



ANNUAL REHABILITATION REPORT

19 January 2021 to 18 January 2022

Wonawinta Silver Project


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Relevant Authority(s) for Approval of Updates: NSW Resources Regulator

Summary Table

Name of Mine	Wonawinta Silver Project	
Annual Rehabilitation Report: Reporting Period		
Commencement Date	19 January 2021	
End Date	18 January 2022	
Revision dates and version numbers		
Revision date	18 February 2022	
Version number	1.0	
Mining Operations Plan Period		
Commencement Date	31 October 2019	
Completion Date	2 July 2022	
Mining Authorisations	Lease Number	Expiry Date
Mining Lease	ML1659	23 November 2032
Exploration Licences	EL6155	Renewal in progress
	EL7345	25 May 2022
	EL6302	23 September 2026
	EL6623	31 August 2023
	EL7515	7 April 2022
	EL8498	10 January 2024
	EL6482	Renewal in progress
Name of Lease holders	Manuka Resources Ltd	
Name and Contact Details of the Mine Manager	David Power (+61 419 298 359)	
Name of Representative(s) of the Authorisation Holder	Haydn Lynch	
Title of Representative(s) of the Authorisation Holder	Chief Operating Officer	
		
Signature:		
	18 February 2022	
Date of Submission:		

Prepared by:

Manuka Resources Ltd
ABN: 80 611 963 225
Grafton Bond Building
201 Kent Street
SYDNEY NSW 2000

Telephone: (+61) 421 370 902
Email: hlynch@manukaresources.com.au

FOREWORD

This Annual Rehabilitation Report (ARR) for the Wonawinta Silver Project has been prepared by Manuka Resources Ltd (“the Company” or “Manuka Resources”). Manuka Resources is the title holder of Mining Lease (ML) 1659. The Wonawinta Silver Project (“Wonawinta” or “the Mine”), commonly known as the Wonawinta Silver Mine and is located approximately 85km south of Cobar, via Bedooba Road (Shire Road 13) on the Manuka property (see **Figure 1**).

This ARR, formerly known as the Annual Environmental Management Report or AEMR, has been prepared in accordance with Condition 4 of ML1659 and follows the format and content requirements identified in *Environmental Management Guidelines for Industry: The Annual Environmental Management Report* (last updated January 2006) prepared by NSW Department of Primary Industries – Mineral Resources. This ARR for the Mine is applicable for the period 19 January 2021 to 18 January 2022 (the “reporting period”).

On 02 July 2021 the new mining lease conditions of the amended Regulation under the *Mining Act 1992* came into force. The [Mining Amendment \(Standard Conditions of Mining Leases—Rehabilitation\) Regulation 2021](#) (*the Regulation*) conditions are new compliance and reporting requirements for rehabilitation which prescribes setting clear, achievable and enforceable requirements for rehabilitation.

For existing mining leases that came into force before this date, these new conditions will apply from 2 July 2022. These new rehabilitation conditions, which include requirements for the annual rehabilitation reporting, will replace existing rehabilitation and environmental management conditions on current leases. The Wonawinta ARR for the next reporting period will therefore follow the new format prescribed under the guideline [Form and Way: Annual Rehabilitation Report and Forward Program \(large mines\)](#).

History of Site Ownership

Ownership and management of the Wonawinta Silver Project remained unchanged during the reporting period.

The Wonawinta Silver Project was established by Cobar Consolidated Resources (CCR) in 2012, who conducted site development, mining, and processing activities. On 18 March 2014, CCR entered administration; consequently, PPB Advisory managed the site during liquidation and the proceeding sale to Southern Cross Goldfields Ltd in September 2014.

Southern Cross Goldfields Ltd changed its name to Black Oak Minerals Limited on 28 November 2014 and operated the site until it too entered administration on 27 November 2015. Black Oak Minerals had conducted mining before converting wholly to processing operations from September 2015, including the processing of gold ore from Mt Boppy. PPB Advisory managed the site during liquidation and the proceeding sale to Manuka Resources Ltd on 31 August 2016.

After several years of care and maintenance activities the company commenced refurbishment of the processing plant during September 2019 together with other site activities including commencing works for a lift on the tailing’s facility, hiring of a plant commissioning team, review of drilling plans on the mining lease and general infrastructure improvements.

Manuka Resources Ltd currently operates the site. Processing operations officially began on site in April 2020 transporting in ore from the Mt Boppy mine (no ground disturbing activities undertaken on ML 1659), and the tailings storage facility wall lift was completed in April 2020.

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LIST OF ACRONYMS

AEMR	Annual Environmental Management Report
ARR	Annual Rehabilitation Report
bgl	Below Ground Level
BOK	Black Oak Minerals
BOM	Bureau of Meteorology
CCR	Cobar Consolidated Resources
DA	Development Approval
DRE	Division of Resources and Energy, now the Resource Regulator
EL	Exploration Licence
ESCP	Erosion and Sediment Control Plan
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
JRPP	Western Region Joint Regional Planning Panel
MARRP	Manuka Asset Register and Refurbishment Plan
ML	Mining Lease
MOP	Mining Operations Plan
POEO	NSW Protection of the Environment Operations Act 1997
RL	Relative Level
ROM	Run-of-Mine
TSF	Tailings Storage Facility
WRE	Waste Rock Emplacement

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1. ANNUAL REHABILITATION REPORT

1.1 COMPLAINTS REGISTER

No reportable complaints have been received during the reporting period.

1.2 CURRENT DEVELOPMENT CONSENTS, LEASES, AND LICENCES

1.2.1 Mining Lease 1659

The Wonawinta Silver Project (“the Mine”) is located within Mining Lease (ML) 1659, issued to Manuka Resources Ltd. ML 1659 covers an area of 923 ha within the “Manuka Station” property, approximately 85km south of Cobar, via Bedooba Road (Shire Road 13). The Manuka tenements are highlighted in red on Figure 3.

Issued following approval of DA 2010/LD-00074, ML 1659 provides conditions of operations within the nominated lease area under the *Mining Act 1992*. The preparation of this Annual Rehabilitation Report (ARR) is required by Condition 4 of ML 1659.

1.2.2 Development Consent DA 2010/LD-00074

DA 2010/LD-0004 relates to establishment of the mine and associated operations including two modifications approved on 29 February 2012 and 6 November 2012. Approvals were granted by the Western Region Joint Regional Planning Panel (the “JRPP”). Cobar Shire Council retains administrative responsibility for ensuring compliant operation of the mine against the conditions of the development consent.

1.2.3 Development Consents DA 2012/LD/00005 and DA 2012/LD/00035

DA’s 2012/LD/00005 and 2012/LD/00035 relate to the establishment of a permanent mine camp upon the Manuka property, approved on 22 March 2012 and 10 August 2012, respectively. Cobar Shire Council retains administrative responsibility for ensuring compliant operation of the mining camp against the conditions of the development consents.

1.2.4 Environmental Protection Licence (EPL) 20020

Issued by the NSW Environment Protection Authority (EPA) under the *Protection of the Environment Operations Act 1997* (POEO Act) for the scheduled activities of:

- Crushing, grinding, or separating (>500,000 t – 2,000,000 t).
- Metal processing (0-100,000 t).
- Mineral processing (>500,000 t-2,000,000 t); and
- Mining for metals (>500,000 t-2,000,000 t).

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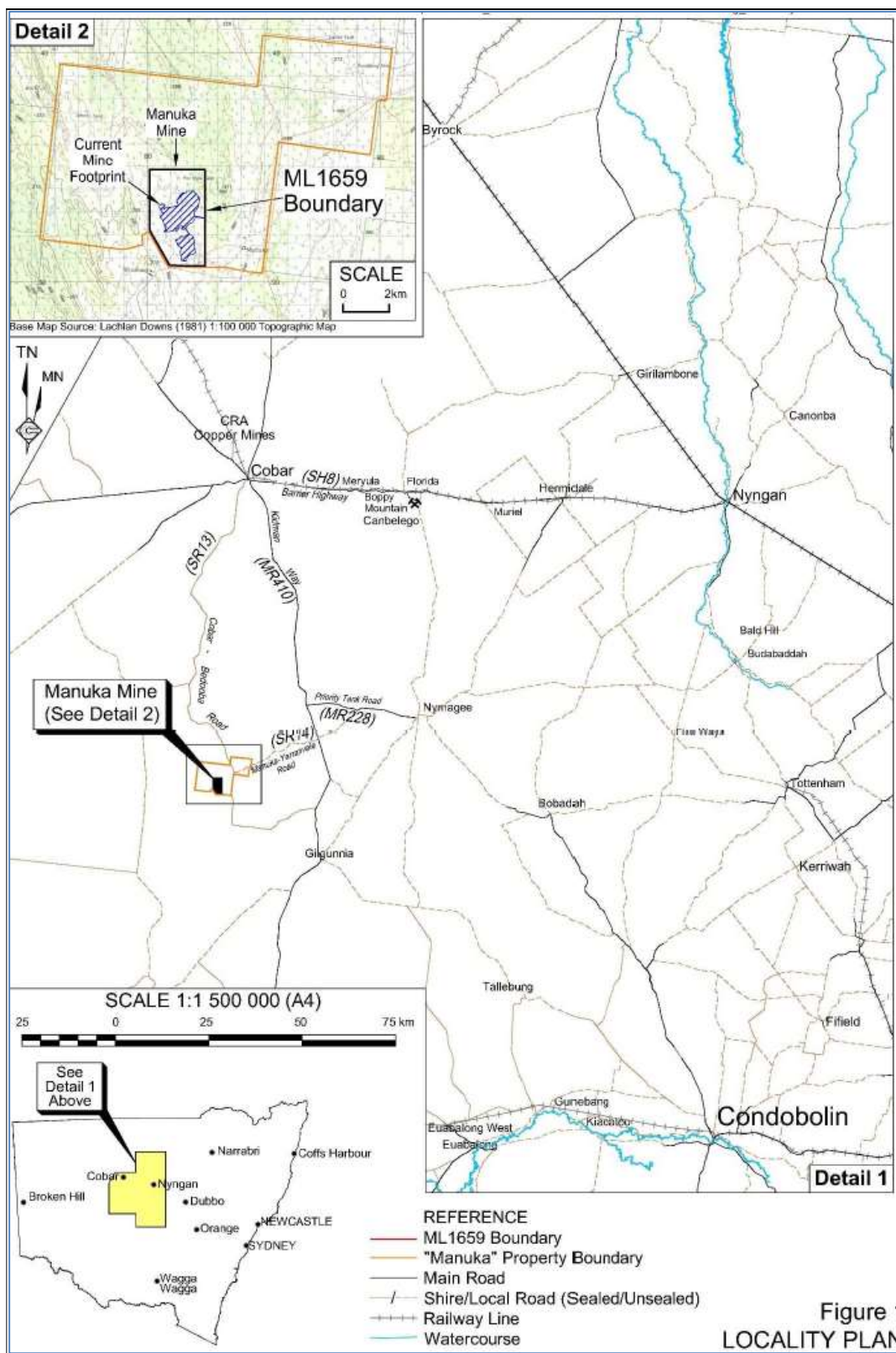


Figure 1: Locality Plan

1.2.5 Water Access Licences

Extraction of groundwater from a bore field on the neighbouring “Wirlong” property for clean water supply to the plant, camp, and administrative buildings.

- Water Access Licence 36531 for 300 ML per annum.
- Water Access Licence 30322 for 750 ML per annum.

1.3 MINE CONTACTS

1.3.1 Current Ownership

Mr Haydn Lynch is appointed Chief Operating Officer of Manuka Resources and is responsible for the overall environmental and operational performance of the mine during its ownership by Manuka Resources.

Mr David Power is the appointed site General Manager and is responsible for the everyday activities on the mine site and achievement of the nominated and conditioned operational and environmental goals for the mine.

The contact details for the mine are as follows.

Postal Address:	Manuka Resources Ltd	Physical Address:	Wonawinta Silver Project
	P.O. Box 273		Shire Road 13
	Cobar NSW 2835		Cobar NSW 2835
Phone:	0421 370 902		
Email:	hlynch@manukaresources.com.au		

1.4 ACTIONS REQUIRED AT PREVIOUS REHABILITATION REVIEW

The previous Rehabilitation Report was lodged by Manuka Resources on 18th February 2021.

There were no specific actions required out of the previous review.

2. OPERATIONS DURING THE REPORTING PERIOD

This section outlines the operations that have occurred at the mine within the 2021-2022 reporting period. No mining activities were conducted during the reporting period.

Figure 2 illustrates the site layout and current status of the Mine, identifying the activities noted throughout this section together with the approved disturbance footprint of the open cut pits, waste dumps and soil stockpiles which have not yet been developed, but are included in the *Manuka Mine Mining Operations Plan* (RW Corkery & Co Pty Limited, 2020) (“the MOP”).

2.1 EXPLORATION

Manuka Resources

A resource update was completed in April 2021 showing an increase of measured and indicated resources by 43%. The updated 2021 Mineral Resources at Wonawinta is reported the Table below. No ore reserves have been calculated yet.

Table 2-A: Calculated of mineral resources for the Wonawinta Silver Project.

Resource Category	Material (Mt)	Ag (g/t)	Ag (M oz)	Pb (%)	Pb (kt)
Measured	1.1	47.3	1.65	0.69	7.5
Indicated	12.3	45.5	18.04	0.83	102.8
Inferred	24.9	39	31.25	0.39	96.9
Total	38.3	41.3	50.94	0.54	207.2

The following exploration drilling activities were undertaken during the reporting period on ML1659:

- A 15,768 m infill resource definition Reverse Circulation (RC) drilling program to expand the Wonawinta silver oxide resource followed by a 3,500m step-out RC drilling program and further RC drilling. The majority of this work was carried in the previous reporting period, but the total program was completed in this reporting period.
- The Wonawinta Deeps diamond drilling program comprising 16 holes. This program was to determine the resource potential for primary carbonate-hosted base metal sulphides beneath the oxide silver resource at Wonawinta. Details of this program are discussed further below.
- Completion of 18 diamond drillholes for metallurgical test work (gap analysis) on the oxide silver resource (and ROM silver stockpiles) to build on the knowledge base from prior operating history and earlier test work. This included comminution, bond work index and process modelling.

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- Non-destructive test work on core samples from Wonawinta to be carried out by CSIRO. This will analyse mineralogy, rock structure and chemical heterogeneity/element department.
- Additional test work was conducted by several external laboratories to better define metallurgical and physical behaviour of the dominant silver mineral species and ore lithologies. This work is ongoing and expected continue in the next reporting period.

Below is a summary table of the completed exploration drilling on ML1659 during the reporting period.

Table 2-B: Exploration drilling completed on ML1659 for January 2021-2022 reporting period.

Exploration drilling on ML1659			
	Holes (un)	meters	Assays (un)
RC drilling	447	21,250	12,205
Diamond drilling	16	1,859	1,611
Diamond drilling - geometallurgical purpose	18	579	17

Wonawinta Deeps Diamond Drilling

The Wonawinta Deeps drilling program was undertaken as a proof-of-concept exercise during the current reporting period. The program was designed to test the proposal that carbonate-hosted lead-zinc-silver sulphide mineralisation exists within the fresh Booth limestone beneath the oxide silver resource in the Wonawinta Anticline. The program comprised four fence lines of holes (16 holes total) drilled as RC pre-collars with diamond tails beneath the main areas of oxide mineralisation – Belah, Bimble, Manuka Pit and Boundary Pit.

As a proof of concept, the program was successful in that it intersected numerous veins containing high lead, zinc, and silver. It showed that sulphide mineralisation was present down dip and along strike within the fossiliferous dolostone but did not intercept any significant ore-grade intervals.

First pass drilling was based on structure, but also aimed at intercepting areas previously identified by airborne VTEM survey.

Further drilling is planned for the 2022-2023 reporting period which will be based on a close-spaced ground-gravity survey (identifying higher density) over the ML that will give supplement the VTEM (high conductivity).

No drilling will take place before approval is obtained under part 5 of the *EP&A Act* for drill sites located beyond the current or approved disturbance footprint.

Figure 3 provides a map of the current tenements held by Manuka Resources Ltd and **Figure 4** provides the completed overview of exploration drilling on ML1659 during the reporting period.

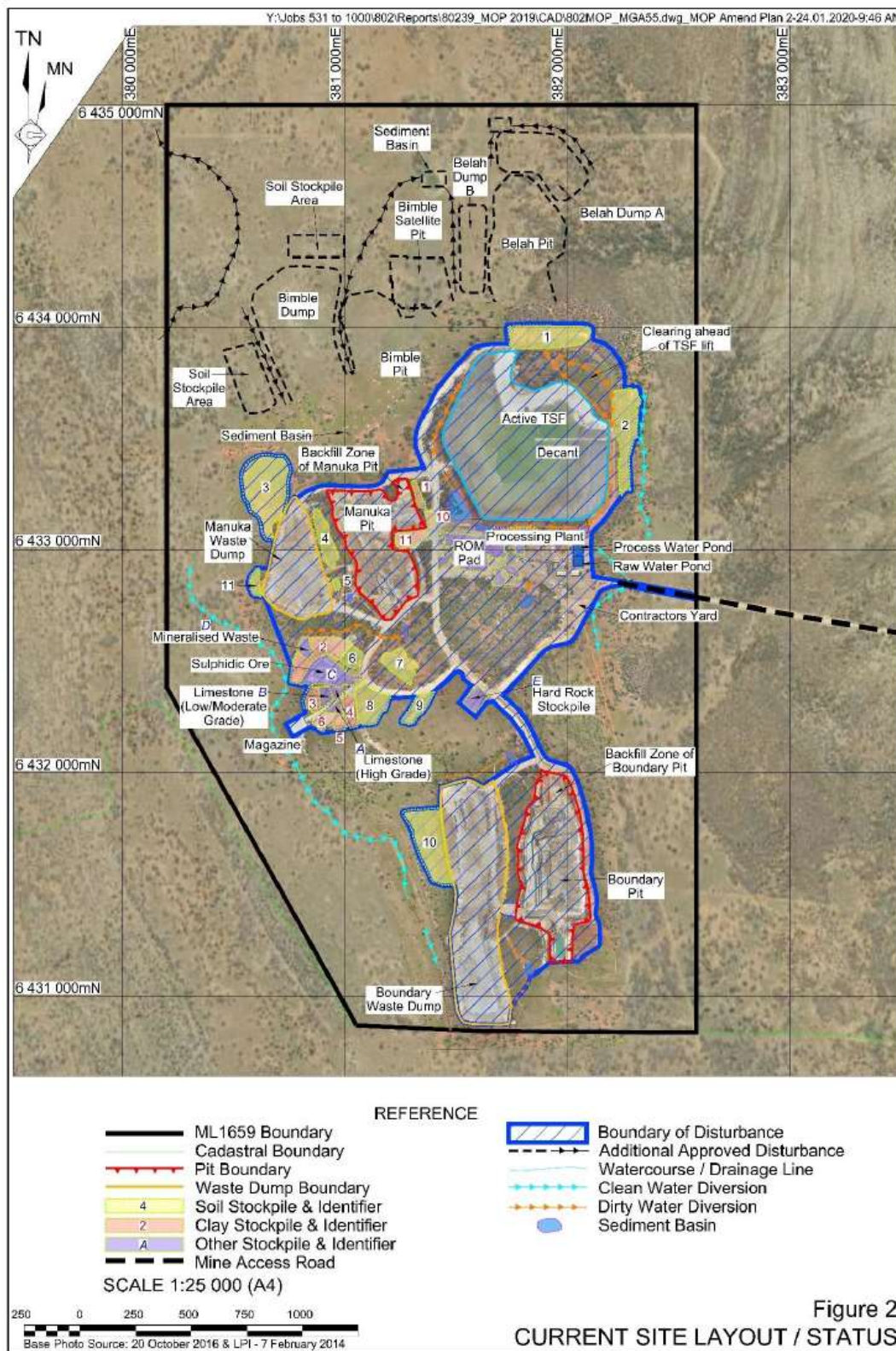


Figure 2: Current site layout and status

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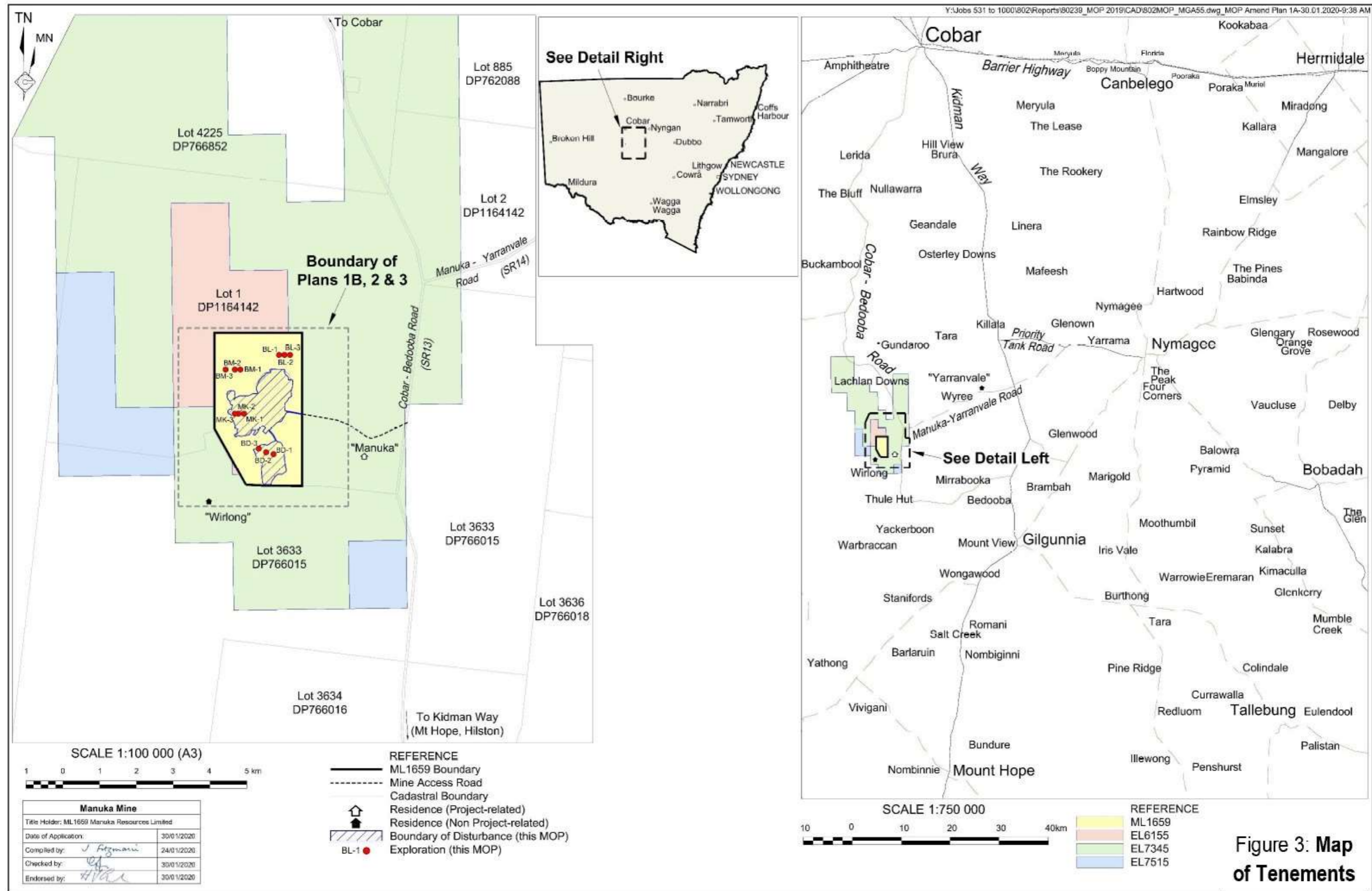


Figure 3: Map of Tenements Currently Held by Manuka Resources Ltd

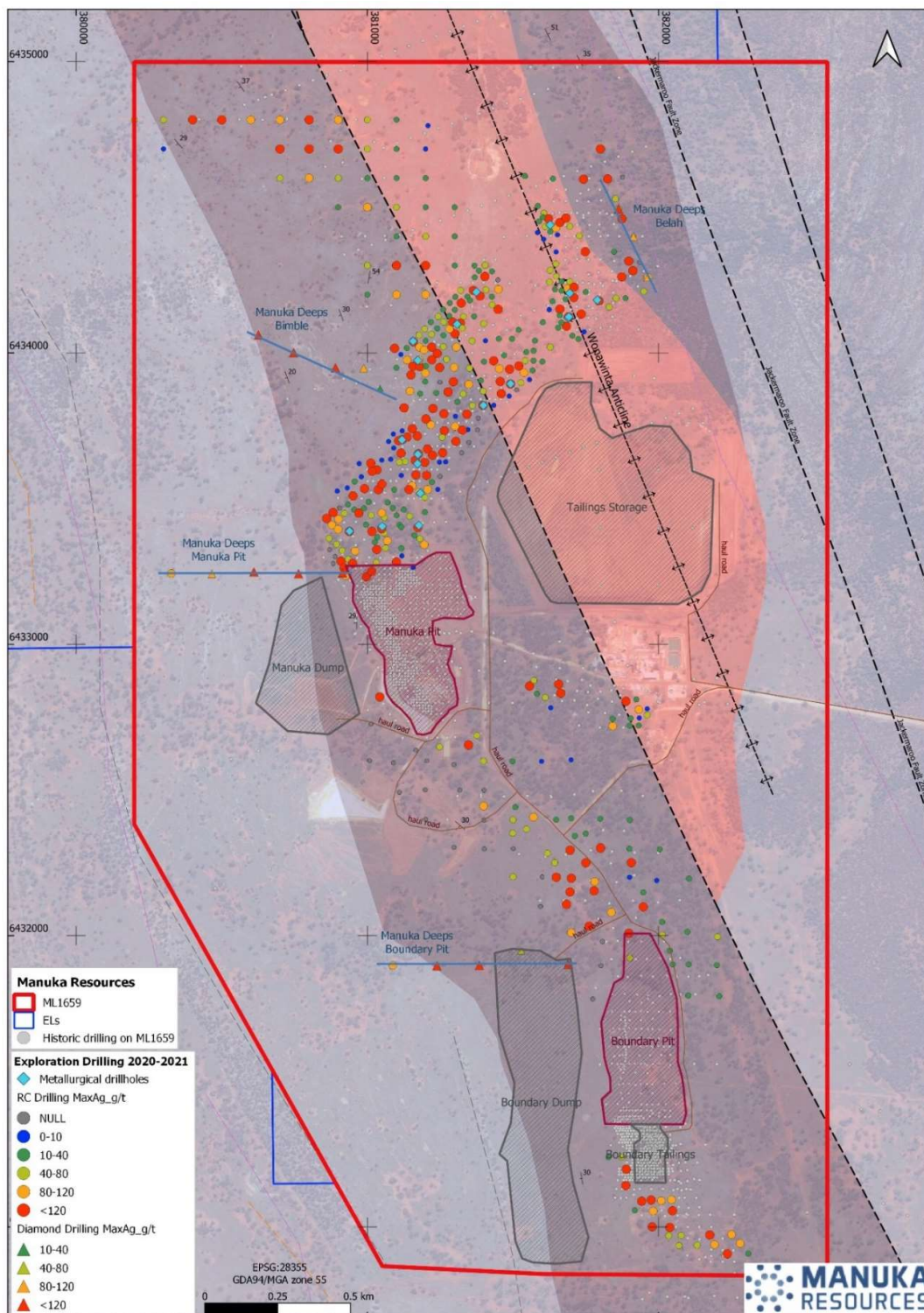


Figure 4: Exploration drilling completed during the 2021-2022 reporting period on ML1659 – Wonawinta Silver Project.

2.2 LAND PREPARATION

There are no reportable land disturbance works for the 2021/2022 reporting period. All land clearing and site construction works within ML 1659, including TSF, waste dumps and new mining camp, were completed prior to the last reporting period (2020/2021) and no disturbance to land occurred during the 2019/2020 reporting period.

Minor land disturbance works may be undertaken during the next reporting period were identified as necessary and within the Approved Existing Disturbance areas to support new construction projects.

2.3 CONSTRUCTION

Construction activities during the reporting period included successful refurbishments of the following to prepare the plant for silver processing:

- Secondary cyclones, pumps, and associated pipelines,
- Acid-caustic wash, pumps, and associated pipelines,
- Loaded carbon pre-wash tank and associated transfer pumps and pipelines,
- Elution Column and associated valves, pipelines, and insulation, and
- The removal of the old Retort from the gold room

Future planned key construction activities during the next reporting period (2022/2023) include the following:

- Two new tanks and a thickener to be constructed within the existing infrastructure of the current processing plant,
- Installation of the new mercury Retort and a Retort enclosure, and
- Fabrication and installation of carbon ducting, scrubber, and fume extractor.

2.4 MINING

No mining activities were conducted during the reporting period. The current Mining Operations Plan (MOP) lodged January 2020, does not contain any new mining activities outside of the existing recoverable ore from the principal pits (Boundary and Manuka Pits).

Future MOPs (soon to be replaced by Rehabilitation Management Plan and Forward Programs under the proposed *Mining Amendment (Standard Conditions of Mining Leases - Rehabilitation) Regulation 2020*, will address future mining activities. It is the company's intention to develop viable mining plans on the known shallow oxide resources and untested deeper resources, which conceptual mine plans due for completion in Q2 2022. The next MOP, which is currently being developed in line with the new Form & Way Rehabilitation Management Plan Guidelines for large mines is nearing its completion and expected to be published online by the approved extension date of 01 July 2022.

Figure 5 displays the current state of mining development upon ML 1659.

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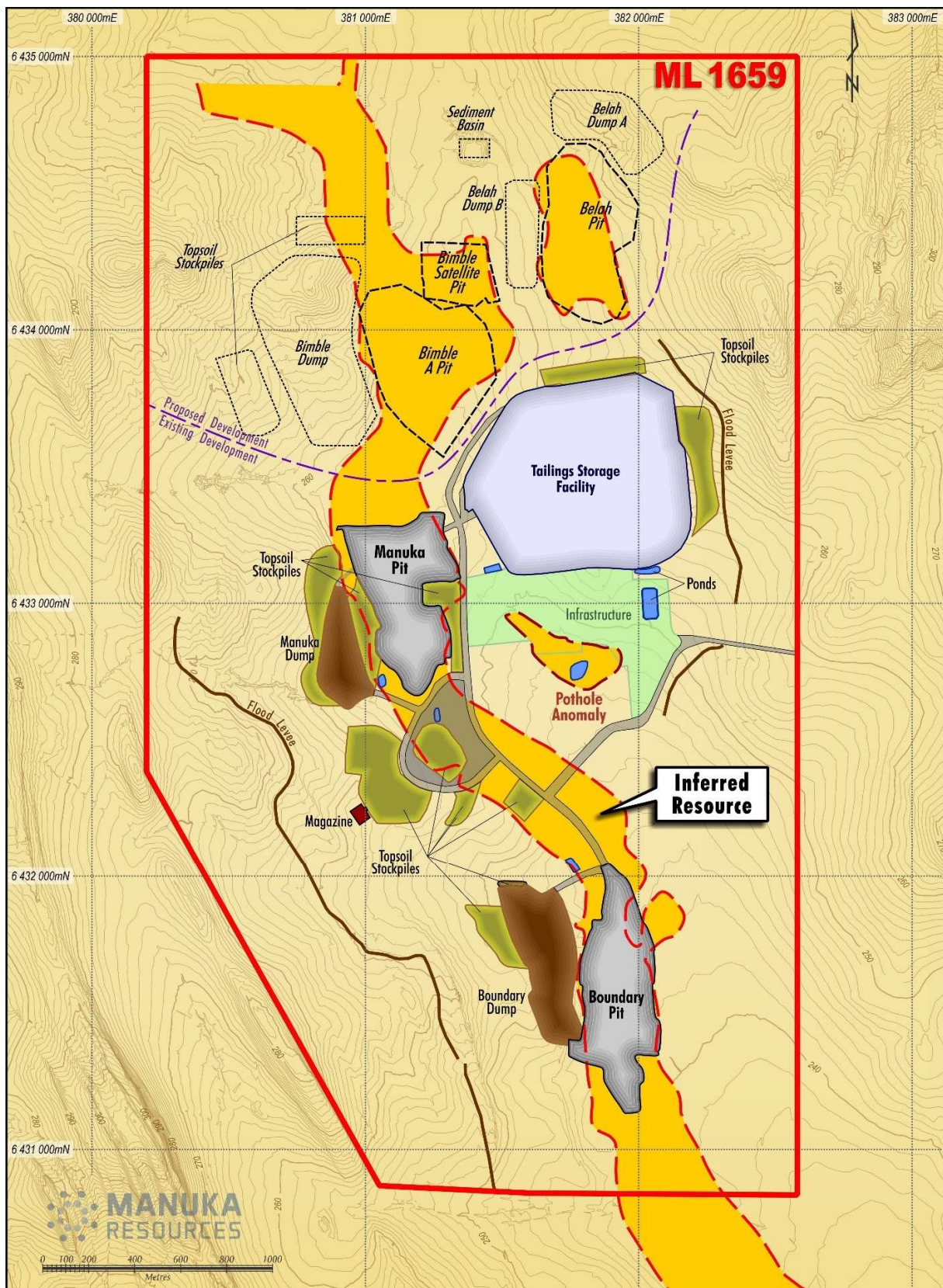


Figure 5: Existing mining development on ML 1659

2.5 MINERAL PROCESSING

A mineral processing plant is located at the Wonawinta Silver Project, including feed preparation, carbon-in-leach circuit, carbon regeneration and Merrill process (mercury removal and silver smelting). The processing plant was decommissioned and cleaned out in early 2016 and was refurbished over 2019 and 2020 to allow for the processing of imported Mt Boppy gold ore. Plant works were commissioned, and the first ore was processed in April 2020.

The processing operations for the Mt Boppy ore utilise the same carbon-in-leach processing methodology as the approved processing operations. **Figure 6** below presents the processing flow chart for processing of the Mt Boppy ore. Processing of Mt Boppy ore ceased at February 2022.

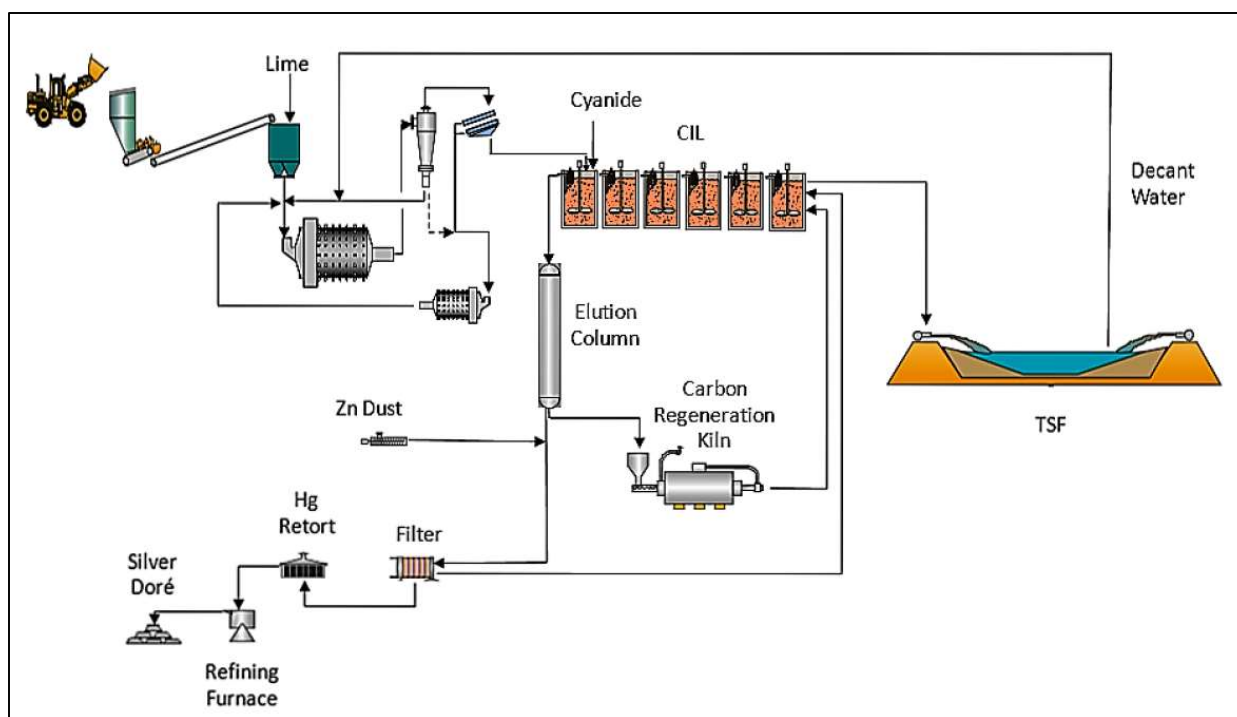


Figure 6: Gold Processing Flow Chart for the Mt Boppy Ore at Wonawinta Silver Project.

In summary, ore from Mt Boppy was processed at the Wonawinta project site as follows:

- Crushed and screened ore delivered to the plant and placed on the ROM Pad.
- The crushed ore fed to the gold mill, with lime added to control pH, for gold recovery.
- Gold recovered from the ore using the same processing methodology as the existing silver recovery circuit, namely:
 - leaching of gold from the ore using sodium cyanide in the existing carbon-in-leach circuit
 - adsorption of gold onto activated carbon
 - stripping of the gold from the carbon in a new elution circuit
 - precipitation of a gold-rich precipitate in a new electrowinning cell
 - production of gold doré using the existing calcine oven and furnace.

2.6 WASTE MANAGEMENT

Waste generated on ML 1659 falls within two defined categories:

- Non-Production waste; or
- Production waste.

Both waste streams are consistent with details provided in the MOP.

The Manuka Resources Waste Management Plan (Document no. *MRL-ST-PLN-004*) details how waste generated on site is managed, stored, and disposed of. The electronic copy of this Management Plan can be found in the Manuka Hub for further details.

2.6.1 Non-Production Waste

Waste management processes have been improved during the reporting period as a result of site activities ramping up.

Non-production waste generated during this report period was collected at the Mine and removed for disposal or recycling by a suitable qualified contractor.

Table 2-C: Non-Production Waste Management presents the non-production waste and describes how each class of waste is stored and subsequently removed from the Mine.

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Table 2-C: Non-Production Waste Management

Waste Type	Storage / Management	Removal / Disposal
General waste (including food scraps)	Covered bins or skips are located at lunch areas, offices, outside workshops and elsewhere as required. Where these bins are located in open areas, they are fitted with animal proof lids.	Collected on a regular basis by a licensed contractor and transported to the Cobar Waste Disposal Facility for disposal.
General Recyclables	Covered bins or skips are located at lunch areas, offices, outside workshops and elsewhere as required. Where these bins are located in open areas, they are fitted with animal proof lids.	Collected on a regular basis by a licensed contractor and transported to a licensed recycling facility in Dubbo.
Waste Oils and Greases	Placed in repurposed IBC pods and stored in a bunded hydrocarbon storage area. Where required, smaller, temporary storage containers are positioned in work areas, with the contents of those containers then transferred to the Hydrocarbon storage area.	Collected on an as needs basis by a licensed contractor and transported to an appropriately licensed facility for recycling.
Batteries	Placed within a covered and marked used battery storage area until removed from the Mine.	Collected on an as needs basis by a licensed contractor and transported to an appropriately licensed facility for recycling.
Tyres	Placed within a marked used tyre storage area until removed from site.	Tyres are disposed of at a licensed waste management facility or removed by a third party approved to recycle tyres.
Scrap Metal	Stored in a specified area within the workshop area, or elsewhere, as required.	Collected on an as needs basis by a scrap metal recycler.
Wastewater	Treated in the on-site Sewage Treatment Plant.	The on-site system is pumped out by a licensed contractor on an as needs basis.

2.6.2 Production Waste

No mining or waste rock generation has occurred during the 2021-2022 reporting period. The following comments refer to future activities.

No current plans for waste rock extraction during the next reporting period. Expected activities will revolve around the processing of existing silver stockpiles at the ROM, and the reuse of materials for construction and/or rehabilitation. Mine planning is occurring during 2022 to develop already approved open pits on the ML.

Majority of the waste rock to be removed on the Mine is pale and ferruginous clay or oxidised limestone which, given the already oxidised nature of the material, represents a very low acid generating potential. Some pre strip of northern pits could occur before end of 2022. It is likely that the majority of this material will be pale clays with very limited limestone (shallow i.e., 50 m). The XRF and external lab assay results have shown no sulphur content on these areas.

The deeper resource (if mined) does contain a portion of marcasite-bearing black clays and fresh limestone, containing sulphides which could have acid generating potential if exposed to air and oxidised. Previous (2010) analyses of the mineralogy of the two sulphidic waste rock types indicated the following.

- The fresh limestone contains less than 2% sulphide as pyrite, galena, and sphalerite.
- The black clay contains an average 10% sulphide as framboidal marcasite with minor galena, sphalerite, and jarosite.

These 'waste' streams contain grades of silver (2.1g/t to 3.5g/t) which could be recoverable and have therefore been stockpiled separately (as sulphidic ore). Furthermore, the fresh limestone also provides a potential source of acid neutralising material should this be required over the life of the Mine. These stockpiles are segregated from other waste rock and natural runoff and, if not processed, will be managed separately of the waste rock dumps.

2.7 ORE AND PRODUCT STOCKPILES

The existing Run-of-Mine (ROM) stockpiles of approximately 515,000 t of various grades of silver ore was maintained during the reporting period. Additional various low grade and hard limestone stockpiles with silver ore are located in and around the Manuka and Boundary Pits. Based on the February 2021 site survey these ex-ROM stockpiles are approximately 200,000 t.

Table 2-D: Estimated Mineral Stockpile Volume And Tonnage At The ROM Pad details the number of ROM stockpiles and contents. Survey and layout plans of key stockpiles are shown in, **Figure 11: Topsoil Stockpile** towards the end of this document.

Table 2-D: Estimated Mineral Stockpile Volume and Tonnage at the ROM Pad

Stockpile*	Description	Volume (m ³)	Specific Gravity (SG)	Tonnage [#]	Estimated Fines (%)
ROM 2	Mixed	11,006	1.95	21,158	35%
ROM 3	Mixed	173,392	1.95	338,055	35%
ROM 4	Limestone	2,148	1.95	4,188	20%
ROM 5	Mixed	5,878	1.95	11,460	35%
ROM 7	Mixed	2,606	1.95	5,081	35%
ROM 8	Clay	40,349	1.95	78,667	80%
ROM 9	Limestone	8,421	1.95	16,418	20%
ROM 10	Mixed	1,204	1.95	2,347	35%
TSF Ramp	Limestone	12,358	1.95	24,094	20%
ROM Scats	Mixed	7,167	1.95	13,973	35%
	ORE TOTAL	264,529 m³		515,740 t	
	Estimated Total Fines				41% (209,204 t)
*Stockpile numbering from Minsurvey – Feb 2021 in <i>Report M3492</i> .					
[#] ROM Tonnage from company Estimates based on material density.					

Non-mineralised stockpiles may either be used for the construction of hardstands or haul roads within the mine site or stored for future processing if metals prices allow production to be economic.

2.8 WATER MANAGEMENT

The objectives for the management of surface water, erosion, sedimentation, and pollution at the Wonawinta Silver Project are as follows.

- To divert surface water flows (clean water) away from active areas of disturbance using drains and diversion banks.
- To control the flow of surface water over areas of disturbance (dirty water) using rock check dams, diversion banks and contouring.
- To ensure the transfer of saline water on the mining lease is appropriately controlled and mitigation strategies are in place in the event of a leak or spill.
- To ensure wastewater is stored, transferred, and re-used in such a way as to minimise the risk of pollution.
- To manage the use, storage and (in the event of a spill or leak) control and clean-up of hydrocarbons; and
- To manage the extraction and storage of waste rock to ensure no acidic runoff is generated.

Table 2-E below provides a summary of volumes of water stored at the start and end of the reporting period as well as the total storage capacity. Commencement of operational activities and increased rainfall during 2020 has caused an increase in the volumes of stored water in all water containment structures. Consent to use the Process Water Pond has not yet been re-instated and therefore this pond remains dry.

Table 2-E: Mine water storage volume during the 2021-2022 Reporting Period

	Volumes Held (cubic metres)		
	Start of Reporting Period ¹	End of Reporting Period	Storage Capacity
Clean Water (Raw Water Pond)	2,000	4,000	7,396
Dirty Water (SB2-3, SB5-6, Internal ROM Basin)	Almost dry	15,000	42,587
Controlled Discharge Water	n/a	n/a	n/a
Contaminated Water (TSF, Process Water Pond)	Almost dry	0	2,935,000

During the reporting period, while processing the Mt Boppy ore, CIL Tank 2 was used to store clean water and Absorption Tank 4 to store TSF return water. This assisted in maintaining sufficient clean water stores onsite while the liner of the process water pond is not yet repaired or approved for use.

Clean Water. The Raw Water Pond was used to supply water for the Plant. While operating, the Pond's water volume fluctuated from almost empty to almost full.

Dirty Water. All sediment basins are approximately at 35% full.

Contaminated Water. The volume on the Storage Capacity column of **Table 2-E: Mine water storage volume during the 2021-2022 Reporting Period** is only for the TSF as the Process Water Pond was not used during the reporting period.

3. ENVIRONMENTAL MANAGEMENT AND PERFORMANCE

3.1 STATUS OF COMPLIANCE ACTIONS

A key focus at the start of the reporting period was meeting the commitments made in the Manuka Asset Register and Refurbishment Plan (MARRP), which was 90% complete as at the end of December 2019, with the remaining 10% of actions closed off before end March 2020.

Commitments from the MARRP are now complete and no additional compliance actions are required to be carried over for the next reporting period.

3.2 CYANIDE MANAGEMENT

Sodium cyanide is a vital reagent used during the processing of both silver and gold ore to extract and refine the end product. Monitoring of weak acid dissociable (WAD) and total cyanide concentrations at the Process Water Pond and Tails Storage Facility recommenced during the reporting period when the processing plant was recommissioned, and the two structures were made active again. As the Process Water Pond is yet to be made active, monitoring of the return water in the return water tank (Absorption Tank 4) has occurred instead.

Review of the process plant by independent engineer, COMO Engineering, in 2017 identified a lack of automatic controls at the cyanide dosing point on the plant. A lack of automated dosing controls could potentially have been the cause of the apparent cyanide spikes that were recorded in prior operations by both Black Oak Minerals and Cobar Consolidated Resources.

Part of the Manuka Resources plant refurbishment program has included installation of automated control systems at several locations in the flowsheet and improved operator access to the sampling areas of the plant. An automated dosing control system was put in place during 2020-2021 reporting period which now allows the operators to control dosing from the control room.

3.3 TAILINGS STORAGE FACILITY

The Tailings Storage Facility (TSF) is a clay-lined dam designed to accept processing waste (tailings slurry). The slurry is discharged into the dam and the water component is either extracted via decant at the centre of the dam for re-use in the plant or lost via evaporation.

The initial design of the Manuka TSF allowed for nine construction stages to gradually increase the dam wall over the forecast life of the mine, to a maximum height of 28.5m. Upon mine closure, clay would be

applied to the TSF surface to encapsulate the processing waste before subsoil and topsoil applied for revegetation.

Surveys undertaken in February 2021, showed the remaining volumetric capacity of the TSF (stage 1 + 2) was approximately 831,000m³, with a measured volume allowance of 0.5m freeboard below the spillway level. The current TSF capacity is expected to hold the remaining Mt Boppy tailings and the future tailings from the silver stockpile phase in the next reporting period.

A Dam Safety Emergency Plan and Dam Operations and Maintenance Manual will be developed in the next reporting period for submission in 2023 to the NSW Dam Safety Committee.

3.4 STOCKPILE INVENTORY

3.4.1 Stockpile Management and Environmental Performance

A comprehensive stockpile materials survey was undertaken in late 2017 to determine the existing materials stockpile volume present at the Mine. This data will also be used as essential information in the design and development of the progressive rehabilitation and site remediation, final landform rehabilitation planning and the TSF capping design. Based on the 2017 survey a total volume of 253,007 m³ was calculated from 11 identified topsoil stockpiles, while a total volume of 62,390 m³ was calculated from the 8 identified clay stockpiles.

During the 2020 Stage 2 TSF Lift construction, most of the clay soils were needed for the Lift while some topsoils were used to top-dress and remediate the eroded corner of the TSF. Any salvageable topsoil during the construction were harvested and stored with the northern and eastern stockpiles to balance out any topsoil used during TSF upgrade and rehabilitation works.

Following the completion of the Stage 2 TSF Lift, the stockpiles were surveyed in early 2021 to update the Mine's current topsoil stockpile volumes. The 2021 survey update indicated that although some topsoils were used to rehabilitate the eroded corner of the TSF, there was 3% increase in the total volume of the topsoil stockpiles. The 6 current clay stockpiles on the other hand, accounts for 23% of the remaining 2017 clay stockpile inventory.

No other topsoil has been removed from any stockpile for any other purpose during the reporting period. Stockpiles not included in the 2021 survey are expected to be within +/- 10% of their 2017 volume estimates when factoring in meteorological changes (e.g., drought and *La Niña*) over the last 5 years.

Details of the revised materials stockpile volumes estimates are summarised in **Table 3-A: Topsoil and Clay stockpile inventory** below while **Figure 11: Topsoil Stockpile** provides the site plans showing the location and volume estimates of the different stockpiles.

Table 3-A: Topsoil and Clay stockpile inventory

Material Type	2017 Survey Stockpile ID	2017 Stockpile Volume (m ³) Estimate	2021 Survey update Stockpile ID	2021 Stockpile Volume (m ³) Estimate
Topsoil	TSP01	45,690	TSP01	60,830
Topsoil	TSP02	58,435	TSP02	60,804
Topsoil	TSP03	5,483		5,483
Topsoil	TSP04	20,561		20,561
Topsoil	TSP05	1,799		1,799
Topsoil	TSP06	8,272		8,272
Topsoil	TSP07	16,392	Topsoil 3	8,696
Topsoil	TSP08	35,931		35,931
Topsoil	TSP09	21,585	Topsoil 4	19,293
Topsoil	TSP10	32,688		32,688
Topsoil	TSP11	6,171		6,171
Total:		253,007		260,528
Clay	CSP01	6,693	Manuka Pit 1	2,713
Clay			Limestone 1	3,838
	CSP02	147,245	Limestone 1A	3,378
Clay	CSP03	29,575	Limestone 2	18,062
Clay	CSP04	35,944	Limestone 5	33,363
Clay	CSP05	5,600		
Clay	CSP06	9,222	Limestone 4	1,036
Clay	Stockpile 10	4,742	100% of material was used for the Tailings Dam Stage 2 Lift	
Clay	Stockpile 11	33,445		
Total:		272,466		62,390
Source: Minstaff Survey (2017), Project Dwg Nos. M1705-SP-001; M1705-SP-002; and M1705-SP-003. Minstaff Survey (2021), Project Dwg No. M3492-5001-001, Sheets 1 to 5.				

3.4.2 Stockpile Research and Development

At the end of 2020, soil sampling and assessment of the site material stockpiles was started with the support of soil specialists from Landloch Pty Ltd (Landloch). A Material Characterisation Report provided by Landloch in mid-2021 identified the various stockpile types found onsite and discussed their morphology, chemical/nutritional status, particle size assessment, as well as their growth media suitability for the land rehabilitation.

3.5 METEOROLOGICAL MONITORING

3.5.1 Environmental Management

A weather station is located adjacent to the mine office which performs continuous monitoring of meteorological data and during normal operations is connected to the site servers for automated data transfer. This station was dormant during the non-operational phase of the Mine site but has been re-established during 2020-2021 reporting period.

The meteorological data collected from the weather station is automatically uploaded and stored on the weathermation.net.au servers. Data available on the Weathermation server is from April 2020 onwards.

3.5.2 Environmental Performance

There was a total of 87 rainy days at the Mine's weather station during the reporting period, five of which were single heavy rainfall events (>25mm/24hr). Two of the heaviest single rainfall events occurred with less than 7 days apart: on 18 March 2021 with 72.6 mm of rain, and on 23 March 2021 with 80 mm of rain. The total rainfall recorded at the Mine for this reporting period is 646.6 mm.

The heavy rainfall event in much of inland NSW, including the Mine's Upper Western Region, on the week of 23 March 2021 caused flooding in several inland rivers. Daily rainfall totals exceeded 100 mm in the North-West Slopes and Upper Western regions of New South Wales¹. Many areas received 3 to 4 times their average monthly total during 18 to 24 March. Figures below compare the extreme weekly rainfall totals (in mm and as percentage average monthly totals) from this reporting period with last reporting period's (2020) as well 2 other extreme occurrences within the last 100 years for New South Wales (BOM, 2021).

¹ Information on the extreme rainfall event taken from the Australian Government Bureau of Meteorology *Special Climate Statement 74 – extreme rainfall and flooding in eastern and central Australia in March 2021* Report. The extreme multi-day rainfall and significant flooding affected many parts of eastern and central Australia from 17 to 26 March 2021. This was the result of a blocking high pressure system in the Tasman Sea and a low-pressure system off north-west Australia feeding a large volume of moist tropical air into eastern Australia.

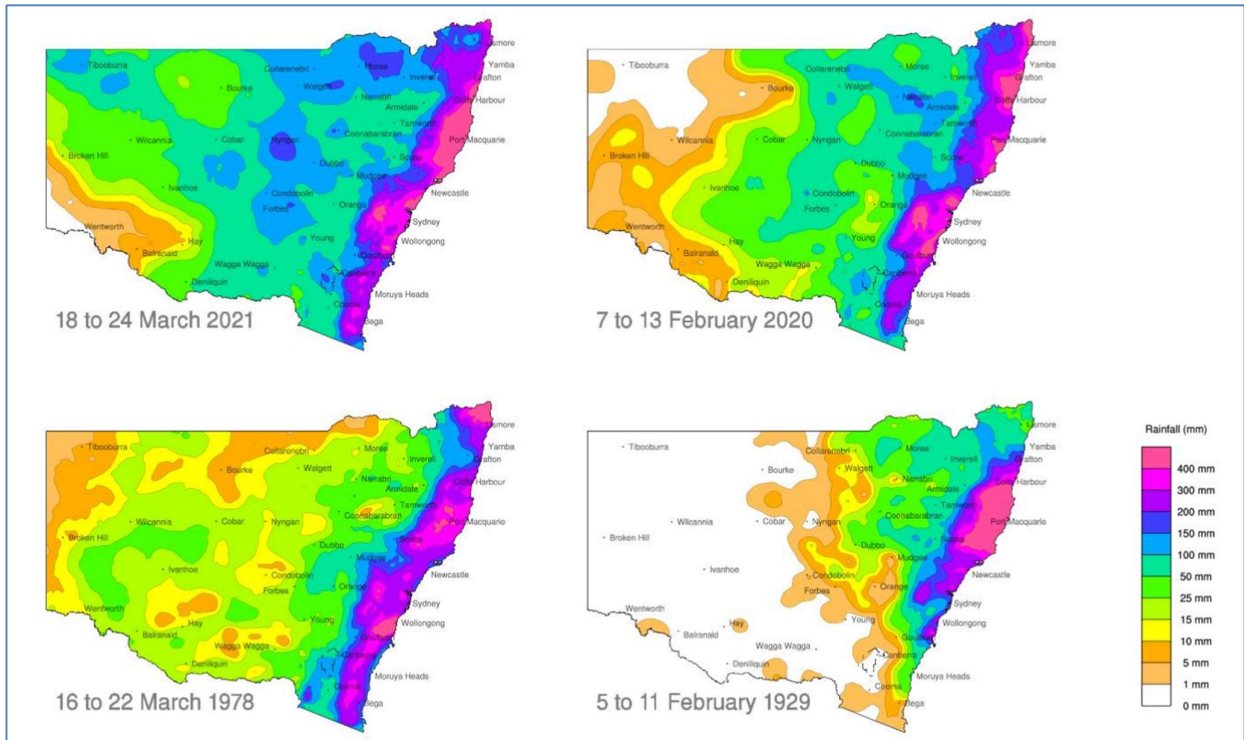


Figure 7: Weekly rainfall totals for New South Wales for the weeks ending 24 March 2021 (top left), 13 February 2020 (bottom left), 22 March 1978 (top right) and 11 February 1929 (bottom right). (BOM, 2021)

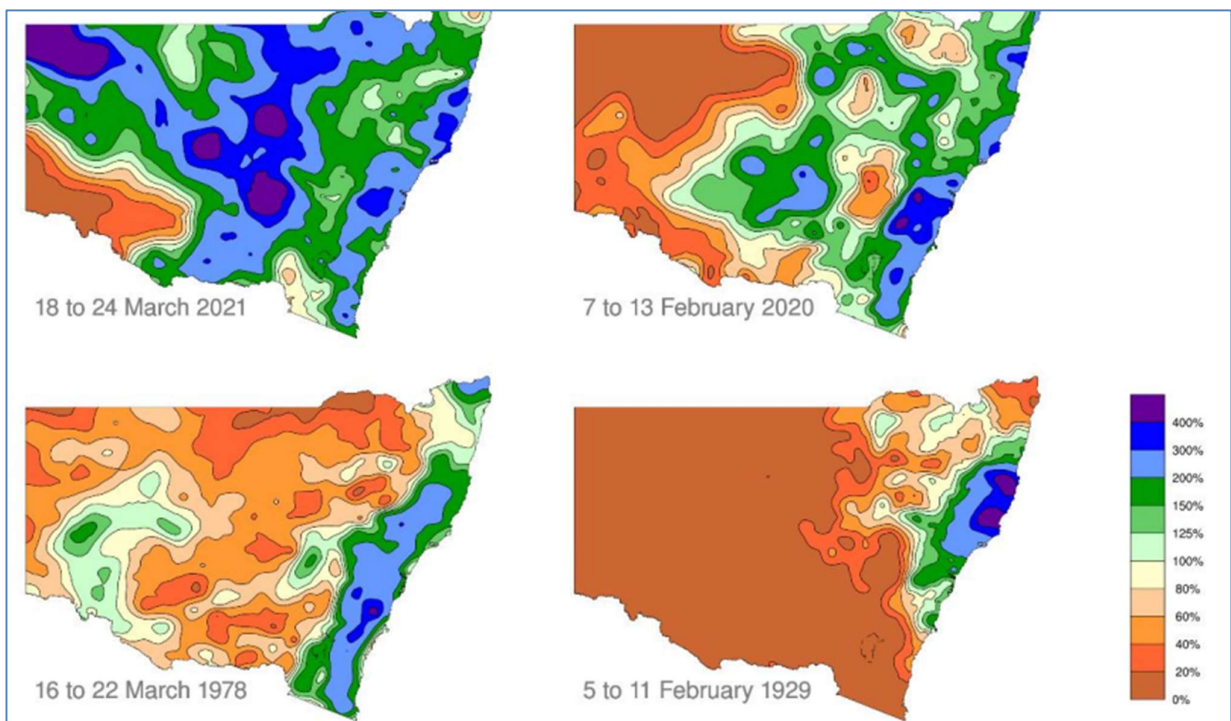


Figure 8: Weekly rainfall totals as a percentage of the 1961-1990 average monthly total for New South Wales for the weeks ending 24 March 2021 (top left), 13 February 2020 (bottom left) 22 March 1978 (top right) and 1929 (bottom right). (BOM, 2021)

3.5.3 Further Improvements

Since last reporting period there has been enough rainfall in the Upper Western NSW Region that it is no longer considered an official drought zone. Despite this, extreme temperatures and strong winds continue to affect significant evaporation rates causing additional strain on the already limited water resources available to the Mine. As such continued efforts have been focused on maximising the capture of any rainfall for use onsite. The volatile conditions during the reporting period continued to challenge land management and water availability at the Mine.

3.6 AIR POLLUTION

3.6.1 Environmental Management and Performance

Due to the prevailing semi-arid environment, dust levels may be elevated during certain climatic conditions. The main sources of dust associated with activities are wind erosion of exposed surfaces including the ROM pad and ore stockpiles, as well as active rehabilitation areas not yet fully rehabilitated.

Monitoring of dust deposition levels is no longer a requirement of EPL 20020 due to the cessation of mining in early 2015. Notwithstanding, in accordance with *Operating Condition O3 - Dust* of the EPL requires that all operations and activities at the mine will be carried in a manner that minimises dust emissions onsite. As such the Mine has continued ensuring trucks entering and leaving the site were covered at all times when carrying load to minimise fugitive dust emissions.

As set out in the *Manuka Air Quality Management Plan*, the target limit for dust deposition is 2 g/m²/month and above ambient levels with a maximum of 4 g/m²/month. Monthly dust monitoring has continued throughout the reporting period.

3.6.2 Reportable Incidents

There were no reportable incidents relating to air pollution during the reporting period.

3.6.3 Further Improvements

Regular dust suppression will continue to be applied on areas cleared of vegetation, soil stockpile areas, haul / access roads and active areas of the Mining Infrastructure Area using a water truck. A water truck will be located on site permanently for this purpose. The *Mine Air Quality Management Plan* presents further controls, safeguards and management measures implemented at the Mine to reduce dust levels for the following activities.

- Internal Transportation of Ore and Waste Rock.
 - All haul road edges will be clearly defined to control their locations, especially when crossing large areas of non-descript disturbance. All roads and trafficked areas will be regularly watered to minimise the generation of dust.
 - All obsolete roads will be closed, ripped allowed to revegetate.
 - The largest practical truck size will be operated to reduce the number of movements necessary to transport the ore. The shortest possible route will be used.
- Processing.
 - The drop heights between front-end loader and/or excavator buckets and ROM Stockpile or ROM bin will be minimised.
 - Water sprays will be used at key transfer points within the processing plant
- Progressive Rehabilitation.
 - Stabilisation of all areas disturbed during site establishment and construction phase including water management structures, any temporary access roads, landscaped areas, banks, and bunds.
 - Progressive shaping, soil replacement and revegetation (to either native vegetation or pasture) of the waste dumps
 - Seeding of the soil stockpiles retained for periods greater than 3 months which have not naturally established ground cover with pasture species to minimise wind erosion.
- Contingency Management.
 - In the event that strong winds are blowing dust towards surrounding residences and dust suppression appears visually ineffective, the Operations Manager will order any dust-generating activity to cease.

3.7 EROSION, SEDIMENTATION AND SURFACE WATER CONTROL

3.7.1 Environmental Management

The Manuka Mine site is a zero offsite-discharge site, meaning that water captured in sediment basins is removed by natural evaporation. Where freeboards are required to be maintained at the 500 mm, water is pumped to an alternate water storage area.

Due to the extremely high evaporation rates and below average rainfall in western NSW, water levels in the sediment basins have been naturally maintained by evaporation during the reporting period.

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3.7.2 Environmental Performance

The site Stormwater Management Scheme and Erosion and Sediment Control Plan were reviewed and updated during the reporting period.

Extensive works were carried out following the cessation of operations by Black Oak Minerals, including clean out and repair of all site drains, rock check dams, haul road bunding and ROM pad bunding. Monitoring of surface water structures occurs monthly, with a more detailed erosion and sedimentation inspection occurring quarterly to identify areas requiring maintenance.

Tailings Storage Facility

The erosion on the southeast corner and western batters of the TSF was addressed during the 2020-2021 reporting period. Soil from nearby stockpiles was used to re-profile and stabilise the batters. Unfortunately, due to the increased rainfall encountered in during the previous and current reporting periods i.e., the tendency for rainfall events to be heavy and accompanied by high wind speeds, the repaired areas have eroded again.

During the reporting period Landloch soil specialists assisted Manuka Resources with the characterisation of stockpile materials at the Mine with outcomes of the assessment to be used for the development of specific strategies in addressing the TSF's erosion and batter stabilisation issues. Landloch's Materials Characterisation Report identified physical and chemical constraints of various soil stockpiles and provided solutions on how to rectify their nutritional and stability limitations. A list of recommendations was also presented in the Report which includes ameliorants, general plant species characteristics suitable for the TSF's final land rehabilitation, as well as helpful procedures for in-field soil analyses and deconstruction prior to the spreading of amended materials.

A revised rehabilitation strategy is currently being drafted by the Manuka Resources to more adequately stabilise both the south-eastern and western batters of the TSF. The revised strategy will continue to be drafted in early 2022 then incorporated in the Rehabilitation Management Plan (RMP). This strategy will be implemented during the 2021-2022 reporting period.

Figure 10 shows the areas of focus for battering and remediation over the 2020–2021 reporting period. Area A includes this TSF erosion rectification works that will take place in this reporting period. Please note that rehabilitation of the Boundary waste dump has been placed on hold as per the comments in Section 5 pending drilling outcomes.

ROM Pad Drainage and Sump

The ROM pad drainage and water catchment systems have been generally reviewed in line with the Wonawinta Surface Water Management Plan. Earthworks have been undertaken to reinstate drains, upgrade a catchment pond and reinstate water management structures, such as windrows and cut-off drains.

Works were completed in late 2021, and the rainfall experienced on site since has demonstrated the drainage and catchment pond works in line with expectations. The direction of expected water flow is indicated on **Figure 9** below.

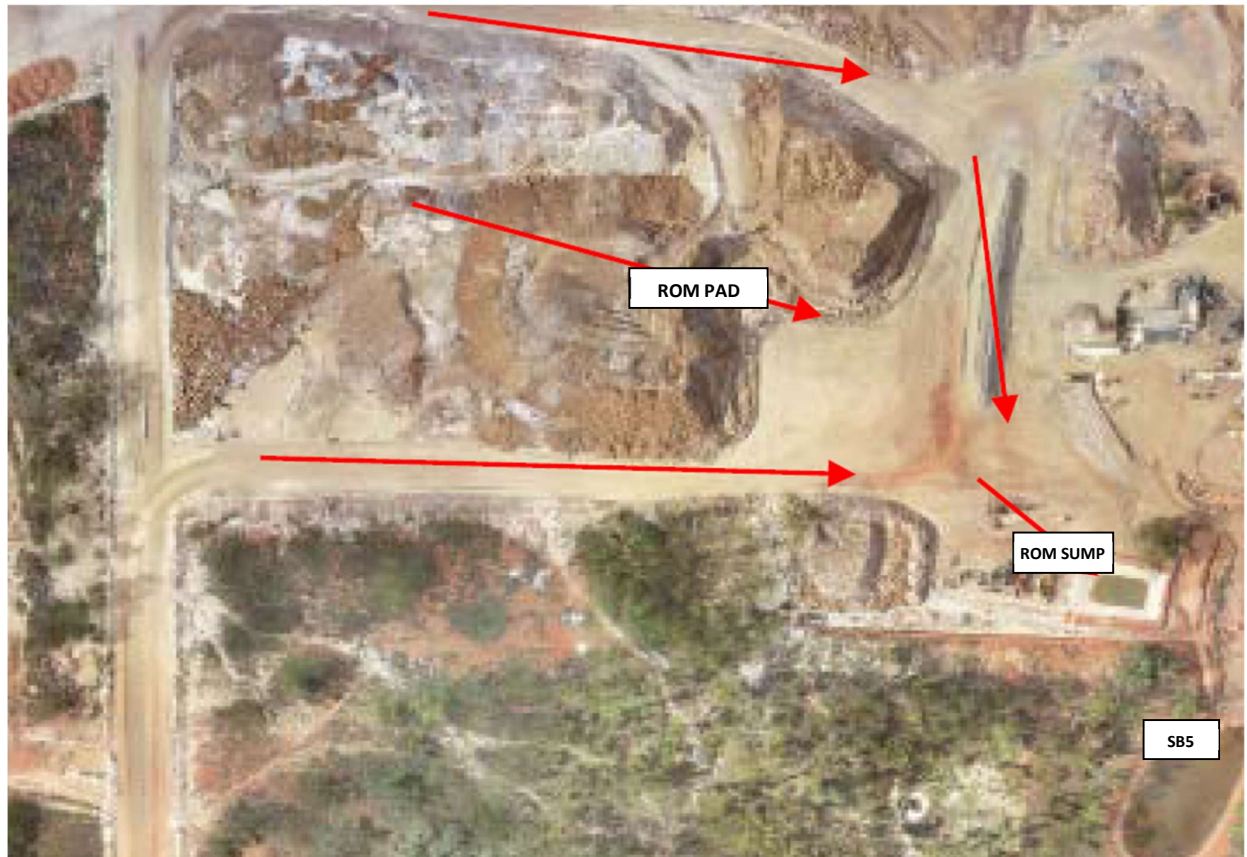


Figure 9: ROM Pad showing direction of surface water run-off toward the new ROM Sump.

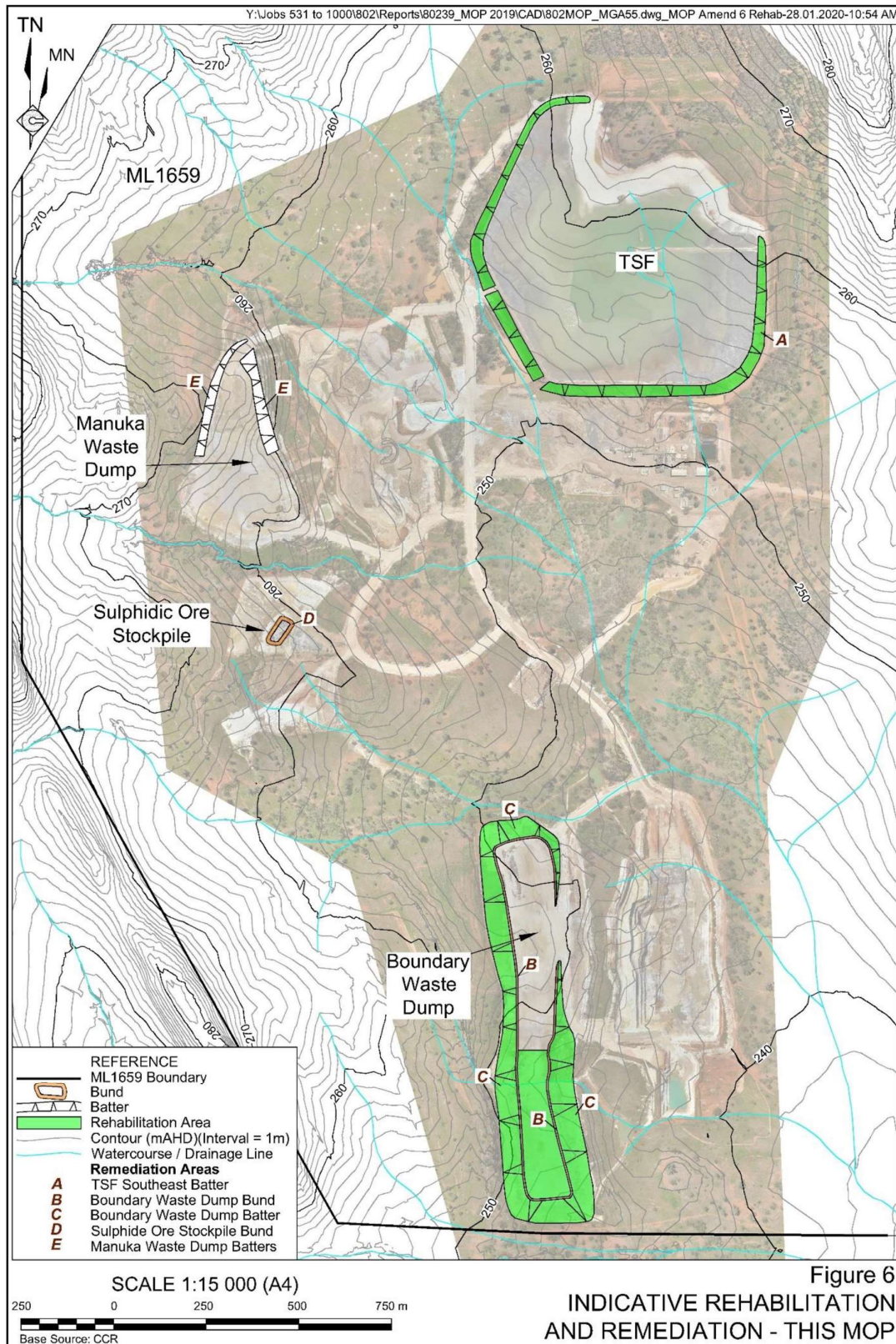


Figure 10: Rehabilitation and Remediation focus areas for 2020 – 2021 reporting period.

3.7.3 Reportable Incidents

There were no reportable incidents relating to erosion or sedimentation during the reporting period.

3.7.4 Further Improvements

There are a number of smaller clean water diversion drainage bund breaks on some of the roadways around the site and these were attended to during the reporting period. Stability of repaired drainage bunds will be inspected as part of the routine site inspection program in the new reporting period.

3.8 GROUNDWATER POLLUTION

3.8.1 Environmental Management

The Mine is not located in an area with a significant groundwater resource, with water contained mainly within fracture zones. The extraction of groundwater will have no effect on any regional aquifer and there will be no effect on other licensed groundwater users (the nearest licensed bore to the site is located approximately 1.3km away and is owned by the Company).

Furthermore, there are no groundwater dependent ecosystems (GDEs) in proximity to the Mine Site. Following completion of groundwater extraction, local groundwater levels are expected to return to existing levels. Impacts on the local and regional groundwater regime are therefore expected to be minimal.

3.8.2 Environmental Performance

Approximately 240,000 m³ of water was extracted from the bore field on the neighbouring property of Wirlong during the reporting period. This, along with recaptured rainwater, has been used to provide water for the processing plant as well as potable water for both the mine site and the camp.

Table 3-B and **Table 3-C** contain standing water level and pH data respectively, collected during the reporting period. Several bores remained dry throughout the reporting period and have been removed from the tables for simplicity. Standing water levels remained consistent throughout the year.

Table 3-B: Standing Water Level Monitoring Data for Groundwater Monitoring Piezometers

Site ID	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun* 2021	Jul 2021	Aug* 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021
WGW 3	54.5	54.8	55.2	55.1	54.7	54.8	54.7		54.5	54.8	54.7	54.8
WGW 1B	80.5	80.2	80.4	80.4	80.4	-	80.3		80.4	80.3	-	-
WGW 2	53.5	53.5	54.4	55.1	55.1	55.2	55.1		55	55.2	ants	55.5
WGW 7	1.7	1.7	1.5	2.9	2.8	1.3	0.8		1.3	1.0	1.3	1.0
WGW 8	-	-	-	-	-	-	2.6	covid	3.2	3.2	3.2	3.1
WGW 12	3.4	3.0	2.5	2.3	3.3	2.7	2.6		2.8	2.5	2.7	2.7
*Months unable to conduct water monitoring due to covid lockdowns. Where values are present, measurements were taken on a different month during the reporting period.												

Table 3-C: pH Monitoring Results for Groundwater Piezometers

Site ID	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May-2021	Jun* 2021	Jul 2021	Aug* 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021
WGW 3	6.5	6.93	7.33	6.96	7.15	6.75	6.72		6.81	6.69	6.8	6.93
WGW 2	6.31	7.19	7.26	7.19	6.9	6.72	6.67		6.75	6.73	ants	6.62
WGW 7	7.42	damp	damp	dry	8.06	7.86	8.26		8.12	7.84	7.63	7.2
WGW8	dry	dry	dry	dry	dry	dry	7.07	covid	damp	dry	dry	dry
WGW 12	7.02	7.71	7.51	7.34	7.79	7.74	7.56		2.8	7.67	7.86	7.74

To date, WGW9, a shallow bore on the southwest corner of the TSF, continue to be inaccessible for groundwater water sampling. Anecdotal accounts suggest that, prior to Manuka Resources' acquisition, this bore had inadvertently been buried during the construction of the TSF access ramp. Plans to propose for its removal from Environment Protection Licence 20020 will be submitted to the EPA during the next reporting period.

Groundwater bore WGW1B on the North-West section of the mining lease is still partially obstructed. Solutions to use various available equipment to remove its blockage is still ongoing. If not rectified via clearing/re-drilling, Manuka Resources will propose to the EPA to have this bore relocated or removed from Environment Protection Licence 20020 during the next reporting period.

3.8.3 Reportable Incidents

There were two reportable non-compliances during the 2021-2022 reporting period i.e., not being able to comply with EPL 20020 Licence Condition M2.2 – for not meeting the required monitoring frequency at 6 monitoring points; and Condition L2.4 for exceeding the Total Mercury limit quarterly at 5 monitoring points.

Monitoring point WGW7 returned an elevated mercury level which was reported via the EPA environmental hotline on 13 Jan 2021 and a written report submitted by email on 19 January 2021. Background mercury levels do vary across the site and whilst the WGW7 result recorded a level greater than the notification level required under the site EPL, it does remain consistent with background readings for the area.

Further investigation into the cause of this incident was undertaken during this reporting period. Results of the soil analysis investigation discovered that the soil material used as part of the Tailings Storage Facility (TSF) stage 2 lift confirmed the material had similar geochemistry to the stockpiles found on the ROM. The elevated mercury levels of soil material would have been leaching, particularly during rainfall events, thereby contributing to the mercury contamination of the groundwater monitoring network surrounding the TSF.

The contaminated soil was consequently from the outer batter of the TSF, had been relocated for reuse as an inner lining section of the TSF to ensure any future mercury leaching will be contained within the TSF. Additional water analysis conducted as confirmation test in December 2021 verified that the mercury levels are now within the EPL concentration limits.

Ongoing groundwater quality monitoring will continue in accordance with the *Water Management Plan*.

3.9 CONTAMINATED OR POLLUTED LAND

3.9.1 Environmental Management

The operating objective of the mine is to avoid contamination or pollution of air, land, or water resources. To assist in meeting this objective, the following management plans have been prepared:

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- Water Management Plan (which incorporates a Stormwater Management Scheme and Erosion and Sediment Control Plan).
- Cyanide Management Plan.
- Waste Management Plan.

Inspections are regularly undertaken in accordance with and additional to the procedures contained in these plans to identify sources of potential contamination/pollution and/or action the remediation of contamination/pollution if identified. With the recommencement of operations during this reporting period, all management plans will be reviewed for suitability against planned activities and updated as required.

3.9.2 Environmental Performance

No contaminated land is present within the Mine Site. During operations, any hydrocarbon spills would be immediately cleaned up and any contaminated material placed within the TSF for encapsulation.

Monthly site inspections have been undertaken during the reporting period in order to identify and rectify issues as they occur or as equipment is available onsite. Aspects of operational planning are also undertaken in preparation for the site recommencing activity.

3.9.3 Reportable Incidents

There were no reportable incidents relating to contaminated or polluted land during the reporting period.

3.9.4 Further Improvements

No further improvements are proposed at this time.

3.10 THREATENED FLORA AND FAUNA

3.10.1 Environmental Management

Activities to be undertaken during this reporting period did not result in the removal of any additional vegetation. Based on previous flora and fauna survey (OzArk, 2010), no flora species of conservation significance will be disturbed by the approved disturbance. Furthermore, it was assessed that the development is unlikely to cause local extinction or any significant impact to any listed fauna species.

The above notwithstanding, the following general flora and fauna management measures are implemented.

- Should clearing of vegetation be required, e.g., for safety reasons or associated with the development of the Belah and Bimble Pits, pre-clearance surveys to detect fauna roosting in any tree hollows will be undertaken (notably, the majority of trees within ML 1659 do not possess suitable hollows for dependant species).
- Implementation of pest management strategies to reduce the number of feral species and weeds.

3.10.2 Environmental Performance

As there was no vegetation clearing or soil stripping activities during the reporting period, management of flora and fauna related primarily to the control of wildlife accessing the mine. The removal of feral goats and maintenance of boundary fences continues to be undertaken by the former station owner who maintains pastoral access rights.

3.10.3 Reportable Incidents

There were no reportable incidents during the reporting period relating to flora or fauna.

3.10.4 Further Improvements

In accordance with the MOP commitment, Manuka engaged an ecological team, AREA Environmental Consultants & Communication (AREA), to undertake a Biodiversity Survey for both the Mine and the Biodiversity Offset Area (BOA) during the reporting period. The survey was completed during Spring 2021 and the draft reports were received during the latter part of the reporting period. Current finalisation of both reports are underway and expected to be received sometime in the early 2022.

3.11 WEEDS

3.11.1 Environmental Management

In accordance with the MOP, appropriate noxious weed control methods and programs will be undertaken, if necessary, in consultation with the Cobar Shire Council (CSC) noxious weeds officer.

Noxious weeds identified during the reporting period include Bathurst burr *Xanthium sp.*, Blue Heliotrope *Heliotropium amplexicaule*, and Silverleaf nightshade *Solanum elaeagnifolium*, with the Bathurst burr being the most prevalent. Herbicide spraying have been used with success during the reporting period to control them from spreading within the mining lease.

3.11.2 Environmental Performance

Groundcover has increased during 2021 due to the increased rainfall. However high daytime temperatures and generally dry conditions outside of rainfall events have continued to maintain a low level of groundcover. Strategies to prevent and introduction or spread of weeds during all remediation and rehabilitation activities planned throughout the reporting period include:

- Inspection of source soil stockpiles and if dominated by weed species, herbicide spray targeting the specific weed species will be applied prior to respreading.
- Regular inspection of rehabilitation and remediation sites. On initial establishment of vegetation, weed species coverage of 50% (no noxious weed species) will be acceptable as the cover is important in stabilising the soil. After 6 months, the acceptable weed species coverage will be 20% (and no noxious weed species). If the threshold coverage percentage is exceeded, targeted weed spraying will be commissioned.
- If weed species coverage cannot be reduced to the target threshold, additional advice will be sought from the Local Land Service or Council weeds officer.

3.11.3 Reportable Incidents

Over the course of the reporting period there were no reportable incidents relating to uncontrollable weed infestation.

3.11.4 Further Improvements

Current improvements to the Weed Management Policy contained in the current MOP is underway as part of its transition to the new Form & Way Rehabilitation Management Plan (RMP). Opportunity to redraft Weed Management Plan have also commenced and continue in the next reporting period.

3.12 BLASTING

Potential environmental impacts resulting from air blast or vibration (caused by blasting activities) were assessed as not applicable unless blasting operations occurred. As there were no blasting activities during the previous reporting period (or forecast for the next reporting period) no further assessment of this subject is given in this report.

3.13 OPERATIONAL NOISE

No operational noise was generated during the reporting period as the recommencement of mining operations has been deferred. In the absence of heavy plant, equipment or processing plant operations for silver mining, there were no noise mitigation or monitoring works required during the reporting period.

3.14 VISUAL, STRAY LIGHT

Potential impacts to visual amenity or community impact by stray light were assessed as presenting a low risk due to the mine's remote location, absence of processing operations and no record of community complaint on this subject by nearby landholders. No further assessment of this subject is given in this report.

3.15 ABORIGINAL HERITAGE

As there were no mining or construction activities conducted onsite during the reporting period, the likelihood of disturbance of natural or Aboriginal heritage items is considered negligible.

3.16 NATURAL AND NON-ABORIGINAL HERITAGE

No items or area of natural or non-Aboriginal heritage significance occur within ML 1659.

Should any site or artefact be uncovered during the planned activities, work in the area surrounding the relic would cease and the OEH (now Heritage NSW) and the Local Aboriginal Land Council would be informed of the find. Work would not recommence in the area immediately surrounding the find until the area has been inspected and permission has been given to proceed.

3.17 BUSHFIRE

3.17.1 Environmental Management

The clearing associated with the Mine Site, access to water and generally open vegetative structure of the Mine and surrounds, result in minimal bushfire risk. There is a general risk for the locality, however, which could impact on rehabilitation in the future.

3.17.2 Environmental Performance

While the mining lease is not located within the bushfire prone area identified on the Cobar LGA land map, the company has implemented a number of management controls to further prevent the likelihood and impact of bushfire.

- An asset protection zone of 10m is maintained between offices, workshops, and fixed plant.
- All water trucks on-site are required to be fitted with fire nozzles for use in a fire situation.
- Fire extinguishers are located at numerous locations around the camp, offices, and work areas, as well as a fixed fire hose system at the processing plant.
- The mine access road is regularly maintained to ensure safe access and egress from the mine in the event that an evacuation is called.
- Roads around the mining lease, camp and homestead are also maintained which provide fire breaks around infrastructure.
- Fire safety procedures and use of on-site fire equipment is covered in site and work area inductions.

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- Emergency and evacuation management procedures have been established and included in induction procedures for the mine workforce. These procedures require that in the event of a local bushfire event:
 - All personnel are required to assemble at a designated Emergency Assembly Area (the carpark of the processing plant and office area).
 - A head count will be undertaken to confirm all site personnel and visitors are accounted for.
 - Instructions on specific actions to be followed, i.e., site protection or evacuation, will be provided based on advice from the NSW RFS.

All management controls were adhered to throughout the course of the reporting period.

3.17.3 Reportable Incidents

There were no bushfire-related incidents during the reporting period.

3.17.4 Further Improvements

Ongoing refresher training, via toolbox talks prior to the hot dry summer period, have been conducted by Manuka Resources to ensure all personnel are prepared and familiar with the emergency procedures in the event of a bushfire. During the latter part of the reporting period, a full review of the Manuka Resources Bushfire Management Plan was done. An updated version is currently being completed and is expected to be finalised during the first half the next reporting period.

3.18 HYDROCARBON CONTAMINATION

3.18.1 Environmental Management

All hazardous materials and/or dangerous goods to be used, stored, or transferred on the Mine Site are managed in accordance with the relevant Australian Standard and/or guidelines.

Diesel is now delivered on a fortnightly basis as operations ramp up by a bulk transporter who adopts industry best practices to prevent any spillage during the transfer of diesel from the road tanker to the onsite containerised diesel tank. Diesel and oils are stored according to Australian Standard 1940-1993. This includes provisions for fire prevention, barriers and bunds, ventilation considerations and appropriate signage. Transfer is undertaken by appropriately trained site personnel. Spill kits are available at various locations around the site and staff and contractors are trained in the use of such kits during site inductions.

3.18.2 Environmental Performance

There were several deliveries of diesel within the reporting period. Diesel is stored within three 70,000L self-bunded container tanks adjacent to the site office. Access to diesel is restricted to site employees who have undertaken the mine induction and have suitable experience using the pumps.

The diesel bund is regularly inspected, and any dirt or debris build-up removed, to maintain effective capacity.

3.18.3 Reportable Incidents

No reportable incident relating to hydrocarbon spills occurred during the reporting period.

3.18.4 Further Improvements

No further improvements to hydrocarbon management are proposed at this time.

3.19 PUBLIC SAFETY

Access to the Wonawinta Silver Project is controlled by staff on site and restricted by appropriate fencing, gates, and signage. Fencing is inspected on a regular basis. Considering the isolated nature of the site and restricted access, there is minimal risk to public safety.

All employees and visitors to site are required to complete an induction prior to entry, and visitors must always be accompanied by a company representative for both safety and security reasons.

There were no reportable incidents during the reporting period relating to public safety, and no further improvements to existing access arrangements.

3.20 OTHER ISSUES AND RISKS

Discussion of the following environmental issues identified by the AEMR guidelines has not been included as these related to either coal and/or underground mining operations, and therefore not relevant.

- Spontaneous Combustion - No material from either ore source is prone to spontaneous combustion and therefore, no specific management measures are necessary.
- Mine Subsidence - Whilst exploratory drilling has occurred within the Mine Site, no underground mining of any kind has been undertaken nor is any anticipated as future mine plans treat Manuka as open-pits. Furthermore, with no underground mining, mine subsidence management measures are not required.
- Methane Drainage / Ventilation – No risk of Methane drainage; no specific management measures are necessary.

4. COMMUNITY RELATIONS

4.1 ENVIRONMENTAL COMPLAINTS

No complaints relating to environmental emissions or performance were received during the reporting period.

4.2 COMMUNITY LIAISON

Manuka Resources has established and publicised a Community Complaints Line, however there were no complaints received from the community or surrounding landholders during the reporting period.

Site staff continue to maintain a good working relationship with the former owners of 'Manuka Station', 'Wirlong Station' and the residents along shire road 13, being the nearest parties to the mine.

5. REHABILITATION

The status of existing disturbance and rehabilitation at the Mine as at the end of the 2021-2022 reporting period is described as follows and shown in **Figure 2: Current site layout and status.**

Manuka and Boundary Pits.

Both pits have been extracted of ore from previous mining operations within the Mine Site, with Boundary Pit ore exhausted. Partial backfilling of the Boundary Pit has been undertaken. Final benching and pit stabilisation activities completed. Perimeter bunds are in place. Current mine planning activities will better determine if these pits will be re-entered in the near term.

Boundary Waste Dump.

Rehabilitation of the southern section has been halted for the time being as new exploration works are planned around boundary waste dump to test for deeper mineralised sulphides which may result in the area becoming an active mine area again.

Manuka Waste Dump.

Incomplete. While no further waste rock is to be placed within the approved dump footprint, final landform creation remains to be completed while the exact volume of material to be used in the construction of the TSF embankment lift and capping material is confirmed.

Tailings Storage Facility.

The outer walls of the TSF Stage 2 lift have been formed and spread with soil. As part of the stage 2 lift the downstream batter has been profiled to 3H:1V (~18°). Erosion on the outer walls of the TSF were identified, cost-effective remediation strategies and appropriate actions to address this erosion issue will

be explored in the next reporting period. The TSF remains active and therefore uncapped. Surface drainage is prevented from inflowing by constructed water diversion drains up-slope of the TSF ROM pad and stockpiles.

Active areas. Previously extracted ore from Boundary and Manuka Pits is currently stockpiled with appropriate drainage controls installed. Earthen bunding was placed around the larger stockpiles to control run-off and prevent erosion as part of the maintenance works done during the 2020 reporting period.

Mine Infrastructure Area / Processing Plant.

Active area. No specific rehabilitation to date.

Soil stockpiles.

All soil stockpiles have been shaped and we will attempt to establish appropriate vegetation over these historic stockpiles over the next reporting period. A small portion of the topsoil stockpiles were removed or spread within the reporting period to assist with the rehabilitation of the TSF outer wall.

Hard rock stockpiles.

Active areas. Some material was used in the construction of the TSF embankment lift. A small amount of rock was used to fill in a section on the south-western corner of the TSF.

Low Grade Ore and Mineralised Waste Stockpiles.

Active areas. Materials not processed through the on-site processing plant will be placed within the TSF.

5.1 BUILDINGS

No permanent buildings were renovated or removed during the reporting period.

There are no plans for any decommissioning or demolition activities during the 2021 period, with all future plans to be subject to a review of the results of the past and proposed future exploration drilling results. If there is to be possible future extensions to the principal pits (Boundary and Manuka) and/or development and mining of the supplementary pits (Bimble and Belah), no significant changes will take place until that determination is made. However, removal of old redundant plant and equipment from the Mine Site, as well as rationalisation of surface storage areas for equipment, will continue to be undertaken as these are identified.

5.2 REHABILITATION OF DISTURBED LAND

During the term of its ownership, Manuka Resources has completed broad-scale clean-up and remediation of the site to return the mine to an appropriate functional state in compliance with legislative and best practice standards.

Increased rainfall over the 2020 and 2021 reporting periods have prefaced an increase in groundcover species. Despite this, high daytime temperature, heavy winds, and the tendency for rain events to be heavy has slowed the regrowth of groundcover. Rehabilitation efforts during the reporting period continued to focus on reducing grazing pressure to allow the groundcover vegetation to return.

Continued rainfall over the 2021-2022 reporting period could provide an effective environment for seeding trials to commence. **Table 5-A** provides a summary of the rehabilitation efforts at the Manuka Mine. No final rehabilitation works were conducted in the reporting period.

Table 5-A: Rehabilitation Summary

A: MINE LEASE(S) AREA	Area Affected (ha)		
	Total Area, start of Reporting Period	Total Area, end of Reporting Period	Area Estimated end of next Reporting Period
A1 Mine lease(s) area	923.23	923.23	923.23
B: DISTURBED AREAS			
B1: Infrastructure area (other disturbed areas to be rehabilitated at closure including facilities, roads)	45.1	45.1	45.1
B2: Active mining area (excluding items B3-5 below)	42.2	42.2	37.7
B3: Waste emplacements (active, unshaped, in or out of pit)	36	36	36
B4: Tailings emplacements (active, unshaped, uncapped)	54.7	54.7	52
B5: Shaped waste emplacement (awaits final vegetation)	0	0	0
Previous Mining Activities	35.3	35.3	35.3
TOTAL ALL DISTURBED AREAS	213.3	213.3	206.1
C: REHABILITATION			
C1: Total rehabilitated area (except for maintenance)	5.5	5.5	12.7
D: REHABILITATION ON SLOPES			
D1: 10 to 18 degrees	5.5	5.5	12.7
D2: Greater than 18 degrees	0	0	0
D3: Less than 10 degrees	0	0	0
E1: Pasture and grasses	0	0	0
E2: Native forests/ecosystems	0	0	0
E3: Plantations and crops	0	0	0
E4: Other (include non-vegetative outcomes)	0	0	0

Table 5-A above also provides a summary of the planned disturbance and rehabilitation over the next reporting period whilst **Figure 10: Rehabilitation and Remediation focus areas for 2020 – 2021**

reporting period (see Section 3.7.2 *Environmental Performance*) presents the location and indicative areas of remediation and rehabilitation at the completion of the current MOP term.

The following sub-sections describe the rehabilitation activities proposed to be implemented during the 2021 reporting period based on the areas referred to in the table above.

5.2.1 Infrastructure Area

The Infrastructure Area will remain as an active operational area throughout the reporting period.

5.2.2 Active Mining Area

Active Mining Areas will remain throughout the reporting period. There will be ongoing works to maintain all sediment basins in accordance with the *Mine Stormwater Management Scheme* to ensure that they retain sufficient capacity and are appropriately managed to avoid discharges to surface water or that discharges meet the applicable guidelines and approval requirements.

Erosion controls and remedial works will be undertaken as necessary in response to excessive erosion or poor performance. The northeast batter and southern side of the Boundary Waste Dump will be reprofiled and stabilised during the 2021 reporting period. No works will take place until the drill program is complete and there is confirmation in the mining plan as to if this area will potentially become an active mine area again in the future.

5.2.3 Tailings Storage Facility

The Tailings Storage Facility will remain as an active operational area throughout the reporting period, given the potential for continued mining and processing at the Mine. As each lift of the TSF is completed however, the following progressive rehabilitation activities will be completed.

- Soil stockpiled adjacent to the TSF will be applied, to create a layer of approximately 150mm thick.
- The soil will be immediately seeded with locally occurring grass species.
- Erosion controls were completed during the 2020-2021 reporting period, as part of the stage 2 lift, however heavy rainfall events caused continued erosion on the southeast batter of the TSF.
- During the 2021 and 2022 reporting period alternate strategies such as erosion control spray or a mulch cover will be explored to control erosion on downstream batters of the TSF.

5.2.4 Waste Emplacement Areas

The Waste Emplacement Areas will remain as an active operational area throughout the reporting period. The Manuka waste dump will be left open as it may be used as a source of clay for TSF capping and/or material for final landform creation and rehabilitation.

5.2.5 Shaped waste emplacement (Stockpiled Material)

Hard rock, low grade ore and mineralised waste stockpiles may either be utilised for construction purposes or processed through the processing plant. Clay stocks will be maintained for future use for TSF lifts and final capping.

Remediation of the bund surrounding the sulphidic ore stockpile will be completed to prevent erosion and runoff from the stockpile.

The remaining landform will be profiled and scarified to integrate with the surrounding topography. Where self-revegetation does not occur, soil will be respread to achieve a layer of approximately 150mm. This will be immediately sown with tree, shrub, and grass species.

5.2.6 Previous Mining Activities (Open Cut Voids)

No further mining is currently planned during the reporting period however mine planning is being undertaken. The Company is investigating the future potential of the site, and therefore no rehabilitation or remediation works are planned in these areas over the coming reporting period.

5.3 REHABILITATION AND RESEARCH TRIALS

Given the status of operations at the Mine, no rehabilitation or research trials were undertaken during the reporting period.

All rehabilitation activities planned for the next reporting period will be undertaken using accepted practices and seed species in consultation with external expertise such as Cobar Shire Council, Local Land Services, appropriate third-party consultants, and experience gained from rehabilitation efforts practiced by other mining operators in the district.

While the conditions have not been ideal for establishing any new rehabilitation trials over the past 3 years with the drought, and lack of onsite presence, Manuka Resources does reference rehabilitation undertaken at the associated Mt Boppy Gold Mine, which also occurs within the Cobar Peneplain Bioregion. The most recent trial work occurred between 2007 and 2015 and covered an area of 1ha and included:

- four photo monitoring points; and
- seven transect lines.

Monitoring was undertaken on an annual basis and included measurement of number of seedlings, assessment of grazing pressure, presence of weed species and groundcover (e.g., bare soil, vegetation, litter, rock etc.). The results of this monitoring have been presented within the respective ARR's.

The Company will maintain comprehensive records of the activities undertaken, including but not limited to, soil depth on application, species mix of seed applied, application of accumulated vegetation from

previous stockpiles, seasonal factors which will allow an analysis of the relative success of rehabilitation. By analysing the data in this way, areas of less successful rehabilitation may be remediated with a better understanding as to what is more successful in this setting. Furthermore, future rehabilitation of the supplementary pits and waste dumps, should they proceed, could be planned around what has been most successful at the Mine to date.

5.4 FURTHER DEVELOPMENT OF THE FINAL REHABILITATION PLAN

During the 2020-2021 reporting period, work commenced to undertake a Materials Characterisation and Rehabilitation Assessment to assist in the development of the Mine's future rehabilitation management program and was recently completed in August 2021

The review of existing Environmental Management Plans has continued over the course of this reporting period and will continue. The review process of the management plans will include confirmation of environmental monitoring, inspections and records keeping programs to adhere to current Australian Standards and Best Management Practices. Outdated management plans will also be aligned with the Mine's current operation and map plans will be updated to demonstrate the current state of the mine site.

6. ACTIVITIES FOR NEXT REPORTING PERIOD

6.1 SUMMARY

The current MOP was lodged in January 2020 to cover a phase of mineral processing only at the Manuka site. A subsequent MOP, which will be in the new Form & Way format, will include mining activities as determined by the infill drilling program results. This new document is due in July 2022.

Apart from the above-mentioned infill drill program on ML 1659, Manuka Resources intends to conduct limited exploration activity on the EL's. Other exploratory activities will comprise geophysics, VTEM surveys and soil sampling. ML1659 hosts significant sulphide mineralisation below the known inferred resource.

Below summarises the activities planned for the next reporting period:

1. Further upgrades to the Processing Plant, to enable the future processing of silver.
2. From the end of Q2 2022, the site will start processing the currently recoverable ore from the existing ROM stockpiles before completing mine planning and opening up of new oxide pits.

3. Progressive rehabilitation of the walls of the TSF, including additional repair of erosion on the southeast corner of the TSF wall.
4. Management and remediation work on the batters and bund on the southern side of, and northwest corner of the Boundary waste dump however progress on these activities may be influenced by the results of the mine planning program referenced earlier.

Results from the 2020 and 2021 drilling programs will be reviewed and used in this reporting period to develop the Manuka Resources Conceptual Mine Plans. Based on these results and the proposed Mine Plans, some work may begin in the Additional Approved Disturbance areas (as identified in the current MOP), to prepare for future mining of the Belah and Bimble Pits. Works to design and prepare future site drainage and water management for these proposed new areas will also be developed during the next reporting period.

There is no new construction planned for the next reporting period. Comprehensive refurbishment of the process plant was completed during this reporting period. Some minor additional plant flowsheet changes may be implemented in the next reporting period.

Future planned key construction activities during the next reporting period (2022/2023) include but may not be limited to, the following:

- Two new tanks and a thickener to be constructed within the existing infrastructure of the current processing plant,
- Installation of the new mercury Retort and a Retort enclosure, and
- Fabrication and installation of carbon ducting, scrubber, and fume extractor.

6.2 FUTURE EXPLORATION

The Company is continuing to work towards a smooth transition to oxide silver production following production from Mt Boppy gold ores transported to the Wonawinta (Manuka) processing plant. MKR is actively striving to be Australia's next silver producer by around mid-2022. To achieve this goal from the perspective of the resource potential of the project the Company has been actively pursuing the following strategy:

- Placing a greater emphasis on better definition of the existing resources on ML 1659 so that it may be upgraded to sufficient Measured and Indicated for mine planning purposes. This is necessary to extend the mine life and therein justify the cost of re-starting the mining operations for a long-life project.
- Carry out the required deeper exploration drilling to test the underlying Pb-Zn-Ag mineralisation hosted in the fresh Booth Limestone, presently known as located at the bottom and down-dip to the west of the existing Boundary and Manuka open pits.

Future work prior to mining and processing of oxide silver ores is expected to include mapping geometallurgical domains using portable XRF, infra-red spectroscopy and mineralogy directed metallurgical tests to optimise plant performance. A variety of pre-mining and exploration related activities

are already in progress on ML 1659 and include metallurgical test work (gap analysis) on the oxide silver resource (and ROM silver stockpiles) building on the knowledge base from prior operating history and earlier test work. This includes comminution, bond work index and process modelling. Como Engineers Pty Ltd were commissioned to supervise the work carried out by the ALS laboratory at Balcatta, WA., and more recently test work on existing oxide stockpiles has been carried out at AMML at Gosford.

6.3 MINING

There will not be any active mining on ML 1659 during the current reporting period. Recovery of existing and stockpiled silver ore from the surface and the existing principal pits (Boundary and Manuka Pits) that has previously been mined and stockpiled, will potentially begin in the latter half of the 2022. Active mining activities will recommence once the inferred resource has been upgraded to measured and indicated status and a robust mining schedule can be developed. The Manuka Resources Conceptual Mine Plan is expected to be developed mid-2022 and a new Form & Way RMP will then be drafted ready for June 2022 lodgement if not earlier, in line with current mine planning.

The silver processing commissioning process is planned to take place in late February 2022/Early March 2022, for a period of at least 4 weeks.

A comprehensive implementation plan is being developed by the team and is expected to be finalised during February 2022.

6.4 REHABILITATION

Improving the environmental management of the site has been a key focus of Manuka Resources following the incidents and mismanagement which occurred under the previous operators.

During the 2020-2021 reporting period, work commenced to undertake a Materials Characterisation and Rehabilitation Assessment to assist in the development of the Mine's future rehabilitation management program. This work will continue over the course of the next reporting period. This program will include (but not limited to):

1. Reviewing historical soils and lands assessments conducted by the previous Mine owners,
2. Characterising the potential growth media onsite to identify potential constraints/opportunities to maximise the salvage of soil resources for use in rehabilitation. Stockpile materials to be characterised including topsoil, subsoil, and waste rock stockpiles.
3. Undertaking a specific rehabilitation risk assessment to identify the range of risks and associated controls in place and identify improvements, where required.

An initial review of the existing Environmental Management Plans commenced this reporting period and will continue in the next reporting period. The review process of the management plans will include confirmation of environmental monitoring, inspections and records keeping programs to adhere to current Australian Standards and Best Management Practices. Outdated management plans will also be aligned with the Mine's current operation and map plans will be updated to demonstrate the current state of the mine site.

Management plans specific to the Mine's rehabilitation program will be reviewed and updated to ensure that:

1. Routine monitoring and inspection of control measures onsite are maintained, and risks are promptly addressed, and outcomes of inspections recorded.
2. Formalised quality assurance process will be designed and followed throughout the life cycle of rehabilitation. Procedures on recording of key data at each rehabilitation phase (e.g., actual methodologies undertaken, weather, etc) will be captured by responsible personnel.

Specific focus will also be placed on developing and implementing agreed techniques to salvage biological resources (e.g., seed bank, plant material, logs, hollows etc.) for use in rehabilitation based on outcomes of the material characterisation analysis. This will be prioritised in preparation for the potential for future disturbance associated with the Manuka Resources Conceptual Mine Plans, which will include the proposed Belah and Bimble Pits.

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Figure 11: Topsoil Stockpile Volumes at Wonawinta Silver Project surveyed on 10/10/16 (Dwg No. M1705-SP003 Rev A)

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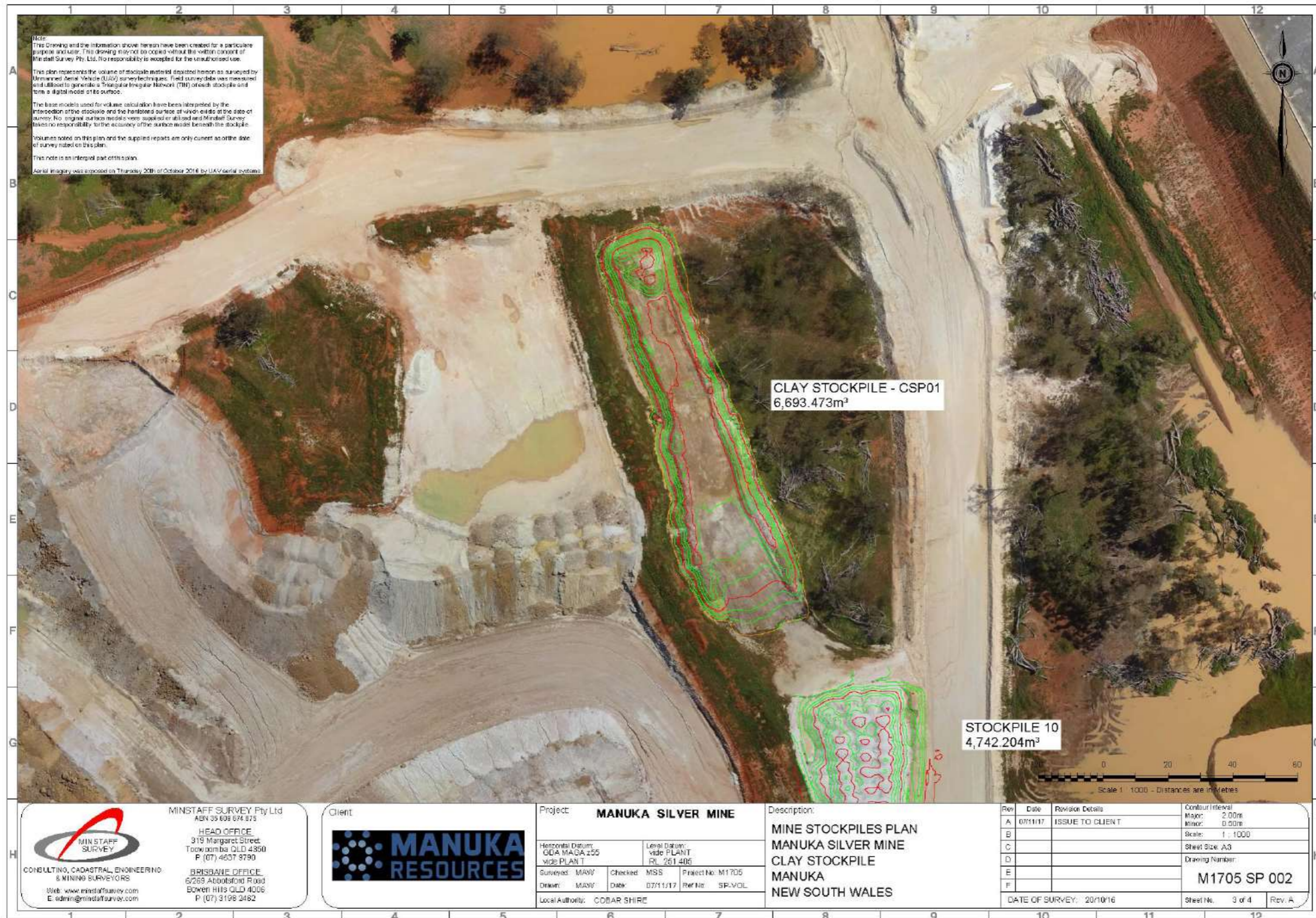


Figure 12: Clay Stockpile at Wonawinta Silver Project surveyed on 10/10/16 (Dwg No. M1705-SP002 Rev A, Sheet 3)

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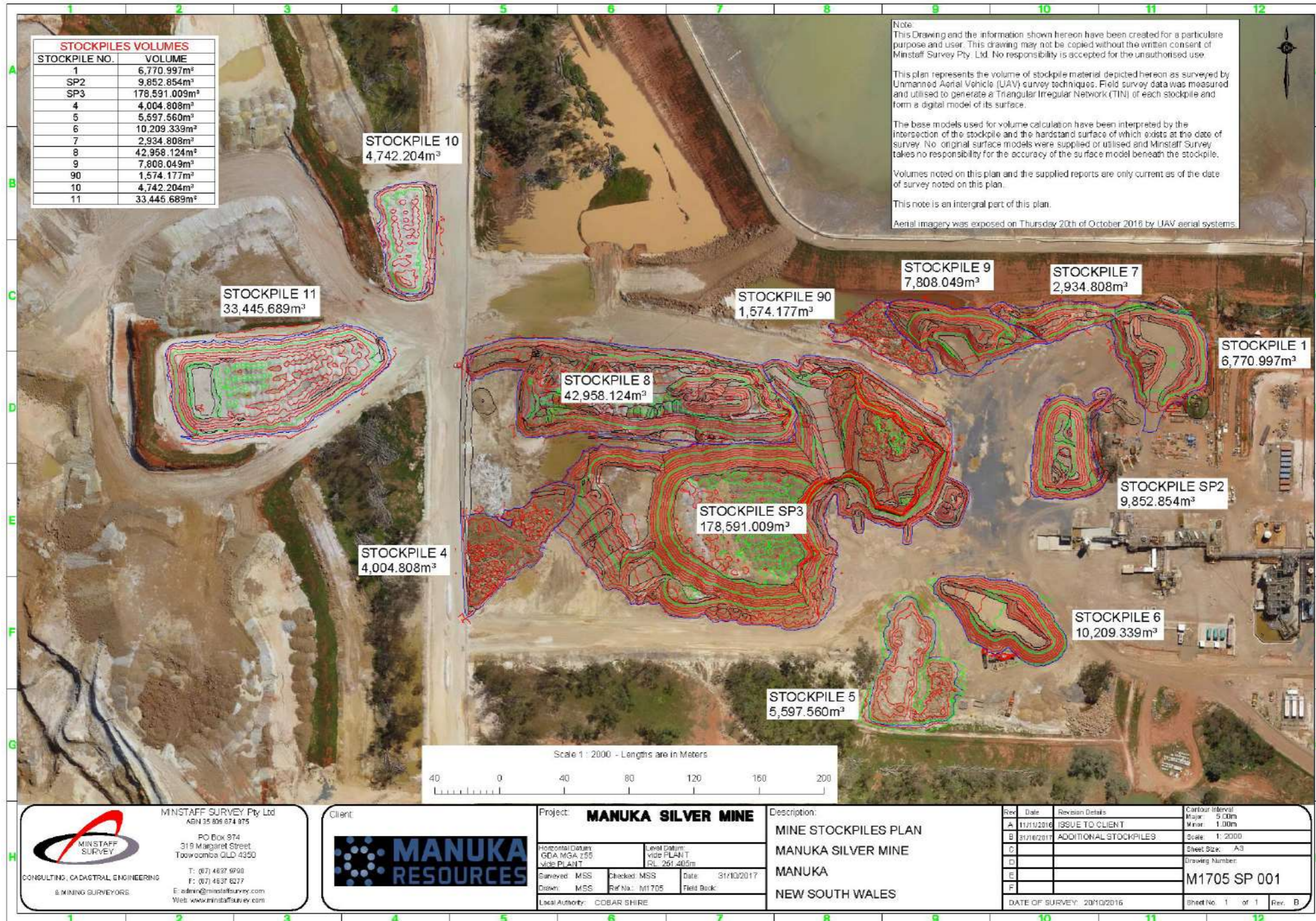


Figure 13: Mine Stockpiles at Wonawinta Silver Project surveyed on 10/10/16 (Dwg No. M1705-SP001 Rev B)

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Figure 14: Clay Stockpile at Wonawinta Silver Project surveyed on 10/10/16 (Dwg No. M1705-SP002 Rev A, Sheet no. 4)

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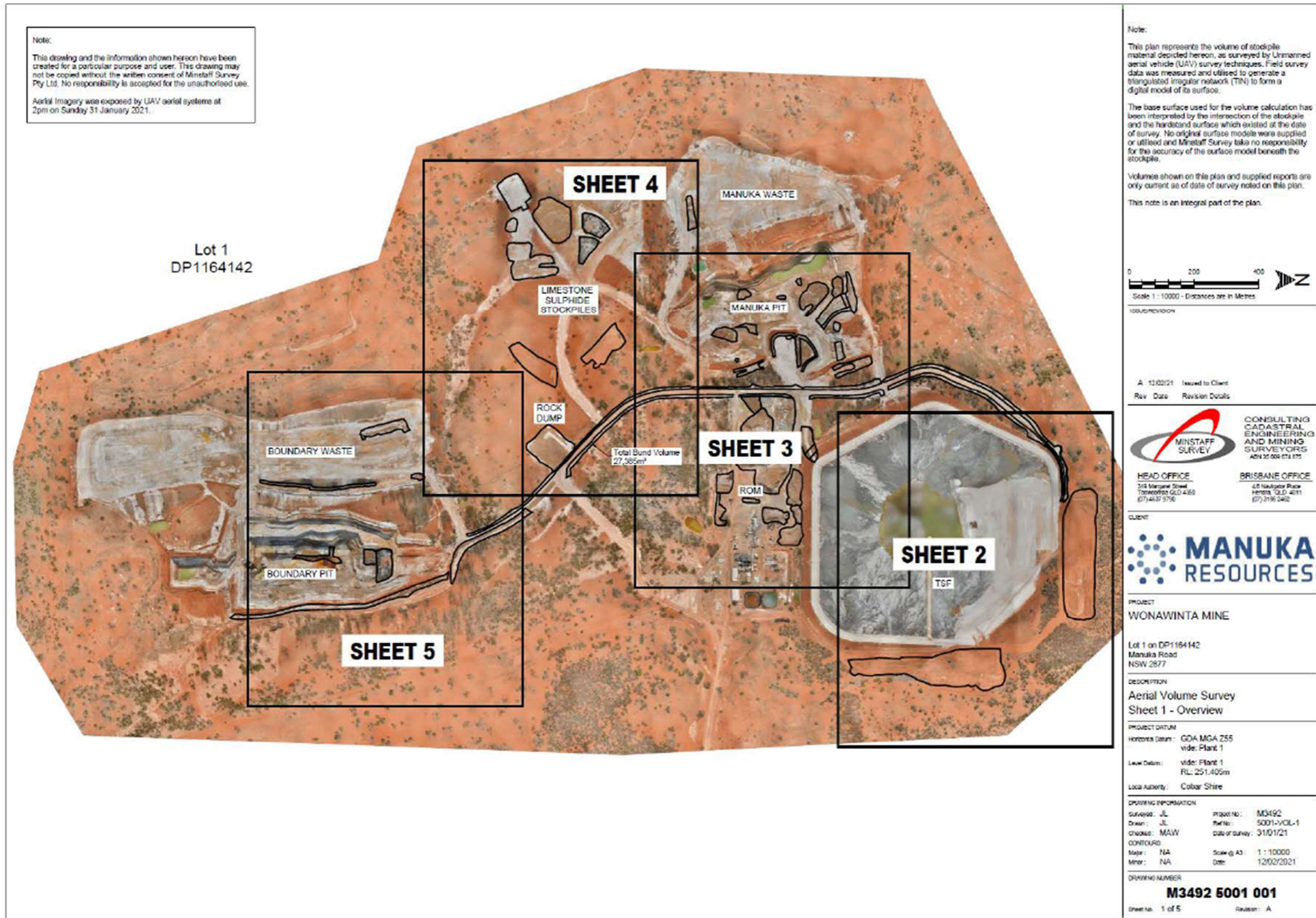


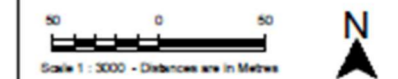
Figure 15: February 2021 Stockpile Update Overview

Doc Code	Ver.	Title	Reporting Period	Print Date	Page
MRL-ENV-RPT-002-2022.001	1.0	Wonawinta Annual Rehabilitation Report 2021/2022	19 Jan 2021 – 18 Jan 2022	17-Feb-2022	61 of 65

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Note:
 This plan represents the volume of stockpile material depicted hereon, as surveyed by Unmanned aerial vehicle (UAV) survey techniques. Field survey data was measured and utilised to generate a triangulated irregular network (TIN) to form a digital model of its surface.
 The base surface used for the volume calculation has been interpreted by the intersection of the stockpile and the hardstand surface which existed at the date of survey. No original surface models were supplied or utilised and Minstaff Survey take no responsibility for the accuracy of the surface model beneath the stockpile.
 Volumes shown on this plan and supplied reports are only current as of date of survey noted on this plan.
 This note is an integral part of the plan.



ISSUE/REVISION
 A 12/02/21 Issued to Client
 Rev Date Revision Details

MINSTAFF SURVEY
 CONSULTING CADASTRAL ENGINEERING AND MINING SURVEYORS
 ABN 35 909 574 875
 HEAD OFFICE: 218 Margaret Street, Toowoomba QLD 4300 (07) 4637 8756
 BRISBANE OFFICE: 418 Navigator Place, Hendra, QLD 4011 (07) 3146 2462

CLIENT

PROJECT
WONAWINTA MINE
 Lot 1 on DP1164142
 Manuka Road
 NSW 2877

DESCRIPTION
**Aerial Volume Survey
 Sheet 2 - Stockpiles**

PROJECT DATUM
 Horizontal Datum: GDA MGA Z55
 Vide: Plant 1
 Level Datum: Vide: Plant 1
 RL: 251.405m
 Local Authority: Cobar Shire

DRAWING INFORMATION
 Surveyed: JL Project No: M3492
 Drawn: JL Ref No: 5001-VOL-2
 Checked: MAW Date of Survey: 31/01/21
 CONTOURS
 Major: NA Scale @ A3: 1:3000
 Minor: NA Date: 12/02/2021

DRAWING NUMBER
M3492 5001 001
 Sheet No: 2 of 5 Revision: A

Figure 16: February 2021 Stockpile Survey Update – Topsoil Stockpiles North and North-East of TSF

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Doc Code	Ver.	Title	Reporting Period	Print Date	Page
MRL-ENV-RPT-002-2022.001	1.0	Wonawinta Annual Rehabilitation Report 2021/2022	19 Jan 2021 – 18 Jan 2022	17-Feb-2022	62 of 65



Figure 17: February 2021 Stockpile Survey Update - ROM and Manuka Pit areas

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MRL-ENV-RPT-002-2022.001	1.0	Wonawinta Annual Rehabilitation Report 2021/2022	19 Jan 2021 – 18 Jan 2022	17-Feb-2022	63 of 65

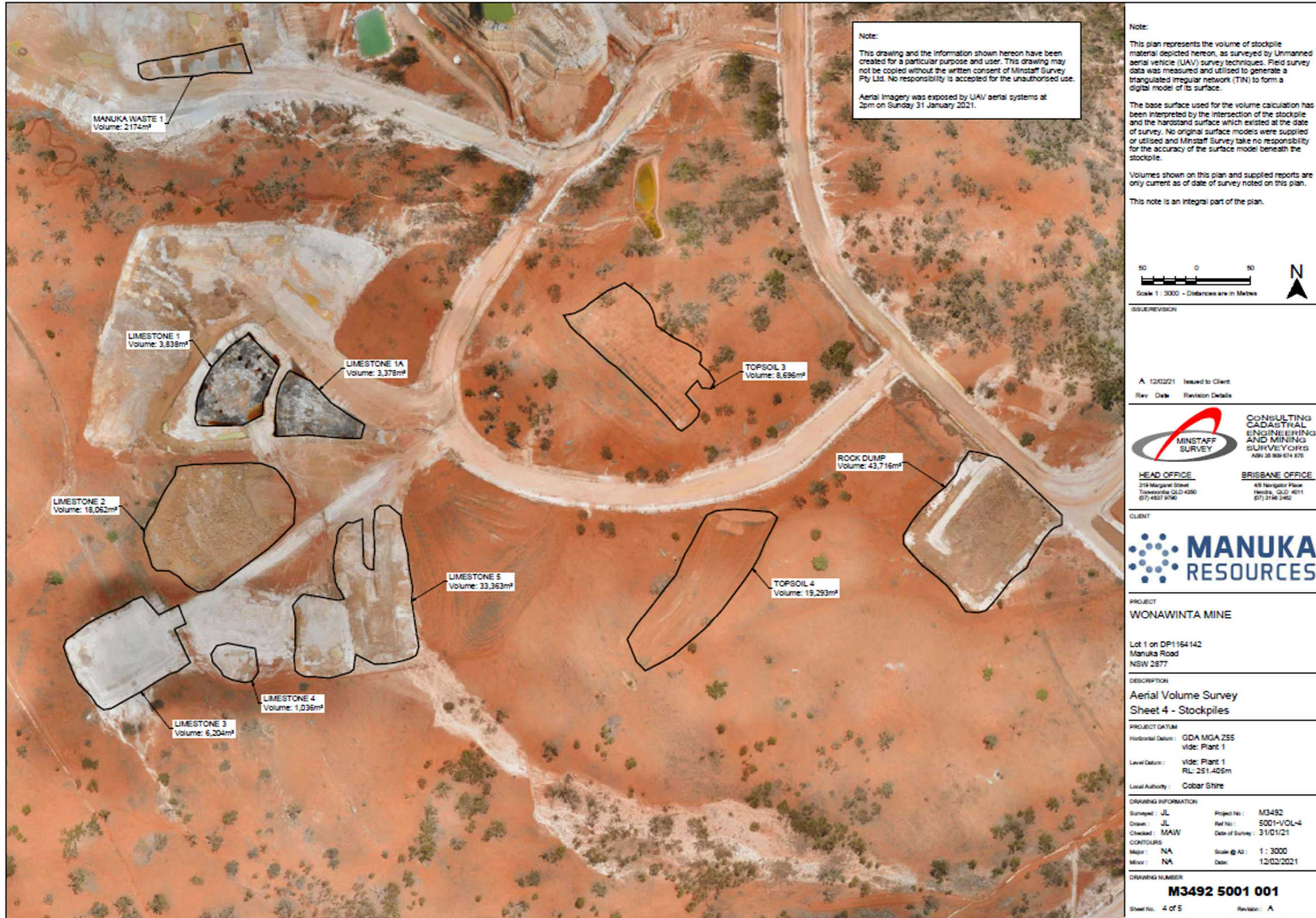
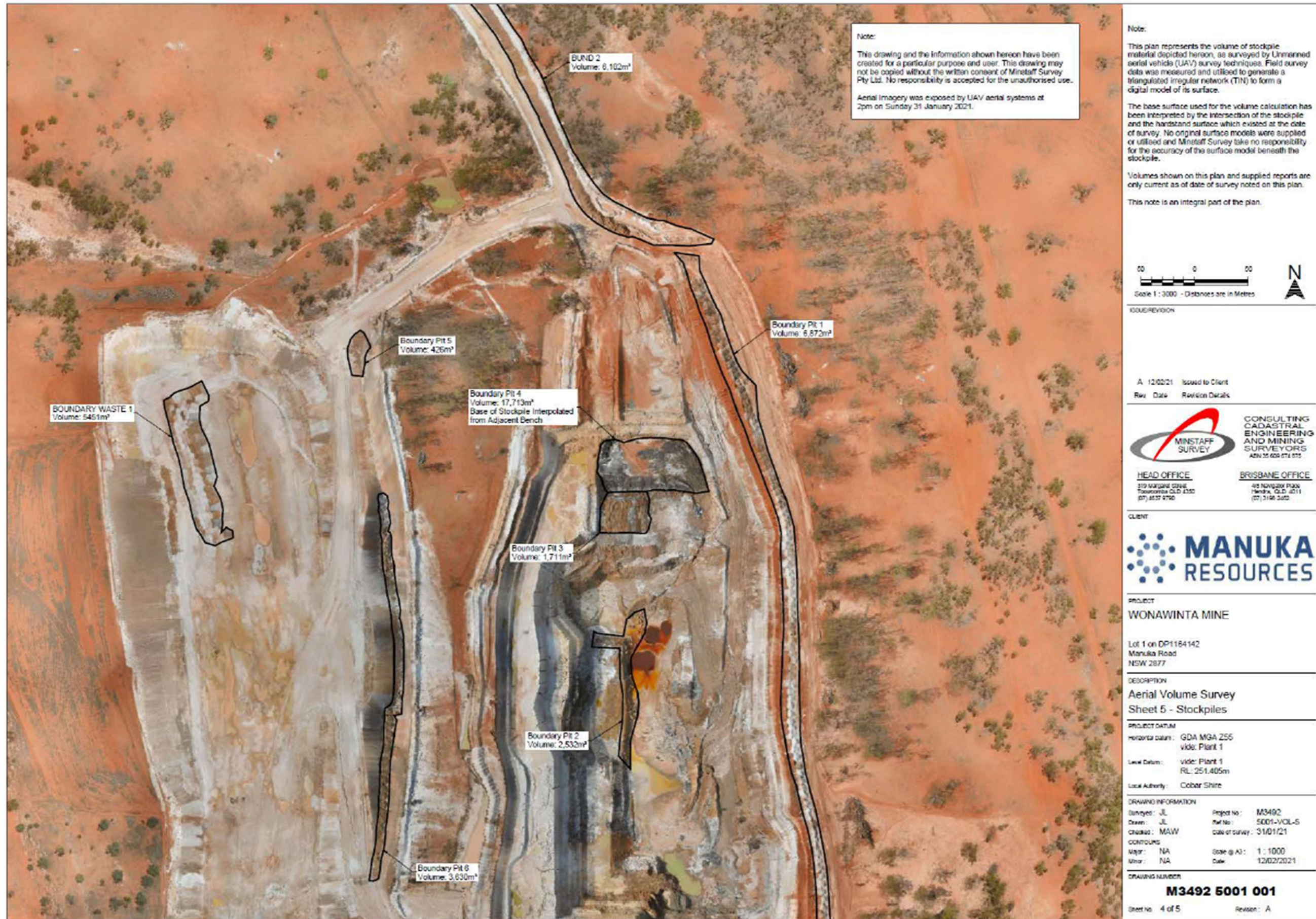


Figure 18: February 2021 Stockpile Survey Update - Topsoil and Clay/Limestone Stockpiles

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MRL-ENV-RPT-002-2022.001	1.0	Wonawinta Annual Rehabilitation Report 2021/2022	19 Jan 2021 – 18 Jan 2022	17-Feb-2022	64 of 65



Note:
 This drawing and the information shown hereon have been created for a particular purpose and user. This drawing may not be copied without the written consent of Minstaff Survey Pty Ltd. No responsibility is accepted for the unauthorized use.
 Aerial imagery was exposed by UAV aerial systems at 2pm on Sunday 31 January 2021.

Note:
 This plan represents the volume of stockpile material depicted hereon, as surveyed by Unmanned aerial vehicle (UAV) survey techniques. Field survey data was measured and utilized to generate a triangulated irregular network (TIN) to form a digital model of its surface.
 The base surface used for the volume calculation has been interpreted by the intersection of the stockpile and the hardstand surface which existed at the date of survey. No original surface models were supplied or utilized and Minstaff Survey take no responsibility for the accuracy of the surface model beneath the stockpile.
 Volumes shown on this plan and supplied reports are only current as of date of survey noted on this plan.
 This note is an integral part of the plan.



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CONSULTING
 CADASTRAL,
 ENGINEERING
 AND MINING
 SURVEYORS
 ABN 35 609 074 015

HEAD OFFICE
 219 Margaret Drive
 Townsville QLD 4850
 (07) 4837 9750

BRISBANE OFFICE
 412 HONGKONG PLACE
 HENDRA, QLD 4011
 (07) 3196 3452

CLIENT

PROJECT
 WONAWINTA MINE

Lot 1 on DP1164142
 Manuka Road
 NSW 2877

DESCRIPTION
 Aerial Volume Survey
 Sheet 5 - Stockpiles

PROJECT DATUM
 Horizontal datum: GDA MGA 255
 veld: Plant 1

Level Datum: veld: Plant 1
 RL: 251.405m

Local Authority: Cobarr Shire

DRAWING INFORMATION

Surveyed: JL	Project No: M3492
Drawn: JL	Ref No: 5001-VOL-5
Checked: MAW	Date of survey: 31/01/21
Major: NA	Scale (p A3): 1 : 1000
Minor: NA	Date: 12/02/2021

DRAWING NUMBER
M3492 5001 001

Sheet No: 4 of 5 Revision: A

Figure 19: February 2021 Stockpile Survey Update – North sections of Boundary Pit and Boundary Waste Dump

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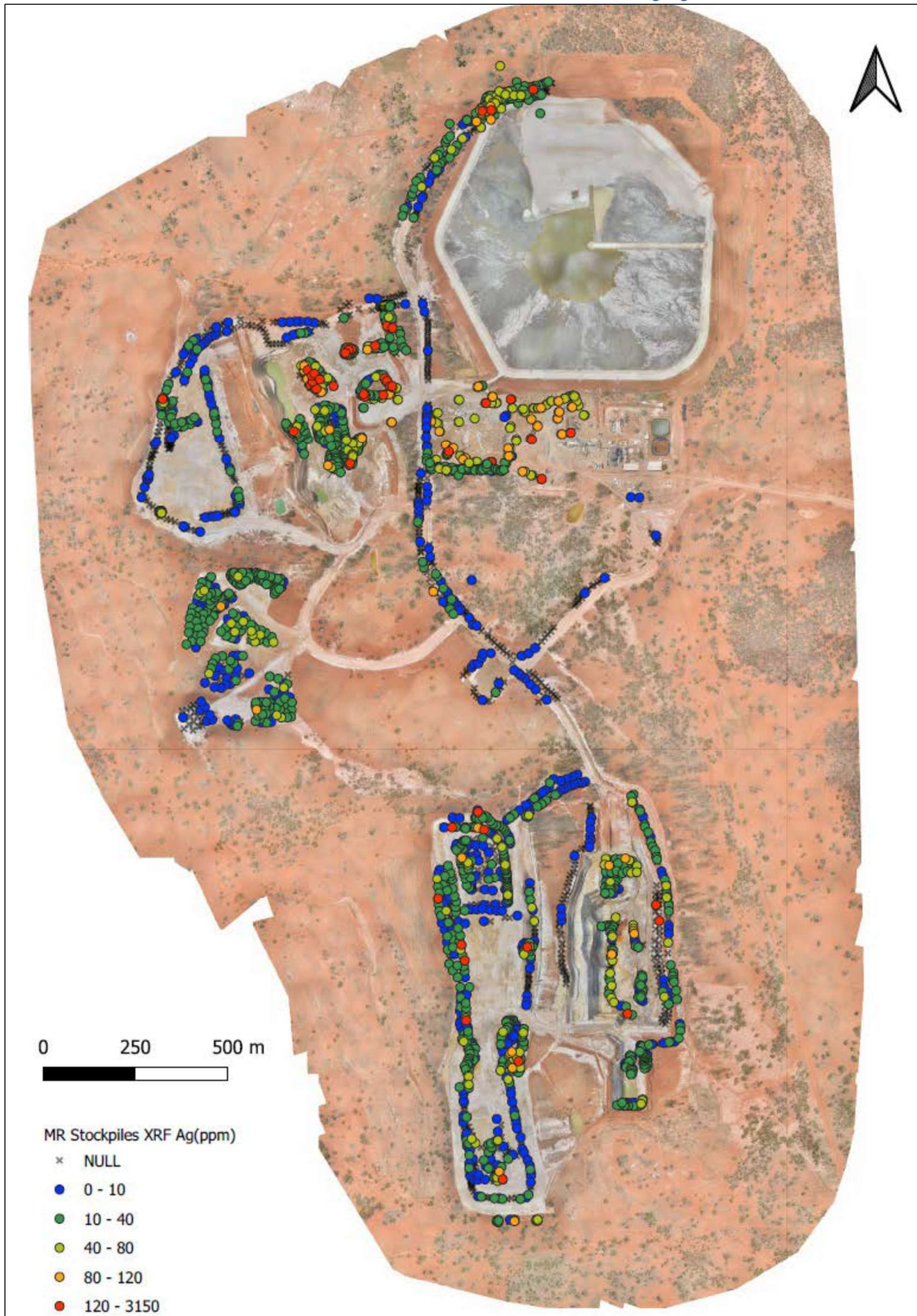


Figure 20: Sampling Points for EX-ROM stockpiles as of 19 July 2021