

Section 1 – Project Details

Project Name Provide existing project name	Bootu Creek Exploration Licences - 2019
--	--

Authorisation Number Insert existing authorisation number	0629-01
---	----------------

Operator Name ASIC-ABR registered name	OM (Manganese) Ltd , (abbreviated as OMM in this report), ABN:60 097 091 506 ACN:097 091 506
--	--

Location and Access Details Include brief description of the location, access details, and distance to nearest town or community	EL31665 located adjacent to Bootu Creek mine site and accessed from OMM Haul Road, east off Stuart Highway, 110km north of Tennant Creek. EL28041 and EL28604 located 15km to west of the Renner Springs Roadhouse, and accessed by gas pipeline access track, west off Stuart Highway, 1km north of Helen Springs access road and 140km north of Tennant Creek (<i>see figure 1</i>).
--	---

Target Commodity Details	Manganese
---------------------------------	-----------

Mining Activities Summarise the mining activities (exploration)	Planned exploration activity for 2019 include repair of access tracks, RC exploration drilling, 3 diamond drill holes for metallurgical samples and self-audit of past rehabilitation.
---	--

Proposed Schedule Include start and finish dates of ground disturbing work	Commence proposed work plan in June or July and complete current program by November 2019.
--	--

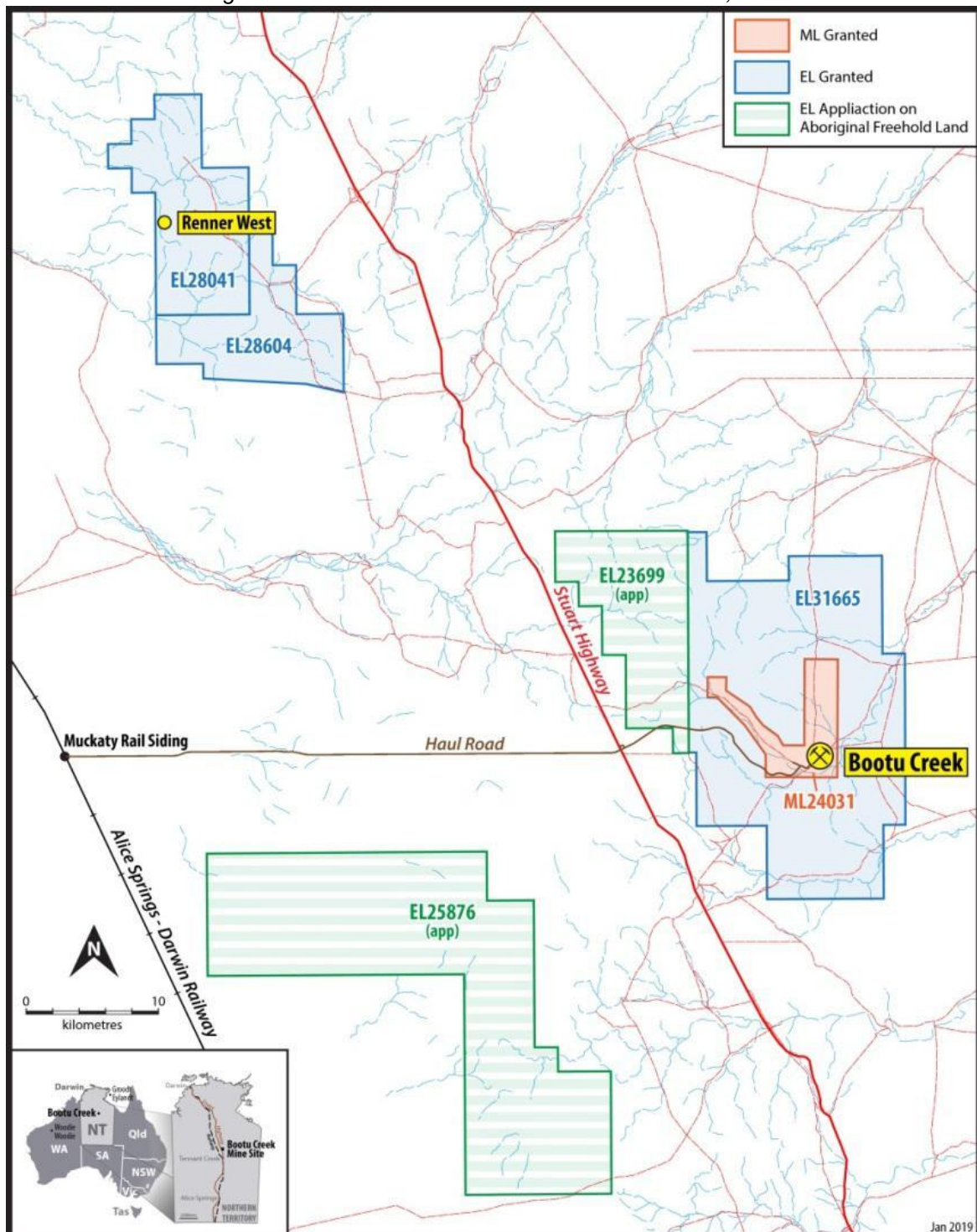
Mining Interest and Land Ownership

Title Number	Title Holder	Expiry Date	Property Name or Land Holder
EL28041	OM Manganese Ltd	08/12/2020	Helen Springs
EL28604	OM Manganese Ltd	26/09/2019	Helen Springs
EL31665	OM Manganese Ltd	02/08/2023	Banka Banka West

Organisational Structure

Position Title	Name
Managing Director	Mr Fanie Van Jaarsveld
General Manager	Mr Trevor Cook
Exploration Manager	Mr Craig Reddell
Senior Geologist	Mr Jordan Abbot-Wightman
HSEC Manager	Mr Andre de Villers

Figure 1 OMM Tenement Location Plan at 31 March, 2019



Section 2 – Operator Self-Assessment of Environmental Risk

Environmental considerations

ASSESSMENT ASPECT	YES or NO	ACTIONS REQUIRED (if answered YES)		APPENDED INFORMATION (Evidence of consultation with DENR and/or management plan)																		
<p>Step 1:</p> <p>Are there any threatened FLORA species or habitats of significance that may occur in the proposed work area?</p>	NO	<p>There were no threatened flora species identified during a survey conducted on the Bootu Creek Mine project area, but three <i>Near Threatened</i> species listed in <i>Territory Parks and Wildlife Conservation Act</i> have been recorded in the Region.</p> <p>Table 1: <i>Near Threatened</i> flora species which are known to occur in the Exploration Project region.</p> <table border="1" data-bbox="480 797 1193 1025"> <thead> <tr> <th>Species</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td><i>Eremophila alternifolia</i> (Narrow-leafed Emu Bush).</td> <td>Occurs in region</td> </tr> <tr> <td><i>Accacia tephрина</i></td> <td>Occurs in region</td> </tr> <tr> <td><i>Sauropus hubbardii</i></td> <td>Occurs in region</td> </tr> </tbody> </table> <p>Four species listed as Data Deficient in the <i>TPWC Act</i> are known to occur in the region. Species assigned this classification are not considered at threat, though future research may show that changes to this classification is appropriate.</p> <p>Table 2: <i>Data Deficient</i> flora species known to occur in the Exploration Project region.</p> <table border="1" data-bbox="480 1339 1179 1585"> <thead> <tr> <th>Species</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td><i>Distichostemon barklyanus</i></td> <td>Occurs in region</td> </tr> <tr> <td><i>Fimbristylis corynocarya</i></td> <td>Occurs in region</td> </tr> <tr> <td><i>Senna Artemisioides</i></td> <td>Occurs in region</td> </tr> <tr> <td><i>Solanum sp.</i></td> <td>Occurs in region</td> </tr> </tbody> </table>	Species	Location	<i>Eremophila alternifolia</i> (Narrow-leafed Emu Bush).	Occurs in region	<i>Accacia tephрина</i>	Occurs in region	<i>Sauropus hubbardii</i>	Occurs in region	Species	Location	<i>Distichostemon barklyanus</i>	Occurs in region	<i>Fimbristylis corynocarya</i>	Occurs in region	<i>Senna Artemisioides</i>	Occurs in region	<i>Solanum sp.</i>	Occurs in region		<p>There are 291 flora species which have been recorded in the region which could occur within the exploration project area.</p> <p>A search of matters protected by <i>Environmental Protection and Biodiversity Conservation Act</i> was conducted on 28 March 2012 using the protected matters search tool provided by Commonwealth Department of Sustainability, Environment, Water, Population and Communities.</p>
Species	Location																					
<i>Eremophila alternifolia</i> (Narrow-leafed Emu Bush).	Occurs in region																					
<i>Accacia tephрина</i>	Occurs in region																					
<i>Sauropus hubbardii</i>	Occurs in region																					
Species	Location																					
<i>Distichostemon barklyanus</i>	Occurs in region																					
<i>Fimbristylis corynocarya</i>	Occurs in region																					
<i>Senna Artemisioides</i>	Occurs in region																					
<i>Solanum sp.</i>	Occurs in region																					

<p>Step 1: cont.</p> <p>Are there any threatened FAUNA species or habitats of significance that may occur in the proposed work area?</p>	<p>YES</p>	<p>The report identified 5 species classified as <i>Vulnerable</i> or <i>Endangered</i> under the <i>Environmental Protection and Biodiversity Conservation Act</i> that were identified as likely to occur in project area or a suitable habitat may occur in the project area.</p> <table border="1" data-bbox="478 369 1197 840"> <thead> <tr> <th>Species</th> <th>Classification</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td><i>Rostratula australis</i></td> <td>Vulnerable</td> <td>Species or habitat may occur in area.</td> </tr> <tr> <td><i>Dasycercus cristicauda</i></td> <td>Vulnerable</td> <td>Species or habitat likely to occur in area.</td> </tr> <tr> <td><i>Macrotis Lagotis</i></td> <td>Vulnerable</td> <td>Species or habitat likely to occur in area.</td> </tr> <tr> <td><i>Notoryctes typhlops</i></td> <td>Endangered</td> <td>Species or habitat likely to occur in area.</td> </tr> <tr> <td><i>Liopholis kintorei</i></td> <td>Vulnerable</td> <td>Species or habitat may occur in area.</td> </tr> </tbody> </table> <table border="1" data-bbox="478 896 1197 2004"> <thead> <tr> <th>Species</th> <th>Classification</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td><i>Varanus panoptes</i> (Yellow spotted monitor)</td> <td>Vulnerable</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Dromaius novaehollandiae</i> (EMU)</td> <td>Vulnerable</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Ardeotis australis</i> (Australian Bustard)</td> <td>Vulnerable</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Onychogalea unguifera</i> (Northern Nailtail Wallaby)</td> <td>Near Threatened</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Pseudomys nanus</i> (Western Chestnut Mouse)</td> <td>Near Threatened</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Lagorchestes conspicillatus</i> (Spectacled Hare Wallaby)</td> <td>Near Threatened</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Pseudomys johnsoni</i> (Pebble Mound Mouse)</td> <td>Near Threatened</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Amytornis striatus</i> (Striated Grass Wren)</td> <td>Near Threatened</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Bruhinus grillarius</i> (Bush Stone-curlew)</td> <td>Near Threatened</td> <td>Species or habitat occurs in region</td> </tr> <tr> <td><i>Heteromunia pectoralis</i> (Pictorella Mannikin)</td> <td>Near Threatened</td> <td>Species or habitat occurs in region</td> </tr> </tbody> </table>	Species	Classification	Location	<i>Rostratula australis</i>	Vulnerable	Species or habitat may occur in area.	<i>Dasycercus cristicauda</i>	Vulnerable	Species or habitat likely to occur in area.	<i>Macrotis Lagotis</i>	Vulnerable	Species or habitat likely to occur in area.	<i>Notoryctes typhlops</i>	Endangered	Species or habitat likely to occur in area.	<i>Liopholis kintorei</i>	Vulnerable	Species or habitat may occur in area.	Species	Classification	Location	<i>Varanus panoptes</i> (Yellow spotted monitor)	Vulnerable	Species or habitat occurs in region	<i>Dromaius novaehollandiae</i> (EMU)	Vulnerable	Species or habitat occurs in region	<i>Ardeotis australis</i> (Australian Bustard)	Vulnerable	Species or habitat occurs in region	<i>Onychogalea unguifera</i> (Northern Nailtail Wallaby)	Near Threatened	Species or habitat occurs in region	<i>Pseudomys nanus</i> (Western Chestnut Mouse)	Near Threatened	Species or habitat occurs in region	<i>Lagorchestes conspicillatus</i> (Spectacled Hare Wallaby)	Near Threatened	Species or habitat occurs in region	<i>Pseudomys johnsoni</i> (Pebble Mound Mouse)	Near Threatened	Species or habitat occurs in region	<i>Amytornis striatus</i> (Striated Grass Wren)	Near Threatened	Species or habitat occurs in region	<i>Bruhinus grillarius</i> (Bush Stone-curlew)	Near Threatened	Species or habitat occurs in region	<i>Heteromunia pectoralis</i> (Pictorella Mannikin)	Near Threatened	Species or habitat occurs in region	<p>A search of matters protected by the <i>EPBC Act</i> was conducted on 28 March 2012 using the protected matters search tool provided by Commonwealth Department of Sustainability, Environment, Water, Population and Communities.</p> <p>A further 10 species classified as <i>Vulnerable</i> or <i>Near Threatened</i> under the Territory Parks and Wildlife Act are known to occur in the Exploration Project region.</p>
Species	Classification	Location																																																				
<i>Rostratula australis</i>	Vulnerable	Species or habitat may occur in area.																																																				
<i>Dasycercus cristicauda</i>	Vulnerable	Species or habitat likely to occur in area.																																																				
<i>Macrotis Lagotis</i>	Vulnerable	Species or habitat likely to occur in area.																																																				
<i>Notoryctes typhlops</i>	Endangered	Species or habitat likely to occur in area.																																																				
<i>Liopholis kintorei</i>	Vulnerable	Species or habitat may occur in area.																																																				
Species	Classification	Location																																																				
<i>Varanus panoptes</i> (Yellow spotted monitor)	Vulnerable	Species or habitat occurs in region																																																				
<i>Dromaius novaehollandiae</i> (EMU)	Vulnerable	Species or habitat occurs in region																																																				
<i>Ardeotis australis</i> (Australian Bustard)	Vulnerable	Species or habitat occurs in region																																																				
<i>Onychogalea unguifera</i> (Northern Nailtail Wallaby)	Near Threatened	Species or habitat occurs in region																																																				
<i>Pseudomys nanus</i> (Western Chestnut Mouse)	Near Threatened	Species or habitat occurs in region																																																				
<i>Lagorchestes conspicillatus</i> (Spectacled Hare Wallaby)	Near Threatened	Species or habitat occurs in region																																																				
<i>Pseudomys johnsoni</i> (Pebble Mound Mouse)	Near Threatened	Species or habitat occurs in region																																																				
<i>Amytornis striatus</i> (Striated Grass Wren)	Near Threatened	Species or habitat occurs in region																																																				
<i>Bruhinus grillarius</i> (Bush Stone-curlew)	Near Threatened	Species or habitat occurs in region																																																				
<i>Heteromunia pectoralis</i> (Pictorella Mannikin)	Near Threatened	Species or habitat occurs in region																																																				

Mining Management Plan Exploration Activities

<p>Step 2:</p> <p>Are there any known declared weeds within the proposed work area?</p>	<p>YES</p>	<p>Introduced plants which pose a significant threat to biodiversity, identified by the Department of Department of Sustainability, Environment, Water, Population and Communities as potentially occurring in the Exploration Project area.</p> <table border="1" data-bbox="475 360 1142 719"> <thead> <tr> <th>Species</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td><i>Acacia nilotica</i></td> <td>May occur in region</td> </tr> <tr> <td><i>Cenchrus ciliaris</i></td> <td>Occurs in region</td> </tr> <tr> <td><i>Parkinsonia aculeata</i></td> <td>Likely to occur in region</td> </tr> <tr> <td><i>Parthenium hysterophorus</i></td> <td>May occur in region</td> </tr> <tr> <td><i>Prosopsis spp.</i></td> <td>May occur in region</td> </tr> </tbody> </table> <p>In addition to these species there were three significant weed species recorded during a survey of the Bootu Creek Mine survey, two of which are declared under the Weeds Management Act 2001:</p> <p>Rubber Bush (<i>Calotropis procera</i>) and Hyptis (<i>Hyptis suaveolens</i>). Buffel grass (<i>Cenchrus ciliaris</i>) is considered an environmental weed and was located throughout the survey area in sandy flood plain areas close to major creek lines.</p> <p>Good vehicle hygiene practices will be employed to ensure that seeds of these species will not be transported onto or off the mine lease area. Any sightings of these species in the exploration project area will be reported to the OM Manganese Environmental Officer for immediate eradication.</p>	Species	Location	<i>Acacia nilotica</i>	May occur in region	<i>Cenchrus ciliaris</i>	Occurs in region	<i>Parkinsonia aculeata</i>	Likely to occur in region	<i>Parthenium hysterophorus</i>	May occur in region	<i>Prosopsis spp.</i>	May occur in region	<p>The report generated by the Protected Matters Search tool identifies the following flora species which are introduced and considered a significant threat to biodiversity.</p>
Species	Location														
<i>Acacia nilotica</i>	May occur in region														
<i>Cenchrus ciliaris</i>	Occurs in region														
<i>Parkinsonia aculeata</i>	Likely to occur in region														
<i>Parthenium hysterophorus</i>	May occur in region														
<i>Prosopsis spp.</i>	May occur in region														
<p>Step 3:</p> <p>Will you be using water from bores or other sources for the operation?</p>	<p>YES</p>	<p>All water required for drilling and drinking will be sourced from the mine site at Bootu Creek, or from existing bores subject to written agreement with the Pastoral Lease holder.</p> <p>No new water bores are planned. Water would only be required for 3 shallow diamond drill holes. If necessary water will be transported to drill sites from the Bootu Creek Operation.</p>													
<p>Step 4:</p> <p>Is your project likely to have a significant impact on the environment?</p>	<p>NO</p>	<p>The proposed exploration work plans will have no significant environment impact.</p> <p>The total proposed exploration clearing for 2019 is 0.44 Ha. Clearing will be undertaken with a blade up approach and significant trees will be avoided.</p>													

Mining Management Plan Exploration Activities

<p>Step 5:</p> <p>Are there Aboriginal sacred sites in the Project area?</p>	<p>YES</p>	<p>All active exploration areas are covered by existing Aboriginal Areas Protection Authority (AAPA) - Authority Certificates which clearly define exclusion areas around sacred and/or aboriginal heritage sites.</p> <p>The areas covered by the proposed exploration activities do not encroach on, nor are they located in close proximity to, any defined exclusion area.</p> <p>Copies of all relevant AAPA Authority Certificates are attached.</p>	
<p>Step 6:</p> <p>Are there archaeological and heritage sites in the Project area?</p>	<p>YES</p>	<p>All active exploration areas are covered by existing Aboriginal Areas Protection Authority (AAPA) - Authority Certificates which clearly define exclusion areas around sacred and/or aboriginal heritage sites.</p> <p>The areas covered by the proposed exploration activities do not encroach on, nor are they located in close proximity to, any defined exclusion area.</p> <p>Copies of all relevant AAPA Authority Certificates are attached.</p>	

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 clearly identify amendments made.

Section	Amendment
Section 1.0 – Organisational Structure	Senior Geologist Bootu Creek – Jordan Abbot-Wightman HSEC Manager Bootu Creek – Andre de Villers
Section 1.0 – Mining Interests	Updated Tenement Status includes the grant of EL31665 (replacing EL28662 and EL30913). Application for Variation of Authorisation 06/03/2018 and the Variation of Authorisation 0629-01 and Mining Management Plan Approval 19/03/2018 attached.
Section 1.0 – Land Ownership	A Land Access Agreement (LAA) will be completed with the Pastoral Lease holder(s) and submitted to the DPIR prior to ground disturbing exploration activity taking place.
Section 2.0 – Step 3	All water required for drilling and drinking will be sourced from the mine site at Bootu Creek, or from existing bores subject to written agreement with the Pastoral Lease holder.

This Mine Management Plan (MMP) for Bootu Creek Exploration Operations in 2019 replaces the previous OMM Mine Management Plan for 2016 Exploration Operations, approved in March 2018.

The reporting period for this report (for Authorisation number 0629-01) has been changed from August to 31st March 2019. The previous MMP for 2016 was approved on March 2018.

There was no exploration or ground disturbing activity conducted on any of the OMM Exploration Licences between 2015 and March 2019.

The only tenement change was the replacement of EL28662 and EL30319 by EL31665. A Variation of Authorisation 0629-01 and Mining Management Plan Approval was forwarded to OMM on 19/03/2018 and is attached as Appendix 8.9

EL31665 was granted for a 6 year term on 03/08/2017.

Section 4 – Activities Proposed

Mining Interests	EL28041	EL28604	EL31655
Number and type of proposed drill holes	RC/DD 12/3	RC 10	RC 0
Maximum depth of proposed holes (m)	36	72	0
Number and size of drill pads to be cleared (Length:10m x Width:8m)	15	10	0
Total area of drill pads to be cleared (ha)	0.120	0.080	0
Is drilling likely to encounter groundwater (Y, N, unsure)	unsure	Y	0
Number of costeans (#) (Length:15m x Width:4m x Depth:3m) (ha)	0 0	0 0	0 0
Number of bulk sample pits	0	0	0
Total bulk sample (tonnes) (Length: m x Width: m x Depth: m)	0	0	0
Bulk sample pits approved under <i>Mineral Titles Act?</i> (Y or N)	0	0	0
Length of line/track clearing (km) (Length: km x Width: 4m) (ha)	0.200 0.080	0.400 0.160	0 0
Camp area to be cleared (ha)	-	-	-
Camp Infrastructure (i.e. demountable, tents)	-	-	-
Previous disturbance yet to be remediated on title (ha)	7.792	0.880	2.000
Proposed area to be cleared (ha)	0.218	0.240	0.000
Total area disturbed proposed (ha)	7.992	1.120	2.000

Section 5 – Previous Disturbance (existing Authorisations)

Mining Interests (i.e. titles)	EL28041	EL28604	EL31665
Number/type of holes drilled	RC 400	RC 57	RC 127
Maximum depth of holes drilled (m)	105	114	119
Number of holes remediated (plugged)	311	52	127
Number and size of drill pads cleared (Length:10m x Width: 8m)	400	114	127
Total area of drill pads cleared (ha)	3.200	0.456	0.136
Total area of drill pads remediated (ha)	2.488	0.416	0.136
Was groundwater encountered (Y or N)	Y	Y	Y
Length of line/track cleared (km) (Length: km x Width:4m) (ha)	17.70 7.080	2.100 0.840	5.000 2.000
Length of line/track remediated (Length: km x Width: 4 m)	0	0	0
Number of costeans excavated (#) (Length:50m x Width:5m x Depth:2m) (ha)	0 0	1 0.025	0 0
Number of costeans remediated	0	1	0
Total bulk sample pits excavated (Length: m x Width: m x Depth: m)	0	0	0
Total bulk sample pits remediated	0	0	0
Camp area/s cleared (ha)	-	-	-
Camp area/s remediated (ha)	-	-	-
Total area disturbed (ha)	10.280	1.321	2.136
Total area remediated (ha)	2.488	0.441	0.136

Section 6 – Environmental Management

By checking these 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	<input checked="" type="checkbox"/>	Blade-up approach for clearing will be used (i.e. no windrows, leave root stock and topsoil)
6.2	<input checked="" type="checkbox"/>	Significant vegetation will be avoided during clearing (i.e. large trees, specimens providing habitat or food sources, riparian vegetation, and threatened species)
6.3	<input checked="" type="checkbox"/>	Vegetation clearing during, and immediately after rainfall events, will be avoided
6.4	<input checked="" type="checkbox"/>	Vegetation clearing will be kept to the minimum required to safely traverse vehicles and drill rigs along tracks and drill pads
6.5	<input checked="" type="checkbox"/>	Where blade-up techniques cannot be employed, topsoil and vegetation will be stockpiled appropriately for remediation purposes
6.6	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	Sumps will be lined or tanks of appropriate size to contain water, sediment and drilling fluids encountered during drilling, will be used
6.8	<input checked="" type="checkbox"/>	Sumps, drill holes, and fuel stores will be located away from environmentally significant areas and water courses
6.9	<input checked="" type="checkbox"/>	Excavations (sumps, costeans and pits) will be appropriately ramped to allow fauna egress
6.10	<input checked="" type="checkbox"/>	Drill holes will be securely capped immediately after drilling
6.11	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	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	<input checked="" type="checkbox"/>	Hazardous substances (including hydrocarbons) will be stored and handled in accordance with relevant Australian Standards
6.14	<input checked="" type="checkbox"/>	Hydrocarbons will be stored in lined and bunded areas
6.15	<input checked="" type="checkbox"/>	Waste will be stored securely while on-site to minimise windblown rubbish and access by feral animals
6.16	<input checked="" type="checkbox"/>	Waste will be removed off-site and disposed of at an appropriate waste management facility
6.17	<input checked="" type="checkbox"/>	All environmental incidents will be reported to the Department in accordance with Section 29 of the <i>Mining Management Act</i> .

Justification and alternative management measures:

Section 7 – Remediation and Closure

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

7.1	<input checked="" type="checkbox"/>	Drill holes 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
7.2	<input checked="" type="checkbox"/>	Drill samples/spoil returned down drill holes, buried in sumps, or removed from site
7.3	<input checked="" type="checkbox"/>	All drill hole and access markers including flagging tape, wooden markers and star pickets will be removed from site
7.4	<input checked="" type="checkbox"/>	Re-contouring of cut and fill drill pads will be consistent with the surrounding terrain
7.5	<input checked="" type="checkbox"/>	Ripping/scarifying of drill pads, and compacted areas along the contour (on sloping ground) and cross-ripping (zig-zag) along tracks
7.6	<input checked="" type="checkbox"/>	Tracks will be remediated, including pushing in all windrows
7.7	<input checked="" type="checkbox"/>	Appropriate erosion and sediment controls will be installed where erosion is evident or likely to occur
7.8	<input checked="" type="checkbox"/>	All tracks will be remediated unless otherwise agreed in writing by the land holder or appropriate third party
7.9	<input checked="" type="checkbox"/>	Access through watercourses will be removed and banks restored
7.10	<input checked="" type="checkbox"/>	No erosion is occurring in disturbed areas, on tracks and in remediated areas
7.11	<input checked="" type="checkbox"/>	All excavations backfilled within 6 months of completion of drilling
7.12	<input checked="" type="checkbox"/>	All water bores decommissioned unless otherwise agreed in writing by the land holder or appropriate third party. The bore must comply with the Minimum Construction Requirements for Water Bores in Australia and may require permits or licenses under the <i>Water Act</i>
7.13	<input checked="" type="checkbox"/>	All rubbish and infrastructure will be removed from site
7.14	<input checked="" type="checkbox"/>	Replacement of topsoil and vegetation
7.15	<input checked="" type="checkbox"/>	Contaminated soils (e.g. hydrocarbon or hazardous chemicals) will be remediated or removed from site
7.16	<input checked="" type="checkbox"/>	Monitoring will be undertaken following the wet season or a significant rainfall event

Justification and alternative management measures:

Section 8 – Required Attachments

8.1	<input checked="" type="checkbox"/>	Security Calculation Spreadsheet
8.2	<input type="checkbox"/>	Not Applicable (Title Holder is the Operator).
8.3	<input checked="" type="checkbox"/>	Spreadsheet with coordinates of proposed drill holes or polygons of target areas
8.4	<input checked="" type="checkbox"/>	Google Earth KML/shape files/track logs of proposed tracks and camp sites
8.5	<input checked="" type="checkbox"/>	A map of the work area(s) showing: <ol style="list-style-type: none"> 1. title boundaries and title numbers 2. current and proposed drill holes, or polygons of target areas 3. current and proposed tracks 4. remediated areas 5. camp sites 6. sacred/heritage sites 7. environmental constraints
8.6	<input checked="" type="checkbox"/>	Remediation Register (for existing Authorisations)
8.7	<input checked="" type="checkbox"/>	Photographs of remediation work
8.8	<input checked="" type="checkbox"/>	AAPA Authorisation Certificates covering exploration project areas.
8.9	<input checked="" type="checkbox"/>	Variation of Authorisation 0629-01 and Mining Plan Approval dated 19/03/2018

Appendix 8.1 – Security Calculation Spreadsheet for 2019

Redacted

Appendix 8.3 – Proposed OMM Drill Program for 2019

A summary of the proposed OMM 2019 Bootu Creek exploration drill program

OMM Bootu Creek -2019 MMP Exploration Activities

EL28041 Renner West

Drill type	Northing	Easting	Depth m	Dip
DDH	7971880	358070	24	vertical
DDH	7972000	358021	30	vertical
DDH	7972120	358008	18	vertical

EL28041 Renner Central (polygon)

Drill Type	Northing	Easting	Depth m	Corner
RC	7971750	361575	max	NW
RC	7971650	361800	36	SE

EL28604 Currthers North

Drill Type	Northing	Easting	Depth m	Corner
RC	7966000	366000	max	NW
RC	7965400	366500	72	SE

Grid: GDA94/MGA zone 53

- Copy of above spreadsheet attached as –
“Appendix 8.3 - OMM 2019 Proposed Drill Program”

Appendix 8.4 – Google Earth KML/shape files/track logs

- Copy of links to be forwarded directly to DPIR by Sarah Joyce.
- PDF's of five 2014 plans showing station tracks, OMM tracks (dashed red and white), rehabilitation status of all drill collars, and location of rehabilitated costeans.
- No exploration activity on these EL's since 2014.
- Note EL31665 replaces EL28662 and EL30913.

Appendix 8.5 - Maps of Work Areas

Maps of work areas showing -

- Title boundaries and title numbers
 - Current and proposed drill holes (or polygons of target areas,
 - Current and proposed tracks
 - Remediated areas
 - Sacred sites
-
- Pdf copies of maps attached as –
“Appendix 8.5 – Maps of proposed work areas”

Appendix 8.6 – Remediation Register for Authorisation 0629-01

The attached summary spreadsheet lists the status following the 2014 rehabilitation self-audit of drill collars and drill pads. There has been no exploration activity or rehabilitation undertaken since the 2014 self-audit.

A follow up self-audit is budgeted for 2019.

- Copy of the full spreadsheet attached as –
“Appendix 8.6 - Drilling Rehab Location 2014a.xlsx”

Appendix 8.7 – Photographs of remedial work

A total of 490 located drill holes, showing drill collars and drill pads, were taken during the 2014 rehabilitation self-audit. Dates listed as 01/01/2012 were taken in July/August 2014.

- Copy of all photos for EL28041, EL28604 and EL31665 forwarded directly to DPIR.

Appendix 8.8 – AAPA Authorisation Certificates

Consultation with the local Aboriginal Groups and Traditional Owners is conducted through the NLC. The Exploration Agreement covering Banka Banka, Northern Territory between Neil Scriven and the Local Aboriginal Groups and Bootu Creek Resources Pty Ltd (OMM) and the Northern Land Council (NLC) dates from 18th September 2001 and still applies over the Exploration Licences.

Authorisation Certificates are sought and obtained from the Aboriginal Areas Protection Authority (AAPA) for specified project areas before commencing ground disturbing activity. AAPA Authorisation Certificates covering the full extent of OMM exploration activity are listed below.

- C2006/132a Carruthers Creek EL28604 (E) nee EL23459 (E)
- +C2006/132b Helen Springs EL28843 EL expired
- C2008/217 Looa Bore EL31665 (N) nee EL10412 (N)
- C2009/164 Gap Bore EL31665 (S) nee EL10412 (S)
- C2009/287 Renner Springs EL28041 (SE) nee EL23624 (SE)
- C2009/319 Carmilly Bore EL31665 (N) nee EL22428 (N)
- C2009/320 Helen Springs EL28843 EL expired
- C2010/005 Carruthers Creek EL28604 (W) nee EL23459 (W)
- C2010/180 Renner Springs EL28041 (S) nee EL9998
- C2011/122 Sliver EL31665 (W) nee EL22940 & EL28046
- C2011/123 Bootu Extended EL31665 nee ML27445 application
- C2011/145 Renner Springs EL28041 (N) nee EL9975

- Copies of Authorisation Certificates attached as -
“Appendix 8.8 – 0629-01 AAPA Authority Certificates.pdf”

Appendix 8.9 – Variation of Authorisation 0629-01 and Mining Management Approval dated 19/03/2018



Copy attached as –

“Appendix 8.9 - Variation of Authorisation 0629-01.pdf”

Section 9.0 – Declaration

ies

The Mining Management Plan must be endorsed by a senior representative of the company who has the appropriate level of authority to do so.

	Author	Reviewed by	Approved by
Date	2/5/2019		2/5/2019
Name	Craig Reddell		R van Jaarsveld
Signature			

I Craig Reddell (name of approving person) Geology Manager (position title) declare that I have the authority to make the commitments contained in this mining management plan on behalf of the company. To the best of my knowledge the information contained in this plan is true and correct and commit to undertake the works in accordance with the agreed minimum standards and all relevant Northern Territory and Commonwealth Government legislation.

SIGNATURE: 

DATE: 2/5/2019