

MINING MANAGEMENT PLAN



Operator: Newmont Exploration Pty Ltd
Project Name: Fenton Exploration Project
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Newmont Fenton Exploration Project Mining Management Plan




Prepared for Department of Primary Industry & Resources (NT)

Prepared by Newmont Exploration Pty Ltd (ABN 65 006 306 690)

I Philippa Sivwright, Newmont Exploration Pty Ltd, Regional Exploration Manager, declare that to the best of my knowledge the information contained in this mining management plan is true and correct and commit to undertake the works detailed in this plan in accordance with all the relevant Local, Northern Territory and Commonwealth Government legislation.

Signature:

Date: 19/07/2018

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2018 MINING MANGEMENT PLAN

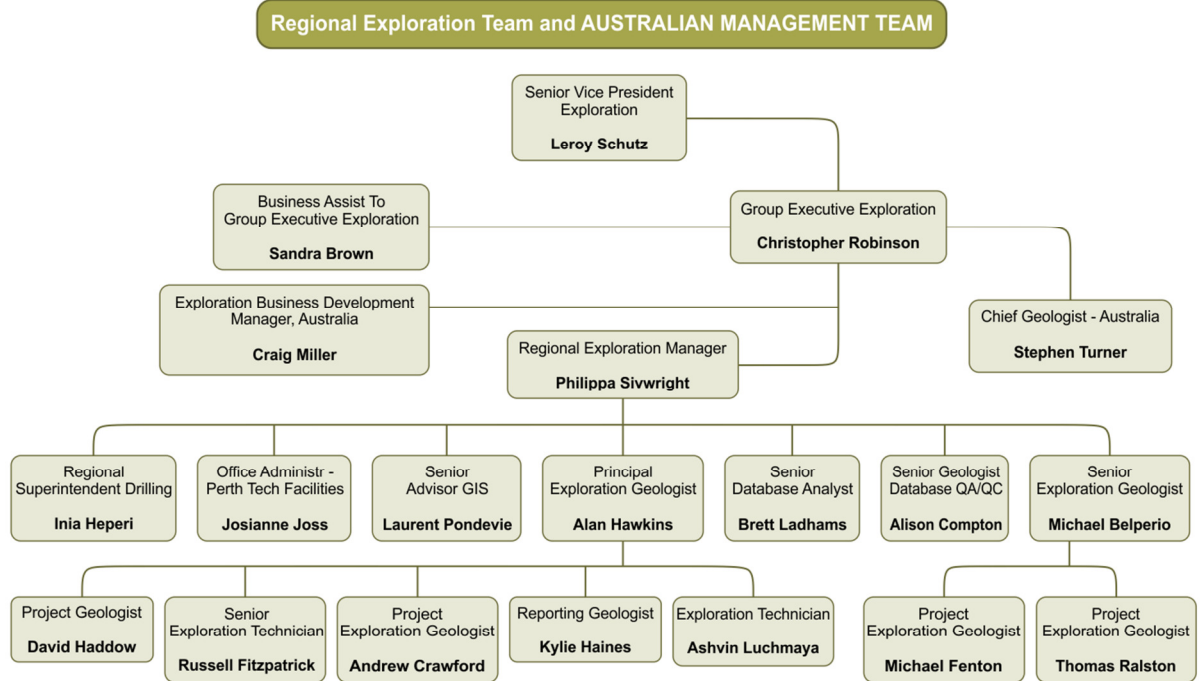
FENTON EXPLORATION PROJECT

Amendments

Section	Amendment

1 OPERATORS DETAILS

Operator Name: Newmont Exploration Pty Ltd (Figure 1 – Regional and Global Exploration Team Organisation Structure)



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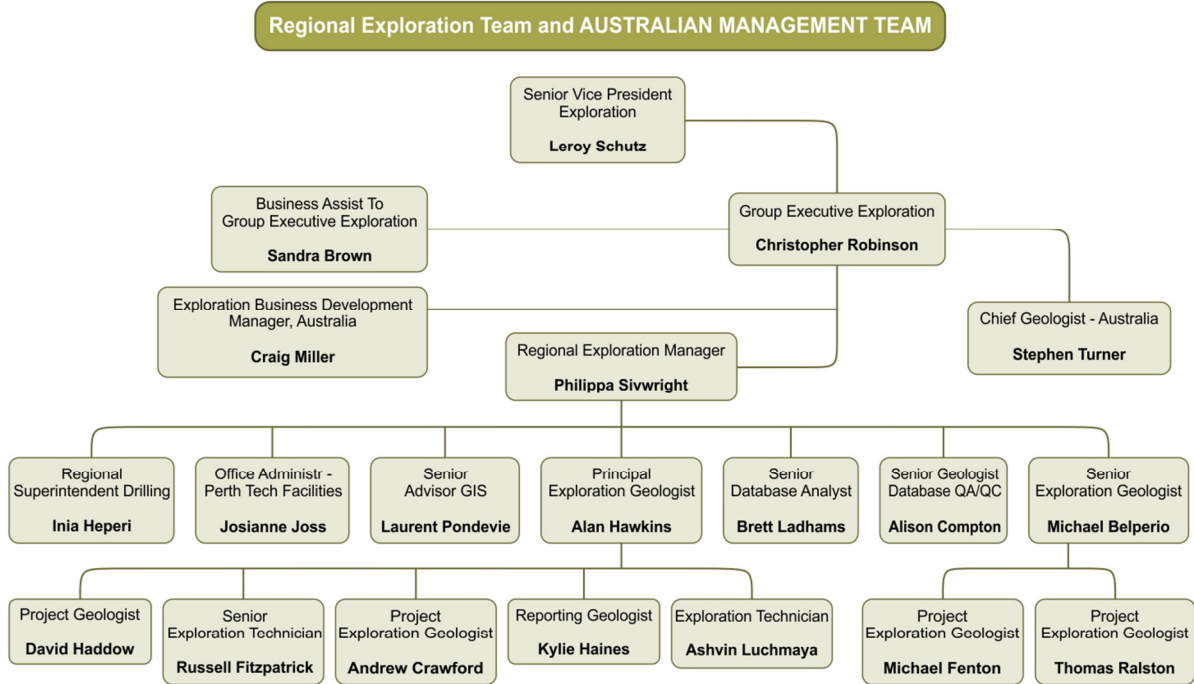
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1.1 Organisational Structure

Figure 1 – Regional and Global Exploration Team Organisation Structure



1.2 Workforce

Personnel conducting exploration activities at the Fenton Exploration Project (Fenton) (EL31350) will be from Newmont's Regional Generative Exploration (GENEX) team based out of the Newmont Technical Facility in Welshpool, Western Australia. The GENEX team consists of approximately eight geoscientists and four geological field technicians assisted by a number of environmental and heritage professionals. The company may also engage contract drilling companies, geophysical companies, earthmoving & rehabilitation professionals and local indigenous entities to assist in completing the proposed work. Exploration personnel will be based at either the Douglas-Daly Tourist Park, Middle Creek Station or in Pine Creek whilst carrying out exploration activities at Fenton.

Contractors to be used by the GENEX team include:

- Surface Exploration Drilling – DDH1 Drilling;
- Earthmoving & Rehabilitation – Shane Izod, Middle Creek Station Owner

2 Stakeholders

Newmont's Sustainability and Stakeholder Engagement Policy establishes Newmont's commitment to transparently communicate with stakeholders and to respect all cultures. Supporting this policy are Newmont Standards that set minimum requirements for Newmont operations, including exploration activities.

The Stakeholder Relationship Management Standard sets the minimum requirements to identify and engage people and groups who may be impacted by our activities and outlines processes to develop and maintain constructive, long-term stakeholder relationships.

The Fenton project is a new addition to the Newmont portfolio and the key stakeholders and interested parties that have been consulted to date include:

- Northern Land Council (NLC);
- Aboriginal Areas Protection Authority (AAPA);
- NT Department of Primary Industry and Resources (DPI&R);
- NT Department of Environment and Natural Resources (DENR);
- Middle Creek Station – Shane Izod;
- Douglas Daly Tourist Park – Brad Hogan;
- Bacchus Resources Pty Ltd – David Ward and Vaughan Cullen; and
- Workforce and contractors.

Stakeholder engagement related to this project will be managed in accordance with the Stakeholder Relationship Management Standard, including the management of any expectations, commitments and complaints.

3 PROJECT DETAILS

Project Name:	Fenton Exploration Project
Tenements:	EL31350 and EL 31407 - illustrated on Figure 2.
Holder:	Newmont Exploration Pty Ltd (100%)

Registered Operator: Newmont Exploration Pty Ltd

Land Council Representing Traditional Owners: Northern Land Council

Site Access: The Stuart Highway runs to the east of the Fenton Project area. Other public roads and station tracks are used to access various areas within the project

Table 1 – Important details regarding the Fenton Exploration Project leases

Lease	Lease Name	Grant Date	Expiry Date	Area	Holders
EL 31350	Fenton	22-Jun-17	21-Jun-23	106 blocks	Newmont Exploration Pty Ltd
EL 31407	Fenton North	20-Jul-17	19-Jul-23	69 blocks	Newmont Exploration Pty Ltd

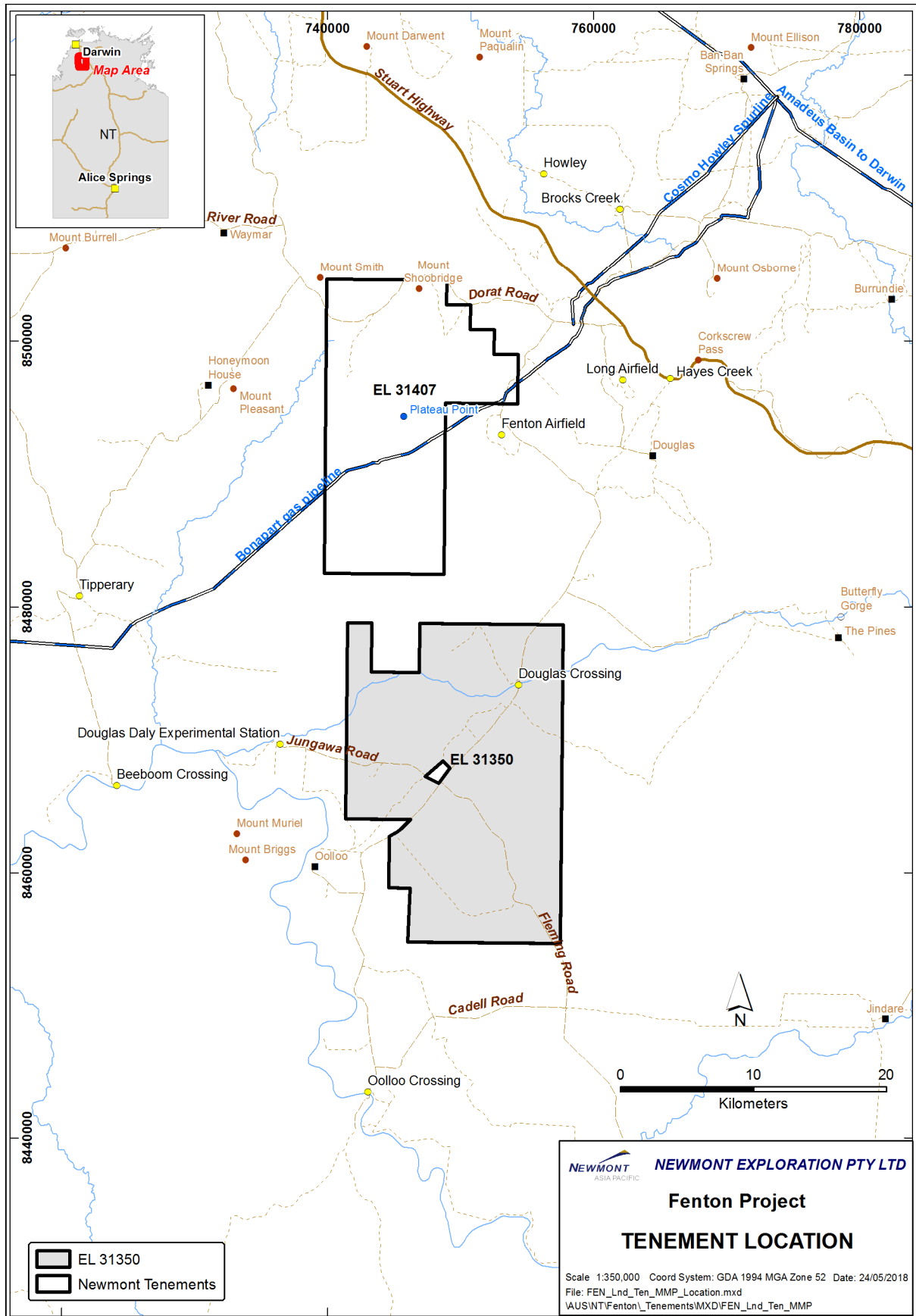
3.1 Location & Access

The Fenton Exploration Project is located 130km southeast from Darwin, Northern Territory, Australia. The logistics of the property are excellent: the area is well serviced by the Stuart Highway, a major highway that runs from Darwin to Alice Springs, with sealed roads and good quality access tracks present within the tenement areas (Figure 2).

The project is also proximal to the main Darwin-Adelaide rail link from the north coast. The northern tenement (EL31407) is traversed by the Bonaparte gas-pipeline and is in proximity to the Fenton and Long airfields (Figure 2).

Approval in this MMP is requested for work to be carried out on EL 31350 only.

Figure 2 – Fenton Exploration Project Location and Access Map



3.2 History of Development

3.2.1 General

The paragraphs below broadly outline the exploration history of the Fenton licenses (EL31350 and EL31407). For more detailed accounts of the work programs completed in any given year, and the results returned, the reader is directed to the relevant annual report(s).

3.2.2 History of the Fenton Exploration Project

The Pine Creek Orogen has been explored for gold for over a century, following the discovery of gold from a hole dug for the construction of the overland telegraph line in the 1870's. A substantial quantity of gold was then produced from 1884 – 1915, with peak production around 1891 – 1895.

Modern gold exploration did not commence until 1980, when increased gold prices and improved mining and metallurgical technology drove renewed exploration. Systematic geological mapping, geochemical surveys and drilling, mostly were conducted around previously known occurrences. A number of previously known occurrences such as Enterprise, Cosmo Howley, Golden Dyke, were re-evaluated and subsequently mined. Several new gold deposits were also discovered. The depressed gold price during the 1990's curtailed exploration from the late 1990's until a recovery in 2005 stimulated further exploration and mining.

The Pine Creek shear hosts most of the known deposits including the Cosmo Howley gold deposit (2Moz+ Au). The Pine Creek Property is located approximately 50km to the south west from the Cosmo Howley Mine but connected by the same target horizon (Koolpin Formation).

The project is hosted by the regional Fenton shear zone, which is covered by some younger sedimentary units, notably the Gerowie Tuff, the Mount Bonney Formation and Cambrian limestone units. This region remains substantially under explored with the majority of past exploration efforts being focused on uranium. The Fenton shear was not seriously explored until a regional Homestake program was carried out in the 1990's (section 3.2.3).

Initial limited exploration in the area involved an aero-magnetic survey, some geochemical surveys and a photo-geological survey. All exploration up to this time appeared to rule out any major surface or subsurface gold mineralisation because of the younger overlying sedimentary horizons.

3.2.3 Homestake Gold of Australia

Homestake Gold of Australia (HGAL) was granted tenure over the ground on 10 November 1996 and approached the area with the new strategy of exploring for concealed (“under cover”) gold deposits. HGAL had noted the similarities between the stratigraphy and mineralisation of the South Alligator Group, especially similarities between the Koolpin and Homestake Formation, which hosts the giant Homestake deposit (~57Moz Au) in Lead, South Dakota (the “Homestake deposit”). This assumption was the basis of their exploration model. The following account of HGAL exploration is taken from Hronsky (2013).

HGAL's regional diamond and RC drilling program intersected material gold levels in two drill holes during this drilling programme: FEND14 and FEND18 (currently on Newmont's EL 31350) before the exploration program was prematurely terminated because of worsening gold prices and a change in corporate strategy.

FEND14 intersected 17m @ 0.74ppm Au (from 610 - 627m) within a 150m-thick zone of pyrrhotite-rich, iron-rich, chlorite and chert sedimentary package within a felsic hanging wall unit. Despite the modest grade, the hole confirmed the presence of a broad gold-bearing iron-formation, and validated the exploration model with the presence of “Homestake-style” gold mineralisation.

FEND18 was drilled 1,200m south-southeast from FEND 14 and intersected 20m @ 1.74ppm Au within a broad zone of continuous stratabound mineralisation from 423 to 443m. The FEND18 intersection was approximately 200m above the intersection made in FEND14. FEND18 was significant in that it confirmed not only the consistency of broad zones of gold mineralisation initially identified in FEND14, but also encountered various high-grade gold intersections (including visible gold at 423m), confirming the strength of the system.

Despite HGAL’s premature withdrawal, the exploration program was successful in demonstrating the previous unexplored Fenton Shear hosted gold mineralisation and that the gold mineralisation was similar in nature and probably in age to that found at Cosmo Howley, providing some proof of concept for the HGAL “Homestake Gold” exploration model.

3.2.4 St George Mining Ltd

St George Mining Ltd (SGML) completed an option agreement to acquire 80% of EL 27732 (now covered by EL 31350) on the 1st of March 2009, from holders, James Stewart (50%) and Geotech International (50%). This tenement formed part of SGML’s Pine Creek Property and Blue Thunder Gold Project covering the area of the Douglas Daly River and approaches. The Blue Thunder Gold Project was a contiguous area comprised of ELs 27732, 28016, 28017, 28232, 28332, 28463 and 28465.

In 2011, SGML conducted a multi-element MMI soil geochemical survey that covered and in-filled an older MMI gold survey by HGAL, re-logging of the two historical diamond holes drilled by HGAL including analysis by CSIRO HyLogger technology, (a hyperspectral logging tool that uses various light bands to determine mineral content) and the drilling of diamond drill hole PCDD001.

The results of the HyLogger showed that despite the higher grade and the presence of visible gold in FEND18, it was the lower grade FEND14 drill hole that was closer to the core of the gold system. This finding was supported by the MMI multi-element soil geochemical survey conducted by SGML in 2011. According to Hronsky (2013), the MMI survey recorded the highest Au + Ag + Mo values in the northwest of the survey area. Elevated levels of these element associations are typically indicative of proximity to the core of a gold system. These high geochemical values are in the area surrounding FEND14. The HyLogger analysis of FEND14 indicated a high Mg-chlorite response, which indicates a proximity to the inner part of a gold system.

Structural analysis of other gold deposits in the Pine Creek Orogen indicate a consistent pattern where gold mineralisation is mainly localised in the northerly trending hinges and moderately dipping western limbs of thrust folds. The earlier thrust folds are later reactivated as shear zones with shearing being most intense in the hinge areas and the sharply overturned sub-vertical eastern limbs.

PCDD001 was drilled adjacent to FEND18 and was the first orientated core hole drilled in the area, reaching a target depth of 550m. The orientated drill hole initially encountered generally flat lying post-mineralisation sedimentary units before passing into a long interval of intense alteration and brecciation, which obscured any specific structural features (Hronsky, 2013).

The CSIRO HyLogger spectral mineral analysis and visual core logging shows the hole to be pervasively altered (silica + albite + pyrite). The drill hole did not intersect any anomalous gold mineralisation, despite its proximity to FEND18. The technical review of the exploration data suggested FEND18 encountered a steeply dipping footwall zone of gold mineralisation

which is hosted within the narrow and sharply overturned eastern limb of a thrust fold. PCDD001, which was marginally to the east, was interpreted by SGML (Hronsky, 2013) to have intersected the footwall of the overlying Koolpin formation, the target formation for gold mineralisation. The footwall of the Koolpin formation is the unconformable sub-vertical boundary between the overlying South Alligator group of sedimentary units and the underlying Mt Partridge group. This unconformity is a major and long lived structural zone and this helps to explain the intense alteration, mineralisation and brecciation encountered in PCD001.

The lack of any anomalous gold levels in association with the silicification and sulphide mineralisation initially identified in the drill core, was suggested by SGML (Hronsky, 2013) to be related to the younger hydrothermal event at Pine Creek, which is linked to uranium and/or rare earth element mineralisation.

On 30th June 2014, SGML relinquished all interest in their Pine Creek Project to concentrate on gold and nickel projects in Western Australia.

3.2.5 Newmont Exploration Pty Ltd

EL 31350 was granted to Newmont Exploration Pty Ltd (Newmont) on 22nd June 2017, which covers the historic anomalous HGAL drilling and SGML drill hole.

Newmont's strategy is to effectively test the proposed western limb of the Fenton shear zone, given that other gold deposits in the Pine Creek Orogen indicate a consistent pattern where gold mineralisation is mainly localised in the northerly trending hinges and moderately dipping western limbs of thrust folds. The HGAL drilling (which was not orientated) was drilled from east to west which is not the optimum azimuth to test a westerly dipping feature. The SGML drill hole, although drilled from west to east, appears to have been collared too far to the east and drilled at too steeper dip (-80°) to effectively test the western limb and / or hinge position.

3.3 2018 Proposed Activities

3.3.1 Overview

The work program proposed will involve two geologists and up to two field assistants working from the third quarter of the year up to the fourth quarter, prior to the onset of the wet season. Track clearing for the 2018 program will be minimal and localised to the areas where drilling activities will take place. Drilling will be carried out in the work area shown in Figure 3, which also shows track access into the area of interest. Four diamond drill holes are proposed however specific collar locations have yet to be determined, as data compilation and interrogation is still in progress.

A summary of the work proposed for the 2018 program is provided in Table 2.

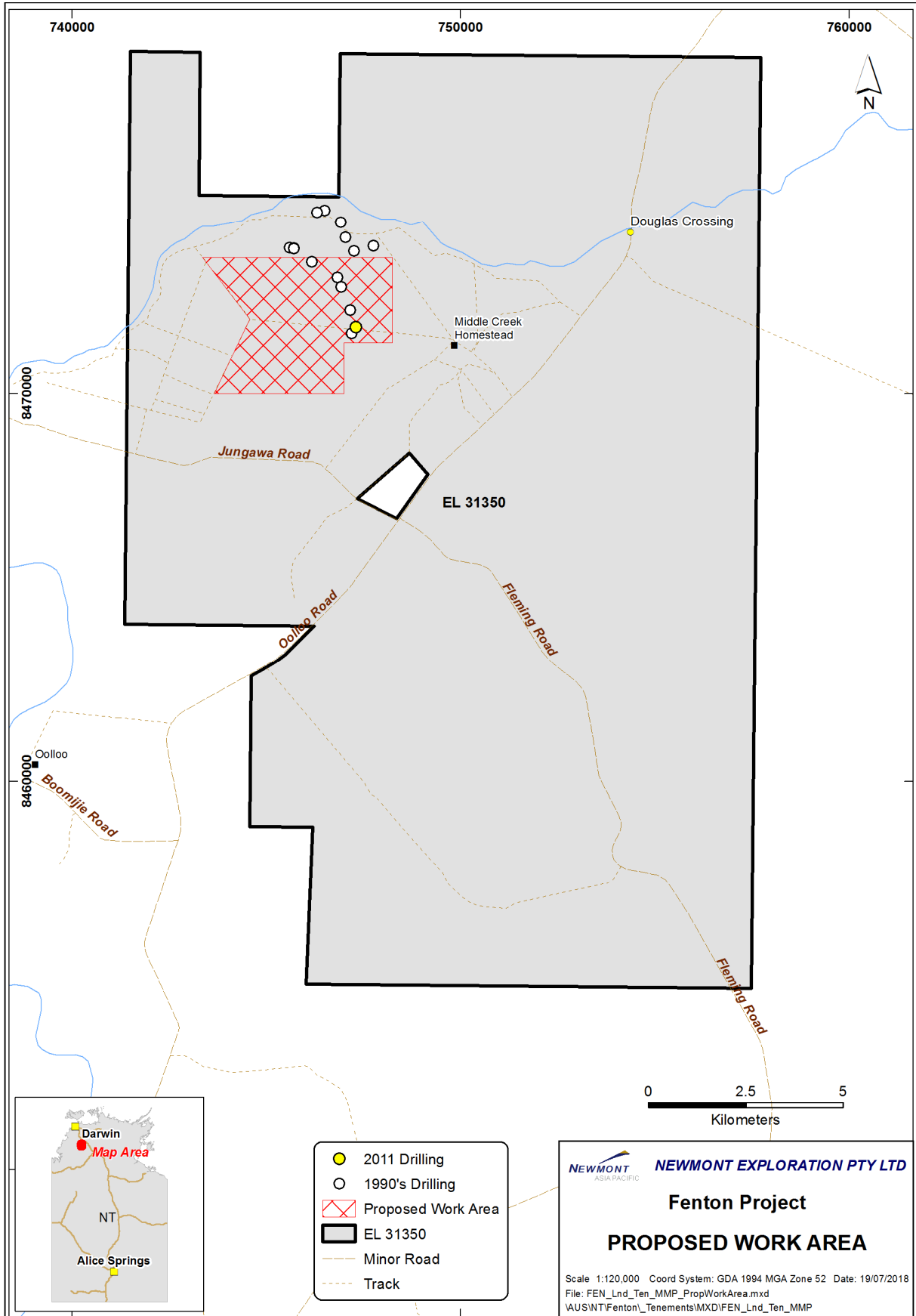
Table 2 - 2018 Summary of Proposed Exploration Activities for EL31350.

Mining Interest	EL31350
Target commodity	Gold
Type of surface sampling	N/A
Number of proposed surface samples	N/A
Length of track clearing (length x width m)	<2,000m x 4m
Number of holes to be drilled	4
Maximum depth of holes (m)	1,000
Total metres to be drilled (m)	4,000
Number of drill pads to be cleared	4
Number of camp pads to be cleared	N/A
Number of sumps to be cleared (volume m³)	8 (144)
Total road area to be disturbed (hectares)	<0.08
Total drill pad area to be disturbed (hectare)	0.64
Total camp pad area to be disturbed (hectares)	N/A
Total area to be disturbed (hectares)	0.72
Drill holes to be capped / plugged	4
Total area to be rehabilitated (ha)	0.4

NOTE: the numbers proposed in this table represent the maximum work program for which authorisation is sought.

Four diamond drill holes are planned to test the Fenton shear zone which will be drilled to a depth of potentially 1,000m deep. At the time of writing, Newmont geologists are assessing the optimum positions to collar the drill holes from. The significant post mineralisation cover (+200m of Cambrian limestone) could potentially present specific exploration and operational challenges for this project. At this stage it is envisaged that two initial drill holes will be completed, with the potential completion of the remaining drill holes subject to the findings of the first two.

Figure 3 – EL 31350 Proposed 2018 Work Area



3.3.2 Exploration Works Support and Logistics

3.3.2.1 Work Crew and Plant

The work program proposed will involve up to two geologists, up to two field assistants, and a drill crew of up to six staff working on a rotational basis. The number of people likely to be working in the area at any one time will vary from a minimum of three to a maximum of seven.

The main plant to be used in the 2018 Work Program is anticipated to consist of:

- One light vehicle – transport;
- Drilling rig – multi-purpose RC/diamond (DDH1 Drilling);
- Support vehicles (compressor truck, rod truck, water truck etc);
- A front-end loader / backhoe – for clearing tracks; and for digging sumps.

3.3.2.2 Ground works - access tracks and drill pads

Generative exploration activities are conducted in accordance with Newmont's global commitment to sustainable development (Newmont's Code of Conduct, Policies and Standards are publicly available on Newmont's website). Exploration activities within the Australian region are further guided by specific internal procedures as described in the *Australia Generative Exploration Procedures Manual – Sustainability and External Relations* (Appendix A). This manual includes field guidance for undertaking clearing necessary for access tracks and/or drill pads.

This includes utilising existing access tracks and cleared areas wherever possible (as shown in Figure 3). Clearing for access tracks or drill pads will be completed (by the Middle Creek Station owner) in a "blade-up" fashion wherever possible, so as to remove surficial vegetation while imparting minimal disturbance to the topsoil. Any topsoil disturbed will be stockpiled for use in the rehabilitation process. Identified drill pads (refer to Table 2) will be cleared at a nominal area of 40m x 40m. These dimensions have historically proven to be most appropriate to accommodate the drill rig and support vehicles, as well as equipment, consumables and water sumps.

Rehabilitation activities for areas cleared during the exploration program will be undertaken when it is deemed that no further exploration activities will be carried out in the particular area. The rehabilitation work will be completed in accordance with the *Mining Management Act* (NT) and according to the requirements outlined in Newmont's Closure and Reclamation Management Standard. The *Australia Generative Exploration Procedures Manual – Sustainability and External Relations* also includes a Rehabilitation SER Checklist to help manage this process.

3.3.2.3 Accommodation / Exploration Camp

Accommodation for the project, for Newmont personnel, will be at the Douglas Daly Tourist Park on Ooloo Road, Douglas Daly.

At this stage, the drill crew from DDH1 will either stay in their own caravans on Middle Creek Station, or at the station homestead, depending on caravan availability. The Middle Creek Station has a homestead and storage shed which the landowner has made available to Newmont and its drilling contractor. It will not be necessary to establish a new camp or storage facilities.

3.3.2.4 Water Use

All water use will be managed in accordance with Newmont's Global Water Strategy to manage water as a precious resource and work collaboratively to create value and improve

lives through sound water stewardship. Newmont's Water Management Standard sets the framework to ensure activities avoid, minimize and mitigate environmental and social water impacts. Water is only required for this project for drilling purposes and it will be sourced from Middle Creek Station.

3.3.2.5 Hydrocarbon Storage

The safe and environmentally responsible management of hydrocarbon and chemical products that may be used during generative exploration activities is guided by the Newmont Hazardous Materials Management Standard. This Standard sets the minimum requirements for the management of hazardous materials including planning and design (e.g. specifying containment requirements), management and implementation of hazardous materials (e.g. regular inspections) and performance monitoring (e.g. reporting requirements). Any hydrocarbon contaminated material will be excavated and taken offsite for remediation.

3.3.2.6 Waste

The Newmont Waste Management Standard sets the minimum requirements for the management of hazardous and non-hazardous wastes and wastewater. Additional guidance is provided in the *Australia Generative Exploration Procedures Manual – Sustainability and External Relations*. Specifically, all waste generated in association with the exploration project will be collected and transported to Pine Creek to be disposed of. No waste is planned to be buried or disposed of within the exploration tenements.

3.3.2.7 Environmental Protection

The exploration activities proposed within this MMP are not considered to have any long term impact on the local or regional environmental values of the area. In accordance with Newmont's Biodiversity Management Standard a desktop study to review the known biodiversity values of the Fenton project area was completed in February 2018. The results of this study are described in section 4.1.5. A risk assessment has also been completed and this is provided in section 5.3.

3.3.2.8 Cultural Heritage Management

Newmont recognises the unique rights, culture and history of Indigenous Peoples and aims to earn the trust and support through meaningful engagements and partnerships. Newmont's activities are guided by the social responsibility standards, specifically the Cultural Resource Management Standard and the Indigenous Peoples Standard. The Northern Land Council has already been engaged by Newmont regarding this project and a search of the Aboriginal sacred sites register (maintained by the Aboriginal Areas Protection Authority (AAPA) under the NT *Aboriginal Sacred Sites Act*) has been completed (refer to Appendix ?). No recorded sacred sites have been identified within the tenement area. However, in the event that any artefacts that may be culturally significant are identified during exploration activities, works will be amended to ensure that the area is not disturbed and the Northern Land Council and AAPA will be contacted for further advice. All Newmont Australia employees are provided cultural training to understand the importance of protecting sacred sites.

4 CURRENT PROJECT SITE CONDITIONS

This section describes the known natural values of the project area covered by EL31350 (and to a lesser extent EL31407). The project is located approximately 50km east of Pine Creek and 30km south of Adelaide River townsites. The Stuart Highway is located to the east of the tenements with direct access to the project area from Oolloo Road, Dorat Road and Fleming Road. The project is located in the tropical savannah region which is characterised

by a distinct six-month dry season (from April – October) followed by a humid wet season (from November to March).

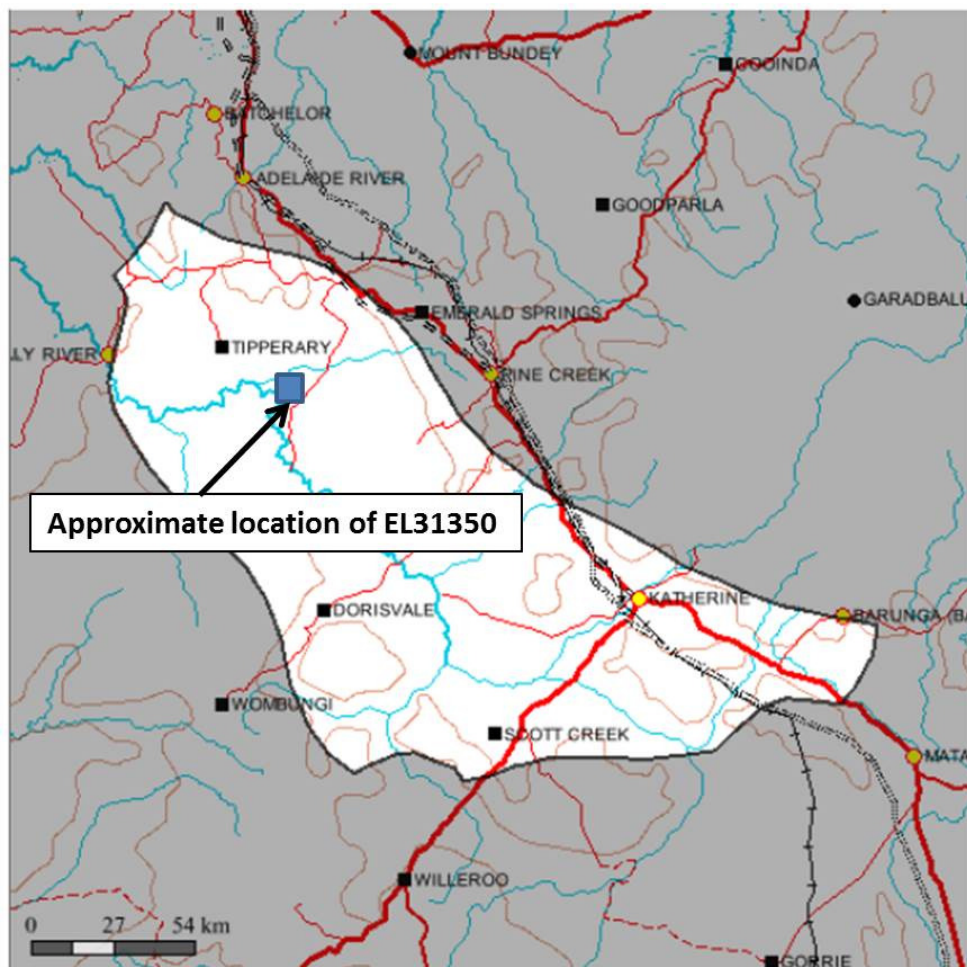
Desktop information has been sourced from the Northern Territory Department of Environment and Natural Resources (<https://denr.nt.gov.au/> and <https://www.nt.gov.au/environment>) including accessing NR Maps (Natural Resource Maps located at <http://nrmaps.nt.gov.au/nrmaps.html>). Additionally, the desktop review included a search of the Australian Government Department of the Environment and Energy Protected Matters Search Tool (<http://www.environment.gov.au/epbc/protected-matters-search-tool>) for matters of national significance as listed under the *Environment Protection and Biodiversity Conservation Act* (1999) (EPBC Act).

4.1 Physical Environment

The Fenton project (tenement EL31350) lies within the Daly Basin Bioregion (as determined from the NR Maps Interactive tool (<http://nrmaps.nt.gov.au>)). The Daly Basin Bioregion Conservation Values and Environmental Resources map is provided in Appendix B.

The Daly Basin Bioregion encompasses an area of 20,922.3 km² as shown in Figure 4. The vegetation within the bioregion is predominantly characterised by woodland and open forests. It includes ‘*gently undulating plains with scattered low plateau remnants and some rocky hills and gorges...The dominant vegetation is Darwin woollybutt (E. miniata) and Darwin stringybark (E. tetradonta) open forests.*’ (Daly Basin bioregion - Department of Environment).

Figure 4 - Daly River Bioregion (taken from Daly Basin Bioregion NT NRM Report www.ntinfor.net.org.au)



4.1.1 Climate

The climatic condition in the region is described as tropical savannah, characterised by a distinct six-month dry season (from April – October) followed by a humid wet season (from November to March).

Local weather information was extracted from the Bureau of Meteorology (BOM) website using the nearest long term weather station to the project area (the Adelaide River Post Office, Weather Station Number 014092). This weather station is located approximately 80km N of the Fenton project site.

4.1.2 Regional Geology

The Fenton project is located in the western section of the Central Domain of the Pine Creek Orogen (PCO), which is a major gold and uranium province in the Northern Territory, containing a known gold endowment of approximately 11Moz Au.

Partington and Williams (2000) describe the region as characterised by early Proterozoic meta-sedimentary rocks occurring in a geosynclinal setting over a gneissic and granitic Archean basement. The PCO sequence is unconformably overlain by the Middle Proterozoic McArthur Basin to the east and by the Middle Proterozoic Victoria Basin and Cambrian-Ordovician and Mesozoic sequences (Daly and Bonaparte Gulf Basins) to the west and southwest. Major sedimentation and volcanism occurred between 2000 to 1870 Ma in an intra-cratonic basin formed by crustal extension of the predominantly Archean granitic basement. The stratigraphic sequence is dominated by mudstones, siltstones, greywackes, sandstones, tuffs, and limestones. The sedimentary units and basic intrusions were folded and metamorphosed to amphibolite facies between 1870 to 1899 Ma and then subsequently intruded by the Cullen Batholith.

At the regional scale, gold mineralisation in the PCO occurs in linear belts associated with regional structures at or near the greenschist facies brittle-ductile transition phase. Gold deposits within the western area of the Central Domain of the PCO are concentrated within the sedimentary Koolpin Formation, the basal unit of the South Alligator Group.

For a comprehensive overview of the PCO, the reader is referred to Şener (2004).

4.1.2.1 Project-scale Geology

The rocks of the South Alligator Group form a distinctive iron-rich sedimentary sequence, resting unconformably on older rocks. The area of the South Alligator Group includes the basal Koolpin Formation which is overlain by the Gerowie Tuff, which is conformable with the Mount Bonney Formation. The Gerowie Tuff and overlying Mount Bonney Formation are similar in composition and may act as a stratigraphic seal for mineralisation found in the ferruginous and carbonaceous rocks of the underlying and preferentially mineralised Koolpin Formation (Bajwah, 1994).

The Pine Creek lode gold deposits are spatially related to regional anticlines that were formed early, above thrust-ramp and thrust duplex structures. Suitable trap sites within these structures appear to have been present as illustrated by the strata-bound nature of some of the gold deposits beneath thick dolerite sills or greywacke units on the crests of anticlines. The thrusts appear to have acted as channel ways for hydrothermal fluids from deep larger structures into anticlines and other trap sites. Dolerite dykes (e.g. Zamu Dolerite) provide local competency contrasts (Hronsky, 2013).

The Cosmo Howley deposit (2+ Moz Au) is one of these gold deposits situated in the inner contact aureole setting of the Cullen Batholith. Cosmo Howley is situated on the sheared western limb (Pine Creek Shear) of a regional antiform; and like most of the known gold deposits in this locality is hosted by the Koolpin Formation.

The Fenton Exploration Project is situated on the same fold limb of this antiform but on the regional sub-parallel Fenton Shear, located further to the west. The known shear-hosted gold mineralisation within the Fenton Shear is also hosted by the folded continuation of the Koolpin Formation.

4.1.3 Topography

The landscape class predominantly within Exploration Licence 31350 is mapped as limestone plains and rises (refer to Figure 5) (NR Maps Interactive tool). Two other landscape systems have also been mapped (associated with the waterways/rivers) including alluvial floodplains and lateritic plains and rises. The land systems mapped within the project area are detailed in Table 3.

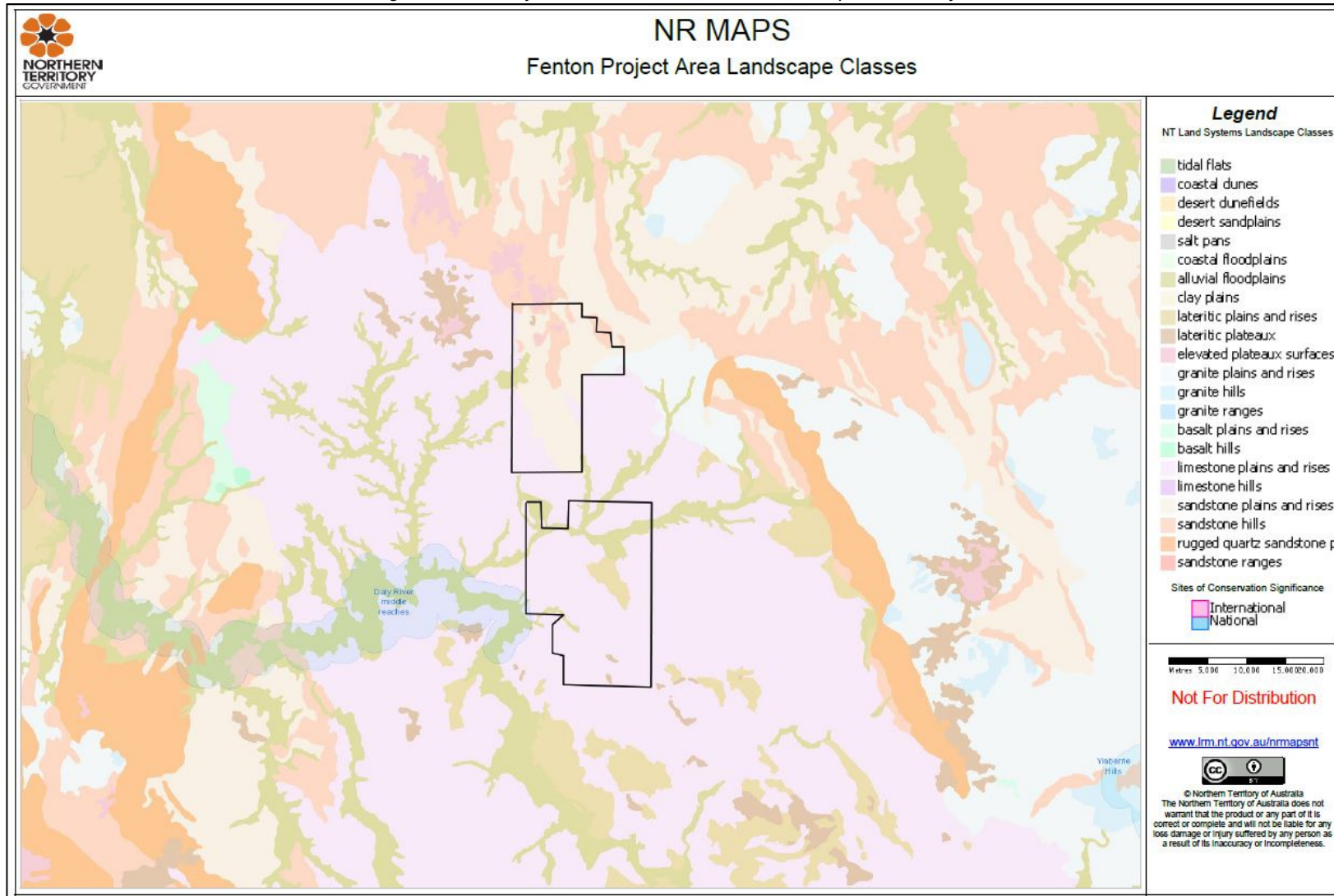
Table 3 - Land System Information for the Fenton Exploration Project

Land system	Map Unit	GeoZone	Landscape Class	Class Description	Landform	Soil origin	Soil association	Vegetation	Occurrence of acid sulphate soils
Claravale	Clv	Daly Basin	Lateritic plains and rises	Plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products; sand and earth soils.	Gently undulating sand terrain	Sandy gravelly brown earths and sand red earths	Sandy gravelly Brown Kandosols and sandy Red Kandosols	Tall open forest of <i>E. miniata</i> , <i>E. tetradonta</i> , <i>C. bleeseri</i> , <i>Erythrophleum chlorostachys</i> , <i>C. dichromophloia</i> over spinifex tall grass (<i>Sorghum</i> spp, <i>Sehima nervosum</i> , <i>Heteropogon triticeus</i>)	No occurrence of acid sulphate soils
Banyan	Bny	Daly Basin	Alluvial floodplains	Alluvial floodplains, swamps, drainage depressions and alluvial fans; sandy, silty and clay soils on Quaternary alluvium	Major river plains; frontage country; dissected by gullies	Red earths on alluvium with some clayey soils	Red Kandosols with some Aquic Vertosols	Tall woodland of <i>E. tectifera</i> , <i>C. foelscheana</i> , <i>E. patellaris</i> , <i>C. grandifolia</i> over tropical tall grass (<i>Themeda australis</i> , <i>Sorghum</i> spp, <i>Chrysopogon</i> spp, <i>Heteropogon contortus</i>)	No occurrence of acid sulphate soils
Douglas	Dgl	Daly Basin	Limestone plains and rises	Plains, rises and plateaux on weathered and unweathered Cambrian limestone, dolomite, chalcedony,	Gently undulating plains on dipping Cambrian limestone,	Loamy red earths	Loamy Red Kandosols	Mid-high woodland of <i>C. foelscheana</i> , <i>C. confertiflora</i> , <i>E. tectifera</i> , <i>C. grandifolia</i> , <i>E. patellaris</i> over	No occurrence of acid sulphate soils

Land system	Map Unit	GeoZone	Landscape Class	Class Description	Landform	Soil origin	Soil association	Vegetation	Occurrence of acid sulphate soils
				shale, sandstone and siltstone with associated sand sheets; sandy and earth soils	sandstone and siltstone			dense tropical tall grass (<i>Sorghum plumosum</i> , <i>Sehima nervosum</i> , <i>Heteropogon triticeus</i>)	
Green Ant	Grn	Daly Basin	Alluvial floodplains	Alluvial floodplains, swamps, drainage depressions and alluvial fans; sandy, silty and clay soils on Quaternary alluvium	Tributary river plains	Dark cracking clays	Aquic Vertosols	Tall closed grassland of <i>Coelorachis rottboellioides</i> , <i>Bothriochloa intermedia</i> , <i>Heteropogon contortus</i> with a very open woodland (<i>C. papuana</i> , <i>C. polycarpa</i>)	No occurrence of acid sulphate soils
Kimbyan	Kmb	Daly Basin	Limestone plains and rises	Plains, rises and plateaux on weathered and unweathered Cambrian limestone, dolomite, chalcedony, shale, sandstone and siltstone with associated sand sheets; sandy and earth soils	Gently undulating plains on Cambrian limestone, sandstone and siltstone	Loamy red earths	Loamy Red Kandosols	Tall woodland of <i>C. foelscheana</i> , <i>E. tectifera</i> , <i>C. confertiflora</i> , <i>C. grandifolia</i> , <i>E. patellaris</i> over tropical tall grass (<i>Sorghum plumosum</i> , <i>Themeda australis</i> , <i>Sehima nervosum</i>)	No occurrence of acid sulphate soils

Source: Survey NTLS_1M Northern Territory Land Systems map scale 1:250,000

Figure 5 - Land System Information for the Fenton Exploration Project



4.1.4 Hydrology

The Fenton project lies within the Daly River catchment area as shown in Figure 6 (below). Site hydrological conditions consist of number ephemeral drains and creeks discharging to south (EL 31407) and northwest (EL 31350) into the Daly River system.

The mapped Hayes Creek meets the Douglas River in the northern portion of EL 31350 and joins the Daly River to the east of the project area. The Daly River middle reaches (recognised as a Site of Conservation Significance by the NT Department of Environment and Natural Resources) is located immediately west of EL 31350 (Figure 7).

Figure 6 – Fenton Exploration Project Surface Hydrology

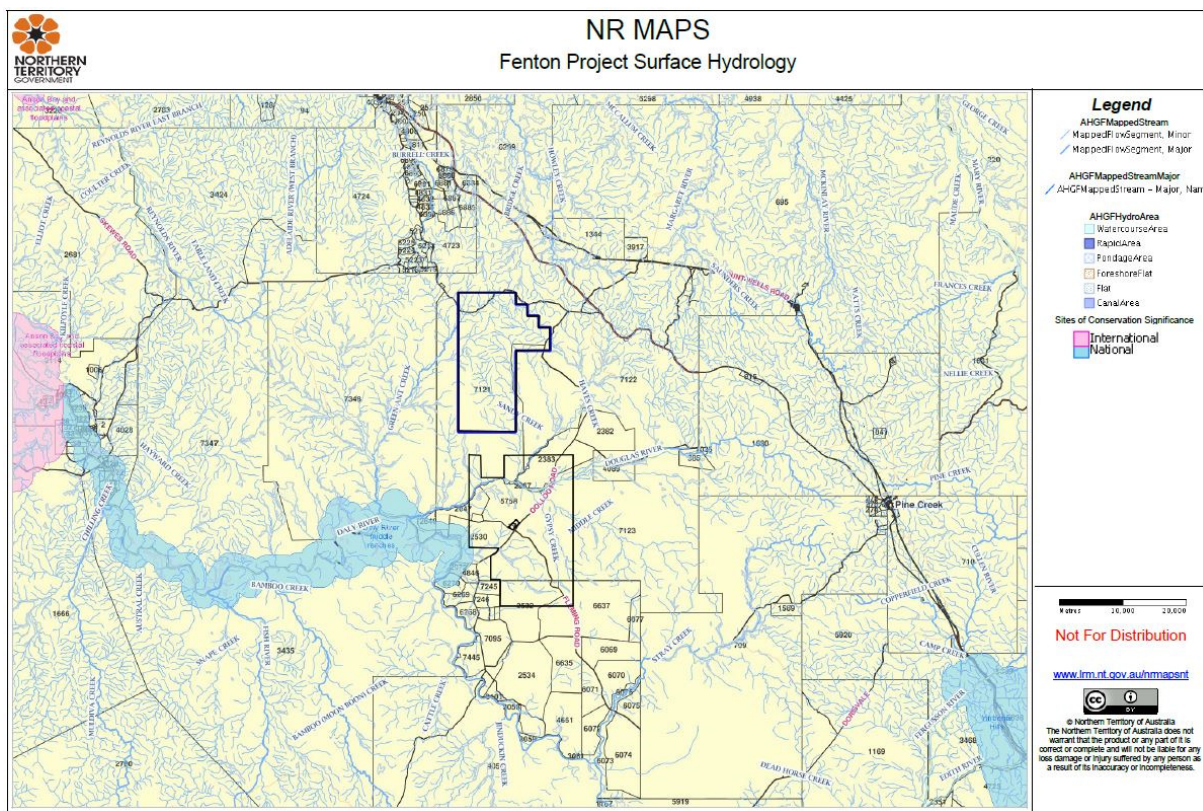
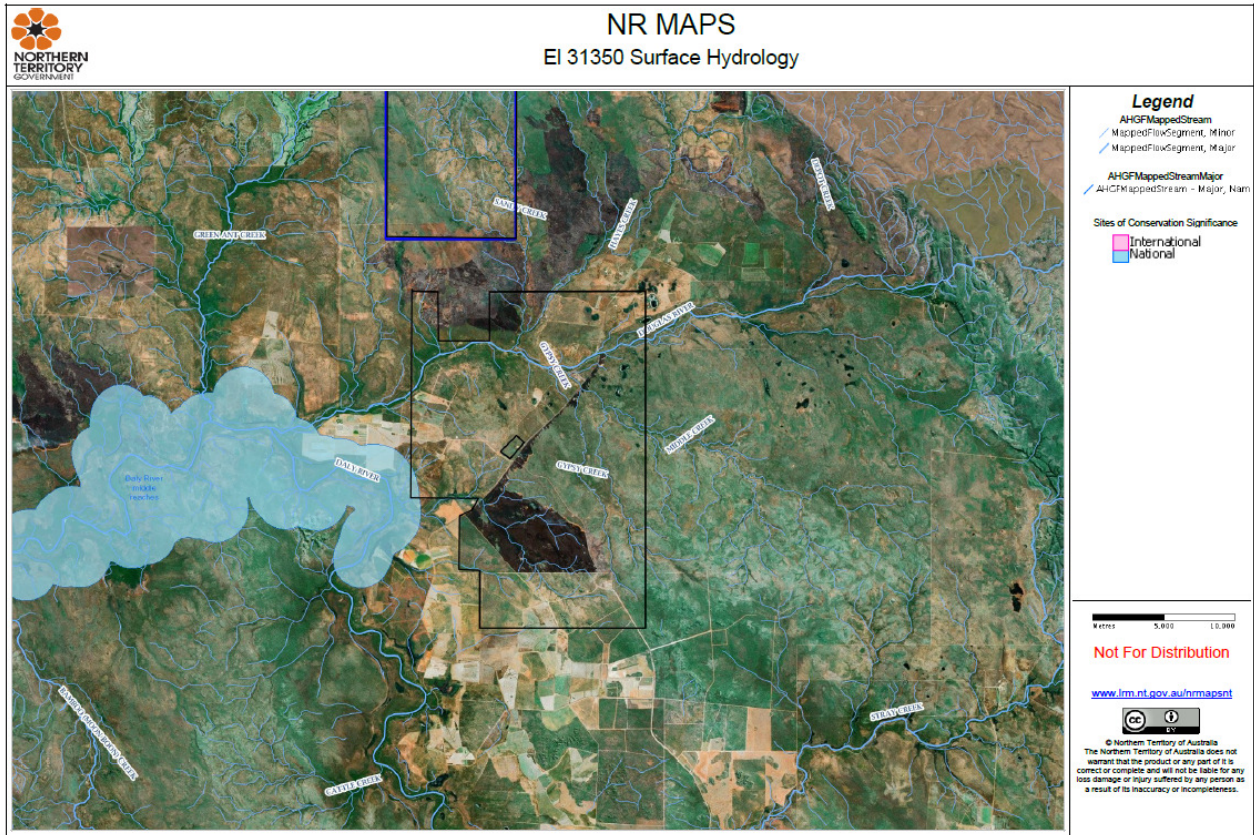


Figure 7 – EL 31350 Surface Hydrology



4.1.5 Biodiversity

In the Northern Territory, flora and fauna considered significant is protected under Australian government legislation (*Environmental Protection and Biodiversity Conservation Act 2000*) (EPBC Act), and/or Northern Territory legislation (*Territory Parks and Wildlife Conservation Act 2000*) (TPWC Act). The desktop study to review the known significant biodiversity values within and around the project area was completed in early 2018. This included an interrogation of the Northern Territory databases (NR Maps) and the Australia Government Protected Matters search tool. A review of the available information from Northern Territory Government’s NR Maps Interactive tool shows the vegetation is dominated by Eucalypt Open Woodlands and Melaleuca Woodlands and Open Forests. Appendix B provides a copy of the downloaded maps (Major Vegetation Groups of the Daly River Catchments and Melaleuca Forests of the Northern Territory). The Protected Matters search tool identified a number of protected species known, or likely to occur within the project area. This report is provided at Appendix C. Appendix D provides a workbook of the data downloaded from NR Maps regarding Significant Flora, Fauna and Threatened Fauna Species sighted at locations within the project area.

4.1.5.1 Known significant flora and fauna

A search of the Protected Matters Search Tool (using a 20km buffer around coordinates - 13.5175 131.21694,-13.51667 131.3,-13.9675 131.38278,-13.96694 131.27667,-13.5175 131.21694) was completed that identified a number of species listed for protection under the EPBC Act that *may occur or are likely to occur* in the search area. This report is attached at Appendix C.)

In addition, locations of significant fauna *sighted* within the tenement extent (EL31350) as listed under the TPWC Act) have been mapped through NR Maps. This map is shown below in Figure 8 and the data downloaded from NR Maps provided at Appendix D.

Figure 8 – EL 31407 and EL 31350 Recorded Locations of Significant Flora and Fauna Species

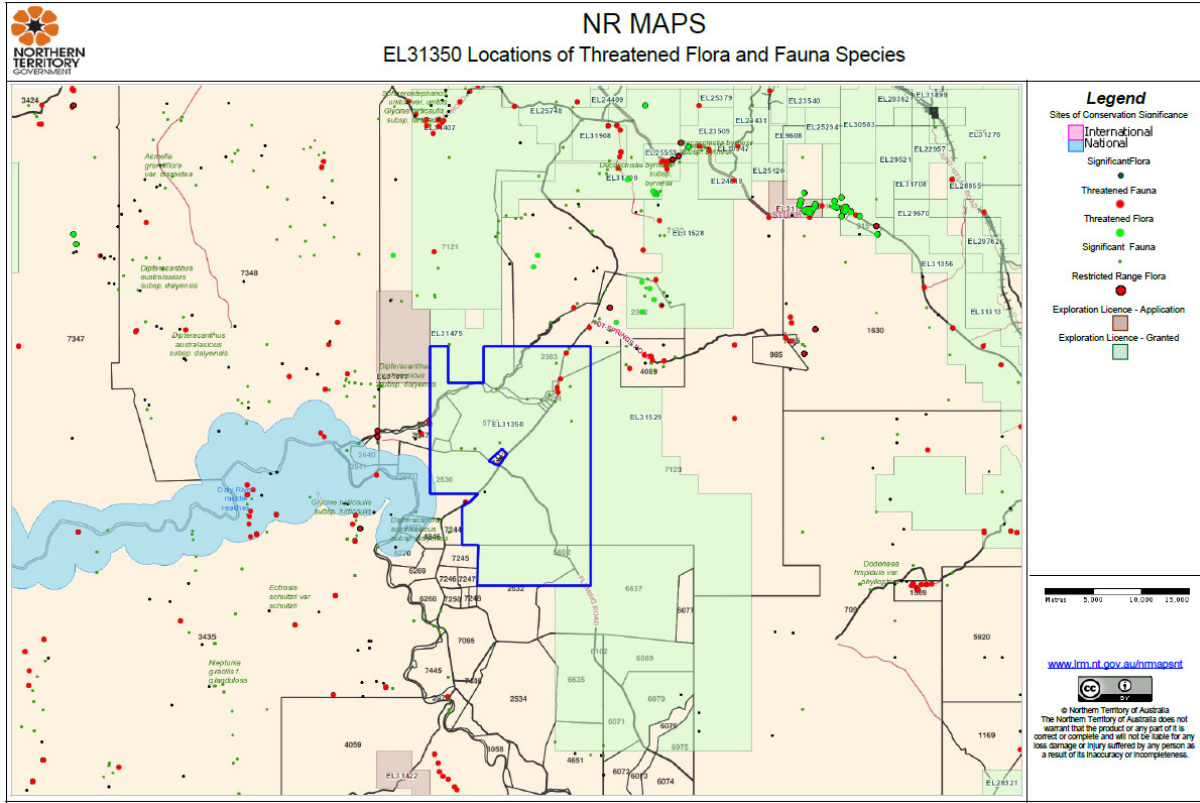


Table 4 below summarises the threatened species listed under the EPBC Act that may occur within the project area. Four of these species (Partridge Pigeon *Geophaps smithii smithii*, the Black-Footed Tree Rat *Mesembriomys gouldii gouldii*, the White-bellied Sea Eagle *Haliaeetus leucogaster* and the Rainbow Bee-eater *Merops ornatus*) have been recorded (sighted) at locations within the project area. The summary download of data from NR maps listing significant and threatened flora and fauna species sighted within the project area are provided in Appendix D.

Table 4 - Flora and fauna species listed under the EPBC Act and/or under the TPWC Act for the project area

Species Name	Common Name	Status	Type of Presence (as listed by the EPBC Act Protected Matters search tool)
BIRDS (Listed Threatened Species under the EPBC Act)			
<i>Calidris ferruginea</i>	Curlew Sandpiper	CR	Species or species habitat <u>may</u> occur within the area
<i>Erythrotriorchis radiatus</i>	Red Goshawk	VUL	Species or species habitat <u>known</u> to occur within the area
<i>Erythrura gouldiae</i>	Gouldian Finch	END	Species or species habitat <u>known</u> to occur within the area
<i>Falcunculus frontatus whitei</i>	Crested Shrike-tit (northern), Northern Shrike-tit	VUL	Species or species habitat <u>likely</u> to occur within the area
<i>Geophaps smithii smithii</i>	Partridge Pigeon (eastern)	VUL	Species or species habitat <u>known</u> to occur within the area
<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew	CR	Species or species habitat <u>may</u> occur within the area
<i>Rostratula australia</i>	Australian Painted Snipe	END	Species or species habitat <u>may</u> occur within the area
<i>Tyto novaehollandiae kimberli</i>	Masked Owl (northern)	VUL	Species or species habitat <u>likely</u> to occur within the area
BIRDS (Listed Migratory Species under the EPBC Act)			
<i>Apus pacificus</i>	Fork-tailed Swift [678] Species		Species or species habitat <u>likely</u> to occur within the area

<i>Cecropis daurica</i>	Red-rumped Swallow [80610]		Species or species habitat <u>may</u> occur within the area
<i>Cuculus optatus</i>	Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat <u>may</u> occur within the area
<i>Hirundo rustica</i>	Barn Swallow [662]		Species or species habitat <u>may</u> occur within the area
<i>Motacilla cinerea</i>	Grey Wagtail [642]		Species or species habitat <u>may</u> occur within the area
<i>Motacilla flava</i>	Yellow Wagtail [644]		Species or species habitat <u>may</u> occur within the area
<i>Rhipidura rufifrons</i>	Rufous Fantail [592]		Species or species habitat <u>known to</u> occur within the area
<i>Acrocephalus orientalis</i>	Oriental Reed-Warbler [59570]		Species or species habitat <u>may</u> occur within the area
<i>Actitis hypoleucos</i>	Common Sandpiper [59309]		Species or species habitat <u>may</u> occur within the area
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper [874]		Species or species habitat <u>may</u> occur within the area
<i>Calidris melanotos</i>	Pectoral Sandpiper [858]		Species or species habitat <u>may</u> occur within the area
<i>Charadrius veredus</i>	Oriental Plover, Oriental Dotterel [882]		Species or species habitat <u>may</u> occur within the area
<i>Glareola maldivarum</i>	Oriental Pratincole [840]		Species or species habitat <u>may</u> occur within the area
<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew [847]	CR	Species or species habitat <u>may</u> occur within the area
<i>Pandion haliaetus</i>	Osprey		Species or species habitat <u>known to</u> occur within the area
<i>Anseranas semipalmata</i>	Magpie Goose		Species or species habitat <u>may</u> occur within the area

<i>Ardea alba</i>	Great Egret, White Egret		
<i>Ardea ibis</i>	Cattle Egret		
<i>Cuculus saturatus</i>	Oriental Cuckoo, Himalayan Cuckoo		Species or species habitat <u>may</u> occur within the area
<i>Haliaeetus leucogaster</i>	White-bellied sea eagle		<u>RECORDED WITHIN THE AREA</u> Species or species habitat <u>known</u> to occur withi the area
<i>Merops ornatus</i>	Rainbow Bee-eater		<u>RECORDED WITHIN THE AREA</u> Species or species habitat <u>may</u> occur within the area
Species Name	Common Name	Status	Type of Presence (as listed by the EPBC Act Protected Matters search tool)
MAMMALS (Listed Threatened Species under the EPBC Act)			
<i>Antechinus bellus</i>	Fawn Antechinus [344]	VUL	Species or species habitat <u>likely</u> to occur within the area
<i>Conilurus penicillatus</i>	Brush-tailed Rabbit-rat, Brush-tailed Tree-rat, Pakooma	VUL	Species or species habitat <u>may</u> occur within the area
<i>Dasyurus hallucatus</i>	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda, [Dambimangari], Wiminji [Martu] [331]	END	<u>RECORDED WITHIN THE AREA</u> Species or species habitat <u>known</u> to occur withi the area
<i>Hipposideros inornatus</i>	Arnhem Leaf-nosed Bat [86675]	END	Species or species habitat <u>may</u> occur within the area
<i>Macroderma gigas</i>	Ghost Bat [174]	VUL	Breeding known to occur within area

<i>Mesembriomys gouldii gouldii</i>	Black-footed Tree-rat (Kimberley and mainland Northern Territory), Djintamoonga, Manbul [87618]	END	<u>RECORDED WITHIN THE AREA</u> Species or species habitat <u>known</u> to occur with the area
<i>Petrogale concinna canescens</i>	Nabarlek (Top End) [87606]	END	Species or species habitat <u>known</u> to occur with the area
<i>Phascogale pirata</i>	Northern Brush-tailed Phascogale [82954]	VUL	Species or species habitat <u>known</u> to occur within the area
<i>Saccolaimus nudicluniatus</i> <i>saccolaimus</i>	Bare-rumped Sheath-tailed Bat, Bare-rumped Sheathtail Bat [66889]	VUL	Species or species habitat <u>may</u> occur within the area
PLANTS (Listed Threatened Species under the EPBC Act)			
<i>Acacia praetermissa</i>	a shrub [14840]	VUL	Species or species habitat <u>likely</u> to occur within the area
<i>Helicteres macrothrix</i>		END	Species or species habitat <u>may</u> occur within the area
<i>Stylidium ensatum</i>	a triggerplant [86366]	END	Species or species habitat <u>known</u> to occur within the area
REPTILES			
<i>Acanthophis hawkei</i>	Plains Death Adder [83821]	VUL	Species or species habitat <u>likely</u> to occur within the area
Additional fauna species listed under the TPWC Act that have been RECORDED WITHIN THE PROJECT AREA (taken from NR Maps)			
<i>Varanus scalaris</i>	Spotted Tree Monitor		Species identified and recorded within project area.



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<i>Rattus tunneyi</i>	Pale Field Rat		
<i>Poecilodryas cerviniventris</i>	Buff sided Robin		
<i>Ardeotis Australia</i>	Australia Bustard		
<i>Demansia olivacea</i>	Olive Whip Snake		
<i>Ardea modesta</i>	Eastern Great Egret		
<i>Pseudomys nanus</i>	Western Chestnut Mouse		
<i>Sminthopsis virginiae</i>	Red-cheeked Dunnart		

4.1.5.2 Invasive Species

The Protected Matters Search Tool report (Appendix C) also identifies eleven weed species of national significance (WoNS) and eleven feral (or introduced) animal species that may occur or are likely to occur within the identified area. These are listed below in Table 5.

Table 5 - Flora and fauna species listed under the EPBC Act for the project area

Species Name	Common Name	Type of Presence (as listed by the EPBC Act Protected Matters search tool)
WEED SPECIES		
<i>Andropogon gayanus</i>	Gamba Grass [66895]	Species or species habitat <u>likely</u> to occur within the area
<i>Brachiaria mutica</i>	Para Grass [5879]	Species or species habitat <u>may</u> occur within the area
<i>Cabomba caroliniana</i>	Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171]	Species or species habitat <u>may</u> occur within the area
<i>Hymenachne amplexicaulis</i>	Hymenachne, Olive Hymenachne, Water Stargrass, West Indian Grass, West Indian Marsh Grass [31754]	Species or species habitat <u>likely</u> to occur within the area
<i>Jatropha gossypifolia</i>	Cotton-leaved Physic-Nut, Bellyache Bush, Cotton-leaf Physic Nut, Cotton-leaf Jatropha, Black Physic Nut [7507]	Species or species habitat <u>likely</u> to occur within the area
<i>Lantana camara</i>	Lantana, Common Lantana, Kamara Lantana, Largeleaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]	Species or species habitat <u>likely</u> to occur within the area
<i>Mimosa pigra</i>	Mimosa, Giant Mimosa, Giant Sensitive Plant, Thorny Sensitive Plant, Black Mimosa, Catclaw Mimosa, Bashful Plant [11223]	Species or species habitat <u>likely</u> to occur within the area

<i>Parkinsonia aculeata</i>	Parkinsonia, Jerusalem Thorn, Jelly Bean Tree, Horse Bean [12301]	Species or species habitat <u>likely</u> to occur within the area
<i>Pennisetum polystachyon</i>	Mission Grass, Perennial Mission Grass, Missiongrass, Feathery Pennisetum, Feather Pennisetum, Thin Napier Grass, West Indian Pennisetum, Blue Buffel Grass [21194]	Species or species habitat <u>likely</u> to occur within the area
<i>Salvinia molesta</i>	Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]	Species or species habitat <u>likely</u> to occur within the area
<i>Vachellia nilotica</i>	Prickly Acacia, Blackthorn, Prickly Mimosa, Black Piquant, Babul [84351]	Species or species habitat <u>may</u> occur within the area
ANIMAL SPECIES		
<i>Columba livia</i>	Rock Pigeon, Rock Dove, Domestic Pigeon [803]	Species or species habitat <u>likely</u> to occur within the area
<i>Rhinella marina</i>	Cane Toad [83218]	Species or species habitat <u>likely</u> to occur within the area
<i>Bos taurus</i>	Domestic Cattle [16]	Species or species habitat <u>likely</u> to occur within the area
<i>Bubalus bubalis</i>	Water Buffalo, Swamp Buffalo [1]	Species or species habitat <u>likely</u> to occur within the area
<i>Canis lupus familiaris</i>	Domestic Dog [82654]	Species or species habitat <u>likely</u> to occur within the area
<i>Equus asinus</i>	Donkey, Ass [4]	Species or species habitat <u>likely</u> to occur within the area
<i>Equus caballus</i>	Horse [5]	Species or species habitat <u>likely</u> to occur within the area
<i>Felis catus</i>	Cat, House Cat, Domestic Cat [19]	Species or species habitat <u>likely</u> to occur within the area

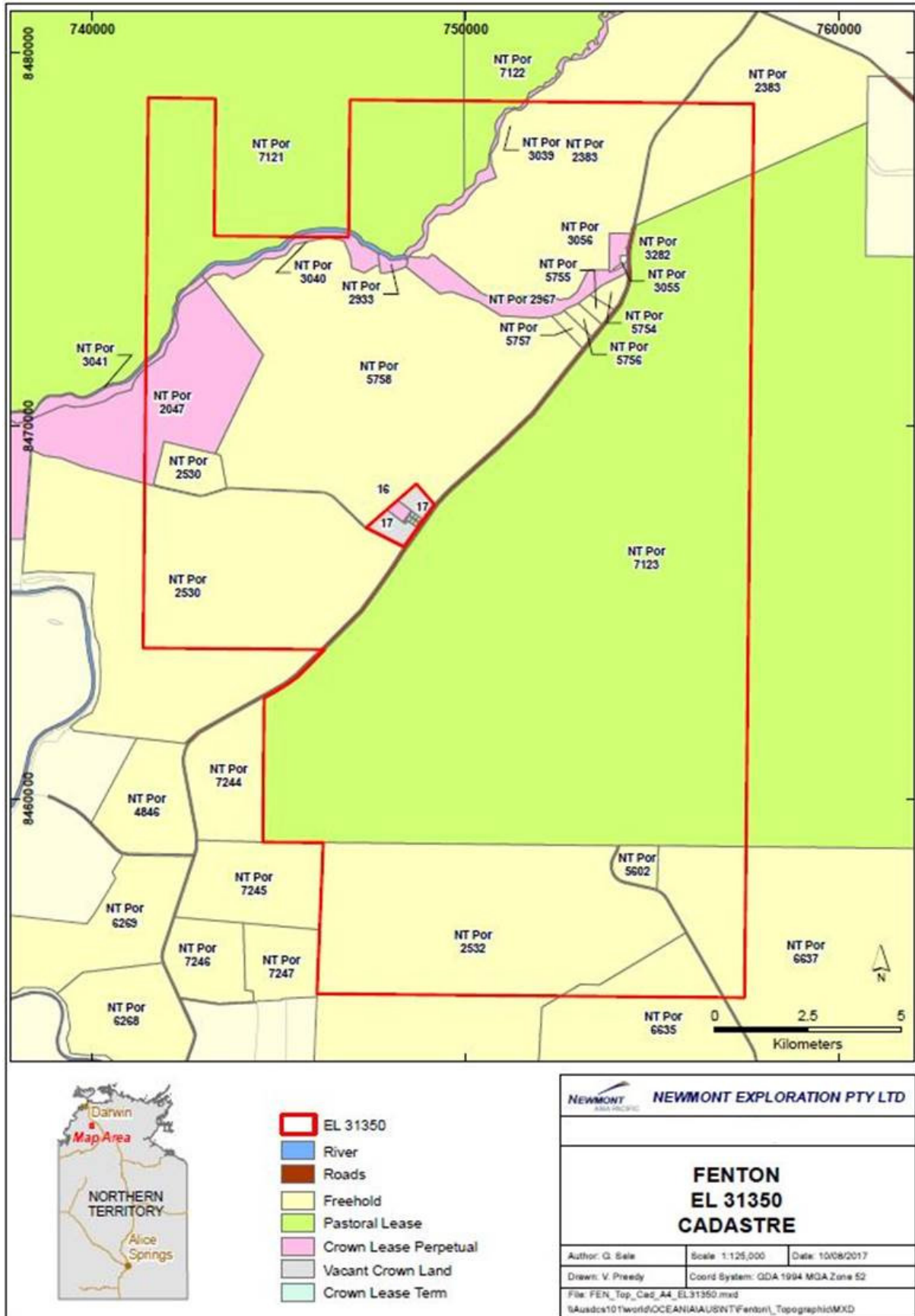
<i>Mus musculus</i>	House Mouse [120]	Species or species habitat <u>likely</u> to occur within the area
<i>Rattus rattus</i>	Black Rat, Ship Rat [84]	Species or species habitat <u>likely</u> to occur within the area
<i>Sus scrofa</i>	Pig [6]	Species or species habitat <u>likely</u> to occur within the area

4.1.5.3 Land Use

Newmont is committed to sustainable development. This is reflected in the Sustainability and Stakeholder Engagement Policy that establishes Newmont’s commitment to develop and maintain constructive stakeholder relationships based on trust and respect. The Newmont exploration team invest considerable effort to develop and maintain good relations with pastoralists and private landowners. On 17th April 2018, Alan Hawkins (Principal Exploration Geologist) and Dave Haddow (Project Exploration Geologist) travelled to Humpty Doo to meet with Shane Izod, station manager of the Middle Creek Station which covers the Fenton Exploration Project. A landholder access agreement was established at this meeting (Appendix ?). Mr Izod will be contracted to carry out clearing and earthworks at the drill sites (as he did for St George Mining in 2011 in the same area) as well as any rehabilitation work.

The current land use for Middle Creek Station (NT Portion (000) Parcel 5758 Freehold land – refer to Figure 9) is for farm land.

Figure 9 – Cadastral Boundaries over Fenton Exploration Project (EL 31350)



5 ENVIRONMENTAL MANAGEMENT SYSTEMS / PLAN

Activities carried out by Newmont Australia, including exploration activities are guided by Newmont’s Integrated Management System (IMS). The IMS is aligned with the International Environmental Management System Standard ISO 14001:2015 and the International Health and Safety Management Systems Standard OHSAS 18001:2007. It is a complete framework of standards, procedures, guidelines and tools that drive efficiency and execution across core business activities, including exploration.

5.1 Environmental Policy & Responsibilities

Newmont Australia operates under a global framework based on Newmont Mining Corporation’s purpose to create value and improve lives through sustainable and responsible mining. This commitment to sustainable development is supported by Newmont’s Code of Conduct, Policies and Standards that are available publicly on Newmont’s website.

All exploration activities are required to be conducted in accordance with this framework. Additional guidance for generative exploration activities is provided in Newmont’s global Exploration ESR Guidebook. The guide sets out in more detail the sustainability and external relations framework specifically for exploration practices. For the Australia region, specific sustainability and external relations guidance for generative exploration activities is provided in the document *Newmont Australia – Generative Exploration Procedures Manual – Sustainability and External Relations* (Appendix A).

5.1.1 Social Responsibility and Environmental Standards

Newmont’s global Sustainability and Stakeholder Engagement Policy, together with the Social Responsibility Standards (Table 6) and Environmental Standards (Table 7) establishes Newmont’s commitment to sustainable development. These Standards are applicable to Newmont operations, including exploration activities.

Table 6 - Social Responsibility Standards

Title	Description
Stakeholder Relationship Management Standard	This Standard sets the minimum requirements to identify and engage people and groups who may be impacted by our activities, thereby providing the means to develop and maintain constructive, long-term stakeholder relationships.
Social Baseline and Impact Assessment Standard	This Standard sets the minimum requirements for collecting information to determine social baseline conditions, the potential impacts of Newmont’s activities, and to devise successful mitigation and development plans.
Land Acquisition & Involuntary Resettlement Standard	This Standard sets the minimum requirements for land acquisition and involuntary resettlement, before any development or construction activity commences, to minimize risks to the project and foster trust and mutual respect.
Community Investment & Development Standard	This Standard sets the minimum requirements for planning, execution, monitoring and evaluation of development activities to ensure that they improve quality of life and align with Newmont’s principles of transparency and shared value.

Local Procurement & Employment Standard	This Standard sets the minimum requirements to ensure that programs are in place to identify and provide employment and business opportunities that can deliver sustainable mutual benefits to local stakeholders.
Cultural Resource Management Standard	This Standard sets the minimum requirements for the identification, protection and management of cultural resources within Newmont's areas of influence so as to prevent unauthorized or undesired disturbance by Newmont employees and contractors.
Human Rights Standard	This Standard defines the minimum requirements to identify, prevent, mitigate, track and report on how we address risks to human rights associated with our operations.
Indigenous Peoples Standard	The purpose of this Standard is to define the minimum requirements to engage with Indigenous Peoples, come to agreement around project development, assess and manage potential impacts, and report our progress.

5.1.2 Environmental Standards

Exploration activities should be conducted in line with best practices to avoid impacts to the environment, and where impact is unavoidable, implement best practices for environmental protection, reclamation and drillhole abandonment. Specific guidance from the following Environmental Standards (Table 7) is relevant for consideration in the execution and planning of exploration activities.

Table 7 – Environmental Standards

Title	Description
Biodiversity Management Standard	This Standard sets the minimum requirements for the management of biodiversity at Newmont owned, operated and/or managed operations and lands in order to ensure a consistent approach to biodiversity conservation and sustainable stewardship of resources.
Closure & Reclamation Management Standard	This Standard sets the minimum requirements for planning and management of closure and reclamation activities from exploration through post-closure in accordance with Newmont's objectives to protect human health, community needs, and the environment.
Hazardous Materials Management Standard	This Standard sets the minimum requirements for the management of hazardous materials (inclusive of hydrocarbons, cyanide and other hazardous chemicals) in order to protect human health and the environment.
Waste Management Standard	This Standard sets the minimum requirements for the management of hazardous and non-hazardous wastes and wastewater generated at Newmont sites, such that human health and the environment are protected.
Water Management Standard	This Standard sets the minimum Newmont requirements to proactively plan and manage water from exploration to post-closure in accordance with Newmont's Water Strategy such that human health, community water needs, and the environment are protected.

5.2 Inductions & Training

All employees and contractors receive environmental training as part of an induction prior to commencing work with Newmont Exploration. Inductions are reviewed and updated as required (i.e. to reflect a change in policy, procedure or personnel).

Cross Cultural Awareness (CCA) training is regularly provided for all Newmont personnel to promote understanding of and appreciation for particular cultural values and norms that apply within the local region.

5.3 Identification of Environmental Aspects & Impacts

Risk management is a key element in Newmont's business and is integral to the IMS. Newmont has developed a common framework for risk management based upon the principles of ISO 31000 and utilises a 5x5 risk matrix table to assess multiple impact types against consequence and likelihood ratings. A risk assessment was completed for this project (Table 8). The key risks to the environmental values identified from this assessment are:

- Unauthorised clearing resulting in loss of significant flora and/or fauna;
- Spread of weeds or invasive species;
- Release (spill) of hydrocarbons and/or hazardous materials; and
- Inappropriate waste disposal.

5.4 Key Management Activities for Environmental Risks

The following management activities will be implemented to minimise the identified key environmental risks:

- Ground disturbance activities will be kept to an absolute minimum, utilising 'blade up' methods for clearing to minimise soil disturbance.
- To prevent introduced plant and animal species from occurring in the work program area, vehicles will be washed prior to entry to the work program areas. All vehicles and machinery will similarly be washed down upon leaving the work program areas. The wash-down will be done at Daly Douglas Caravan Park, which is remote to the property.
- All hydrocarbons or other chemicals will be removed from site when the work program is finished. If a spillage occurs it will be excavated then backfilled and carted from site to an approved waste disposal facility.
- All waste will be separated into varying categories and cleared from the sites on a daily basis. Appropriate disposal will occur subsequently i.e. diesel/grease contaminated cloth with respect to paper and general plastic.
- Rehabilitation works will be undertaken when access tracks and drill pads are no longer required, ensuring stockpiled soil is spread onto disturbed areas, compacted (disturbed) areas to be ripped where necessary and locally sourced seed spread (where necessary).

Table 8 - Environmental Aspects and Possible Impacts

Aspect	Impact	Unmitigated Risk Rating	Management measures (prevention)	Management measures (remediation)	Residual Risk Rating after Management Measures
Driving between highway and drill sites and <i>vice versa</i>	Disturbance to environment including fauna and flora. Possibility of spreading weeds.	Medium	Induction and training. Staff and contractors will be instructed to use only existing tracks. Inspection and wash down procedures for vehicles (to be washed down prior to site entry).	Continued monitoring of staff and contractors use of access routes.	Low
Earthmoving works required for clearing drill pads and sump construction	Soil profile may be disturbed where earth moving necessary.	Medium	Earthmoving contractor will be instructed to stockpile top soil. Clearing minimised to 40m x 40m	Use top soil in rehabilitation activities.	Low
Drilling activities	Dust and noise pollution affecting flora, fauna and humans. Hydrocarbon spillage causing contamination of soil, surface and ground water.	Medium	Dust suppression devices if required. Plastic lining utilised underneath the drill rig. Regular maintenance of machinery to prevent leaks.	Upgrade dust suppression measures as required. Appropriate spill kit available at all times.	Low
Fuel and Chemical Storage	Spill or release of liquids could quickly contaminate soil and surface water and water	Medium	Fuels and chemicals stored in appropriate containment, including use of bunded storage options.	Isolate, collect and remove all severely contaminated soil (to be disposed of at appropriate waste disposal facility).	Low



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	table.		As per hydrocarbon spills above.		
Final Rehabilitation of drill sites	Backhoe may affect local flora/fauna as well as minor noise pollution.	Low	Utilise same tracks used to access drill sites.	Continued monitoring of staff to ensure existing tracks only used.	

5.5 Environmental Audits & Inspections

Under Newmont's IMS framework regular environmental inspections of activities, including exploration activities, are completed based on risk assessments. Inspection Checklists relevant to the Fenton Exploration Project will include a number of exploration specific checklists including:

- Remote Camp Inspection, Drill Rig Inspection and Drill Program Checklist;
- The Exploration Activities SER Checklist (example in appendix of the *Australia Generative Exploration Procedures Manual – Sustainability and External Relations* – refer to Appendix A); and
- Housekeeping Checklist.

5.6 Environmental Performance Reporting

5.6.1 Objectives and Targets

During the period of the work program covered by this MMP the following environmental objectives are to be met:

- Removal of all waste from work program areas.
- Capping and rehabilitation of drill holes to DoR approved standards.
- Rehabilitation of all drill access tracks and drill pads to DoR approved standards.
- No transport of imported species of flora and fauna to or from work program areas.
- Completion of statutory rehabilitation reports.
- Compliance with environmental guidelines with regards to noise and dust emissions.
- Monitoring and recording of environmental effect of work program for incorporation in future MMPs.

5.6.2 Performance Reporting

Monitoring data is entered into a database called Cintellate (used for accidents/incidents, hazards, inspection, audits and corrective actions). Details of environmental audits/inspections carried out for the Fenton Exploration Project will be incorporated in future MMPs for this area.

5.7 Emergency Procedures and Incident Reporting

All reporting of incidents will be carried out in accordance with the terms of the Mining Act and the Mining Management Act and other applicable acts of the Northern Territory. Any incidents will be reported to DoR, the identified stakeholders and their representatives and the directors of the operating company.

In the event of any emergency, the ground crew is instructed to enact the emergency response procedures in place. These include:

- contacting the landowner;
- contacting the Project Manager, or their representative.

Crews are then instructed to immediately contact the appropriate authorities (e.g. land holder, DoR and Technical Director) with the order of contact dependent upon the situation involved in the emergency. It should be restated that the health and safety of all individuals in

the work program is paramount and that in any emergency situation this priority will be acted upon initially.

Crews have scheduled communications with the Exploration Manager (or delegate) in Perth, and if the crews miss scheduled communications, steps are taken to make contact with them and check on their safety.

6 EXPLORATION REHABILITATION

All exploration activities conducted by on the Fenton project will be conducted to ensure that environmental disturbance is minimised. Rehabilitation of disturbed areas will be completed according to the Newmont Closure and Reclamation Standard.

The end land use of areas disturbed by exploration is to return it to a natural state. The closure objective is to aim to have drill holes, drill pads, sumps and unwanted access tracks rehabilitated to a point where native vegetation has the potential to re-establish naturally without further intervention.

6.1 Rehabilitation Plan

Rehabilitation is a requirement post drilling activities, to ensure that areas disturbed by these activities are returned to a safe and environmentally sound condition, as close to site condition prior to disturbance as possible.

Specifically for this drill program, drillholes will be immediately rehabilitated in the following manner:

- Temporarily capping the hole immediately after drilling with a plastic cap.
- When the hole is no longer required the PVC casing should be cut at 40cm below ground level using a collar cutter.
- Inserting a plastic plug ensuring that is correctly seated.
- Backfilling the hole using low permeability material (drill spoil may be used) and mounding the topsoil over the top of the hole to allow for settling and to avoid ponding of water.
- Sumps will be rehabilitated by replacing stockpiled subsoil and topsoil materials in the correct order.
- Compacted areas will be ripped if required.

Revegetation is assessed by Newmont approximately 12 months following rehabilitation activities have been completed.

6.2 Costing of Closure Activities

This closure cost estimate has been determined by Newmont in conjunction with the authorisation granted for the Fenton Exploration Project as preented in Appendix ? and summarised below in Table 9. Adjustments will be made in progressive years based on exploration and rehabilitation works performed.

Table 9 – Fenton Exploration Project Security Estimate

Details			
Contact Name	Alan Hawkins	Authorisation #	
Project	Fenton Exploration Project	Date	18/06/2018
MMP	2018 Exploration mining Management Plan		

Calculation Trigger			
New Authorisation	MMP Renewal/amendment	Audit Finding	Client Request
<input checked="" type="checkbox"/>			

Domains	Calculated Cost
Site Infrastructure	\$0.00
Exploration	\$1,176.00
Post Closure Management	\$12,030.00
Sub-Total - All Domains	\$13,206.00
CONTINGENCY @15%	\$1,980.90
TOTAL COST	\$15,186.90
10% Discount	\$1,519
Amended amount	\$13,668
1% levy	\$137

7 REFERENCES

Bajwah, Z.U., 1994. A contribution of geology, petrology and geochemistry to the Cullen Batholith and related hydrothermal activity responsible for the mineralisation, Pine Creek Geosyncline, Northern Territory; NT Geological Survey Report No. 8

Hronsky, T., 2013. Pine Creek Property. Second Annual & Final Report 30th August 2013. St George Mining Ltd.

Partington, G. A., and Williams P. J., 2000. Proterozoic Lode Gold and Iron-Copper-Gold Deposits: a Comparison of Australian and Global Examples, in Australian & Global Proterozoic Lode Au & (Fe)-Cu-Au Deposits (chapter 2), 2000

Şener, A. K., 2004. Characteristics, distribution and timing of gold mineralisation in the Pine Creek orogeny, Northern Territory, Australia. The University of Western Australia, Unpublished PhD thesis.

Websites accessed for environmental information:

Northern Territory

<https://denr.nt.gov.au/>

<https://denr.nt.gov.au/>

<https://www.nt.gov.au/environment>

<http://nrmaps.nt.gov.au/nrmaps.html>

Australian Government

<http://www.environment.gov.au/epbc/protected-matters-search-tool>

<https://environment.gov.au/system/files/resources/a8015c25-4aa2-4833-ad9c-e98d09e2ab52/files/bioregion-daly-basin.pdf>

8 DOCUMENT CONTROL

Rev.	Author	Reviewer	Approved By	Issue Date
1	A HAWKINS K SAVAGE	G SALE	P SIVWRIGHT	2018

9 APPENDICES

Appendix A – Newmont Australia Generative Exploration – Sustainability & External Relations Procedures

Appendix B1 – Map of Daly Basin Bioregion Conservation Values and Environmental Resources

Appendix B2 – Map of Major Vegetation Groups of the Daly River Catchments

Appendix B3 – Map of Melaleuca Forests of the Northern Territory

Appendix C – EPBC Act Protected Matters Search Tool Report

Appendix D – NT NR Maps Data Significant Flora and Fauna Species Lists Recorded within Project Area

Appendix E – NT Landholder & Stakeholder Communications Spreadsheet and accompanying correspondence

Appendix F – AAPA Inspection Reply

Appendix G – Fenton Project Exploration Security Calculation Tool

Appendix H – Shape files of Proposed Work Area



MINING MANAGEMENT PLAN
FENTON EXPLORATION PROJECT