Mining Management Exploration Activities

Northern Territory of Australia – *Mining Management Act 2001*

It is recommended that the Mining Management Plan (MMP) is completed in conjunction with the user guide available on the Northern Territory Government website.

Section 1 – Project Details

Project Name Provide new or existing project name	Tanami Exploration Project

Authorisation Number Insert existing authorisation number, where applicable	0458-04

Operator Name Use ASIC-ABR registered name (if a company), or name of the applicant	Newmont Tanami Pty Ltd
Operator ABN and ACN numbers	ACN 007 688 093 ABN 39 007 688 093

Location and Access Details Include brief description of the location, access details, and distance to nearest town or community	The Newmont Tanami Operations (NTO) are located in the Tanami Desert approximately 550km northwest of Alice Springs along the Tanami Highway. Exploration activities undertaken under the Tanami Exploration Project (TEP) are supported from the Granites (MLS8) and Dead Bullock Soak (DBS, MLS154) mining operations. The Aboriginal Communities of Yuendumu and Lajamanu are the closest 'major' population centres to NTO, located 270km south-east and 350km north of the Granites respectively. The Yarturlu Yarturlu Outstation, which is intermittently occupied, is located approximately 700m from the south-eastern lease boundary of MLS8. Approximately 22 kilometers west of DBS is the homestead of the Tanami Downs Station, which occupies approximately 4,200 sq km that was returned to the traditional owners in December 1992 following the Mangkururrpa Aboriginal Land Trust Claim. The Aboriginal Mungurrupa Outstation is located approximately 2.5 kilometers from the homestead and is infrequently occupied by the Traditional Owners.

Target Commodity Details Include target mineral commodities (i.e. gold, copper etc.)	Gold

Mining Activities Summarise the mining activities (exploration) to be the subject of the proposed Authorisation or Variation. Drilling programs over a maximum of four years are supported and encouraged and can be staged. Please refer to the guidelines for further information.	The subject mining activities to be undertaken under the Variation to Authorisation 0485-04 consists of exploration for minerals and operations and works in connection with the exploration for minerals. The exploration programs being progressed under the TEP consist of generative exploration prospect identification and investigation through to resource delineation and feasibility evaluations. The activities detailed herein are proposed for completion over 2-3 year term. The broader work programs detailed in this exploration Mining Management Plan (MMP) are focused on updating the geochemical baseline dataset across the tenement holding via Newmont's proprietary Deep Sensing Geochemistry (DSG) soil sampling technology. The highest ranked anomalies from the DSG programs are then investigated via reverse circulation (RC) and diamond drilling programs. Subject to the success of initial drilling programs more intensive assessments follow to delineate a resource, as has occurred for the Oberon deposit on EL23662. Drilling completed since 2018 of the Oberon prospect has focused on defining the deposit believed to be a resource in excess of 1.5 million ounces undergoing detailed feasibility evaluation and mineral lease application (MLA32322). The key programs of work for Oberon consist of exploration, geotechnical and hydrogeological drilling programs and environmental assessments to facilitate the continued development of the prospect through project feasibility and environmental/social impact assessments.

Proposed Schedule Include start and finish dates of ground disturbing work	The broader generative exploration program conducted across the tenement holdings will primarily be undertaken between March and November annually in avoidance of the wet season and associated access impediments. The progression of the Oberon programs will be year round to support the project feasibility evaluation schedule although also biased for the March to November period when access is generally not limited.

Mining Interest and Land Ownership

List the mining interests (titles), the title holder name/s, the title expiry date and the Property name/Land holder (e.g. pastoralist or Aboriginal land trust) for each title.

Title Number	Title Holder	Expiry Date	Underlying Property Name or Land Holder
EL2366	Newmont Tanami Pty	31-12-2022	Central Desert Aboriginal Land Trust
EL2367	Newmont Tanami Pty	31-12-2022	Central Desert Aboriginal Land Trust
EL4529	Newmont Tanami Pty	31-12-2022	Central Desert Aboriginal Land Trust

Title Number	Title Holder	Expiry Date	Underlying Property Name or Land Holder
EL8077	Newmont Tanami Pty	02-01-2022	Mangkururrpa Aboriginal Land Trust
EL8912	Newmont Tanami Pty	07-09-2021	Central Desert Aboriginal Land Trust
EL9737	Newmont Tanami Pty	19-08-2021	Central Desert Aboriginal Land Trust
EL9996	Newmont Tanami Pty	19-08-2021	Central Desert Aboriginal Land Trust
EL10138	Newmont Tanami Pty	05-06-2021	Mangkururrpa Aboriginal Land Trust
EL22170	Newmont Tanami Pty	19-08-2021	Central Desert Aboriginal Land Trust
EL22900	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL22933	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL23150	Newmont Tanami Pty	28-07-2021	Mangkururrpa Aboriginal Land Trust
EL23308	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL23658	Newmont Tanami Pty	31-03-2023	Central Desert Aboriginal Land Trust
EL23660	Newmont Tanami Pty	31-03-2023	Central Desert Aboriginal Land Trust
EL23662	Newmont Tanami Pty	31-03-2023	Central Desert Aboriginal Land Trust/ Mangkururrpa Aboriginal Land Trust
EL23744	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL23833	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL24864	Newmont Tanami Pty	30-12-2022	Mangkururrpa Aboriginal Land Trust
EL24865	Newmont Tanami Pty	30-12-2022	Mangkururrpa Aboriginal Land Trust
EL24886	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL24888	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL24889	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL24890	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL24895	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL24896	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL24973	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL24974	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust
EL25012	Newmont Tanami Pty	30-12-2022	Central Desert Aboriginal Land Trust/ Mangkururrpa Aboriginal Land Trust
EL25013	Newmont	30-12-2022	Central Desert Aboriginal Land Trust
EL30806	Newmont Tanami Pty	31-12-2022	Central Desert Aboriginal Land Trust

Organisational Structure

Position Title	Name
Regional Senior Vice President – Australia	Alex Bates
General Manager	Vince De Carolis
Exploration Manager (Regional)	Philippa Sivwright
Principal Exploration Geologist (Regional)	Alan Hawkins
Mine Exploration Manager	Matthew Baggott
Mine Exploration Superintendent	Erin Hart
Sustainability & External Relations Manager	Javier Brodalka
Sustainability & External Relations Superintendent	Seth McCann

Section 2 – Operator Self-Assessment of the Environmental Risk

The purpose of this self-assessment is to ensure Operators complete a project risk assessment of potential environmental impacts and are aware of other legislative obligations from various Agencies. As a result of this self-assessment, further information may be required in the form of a management plan to enable full assessment of the MMP. If you have any queries please contact a Mining Officer prior to submitting the MMP. Useful resources to assist with this self-assessment are provided in the User Guide.

Environmental considerations

ASSESSMENT ASPECT	YES or NO	ACTIONS REQUIRED (if answered YES)	APPENDED INFORMATION (e.g. evidence of consultation with DEPWS and/or management plan where required).
Step 1: Are there any threatened flora and fauna species or habitats of significance that may occur in the proposed work area?	Yes	The Operator must assess the likelihood of threatened species or their habitats occurring at or near the site. If the likelihood is high, then a "Significant Impact Assessment" must be undertaken and appended to this document.	Biodiversity and Land Management Plan
Step 2: Are there any known declared weeds within the proposed work area?	No	Seek advice from DEPWS – Weed Management Branch to determine if weeds are present on site and ensure management measures are appropriate for the level of activity proposed and attach a Weed Management Plan (if required).	N/A
Step 3: Will you be using water from bores or other sources for the operation?	Yes	Water related matters on mineral titles are no longer exempt from the *Water Act 1992.* Please consult with DEPWS Water Resources and/or familiarise yourself with the *Water Act* to ensure compliance under this Act when undertaking exploration activities.	In accordance with the *Water Act 1992,* 18 March 2021 Revocation of Declarations and Declarations of Exemptions; water licences will be applied for for abstraction from bores as required in 2022 in consultation with DEPWS. Previous supply abstracted from these sources were below the former 15L/sec threshold.

Environmental assessment and cultural considerations

ASSESSMENT ASPECT	YES or NO	MANAGEMENT REQUIREMENTS
Step 4: Is your project likely to have a significant impact on the environment?	No	Refer to the NTEPA Environmental Factors and Objectives Guideline.
Step 6: Are there archaeological and heritage sites in the Project area?	No	Heritage and archaeology sites are protected in the NT. NT Department of Territory Families, Housing and Communities (DTFHC) administers the *Heritage Act 2011.* Seek advice in relation to protection of heritage and archaeological sites.

Section 3 – Amendments

As per Section 41(3) of the *Mining Management Act*, an MMP reviewed and amended under Section 41(1)(a) is to have amendments made since the previous MMP submission clearly identified.

Section	Amendment
Entire Document	Adapted to new document template (23 March 2021 Release)
Section 1	Updated 'Location and Access Details' and 'Mining Activities'. EL23150 added to 'Mining Interest and Land Ownership', formerly approved via Mining Authorisation 0894.01. Updated 'Organisational Structure'.
Section 4	Activities proposed updated for 2021 – 2023 scope
Section 5	Previous disturbance record collated and attached separately
Section 6	Added in commentary regarding the management of access to free water and effluent to restrict access to pest animals and water quality.
Section 7	Detail in 'Justification and alternative management measures'
Section 8	Updated Figures

Delete or add rows as required

Section 4 – Activities Proposed for this MMP only

Drilling type relates to diamond core, RC and RAB / Aircore. A larger volume of holes generally denotes a likely RAB/AC program.

Assessment scope for EL23662 has been split between the MLA32322 and the broader EL23662.

Mining Interest	EL2366			EL2367			EL4529			EL8077		
Year	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Target commodity	Gold	Gold	Gold	Gold	Gold	-	Gold	Gold	Gold	Gold	Gold	Gold
Maximum depth of holes (m)	1,000	1,000	1,000	1,000	1,000	-	300	300	300	250	250	250
Number of holes to be drilled [1]	10	10	10	65	15	-	24	24	24	20	20	20
Total metres to be drilled (m)	5,000	5,000	5,000	16,000	6,000	-	7,200	7,200	7,200	2,000	2,000	2,000
Number of drill pads to be cleared	10	10	10	65	15	-	24	24	24	20	20	20
Number of sumps to be cleared (volume m^3)	20 (360)	20 (360)	20 (360)	65 (1,170)	45 (810)	-	24 (432)	24 (432)	24 (432)	8 (144)	8 (144)	8 (144)
Number of camp pads to be cleared (40m x 40m)	1	-	-	-	-	-	-	-	-	1	-	-
Total drill and camp pad area to be disturbed (hectares)	1.76	1.76	1.76	10.4	2.4	-	3.84	3.84	3.84	-	-	-
Length of historic tracks to be re-established (length x width m)	-	-	-	-	-	-	-	-	-	-	-	-
Length of new tracks to be established (length x width m)	8,500 x 4	8,500 x 4	8,500 x 4	21,000 x 4	1,000 x 4	-	2,000 x 4	2,000 x 4	2,000 x 4	10,000 x 4	10,000 x 4	10,000 x 4
Total track area to be disturbed (hectares)	3.4	3.4	3.4	8.4	0.4	-	0.8	0.8	0.8	4	4	4
Drill holes to be capped / plugged	10	10	10	65	15	-	24	24	24	20	20	20
Total area to be rehabilitated (ha)	0.32	0.32	0.32	0.32	-	-	-	-	-	-	-	-

Mining Interest	EL8912			EL9737			EL9996			EL22170		
Year	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**
Target commodity	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold
Maximum depth of holes (m)	-	250	-	250	250	250	250	250	250	-	250	-
Number of holes to be drilled [1]	-	5	-	10	10	10	20	20	20	-	5	-
Total metres to be drilled (m)	-	1,250	-	2,000	2,000	2,000	2,000	2,000	2,000	-	1,250	-
Number of drill pads to be cleared	-	5	-	10	10	10	20	20	20	-	5	-
Number of sumps to be cleared (volume m^3)	-	4 (72)	-	4 (72)	4 (72)	4 (72)	8 (144)	8 (144)	8 (144)	-	4 (72)	-
Number of camp pads to be cleared (40m x 40m)	-	0	-	-	-	-	-	-	-	-	-	-
Total drill and camp pad area to be disturbed (hectares)	-	0.8	-	1.6	1.6	1.6	3.2	3.2	3.2	-	0.8	-
Length of historic tracks to be re-established (length x width m)	-	-	-	-	-	-	-	-	-	-	-	-
Length of new tracks to be established (length x width m)	25,000 x 4	25,000 x 4	25,000 x 4	2,000 x 4	2,000 x 4	2,000 x 4	2,000 x 4	2,000 x 4	2,000 x 4	5,000 x 4	5,000 x 4	5,000 x 4
Total track area to be disturbed (hectares)	10	10	10	0.8	0.8	0.8	0.8	0.8	0.8	2	2	2
Drill holes to be capped / plugged	-	5	-	10	10	10	20	20	20	-	5	-
Total area to be rehabilitated (ha)	-	-	-	-	-	-	-	-	-	-	-	-

Mining Interest	EL22933			EL23150			EL23658			EL23660		
Year	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**
Target commodity	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold
Maximum depth of holes (m)	250	250	250	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Number of holes to be drilled	10	10	10	80	80	80	50	50	50	60	60	60
Total metres to be drilled (m)	2,000	2,000	2,000	45,000	45,000	45,000	10,000	10,000	10,000	10,000	10,000	10,000
Number of drill pads to be cleared	10	10	10	80	80	80	50	50	50	60	60	60
Number of sumps to be cleared (volume m^3)	4 (72)	4 (72)	4 (72)	110 (1,980)	110 (1,980)	110 (1,980)	20 (360)	20 (360)	20 (360)	40 (720)	40 (720)	40 (720)
Number of camp pads to be cleared (40m x 40m)	-	-	-	-	-	-	1	-	-	2	-	-
Total drill and camp pad area to be disturbed (hectares)	1.6	1.6	1.6	12.8	12.8	12.8	8.16	8.16	8.16	9.92	9.92	9.92
Length of historic tracks to be re-established (length x width m)	-	-	-	-	-	-	-	-	-	-	-	-
Length of new tracks to be established (length x width m)	10,000 x 4	10,000 x 4	10,000 x 4	30,000 x 4	30,000 x 4	30,000 x 4	15,000 x 4	15,000 x 4	15,000 x 4	15,000 x 4	15,000 x 4	15,000 x 4
Total track area to be disturbed (hectares)	4	4	4	12	12	12	6	6	6	6	6	6
Drill holes to be capped / plugged	10	10	10	80	80	80	50	50	50	60	60	60
Total area to be rehabilitated (ha)	-	-	-	-	-	-	-	-	-	-	-	-

Mining Interest	EL23662			EL23744			EL24886			EL24888		
Year	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**
Target commodity	Gold	Gold	-	Gold	Gold	-	Gold	Gold	Gold	Gold	Gold	Gold
Maximum depth of holes (m)	1,000	1,000	-	400	400	-	400	400	400	400	400	400
Number of holes to be drilled [1]	90	30	-	24	12	-	20	20	20	5	5	5
Water / Monitoring Bore	40	-	-	-	-	-	-	-	-	-	-	-
Total metres to be drilled (m)	14,000	10,000	-	5,400	2,700	-	5,000	5,000	5,000	2,000	2,000	2,000
Number of drill pads to be cleared	90	30	-	24	12	-	20	20	20	5	5	5
Number of sumps to be cleared (volume m^3)	100 (1,800)	90 (1,620)	-	24 (432)	12 (216)	-	20 (360)	20 (360)	20 (360)	4 (72)	4 (72)	4 (72)
Number of camp pads to be cleared (40m x 40m)	2	-	-	-	-	-	-	-	-	-	-	-
Total drill and camp pad area to be disturbed (hectares)	30.52	4.80	-	3.84	1.91	-	3.2	3.2	3.2	0.8	0.8	0.8
Length of historic tracks to be re-established (length x width m)	-	-	-	-	-	-	-	-	-	-	-	-
Length of new tracks to be established (length x width m)	37,000 x 4	10,000 x 4	-	12,455 x 4	12,455 x 4	-	5,000 x 4	5,000 x 4	5,000 x 4	2,000 x 4	2,000 x 4	2,000 x 4
Total track area to be disturbed (hectares)	21.8	4.0	-	4.98	4.98	-	2	2	2	0.8	0.8	0.8
Drill holes to be capped / plugged	50	30	-	24	12	-	20	20	20	5	5	5
Total area to be rehabilitated (ha)	0.8	-	-	-	-	-	-	-	-	-	-	-

Mining Interest	EL24895			EL24896			EL24973			EL24974		
Year	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**	**2021**	**2022**	**2023**
Target commodity	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold
Maximum depth of holes (m)	-	250	-	-	250	-	250	250	250	-	250	-
Number of holes to be drilled [1]	-	5	-	-	5	-	20	20	20	-	5	-
Total metres to be drilled (m)	-	1,250	-	-	1,250	-	2,000	2,000	2,000	-	1,250	-
Number of drill pads to be cleared	-	5	-	-	5	-	20	20	20	-	5	-
Number of sumps to be cleared (volume m^3)	-	4 (72)	-	-	4 (72)	-	4 (72)	4 (72)	4 (72)	-	4 (72)	-
Number of camp pads to be cleared (40m x 40m)	-	0	-	-	0	-	-	-	-	-	0	-
Total drill and camp pad area to be disturbed (hectares)	-	0.8	-	-	0.8	-	3.2	3.2	3.2	-	0.8	-
Length of historic tracks to be re-established (length x width m)	-	-	-	-	-	-	-	-	-	-	-	-
Length of new tracks to be established (length x width m)	10,000 x 4	10,000 x 4	10,000 x 4	10,000 x 4	10,000 x 4	10,000 x 4	10,000 x 4	10,000 x 4	10,000 x 4	5,700 x 4	5,700 x 4	5,700 x 4
Total track area to be disturbed (hectares)	4	4	4	4	4	4	4	4	4	2.28	2.28	2.28
Drill holes to be capped / plugged	-	5	-	-	5	-	20	20	20	-	5	-
Total area to be rehabilitated (ha)	-	-	-	-	-	-	-	-	-	-	-	-

Mining Interest	EL30806		
Year	**2021**	**2022**	**2023**
Target commodity	Gold	Gold	Gold
Maximum depth of holes (m)	1,000	1,000	1,000
Number of holes to be drilled [1]	40	40	40
Total metres to be drilled (m)	5,000	5,000	5,000
Number of drill pads to be cleared	40	40	40
Number of sumps to be cleared (volume m^3)	20 (360)	20 (360)	20 (360)
Number of camp pads to be cleared (40m x 40m)	1	-	-
Total drill and camp pad area to be disturbed (hectares)	6.56	6.56	6.56
Length of historic tracks to be re-established (length x width m)	-	-	-
Length of new tracks to be established (length x width m)	10,000 x 4	10,000 x 4	10,000 x 4
Total track area to be disturbed (hectares)	4	4	4
Drill holes to be capped / plugged	40	40	40
Total area to be rehabilitated (ha)	-	-	-

Following the completion of the 2021 field season a critical appraisal of exploration targets will be undertaken to facilitate disturbance retention rationalisation and rehabilitation scope delineation.

The retention of capped drill collars is preferenced to facilitate down hole survey and geophysics assessment data collection to support drill results appraisal and interpretation.

Mining Interest	MLA32322 (EL23662)													
Drilling type	**Resource / Reserve Drilling**		**Sterilisation**		**Grade Control**		**Inventory**		**Hydrogeology**		**Geotech**		**Total**	
Year	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**
Target commodity	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Gold	Water	Water	Geotech	Geotech	-	-
Maximum depth of holes (m)	1500	1500	80	60	200	200	1,500	1,500	300	300	300	100	3,880	3,660
Number of holes to be drilled	215	165	330	90	370	120	75	50	50	20	30	25	1,070	470
Test Pits	-	-	-	-	-	-	-	-	-	-	80	50	80	50
Water / Monitoring Bore	-	-	-	-	-	-	-	-	50	20	-	-	50	20
Total metres to be drilled (m)	107,500	82,500	16,200	5,400	30,000	12,000	45,000	75,000	6,500	4,000	5,000	2,500	210,200	169,400
Number of drill pads to be cleared	109	109	270	90	1	20	75	50	50	20	15	10	520	299
Number of sumps to be cleared (volume m^3)	430	330	270	90	93	50	150	100	50	20	60	50	1,053	640
Total drill pad area to be disturbed (hectares)	17.4	17.4	43.2	14.4	35.9	3.2	12	8	8	3.2	2.4	1.6	119	48
Length of new tracks to be established (length x width m)	3,000 x 4	3,000 x 4	140,000 x 4	33,368 x 4	1,000 x 4	1,000 x 4	10,000 x 4	1,200 x 4	28,400 x 4	5,600 x 4	3,600 x4	2,400 x4	186,000 x 4	46,568 x 4
Total track area to be disturbed (hectares)	1.2	1.2	56	13.35	0.4	0.4	4	0.48	11.4	2.24	1.44	0.96	74	19
Drill holes to be capped / plugged	215	165	330	90	370	120	75	50	-	-	30	25	1,020	450

Additional to the above activities further infrastructure related disturbance detailed below is sort for approval with the MLA32322 footprint:

- Two 150m x 300m borrow pits to ~2.5m depth to source laterite material for road maintenance (9ha disturbance, to be accessed off other tracks provisioned above);
- Seven 70m x 140m turkeys nest water holding ponds (comparable to that already in-situ in the Oberon project area) to be utilised to contain groundwater intercepted or abstracted in association with drilling, hydrogeological investigations and pump testing (6.86ha);
- Construction of two 40m x 40m multi use concrete hard stands to an existing cleared area each to be fitted with two 12m shipping contains and dome igloo shade sail.
- Additional Oberon camp expansion to 63 room capacity, within existing cleared area.

Section 5 – Previous Disturbance (for existing Authorisations only)

The ‘Disturbance Tracking’ spreadsheet must be completed and attached to the MMP submission to complete this section. The spreadsheet is available on the departmental web page where this template is located.

Section 6 – Environmental Management

By checking these shaded boxes, you are agreeing to implement the following minimum environmental management standards on the project area. Where boxes have been left unchecked, justification is required.

6.1	X	Blade-up approach for clearing will be used (i.e. no windrows, leave root stock and topsoil)
6.2	✓	Significant vegetation will be avoided during clearing (i.e. large trees, specimens providing habitat or food sources, riparian vegetation, and threatened species)
6.3	✓	Vegetation clearing during, and immediately after rainfall events, will be avoided
6.4	✓	Vegetation clearing will be kept to the minimum required to safely traverse vehicles and drill rigs along tracks and drill pads
6.5	✓	Where blade-up techniques cannot be employed, topsoil and vegetation will be stockpiled appropriately for rehabilitation purposes
6.6	✓	All employees and contractors will be trained and inducted in relation to the management of environmental risks in the work area, including weeds, waterways, threatened species, soil erosion, sacred sites and heritage areas
6.7	✓	Sumps will be lined or tanks of appropriate size to contain water, sediment and drilling fluids encountered during drilling, will be used
6.8	✓	Sumps, drill holes, and fuel stores will be located away from environmentally significant areas and water courses
6.9	✓	Excavations (sumps, costeans and pits) will be appropriately ramped to allow fauna egress
6.10	✓	Drill holes will be securely capped immediately after drilling
6.11	✓	Vehicle hygiene measures will be employed to prevent the introduction and spread of invasive species and pathogens when mobilising vehicles and equipment from one location to another
6.12	✓	Hydrocarbon spills will be minimised using liners and drip trays under machinery, and appropriately sized spill-kits available in the event of a spill
6.13	✓	Hazardous substances (including hydrocarbons) will be stored and handled in accordance with relevant Australian Standards
6.14	✓	Hydrocarbons will be stored in lined and bunded areas
6.15	✓	Waste will be stored securely while on-site to minimise windblown rubbish and access by feral animals
6.16	✓	Waste will be removed off-site and disposed of at an appropriate waste management facility
6.17	✓	All environmental incidents will be reported to the Department in accordance with Section 29 of the Mining Management Act.

6.18	✓	Acid and Metalliferous Drainage (AMD) and Potentially Acid Forming (PAF) material derived from drilling cuts will be managed to avoid AMD and PAF related issues on site.
6.19	✓	Radioactive/NORM drill cuttings will be managed to avoid radiation related issues on site.
6.20	✓	Dust management will be implemented on site, if becomes problematic or excessive.

Justification and alternative management measures:

6.1 Blade-up approach is not used; however, topsoil and vegetation is stockpiled and re-spread on rehabilitation of the drill pad.

6.16 Waste is removed and disposed of at the Granites or DBS landfill facilities in accordance with the Newmont Tanami Operations Waste Management Plan as approved under Authorisation 0086-02.

Free water and effluent water management to avoid subsidising pest animals:

Effluent management at the camp at Oberon is managed via sprinkler irrigation as per previously approved Mining Management Plans. This negates any freestanding water access for pest animals.

Free water that is extracted as a part of the exploration works program across the exploration leases and more specifically at the Oberon works program, where the Turkey's Nests are planned is non potable water that is classified as saline/hypersaline. This water quality does not meet the quality criteria for the ANZECC guidelines for livestock drinking water. Thus the quality of this water does not attract pest animal species.

The requirement of the Turkey's nests for the Oberon project work program is to manage impacts of poor quality water on the surrounding environment, as opposed to direct discharging the water to the surrounding ground surface which would create water logging and accumulation of salt discharge in the area.

Section 7 – Rehabilitation and Closure

By checking these shaded boxes, you are agreeing to implement the following minimum rehabilitation standards on the project area. Where boxes have been left unchecked, justification is required.

A refund of security related to completed rehabilitation on site requires the submission of a rehabilitation report including photographs, an updated security calculation and updated disturbance tracking spreadsheet to the Department.

7.1	✓	Drill holes will be plugged below ground level at a minimum depth of 0.4 metres and soil mounded to prevent subsidence, within 6 months of completion of drilling and collection of down hole survey.
7.2	X	Drill holes encountering multiple or confined aquifers will be grouted with concrete.
7.3	✓	Drill samples/spoil will be returned down drill holes, buried in sumps, or removed from site.
7.4	✓	All drill hole and access markers including flagging tape, wooden markers and star pickets will be removed from site.
7.5	✓	Cut and fill drill pads will be re-contoured to be consistent with the surrounding terrain.
7.6	✓	Drill pads and compacted areas along the contour (on sloping ground) will be ripped/scarified of and tracks will be cross-ripped (zig-zag).
7.7	✓	Tracks will be rehabilitated, including pushing in all windrows, unless otherwise agreed in writing by the land holder or appropriate third party.
7.8	✓	Appropriate erosion and sediment controls will be installed where erosion is evident or likely to occur.
7.10	✓	Access through watercourses will be removed and banks restored.
7.11	✓	All previously disturbed areas will be stable, with no evidence of active soil erosion.
7.12	✓	All excavations will be backfilled within 6 months of their completion, with exception to where additional infill drilling will reutilise
7.13	X	All water bores will be decommissioned unless otherwise agreed in writing by the land holder or appropriate third party.
7.14	✓	All rubbish and infrastructure will be removed from site.
7.15	✓	Topsoil will be replaced and vegetation re-established.
7.16	✓	Contaminated soils (e.g. hydrocarbon or hazardous chemicals) will be rehabilitated or removed from site.
7.17	✓	Monitoring will be undertaken following the wet season or a significant rainfall event.

Justification and alternative management measures:

7.2 – The exploration areas are not within a water controlled district. The identification of multiple or confined aquifer interceptions during drill can be difficult subject to drilling type and hydrogeological understanding of drilling crew and supervising geologist. Drill collars which are proposed to be retained open for a period of 2 to 4 years post drilling.

Within the Oberon project area comprehensive aquifer investigations are proposed to characterise and quantify the hydrogeological condition of mineralised area as well as the adjacent calcrete aquifers that are being considered and evaluated as possible receiving systems for aquifer reinjection of dewatered groundwater.

7.13 - Water bores and monitoring bores to be retained for ongoing assessment and potential future utility in successive programs.

The Oberon prospect is currently undergoing detailed feasibility evaluation and mineral lease application (MLA32322). No concurrent reclamation is proposed for the MLA32322 project area and adjacent locations with EL23662 due to the likely requirement for further evaluation of project development disturbance. Subject to the success of the evaluation and project progression a rehabilitation scope will be developed during the late 2022 for implementation in early 2023.

During 2020 the rehabilitation of twenty one (21) legacy costeans that were excavated around the 1990s were completed. The majority of the works were performed by the Newmont Yapa Crew (indigenous work crew consisting primarily of Warlpiri workers form Lajamanu and Yuendumu). Closure and reclamation work records for each rehabilitated costean are provided as Appendix 3.

Section 8 – Required Attachments

8.1	✓	Initial Application for Authorisation or variation of Authorisation (only if details on the form have subsequently changed).
8.2	✓	Nomination of Operator Form, where required
8.3	✓	Security Calculation Spreadsheet
8.4	X	Evidence of Land Access Agreement if operating on an Exploration Licence (EL) on Pastoral Lease (e.g. two-ways exchange of email)
8.5	✓	Disturbance tracking spreadsheet (for existing Authorisations)
8.6	✓	Spreadsheet with coordinates of proposed drill holes or polygons of target areas
8.7	✓	KML/shape files/track logs of proposed tracks, camp sites and proposed drill holes or polygons of target areas
8.8	✓	Map(s) of the work area(s) showing: 1. title boundaries and title numbers 2. current and proposed drill holes, or polygons of target areas 3. current and proposed tracks 4. rehabilitated areas 5. camp sites 6. heritage sites or significant environmental areas 7. environmental constraints
8.10	X	Radiation Management Plan (if applicable)
8.12	✓	Document(s) being appended in relation to Section 2 (if any): - Oberon Demob costs - Biodiversity and Land Management Plan -Closure and Reclamation Work Record

Figure 1 - Tanami Exploration Project 2021 Exploration Tenement Activity

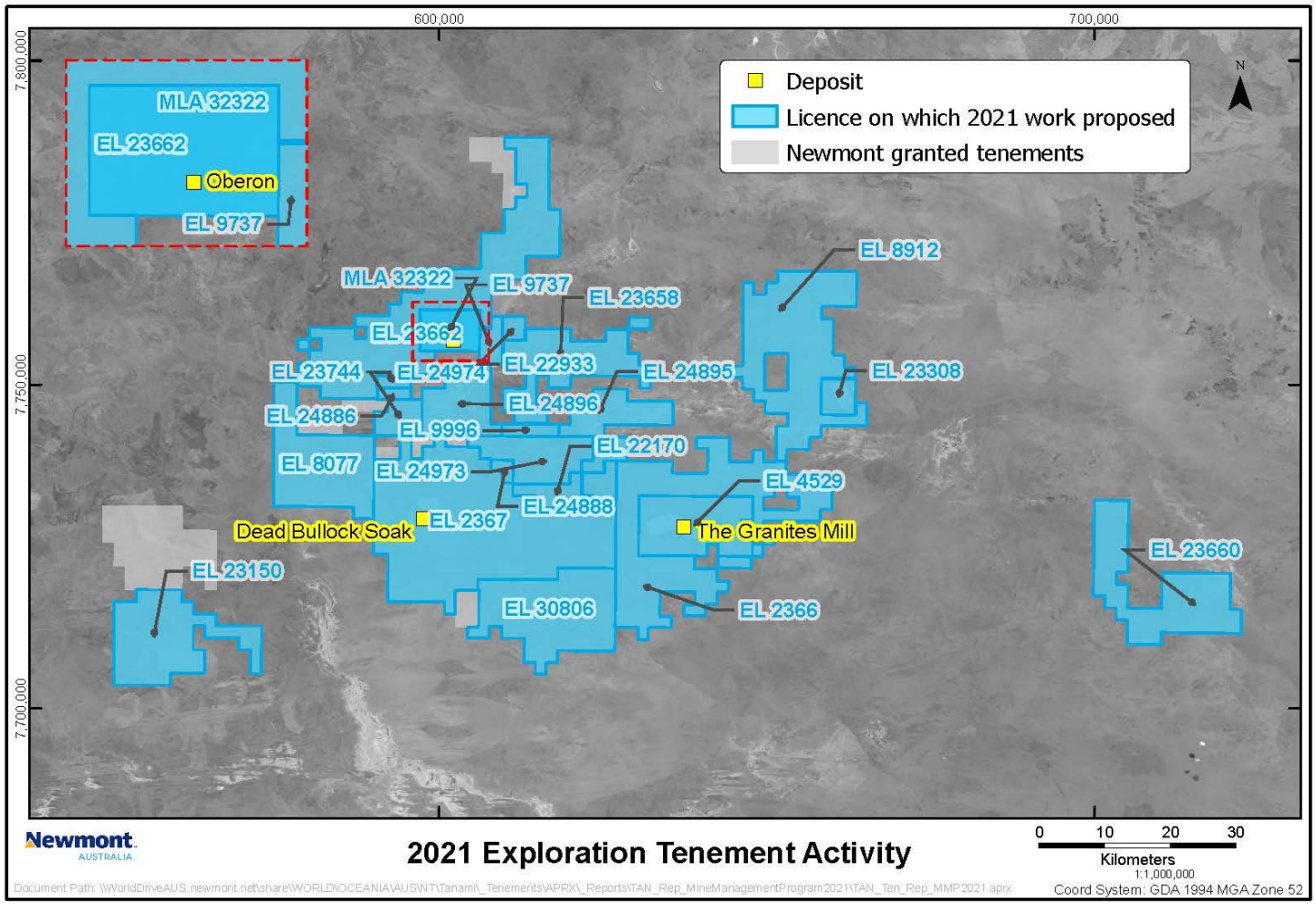


Figure 2 - 2019 Oberon Drilling activities showing collar locations, cleared pads and access tracks.

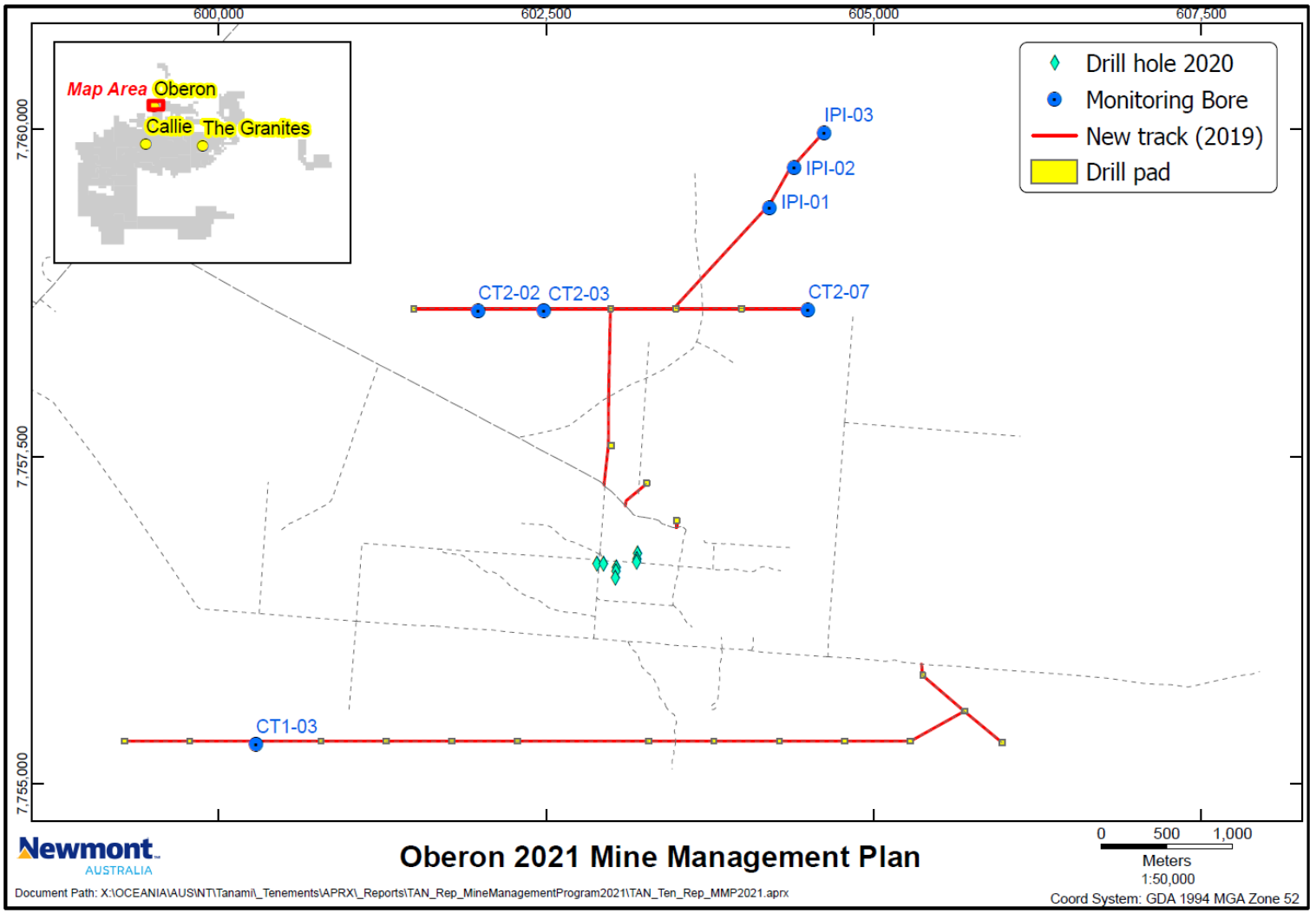


Figure 3 - 2020 Oberon Drilling activities showing collar locations, cleared pads and historic access tracks.

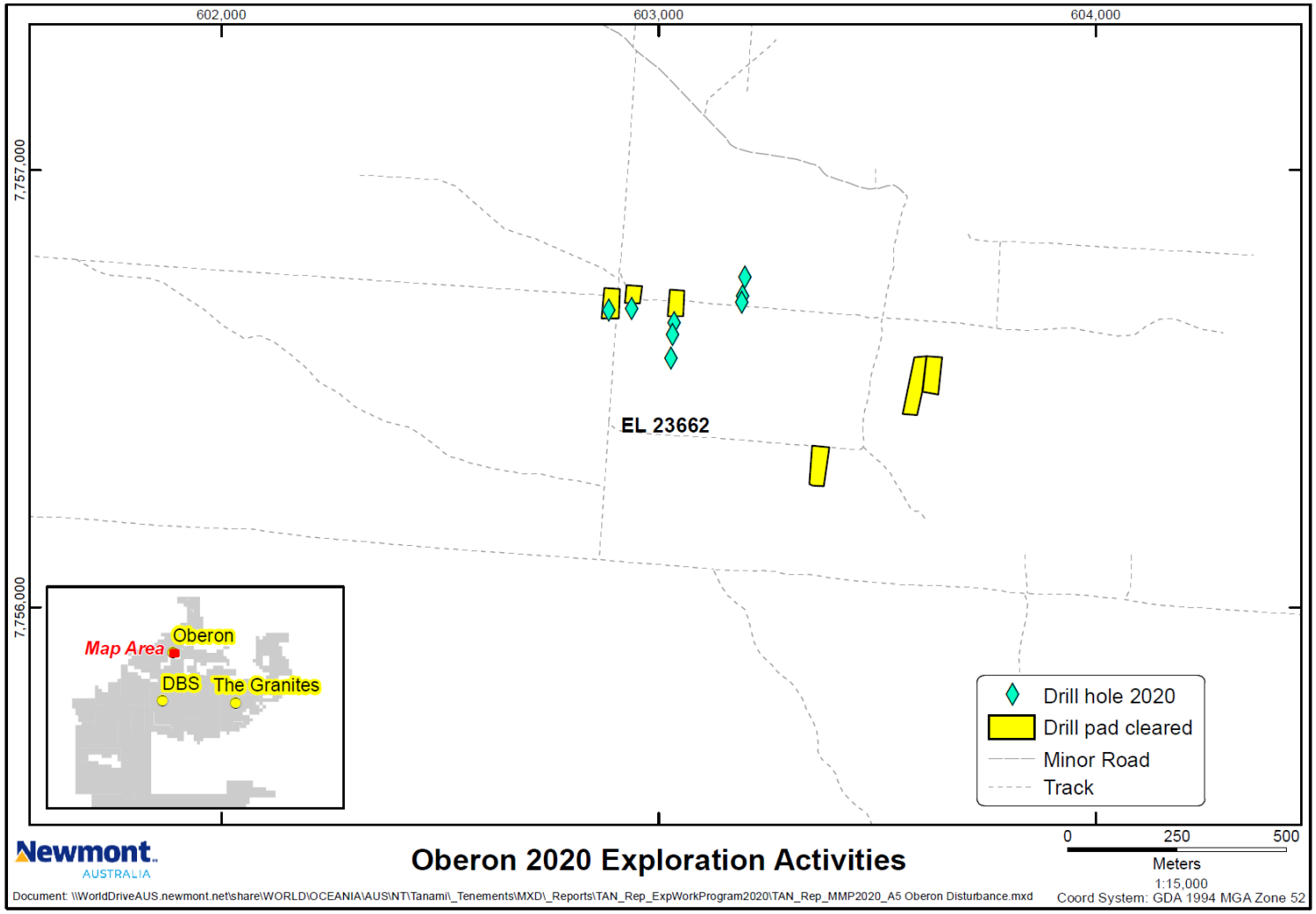


Figure 4 – Proposed Work Area for the Symington Project Area

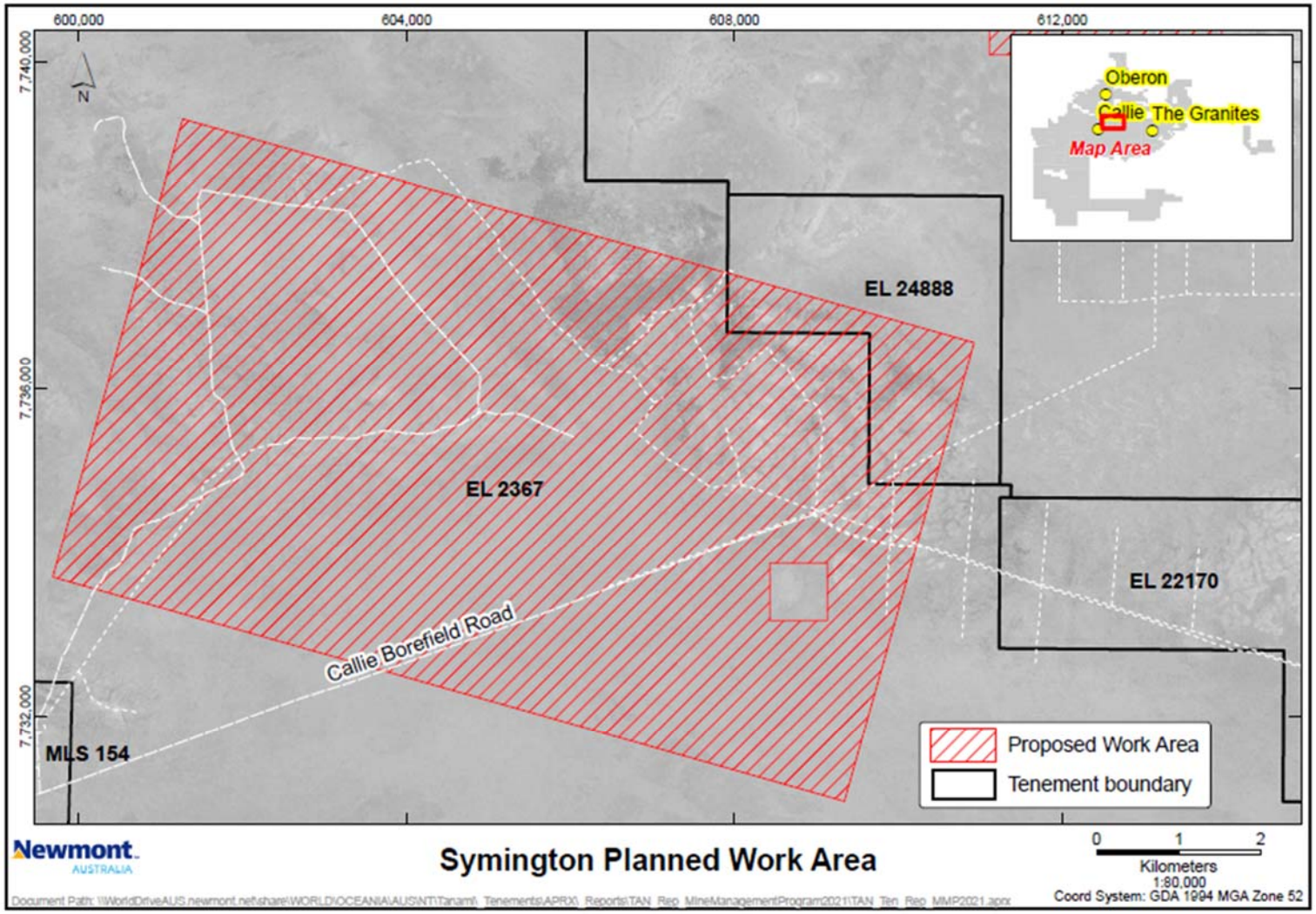


Figure 5 - Proposed Work Area for the Rainmaker Project Area

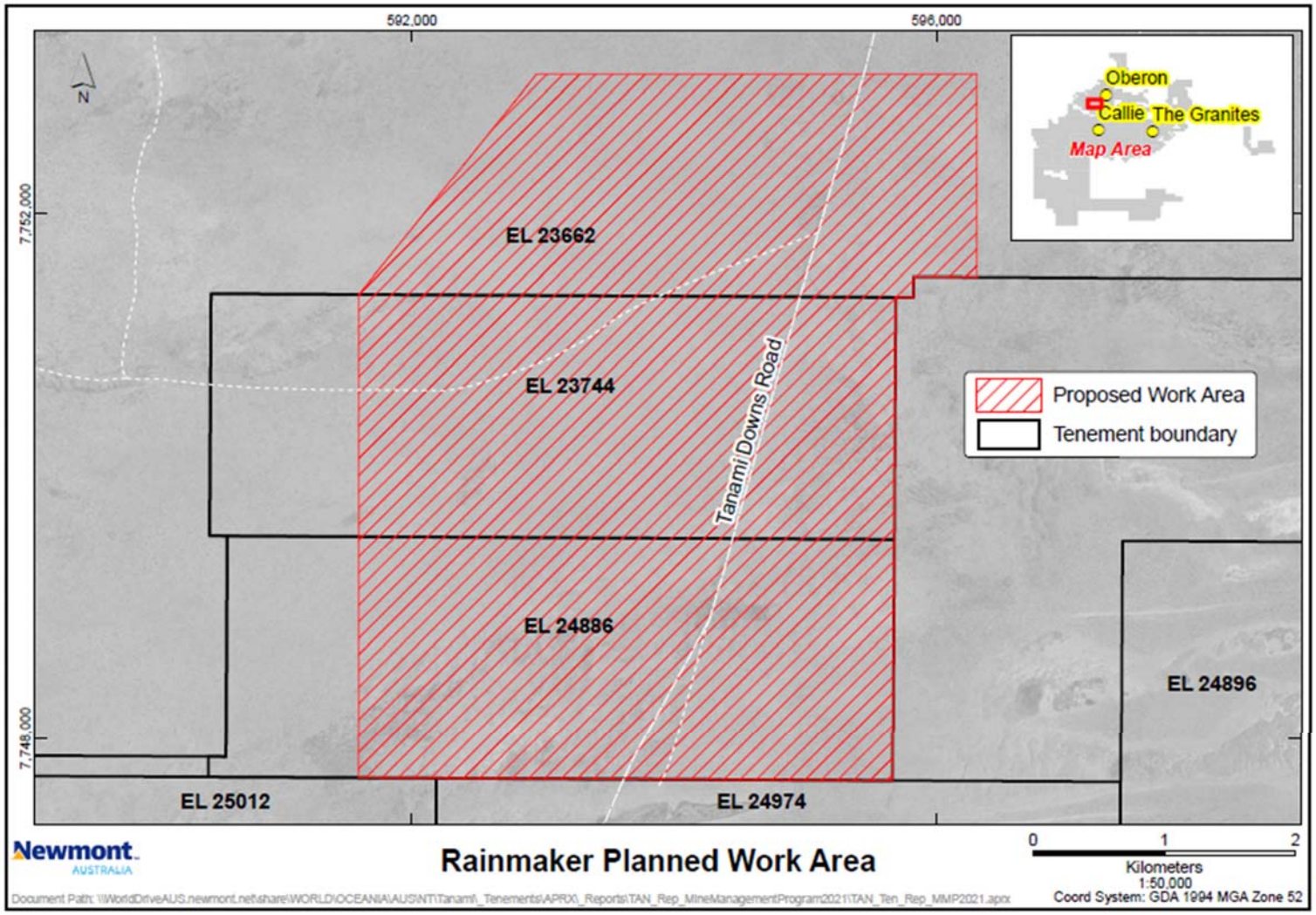


Figure 6 – Work Area for the Ptilotus Project Area

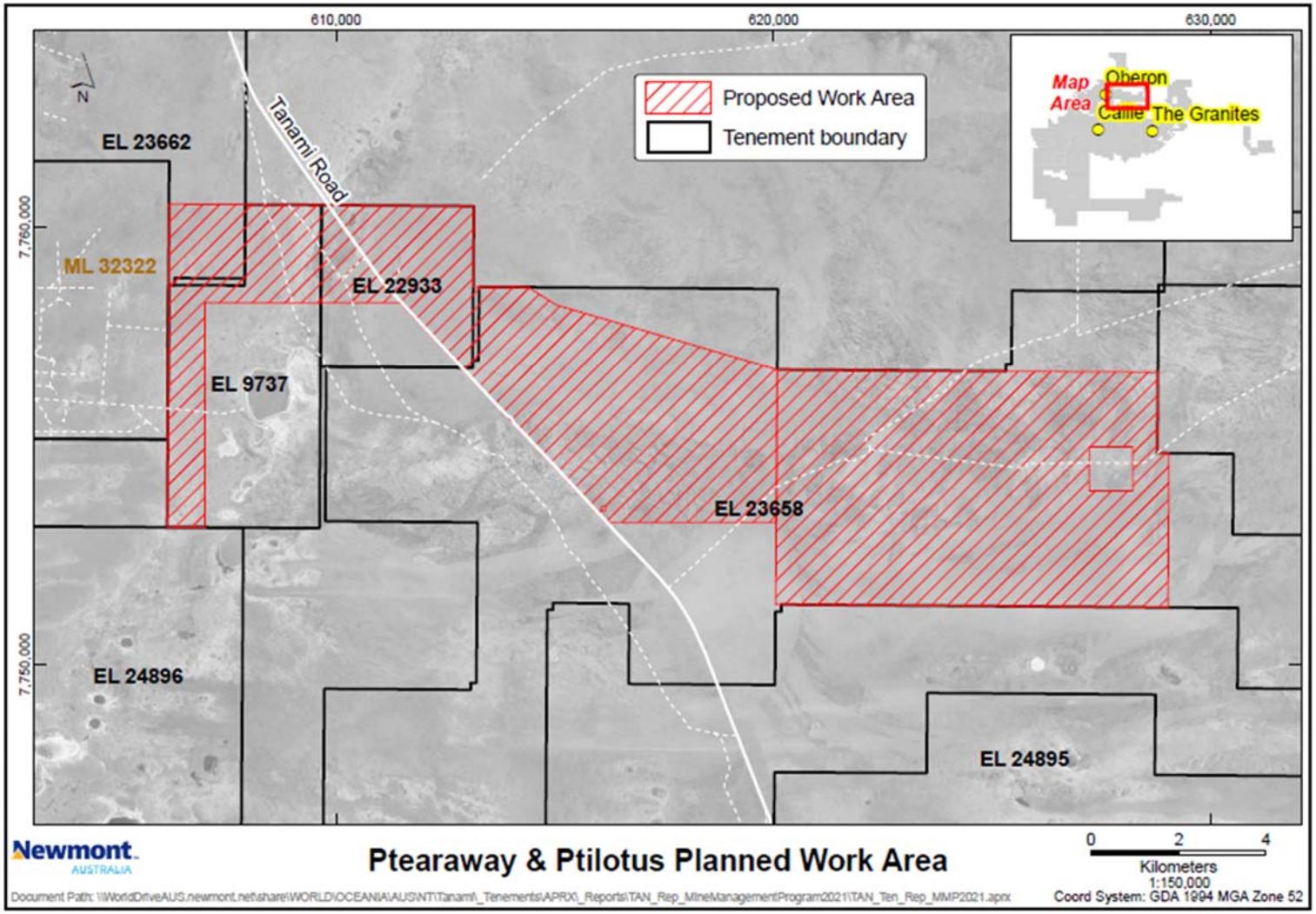


Figure 7 - Work Areas for the Ajax and Grimwade – Update in progress

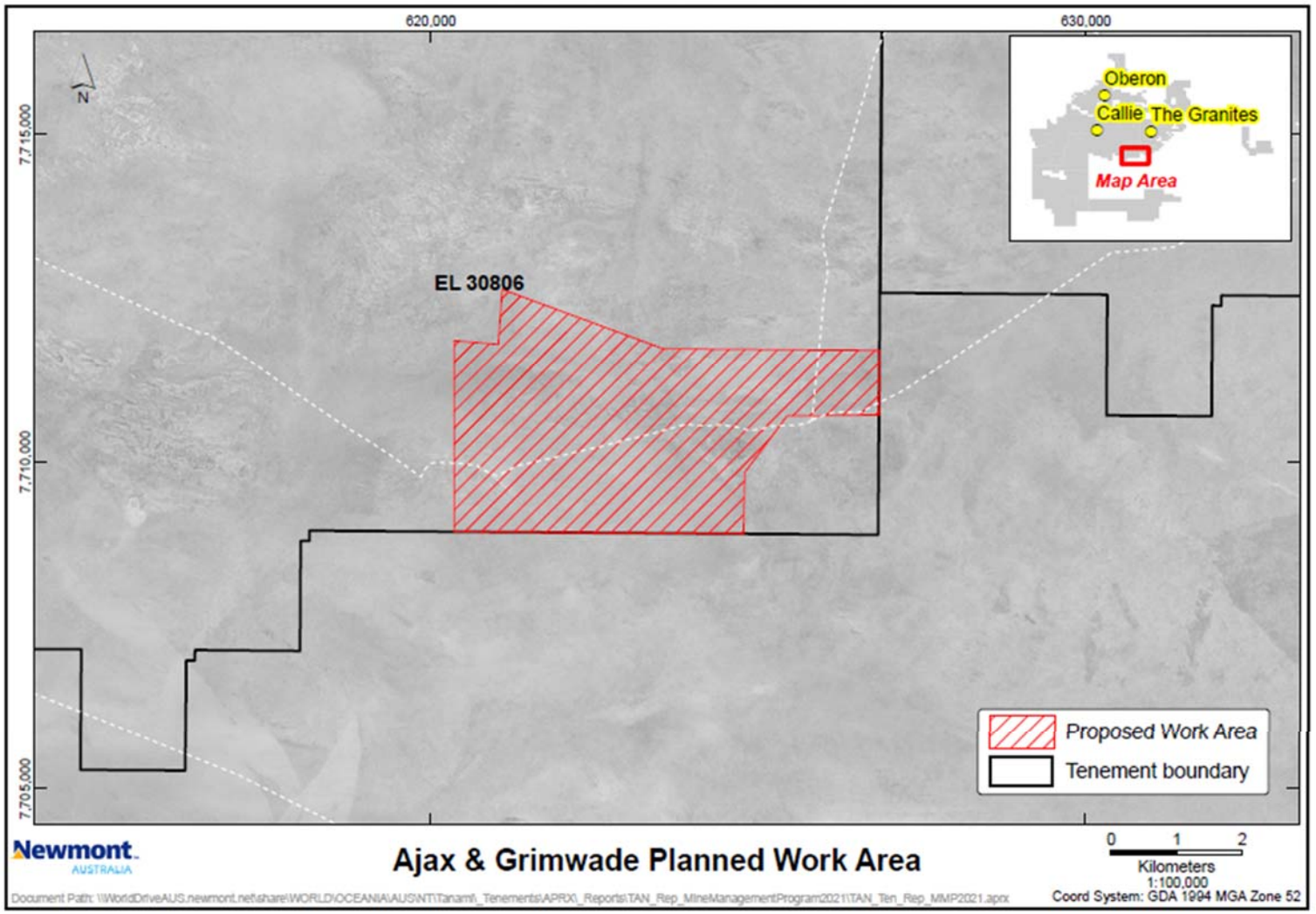


Figure 8 - Work Area for the Ophelia Project Area and the location of the Dead Bullock Soak Southwest Proposed Work Areas

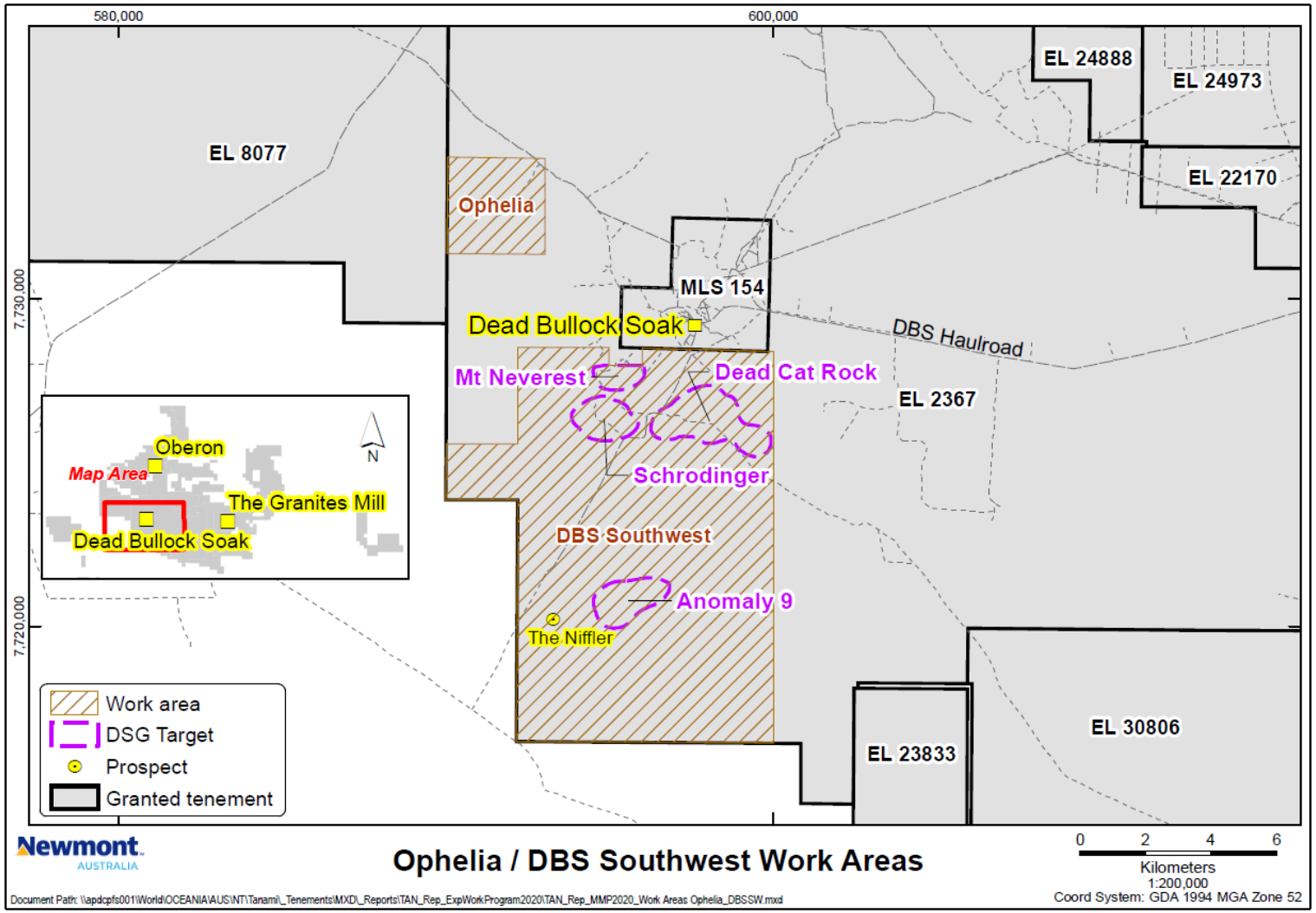


Figure 8 - Cashel & Terry's Depot Project Areas

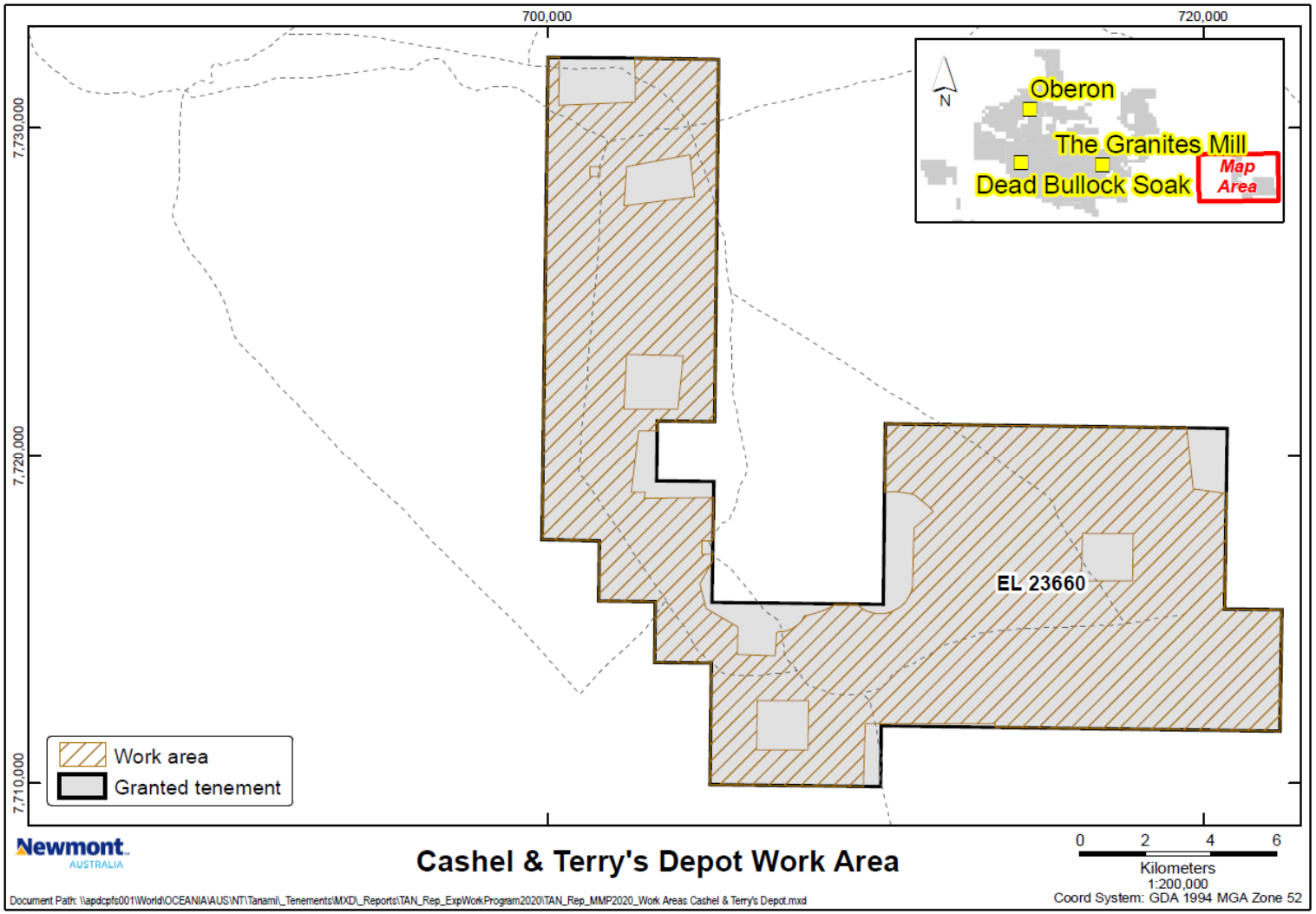


Figure 9 - Prospect map of the Officer Hill and Paris prospect areas on Officer Hill (EL23150) showing proposed work areas and Heritage sites.

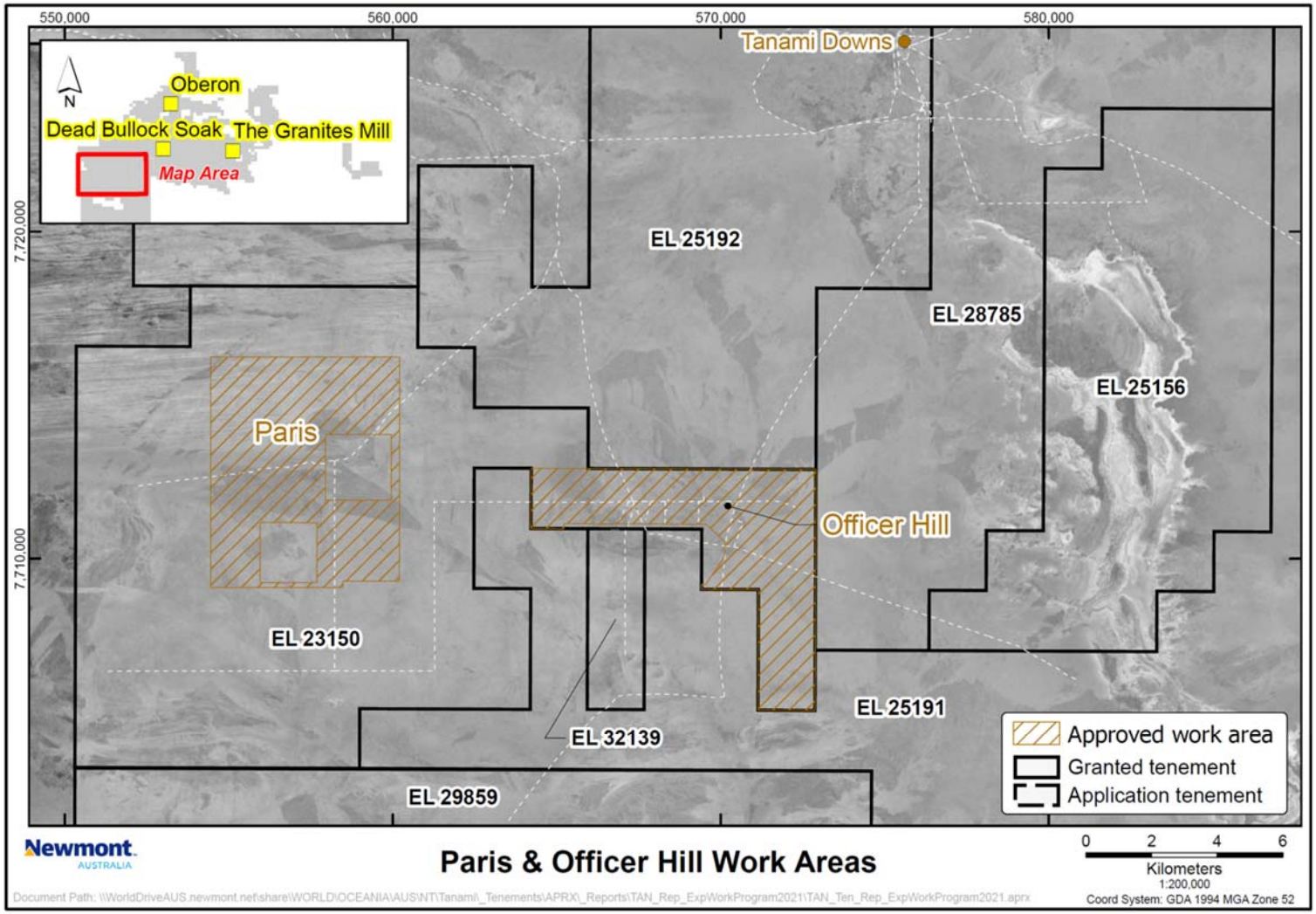


Figure 10 - Officer Hill prospect area showing 2021 potential drill area.

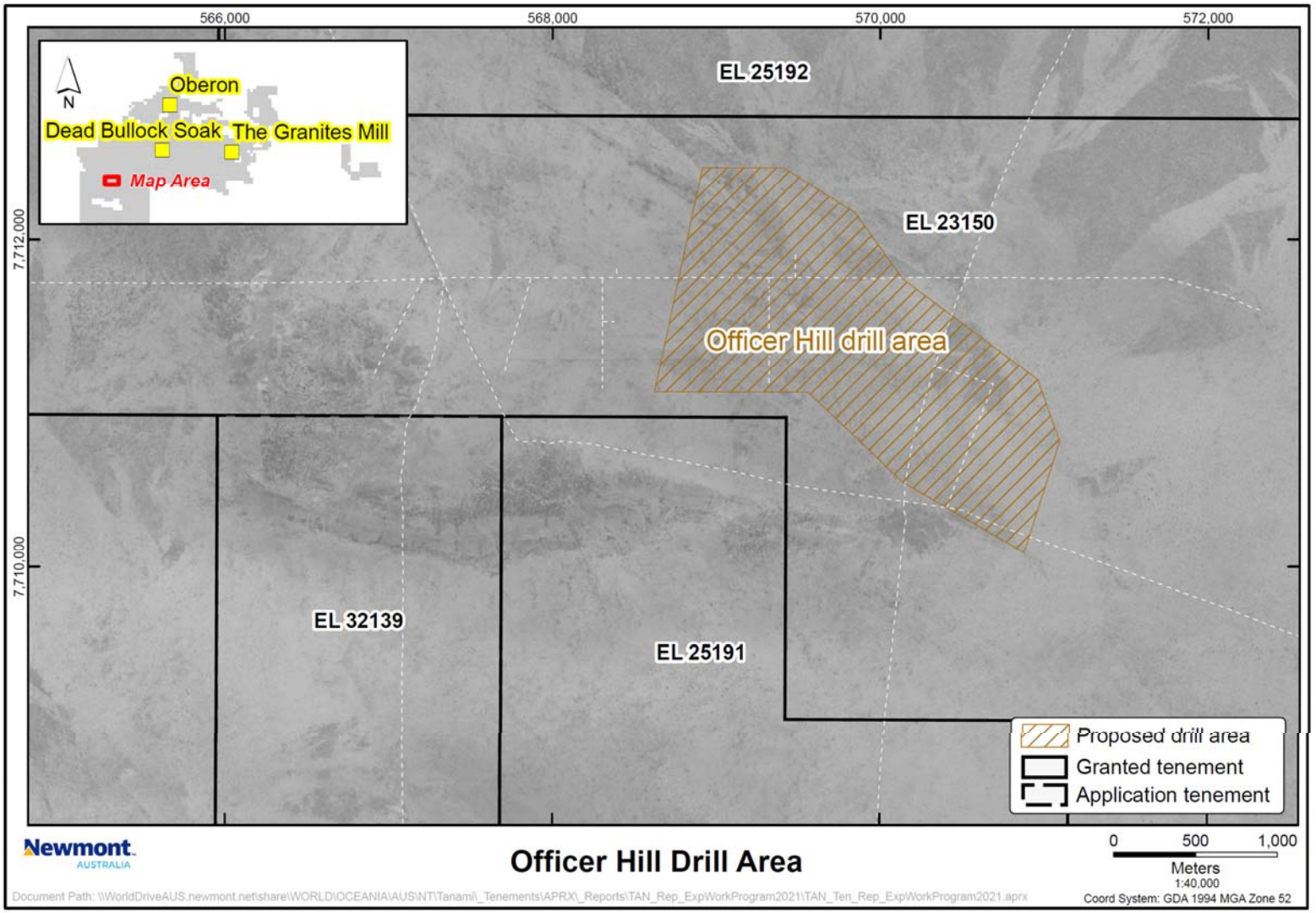


Figure 11 – Strike Drilling EnviroPod

1 PURPOSE

Newmont Goldcorp Tanami (NGT) is committed to effectively managing and conserving biodiversity and land values on its historic, current and future mining leases and the surrounding environment; with the goal of ensuring a consistent approach to biodiversity conservation and sustainable stewardship of resources.

The purpose of this plan is also to ensure that systems are established and maintained for the effective management and conservation of biodiversity and land values across NGT leases, as well as to avoid, minimise and offset potential impacts to biodiversity and land values imposed by the mining operation.

2 SCOPE

This management plan applies to all NGT employees, contractors and visitors, to ensure:

- Responsible stewardship of the land;
- Identification of biodiversity and land conservation opportunities; and
- Involvement of relevant stakeholders in the management of identified biodiversity aspects.

This management plan is specifically applicable to all NGT activities that have the potential to significantly impact upon land. This includes all activities with the potential to impact on the environmental values of land; including:

- damage or removal of vegetation;
- altering natural landforms;
- altering fire regimes;
- disturbance of faunal habitats;
- spills or stockpiling of materials containing hazardous contaminants;
- impacts on cultural or heritage values; and
- 'downstream' impacts on environmental values.

This document and other associated documents apply primarily to the NGT Environment, Processing, Mining, Geology and Projects Departments.

3 RESPONSIBILITIES

Role	Responsibilities
General Manager (GM)	▪ Ensure adequate resources are provided to manage biodiversity and land values at NGT. ▪ Ensure risks associated with biodiversity and land values are included in the NGT Risk and Opportunity Register.
Sustainability and External Relations (SER) Manager	▪ Ensure systems are established and maintained to support the requirements of this procedure. ▪ Ensure resources are available to assist all areas of the operations achieve the requirements of this procedure. ▪ Monitor, review and report on compliance with the requirements of this procedure.
Environment Department Personnel	▪ Ensure the requirements of this management plan and associated documents applicable to the area of responsibility

Role	Responsibilities
	are communicated to and implemented by all relevant personnel. ▪ Ensure effective systems, including effective planning measures, exist in relation to biodiversity management. ▪ Maintain the site disturbance permitting system. ▪ Review and approval of site disturbance permits. ▪ Facilitate cultural heritage surveys as required. ▪ Ensure consultation and dissemination of information is appropriate. ▪ Participate in biodiversity and land management risk assessments. ▪ Ensure risks associated with biodiversity, are included in NGT Risk and Opportunity Register. ▪ Ensure the requirements of this management plan and associated documents applicable to the area of responsibility are communicated to and implemented by all relevant personnel. ▪ Where required obtain the assistance from the APAC Regional SER Department and the Denver Corporate SER Department when planning closure and reclamation activities.
External Relations Department	▪ Provide advice regarding requirements for indigenous cultural heritage surveys.
Processing Department Personnel	▪ Ensure the requirements of this management plan and associated documents applicable to the area of responsibility are communicated to and implemented by all relevant personnel. ▪ Consider biodiversity and land management when conducting process water and process slurry management and containment.
Mining Department Personnel	▪ Ensure the requirements of this management plan and associated documents applicable to the area of responsibility are communicated to and implemented by all relevant personnel.
Projects Department Personnel	▪ Ensure the requirements of this management plan and associated documents applicable to the area of responsibility are communicated to and implemented by all relevant personnel. ▪ Consider biodiversity and land management when conducting project-related activities. ▪ Comply with the site disturbance permit procedure with effective planning and execution of disturbance rehabilitation in a timely manner relevant to type of disturbance.

Role	Responsibilities
Geology Department Personnel	▪ Ensure the requirements of this management plan and associated documents applicable to the area of responsibility are communicated to and implemented by all relevant personnel. ▪ Consider biodiversity and land management when conducting exploration-related activities and select track and drill site locations in such a way to minimise impacts to key biodiversity areas. ▪ Comply with the site disturbance permit procedure with effective planning and execution of disturbance rehabilitation in a timely manner relevant to type of disturbance.

4 PLAN DETAILS

4.1 Legal Requirements and other Commitments

The following legal requirements apply to the management of biodiversity and land values at NGT:

- Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act);
- Territory Parks and Wildlife Conservation Act 2000 (TPWC Act);
- Aboriginal & Torres Strait Islander Heritage Protection Act;
- Aboriginal Land Rights (Northern Territory) Act and Aboriginal Land Rights (Northern Territory) Regulations;
- Northern Territory Weeds Management Act 2001;
- NT Weeds Management Regulations 2006;
- Bushfires Act and Bushfires Regulations;
- Northern Territory Aboriginal Sacred Sites Act;
- Northern Territory Aboriginal Sacred Sites Regulations;
- NT Plant Health Act 2008;
- NT Plant Health Regulations 2012;
- Commitments made within the NGT Mining Management Plan;
- Commitments made within the NGT Closure and Reclamation Management Plan;
- Consolidated Mining Agreement for MLS8 and MLS154;
- Commitments made to the International Committee on Mining and Metals (ICMM) to meet Principle 7 of the 12 Sustainable Development principals; and
- Mining Management Act 2015 (NT).

Other commitments that apply to the management of biodiversity and land values at NGT include:

- Newmont Goldcorp Corporation (NGC) Environmental Discipline Specific Standard Biodiversity Management;
- NGC Environmental Discipline Specific Standard Waste Rock and Ore Stockpile Management;

- NGC Environmental Discipline Specific Standard Tailings and Heap Leach Facility Management; and
- NGC Environmental Discipline Specific Standard Closure and Reclamation Management.

Documents referenced are located on the site Legal Requirements and Other Commitments Register, NGT intranet.

4.2 Site-specific biodiversity objectives

NGT has developed site-specific biodiversity objectives in consultation with relevant stakeholders and in accordance with the following table:

Type of Project	Requirement
Exploration	Refer to the Exploration S&ER Guidebook.
New Projects and Expansions	No net loss of key biodiversity values as a result of mine-related activities or a net gain, when possible, within 10 years post mine closure.
Operational Sites	No additional loss of key biodiversity values as a result of mine-related activities by the time of mine closure.
Legacy Sites	Seek to enhance the long-term health and resiliency of species and ecosystems in affected areas and/or managed areas in accordance with regional conservation goals and long-term land use plans.

4.3 Introduction to NGT's Key Biodiversity and Land Values

NGT is located within the Southern Tanami Indigenous Protection Area (IPA) and the South-west Tanami Site of Conservation Significance (SOCS); these areas are home to numerous fauna and flora species protected under both Territory and Federal legislation. As a result NGT presents a number of risks to these key biodiversity values (species, habitat and ecosystem services) that are managed through the Integrated Management System (IMS) and procedures derived to manage conditions of NGT's land access agreements.

4.3.1 Biodiversity Assessments

Biodiversity (flora and fauna) monitoring, surveys and / or assessments have historically been conducted intermittently in the NGT area. The key historic assessments include:

- Botanical Surveys by Mt King Ecological Surveys, 1985;
- Fauna Survey by Gibson, 1986;
- Vegetation Survey by Low Ecological Services, 1990;
- Fauna Survey by Low et al., 1990;
- Stygofauna Survey by SA Museum, 2001; and
- Bird Survey (for DBS Shaft Project) by Desert Wildlife Services, 2009.
- Flora and Fauna Assessment DBS South East Block and Ivy Corner, Low et al., 2018.

More recently, since 2005 and the commencement of the Regional Biodiversity Management Strategy 2004, NGT has overseen the periodic completion, in

collaboration with the CLC (Central Land Council), of eight fauna and flora surveys within a 200km radius of the existing Mineral Leases.

4.3.2 NGT Key Biodiversity and Land Values

4.3.2.1 South-west Tanami Desert SOCS

The NGT mineral leases sit within the South-west Tanami Desert site of Conservation Significance (SOCS) as per the former Department of NRETAS document 'An inventory of sites of international and national significance for biodiversity values in the NT, 2009'. This area is characterised by a complex mosaic of landforms and habitats that are considered distinct from surrounding country including the paleodrainage system, alluvial plains, dunefields, sand plains, salt and freshwater lakes etc. This habitat supports a rich diversity of fauna and flora and various threatened species persist in the area including the Dwarf Desert Spike-rush (*Eleocharis papillosa*), Bilby (*Macrotis lagotis*), Brush-tailed Mulgara (*Dasycercus blythi*) and the Great Desert Skink (*Egernia kintorei*).

The primary threats to the South-west Tanami Desert site include fire, feral animals, weeds and invasive exotic plants. Mining, exploration and road work activities occur within the area and may have some impacts on sensitive habitats.

Numerous sites of botanical significance (SOBS) have been identified within the South-west Tanami Desert SOCS. SOBS are considered important for plant conservation and are designated as either nationally significant, bio regionally significant or of undetermined significance. NGT sits to the west of the Western Tanami Paleodrainage system (nationally significant) and south-east of the Mongrel Downs (bio regionally significant) SOBS.

4.3.2.2 Southern Tanami IPA

In 2002 the Southern Tanami became an IPA and consists entirely of Aboriginal freehold land that is managed by the CLC on behalf of the Warlpiri people. IPAs are areas of Aboriginal owned land or sea where traditional owners have entered into an agreement with the Australian Government to protect the biodiversity and associated cultural values of a region.

The NGT mineral leases fall within the Southern Tanami Indigenous Protected Area (IPA), which is managed by the Warlpiri Ranger group.

4.3.2.3 Flora

The following sections describe studies of floral communities, conservation and cultural significance and endemic species at NGT.

The Granites

Three habitat types/landforms supporting various vegetation associations were identified during botanical surveys of the Granites mineral lease and associated exploration areas conducted in 1984 (Mt King Ecological Surveys, 1985). These were:

- Sand plains – dominant vegetation comprising hummock grasslands with trees and shrubs scattered or locally dominant, and forming low open/sparse woodlands, open/sparse shrub lands, or open shrubs (the latter represented by usually monospecific thickets of Acacia spp.).

- Low rocky outcrops – hummock grassland with trees and shrubs scattered, some locally dominant and forming sparse shrub land open mixed shrub land.
- Stream channels dissecting low rocky outcrops – hummock grassland with trees and shrubs scattered, some locally dominant and forming sparse shrub land open mixed shrub land.

A total of 125 species were recorded by Mt King Ecological Surveys in 1985, the dominant families being Poaceae (27 species), Mimosaceae (14 species), Amaranthaceae (7 species) and Myrtaceae (7 species). No plants considered rare were recorded during the survey.

Two introduced species were present within the Granites mineral lease at the time of the survey, being Buffel Grass (Chenchrus cilliaris) and Couch Grass (Cynodon dactylon) which were present on Chapman's Hill at the Granites.

Dead Bullock Soak

A vegetation survey of the DBS mineral lease area by Low Ecological Services in 1990 identified habitats supporting a relatively narrow range of plant communities which were generally widespread and common throughout the Tanami region. The communities identified were:

- Mixed Acacia spp. under widely scattered Eucalyptus - with an understorey of hummock grasslands (Triodia and Plectrachne) in the deeper loamy sands of the drainage depressions and on the sand plains and ridges.
- Hummock grasslands (Triodia) - occur on rocky slopes; no overstorey present.

A total of 198 species were recorded in the 1990 survey of the DBS lease area, the dominant families being Poaceae (37 species), Mimosaceae (16 species) Myrtaceae (11 species), Caesalpiniaceae (9 species) and Malcaceae (9 species). No plants recorded from the survey area were considered rare.

Two introduced species were identified within the survey area, being Couch Grass (Cynodon dactylon) and Spiked Malvastrum (Malvastrum americanum) (Low Ecological Services, 1990).

Ecological Conservation Significance

The Large palaeodrainage channels in the Tanami region have been identified as highly significant refugia (level 5, SEWPAC) for vulnerable and other species due to their ability to provide protection from introduced species and to support greater plant production than the more elevated land systems (Morton et al., 2004).

One flora species, Dwarf Desert Spike-rush (*Eleocharis papillosa*), listed under the *Territory Parks and Wildlife Conservation Act* (TPWC) or the *Environmental Protection Biodiversity Conservation Act* (EPBC) for conservation significance was identified within a protected matters report from the SEWPAC within a 20km radius of NGT. The recorded distribution of the species is predominantly proximal to temporary freshwater and semi-saline wetlands and swamps, none of which occur within or immediately adjacent to the Granites or DBS minerals leases or associated haul road corridor.

Cultural Significance

Though not listed under territory or federal law there are a number of species in the area that are considered significant to the Indigenous Warlpiri people.

Trees of significance in the area greater than 2m tall should not be removed unless approved by the Aboriginal Traditional Owners. These include desert walnuts *(Owenia reticulata)*, bloodwoods (*Corymbia opaca*), rough-leaved range gum (*Corymbia aspera*), red-bud mallee (*Eucalyptus pachyphylla*), beefwood (*Grevillea striata*), bull hakea (*Hakea chordophylla*) and flat leaved hakea (*Hakea macrocarpa*).

Endemic Species

There are a number of species found in the area that are considered endemic on a local, regional or territory/State level.

Endemic to the site:

One plant species (*Marsilea latzii*) is entirely restricted to this site and another (*Spermacoce resinosula*) is known only from the site and a record immediately adjacent to it.

Endemic to the bioregion:

Three plant species recorded from this site are endemic to the Tanami bioregion (*Coleocoma centaurea, Marsilea latzii and Spermacoce resinosula*).

Endemic to the NT:

Seven plant species recorded from this site are endemic to the NT (*Acacia abbreviate, Bonamia deserticola, Eleocharis papillosa, Goodenia halophila, Marsilea latzii, Spermacoce resinosula and Trachymene inflata*).

Other:

Seven plant species are restricted to the Tanami bioregion within the NT but also occur in other states (*Acacia sabulosa, Acacia stellaticeps, Acacia synchronicia, Coleocoma centaurea, Corynotheca asperata, Indigofera ammobia and Pityrodia chorisepala*).

4.3.2.4 Fauna

Gibson (1986) in a wide ranging survey of the Tanami found three locally abundant but regionally and nationally rare mammals to be widespread:

- Spectacled Hare-wallaby (Lagorchestes conspicillatus),
- Mulgara (Dasycercus blythi); and
- Greater Bilby (Macrotis lagotis).

The fauna identified in 1990 by Low et al. in the Granites to DBS region that are distributed widely, in appropriate habitats over the Tanami, with the exception of three regionally rare animals:

- Greater Bilby (Macrotis lagotis);
- Mulgara (Dasycercus blythi); and
- Great Desert Skink (Liopholis (Egernia) kintorei).

Scattered over the Calcrete rises in the Jumbuck bore field are relict warrens of Burrowing Bettongs (*Bettongia lesueur*), which had been abundant in this area before they became extinct on the mainland approximately 50 years ago.

Evidence of populations of Greater Bilby (*Macrotis lagotis*) have been recorded along the DBS haul road and in the Billabong and Jumbuck bore

fields. Bilby populations were also present along the Windy Hill (Minotaur) haul road prior to and during operation.

In 2001, SA Museum completed a survey of groundwater of the Granites and DBS leases and the Billabong and Jumbuck bore fields with no stygofauna recorded.

Since 2005, NGT has overseen the completion, in collaboration with the CLC, of fauna and flora surveys within a 200km radius of the existing Mineral Leases. These surveys were initially intended to assess the impacts of the operations on biodiversity of the Tanami, but have also been a source of employment for Indigenous Rangers from Yuendumu and Lajamanu and have provided substantial information on the biodiversity of the region. To date, eight surveys have been completed.

In early 2009, a bird survey at DBS was conducted for the Tanami Shaft project. These surveys observed 82 species at DBS. For the wider Granites Region, 162 bird species have been observed (Desert Wildlife Services, 2009).

Conservation Significance

Fauna species listed under the *Territory Parks and Wildlife Conservation Act 2011* (TPWC) or EPBC Act for conservation significance were identified within a protected matters report from the DEWHA within a 20km radius of NGT as of February 2015 are shown in Table 11.

Only one reptile species identified as inhabiting or known to potentially inhabit the survey area, the Great Desert Skink, is considered to be vulnerable under the EPBC Act. All other reptile species identified are common throughout the Tanami region.

Two mammal species either identified as inhabiting the survey area or known to potentially inhabit suitable habitat were the Greater Bilby and the Mulgara. These species are considered vulnerable under the EPBC Act. There have been no recorded sightings of these species within or immediately adjacent to the Granites or DBS minerals leases or associated haul road corridor during the reporting period.

Table 1 – Rare fauna listed under the TPWC and EPBC.

Species Name and Status	Common Name	Level of Status	Known to occur within 20km radius to operations	Preferred habitat
ENDANGERED				
Mammals				
Issoodon aratus	Golden Bandicoot	TPWC	Not known to occur (since 1958)	Shrub land on sandstone.
Notoryctes caurinus	Northern Marsupial Mole	EPBC	Not known to occur	Sand-dunes and sandy soils along river flats
Trichosurus vulpecular	Central Australian Brushtail Possum	TPWC	Not known to occur	River systems supporting large eucalypts, coolabah claypans and spinifex grasslands with a shrubby over story.
Zyzomys pedunculatus	Central Rock-rat	EPBC TPWC	Not known to occur (since 1952)	Steep rocky slopes, usually with trees such as Native Pine (*Callitris glaucophylla*) and Hill Mulga (*Acacia macdonnellensis*), various tussock grasses and in close proximity to dense Spinifex
Birds				
Pezoporus occidentalis	Night Parrot	EPBC TPWC – (critically endangered)	Not known to occur	Inhabits arid and semi-arid areas that are characterised by having dense, low vegetation.
Rostratula australis	Australian Painted Snipe	EPBC TPWC – (Vulnerable)	Not known to occur	Generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans.
VULNERABLE				
Mammals				
Dasycercus cristicauda	Crest-tailed Mulgara	EPBC TPWC	Known to occur in the region	Arid and semi-arid sandy regions particularly mature hummock grasslands
Dasycercus blythi	Brush-tailed Mulgara	TPWC	Known to occur in the region near NGT	Occur in a range of vegetation types, but principal habitat is mature hummock grasslands of spinifex.
Macrotis lagotis	Greater Bilby	EPBC TPWC	Known to occur in the region	Acacia shrub lands and hummock grasslands
Notoryctes typhlops	Southern Marsupial Mole	EPBC TPWC - (Vulnerable)	Not known to occur	Sand-dunes, sandy interdunal flats, and sandy flood plains

Species Name and Status	Common Name	Level of Status	Known to occur within 20km radius to operations	Preferred habitat
Reptiles				
Liopholis (Egernia) kintorei	Great Desert Skink	EPBC TPWC	Known to occur in sand plains in the region	Hummock grass, sand plains and dune field swales
Birds				
Falco hypoleucos	Grey Falcon	TWPC	Known to occur	Lightly timbered lowland plains, typically on inland drainage systems.
Polytelis alexandrae	Princess Parrot	EPBC TPWC – (Vulnerable)	Not known to occur	Inhabits sand dunes and sand flats in the arid zone of western and central Australia. It occurs in open savannah woodlands and shrub lands that usually consist of scattered stands of Eucalyptus, Casuarina or Allocasuarina trees; an understorey of shrubs and a ground cover dominated by Triodia species.
MIGRATORY and/or MARINE – Species or species habitat either likely, known or may occur within the area				
Birds				
Actitis hypoleucos	Common Sandpiper	EPBC	Not known to occur	Water bodies.
Apus pacificus	Fork-tailed Swift	EPBC	Not known to occur	Boreal and temperate forests
Ardea alba	Great Egret, White Egret	EPBC	Known to occur	Wet areas and damp grasslands
Ardea ibis	Cattle Egret	EPBC	Not known to occur	Grasslands, woodlands and wetlands
Charadrius veredus	Oriental Plover	EPBC	Known to occur	Timbered Habitats
Erythrotriorchis radiatus	Red Goshawk	TWPC - (Vulnerable)	Not known to occur	Open woodlands.
Glareola maldivarum	Oriental Pratincole	EPBC	Known to occur	Creek lines
Hirundo rustica	Barn Swallow	EPBC	Not known to occur	Open country in coastal lowlands, often near water, towns and cities
Merops ornatus	Rainbow Bee-eater	EPBC	Known to occur	Open forests, woodlands and shrub lands, and cleared areas, usually near water. Migratory in summer.
Motacilla cinerea	Grey Wagtail	EPBC	Not known to occur	

Species Name and Status	Common Name	Level of Status	Known to occur within 20km radius to operations	Preferred habitat
Motacilla flava	Yellow Wagtail	EPBC	Not known to occur	
Numenius minutus	Little Curlew, Little Whimbrel	TWPC	Known to occur	
Tringa nebularia	Common Greenshank	EPBC	Known to occur	

IUCN Red List Species

The Woma Python / Ramsay's Python (*Aspidites ramsayi*), known to occur, is not identified of conservation significance in Federal or Territory legislation, but is identified on the International Union for Conservation of Nature (IUCN) Red List.

Cultural Significance

The dingo (*Canis lupus dingo*) is present throughout the Tanami and is commonly sighted within the mine operational and accommodation areas. A Warlpiri 'dingo dreaming' site is located about 100km distance from operational areas. The Warlpiri name for dingo is 'wanaparri'.

NGT has a long-term dingo management plan which was developed in 2006 and has been continually reviewed. The aim of the plan is to minimise the level of dependence of the dingo on mining activities (i.e. food and water resources) and to reduce potential human-dingo interaction on the leases to ensure the protection of the dingo and the safety of site personnel.

There are other species of cultural significance to the Warlpiri that reside within the area; this includes the emu, mulgara, diamond dove, and wedge-tailed eagle.

Migratory Bird Species

Includes all migratory species that are native species protected under international agreements including (but not limited to) the:

- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
- China-Australia Migratory Bird Agreement (CAMBA)
- Japan-Australia Migratory Bird Agreement (JAMBA)

Values of migratory bird species that require management include breeding and roosting habitat.

4.4 Identification of NGT's KBVs

The Biodiversity Risk Assessment Tool (BRAT) was utilised to determine the KBVs for NGT.

Three KBVs have been classified in line with NGT's biodiversity and land management practices. This approach ensures that all biological values (e.g. species, habitat and/or ecological services) are adequately managed through grouping values that are managed through the same systems and/or process to form part of a KBV.

As such, the KBVs for NGT include:

1. Cultural and Ecological Values managed as part of NGT's Land Access Agreements. This encompasses species, habitats and ecosystem services.
2. Migratory Bird Species managed under the ICMC certification.
3. Preservation of Chapmans Hill to ensure management of European Heritage. Although not a listed heritage site the preservation of the mining relics are an ecosystem service.

4.5 NGT Biodiversity Management Strategies and Initiatives

4.5.1 Regional Biodiversity Monitoring (RBM)

With the introduction of the EPBC Act, NGT faced a requirement to refer proposals for new mining operations for assessment under the Act. In response, NGT decided to look more closely at the potential impacts its operations were having, both in a site specific sense and a cumulative sense, on the regional distribution and abundance of threatened species known to occur in the vicinity of its operations. In many ways NGT was grappling with similar dilemmas that faced the CLC - trying to understand the potential cumulative impact of its operations on the region and despite the years of collecting data, finding it difficult to quantify impacts (Stoll, Barnes & Fowler 2004).

Given Indigenous ecological knowledge and skills in natural resource management are highly valued; NGT and the CLC entered into discussions regarding the development of a strategy for monitoring and assessing the impacts of exploration and mining on biodiversity, in 2003. The aim was to develop a better approach to environmental monitoring, particularly in relation to regional biodiversity, enabling some direct comparisons between data collected specifically at operating sites and proposed new mining projects.

Subsequently, in 2004 the *Tanami Biodiversity Strategy*, a joint agreement with the Central Land Council was developed and implemented as a collaborative outcome between the CLC, NGT and a NGT hired consultant. It was agreed that the strategy was to operate over a portion of the central and northern Tanami Desert, shown on the map in Figure 1.

The aim of the agreement was to create a systematic and collaborative approach to environmental and biodiversity monitoring in the strategy area to enable the parties to be informed about and to assess the effects of NGT's operations on the environment of the Tanami Desert whilst also providing data on an area on which there has been little if any scientific investigation.

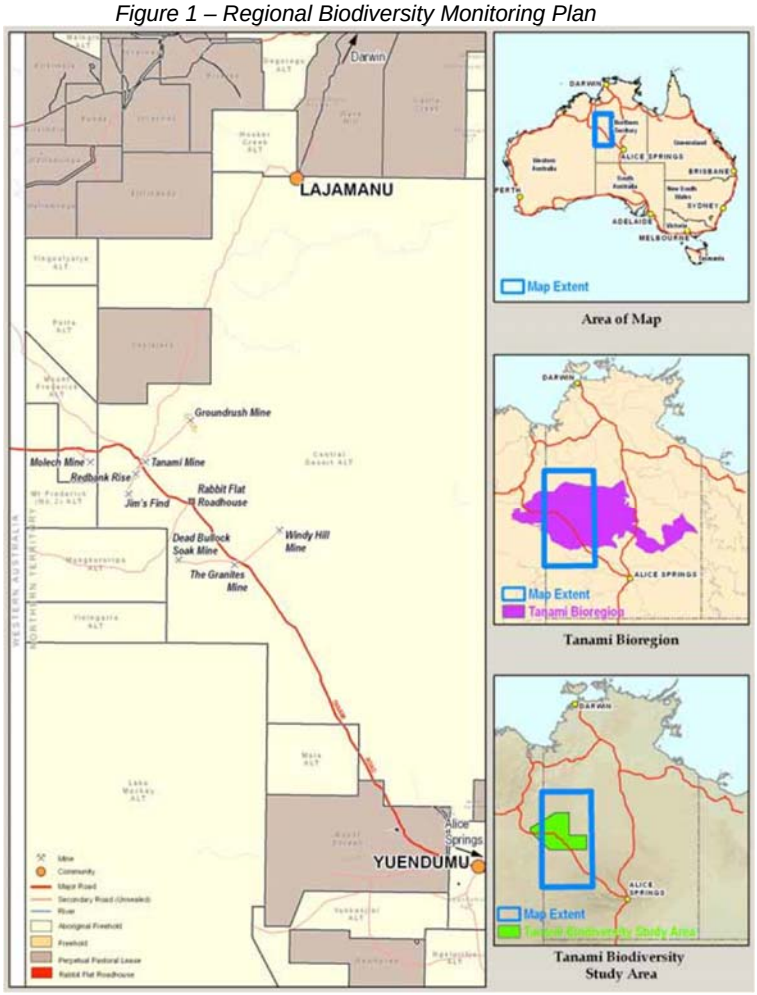
With the inception of the Tanami Biodiversity Strategy from 2005 onwards Newmont has overseen the completion, in collaboration with the CLC, of eight fauna and flora surveys within a 200km radius of the existing Mineral Leases. Although these surveys were initially intended to assess the impacts of the operations on biodiversity of the Tanami, they have also been a source of employment for Indigenous Rangers from Yuendumu and Lajamanu and have provided substantial information on the biodiversity of the region.

Following the completion of the 2012 survey the assessment program was deferred to an as required basis pending agreement between CLC and NGT, continuing to assess regional variances in biodiversity and presence/absence of favourable or adverse trends.

In 2019, the University of Sydney was commissioned by CLC to independently review the RBM program against its objectives in the "*Tanami Regional Biodiversity Monitoring Analysis Project Report, 2019".* In 2019 and 2020, CLC and NGT are

reviewing Stage 2 of the RBM program before a formal commitment is made with Tanami stakeholders.

Figure 1 – Regional Biodiversity Monitoring Plan



Note: Tanami Bioregion indicated in purple and survey area indicated in green.

4.5.2 "No additional loss" of KBVs on NGT sites

Conservation of the environment and its inherent biodiversity is the responsibility of all NGT personnel and business partners. NGT promotes best practice environmental management principles and works to minimise environmental impact.

All NGT employees are required to conserve and protect the sites biodiversity and land value by following the below requirements:

- Drive on designated roads;
- Walk on designated walking tracks;
- Keep out of the vegetation;
- Comply with the Site Disturbance Permit procedure;
- Comply with site signage;
- Be aware of and slow down for wildlife;

- Report any fauna / dingo deaths on the Animal Mortality Register (in each individual work area) and issues to the Environment department monthly associated with end of month reporting;
- Report sightings of native animals (particularly mammals), introduced animals (e.g. rabbits, cats, foxes, camels, etc.), dead or injured animals, animals in danger or animals that may be a threat to personnel;
- Report weed sightings to the Environment Department;
- Remove all seeds from clothing before leaving an area;
- Regularly wash machinery and equipment;
- Ensure all equipment and vehicles being mobilised to site are inspected by the Environment Department;
- Do not capture and/or relocated any reptile unless qualified, authorised and licenced to do so in the NT (note that all States and Territories have different regulations). Report all snake and reptile species relocated;
- Report the damage / removal of any culturally significant or legally protected plants of conservation significance; and
- Do not feed or disturb the wildlife;

Further reiterated, encouraging dingoes and feeding them is illegal and strictly prohibited and strict penalties shall be enforced for any personnel observed to be feeding dingoes.

4.5.3 Biodiversity Management on NGT sites

Biodiversity shall be considered for all new projects and major changes to existing operations.

As part of the site disturbance permit process, Environmental Department personnel are to indicate to the Project Manager if a new project area is within an area of high biodiversity significance (endangered regional ecosystem, culturally significant species found there, etc.). These areas are identified in the Site Disturbance Register (ArcGIS). Information within the Site Disturbance Register includes areas on the lease considered to be culturally significant, endangered, vulnerable or rare as determined by internal and external commitments.

Additional documentation shall be established and maintained in order to identify appropriate management priorities and outcomes for the land managed by NGT. These documents will identify and facilitate the protection of significant species and critical regional ecosystems, provide a baseline for biodiversity risk analysis, monitoring and environmental management plans. Where areas of significance have been identified, consideration shall be given as to whether some form of security is required to protect the integrity of the site or region.

Conservation Management Plans where applicable are to be development by the Environment Department to ensure the appropriate and effective management of threatened or significant species within NGT leases. These plans are to be reviewed on an annual basis.

Adhoc botanical and/or fauna surveys, monitoring, assessments or studies will be carried out as required.

4.5.4 Wildlife Rehabilitation

Any injured fauna that does not pose harm to personnel will be cared for by the Environment Department. Following successful rehabilitation of any wildlife they will be released into the wild. All personnel involved in the rehabilitation of wildlife must be appropriately trained.

4.5.5 Relocation of Dangerous Wildlife

Any dangerous fauna that places personnel's health and safety at risk will be removed from the relevant work area and relocated as per the requirements of the EPBC Act and the TPWC Act by trained and competent personal that are licenced to do so, on the NGT mining leases.

The most common fauna species that pose a threat to personnel at NGT are venomous snakes, larger reptiles and venomous spiders, and any larger mammals that may become aggressive towards humans (i.e. dingoes, emus or camels).

All personnel involved in the relocation and removal of wildlife must be appropriately trained and deemed competent. NGT shall ensure ethical options of trapping, removal and relocation are utilised.

A list of all registered snake handlers will be made available in each individual work area. It is illegal for NGT personnel to disrupt or interfere with fauna unless authorised and trained to do so.

4.5.6 Cyanide Exposure Controls for Fauna

NGT is a signatory to the International Cyanide Management Code (ICMC), which ensures fauna (inclusive of avifauna) is adequately protected.

The PVC pond has avifauna netting in place to prevent birds from coming in contact with water containing traces of cyanide. Other locations where traces of cyanide may be present in solution, such as the tailings facilities and Gerry's pond are monitored on a daily basis for fauna by the Processing Department.

If there is an exceedance of the 50ppm WAD CN limit, additional checks are performed of the active tailings facilities and where needed appropriately trained and licenced personnel may utilise 'bird fright' to encourage fauna to relocate safely from the tailings supernatant.

4.5.7 Fauna Mortality

All fauna mortalities shall be reported to and monitored by the Environment Department.

All deceased fauna shall be returned to its natural environment (i.e. natural bushland) to rest, in line with Aboriginal customs and beliefs and conditions of the Consolidated Mining Agreement with the CLC.

There is no requirement for NGT to report fauna mortalities to the NT or federal government.

Refer to section 4.8 for additional information.

4.5.8 Vehicle Weed and Seed Inspections

In order to prevent the potential introduction of weed species and or the dispersion of, inspections are undertaken of all equipment and machinery entering and / or leaving the lease footprints of NGT. These inspections are designed to identify potential weed, seed and soil material accumulation on vehicles in areas including within the radiator and between radiator and condenser grills, along, under and within the chassis, battery housings, behind bull bars and under running boards. Any vehicles that have not passed the appropriate environmental requirements will be required to be washed down in a designated area to prevent further spread or introduction of weeds.

Additionally weed and vegetation control programs are routinely implemented to prevent and control the establishment of vegetation in unwanted areas around infrastructure and to manage problem species.

If and when instances of new or declared weeds are identified notification is made to the Department of Land and Resource Management, Northern Territory Government.

4.5.9 Site Disturbance Permit

The primary objective of a site disturbance permit (SDP) is to minimise disturbance and contamination of land, prevent unauthorised clearing and environmental harm, ensure areas of high biodiversity significance are retained and comply with Cultural Heritage Management procedures. It is the Project Manager's responsibility to ensure all site activities are undertaken in accordance with the conditions specified in the Site Disturbance Permit.

The Site Disturbance Permit Form shall be obtained from Prospector or the Environment Department prior to the commencement of works and a site disturbance permit issued from the Environment Department (in line with the Site Disturbance Permit Procedure) prior to the commencement of any activities that may result in damage (potential or actual) to the values of undisturbed land within MLS8, MLS154 or other leases that are licenced to NGT. This system ensures appropriate duty of care is displayed for Aboriginal Cultural Heritage and land management.

Project managers shall ensure all site activities are in accordance with the conditions specified in the Site Disturbance Permit approval. Copies of each land disturbance approval will be retained by the Environment Department for 3 years.

Many permits will mandate the retention of logs, debris and/or top soil for use in rehabilitation works.

4.5.10 Disturbed Land Register

A Site Disturbance Register will be maintained and updated by the Environment Department. The register as a minimum shall include the nature and size of the

disturbance. The register shall be updated as per the Site Disturbance Permit procedure and the Site Disturbance Permit Follow-up Procedure.

4.5.11 Land Contamination

All operations and projects shall be undertaken with regard to minimising land contamination. Land contamination can be the result of any number of instances, including but not limited to:

- hydrocarbon spills;
- drill sump water overflows;
- emissions fallout;
- process water drainage and discharge;
- tracking of contaminants by vehicles;
- incorrect placement of waste rock;
- incorrect disposal of wastes and chemicals; and
- tailings spills

The risk assessment process outlined in the Hazardous Materials Management Plan and Waste Management Plan will assist in assessing the likelihood and consequences of land contamination occurring as a result of projects or major operational changes. Land contamination impacts are also to be assessed through the NGT Aspects Registers. Controls or potential for operational improvements may be captured in the relevant Environmental Management Program.

4.5.12 Aboriginal Cultural Heritage

Risks to Aboriginal Cultural Heritage and appropriate controls shall be assessed for all new projects and any major changes to existing operations. Additional information is detailed in the Cultural Heritage Management Plan.

4.5.13 Pests / Weeds Management

Pests are controlled under section 47(1) of the *Territory Parks and Wildlife Conservation Act* and therefore subject to control where deemed necessary.

Weeds are controlled in line with the requirements of the Weed Management Branch in the NT Department of Land Resource Management (DLRM) through the *NT Weed Management Act 2001* and *Weed Management Regulations 2006*.

Weed and animal control is outlined further in:

- Weed Management Plan; and
- Long-term Dingo Management Plan.

Invasive Plant Species

Weed species identified to be present or previously identified with Newmont lease footprints are detailed below with occurrences specified as low, medium or high:

Schedule Class B/C Weeds

- *Argemone ochroleuca* - Mexican Poppy - Low
- *Calotropis procera* - Rubber Bush - Low
- *Cenchrus echinatus* - Mossman River Grass - Low
- *Tribulus cistoides*, T. terrestris – Caltrop - Low

Other species considered weeds in the Tanami region (non-indigenous)

- *Cenchrus biflorus* - Gallon's Curse - Medium
- *Aerva javanica* - Kapok Bush - High
- *Acetosa vesicaria* - Ruby Dock - High
- *Cynodon dactylon* – Couch - Medium
- *Chloris virgata* - Feathertop Rhodes Grass - Medium
- *Cenchrus ciliaris* - Buffel Grass - High
- *Citrullus colocynthis* - Paddy Melon – Low
- *Azadirachta indica* – Neem - Low

Weeds are managed as per the NGT Weed Management Plan.

The main focus of control is spraying of areas around the lease that have been rehabilitated or not disturbed or areas of high occurrence. The two species receiving the most attention due to the high occurrence on site is Kapok Bush and Ruby Dock, which are sprayed with herbicide. The spraying program is managed under the guidance of the environment personnel and is undertaken by environment staff, other NGT staff, and contractors from individual work areas of responsibility.

All incurrences of Class B/C weeds are managed to eradication of the identified instance to mitigate the potential of further dispersion. Following eradication; the impacted areas are routinely inspected to allow prompt identification of any seed body germination.

Weeds can impact on biodiversity, as they invade natural environments and out-compete native species, disrupt natural food webs, pollination cycles and the water table, and can increase the risk of fire and contribute to land degradation. For this reason, NGT encourages weeds to be managed in accordance with the Weed Management Plan and its associated documents.

Invasive Fauna Species

Rabbits (*Oryctolagus cuniculus*) were known to occupy much of the area from at least the early 1920's (Low Ecological Services et al. 1983) but numbers are now low and populations very disjointed. There are infrequent sightings of rabbits along the haul road and mineral leases.

Occasional reports are also received for sightings of other feral species in or around the lease areas including cats, foxes and camels.

Sightings of pests or invasive fauna are monitored and recorded to determine if any management initiatives are required to reduce the threat they impose on the area's biodiversity.

Currently NGT does not actively manage feral animals due to the relatively small footprint of the active mineral lease footprints and infrequent occurrences.

4.5.14 Fire Management

Fire is not considered to be a shaping factor of the environment in the vicinity of NGT operations.

Fire influences the ecosystem, and many of the endemic species are threatened by inappropriate fire regimes. The regional fire regime in the area is managed by the CLC in consultation with Bushfires Council NT and the Traditional Owners. The area surrounding the mineral leases is a part of the Central Desert Aboriginal Land Trust and is not managed by NGT.

Fire is considered an important component of biodiversity management in northern Australia; with many of the plant and terrestrial animals having adapted to a long history of Aboriginal fire management regimes. Some plants survive fire and then resprout from epicormic buds, roots or lignotubers. Others are killed by fire, but germinate from fire-resistant seeds in the canopy or soil. The seeds of some species (e.g. various species of Acacia) remain viable for many hundreds of years.

Noteworthy for the NGT leases is the decline of fire-sensitive Mulga stands. This is a common feature across arid Australia and may be due to infrequent large fires in spinifex ecosystems. Previously, these communities experienced more frequent, smaller fires as part of Aboriginal land management.

On a smaller scale, the NGT leases utilise fire as a tool to protect infrastructure as outlined in NGT Fire Management Plan. Risk to operations presented by fire is managed in accordance with the NGT Bushfire Management Plan which includes the provisions for fuel reduction burning and fire break management that are undertaken in consultation with the Bushfires Council NT.

4.6 Monitoring

The status of biodiversity shall be reviewed periodically in terms of, but not limited to:

- Species and habitat loss or gains;
- Conservation significance of the site in a national and regional context;
- Factors that impact on biodiversity;
- Security of protected areas;
- Management of biological resources;
- Success of on-going rehabilitation and restoration of ecostyems;
- Resilience of the ecosystem; and
- Presence and significance of noxious weeds and pests, erosion control and stock management.

Biodiversity (flora and fauna) monitoring, surveys and / or assessments have historically been conducted intermittently in the NGT area. The key historic assessments include:

- Botanical Surveys by Mt King Ecological Surveys, 1985;
- Fauna Survey by Gibson, 1986;
- Vegetation Survey by Low Ecological Services, 1990;
- Fauna Survey by Low et al., 1990;
- Stygofauna Survey by SA Museum, 2001; and
- Bird Survey (for DBS Shaft Project) by Desert Wildlife Services, 2009.

More recently, since 2005 and the commencement of the *Regional Biodiversity Management Strategy 2004,* NGT has overseen the periodic completion, in collaboration with the CLC, of eight fauna and flora surveys within a 200km radius of the existing Mineral Leases.

NGT partake in a range of other monitoring that assists with the management of biodiversity, including;

- Regional Biodiversity Monitoring (RBM);
- Biennial Rehabilitation Ecological Assessments;
- Periodic weed monitoring;

- Monitoring of feral animal observations;
- Adhoc flora surveys;
- Adhoc fauna surveys; and
- Adhoc Dingo studies.

4.6.1 Regional Biodiversity Monitoring Program

As detailed in Section 4.11.1, NGT has overseen the completion, in collaboration with the CLC, of flora and fauna surveys within a 200km radius of the existing Mineral Leases since 2005. To date, eight surveys have been completed and the fauna survey results are summarised in Table 2. These surveys were initially intended to assess the impacts of the operations on biodiversity of the Tanami, but they have also been a source of employment for Indigenous Rangers from Yuendumu and Lajamanu and have provided substantial information on the biodiversity of the region.

Table 2 – Summary of Findings from Fauna Surveys

Survey Method	Phylum	Number of Species Recorded to Date
Trapping	Amphibia	57
	Reptilia	6
	Mammalia	13
Tracking	Amphibia	1
	Reptilia	9
	Mammalia	14
Bird Survey	Avian	100

The effects of season, distance to mine impact sites, latitude (north/south), fire and disturbance, land unit, vegetation species richness and percentage of ground cover have been assessed. This was been achieved by using regression modelling analysis from the database to quantify and assess the significant effects of a series of explanatory variables and co-variants on a selection of flora and fauna groups (Newsome et al, 2009).

Fauna data was highly variable between sites and surveys which suggest that local habitat and seasonal conditions are important determinants of abundance, richness and probability of occurrence of selected fauna groups. Distance to mine site impacts did not appear to affect the majority of fauna groups although the abundance of all fauna, particularly members of the Muridae family, appeared higher in proximity to mine sites (Newsome et al., 2009). Following the review of the statistical analysis and consultation with the CLC it was decided that the RBM program be scaled back to being completed on an as agreed basis.

4.6.2 Tree Health Monitoring

NGT has overseen the completion, in collaboration with the Low Ecological Services (LES) and periodically with assistance of CLC rangers, assessments of tree health in the Schist Hills Bore fields. Since 2000 nine tree health surveys have been conducted that have been utilised to determine the impact water extraction activities has had on the culturally significant tree species in the bore fields due to changes in the water table. The conclusions from the tree health surveys has determined with statistical confidence there have been no negative impacts to the tree health in the bore fields as a result of water extraction.

4.6.3 Daily Fauna Monitoring

In line with the International Cyanide Management Code (ICMC) requirements, NGT completes daily fauna monitoring on the tailings storage facilities and in areas where avifauna may be exposed to cyanide solution. The processing department completes three checks daily including a wildlife check in the morning of these locations.

4.6.4 Dingo Monitoring

NGT has periodically with assisted with research into dingo population dynamics and dingo dietary studies with several universities and the CLC rangers.

4.7 Risk and Opportunity Management

NGT personnel and contractors are required to identify and manage risks associated with biodiversity and land values management. Risk assessments are to include consideration of closure and reclamation.

Risks are identified through formal risk assessments (internal or external), hazard reports, accident and incident investigations, workplace inspections and internal or external audits. Risk management processes are defined within the Risk Management Regional Procedure. Refer to the NGT Risk and Opportunity Register for all identified risks at NGT.

NGT Aspects/Risks Registers and Environmental Management Plans shall consider Biodiversity and Land Management impacts associated with their operations.

All environmental aspects that have the potential to impact on biodiversity and land shall be assessed for all operations (in additional to specific projects). Environmental aspects may include but are not limited to:

- emissions to air and water;
- waste management and contamination of land;
- biodiversity;
- use of raw materials and natural resources;
- other local environmental and community issues; and
- NT and Aboriginal Cultural Heritage.

NGT Environmental Management Programs are maintained to manage and improve biodiversity and land management performance. The targets and objectives detailed in the program are to be linked to NGC Environmental Standard 8 (*NEM-SER-STA-008)* to ensure the appropriate and effective continual improvement of biodiversity, land and landscape function management within NGT.

Effectiveness of controls are reviewed on a periodic basis through inspections, maintenance programs and audits. Significant risks are reviewed on a quarterly basis and the complete risk register is reviewed annually at a minimum as defined in the Risk Management Procedure.

4.8 Change Management

Any changes in relation to biodiversity and land values management are required to be put through the Change Management process, including risk assessments where appropriate.

Change Management is defined within the Management of Change Regional Procedure.

4.9 Procedures

Procedures are developed for regular activities based on an identified risk basis. Management of procedures is performed in accordance with the Systems Documentation and Record Management Procedure. Procedures are developed for various activities associated with biodiversity and land values management, including the long-term dingo management, land disturbance, fire management and control of pests and introduced species management, and are available on the NGT Prospector.

A list of procedures relating to biodiversity and land values management is provided in Section 6 References and Associated Documentation.

4.10 Training and Awareness

Implementation of training requirements are in accordance with the Tanami Training Management Procedure or where applicable, the contractors training procedure. It is the responsibility of each supervisor to ensure that all relevant personnel are adequately trained and competent in biodiversity and land values management, and are provided with the appropriate training, instruction and supervision.

NGT employees or contractors are to be trained in accordance with the Employee In-role to Competency Matrix and/or contractor's training management system where applicable.

Training and/or awareness is provided through various means, including:

- NGT induction program;
- Toolbox awareness sessions;
- Change management awareness sessions when implemented; and / or
- Detailed internal / external training programs.

All personnel are to be trained in hazard recognition, where relevant to their work area. Where personnel work in a high or extreme risk environment, mandatory specific training may be required in combination with the relevant specific procedures.

Training records are maintained by the NGT Training Department using the Employee In-role to Competency Matrix and/or by the contractor's Training Coordinator where applicable.

4.11 Inspections and Audits

4.11.1 Inspections

Informal inspections of flora, fauna, weeds and pests are conducted by the Environment Department whilst performing and planning monitoring activities and inspecting various work areas (refer Section 4.16).

Inspections of any proposed site disturbance will be conducted prior to sign-off on the site disturbance permit (SDP). Additionally, where site disturbance permits have been granted, follow-up inspections will also be completed by the Environment Department.

All new equipment and machinery will also be inspected for weeds and seeds prior to entry into site.

Routine inspections of rehabilitated areas are completed by the Environment Department.

Periodic weed inspections and surveys are carried out at the bore fields and along the Haul Roads and other access tracks.

All associated corrective actions are considered in projects and closure and reclamation planning, and entered into Cintellate and managed as per the requirements of the Corrective and Preventative Action Regional Procedure.

4.11.2 Audits

NGT performs audits in accordance with the Internal and External Audit Regional Procedure.

The NGT Audit Schedule is reviewed and updated annually or when required with input from the SER and the Health, Safety and Security (HSS) Departments. The audit schedule includes the following activities related to biodiversity and land management:

- Site-wide biodiversity management against Biodiversity Management Standard and all associated documentation (including this plan), at a minimum of once every three years.

4.12 Reporting

Implementation of reporting and communication requirements is conducted in accordance with the Communication, Consultation and Participation Regional Procedure, Monitoring and Measurement Regional Procedure and documents associated with the Newmont Legal and Other Requirements IMS Standard.

Events classified as biodiversity-related environmental accidents or incidents requiring reporting may include:

- Fauna / Dingo death;
- Fauna interaction with personnel and/or equipment;
- Site disturbance that has not been authorised by the Sustainability and External Relations Department;
- Conservation or culturally significant plant removed and/or damaged without authorisation;
- Unsatisfactory human-wildlife interaction, removal from natural habitat, removal without relevant training or inadequate relocation;
- Driving off-road without appropriate site disturbance approval;
- Unauthorised fire or back-burning;
- New declared weed occurrence or the spread of existing weeds; and/or
- Pests observed and or signs of pests impeding on the biodiversity.

Any disturbance to NGT's biodiversity and land value is to be reported to the Environment Department through the Hazard Reporting process (refer to Behaviour and Observation Regional Procedure).

4.12.1 Internal Reporting

Internal reporting related to biodiversity and land management shall include:

- Reporting of all biodiversity and land value related accidents / incidents to NGT Management Team within 24 hours, and all Level 3 and above accidents / incidents to APAC Regional Sustainability and External Relations (SER) Manager;
- Where applicable, provision of information regarding all follow-up activities and/or corrective actions related to biodiversity accidents / incidents to the Environment Department;
- Accidents / incidents reported to APAC SER through the Monthly Reporting process;
- Any changes to the area of disturbance on surface as identified in the life of mine plan;

- Reporting of any new weed occurrences on site; and
- An inventory of known international and regionally significant species (as per the EPBC Act and TPWC Act) including a survey of flora and fauna, and monitoring locations is to be kept.

4.12.2 External Reporting

Ongoing biodiversity and land management practices are reported to the NT Department of Mines and Energy (DME) through the provision of the annual Mining Management Plan (MMP) submissions and the NGT Closure and Reclamation Plan.

External reporting of biodiversity-related accidents / incidents occurs through the annual submission of the Mining Management Plan (MMP) to the Department of Mines and Energy NT (DME) or S29 notifications subject to the significance of the event.

There is no regulatory requirement to report fauna mortalities to DME. However, various NT departments have specified interest (i.e. it is optional to report) in receiving the following information:

- NT Parks & Wildlife Commission are interested in botulism mortalities in birds, primarily during the wet season that occur in close proximity to sewage ponds;
- Department of Primary Industry and Fisheries (DPIF) is interested in significant illness or mortality (greater than 20 deaths) in wildlife for investigation; and
- All fauna observations or mortalities can be optionally reported to NT Flora and Fauna Division. A location (GPS coordinates), date, species, and other information can be lodged with the NT Flora and Fauna Division's biodiversity database. Data can be entered at: www.wildwatch.nt.gov.au.

In the event of a declared weed being positively identified at NGT, notification is to be given to the Department of Land Resource Management (formerly Natural Resources, Environment, Sport and The Arts Northern Territory (NRETAS)) Weed Management Branch within 14 days of becoming aware of the presence of the declared weed. This requirement is prescribed in the *Weed Management Act 2001*.

External reporting is the responsibility of the Sustainability and External Relations Manager in consultation with the General Manager and Regional SER Manager's.

4.13 Management Review

The effectiveness, suitability and/or adequacy of this management plan is assessed and communicated as per the Commitment, Leadership and Management Review Procedure.

Issues relating to biodiversity management (including incidents, accidents and trends), results of audits and an analysis of objectives, targets, corrective actions and other planning functions are included within the agenda of the management review.

4.14 Document and Records Management

This Biodiversity and Land Management Plan will be reviewed at a minimum triennially through the document control and review process (refer to the Systems Documentation and Record Management Regional Procedure) or alternatively as required by an audit action, change of policy, standards or procedure, or proceeding a significant accident / incident.

Related records to be retained by NGT include:

- Monitoring and survey reports completed in partnership with CLC;
- Rehabilitation monitoring reports completed by third-party consultants;
- Weed inspection and survey forms;

- New Declared Weed Occurrence forms;
- Fauna mortality register; and
- Accident / incident reports.

4.15 Closure

As previously discussed, biodiversity and land management, monitoring, and assessment, is an integral component of closure and reclamation planning. As such closure planning and closure criteria are to be considered at all stages of mine life to ensure that the biodiversity and land-value is not negatively impacted.

4.15.1 Concurrent Rehabilitation

Throughout the life of the mine, there are opportunities to complete rehabilitation of disused areas. Rehabilitation methods are outlined in the NGT Closure and Reclamation Plan and various reports from external consultants and other related documents. In general, rehabilitation involves the re-engineering of landforms to ensure design stability, preparation of ground surface through techniques such as ripping, and spreading of topsoil to promote vegetation re-establishment. Consideration needs to be made with regards to water, weed and erosion management. At NGT, methods involving seeding and/or planting of topsoil are not required due to favourable natural regeneration of native species.

Concurrent rehabilitation, where practical to be completed with regard to resource constraints such as time, labour, equipment and budget allowances, is a valuable activity as it can reduce liabilities, decrease cost at mine closure, reduce time until relinquishment post-closure, and make efficient use of under-utilised resources.

Concurrent rehabilitation at NGT is planned and coordinated by the Environment Department, in association with the Projects Department.

Individual Area Managers will annually assess the availability of land no longer required for operational purposes for rehabilitation. Site rehabilitation will commence on all areas within two years of the area being identified as available.

4.15.2 Rehabilitation Criteria

All land is to be designed and, at landform closure, managed in accordance with Closure Criteria as described in the NGT Closure and Reclamation Plan, and as listed below:

- Landform slopes are geo-technically stable;
- Landform surfaces are constructed and rehabilitated to promote soil stability and minimise erosion;
- Cover designs of waste rock landforms and TSF's are specific to the nature of the underlying materials and to the materials available for rehabilitation use. Infiltration into landforms through covers is encouraged in the case of NGT, provided it does not affect stability or create detrimental subsidence, or generate and mobilise ARD;
- Rehabilitate disturbed lands, unless otherwise specified through appropriate consultation and approval for final land use considerations;
- Demonstrate that vegetation establishment trends towards relevant analogue sites, or is appropriate in terms of plant species composition, diversity and abundance, if for any reason control sites are not an appropriate measure (where control sites are not the measure this will be specified);

- Demonstrate that measured values for Landscape Function Analysis, and habitat complexity trend towards relevant analogue sites, or are appropriate in terms of a regional completion criteria. If for any reason analogue sites are not an appropriate measure (where analogue sites are not the measure this will be specified); and
- The occurrence of weeds is reduced and managed such that they do not significantly impact on the rehabilitation ecology.

The closure criteria ensure that the final landscape following cessation of mining activities will support a self-sustaining natural environment before the land can be relinquished. As such, this promotes the protection and conservation of biodiversity and land values at NGT throughout the life of mine cycle.

5 DEFINITIONS

Term	Description
APAC	Newmont Asia Pacific Region
ARD	Acid rock drainage
BAP	Biodiversity Action Plan (or equivalent)
Biodiversity	The variety of different species, the genetic variability of each of those species and the variety of different ecosystems that they form.
BRAT	Biodiversity Risk Assessment Tool
Cintellate	NGT accident and incident reporting system
DME	Department of Mines and Energy
EMP	Environmental Management Plan
Environmental Aspect	Element of the organisation's activities, products or services, which can interact with the environment.
Environmental Value	A quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety. These have been developed with key stakeholders.
EPBC Act	Environmental Protection and Biodiversity Conservation Act
GM	General Manager
HSLP	Health Safety and Loss Prevention
IMS	Integrated Management System
JHA	Job Hazard Analysis
Landscape Function	The intrinsic broader processes/function of the landscape that promotes and maintains biodiversity.
NGC	Newmont Mining Corporation
NGT	Newmont Goldcorp Tanami
SER	Sustainability and External Relations Department
TPWC Act	Territory Parks and Wildlife Conservation Act

6 REFERENCES AND ASSOCIATED DOCUMENTATION

Item	Title	Location

Item	Title	Location
Corporate Standard	Biodiversity Management Standard	Prospector Corporate
Corporate Standard	Legal and Other Requirements	Prospector IMS Standards
Procedure	Risk and Opportunity Regional Procedure	Prospector Tanami IMS
Procedure	Management of Change Regional Procedure	Prospector Tanami IMS
Procedure	Commitment, Leadership and Management Review Regional Procedure	Prospector Tanami IMS
Plan	NGT Long-Term Dingo Management Plan	Prospector Tanami
Plan	NGT Closure and Reclamation Plan	Prospector Tanami
Register	NGT Risk and Opportunity Register	Prospector Tanami
Register	Legal and Other Commitments Register	Prospector Envirolaw
Procedure	Site Disturbance Permit Procedure	Prospector Tanami
Procedure	Site Disturbance Permit Follow-up Procedure	Prospector Tanami
Procedure	Behaviour and Observation Regional Procedure	Prospector Tanami IMS
Procedure	Vehicle Site Access Requirements Procedure	Prospector Tanami
Register	Site Disturbance Register	Prospector Tanami/Environment Drive
Register	Registered Snake Handlers	Prospector Tanami/Environment Drive
Checklist	Vehicle Equipment Item Washdown Checklist	Prospector Tanami
Schedule	NGT Environmental Assessment Monitoring Schedule	Prospector Tanami
Form	Site Disturbance Permit Form	Prospector Tanami
Form	Site Disturbance Permit Follow-up Form	Prospector Tanami
Form	Vehicle Weed Inspection Form	Prospector Tanami
Report	Newsome et al. (2009) Regional Biodiversity Monitoring Project: Factors affecting the distribution of selected wildlife within the vicinity of mining activity in the central and northern Tanami. Late Wet Season 2005 – Late Dry Season 2007.	Environment Drive

Item	Title	Location
Report	Morton, S.R., Short, J. and Barker, R.D. (2004) Refugia for Biological Diversity in Arid and Semi-arid Australia, Biodiversity Series Paper No. 4, Department of Environment and Heritage	Environment Drive
Report	Stoll, Barnes and Fowler, n.d The Tanami Biodiversity Strategy - Aboriginal And Industry Partnership In Biodiversity Conservation. Newmont Tanami Operation and Central Land Council.	Environment Drive
Report	Gibson, D. F. (1986) A Biological Survey of the Tanami Desert in the Northern Territory. Conservation Commission of the Northern Territory, Alice Springs, N.T	Environment Drive
Report	Low Ecological Services (1990) Flora and Vertebrate Fauna Survey of the Proposed Mineral Lease at Dead Bullock Soak and Haulage Road to the Granites, Tanami Desert. Report prepared for North Flinders Mines Ltd, May 1990.	Environment Drive
Report	Low, W.A., Cook, B.D. and Strong, B.W. (1983) Reproduction and population dynamics of the rabbit, Oryctolagus cuniculus, in the Northern Territory at the edge of its distribution in Australia. Report to CCNT.	Environment Drive
Report	Mt King Ecological Surveys (1985) The Biological Environment of the Granites Goldfield. Report prepared for North Flinders Mine Limited.	Environment Drive
Report	Stoll, Barnes and Fowler, n.d The Tanami Biodiversity Strategy - Aboriginal And Industry Partnership In Biodiversity Conservation. Newmont Tanami Operation and Central Land Council.	Environment Drive
Report	Thackway, R. and Cresswell I. D. (ed), (1995) An Interim Biogeographic Regionalisation for Australia. Australian Nature Conservation Agency, Reserve System Unit, Canberra.	Environment Drive
BRAT	NGT Biodiversity Risk Assessment Tool	Environment Drive

7 DOCUMENT CONTROL

Author	Reviewer	Change	Date
S Dodd	S McCann	New Document	28/05/2015

S Dodd	S McCann	Minor edits to the document.	30/09/2015
S Dodd	S McCann	Additional content and clarification to site processes provided in line with amendments to the Biodiversity Management Standard and observations from the LCA Audit.	22/06/2016
S Dodd	S McCann	Defined KBVs for the site and referenced the objective of “no additional loss” following the workshop held in Perth and completion of the NGT BRAT.	13/11/2016
T Purcell	K Johnston	Amended; Southern IPA section, RBM section, Cyanide and wildlife management section, and SDP section.	28/11/2019

Start Date: **20 Dec 20**
Completion Date : **21 Dec 20**

Lease	**EL2367**	**Project Area**	**Pegasus, South DBS/GTS Haul Rd**	**Costean ID**	**A2C0005**

Title: Closure Report

Pre-Rehab Condition	Thick vegetation regrowth on/in costean. Large mature culturally significant trees present on top of soil stockpile and the odd one in the trench. Erosion present				
Method Of Work and Equipment Used	Each site was inspected by operator and supervisor.				
	The Costean was backfilled using wheeled front end loader with material from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible.				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-48
Other Notes	Surface works supported rehab completion				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrow from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Surface works	Completed		20 Dec 20
		Supervisor Sign-Off	**Date**
		-	21 Dec 20

Photographic Record Of Task	
Before	**Ater**
	
	

Start Date: **20 Dec 20**
Completion Date : **21 Dec 20**

Lease	**EL2367**	**Project Area**	**Pegasus, South DBS/GTS Haul Rd**	**Costean ID**	**A2C0006**

Title: Closure Report

Pre-Rehab Condition	Thick vegetation regrowth on/in costean. Large mature culturally significant trees present on top of soil stockpile and the odd one in the trench. Erosion present				
Method Of Work and Equipment Used	Each site was inspected by operator and supervisor.				
	The Costean was backfilled using wheeled front end loader with material from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible.				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-48
Other Notes	Surface works supported rehab completion				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrow from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Surface works	Completed	-	20 Dec 20
		Supervisor Sign-Off	**Date**
		-	21 Dec 20

Photographic Record Of Task	
Before	**Ater**
	

Start Date: **20 Dec 20**
Completion Date : **21 Dec 20**

Lease	**EL2367**	**Project Area**	**Pegasus, South DBS/GTS Haul Rd**	**Costean ID**	**A2C0008**

Title: Closure Report

Pre-Rehab Condition	Thick vegetation regrowth on/in costean. Large mature culturally significant trees present on top of soil stockpile and the odd one in the trench. Erosion present				
Method Of Work and Equipment Used	Each site was inspected by operator and supervisor.				
	The Costean was backfilled using wheeled front end loader with material from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible.				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-48
Other Notes	Surface works supported rehab completion				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrow from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Surface works	Completed	-	20 Dec 20
		Supervisor Sign-Off	**Date**
		-	21 Dec 20

Photographic Record Of Task	
Before	**After**
	
	
	

Start Date: **20 Dec 20**
Completion Date : **21 Dec 20**

Lease	**EL2367**	**Project Area**	**Pegasus, South DBS/GTS Haul Rd**	**Costean ID**	**A2C0010**

Title: Closure Report

Pre-Rehab Condition	Thick vegetation regrowth on/in costean. Large mature culturally significant trees present on top of soil stockpile and the odd one in the trench. Erosion present				
Method Of Work and Equipment Used	Each site was inspected by operator and supervisor.				
	The Costean was backfilled using wheeled front end loader with material from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible.				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-48
Other Notes	Surface works supported rehab completion				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrow from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Surface works	Completed	-	20 Dec 20
		Supervisor Sign-Off	**Date**
		-	21 Dec 20

Photographic Record Of Task	
Before	**After**
	
	
	

CLOSURE AND RECLAMATION WORK RECORD

Sustainability and External Relations

Start Date: **23 Nov 20**
Completion Date : **23 Nov 20**

Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0002

Title: EPC0002 Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	Janice Hill	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**

Photographic Record Of Task	
Before	**After**
	
	
	

CLOSURE AND RECLAMATION WORK RECORD

Start Date: **22 Nov 20**
Completion Date : **22 Nov 20**

Lease	**EL23658**	**Project Area**	**SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)**	**Costean ID**	**EPC0003**

Title: EPC0003 Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers
	Where possible all signs of interference where removed such as wheel tracks.
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.

Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43

Other Notes	Yapa Crew completed the works.
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.
Opportunities	Inspect the works after 12 months to assess the success of the works.

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**

Photographic Record Of Task	
Before	**After**
	

Start Date: **23 Nov 20**
Completion Date : **23 Nov 20**

Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0004

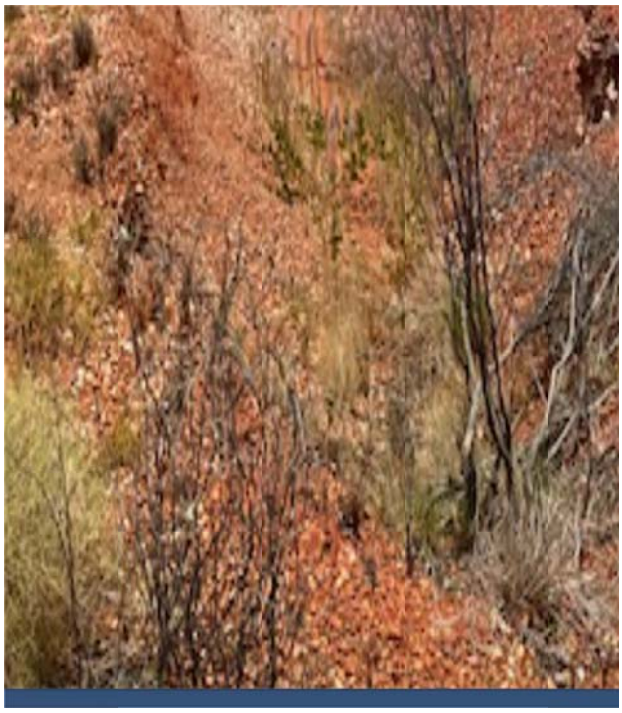
Title: EPC0004 Closure Report

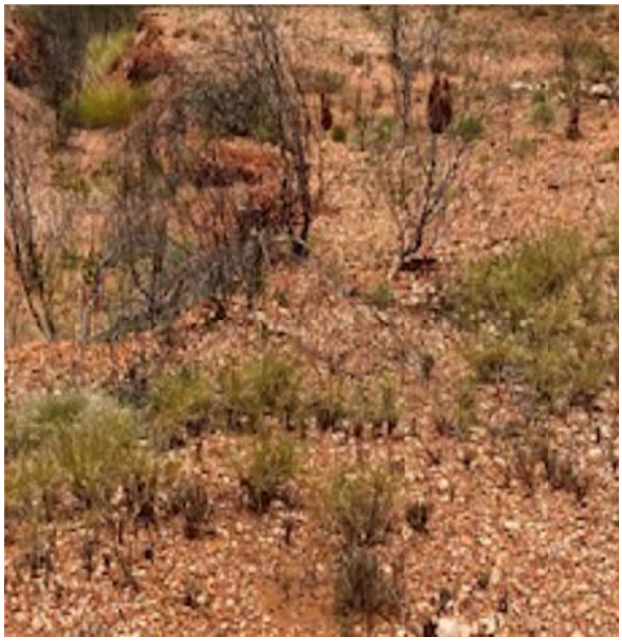
Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**

Photographic Record Of Task	
Before	**After**
	





Start Date: **23 Nov 20**
Completion Date : **24 Nov 20**

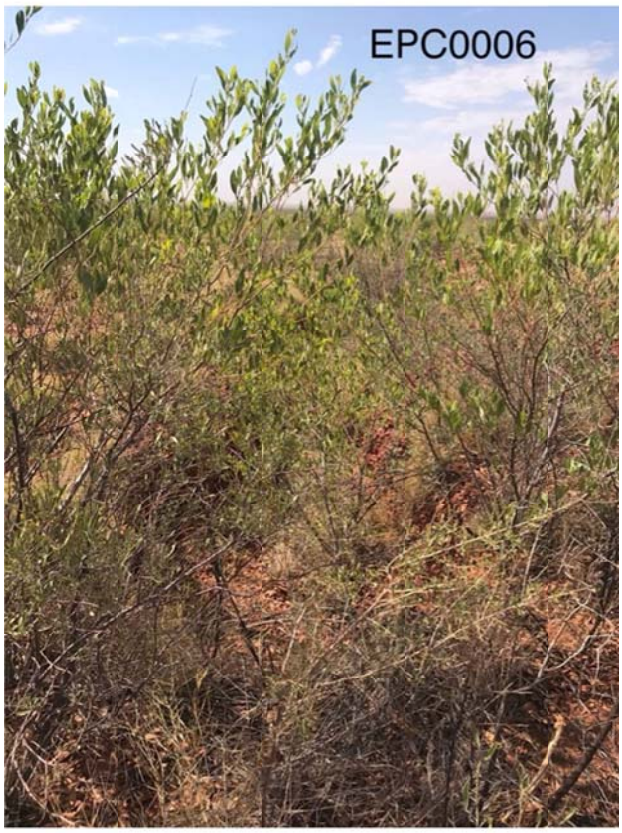
Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0006

Title: EPC0006 Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**


EPC0006

Photographic Record Of Task	
Before	**After**
	
	

 EPC006	

Start Date: **24 Nov 20**
Completion Date : **25 Nov 20**

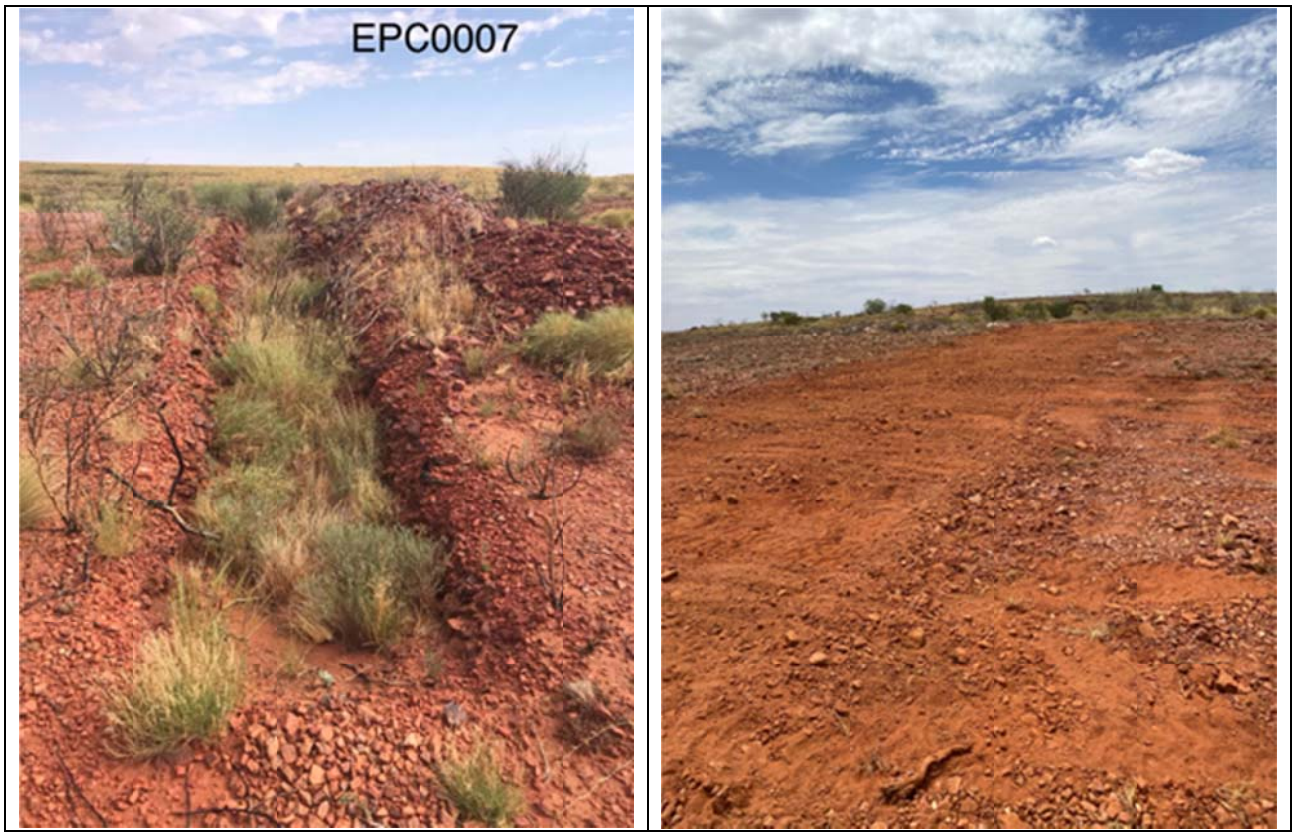
Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0007

Title: EPC0007 Closure Report

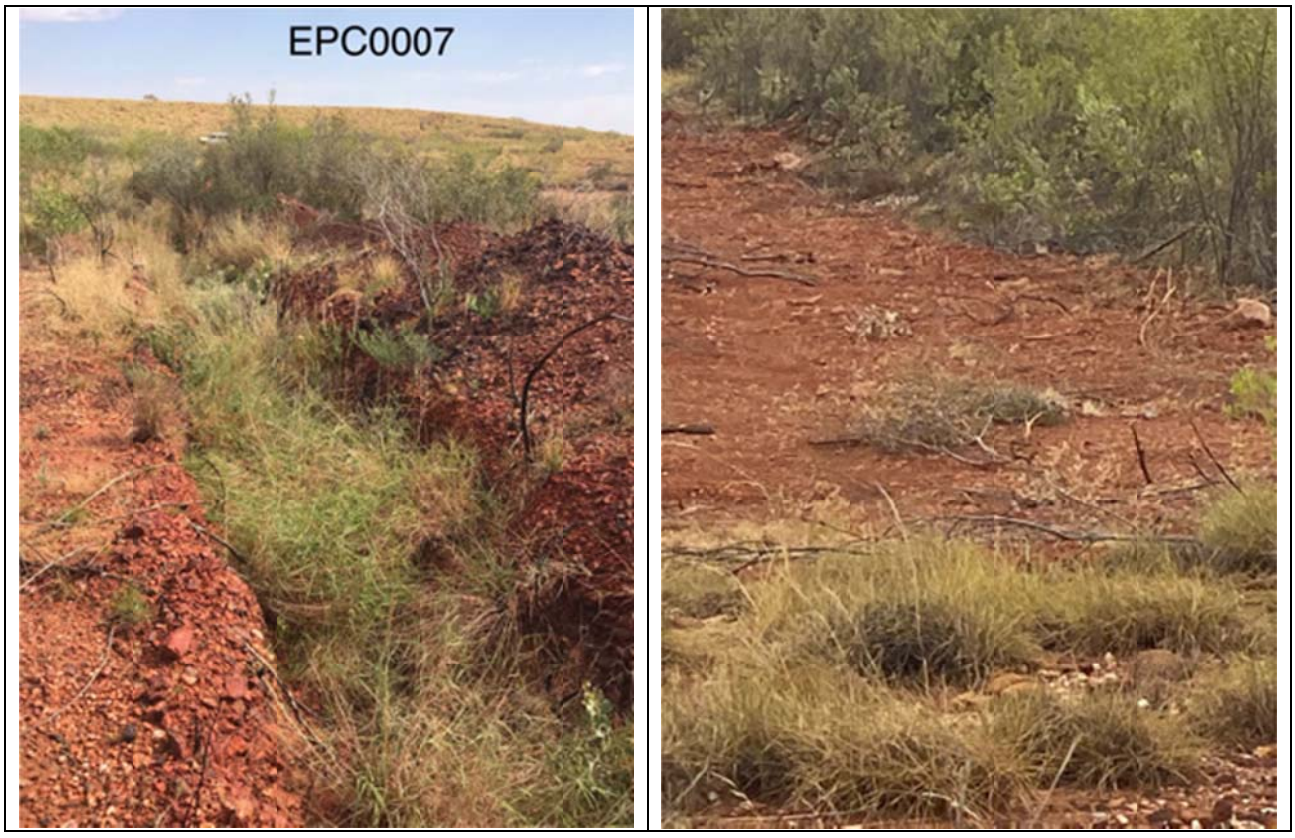
Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**


EPC0007

Photographic Record Of Task	
Before	**After**
	
	


EPC0007

Start Date: **25 Nov 20**
Completion Date : **25 Nov 20**

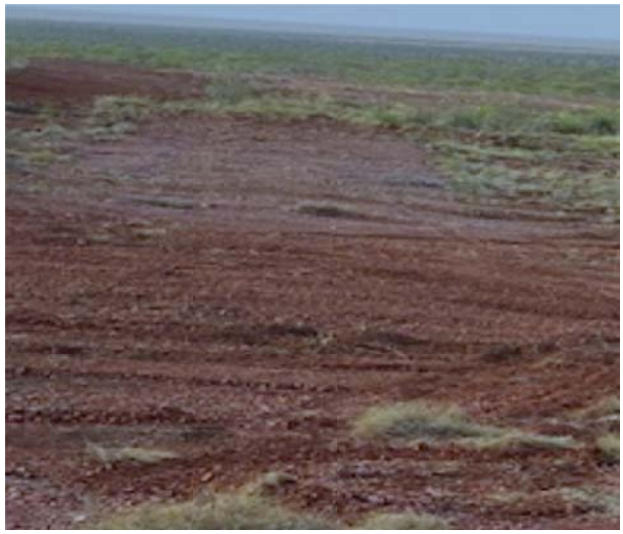
Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0007E

Title: EPC0007E Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**

Photographic Record Of Task	
Before	**After**
	
	
	

Start Date: **25 Nov 20**
Completion Date : **26 Nov 20**

Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0008E

Title: EPC0008E Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**


EPC0008E

Photographic Record Of Task	
Before	**Ater**
	
	

CLOSURE AND RECLAMATION WORK RECORD

Sustainability and External Relations

Start Date: **22 Nov 20**
Completion Date : **22 Nov 20**

Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0021

Title: EPC0021 Closure Report	
Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers
	Where possible all signs of interference where removed such as wheel tracks.
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.

Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43

Other Notes	Yapa Crew completed the works.
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.
Opportunities	Inspect the works after 12 months to assess the success of the works.

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Yapa Crew	Completed	Janice Hill	18 Nov 20
		Supervisor Sign-Off	**Date**
		[signature]	18 Nov 20

Photographic Record Of Task	
Before	**After**

Photographic Record Of Task	
Before	**After**
	

Start Date: **23 Nov 20**
Completion Date : **24 Nov 20**

Lease	**EL23658**	**Project Area**	**SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)**	**Costean ID**	**EPC0022**

Title: EPC0022 Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers
	Where possible all signs of interference where removed such as wheel tracks.
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.

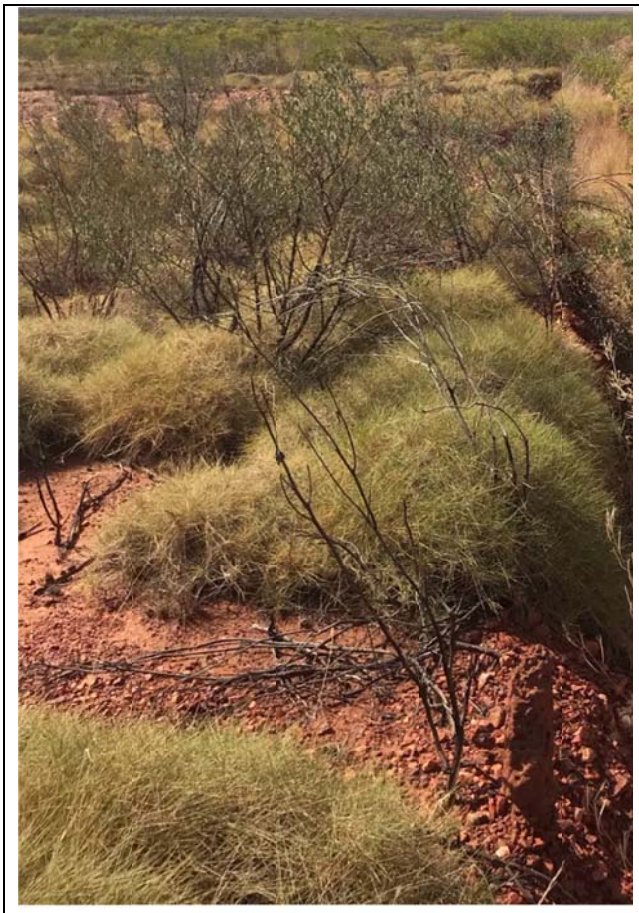
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43

Other Notes	Yapa Crew completed the works.
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.
Opportunities	Inspect the works after 12 months to assess the success of the works.

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Yapa Crew	Completed	Janice Hill	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task

Before	**After**



Photographic Record Of Task	
Before	**After**
	

Start Date: **26 Nov 20**
Completion Date : **26 Nov 20**

Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0024

Title: EPC0024 Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**


EPC0024

Photographic Record Of Task	
Before	**Ater**
	
	

Start Date: **27 Nov 20**
Completion Date : **27 Nov 20**

Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0025

Title: EPC0025 Closure Report					
Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Yapa Crew	Completed	Janice Hill	18 Nov 20
		Supervisor Sign-Off	**Date**
		[signature]	18 Nov 20

Photographic Record Of Task	
Before	**After**

Photographic Record Of Task	
Before	**Ater**
	
	

Start Date: **26 Nov 20**
Completion Date : **27 Nov 20**

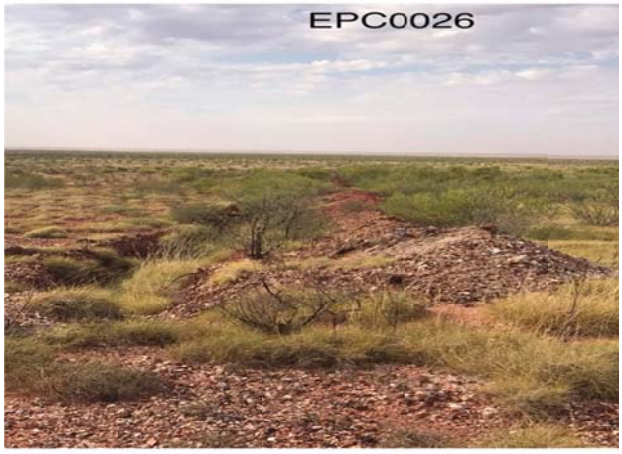
Lease	EL23658	Project Area	SITE 1 (30KM NW GRANITES, 10KM N TANAMI RD)	Costean ID	EPC0026

Title: EPC0026 Closure Report

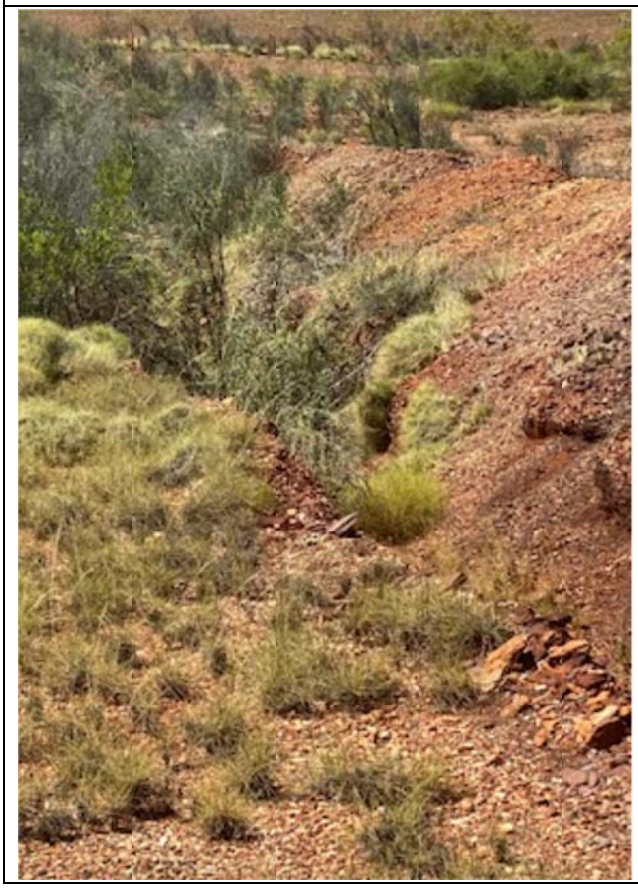
Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**


EPC0026

Photographic Record Of Task	
Before	**Ater**
	
	

Start Date: **1 Dec 20**
Completion Date : **2 Dec 20**

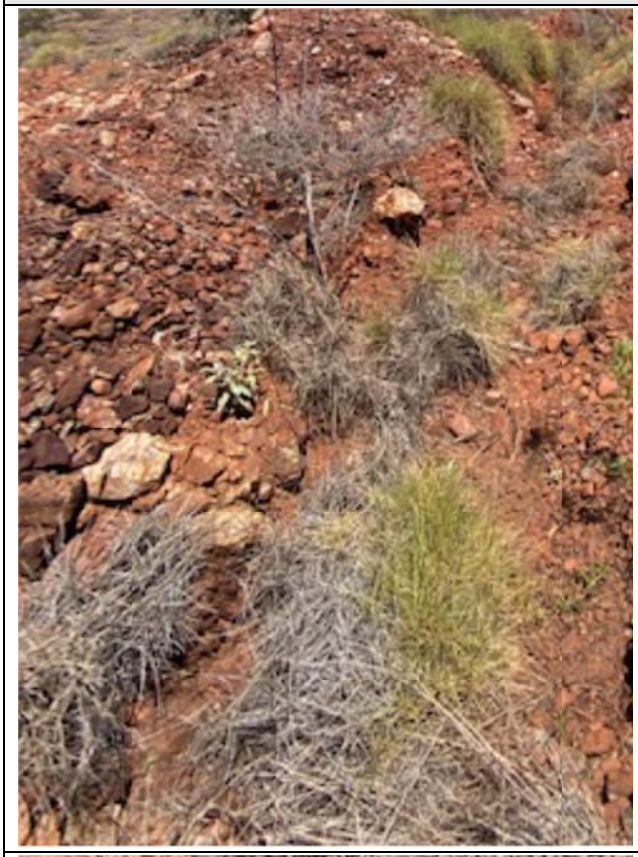
Lease	EL23658	Project Area	CASHEL (5KM SE GRANITES, 95KM N TANAMI RD)	Costean ID	LAC0005

Title: LAC0005 Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**

Photographic Record Of Task	
Before	**Ater**
	
	
	

Start Date: **28 Nov 20**
Completion Date : **29 Nov 20**

Lease	EL23658	Project Area	CASHEL (5KM SE GRANITES, 95KM N TANAMI RD)	Costean ID	LAC0006

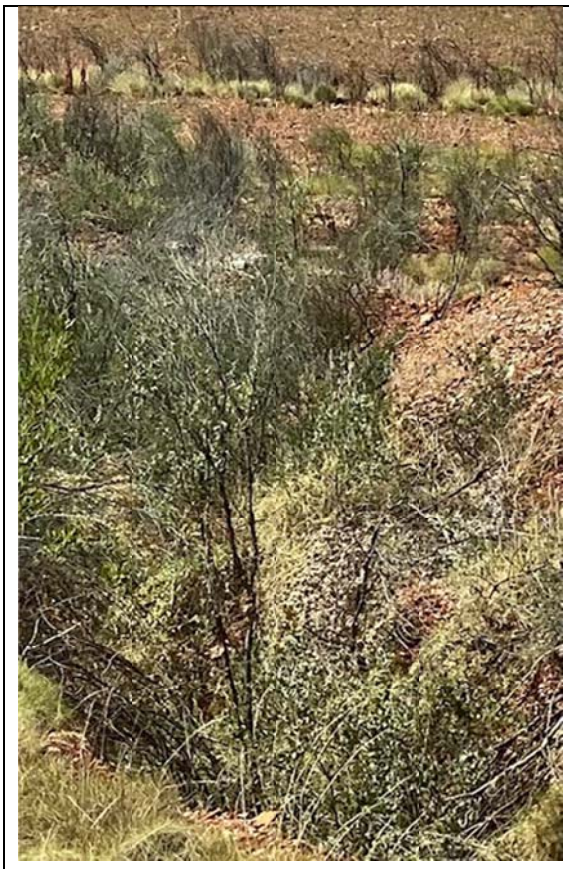
Title: LAC0006 Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**

Photographic Record Of Task	
Before	**Ater**
	
	



Start Date: **29 Nov 20**
Completion Date : **30 Nov 20**

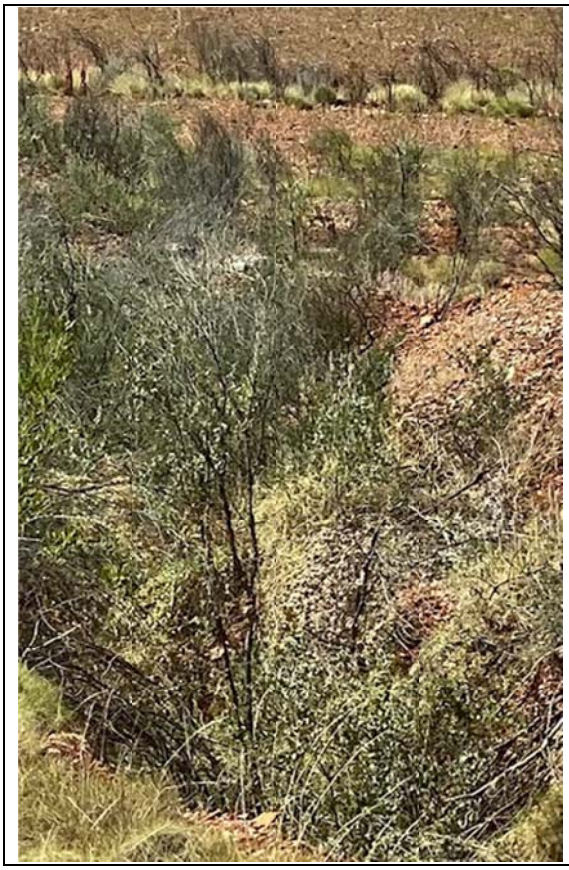
Lease	EL23658	Project Area	CASHEL (5KM SE GRANITES, 95KM N TANAMI RD)	Costean ID	LAC0007

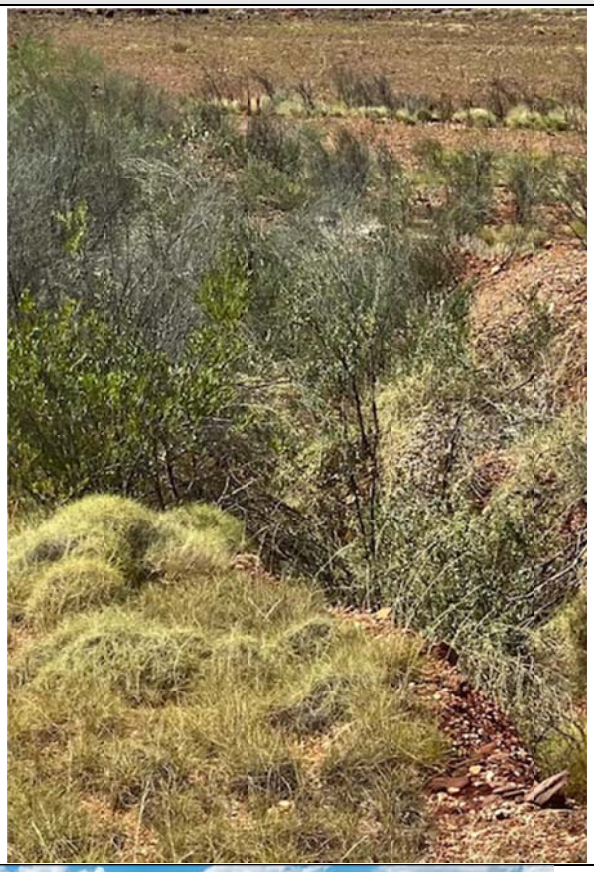
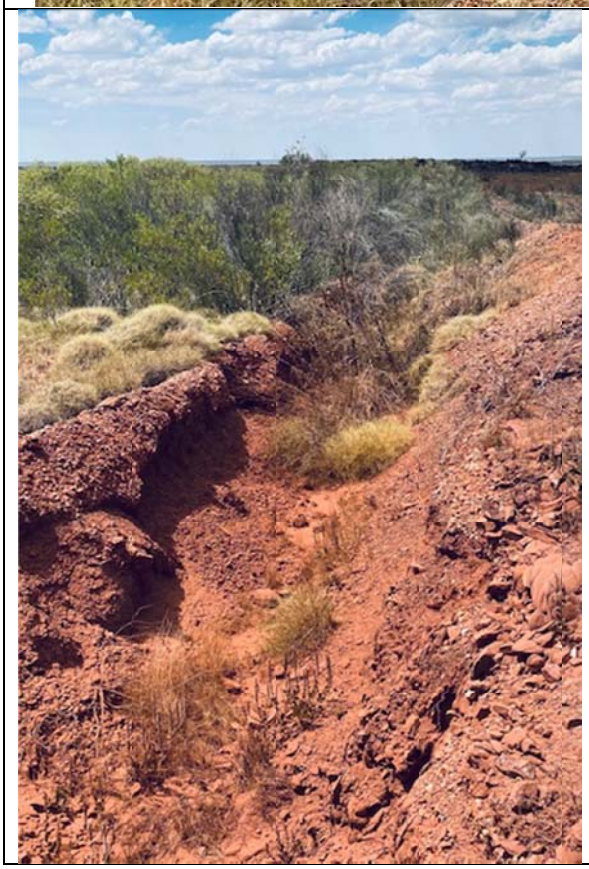
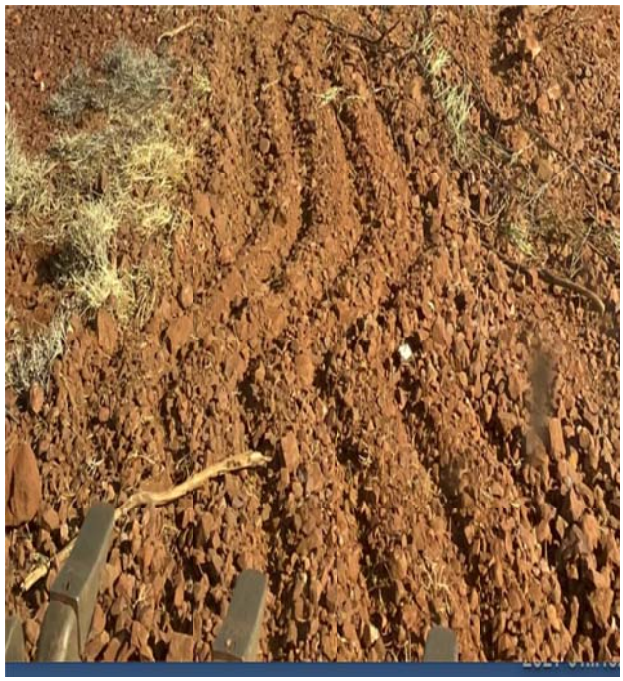
Title: LAC0007 Closure Report

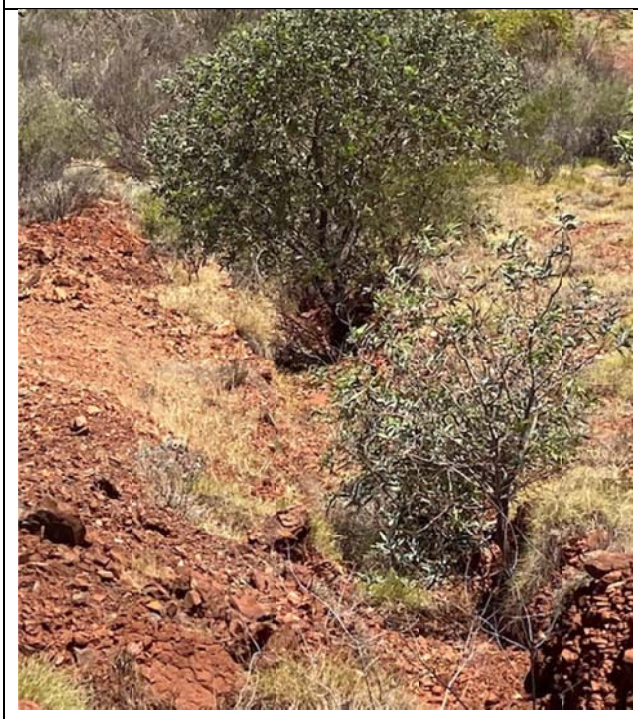
Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**



Photographic Record Of Task	
Before	**Ater**
	
	

Start Date: **28 Nov 20**
Completion Date : **28 Nov 20**

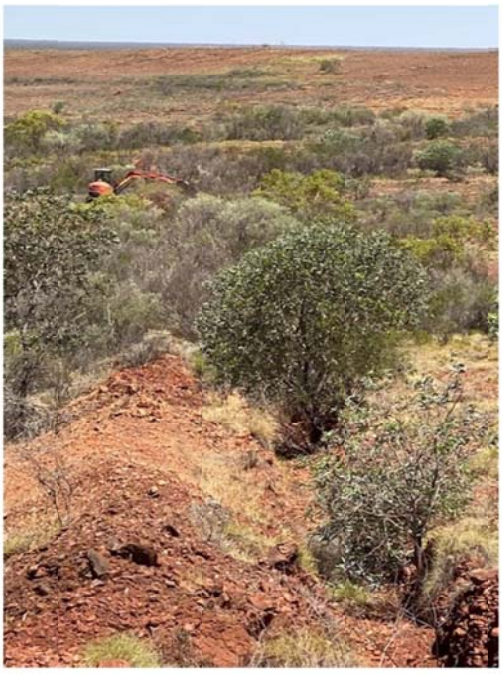
Lease	EL23658	Project Area	CASHEL (5KM SE GRANITES, 95KM N TANAMI RD)	Costean ID	LAC0008

Title: LAC0008 Closure Report

Pre-Rehab Condition	As per Before photographs. Overgrown, some minor erosion.				
Method Of Work and Equipment Used	Each site was inspected by Dylan Poulson (Yapa Crew member) and myself for cultural significance prior to work commencing.				
	Excavator and skid steer where used. The Costean was backfilled using excavator from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible using the skid steers				
	Where possible all signs of interference where removed such as wheel tracks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil. The Yapa Crew assessed that there were no trees of significance within or near this costean.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-43
Other Notes	Yapa Crew completed the works.				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrowth from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	Task Completion Status	Operator Sign-Off	Date
Yapa Crew	Completed	*Janice Hill*	18 Nov 20
		Supervisor Sign-Off	**Date**
			18 Nov 20

Photographic Record Of Task	
Before	**After**



Photographic Record Of Task	
Before	**Ater**
	
	

Start Date: **20 Dec 20**
Completion Date : **21 Dec 20**

Lease	**EL2367**	**Project Area**	**Callie NW**	**Costean ID**	**MMC0004**

Title: Closure Report

Pre-Rehab Condition	Large pile of soil next to trench/costean. Costean is deep and narrow and requires rehabbing. No evidence or erosion. Vegetation regrowth is thick (consistent with surrounding undisturbed vegetation) with some mature trees present. Access to costean is along main road then requires 250m bush bashing.				
Method Of Work and Equipment Used	Each site was inspected by operator and supervisor.				
	The Costean was backfilled using an excavator with material from the spoil line and the site was levelled, scarified and spread with vegetation where ever possible.				
	Where possible all signs of interference where removed such as track marks.				
Hazards / Risks	Trench cave in. Regrowth of vegetation both in the trench and within the spoil.				
Permit Required?	Yes	**Permit type**	Site Disturbance Permit	**Permit number**	SDP-48
Other Notes	Surface works supported rehab completion				
Materials, Quantities and Costs	Spoil adjacent to the costean was used. There was some vegetation growing in the spoil. This will regrow from within the trench.				
Opportunities	Inspect the works after 12 months to assess the success of the works.				

Task Responsibility	**Task Completion Status**	**Operator Sign-Off**	**Date**
Surface works	Completed	-	20 Dec 20
		Supervisor Sign-Off	**Date**
		-	21 Dec 20

Photographic Record Of Task	
Before	**After**