

**EXPLORATION LICENCES 25669, 25576 and 25670  
MT TODD PROJECT  
NORTHERN TERRITORY  
AUSTRALIA**

**ANNUAL REPORT  
FOR THE PERIOD ENDED  
14th March 2009**

*Data presented in  
GDA 94 Datum*

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## SUMMARY

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The three tenements, EL's 25669, 25576 & 25670 comprise a significant portion of the Mount Todd Project area and cover 1 062.23 square km (90% of the project area). The tenements are situated approximately 42 km north of the town of Katherine. This annual report documents the work completed on the tenement group comprising EL's 25669, 25576 & 25670 for the period March 15, 2008 to March 14, 2009. The licences were granted to Vista Gold Australia Pty Ltd. by the Northern Territory government on March 15, 2007. Vista Gold Australia Pty Ltd. is the operator and managing the exploration work.

Work on the project during 2008-2009 included prospecting and rock sampling on tenement EL 25576. There was limited field work comprising initial reconnaissance traverses carried out on EL's 25669 and 25670 during Year 2 as work was concentrated on the larger EL 25576 as well as ongoing drilling on the Mount Todd Mineral Leases. Work on EL's 25669 and 25670 covered general research on previous exploration activities in addition to the initial reconnaissance traverses.

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## INTRODUCTION

The following report describes work completed on the tenement group EL's 25669, 25576 & 25670 of the Mt Todd Project during the period 15 March 2008 to 14 March 2009.

These tenements are centred about 42 km north of Katherine and 200 km southeast of Darwin, Northern Territory. Access is gained via the Stuart Highway, with an eastern turn off 42 km north of Katherine on the Edith Falls road.

Vista Gold Corp. signed an agreement on March 1st 2006 with the Northern Territory Government, the administrators of Pegasus Gold and the Jawoyn Association for the purchase of the Mt Todd Gold Mine. The purchase of the mineral leases was finalised on 16th June 2006.

The area surrounding the Mt Todd mineral leases was the subject of a number of mining reserves held by the NT government. As part of the purchase agreement Vista applied for exploration licences over the mining reserves. This includes EL's 25669, 25576 & 25670.

The project area contains a significant proportion of the highly prospective Burrell Creek Formation of the Finness River Group.

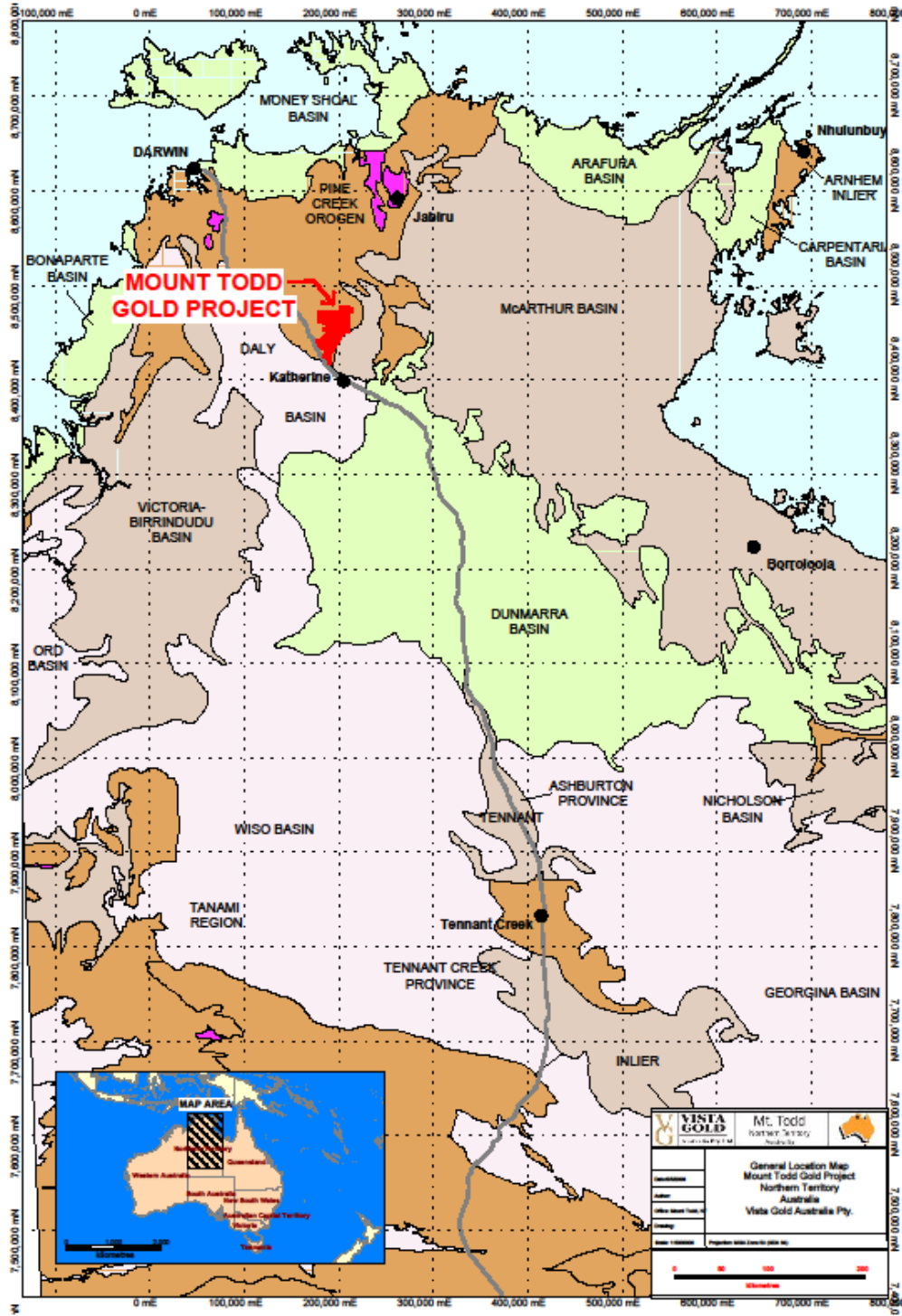
## TENURE

Table 1 lists tenement details for the three EL's comprising a portion of the Mount Todd Project.

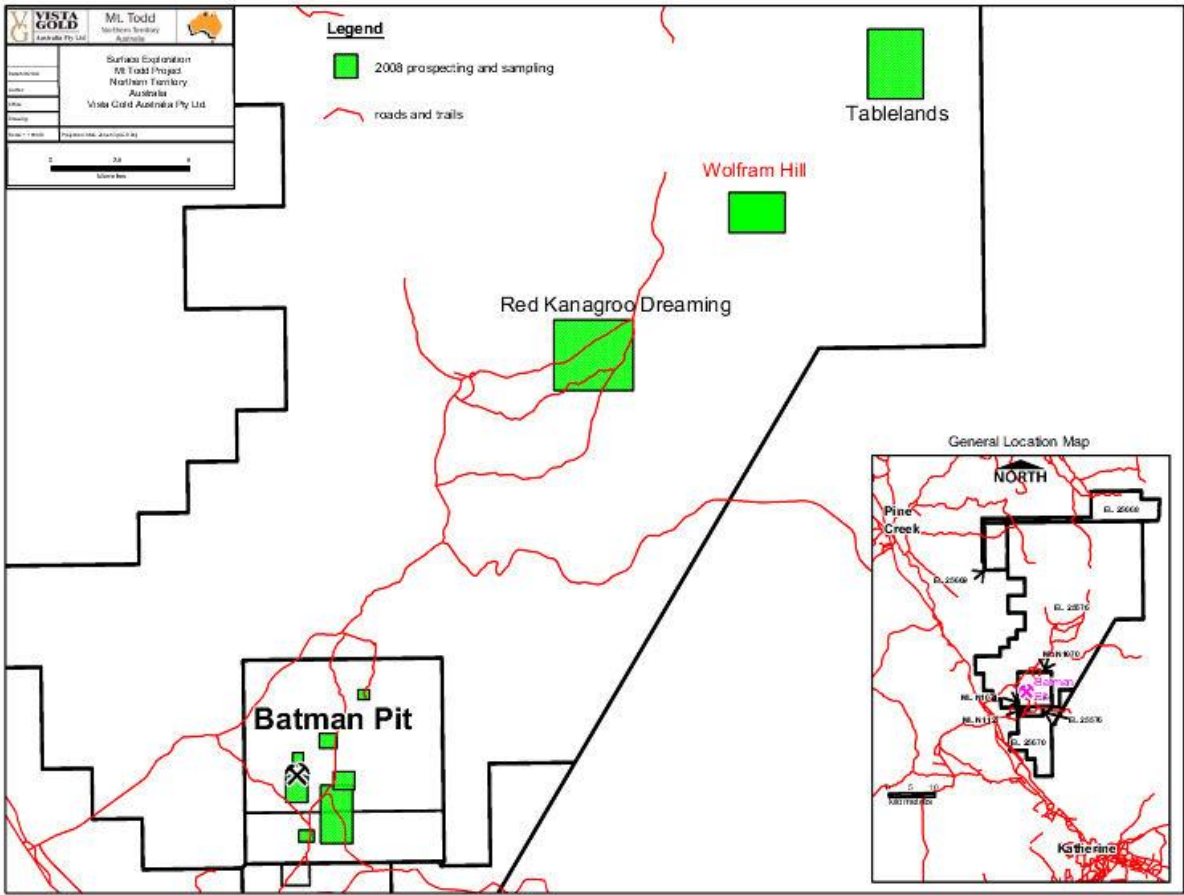
**Table 1: Tenement Details**

EL's	Area (square km)	Grant Date	Expiry Date
EL25669	49.73	15/3/2007	14/3/2013
EL25576	912.4	15/3/2007	14/3/2013
EL25670	100.1	15/3/2007	14/3/2013
<b>Total</b>	<b>1062.23</b>		

Figure 1  
Location Map



**Figure 2  
Prospecting and Sampling Map**



## **REGIONAL AND LOCAL GEOLOGY**

### **Regional geology**

The Precambrian rocks of the Northern Territory have been divided into two principal orogenic provinces, the North Australian Craton and the Central Australian Mobile Belts. Orogenic domains within the North Australian Craton include the Pine Creek Orogen, the Tanami Region, the Murphy, Tennant and Arnhem Inliers, and the northern Arunta Province.

Historically, the Pine Creek Orogen has been the most prospective region of the Northern Territory (Ahmed et al, 1999). The Orogen extends southeast 260 km from Darwin to Katherine and east from Darwin to 130 km northeast of Jabiru. The Mount Todd Project lies in the southern end of the Central Region of the Pine Creek Orogen.

The Pine Creek Orogen has had a long and complex history of sedimentation, deformation, metamorphism and plutonism. It comprises an alternating sequence psammitic and pelitic rocks with minor carbonate and volcanic rock. The age of the sequence is constrained between 2470 and 1870 Ma (Page et al 1980). Regional metamorphism grades range from sub-greenschist facies in the Central Region to upper amphibolites facies along the western and eastern margins.

There are over 250 gold occurrences and two operating gold mines in the Pine Creek Orogen region.

### **Local geology**

The oldest lithostratigraphic units exposed within the exploration licences are those of the Finnis River Group which includes the Burrell Creek and Tollis Formations (Poxon et al 1994).

The Burrell Creek Formation represents a turbidite sequence deposited in a deep-water, high energy environment. This unit consists of greywacke, siltstone and shales with minor volcanoclastic beds. The Burrell Creek Formation covers approximately 75% of the Mount Todd Project area (approximately 900 square km). It is also one of the most prospective in the Pine Creek Orogen, hosting a significant proportion of gold occurrences.

The Tollis Formation which unconformably overlies the Burrell Creek Formation, comprises alternating greywacke, mudstone, banded ironstone tuff and minor conglomerate and volcanic rocks. The Tollis Formation covers approximately 80 square kilometers in the southern portion of the property, primarily located within EL 25670. It also outcrops in the central project area near Wolfram Hill.

Overlying the Finnis River Group, are the sediments and volcanic of the Edith River Group. These overlie the Tollis Formation in the southern portion of the project area. The Phillips Creek Sandstone and the Plum Tree Creek Volcanics represent a relatively small area within the EL's (6 square km).

These older rocks are intruded and extensively contact metamorphosed by the Cullen Batholith granitoids. The batholith is restricted to the western edge of the project area, however, late leucogranites such as the Mount Davis Granite and the Wolfram Hill Granite are located east of the main batholith. Both granites intrude Finnis River Group sediments.

## EXPLORATION COMPLETED

Vista Gold Corp. conducted a surface exploration program, including prospecting, rock sampling and gps surveying of drill hole collars and grid pickets on EL 25576 on the Mt Todd Project from April to July, 2008. Equipment and personnel were mobilized from the Mt Todd Mine site. The work was conducted by geologists and field technicians.

During early 2008, three prospect areas were sampled on EL 25576: Red Kangaroo Dreaming (“RKD”), Tablelands area and Wolfram Hill. All prospects can be accessed from the Mt Todd mine site easily via existing roads. A total of 164 rock samples were collected from all areas (see table below). These prospect areas were chosen for further exploration as they were along strike (or proximal) of a mineralized northeast regional trend which hosts the Batman Pit and numerous gold prospects.

Table 2: 2008 rock samples

Prospect	Samples Collected
Red Kangaroo Dreaming	145
Tablelands area	6
Wolfram Hill	13
<b>Total Samples</b>	<b>164</b>

RKD was main focus of EL exploration by previous operator Pegasus (38 RC holes, 58 RAB holes). Mineralization was defined along a south trending 575 meter strike length. The area sampled during the 2008 program is west and south of the main RKD mineralized zone. The rock sampling was conducted to confirm both historical gold anomalies and soil anomalies from the 2007 Vista soil sampling program. At RKD, 145 samples were collected and submitted for analysis.

In the Wolfram Hill area, 13 samples were collected and submitted for analysis. There are numerous historical gold anomalies in the Wolfram Hill area that have seen limited exploration. The area that was sampled includes historical shafts and adits from previous tungsten mining operations.

Limited sampling at Tablelands area, 33 km northeast of the Batman pit (14 km northeast of RKD), comprised only 6 samples. Previous drilling by past operators returned a near surface assay of 36 g/T Au as well as other anomalous values.

All observations and sampling are recorded at “stations” which have UTM coordinates that are located in the field with a GPS unit.

An ICP multi-element suite was utilized to analyze the rock samples from RKD, Tablelands area and Wolfram Hill prospect by ALS Chemex Labs in Adelaide, South Australia. The ICP analysis consist of a multi-element suite that reports analyses for base and precious metals, pathfinder elements for these commodities, as well as elements useful for mapping bedrock geology.

Concurrent with the rock sampling, from April to July 2008, drill hole collar locations and grid pickets were surveyed at Tablelands prospects using a GPS unit. All locations were surveyed in using UTM. Accurate drill hole locations has enabled the compilation of an accurate database for further drill planning and geological interpretation. From the gps surveying, it was determined that the existing collar locations were inaccurate, in some cases, up to 240 meters. All surveying was conducted within EL 25576.



There was limited field work comprising initial reconnaissance traverses carried out on EL's 25669 and 25670 during Year 2 as work was concentrated on the larger EL 25576 as well as ongoing drilling on the Mount Todd Mineral Leases. Work on EL's 25669 and 25670 covered general research on previous exploration activities in addition to the initial reconnaissance traverses.

## **RESULTS**

Approximately 1100 meters due west of the RKD prospect, a 600 meter long arsenic soil anomaly was prospected and sampled during the 2008 exploration program. Historical rock samples have assayed up to 17.37 gpt gold within the anomaly. During the program, a topographic ridge corresponding within the southern portion of the anomaly was explored. The ridge was sampled along 500 meters with 41 samples collected. Of the samples collected almost half (46%) were over 0.3 gpt Au (ranging from 0.3 to 2.36 gpt Au). No known drilling has been conducted on the anomaly and the mineralized ridge, although historical drill holes are collared 500 meters west (DN-RC-4 and DN-RC-5) and 200 meters south (DN-RC-1 to DN-RC-3) of the ridge. Further field work is recommended including mapping, rock sampling and further soil sampling to investigate the anomaly and mineralized ridge.

At the Wolfram Hill prospect, the 2008 rock sampling located anomalous gold, silver, copper, and tungsten anomalies including one sample which assayed 2.33 gpt Au, 738 gpt Ag, 37.8% Cu and 0.21% W. Only preliminary work was conducted in 2008, further work is warranted due to the significant gold, silver and copper values that were delineated in 2008. It should also be noted that other historic tungsten occurrences, similar to the Wolfram Hill prospect, in the Pine Creek Orogen, also have significant enrichment of tantalum (it is currently unclear if the Wolfram Hill prospect has been explored for or historic samples have been analyzed for tantalum). Tantalum mineralization is present in a number of deposit styles including pegmatites and polymetallic veins of which both are found at the Wolfram Hill prospect.

Exploration at the Tablelands prospect was not completed and was in the initial stages of prospecting and sampling before operations were discontinued. Further work is recommended to complete the 2008 surface exploration.

## EXPLORATION EXPENDITURE

The majority of expenditure was incurred on EL 25576 where prospecting and rock sampling occurred. There was limited field work comprising initial reconnaissance traverses carried out on EL's 25669 and 25670 during Year 2.

**Table 3: 2008/09 Expenditure**

Tenement	Expenditure
EL25576	<b>\$210,019.80</b>
EL25669	<b>\$16,411.75</b>
EL25670	<b>\$24,587.75</b>

## WORK PROGRAMME PROPOSED FOR 2009/2010

The proposed exploration costs for the tenement packages are defined below:

**Table 4: Proposed 2009/10 Expenditure**

Tenement	Expenditure
EL25576	<b>\$200,000</b>
EL25669	<b>\$20,000</b>
EL25670	<b>\$20,000</b>