke Group is also interpreted to lie unconformably over the Tanami Group. This group is divided into two units including siliclastic sediments and felsic volcanics.

The Nanny Goat Volcanics are characterised by extrusive volcanic rocks including quartz-feldspar ignimbrite, feldspar ignimbrite, rhyolite lava, basalt and minor siliclastic sediments.

The Birrindudu group comprises 3 units with Gardiner Sandstone at the base, overlain by Talbot Well Formation and Coomarie Sandstone. The Suplejack Down sandstone is interpreted to belong to this group but its relationship is unclear.

Cainozoic laterite, silcrete, calcrete, and Quaternary debris cover 60 – 70% of the Tanami Desert. The Quaternary sediments are generally unconsolidated, representing the most recent phase of erosion and deposition of sands, gravels and lithic fragments.

## **2.2 Local Geology**

The geology within the Gardiner Range Lease (EL7911) consists of Tanami Complex rocks, primarily of east-west folded sedimentary and volcanic rocks of the Lower Proterozoic Killi Killi Beds. The Killi Killi Beds are characteristically micaceous siltstone and sandstone.

To the North of the lease, Gardiner Sandstone of the Gardiner Range predominates. There are also small outcrops of the quartzose Mesozoic/Cretaceous Larranganni Beds to the north of the lease. Quaternary sands cover the majority of the region, with the centre of the lease being a major drainage. There are small outcrops of Killi Killi Beds on the western side of the lease.

### 3.0 WORK COMPLETED 10-06-00 TO 9-06-01

Work completed in EL 7911 during the reporting period consisted mainly of surface geochemical surveys. A component of re-analysis of remotely sensed data was also completed.

Two programs of geochemical sampling were conducted in the tenement area. The first was follow-up regional 400m x 400m sampling in the southwestern portion of the tenement. The program brought the nominal sample spacing in the area to ~200m x 200m on an offset grid. A total of 247 samples were taken.

The second sampling program was a 400m x 100m infill program following anomalous results in the central portion of the tenement. A total of 127 samples were taken.

A spot high of 4.4ppb Au was returned from the infill program although neither survey produced coherent geochemical anomalism.

### 4.0 EXPENDITURE 10-06-00 TO 9-06-01

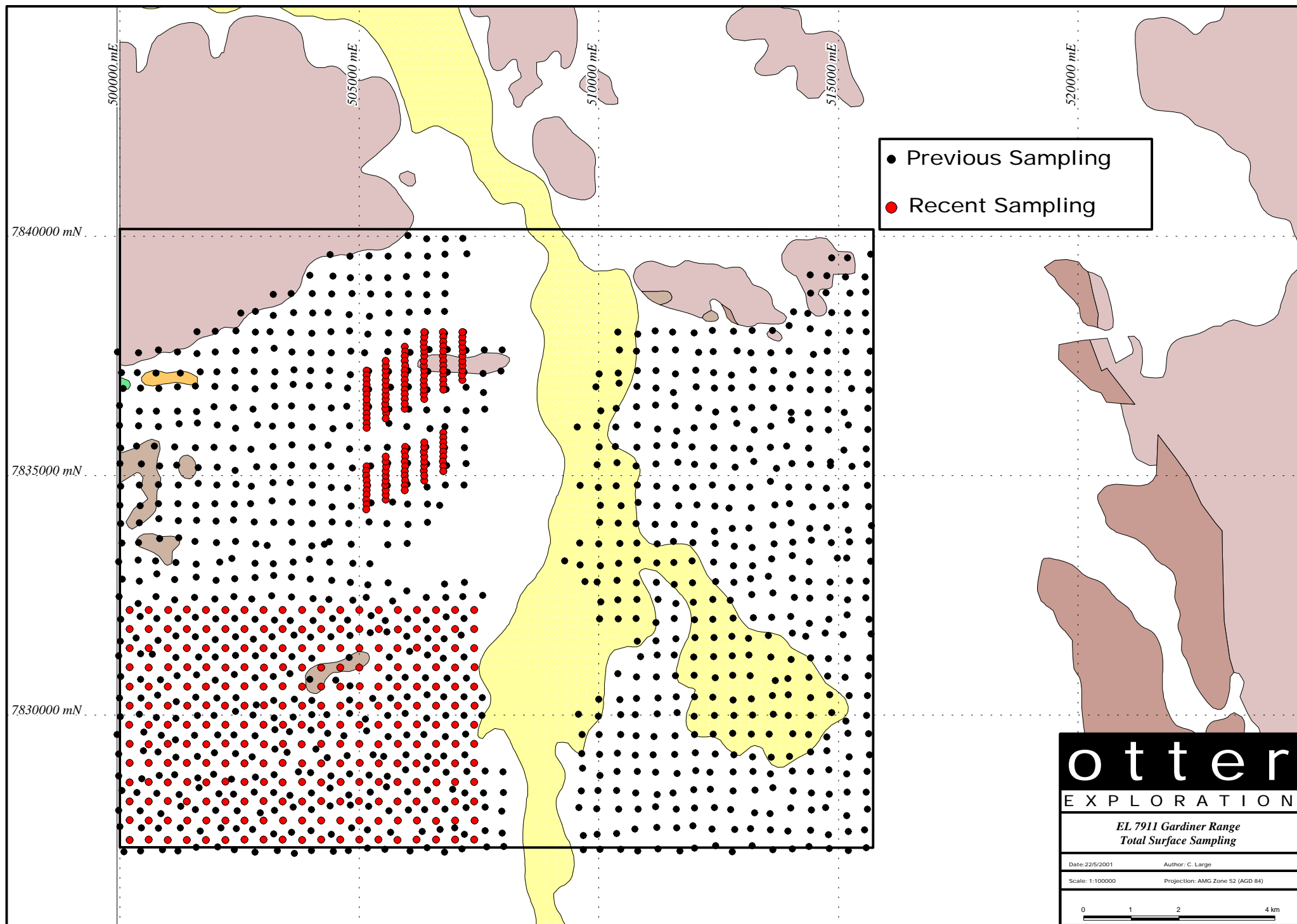
CATEGORY	EXPENDITURE
Geology	\$13,103.98
Computer Support	\$834.22
Survey	\$0.00
Field Costs/Access	\$3,132.73
Assay (Drilling)	\$0.00
Drilling	\$0.00
Geophysics	\$0.00
Geochemistry (Surface)	\$3,820.84
Petrology	\$0.00
<b>Total</b>	<b>\$20,891.77</b>

**Table 2. Expenditure EL 7911 during reporting period.**

### 5.0 PROPOSED 2001/02 WORK PROGRAM AND EXPENDITURE

The results of the geochemical surveys, although not overwhelming, allow some scope for follow-up. Ground-checking would be the first step in this process.

Further targets may be generated by careful interpretation of the newly processed geophysical data.



<b>CATEGORY</b>	<b>EXPENDITURE</b>
Geology	\$5,000
Computer Support	\$1,000
Survey	\$0.00
Field Costs/Access	\$2,000
Assay (Drilling)	\$3,000
Drilling	\$10,000
Geophysics	\$2,000
Geochemistry (Surface)	\$2,000
Petrology	\$0.00
<b>Total</b>	<b>\$25,000</b>

**Table 3. Proposed expenditure EL 7911 during next reporting period.**

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