# MINING LEASES N1070, N1071 and N1127 MT TODD PROJECT NORTHERN TERRITORY AUSTRALIA

ANNUAL REPORT FOR THE PERIOD ENDED 4th March 2010

> Data presented in GDA 94 Datum

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August 2010

The three mining leases, MLN1070, MLN1071 & MLN1127 comprise a portion of the Mount Todd Project area and cover 54.15 square km (4% of the project area). The mining leases are situated approximately 42 km north of the town of Katherine. This annual report documents the work completed on the leases comprising MLN1070, MLN1071 & MLN1127 for the period March 5, 2009 to March 4, 2010. The leases were originally granted on 5 March 1993 and were transferred to Vista Gold Australia Pty Ltd. by the Northern Territory Government on June 15, 2006. Vista Gold Australia Pty Ltd. is the operator and managing the exploration work.

Work on the project during the Reporting Year included 2961.5 meters of drilling consisting of ten diamond holes with RC precollars for a total of 2157.5m of diamond drilling and 804m of RC drilling. All holes targeted infill and step-out targets. All the drilling was conducted on mining lease MLN1070. A total of 729 assays were submitted from the program to the ALS Chemex for analyses.

There was no field work carried out on ML's N1071 and N1127 during the Reporting Year as work was concentrated on the larger MLN1070 which hosts the Batman deposit. Work on ML's N1071 and N1127 covered modeling and geological research into the prospectivity of the Batman - Quigley's structural corridor, resulting in a soil sampling program that in part covers MLN 1071 to be completed during 2010.

## **Table of Contents**

- 1. Introduction
- 2. Tenure

Tenure history

- 3. Regional and local Geology Regional geology Local geology
- 4. Exploration Completed
- 5. Results
- 6. Exploration Expenditure
- 7. Work Program Proposed for 2010/2011

# **Figures**

Figure 1 General Location

Figure 2 Lease Location Map

Figure 3 Diamond Drilling – Surface Location

Figure 4 Phase 1 2010 / 2011 drilling plan

# Tables

Table 1: Lease Details

Table 1-1: Tenure History

Table 2: Drilling Details

Table 3: ML's – 2009/2010 Expenditure

Table 4: ML's - Estimated Work Program 2010/2011

**Appendix I** 2009 / 2010 Drilling Cross Sections

#### INTRODUCTION

The following report describes work completed on the mining lease group MLN1070, MLN1071 and MLN1127 comprising the Mt Todd Project during the period 5 March 2009 to 4 March 2010.

These tenements are centered about 42 km north of Katherine and 260 km southeast of Darwin, Northern Territory. Access is gained via the Stuart Highway, with an eastern turn off 42 km north of Katherine on 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 finalized on 15th 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 licenses over the mining reserves. These licenses have now been granted and are reported on separately.

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

Following on from the successful drilling conducted in the 2008/2009 season a further 10 holes were drilled in 2009/2010. This drill program is ongoing during the 2010/2011 season. A new resource model for the Batman deposit will be generated once the results of this drill program are finalized.

#### **TENURE**

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

**Table 1: Lease Details** 

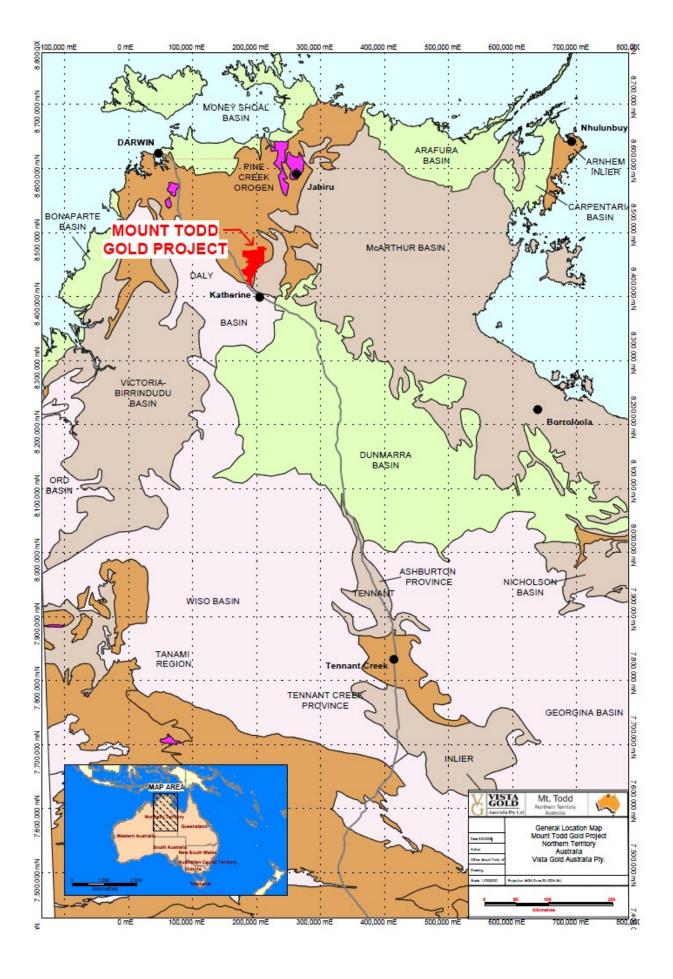
EL's	Area (square km)	Grant Date	Expiry Date
MLN1070	39.97	5/3/1993	4/3/2018
MLN1071	13.36	5/3/1993	4/3/2018
MLN1127	0.82	5/3/1993	4/3/2018
total	54.15		

# **TENURE HISTORY**

Table 1.1 lists Tenure history of the Mt Todd Project.

TABLE 1-1: PROPERTY HISTORY VISTA GOLD CORP. – MT TODD GOLD PROJECT June 2009			
1986 October 1986 – January 1987:	Conceptual Studies, Australia Gold PTY LTD (Billiton); Regional Screening; (Higgins), Ground Acquisition by Zapopan N.L.		
1987 February: June-July: October:	Joint Venture finalized between Zapopan and Billiton. Geological Reconnaissance, Regional BCL, stream sediment sampling.  Follow-up BCL stream sediment sampling, rock chip sampling and geological mapping (Geonorth)		
1988 Feb-March: March-April: May: May-June: July:	Data reassessment (Truelove) Gridding, BCL grid soil sampling, grid based rock chip sampling and geological mapping (Truelove) Percussion drilling Batman (Truelove) - (BP1-17, 1475m percussion) Follow-up BCL soil and rock chip sampling (Ruxton, Mackay) Percussion drilling Robin (Truelove, Mackay) - RP1-14, (1584m percussion)		
July-Dec:	Batman diamond, percussion and RC drilling (Kenny, Wegmann, Fuccenecco) - BP18-70, (6263m percussion); BD1-71, (8562m Diamond); BP71-100, (3065m R.C.)		
1989 Feb-June:	Batman diamond and RC drilling:BD72-85 (5060m diamond); BP101-208, (8072m RC). Penguin, Regatta, Golf, Tollis Reef Exploration Drilling: PP1-8, PD1, RGP132, GP1-8, BP108, TP1-7 (202m diamond, 3090m RC); TR1-159 (501m RAB).		
June: July-Dec:	Mining lease application (MLA's 1070, 1071) lodged. Resource Estimates; mining-related studies; Batman EM-drilling: BD12, BD8690 (1375m diamond); RC pre-collars and H/W drilling, BP209-220 (1320m RC); Exploration EM and exploration drilling: Tollis, Quigleys, TP9, TD1, QP1-3, QD1-4 (1141 diamond, 278m RC); Negative Exploration Tailings Dam: E1-16 (318m RC); DR1-144 (701. RAB) (Kenny, Wegmann, Fuccenecco, Gibbs).		
1990			
Jan-March:	Pre-feasibility related studies; Batman Inclined Infill RC drilling: BP222-239 (2370m RC); Tollis RC drilling, TP10-25 (1080m RC). (Kenny, Wegmann, Fuccenecco, Gibbs)		
1993 - 1997 Pegasus Gold Australia Pty Ltd.	Pegasus Gold Australia Pty Ltd reported investing more than US\$200 million in the development of the Mt Todd mine and operated it from 1993 to 1997, when the project closed as a result of technical difficulties and low gold prices. The deed administrators were appointed in 1997 and sold the mine in March 1999 to a joint venture comprised of Multiplex Resources Pty Ltd and General Gold Resources Ltd.		
1999 - 2000 March - June	Operated by a joint venture comprised of Multiplex Resources Pty Ltd and General Gold Resources Ltd. Operations ceased in July 2000, Pegasus, through the Deed Administrators, regained possession of various parts of the mine assets in order to recoup the balance of purchase price owed it. Most of the equipment was sold in June 2001 and removed from the mine. The tailings facility and raw water facilities still remain at the site.		
2000 – 2006	Ferrier Hodgson (the Deed Administrators), Pegasus Gold Australia Pty Ltd; the government of the NT; and the Jawoyn Association Aboriginal Corporation (JAAC) held the property.		
<u>2006</u>			
March to Present	Vista Gold Corp. acquires concession rights from the Deed Administrators.		

Figure 1: General Location



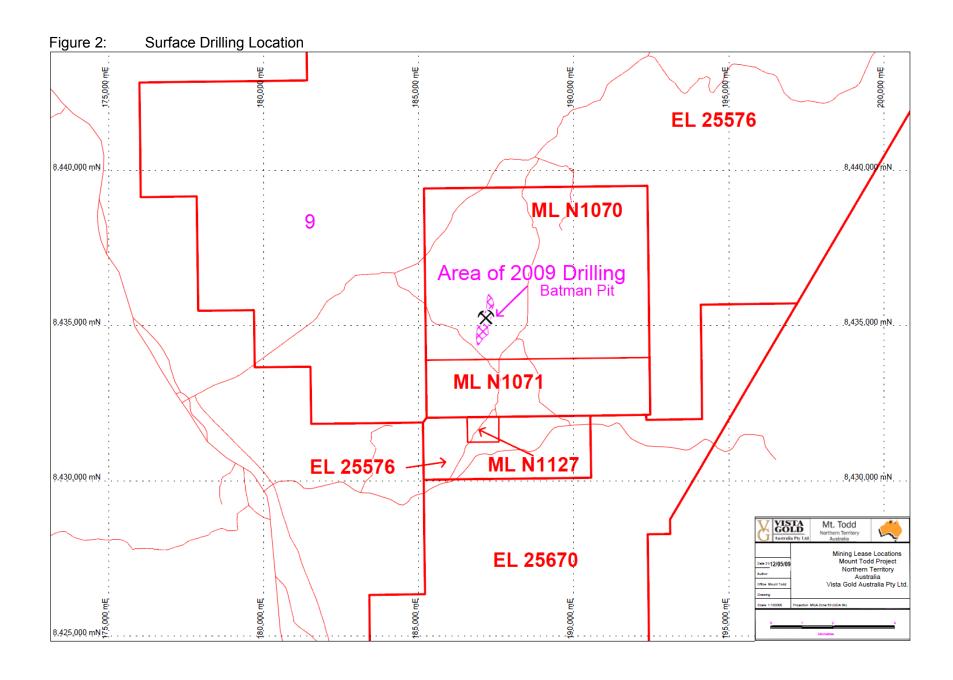
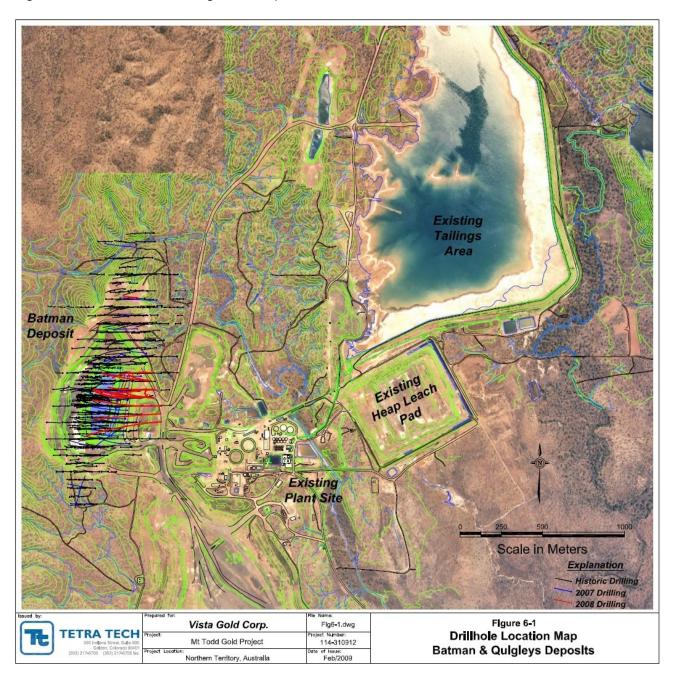


Figure 3 Diamond drilling detailed plan



#### 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 Finniss 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 including the Batman deposit.

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 Finniss River Group, are the sediments and volcanic of the Edith River Group. These overly 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 Finness River Group sediments.

#### **EXPLORATION COMPLETED**

Vista Gold Corp. conducted a drilling program on the Batman deposit on MLN1070 on the Mt Todd Project which consisted of diamond holes with RC precollars. The focus of the program was to upgrade and expand the Batman Deposit resources and provide drill coverage sufficient for the ongoing pre-feasibility studies.

The drilling program commenced on January 14 2010 and was ongoing at the end of the reporting period, with 10 holes completed for 2961.5 meters of drilling (Table 2), under the overall supervision of Frank Fenne, Vista's Vice President of Exploration.

Table 2: Drilling Details

Hole ID	Easting (GDA94)	Northing (GDA94)	Elevation	Bearing	Dip	RC depth (m)	Diamond depth (m)	Total depth (m)
VB10-001	187528.93	8435954.6	138.23	273.8	-62.31	132	418.7	550.7
VB10-002	187468.36	8435505	147.44	269.76	-55.56	0	287.5	287.5
VB10-003	186748.03	8435114.21	163.54	267.4	-80.08	0	525.7	525.7
VB10-004	187588.99	8434904.44	141.67	280.75	-59.4	150	425.7	575.7
VB10-005	187019.61	8434456.9	148.75	268.39	-61.38	84	0	84
VB10-006	187460.28	8435250.86	145.30	273.83	-62.26	120	0	120
MTH-003	187266.21	8434758.53	144.90	313.88	-27.4	0	499.9	499.9
04-NSL-01	187552.71	8435507.75	140.022	270.61	-61.69	132	0	132
04-NSL-02	187517.51	8435507.05	142.39	272.69	-59.8	102	0	102
04-NSL-03	187491.63	8435504.02	144.20	272.90	-60.1	84	0	84

The drill holes covered an area of 1500 meters by 1000 meters. Drill hole spacing of the holes drilled in this program averaged 50 meters, consistent with holes drilled by previous operators. All holes were angle holes drilled to intersect mineralization at close to right angles; however, due to physical constraints and the complex nature of the deposit, true thickness of the drilled intervals cannot be assumed from the measured intercepts.

The drilling was conducted using Boart Longyear Equipment and personnel were mobilized to the Mt Todd Mine site in January 2010. The work was conducted by geologists, field technicians and drillers. The drilling was performed by Boart Longyear Drilling Pty Ltd drilling two shifts per day 7 days per week.

All holes were angle holes between -25 and -80 deg from horizontal and down hole surveys were taken every 30 meters. All survey data has been submitted with the digital data compilation of this report.

The core was sampled on intervals constrained by lithological, alteration or structural boundaries, with the minimum interval being 0.2m and the maximum being 1.2m, by cutting with a diamond saw. The half-core samples will be assayed at ALS Chemex located in Perth, W.A. Additional QA/QC assaying for Au will be done at North Australia Labs located in Pine Creek, N.T. All core was prepared for analysis at ALS Chemex in Alice Springs. Assay results will be included as raw data and submitted with the digital data compilation in next year's report.

At the end of the reporting period a total of 729 samples were being analysed by Fire Assay for Au and by ICP for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W and Zn.

There was no drilling carried out on ML's N1071 and N1127 during the Reporting Year as work was concentrated on drilling the Batman deposit on MLN1070. Work on ML's N1071 and N1127 covered general research on previous exploration activities.

#### **RESULTS**

The 2010 drilling program consisted of 10 holes with 2961.5 meters drilled. Of the 10 holes completed in this program, one was drilled to obtain a sample for ongoing metallurgical testing (hole MHT-003). Six of the ten holes were incomplete at the end of the reporting period, with one diamond hole being still in progress and five diamond holes remaining to be drilled from the RC precollars. Assay results for all holes were still outstanding at the end of the reporting period.

## **EXPLORATION EXPENDITURE**

The majority of expenditure was incurred on MLN1070 where diamond drilling occurred. Work on ML's N1071 and N1127 covered general research on previous exploration activities, there was no field work conducted on these ML's.

Table 3: 2009/2010 Expenditure

Mining Lease	Expenditure
N1070, N1071, N1127	\$699,497

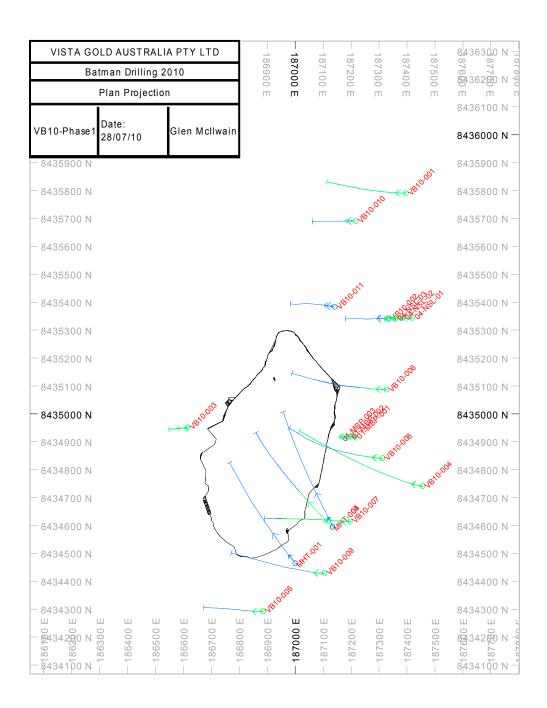
#### **WORK PROGRAMME PROPOSED FOR 2010/2011**

Proposed work will involve metallurgical testing, engineering design and costing on the Batman Pit. Following the study if indicated, further drilling may be undertaken to provide increased confidence in the Pit Design and to target the a possible eastern shoot of elevated grade.

Table 4: Proposed 2010/2011 Expenditure

Tenement	Expenditure
N1070, N1071, N1127	\$1,200,000

Figure 4 Phase 1 2010 / 2011 drilling plan



## APPENDIX I 2009 / 2010 DRILLING CROSS SECTIONS

