

**MT TODD PROJECT
NORTHERN TERRITORY
AUSTRALIA**

**ANNUAL REPORT
FOR THE PERIOD ENDED
4th March 2019**

*Data presented in
GDA 94 Datum*

Map sheets: Katherine 1:250 000 Sheet No. SD53-9
Katherine 1:100 000 Sheet No. 5369
Edith River Region 1:100 000

Target commodity: Au

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SUMMARY

The four mining leases, MLN1070, MLN1071, MLN1127 and MLN31525 comprise a portion of the Mount Todd Project area and cover 55.70 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 & MLN31525 for the period March 5, 2017 to March 4, 2018. 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. MLN31525 was applied for to allow expansion of the RAW water dam capacity and it was granted on the 04/09/2017. Vista Gold Australia Pty Ltd. is the operator and manages the exploration work. Work on the project during the Reporting entailed reducing the water inventory onsite by treating and discharging water from the Batman Pit, dust sampling to obtain baseline figures. % diamond holes were drilled at the Quigleys resource to test for extensions to mineralisation, an additional 8 drillholes were drilled into the heap leech pad with a sonic drill to obtain additional met testing material.

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1. INTRODUCTION

The following report describes work completed on the mining lease group MLN1070, MLN1071 MLN1127 & ML31525 of the Mt Todd Project during the period 4 March 2017 to 5 March 2018.

These tenements are centred 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 Finnis River Group.

Attention has focused on reducing the water balance and drilling at Quigleys

2. TENURE

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

Table 1: Lease Details

LEASE	AREA (square km)	Grant Date	Status	Expiry Date
MLN1070	39.97	5/03/1993	Retained	4/03/2043
MLN1071	13.36	5/03/1993	Retained	4/03/2043
MLN1127	0.82	5/03/1993	Retained	4/03/2043
MLN31525	1.55	4/09/2017	Current	3/09/2042
TOTAL	55.7			

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	
<u>1986</u> October 1986 – January 1987:	Conceptual Studies, Australia Gold PTY LTD (Billiton); Regional Screening; (Higgins), Ground Acquisition by Zapopan N.L.
<u>1987</u> 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)
<u>1988</u> Feb-March: March-April: May: May-June: July: July-Dec:	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) Batman diamond, percussion and RC drilling (Kenny, Wegmann, Fuccenecco) - BP18-70, (6263m percussion); BD1-71, (8562m Diamond); BP71-100, (3065m R.C.)
<u>1989</u> Feb-June: June: July-Dec:	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). 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).
<u>1990</u> 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)
<u>1993 - 1997</u> 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.
<u>1999 - 2000</u> 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.
<u>2000 – 2006</u>	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

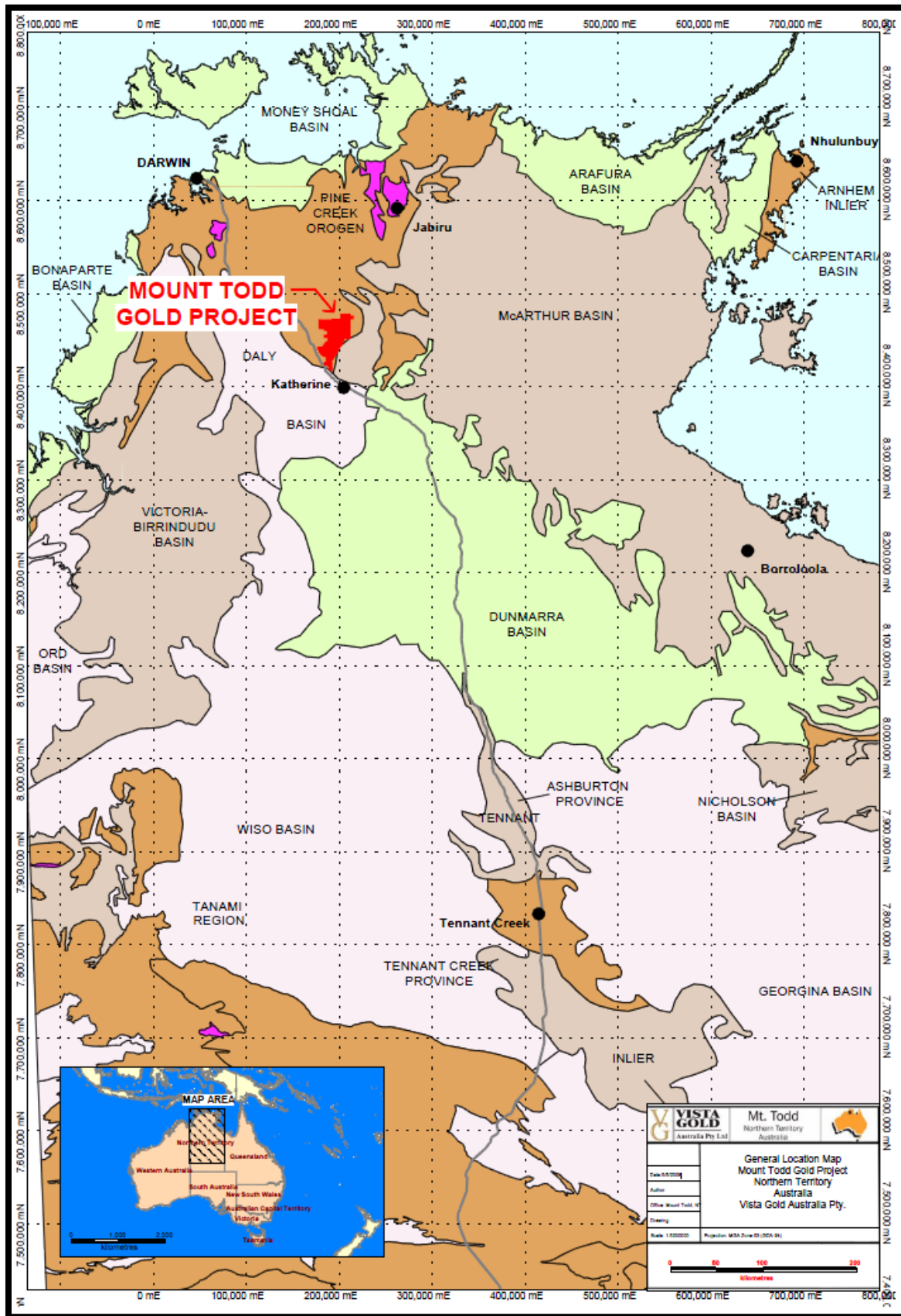


Figure 2: Drilling location 2018-19

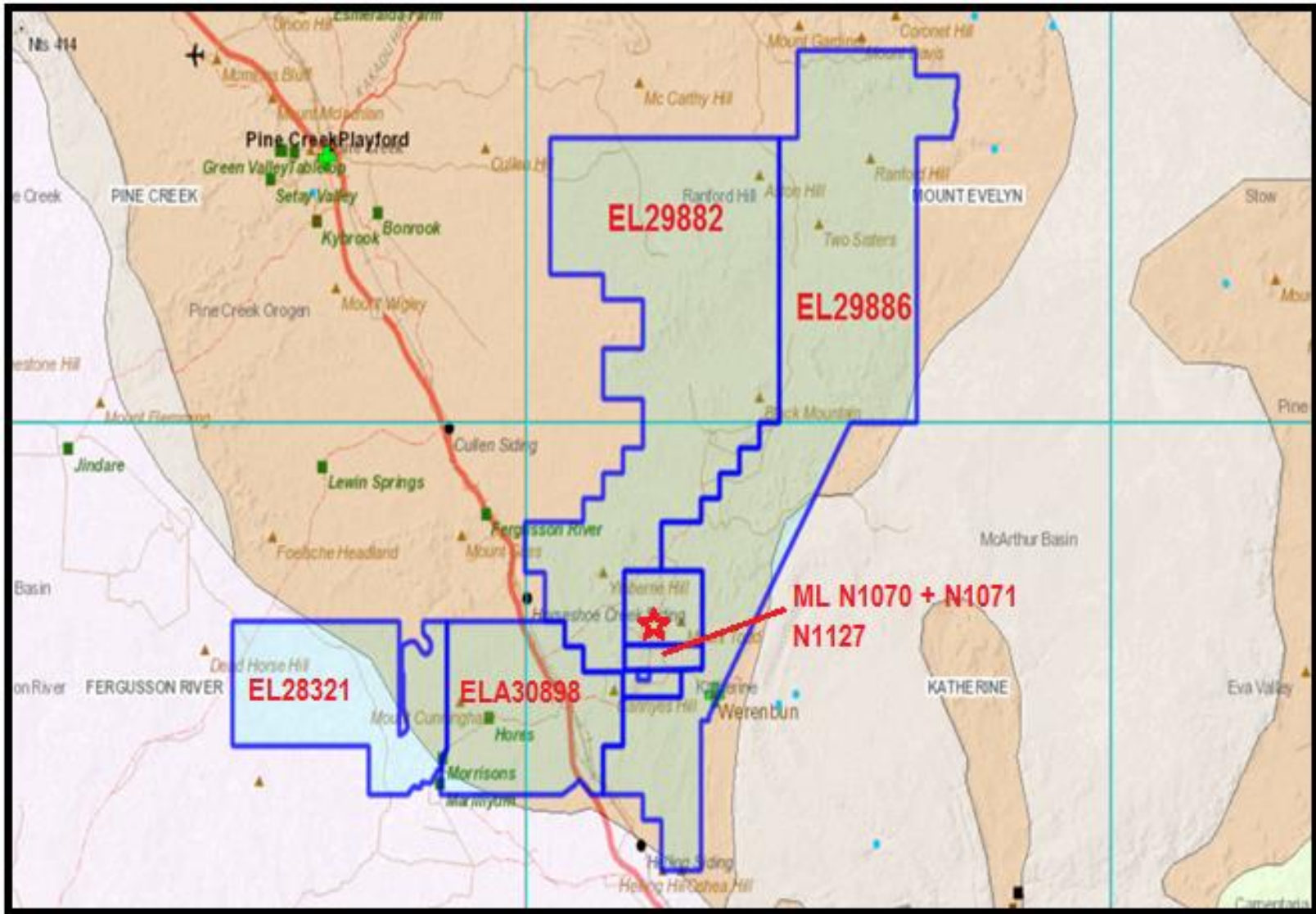


Figure 3 Quigleys diamond drilling detailed plan

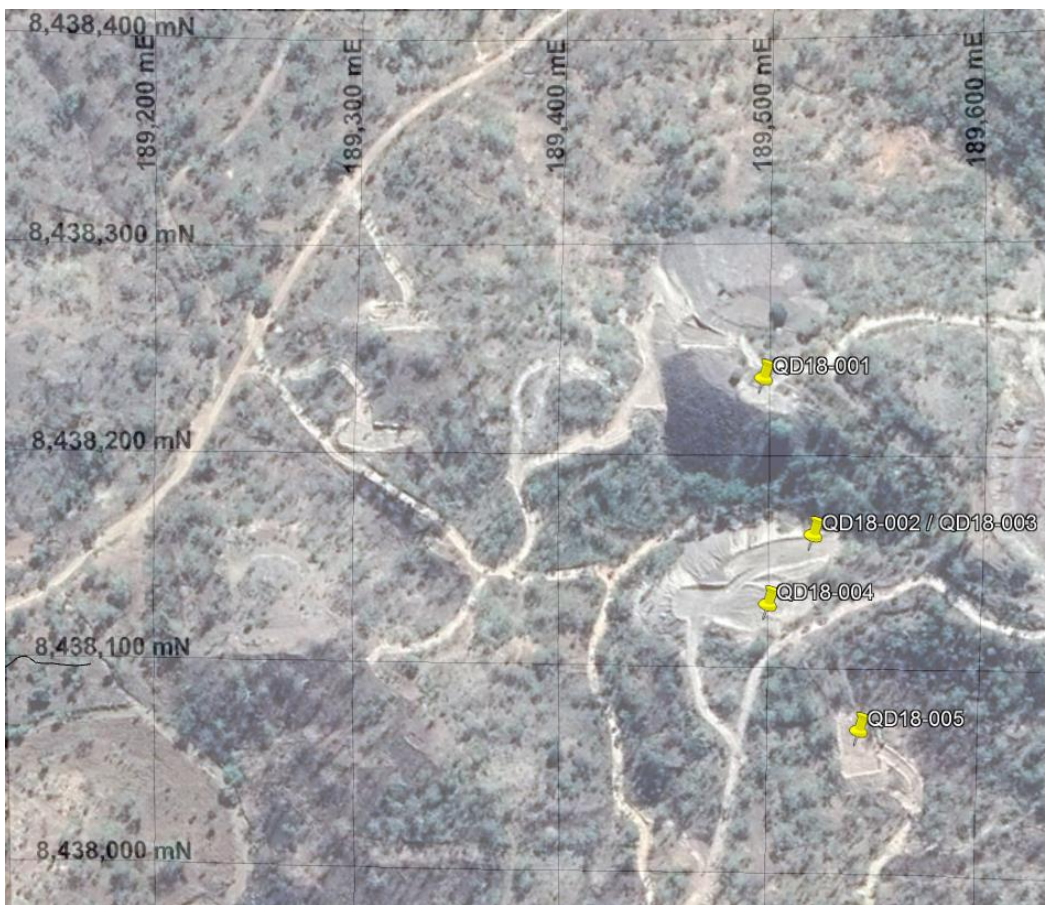
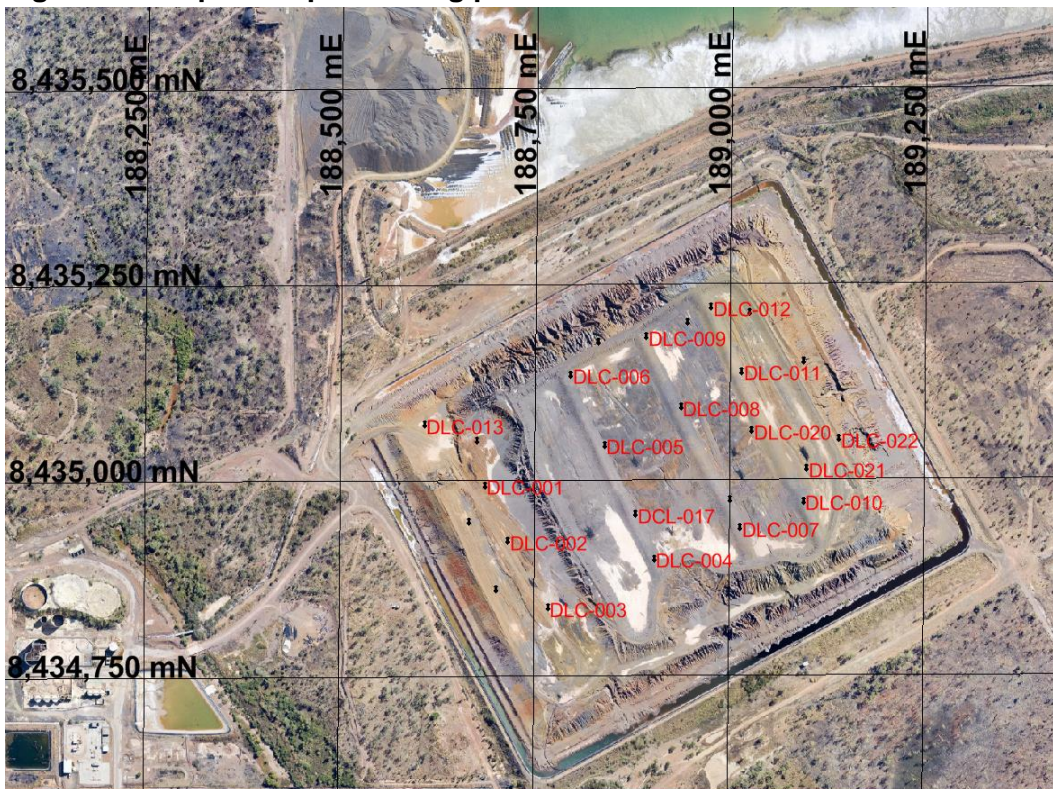


Figure 4 Heap leech pad drilling plan



3. 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 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 EL25670. 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.

4. WORK COMPLETED

Vista Gold Australia has continued work to bring the site into production, including significant drilling to test additional areas at Quigleys and obtain samples from the HLP to test its amenability to ore sorting, ongoing baseline dust studies and continued Care & Maintenance focussing on reducing the water stocks, via both evaporation and water treatment / discharge. This has seen the level of the water in the Batman pit fall to its lowest levels since treatment and release has begun, with over half the water being removed by Jan 2018, the first remnant benches are now visible again within the Pit. 0.4 gegalitres was released from RP3 in conformance with the waste discharge licence and 0.25 gegalitres evaporated on the RP7 / RP1 evaporation system to leave with approximately 5 gegalitres in the Batman pit.

Figure 5 Batman pit water level



The Quigleys drillholes were all logged with structural measurements taken and loaded into datamine for investigation. The Quigleys wireframes will be modified to incorporate the new drilling and a new resource model may be calculated mid 2019. The HLP drilling results were returned and selected samples have been shipped by air to the USA for sorting testwork.

All drilling carried out during the reporting period is summarized in Table 2.

Table 2: Summary of drilling.

Prospect	Lease	Drillhole ID	Northing m (MGA94 z53)	Easting m (MGA94 z53)	Elevation msl	Bearing	Dip	Total Depth
QUIGLEYS	MLN1070	QD018-001	8438220	189508	173	107	63	128.2
QUIGLEYS	MLN1070	QD018-002	8438121	189468	168	33	76	188.1
QUIGLEYS	MLN1070	QD018-003	8438159	189528	162	51	56	110
QUIGLEYS	MLN1070	QD018-004	8438159	189528	162	94	56	99.5
QUIGLEYS	MLN1070	QD018-005	8438054	189547	145	93	63	137.9
								663.7
HLP	MLN1070	DLC19-003	8434831	188769	149	0	90	10
HLP	MLN1070	DLC19-005	8435038	188836	159	0	90	8
HLP	MLN1070	DLC19-008	8435090	188935	160	0	90	15
HLP	MLN1070	DLC19-010	8434967	189094	159	0	90	12
HLP	MLN1070	DLC19-014	8435046	188673	150	0	90	3
HLP	MLN1070	DLC19-017	8434954	188876	157	0	90	15
HLP	MLN1070	DLC19-018	8435180	188826	160	0	90	11
HLP	MLN1070	DLC19-024	8435209	189023	159	0	90	14
								88
TOTAL								751.7

The diamond drilling was conducted by DDH1 Pty Ltd drilling two shifts per day seven days per week, and was mobbed in from the EL's following drilling at Wandie and Goldeneye.

The sonic rig performed the small program on the HLP twinning previously drilled holes to obtain sample for ore-sorting test-work. The samples were bagged and shipped to the USA for sorting test-work, results are awaited.

5. RESULTS

Drilling at Quigleys intersected significant mineralisation consistent or better than expected.

The Quigleys orebody sits approximately 3 km to the north east of the Batman Deposit within the Cullen-Australis structural zone. Primary mineralisation is hosted within a continuous silt bed that has undergone reverse faulting and folding, there are 8 lodes overall, however the 500 and 600 lodes host the majority of the high-grade mineralisation.

Vista has previously drilled 3 holes into Quigleys targeting down-plunge, deep extensions of the 500 lode. The three holes returned positive results in 2011 and the Quigleys deposit underwent a significant remodel, follow up drilling was planned and conducted in 2018.

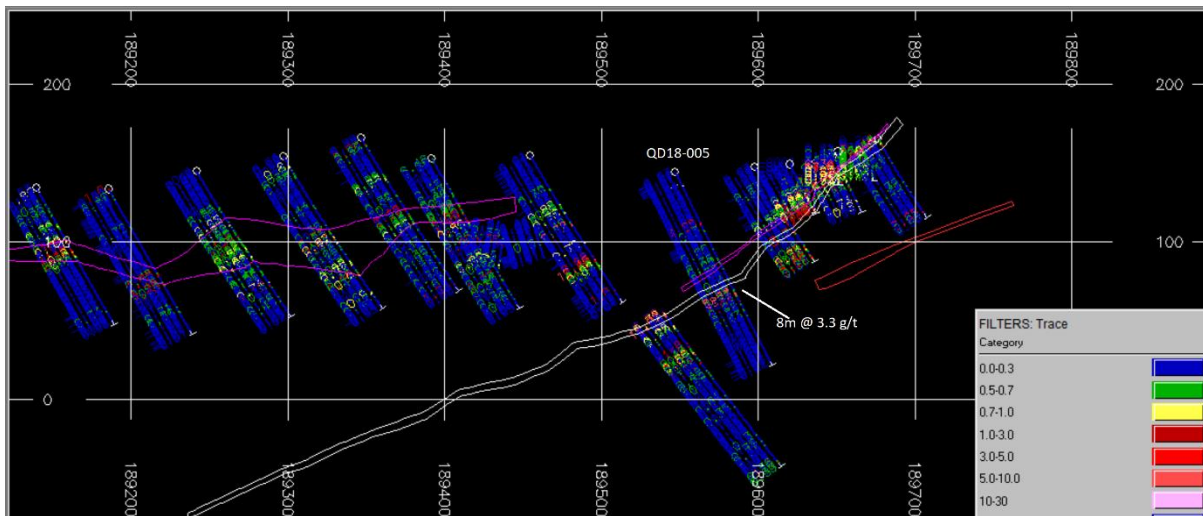
A drill program of 5 holes with 664m was drilled targeting zones likely to host elevated mineralisation and possible extensions to known mineralisation all holes intersected ore with three holes representing an upgrade to the modelled grade.

Mineralisation within the 500 lode is typically +50% milled pyrite chalcopyrite and arsenopyrite with ancillary quartz. Mineralisation in the other lodes comprise quartz veining with similar sulphide content that dip and strike parallel to the primary 500 lode. Quigleys outcrops at surface and exhibits higher grades than those encountered at Batman. The Quigleys deposit remains open both down dip and perpendicular to dip for repeat lodes and further drilling is planned to increase the overall resource grade and tonnes. The following table summarizes the results from the Quigleys drilling:

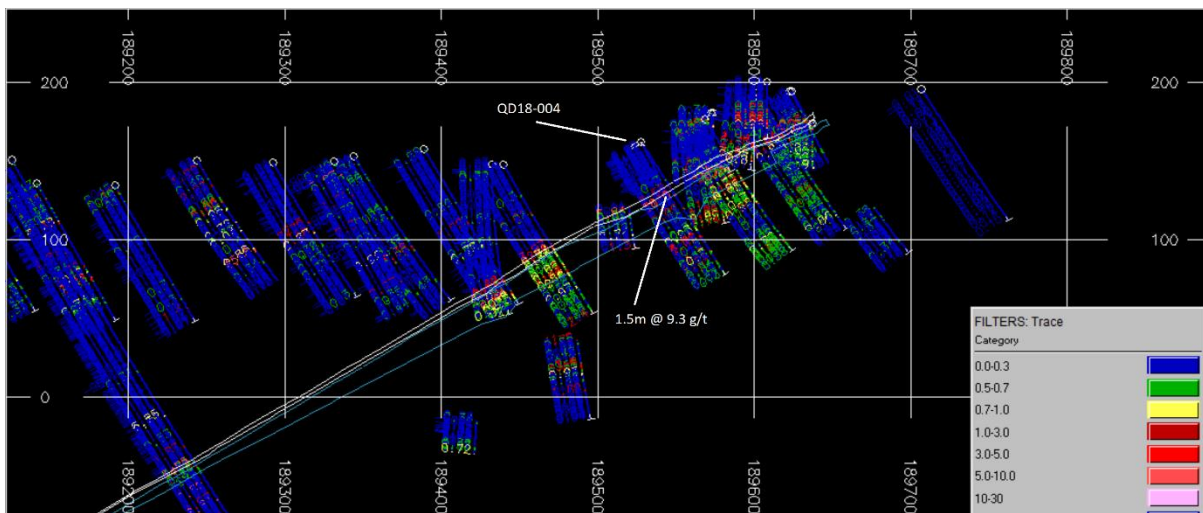
Table 3 Significant assays from 2018 Quigleys drilling

Drillhole ID	Northing m (MGA94 z53)	Easting m (MGA94 z53)	Elevation msl	Bearing	Dip	Total Depth	Intercept 1	Intercept 2
QD018-001	8438220	189508	173	107	63	128.2	8.0m @ 1.2 g/t from 66.78 mdh	16m @ 1.8 g/t from 99 mdh
QD018-002	8438121	189468	168	33	76	188.1	8.5m @1.7 g.t from 72.5 mdh	9m @1.9 g/t from 128 mdh
QD018-003	8438159	189528	162	51	56	110	3.3m @1.6 g/t from 66.8 mdh	6.4m @0.96 g/t from 84 mdh
QD018-004	8438159	189528	162	94	56	99.5	1.5m @9.3 g/t from 39.1 mdh	2m @ 2.8 g/t from 70 mdh
QD018-005	8438054	189547	145	93	63	137.9	8.0m @ 3.3 g/t from 86 mdh	No sig assays

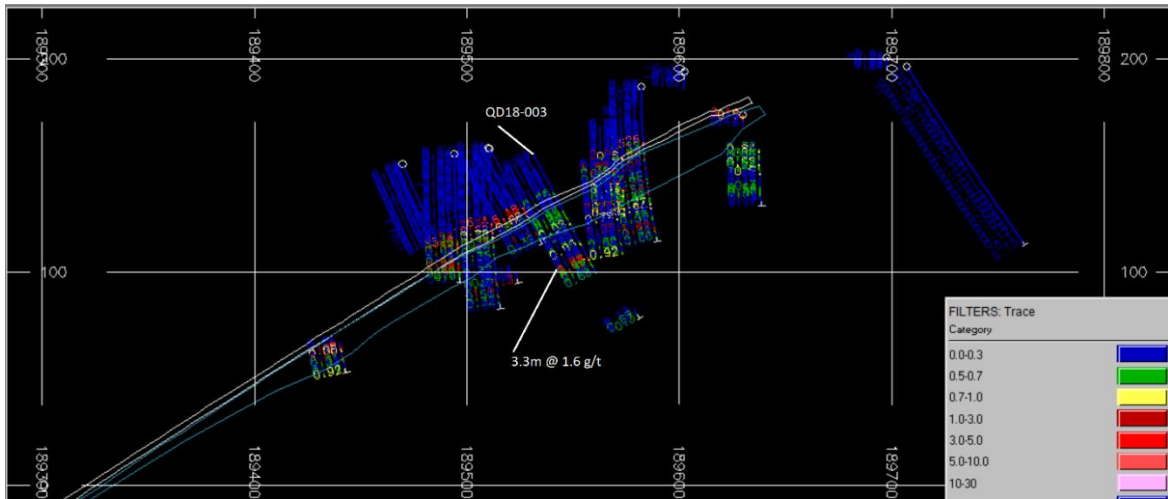
Figure 6 Drill sections at Quigleys



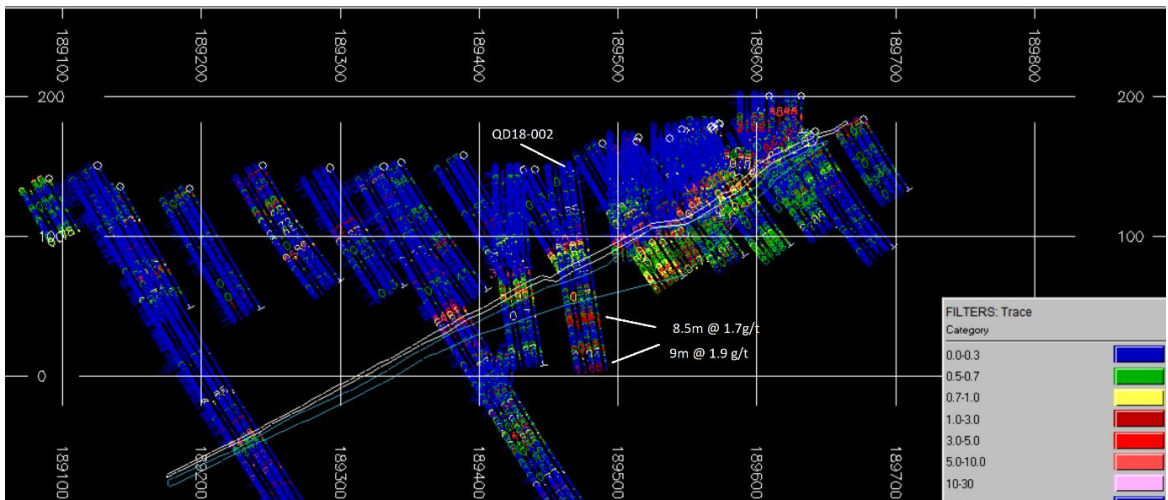
Section 8438050N, QD18-005, intercepts 500 lode (white wireframe) for 8.0m @ 3.3 g/t.



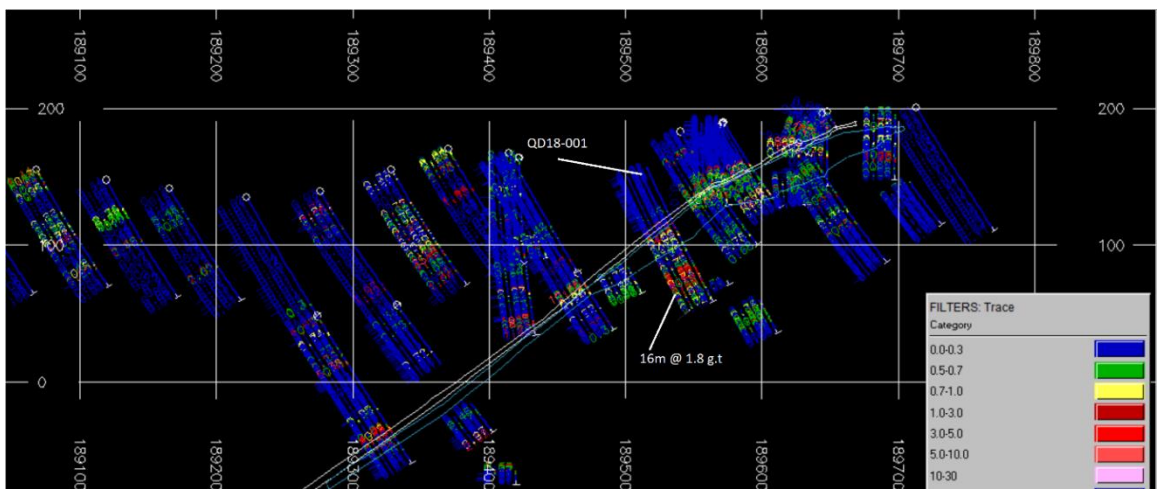
Section 8438150N, QD18-004, intercepts 500 lode (white wireframe) for 1.5m @ 9.3 g/t.



Section 8438175N, QD18-003, intercepts below Faulted 500 lode (white wireframe) for 1.5m @ 9.3 g/t.



Section 8438125N, QD18-002, intercepts below 500 lode (white wireframe) and in 600 lode (blue wireframe), 8.5m @ 1.7 g/t and 9m @ 1.9 g/t



Section 8438200N, QD18-001, intercepts below 500 lode (white wireframe) and in 600 lode (blue wireframe), 16m @ 1.8 g/t

See figures 7-11 appended to report for A0 detailed sections.

5. Core Processing

A drill plan sheet was approved and provided to the drillers that specified Azimuth, dip, total depth, survey intervals and drill orientation intervals, along with target depth. The rig was visited daily and plod-sheets emailed to Vista that detailed the drill progress, charges and hole orientation. Drilling procedure required the drill crew to orient every run of the core using a digital orientation method (in this instance the REFLEX which proved accurate with the majority of orientation runs matching up.) clean the core of any grease or dirt and place a core block at the end of every run detailing meters drilled, core recovered and any core lost. When the rodstring was pulled, a rod count block was also placed as verification of hole depth.

The diamond core was picked up daily from the drill rig and transported back to site in a modified tray of a Toyota landcruiser. The core was strapped down with lids and put up on the logging racks in the core-shed for markup. Core was then placed by the meter in the orientation rack and matched up, then meter marked.

Figure 7 Core racks in logging shed



Following markup, the core was geologically logged using a laptop computer and a site developed spreadsheet. Geological sample intervals were generated and marked on the core using blue paint pen. No sample interval exceeding 1.2m in length or less than 0.2m was selected. The core was half-cut using Almonte automated coresaws preserving the OM line and nominally at 1m spacing, when the geological interval was larger than 2 meters.

Figure 8 Almonte core saw



Samples were bagged into pre-numbered calico bags and packed into green plastic bags weighing no more than 20Kg's per bag. A sample submission sheet requesting 50gram Fire assay for Au and ICPOES multi element work were completed and submitted to NAL requesting the following elements Cu, Pb, Zn, As, Ag, Ni, Bi, Co, Al, Ca, Fe, Mn, Sb, Sr, Mg, Mo. 1 in every 20 samples submitted was a standard for QA/QC purposes. The core was transported via landcruiser ute to NAL in Pine creek, who undertook assaying

Sample prep for half core is drying at 110 C, then jaw crushing whole sample to -7mm then cone crushing to -4mm. One Kg of sample is split through a jones riffle splitter and the sample pulverised in a Keegor vertical spindle pulveriser to 90% passing 100 Um. The sample is roll mixed on a rubber mat and 400 to 500 gram cut as the assay sample. The jaw crusher and the cone crusher are cleaned with compressed air between each sample, The Keegormill has a barren quartz coarse sand flush pulverised after every sample and is then cleaned with compressed air.

Au assays are done using a fire assay procedure, a 50 gram sample charge is mixed with 150 gram of fire assay flux in a fire clay crucible and tumbled in a flux/sample mixer for ten minutes.

The flux is predominantly lead oxide with sodium carbonate, sodium tetraborate, silica and carbon [flour] with a small amount of silver nitrate to ensure sufficient Ag for parting the dore prill after cupellation. The crucible is fired in a gas fired furnace at 1000C for 50 minutes [one hour for high sulphide samples]. After fusion the charge is poured into a cast iron mould and allowed to cool, there are then two phases in the mould, a slag containing all the gangue minerals in the sample and a discrete lead button that contains all the Au & Ag. The button is cupelled in a magnesium oxide cupel in a gas fired muffle furnace at 1020C. the lead button oxidizes and the cupel absorbs the lead oxide until the Au & Ag is all that remains. The cupel is removed from the furnace and cooled. The dore prill is transferred to a new pyrex glass test tube and Nitric acid is added to the tube to dissolve the Ag in the dore prill and the Au dissolved with aqua regia, then diluted with demineralised water and the Au content determined using AAS.

Multi element assays are done using a mixed HNO₃/HCl/HClO₄/HF acids digestion in a teflon vessel, the sample is taken to white fumes of HClO₄ on a hot plate at 180C, cooled and then leached with conc HCl, the assay is diluted with demin water and the elements determined by ICP-OES and ICP-MS instrumentation.

Results were emailed back and following checks on standards, loaded into datamine for interpretation.

Drilling at the HLP was completed utilizing Bores NT sonic rig, sample recoveries were very good and the program was completed under budget and on time. Samples were dried and split with meter interval samples sent to NAL to assist in selection of composites for the ore sorting test-work. Once assays were returned, composites were bagged up and placed in 20ltr plastic drums and air-freighted to the USA. Results of the sorting testwork is awaited.

1. EXPENDITURE

Most of the expenditure was incurred on MLN1070 involved the water treatment / discharge and Quigleys drilling program. Remaining expenditure was directly related technical studies.

Quigleys Drilling	\$0.31 million
HLP drilling	\$0.12 million
Maintenance, site and dewatering infrastructure	\$0.347 million
Water treatment and discharge from Batman	\$0.491 million
Mapping + Sampling	\$0.01 million

Table 4: 2018-2019 Expenditure

Mining Lease	Expenditure
N1070, N1071, N1127, N31525	\$1.278

7. WORK PROGRAMME PROPOSED FOR 2019-2020

Focus on the ML's will be continued Brownfields exploration, targeting improvements in Quigleys, with additional drilling planned dependant in follow-wp resource modelling. A feasibility study may be undertaken to update costs and treatment methodology dependant on the final TOMRA met testing results. Dewatering, possible water treatment and other C&M duties will be carried out as required to maintain the site and prepare for future mining.

Table 5: Proposed 2019-2020 Expenditure

Tenement	Expenditure
N1070, N1071, N1127, N31525	\$1.3 million

