



# IMX Resources

## **EL 46/2006 'Smithton' Annual Report for the Period 10th July 2010 to 9th July 2011.**

Volume 1 of 1

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## **ABSTRACT**

EL46/2006 'Smithton' was granted to IMX Resources Ltd for a period of 5 years commencing 10 July 2007 with the intention to explore for mafic-hosted Ni-Cu sulphide mineralisation.

As there were no targets generated from the VTEM data collected in 2008, it was decided to relinquish the tenement.

Expenditure for the reporting period is \$21,380.08.

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EL462006\_201106\_01\_report.pdf

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## 1 INTRODUCTION

The following report details work conducted at IMX Resources Ltd's ('IMX') EL 46/2006 – 'Smithton' during the period 10<sup>th</sup> July 2010 to 9<sup>th</sup> July 2011. The tenement is located 9km east of Smithton, in the Land District of Wellington in the vicinity of Forest (Figure 1).

### 1.1 Exploration Rationale

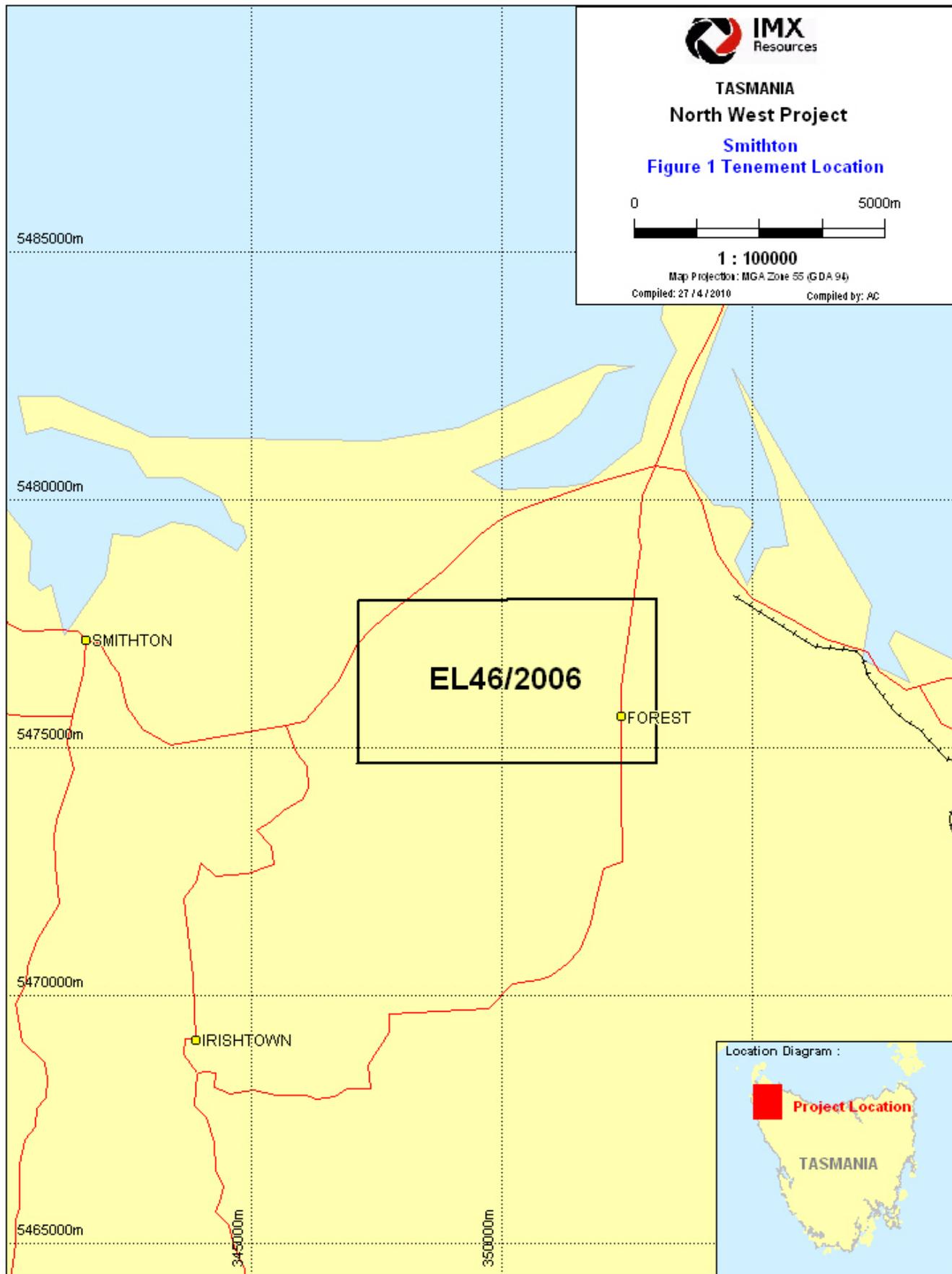
EL46/2006 is considered to have potential for Ni-Cu sulfide mineralisation in subvolcanic basic-ultrabasic intrusions. Magnetic highs are prominent in the Forest and South Forest areas, but due to a thin cover of Tertiary basalts, it is not possible to determine the origin of the magnetic highs by direct observation or sampling.

### 1.2 Geological Setting

The Rocky Cape region of northwest Tasmania consists of thick, essentially unmetamorphosed deformed Neoproterozoic sedimentary and volcanic successions (Calver 1998). The oldest exposed succession consists of orthoquartzites, siltstone and minor carbonate (the Rocky Cape Group) that underlies the Togari Group. The Rocky Cape Group is younger than 1200Ma. An angular unconformity separates the Rocky Cape Group from the Togari Group which occupies the Smithton Synclinorium in far northwest Tasmania... The Togari Group (Everard et al. 2007) consists of siliciclastics (Forest Conglomerate), a carbonate -chert-shale unit (Black River Dolomite) dated at 750-650 Ma, rift tholeiites and associated volcanoclastics (Kanunnah Subgroup) and dolostone (Smithton Dolomite) dated at 580-545 Ma. The Smithton Dolomite is overlain by Middle to Late Cambrian sandstone and shale, the Scopus Formation. On older maps e.g. the 1: 50 000 SMITHTON sheet all carbonates and dolostones are shown as Smithton Dolomite.

Dolerite dykes dated at 600-588 Ma and differentiated basic- ultrabasic intrusions related to the tholeiitic sequence were emplaced into the sequence below the Kununnah Group. The Proterozoic- Palaeozoic sequence is locally overlain by Tertiary basalts occurring mainly as hill cappings. Basalt compositions range from basanite through alkali olivine basalts to tholeiites. For a recent account of the Smithton Basin geology see Everard et al. (2007)

Mafic-ultramafic intrusions- shown on published maps as dolerite- in the South Forest area have been interpreted as feeders to the overlying basaltic volcanic and as possible host rocks for Ni-Cu sulfide mineralisation. Possible sulfur sources for Ni sulfide deposits are present in the Cowrie Siltstone (Rocky Cape Group) and in shales of the Duck River Dolomite.



### 1.3 Tenure

EL46/2006 was granted to Goldstream Mining NL (now IMX) for a term of 5 years from 10<sup>th</sup> July 2007 covering an area of approximately 68km<sup>2</sup>. A partial relinquishment of 48km<sup>2</sup> was made during 2009 reducing the licence to 20km<sup>2</sup>. Table 1 summarises the licence history.

**Table 1: Licence Details**

Licence	Period		Year	Area
	From	To		
EL46/2006	10 <sup>th</sup> July 2007	9 <sup>th</sup> July 2008	1	68 km <sup>2</sup>
	10 <sup>th</sup> July 2008	9 <sup>th</sup> July 2009	2	68 km <sup>2</sup>
	10 <sup>th</sup> July 2009	9 <sup>th</sup> July 2010	3	20 km <sup>2</sup>
	10 <sup>th</sup> July 2010	9 <sup>th</sup> July 2011	4	20 km <sup>2</sup>

## 2 REVIEW OF PREVIOUS WORK

Very limited work has been carried out in EL 46/2006 as most of the area is farm land, with most attention being on limestone/ dolomite.

Australia and New Zealand Exploration Company collected a few stream sediment samples during 1972 as part of their regional sampling program, but no anomalies were located and no follow up carried out. From 1997-2002 Morritt Holdings, Pacific Nevada and Greenstone Resources explored EL11/97 which large overlaps EL 46/2006 for epithermal gold along the Roger River Fault and over siliceous and calcareous spring mounds like Smokers Bank immediately south of Smithton (Morritt Holdings – *author unknown*, 2003; Reid, 1998; Reid and Westbrook, 1998; Westbrook, 1999). Exploration methods used were soil and stream sediment sampling and auger drilling of spring mounds, and they detected low level concentrations of elements normally associated with epithermal gold but no significant gold values.

A detailed aeromagnetic survey with 200 m line spacing was flown over the tenement by AGSO/MRT in 1996.

Geotech Airborne Pty Ltd flew an airborne EM survey 2008 (Barrett et al, 2008). In 2009 Southern Geoscience Consultants (SGC) interpreted the results from the 2008 VTEM survey (Chai, 2009). No ground activities took place, as activities were concentrated elsewhere in the project area (Chai, 2010).

### **3 EXPLORATION COMPLETED DURING THE REPORT PERIOD**

No field activities took place within EL46/2006 during the 2010-11 reporting year. As no targets were generated from EM collected in previous years, IMX will relinquish the licence.

## **4 ENVIRONMENT**

There have been no activities to report.

## 5 EXPENDITURE

Expenditure for EL46/2006 during the reporting period is summarised in Table 2 and includes expenses up to and including April 2011. Total expenditure for 2010-2011 is \$21,380.08. Expenditure for the life of the licence is \$101,392.46.

<b>Activity</b>	<b>Amount</b>
Geological Salaries (recharge - staff S & W)	\$ 7,790.85
Field Supplies	\$ 235.13
Geological Consultants	\$ 5,991.00
Petrology / Mineralogy	\$ 951.00
Tenement Rentals	\$798.00
Vehicles - Fuel	\$ 36.14
Light Vehicle Hire	\$ 145.98
Computer Software	\$ 2,185.00
Travel & Accommodation - Domestic	\$ 458.27
	18591.37
Overheads (15%)	\$ 2788.71
<b>TOTAL</b>	<b>\$ 21,380.08</b>

## 6 REFERENCES

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## 7 KEYWORDS

Tasmania North West, Smithton, VTEM geophysics, Ni-Cu sulphide mineralisation