Queensland Government

Application for Mining Lease

Mineral Resources Act 1989

Form MMOL-14 Version 7

Permit Application (ID: 10011402) - COMPLETE

Lodged On: 14/12/2023 11:25 AM

PERMIT DETAILS

Permit name:	Dugald River Northeast
Permit type:	Mining Lease - Infrastructure (Minerals)
Permit term:	23 Years
Permit subtype:	Mineral
General locality of the application:	Approx 85km NW of Cloncurry
Specific infrastructures:	Living quarters / camp

PERMIT HOLDER DETAILS

Client name	Percent holding	Authorised
MMG DUGALD RIVER PTY LTD	100.000000000000	Yes

Holder address details:

Holder:	MMG DUGALD RIVER PTY LTD	**Address:**	C/-Hetherington Exploration & Mining Title Services (QLD) Pty Ltd PO Box 49 Spring Hill LPO
ACN:	083405556	**Town/City:**	Spring Hill
Email address:		**State:**	QLD
Business number:	[redacted]	**Postcode:**	4004
Mobile number:	[redacted]	**Country:**	Australia

Applicant or associate disqualified: No

Authorised Holder Representative (AHR) address details:

Name:	Hetherington Exploration & Mining Title Services (QLD) Pty Ltd	**Address:**	PO BOX 49 SPRING HILL LPO
		Town/City:	SPRING HILL
Email address:	[redacted]	**State:**	QLD
Business number:	[redacted]	**Postcode:**	4004
Mobile number:		**Country:**	Australia

PERMIT AREA

Size of area applied for (ha):	43.5000
Size of surface area applied for (ha):	43.5000
Local government area(s):	Cloncurry Shire Council, Cloncurry Shire Council
Has a datum post been inserted?	No
Datum post standard used:	GDA2020
Provide coordinates for the datum post:	refer to boundary description
Is surface area within the permit area required?	Whole.
Provide width of access (m):	30.00
Provide any relevant information about access including start and end points:	refer to attachment

LAND INFORMATION DETAILS

Does this application involve the surrender of a granted permit in favour of whole or part of this application?	No
Is there any restricted land associated with this permit application?	No
Is the lease area within the surface of reserve?	No
Is the land applied for situated within an area of a greenhouse gas (GHG) permit?	No

Overlapping permits

Permit number	Holder	Status
ML 2638	MMG DUGALD RIVER PTY LTD	GRAN
ML 90212	MMG DUGALD RIVER PTY LTD	GRAN

Constrained lands

Type	Brief definition	Details of constraint
Endangered Regional Ecosystems	Where the application overlaps with a regional ecosystem that is endangered, additional requirements for the Environmental Authority may be required. Remnant 2019 regional ecosystems are vegetation communities in a bioregion that are consistently associated with a particular combination of geology, landform and soil.	For more information please contact the Queensland Herbarium, Department of Environment and Science, Brisbane Botanic Gardens.
RVM category A - vegetation offsets	This layer provides information about vegetation management activities within Queensland for landholders.	For more information please contact Department of Environment and Science.

Land details

Description	Proposed usage	Current usage	Compensation required?
Lot 36 on plan AP23793 - Unallocated state land	Access	Grazing	No
Lot 036 on plan AP23793 - Lands lease	Access	Grazing	No
Lot 92 on plan SP303378 - Lands lease	Permit	Grazing	Yes
Lot 2577 on plan PH139 - Lands lease	Access	Grazing	Yes
Lot 92 on plan SP303378 - Lands lease	Access	Grazing	Yes
Lot 36 on plan AP23793 - Unallocated state land	Permit	Grazing	No
Lot 036 on plan AP23793 - Lands lease	Permit	Grazing	No
Lot 211 on plan SP136468 - Lands lease	Permit	Grazing	Yes

NATIVE TITLE

Native title process:	Right to Negotiate
Determined native title claim:	Yes

OBLIGATIONS

As the authorised holder representative, I understand and agree to the obligations associated with the permit: Yes

PAYMENT DETAILS

Fee type	Details	Amount ($)
APPMLINFMIN	Mining Lease - Infrastructure (Minerals)	1,800.94
ADVREVDL	Native title determined land advertisement	0.00
	Total Fee:	1,800.94

UPLOADED DOCUMENTS

Section	File name	Uploaded by	Date uploaded
Financial Capability	Financial Commitment	[redacted]	14/12/2023 10:55 AM
Land availability	Adjoining land details	[redacted]	13/12/2023 09:40 AM
Permit area	Access area file	[redacted]	13/12/2023 09:32 AM
Permit area	Statement detailing adjoining resource authorities and land parcel details	[redacted]	13/12/2023 09:32 AM
Permit area	Area file	[redacted]	13/12/2023 09:31 AM
Permit area	Surface area justification statement	[redacted]	13/12/2023 09:32 AM
Technical capability	Other resource commitment statement	[redacted]	14/12/2023 10:55 AM
Work program	Proposed mining program	[redacted]	14/12/2023 10:51 AM
AHR	Letter of authority - AHR	[redacted]	12/12/2023 04:29 PM
Financial Capability	Financial capability statement	[redacted]	14/12/2023 10:55 AM
General	Company structure	[redacted]	12/12/2023 04:28 PM
Land availability	Land details	[redacted]	13/12/2023 09:40 AM
Permit area	Statement dealing permit location	[redacted]	13/12/2023 09:32 AM
Permit area	Map of boundaries and access	[redacted]	13/12/2023 09:31 AM
Permit area	Statement justifying the area	[redacted]	13/12/2023 09:31 AM
Permit details	Permit term justification statement	[redacted]	12/12/2023 04:26 PM
Technical capability	Technical capability statement	[redacted]	14/12/2023 10:55 AM

OFFICE USE ONLY

Received AT: _____ **Received BY:** _____

DATE: _____ **TIME:** _____

FEE Paid: _____ **RECEIPT no:** _____

Disclaimer

© State of Queensland, 2014.

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 3.0 Australia (CC BY) licence.



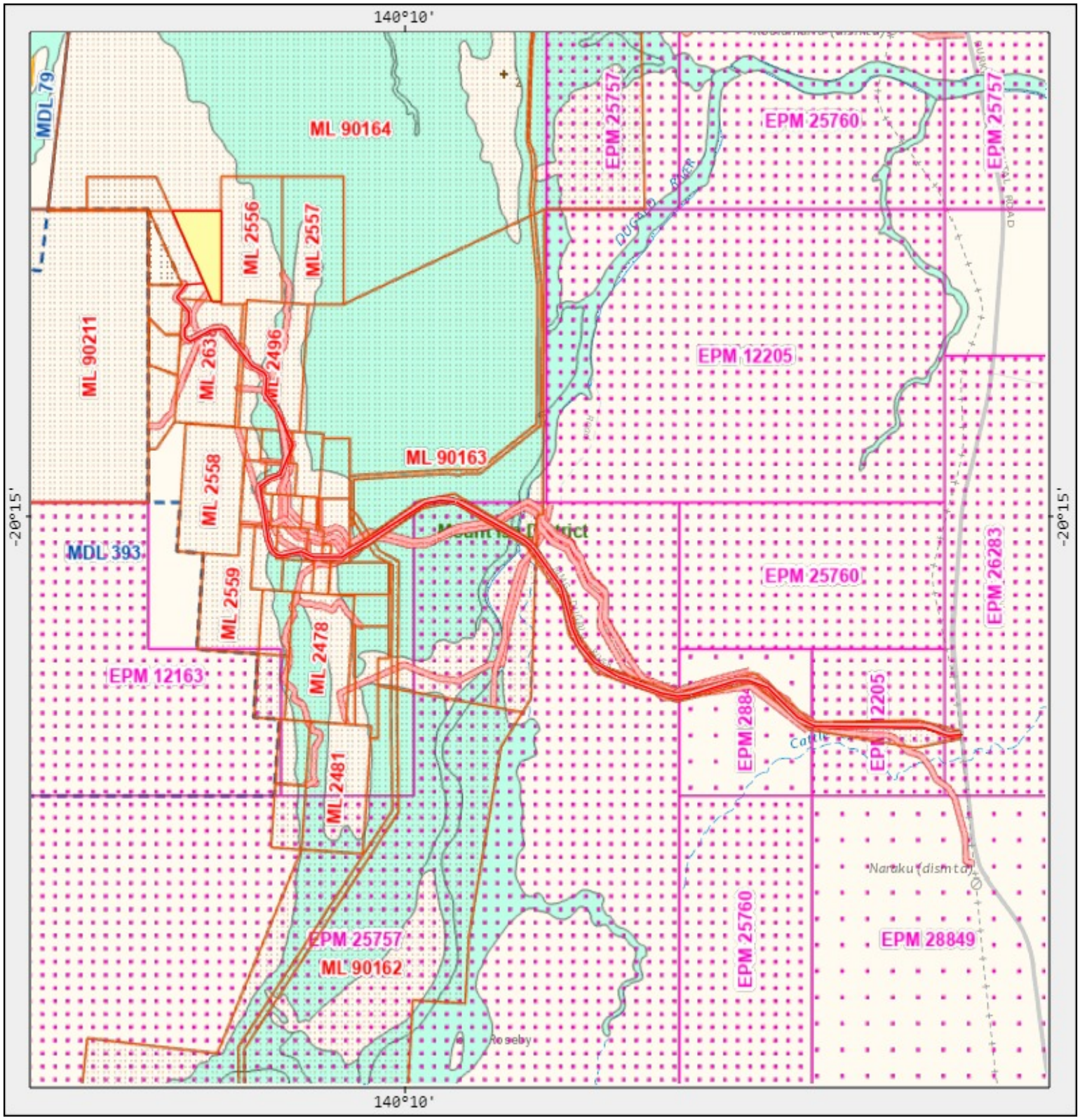
Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms.

You must keep intact the copyright notice and attribute the State of as the source of the publication.

For more information on this licence, visit http://creativecommons.org/licenses/by/3.0/au/deed.en

The information contained herein is subject to change without notice. The Queensland Government shall not be liable for technical or other errors or omissions contained herein. The reader/user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using this information.

ML Application 10011402 - Validate Constraints Map



A product of
GeoResGlobe



Legend located on next page

N

0 1 km

Scale: 1:71432

Printed at: A4

Print date: 14/12/2023

Projection: Web Mercator EPSG 102100 (3857)

For more information, visit https://georesglobe.information.qld.gov.au/help-info/Contact-us.html

Includes material © State of Queensland 2023. You are responsible for ensuring that the map is suitable for your purposes. The State of Queensland makes no representation or warranties in relation to the map contents and disclaims all liability.

Imagery includes material © CNES reproduced under licensed from Airbus DS, all rights reserved © 21AT © Earth-i, all rights reserved, © Planet Labs PBC, 2023

Queensland Government
Department of Resources

ML Application 10011402 - Validate Constraints Map

Legend

- POLYLINE-Access area le (6).zip - line
- POLYGON-Area le (18).zip - poly
- RVM category A - vegetation o sets; compliance notices; VDecs
- Queensland special wildlife reserve

Coordinated Projects - The Coordinator General

- Current EIS project
- Current IAR project
- Completed EIS project
- Completed IAR project

- MSES legally secured o set area [o set register]
- EPC application
- EPC granted
- EPM application
- EPM granted
- EPM special application
- EPM special granted
- MDL permit application
- MDL access application
- MDL permit granted
- MDL access granted
- EPG application
- EPG granted
- PGA application
- PGA granted
- EPQ application
- EPQ granted
- PSA granted
- ATP application
- ATP granted
- PCA application
- PCA granted
- Cultural Heritage designated landscape area
- Commonwealth acquisition (unavailable)
- Conservation park
- Fish habitat area A
- Forest reserve

Attribution

Esri, Geoscience Australia, NASA, NGA, USGS

Department of Resources, Dept.of Environment and Science, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS

© State of Queensland (Department of Resources) 2023

© State of Queensland (Department of Environment and Science) 2022

© State of Queensland (State Development, Infrastructure, Local Government and Planning) 2022

© State of Queensland (Aboriginal and Torres Strait Islander Partnerships) 2022

ML Application 10011402 - Validate Constraints Map

Legend

- National park
- Scienti c purposes reserve
- Torres Strait protection zone
- World heritage area
- Commonwealth acquisition (constrained)
- Coordinated conservation area
- DAF research site
- Endangered regional ecosystem
- Fish habitat area B
- National heritage list
- Nature refuge
- Priority agricultural area
- Priority living area
- Queensland marine park
- Regional open space system
- Reserve
- Resources reserve
- State development area
- State forest
- State forest feature protection
- State forest park
- State forest scienti c area
- Forest consent area
- Forest entitlement area A
- Forest management area
- Quarry resource
- Quarry resource access
- Plantation licence area
- Timber reserve
- State heritage place
- SCL criteria zone
- SCL criteria sub-zone
- SCL trigger map
- SEA

ML Application 10011402 - Validate Constraints Map

Legend

- SEA-designated precinct
- Surat Basin transitional area
- Wild rivers designated urban management area
- Wild rivers oodplain management area
- Wild rivers high preservation area
- Wild rivers nominated waterway
- Wild rivers preservation area
- Wild rivers special oodplain management area
- Wild rivers sub-artesian management area
- OEP application
- OEP granted
- ML infrastructure permit application
- ML infrastructure surface area application
- ML infrastructure access application
- ML infrastructure permit granted
- ML infrastructure surface area granted
- ML infrastructure access granted
- PPL application area
- PPL granted area
- PPL application centre line
- PPL granted centre line
- PFL application
- PFL granted
- MC permit application
- MC access application
- MC permit granted
- MC access granted
- ML permit application
- ML surface area application
- ML access application
- ML permit granted
- ML surface area granted
- ML surface restricted land granted
- ML access granted

ML Application 10011402 - Validate Constraints Map

Legend



ML Application 10011402 - Validate Constraints Map

Legend



TENEMENT BOUNDARY, SURFACE AREA AND ACCESS DESCRIPTION
DUGALD RIVER NORTHEAST MLA

MLA Access Description

The access description for the Dugald River Northeast MLA commences at a point on the Bourke Developmental Road at co-ordinates (-20.27474°, 140.23647°).

From the commencement point, the centreline of the access proceeds: -

- At a bearing of 263 degrees for approximately 93m, then -
- At a bearing of 274 degrees for approximately 67m, then -
- At a bearing of 288 degrees for approximately 35m, then -
- At a bearing of 297 degrees for approximately 9m, then -
- At a bearing of 291 degrees for approximately 29m, then -
- At a bearing of 284 degrees for approximately 36m, then -
- At a bearing of 279 degrees for approximately 71m, then -
- At a bearing of 272 degrees for approximately 73m, then -
- At a bearing of 270 degrees for approximately 17m, then -
- At a bearing of 270 degrees for approximately 87m, then -
- At a bearing of 269 degrees for approximately 117m, then -
- At a bearing of 275 degrees for approximately 37m, then -
- At a bearing of 285 degrees for approximately 118m, then -
- At a bearing of 291 degrees for approximately 29m, then -
- At a bearing of 302 degrees for approximately 67m, then -
- At a bearing of 311 degrees for approximately 19m, then -
- At a bearing of 314 degrees for approximately 87m, then -
- At a bearing of 315 degrees for approximately 26m, then -
- At a bearing of 306 degrees for approximately 73m, then -
- At a bearing of 299 degrees for approximately 10m, then -
- At a bearing of 290 degrees for approximately 43m, then -
- At a bearing of 279 degrees for approximately 132m, then -
- At a bearing of 272 degrees for approximately 53m, then -
- At a bearing of 261 degrees for approximately 81m, then -
- At a bearing of 257 degrees for approximately 80m, then -
- At a bearing of 255 degrees for approximately 68m, then -
- At a bearing of 258 degrees for approximately 49m, then -
- At a bearing of 267 degrees for approximately 43m, then -
- At a bearing of 277 degrees for approximately 89m, then -
- At a bearing of 286 degrees for approximately 122m, then -
- At a bearing of 288 degrees for approximately 1m, then -
- At a bearing of 288 degrees for approximately 73m, then -
- At a bearing of 293 degrees for approximately 48m, then -
- At a bearing of 298 degrees for approximately 16m, then -
- At a bearing of 303 degrees for approximately 52m, then -
- At a bearing of 307 degrees for approximately 7m, then -
- At a bearing of 313 degrees for approximately 75m, then -
- At a bearing of 319 degrees for approximately 59m, then -
- At a bearing of 324 degrees for approximately 42m, then -
- At a bearing of 330 degrees for approximately 15m, then -
- At a bearing of 337 degrees for approximately 66m, then -
- At a bearing of 343 degrees for approximately 3m, then -

- At a bearing of 348 degrees for approximately 55m, then -
- At a bearing of 343 degrees for approximately 57m, then -
- At a bearing of 332 degrees for approximately 46m, then -
- At a bearing of 324 degrees for approximately 60m, then -
- At a bearing of 322 degrees for approximately 25m, then -
- At a bearing of 322 degrees for approximately 30m, then -
- At a bearing of 317 degrees for approximately 16m, then -
- At a bearing of 311 degrees for approximately 37m, then -
- At a bearing of 305 degrees for approximately 49m, then -
- At a bearing of 298 degrees for approximately 227m, then -
- At a bearing of 298 degrees for approximately 64m, then -
- At a bearing of 296 degrees for approximately 415m, then -
- At a bearing of 289 degrees for approximately 100m, then -
- At a bearing of 282 degrees for approximately 13m, then -
- At a bearing of 272 degrees for approximately 140m, then -
- At a bearing of 264 degrees for approximately 73m, then -
- At a bearing of 254 degrees for approximately 48m, then -
- At a bearing of 246 degrees for approximately 43m, then -
- At a bearing of 239 degrees for approximately 42m, then -
- At a bearing of 237 degrees for approximately 50m, then -
- At a bearing of 238 degrees for approximately 60m, then -
- At a bearing of 241 degrees for approximately 68m, then -
- At a bearing of 248 degrees for approximately 95m, then -
- At a bearing of 245 degrees for approximately 52m, then -
- At a bearing of 237 degrees for approximately 161m, then -
- At a bearing of 224 degrees for approximately 121m, then -
- At a bearing of 265 degrees for approximately 76m, then -
- At a bearing of 271 degrees for approximately 85m, then -
- At a bearing of 283 degrees for approximately 90m, then -
- At a bearing of 303 degrees for approximately 89m, then -
- At a bearing of 304 degrees for approximately 47m, then -
- At a bearing of 296 degrees for approximately 47m, then -
- At a bearing of 282 degrees for approximately 49m, then -
- At a bearing of 269 degrees for approximately 43m, then -
- At a bearing of 259 degrees for approximately 38m, then -
- At a bearing of 261 degrees for approximately 35m, then -
- At a bearing of 273 degrees for approximately 39m, then -
- At a bearing of 288 degrees for approximately 94m, then -
- At a bearing of 300 degrees for approximately 129m, then -
- At a bearing of 322 degrees for approximately 31m, then -
- At a bearing of 337 degrees for approximately 31m, then -
- At a bearing of 345 degrees for approximately 28m, then -
- At a bearing of 333 degrees for approximately 32m, then -
- At a bearing of 345 degrees for approximately 41m, then -
- At a bearing of 351 degrees for approximately 45m, then -
- At a bearing of 356 degrees for approximately 344m, then -
- At a bearing of 348 degrees for approximately 42m, then -
- At a bearing of 347 degrees for approximately 39m, then -
- At a bearing of 346 degrees for approximately 68m, then -
- At a bearing of 9 degrees for approximately 159m, then -
- At a bearing of 54 degrees for approximately 87m, then -
- At a bearing of 61 degrees for approximately 73m, then -
- At a bearing of 72 degrees for approximately 233m, then -
- At a bearing of 81 degrees for approximately 458m, then -
- At a bearing of 61 degrees for approximately 89m, then -

- At a bearing of 42 degrees for approximately 90m, then -
- At a bearing of 20 degrees for approximately 96m, then -
- At a bearing of 11 degrees for approximately 103m, then -
- At a bearing of 26 degrees for approximately 97m, then -
- At a bearing of 43 degrees for approximately 96m, then -
- At a bearing of 25 degrees for approximately 91m, then -
- At a bearing of 333 degrees for approximately 94m, then -
- At a bearing of 337 degrees for approximately 623m, then -
- At a bearing of 318 degrees for approximately 211m, then -
- At a bearing of 331 degrees for approximately 75m, then -
- At a bearing of 2 degrees for approximately 67m, then -
- At a bearing of 2 degrees for approximately 76m, then -
- At a bearing of 23 degrees for approximately 211m, then -
- At a bearing of 12 degrees for approximately 226m, then -
- At a bearing of 11 degrees for approximately 108m, then -
- At a bearing of 349 degrees for approximately 102m, then -
- At a bearing of 326 degrees for approximately 101m, then -
- At a bearing of 299 degrees for approximately 211m, then -
- At a bearing of 295 degrees for approximately 119m, then -
- At a bearing of 295 degrees for approximately 108m, then -
- At a bearing of 305 degrees for approximately 117m, then -
- At a bearing of 305 degrees for approximately 103m, then -
- At a bearing of 318 degrees for approximately 95m, then -
- At a bearing of 333 degrees for approximately 100m, then -
- At a bearing of 315 degrees for approximately 99m, then -
- At a bearing of 315 degrees for approximately 67m, then -
- At a bearing of 315 degrees for approximately 98m, then -
- At a bearing of 310 degrees for approximately 96m, then -
- At a bearing of 310 degrees for approximately 388m, then -
- At a bearing of 310 degrees for approximately 237m, then -
- At a bearing of 324 degrees for approximately 105m, then -
- At a bearing of 325 degrees for approximately 97m, then -
- At a bearing of 319 degrees for approximately 101m, then -
- At a bearing of 291 degrees for approximately 88m, then -
- At a bearing of 267 degrees for approximately 514m, then -
- At a bearing of 257 degrees for approximately 103m, then -
- At a bearing of 245 degrees for approximately 61m, then -
- At a bearing of 245 degrees for approximately 99m, then -
- At a bearing of 245 degrees for approximately 97m, then -
- At a bearing of 235 degrees for approximately 92m, then -
- At a bearing of 263 degrees for approximately 84m, then -
- At a bearing of 311 degrees for approximately 88m, then -
- At a bearing of 341 degrees for approximately 153m, then -
- At a bearing of 2 degrees for approximately 203m, then -
- At a bearing of 27 degrees for approximately 98m, then -
- At a bearing of 46 degrees for approximately 87m, then -
- At a bearing of 8 degrees for approximately 74m, then -
- At a bearing of 2 degrees for approximately 80m, then -
- At a bearing of 333 degrees for approximately 78m, then -
- At a bearing of 316 degrees for approximately 85m, then -
- At a bearing of 296 degrees for approximately 601m, then -
- At a bearing of 2 degrees for approximately 595m, then -
- At a bearing of 34 degrees for approximately 84m, then -
- At a bearing of 53 degrees for approximately 59m, then -
- At a bearing of 38 degrees for approximately 62m, then -

- At a bearing of 19 degrees for approximately 70m, then -
- At a bearing of 48 degrees for approximately 77m, then -
- At a bearing of 80 degrees for approximately 61m, then to a point on the Western boundary of the Dugald River Northeast MLA at co-ordinates (-20.22356°, 140.14149°).

External Boundary Description

Commencing from the NW corner point of the Dugald River Northeast MLA, also being a point on the eastern boundary of ML 90212 (-20.21534°, 140.13741°) then-

- At an approximate bearing of 90 degrees for approx. 649m, along the southern boundary of ML 90164 (-20.21534, 140.14362) then-
- At an approximate bearing of 180 degrees for approx. 1142m, along the western boundary of ML 2556 (-23.22566, 140.14362) then –
- At an approximate bearing of 274 degrees, for approx. 118m along the northern boundary of ML 2638 (-20.22559, 140.14249) then –
- At an approximate bearing of 335 degrees, for approx. 1252m along the eastern boundary of ML 90212, back to the point of commencement.

Notes - The total area of the Dugald River Northeast MLA is approximately 43.5 Ha
- The surface area of the Dugald River Northeast MLA is - whole
- The access width is 30m
- All listed bearings reference MGA2020

Figure 1 below is a locality sketch showing the location of the Dugald River Project,

Figure 2 below is a sketch showing the location of the existing Dugald River project tenements and the Dugald River Northeast MLA.

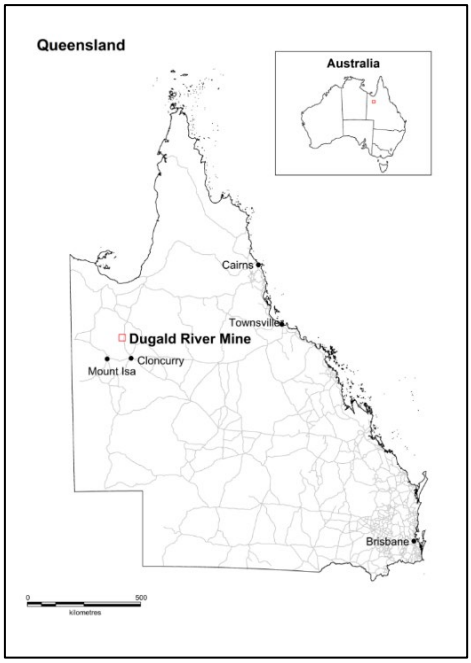


Figure 1 - Locality map of the Dugald River Mine

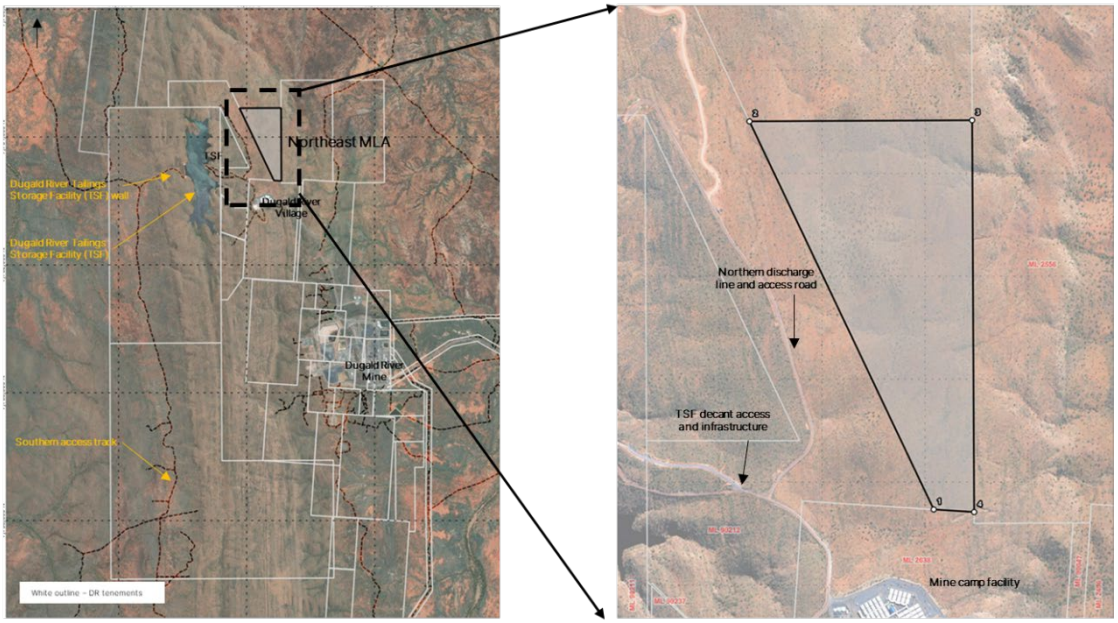


Figure 2 - Aerial image of the Northeast MLA boundary

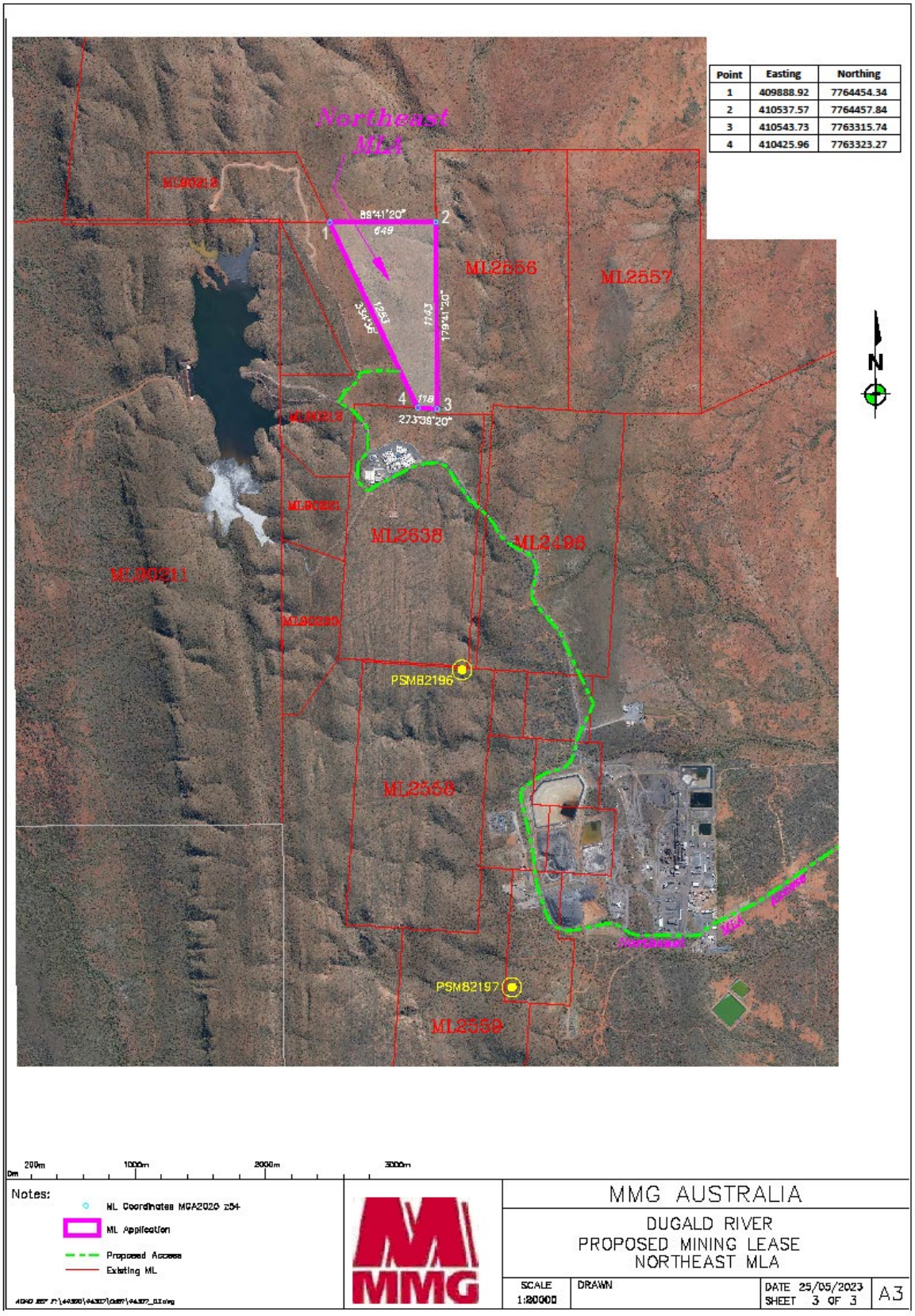


Figure 3: Northeast MLA - meets and bound sketch

MMG Dugald River Pty Ltd

Dugald River Mine

Project Development Plan

For period: Five years from grant.

Company details: MMG Dugald River Pty Ltd, Regional Office, Development Road, Cloncurry QLD/ [redacted] Sept 2023

Table of Contents

1. Current operations and Justification 3
1.1 Operational overview of current activities 3
1.3 Public Interest 11
1.4 Purpose of development plan 11
1.5 Reasons why the plan is considered appropriate. 11
2. Geology and resource information 12
2.1 Geological Summary 12
2.1.1 Local Geology 12
2.2.1 Location and estimation of mineral resources 15
2.3 Mineral resource estimation standards and procedures 18
3. Mine Planning and Compliance 19
3.1 Nature and extent of operations on an annual basis 19
3.2 Compliance with the current development plan 22
3.2.1 Compliance with the current development plan. 22
3.2.2 Significant changes from the current plan 22
4. Maps and spatial data 22
4.1 Map and spatial data requirements 22

List of Figures

Figure 1 – Locality map of the Dugald River Mine 3
Figure 2 – Aerial image of the Dugald River Held Mining Leases 6
Figure 3 – Aerial view of the Dugald River existing tenements and the three proposed ML application areas 8
Figure 4 – Map of the Dugald River ML's and Underground working in "magenta". 10
Figure 5 – Cross section 14110mN (local Dugald River mine grid) of the South Mine looking north – 1% zinc composite wireframes (yellow) with 7% zinc composite wireframes (red), development (grey), limestone contact (blue), calc-silicate contact (purple), mafic porphyry contact (green) with topography (grey). 13
Figure 6 – Cross section 14960mN (local Dugald River mine grid) of the North Mine looking north – 1% zinc composite wireframes (yellow) with 7% zinc composite wireframes (red), development (grey), limestone contact (blue), calc-silicate contact (purple), mafic porphyry contact (green) with topography (grey). 14
Figure 7 – Aerial view of DR ML's and ore body outline in "green" 16
Figure 8 – Long section (Looking West) of 2022 Resource Classification for the Dugald River zinc wireframe (Measured – green, Indicated- yellow and Inferred -red) 17
Figure 9 – Long section (looking West) of asbuilt mine and planned mine design. Planned stopes to 5 years are coloured by year (see legend), with completed stopes (dark grey), planned stopes of Inferred Resource (pale grey polygons), completed development (textured grey polygons), planned development (smoothed grey polygons) and vent and surface lines (blue and red traces). 21

List of Tables

Table 1 – Currently granted resource authorities included in Dugald River Project. 4
Table 2 – Dugald River 2022 Mineral Resource Estimates 18
Table 3 – Schedule of Mining Activity for the Dugald River MLs during the IDP period 19

1. Current operations and Justification

1.1 Operational overview of current activities

MMG Dugald River Pty Ltd (MMG) currently own and operate the Dugald Rive Mine, which consists of 1 EPM, 1 MDL and 40 individual ML's (Table 1). The mine is located approximately 65km northwest of Cloncurry, in North-West Queensland (Figure 1). Table 1 provides details of the current Dugald River Resource Authorities.

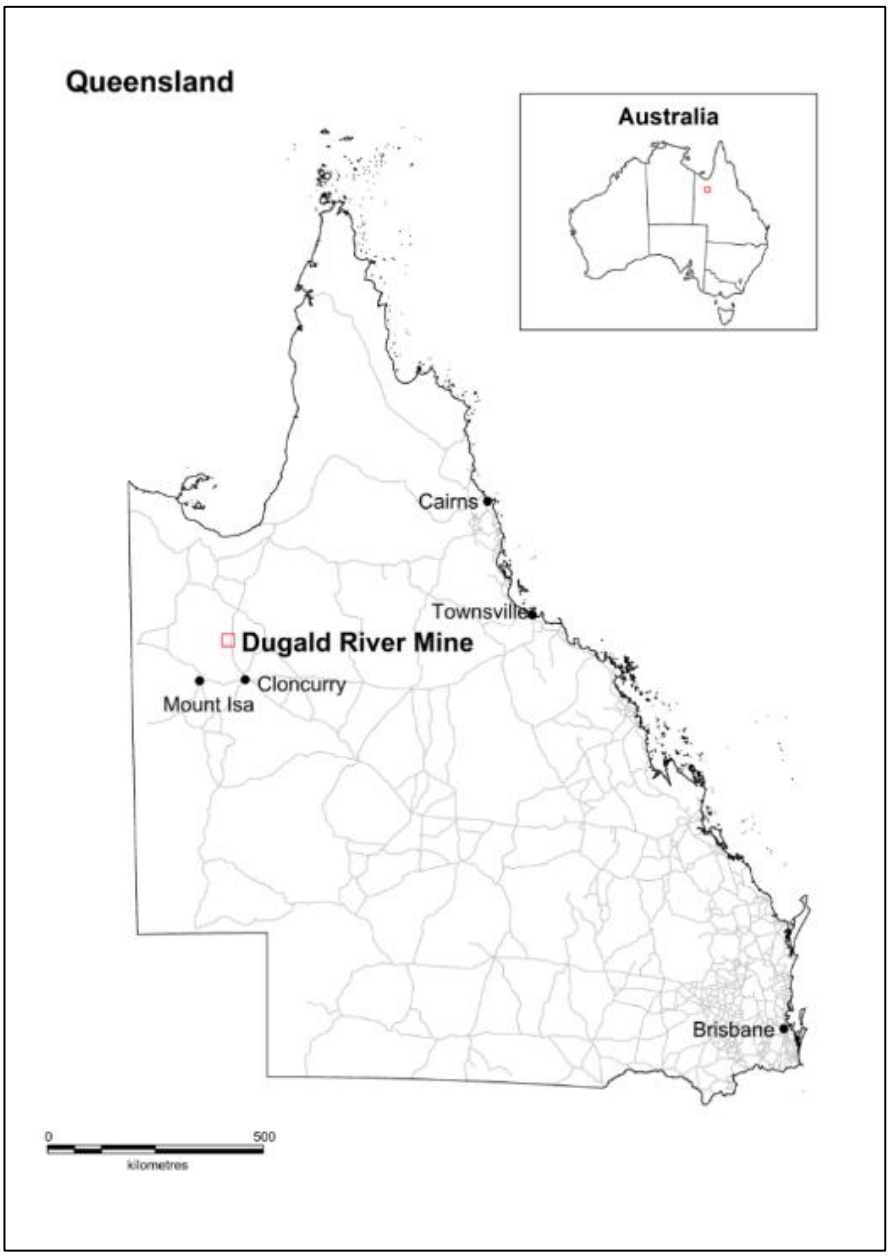


Figure 1 – Locality map of the Dugald River Mine

This IDP is lodged in support of the application for MLs 100359, 100382 and 100383. They will form part of the broader Dugald River Project which includes the resources authorities listed in Table 1 below.

Table 1 – Currently granted resource authorities included in Dugald River Project.

Lease	Lease Name	Status	Grant Date	Expiry Date	Area
EPM 12163	Knapdale	Granted	27.06.2003	26.06.2025	3 s/b
MDL 79	North Knapdale	Granted	30.09.1991	30.09.2026	227.5 ha
ML 2467	Dugald River 1	Granted	22.11.1973	30.11.2028	16.21 ha
ML 2468	Dugald River 2	Granted	15.11.1973	30.11.2028	16.21 ha
ML 2469	Dugald River 3	Granted	15.11.1973	30.11.2028	16.2 ha
ML 2470	Dugald River 4	Granted	22.11.1973	30.11.2028	16.19 ha
ML 2471	Dugald River 5	Granted	22.11.1973	30.11.2028	16.19 ha
ML 2477	Dugald 6	Granted	06.12.1973	31.12.2036	32.51 ha
ML 2478	Dugald 7	Granted	06.12.1973	31.12.2036	129.5 ha
ML 2479	Dugald 8	Granted	06.12.1973	31.12.2036	32.37 ha
ML 2480	Dugald 9	Granted	06.12.1973	31.12.2036	32.37 ha
ML 2481	Dugald 10	Granted	06.12.1973	31.12.2036	129.5 ha
ML 2482	Dugald 11	Granted	06.12.1973	31.12.2036	32.37 ha
ML 2496	Dugald River 6	Granted	17.07.1989	31.12.2036	129.5 ha
ML 2497	Dugald River 7	Granted	17.07.1989	31.12.2036	8.094 ha
ML 2498	Dugald River 8	Granted	17.07.1989	31.12.2036	29.06 ha
ML 2499	Dugald River 9	Granted	06.12.1973	31.12.2036	28.08 ha
ML 2500	Dugald River 10	Granted	17.07.1989	31.12.2036	28.35 ha
ML 2501	Dugald River 11	Granted	06.12.1973	31.12.2036	30.4 ha
ML 2502	Dugald River 12	Granted	06.12.1973	31.12.2036	31.64 ha
ML 2556	Clandestine 7	Granted	24.01.1974	31.01.2033	127.7 ha
ML 2557	Clandestine 8	Granted	24.01.1974	31.01.2033	129.2 ha
ML 2558	Clandestine 13	Granted	24.01.1974	31.01.2033	128.5 ha
ML 2559	Clandestine 14	Granted	24.01.1974	31.01.2033	98.71 ha
ML 2596	Dugald River 15	Granted	10.01.1974	31.01.2033	19 ha
ML 2599	Dugald River 57	Granted	24.01.1974	31.01.2033	44.77 ha
ML 2601	Dugald River 16	Granted	24.01.1974	31.01.2033	28.51 ha
ML 2638	Knapdale	Granted	20.09.1973	30.09.2035	122.5 ha
ML 2684	Dugald River 12	Granted	05.08.1976	31.01.2033	1.049 ha
ML 2685	Dugald River 13	Granted	05.08.1976	31.01.2033	2.51 ha
ML 7496	Dugald	Granted	30.07.1992	31.07.2032	24.8 ha
ML 90047	Knapdale 2	Granted	25.01.1995	31.01.2029	8.3620 ha
ML 90049	Dugald South 7	Granted	25.01.1995	31.12.2028	0.3088 ha
ML 90050	Dugald South 8	Granted	25.01.1995	31.12.2028	0.2174 ha
ML 90051	Scanlan 6	Granted	25.01.1995	31.01.2029	9.5870
ML 90211	Dugald TSF	Granted	04.10.2012	31.10.2033	643 ha
ML 90212	Dugald TSF1	Granted	04.10.2012	31.10.2033	100.5130 ha
ML 90213	Dugald TSF 2	Granted	04.10.2012	31.10.2033	31.6854 ha
ML 90218	Dugald WPIPE	Granted	13.11.2012	30.11.2033	43.6212 ha
ML 90220	Dugald PLINE	Granted	04.02.2013	28.02.2034	507.9494
ML 90230	DACCESS	Granted	04.10.2012	31.10.2033	120.8265 ha
ML 90237	Dugald TXS3	Granted	15.07.2013	31.07.2034	20.5025 ha

MMG owns and operates the Dugald River Mine on one of the largest and highest-grade known deposits of zinc, lead and silver in the world, located in north-west Queensland, approximately 65 kilometres north-west of Cloncurry. As reported in the 2022 MROR report, the deposit has a Mineral Resource of 61 million tonnes at 11.9% zinc, 1.1% lead and 23g/t silver.

The Dugald River Mine consists of an underground mine accessed by two declines (north and south). The operation was commissioned ahead of schedule and under budget with the first trucking of zinc concentrate occurring on 8 November 2017. Current underground development extends to approximately 650m below surface with the Inferred Resource more than 1km below surface.

The leases for the Dugald River Mine include road access, water pipeline and powerline leases to provide this critical infrastructure to the mine site. Concentrate produced from the mine is transported in containers by road train to a rail heading in Cloncurry where it is transported by rail to the port of Townsville for export or to a customer in Townsville. Some lead concentrate is transported by road to a customer in Mt Isa.

The operation has produced between 170,000 – 180,000 tonnes of zinc in concentrate per annum since operations commenced, with the milestone of 1 million tonnes of zinc concentrate achieved in November 2020.

Near-mine surface and underground drilling aims to extend the current resource base at depth. Extension of the known inferred mineral resource may allow for extension of mine life and may potentially support higher mining rates.

Ongoing exploration activities for Zn-Pb-Ag and Cu prospects on Dugald River EPM, MDL and mining leases, will provide further geological knowledge of the region, and ultimately lead to major mineral discoveries and therefore subsequent mineral extraction. These lease areas include some historical small-scale mining activities pre-dating, by many decades, the MMG and Dugald River Mine development.

In May 2021, applications to renew ML's 2477 to 2482 and 2496 to 2502 were lodged with the Department of Resources (DoR). An Initial Development Plan (IDP) for the Dugald River Project was lodged with DOR in accordance with the IDP transition provisions, to support the renewal applications.

The IDP was approved 10 December 2021, commencing 1 January 2022.

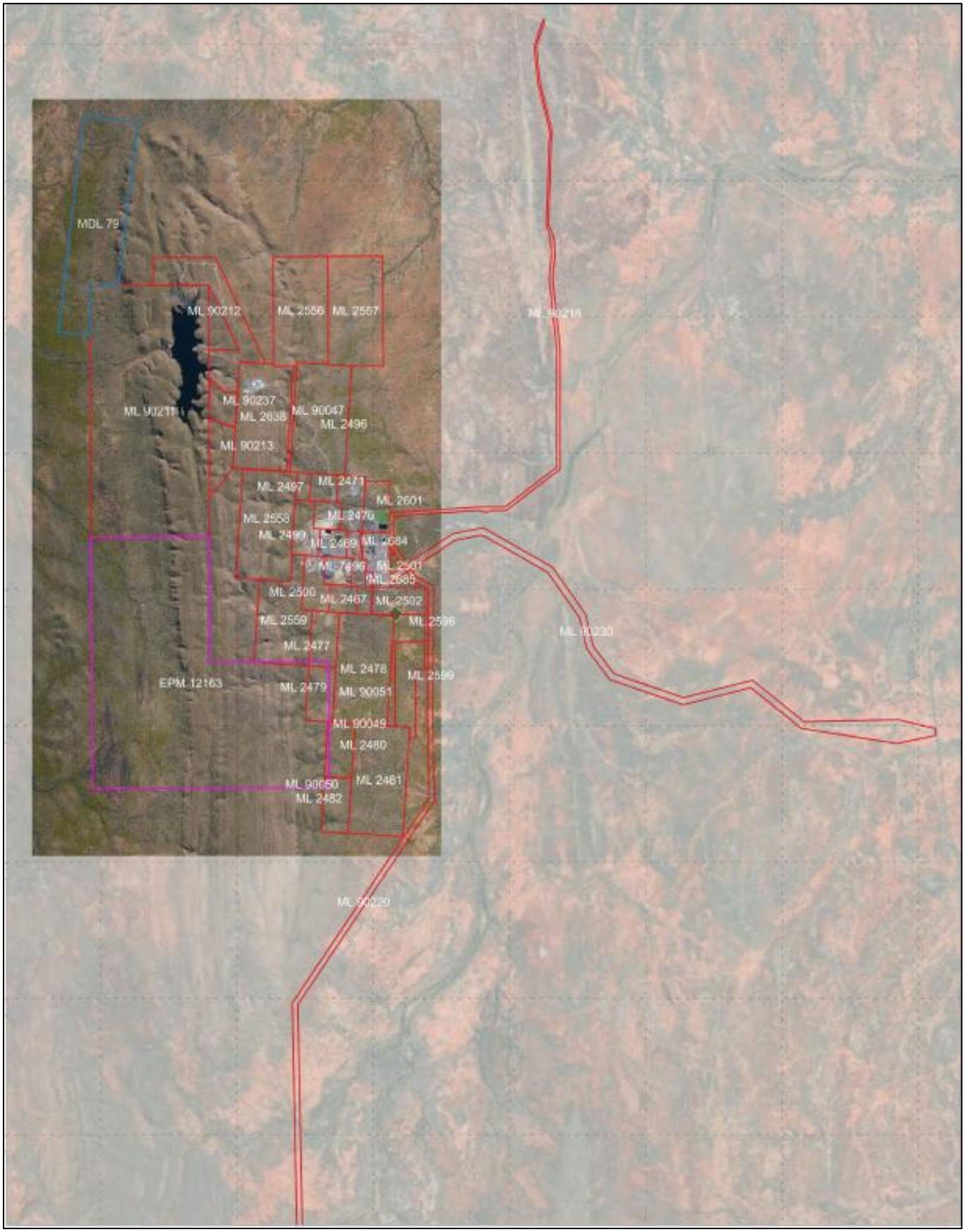


Figure 2 – Aerial image of the Dugald River Held Mining Leases

As stated, MMG has elected to apply for 3 additional Mining Lease Applications (MLAs). These will secure necessary ground to install required infrastructure for the project. The application areas include: -

- The Dugald River Southwest MLA (Minerals) (1075.40 Ha)
- The Dugald River Northwest MLA (Infrastructure) (21.13 Ha)
- The Dugald River Northeast MLA (Infrastructure) (43.53 Ha)

Dugald River Southwest MLA (ML100383)
Permit Type: Minerals - Prescribed Threshold Critical Minerals
Prescribed Purpose: Ancillary Power Generation, Road / access / right of way
Prescribed Minerals: Copper ore, gold, silver ore, lead ore, zinc ore, and cobalt ore

- Opportunity to optimise and possibly expand the proposed Renewable Wind Farm Project turbine locations and associated tracks and infrastructure.
- Maintain access to the road along the western boundary of the lease to the TSF allowing second access.
- Continue geological exploration activities across the ML to further build on known Zinc-Lead and Copper prospect targets.

Dugald River Northwest MLA (ML100359)
Permit Type: Infrastructure (Minerals)
Prescribed Purpose: Environmental dam, Road / access / right of way

- To support operational capacity of the northern discharge TSF line for additional catchment dams and associated access tracks and infrastructure
- To support development of access tracks for the site camp facility
- To support development of firebreak management of the camp facility

Dugald River Northeast MLA (ML100382)
Permit Type: Infrastructure (Minerals)
Prescribed Purpose: Living quarters / camp

- To support development of access tracks for the site camp facility
- To support development of firebreak management of the camp facility

The IDP lodged in support of the above applications essentially mirrors, the currently approved development plan but has been amended to include information relevant to the proposed MLA areas (Figure 3).

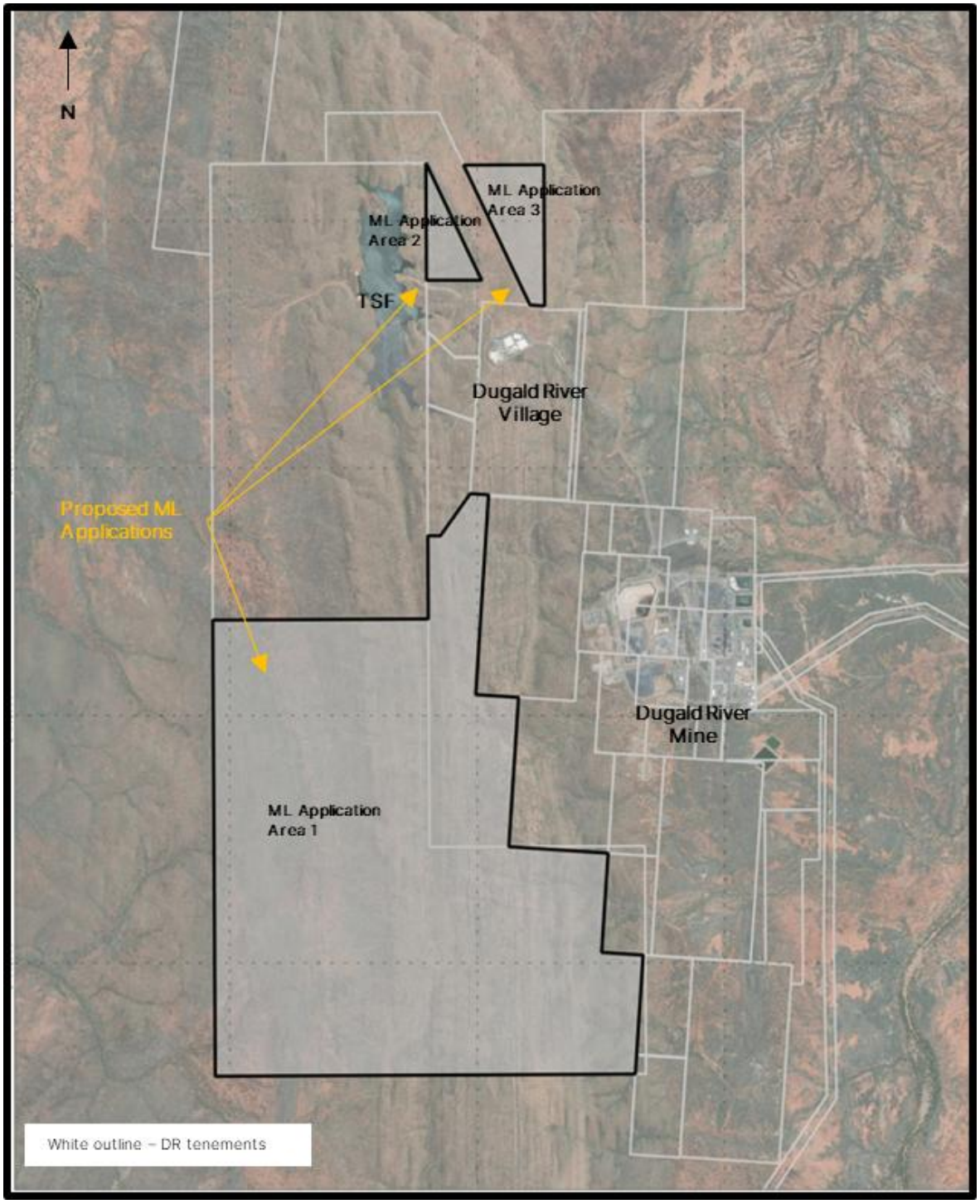


Figure 3 – Aerial view of the Dugald River existing tenements and the three proposed ML application areas

1.2 Plan period

This plan period is 5 years upon grant of the MLs. The next later development plan to be lodged after grant will incorporate these MLs into the broader project and supersede this IDP.

The Dugald River deposit consists of an underground mine accessed by two declines (north and south) (e.g. Figure 4). Ore is extracted via traditional underground stoping techniques at an annual rate of 1.8Mt. Current underground development extends around 650m below surface with the Inferred Resource reaching to more than 1km deep. The operation has produced between 170,000 – 180,000 tonnes of zinc concentrate per

annum. Based on this rate and the known resource, the Life of Mine (LOM) for Dugald River is currently planned out to 2046.

This revised development plan supports the applications for 3 new mining leases to be applied in the south-western and northern area of the Dugald River Project (Figure 3).

Dugald River Southwest MLA – Conversion of EPM12163 and adjacent vacant land parcel;

- This area does not contain any underground operations at this point.
- This area contains geological exploration targets that have been the focus as part of EPM 12163
- MMG maintains interest in the area to support ongoing renewables project optimisation and growth study options, as well as continuing exploration activities to further understand known prospects.

Dugald River Northwest MLA – N-W vacant land area;

- This area does not contain any underground operations at this point.
- This area is primarily required for necessary project infrastructure.

Dugald River Northwest MLA – N-E vacant land area;

- This area does not contain any underground operations at this point.
- This area is primarily required for necessary project infrastructure.

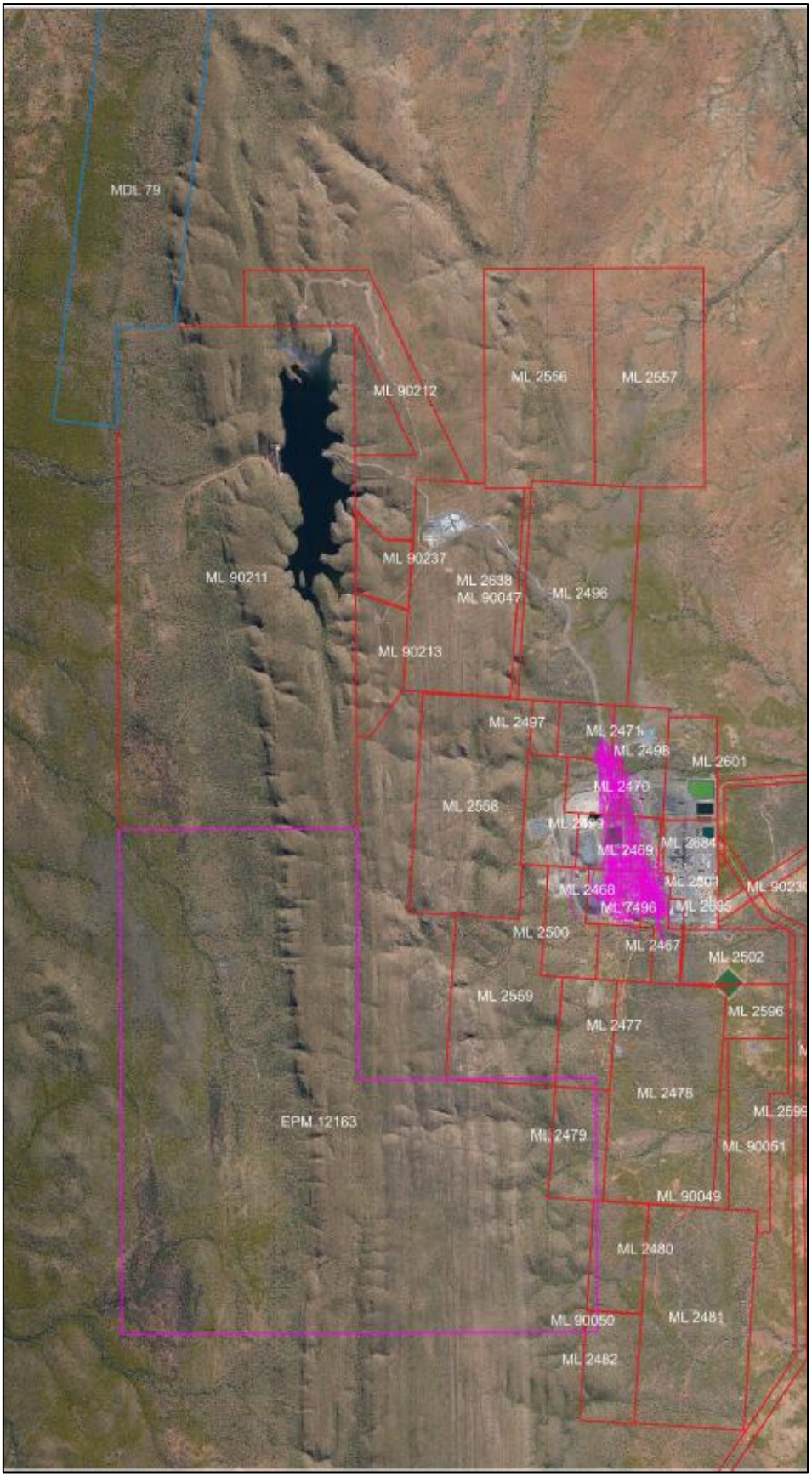


Figure 4 – Map of the Dugald River ML's and Underground working in "magenta".

1.3 Public Interest

The Dugald River operation currently employs around 800 employees and contractors on a mix of fly-in, fly-out and local residential basis.

Continued development of the Dugald River Mining operation and associated exploration and infrastructure activities to support, provide a significant benefit to the local community through direct employment in the form of site-based positions. MMG continues to promote local employment through ongoing advertisement within the local community as well as regular engagement with Cloncurry and Mt Isa businesses and councils. MMG Dugald River commitment to support local businesses will also see significant advantages through expansion and growth activities as part of the ongoing operations for the site.

MMG Dugald River is committed to the use of local suppliers ensuring the support of the local businesses and suppliers in the region.

Ongoing exploration activities of Zn-Pb-Ag and Cu-Co prospects will provide further geological knowledge of the Northwest Minerals Province, supporting the site to understand the Dugald River Mineral System. Ultimately, this work aims to support major mineral discoveries and subsequent mineral extraction, with flow on benefits from such activities for both the local communities and state.

1.4 Purpose of development plan

MMG has elected to apply for 3 additional MLAs. These will secure necessary ground to install required infrastructure for the project. The application areas include: -

- The Dugald River Southwest MLA (Minerals) (1075.40 Ha)
- The Dugald River Northwest MLA (Infrastructure) (21.13 Ha)
- The Dugald River Northeast MLA (Infrastructure) (43.53 Ha)

1.5 Reasons why the plan is considered appropriate.

MMG has been operating the Dugald River Mine since 2017 achieving annual production rates of >1.7Mt / annum at stable rates from the mine with overall Zinc production of 170-180kt annually. The sub level stoping mining method has been proved successful for the geological conditions and the required mining rates to support ongoing annual production from the mine. Site infrastructure and facilities are in place to support the operational activities of the mine.

MMG is currently reviewing options for higher mining and milling throughput rates based on recent understanding that significant growth opportunities are present for the deposit which would in turn facilitate expansion of the operation and support a >20-year mine life. It is expected that, since the deposit is open at depth, the actual mine life may be greater than this. The expansion of the mine will be based on current stoping methods (Longitudinal, Transverse and Avoca).

As part of MMG's commitment to achieving 40% reduction in emissions by 2030, Dugald River commenced a renewable energy study for the site in early 2022. This study has successfully gathered the support and endorsement of the MMG board in late 2022 and has entered into the feasibility stage in 2023. The project consists of 8 wind turbines to be installed across the Knapdale Range to the west of existing Dugald River

Operational area with additional access tracks and electrical infrastructure (powerlines and substations) to be installed to support. The proposed location of the wind turbines has been constrained to within existing Dugald River ML's and includes Dugald River Southwest MLA (ML 100383) once granted.

2. Geology and resource information

2.1 Geological Summary

2.1.1 Local Geology

The deposit is located within a 3-4 km along strike north-south trending high-strain domain named the Mount Roseby Corridor and is hosted by steeply dipping mid Proterozoic sediments of the Mary Kathleen Zone in the Eastern Succession of the Mount Isa Inlier. The host sequence is composed of the Knapdale Quartzite and the Mount Roseby Schist Group (which includes the Hanging wall calc-silicate unit, the Dugald River Slate (DRS) and the footwall argillaceous limestone/dolostone). The sequence is an interbedded package of greenschist to amphibolite grade metamorphosed carbonate and siliciclastic lithologies.

The main Dugald lode is hosted within a major N-S striking steeply west dipping shear zone which crosscuts the strike of the Dugald River Slate stratigraphy at a low angle. The lode pinches and swells in thickness along strike and to depth (Figure 5). Significant boudinage features reflect the strong structural influence to mineralisation. It is recognised that the previously modelled hanging wall and foot wall domains (1A, 2, 3, 4 and 5) are part of the main lens which anastomoses, splits and merges. All zinc and associated lead-silver mineralisation are governed by this geometry. The mineralised zone extends approximately 2.4 km in strike length and up to 1.4 km down dip.

The DRS hosts the Dugald Lode. The DRS are metasomatized and brecciated calcareous to carbonaceous slates. The shales are variably fractured, with a strong structural control to mineralisation. The lode and alteration halo crosscut the strike of the slate sequence at a low angle. The most significant zinc-lead-silver mineralisation is restricted to the breccias in the main lens with the hanging wall and footwall lenses hosting minor mineralisation. Breccia clasts are dominantly DRS. Three main mineralisation textures/types are recognised, including banded, slatey breccia, and massive breccia. The slatey and massive breccias dominate the south mine and exhibit extensive pinch and swell (Figure 5). The banded ore dominates the thinner steeply dipping northern section of the mine (Figure 6).

The mineralogy of the Dugald lode is typical of a slate-hosted base metal deposit. The main sulphides are sphalerite, pyrite, pyrrhotite and galena with minor arsenopyrite, chalcopyrite, tetrahedrite, pyrargyrite, marcasite and alabandite. The gangue within the lode is composed of quartz, muscovite, carbonates, K-Feldspar, clays, graphite, carbonaceous matter and minor amounts of calcite, albite, chlorite, rutile, barite, garnet, and fluorite.

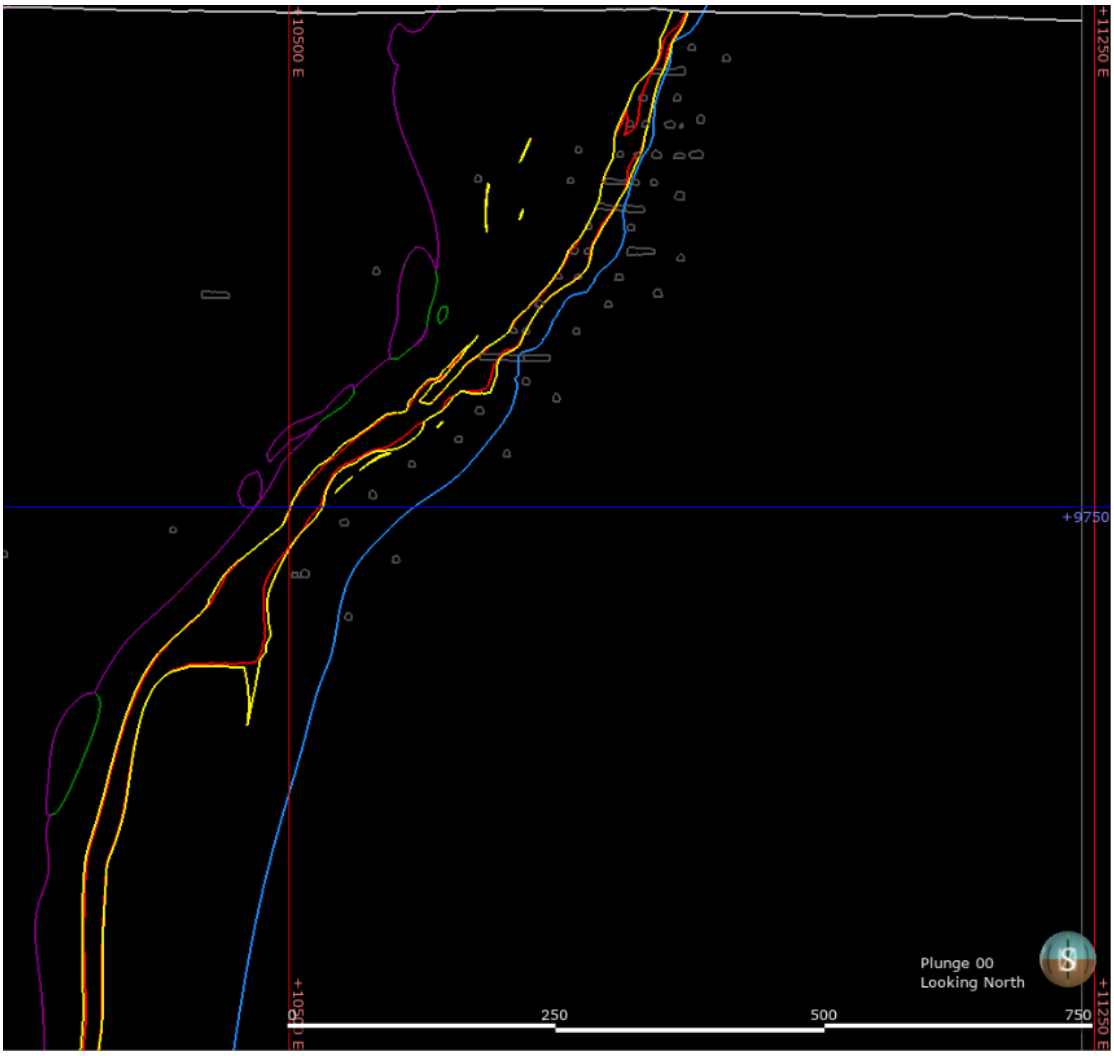


Figure 5 – Cross section 14110mN (local Dugald River mine grid) of the South Mine looking north – 1% zinc composite wireframes (yellow) with 7% zinc composite wireframes (red), development (grey), limestone contact (blue), calc-silicate contact (purple), mafic porphyry contact (green) with topography (grey).

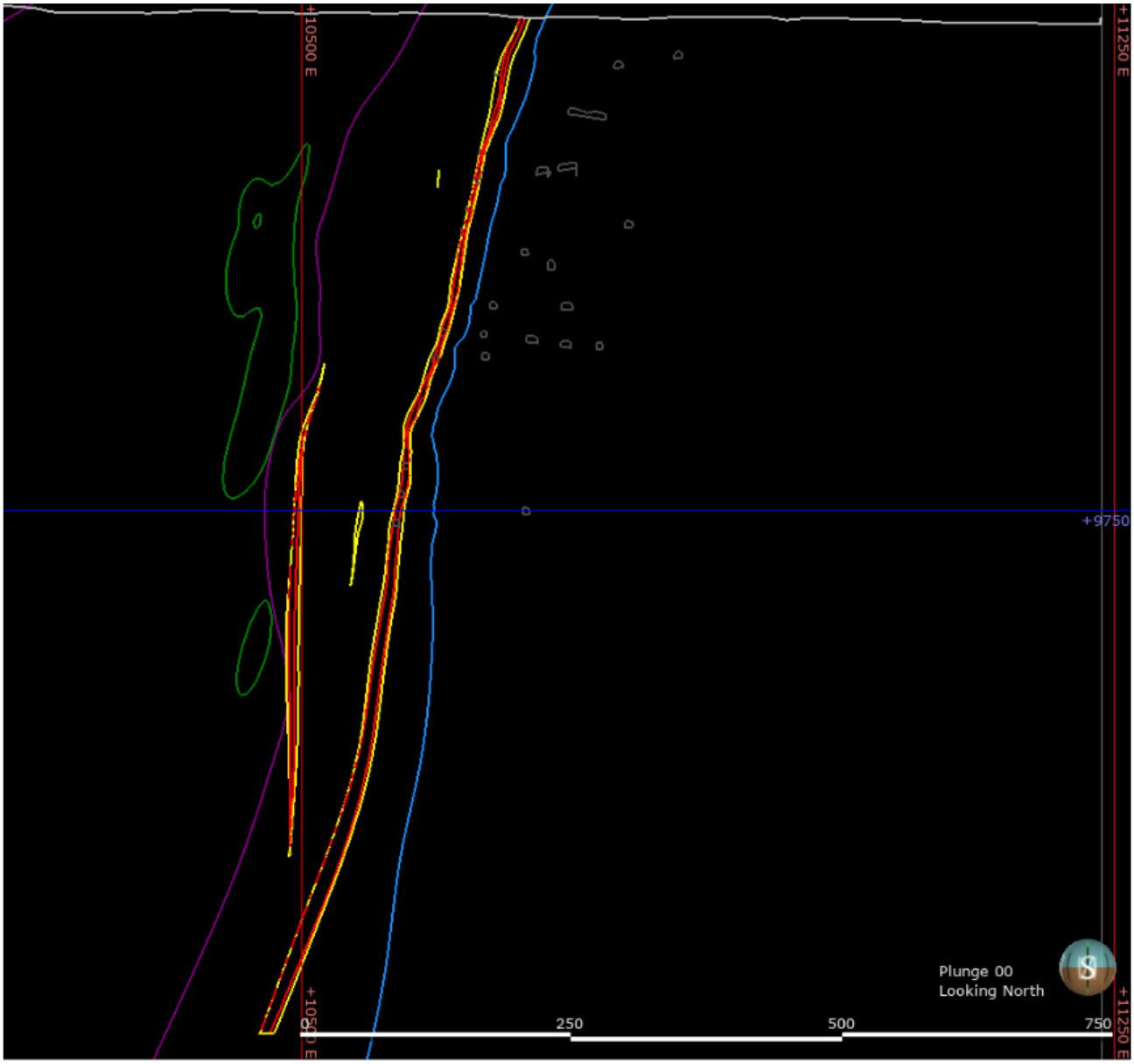


Figure 6 – Cross section 14960mN (local Dugald River mine grid) of the North Mine looking north – 1% zinc composite wireframes (yellow) with 7% zinc composite wireframes (red), development (grey), limestone contact (blue), calc-silicate contact (purple), mafic porphyry contact (green) with topography (grey).

2.2 Resource Estimation / Reserves

2.2.1 Location and estimation of mineral resources

The footprint of the Dugald River orebody covers the following ML's (Figure 7): -

- ML2496
- ML2498
- ML2499
- ML2500
- ML2501
- ML2502
- ML2471
- ML2470
- ML2469
- ML2468
- ML7496
- ML2467
- ML2477
- ML2478

Figure 8 below is a long section, looking west, of the Dugald River mineralisation lode showing blocks coloured by Kriging variance (KV) and the Measured, Indicated and Inferred wireframes used in selecting the 2022 Mineral Resource classification (Figure 8). Mineral resource estimates for Dugald River are shown in Table 2.

- Measured = green polygon
- Indicated = yellow polygon
- Inferred = red polygon

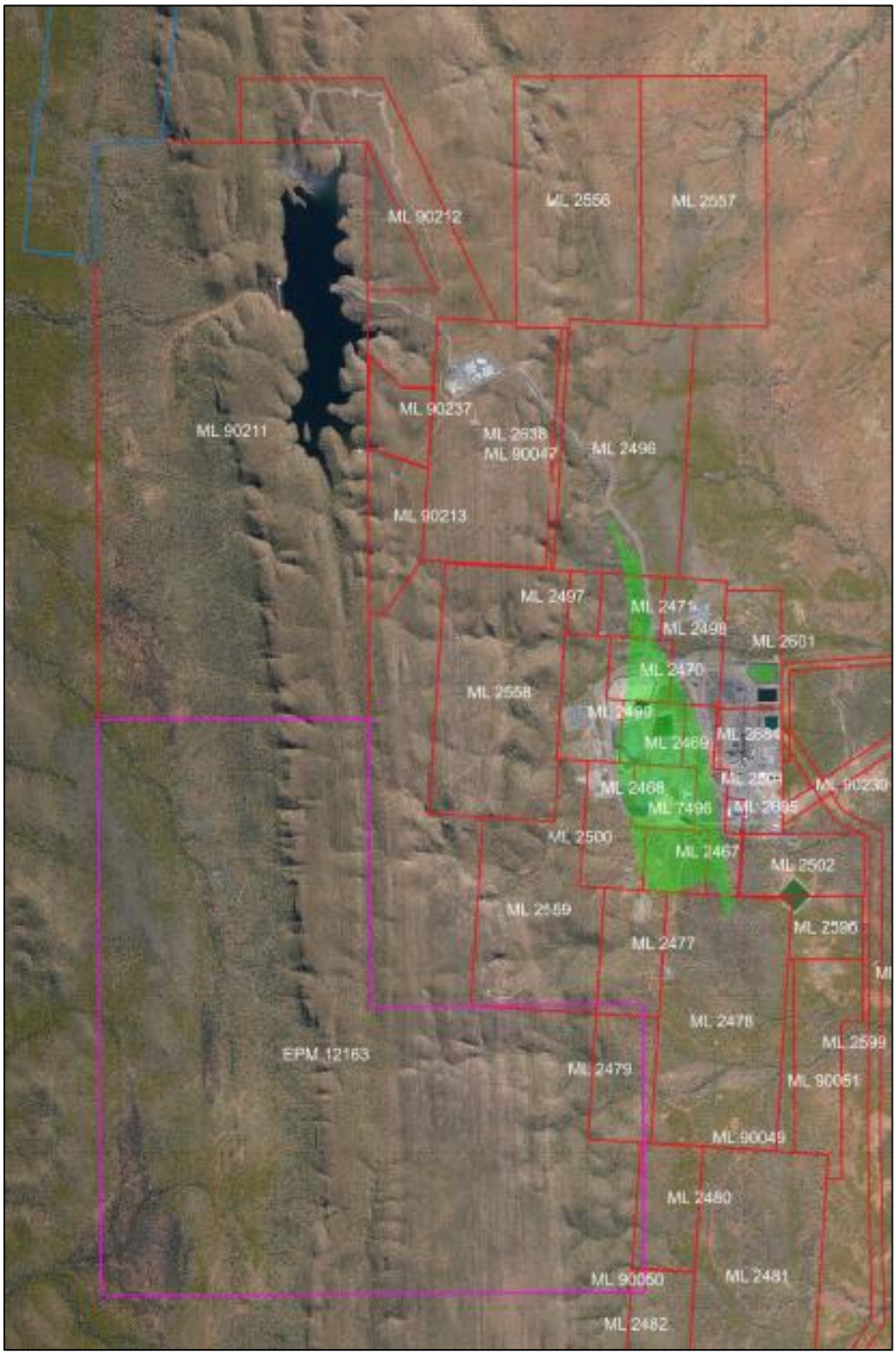


Figure 7 – Aerial view of DR ML's and ore body outline in "green"

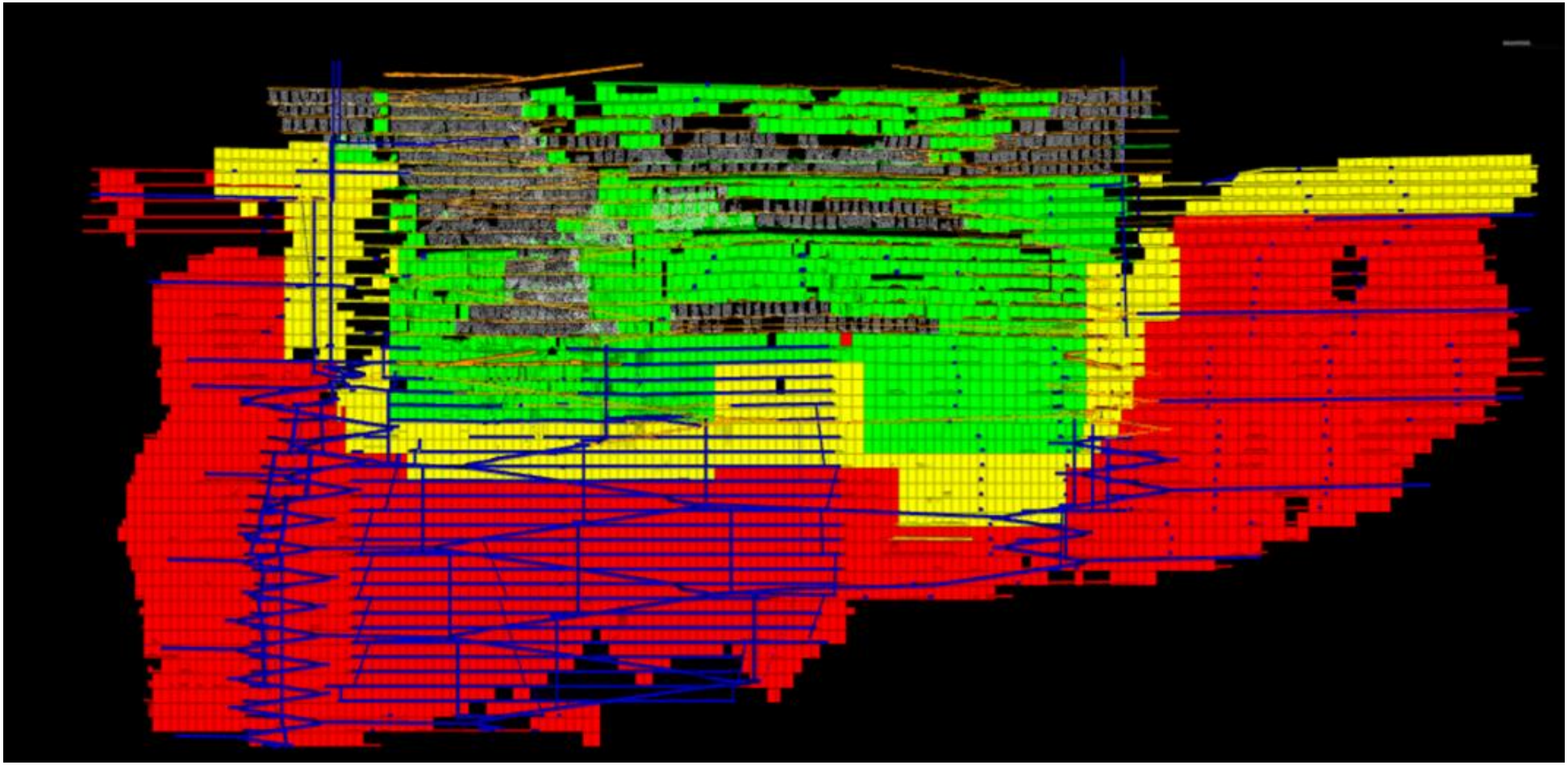


Figure 8 – Long section (Looking West) of 2022 Resource Classification for the Dugald River zinc wireframe (Measured – green, Indicated- yellow and Inferred -red)

Table 2 – Dugald River 2022 Mineral Resource Estimates

Dugald River Mineral Resource											
2022							Contained Metal				
	Tonnes (Mt)	Copper (% Cu)	Zinc (% Zn)	Lead (% Pb)	Silver (g/t Ag)	Gold (g/t Au)	Copper ('000)	Zinc ('000)	Lead ('000)	Silver (Moz)	Gold (MoZ)
Primary Zinc[1]											
Measured	12		13.5	2.2	71			1,700	260	28	
Indicated	15		12.0	0.9	16			1,800	130	7.6	
Inferred	33		11.3	0.8	8			3,800	270	8.7	
Total	**61**		**11.9**	**1.1**	**23**			**7,200**	**660**	**44**	
Stockpiles											
Measured	0.02		9.9	1.6	40			2.2	0.4	0.03	
Total	**0.02**		**9.9**	**1.6**	**40**			**2.2**	**0.4**	**0.03**	
Total Primary Zinc	**61**		**11.9**	**1.1**	**23**			**7,200**	**660**	**44**	
Primary Copper[2]											
Inferred	4.5	1.5				0.1	68				0.02
Total	**4.5**	**1.5**				**0.1**	**68**				**0.02**
Dugald River Total							**68**	**7,200**	**660**	**45**	**0.02**

[1] $145/t NSR Cut-off, in-situ (less depletion and oxide material)

[2] 1% Cu Cut-off, in-situ (less depletion and oxide material)

Figures are rounded according to JORC Code guidelines and may show apparent addition errors.

Contained metal does not imply recoverable metal

The Dugald River Northwest and the Dugald River Northeast MLAs have been applied for infrastructure purposes only at this point. There are currently no defined JORC resources within the MLA areas.

2.3 Mineral resource estimation standards and procedures

Excerpts below are referenced from the MMG Mineral Resources and Ore Reserves Statement, 30th June 2022;

Mineral Resources and Ore Reserves for MMG have been estimated as at 30 June 2022 and are reported in accordance with the guidelines in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 JORC Code) and Chapter 18 of the Listing Rules. Mineral Resources and Ore Reserves tables are provided on pages 4 to 8, which include the 30 June 2022 and 30 June 2021 estimates for comparison. The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources that have been converted to Ore Reserves. All supporting data are provided within the Technical Appendix, available on the MMG website.

Mineral Resources and Ore Reserves information in this statement have been compiled by Competent Persons (as defined by the 2012 JORC Code). Each Competent Person consents to the inclusion of the information in this report, that they have provided in the form and context in which it appears.

MMG has established processes and structures for the governance of Mineral Resources and Ore Reserves estimation and reporting. MMG has a Mineral Resources and Ore Reserves Committee that regularly convenes to assist the MMG Governance and Nomination Committee and the Board of Directors with respect to the reporting practices of the Company in relation to Mineral Resources and Ore Reserves, and the quality and integrity of these reports of the Group.

3. Mine Planning and Compliance

3.1 Nature and extent of operations on an annual basis

Table 3 below provides details of the mining activities proposed to be conducted on the Dugald River MLs during this IDP period.

The Life of Mine long section is displayed in Figure 9 showing the orebody strike of ~2km's and to a depth in excess of 1km below the surface. Colouring in the long section outlines the mine stoping extraction plan for the next 5 years.

Table 3 – Schedule of Mining Activity for the Dugald River MLs during the IDP period

Year	Activity	Area / mine / pit
2023	Development Panel 5 B&D, A Block decline, A Block EXEs	ML2496 ML2471 ML2498 ML2470 ML2469 ML2468 ML2467 ML7496 ML2500
	Stoping 1-3D, 2-3B	ML2471 ML2470 ML2498 ML2469 ML2684 ML2468 ML2500
	Resource Extension drilling of orebody	ML2478, 2477, 2479, 2481, 2480, 2496, 2499, 2497, 2500
	Development (wind farm and operations support)	ML100383, ML2558, Ml2559, ML90211, ML90213
	Geological growth and operations support	ML100383
2024	Development Panel 5 B&D, A Block decline, 2A, A Block EXDs, 2E ore drives	ML2496 ML2471 ML2470 ML2498 ML2469 ML2468ML2467ML2500ML7496
	Stoping 1-3D, 2-4B, Commence Stoping 4D	ML2470 ML2469 ML2468 ML2468ML2500 ML7496
	Resource Extension drilling of orebody	ML2478, 2477, 2479, 2481, 2480, 2496, 2499, 2497, 2500
	Development (wind farm project and operations support)	ML100383, ML2558, Ml2559, ML90211, ML90213
2025	Development Panel 5 B&D, A Block decline, 2A, A Block EXDs, Complete 790 Link Drive	ML2496 ML2471 ML2470 ML2469 ML2468 ML2500 ML7496 ML2467
	Stoping 1-3D, 2-4B, Commence Stoping 2A, 5B	ML2470 ML2498 ML2469 ML7496 ML2468 ML2467 ML2500
	Resource Extension drilling of orebody	ML2478, 2477, 2479, 2481, 2480, 2496, 2499, 2497, 2500
	Growth (exploration geophysics)	ML100383
2026	Development Panel 5 B&D, A Block decline, 3A ore drives	ML2496 ML2471 ML2470 ML2469 ML2468 ML2500 ML2467
	Stoping 1-5D, 3-4B, Commence 3A oredrives	ML2470 ML2469 ML2468 ML2500 ML2467 ML7496
	Resource Extension drilling of orebody	ML2478, 2477, 2479, 2481, 2480, 2496, 2499, 2497, 2500
	Operations support	ML100359, ML100382
	Geological and operations support	ML100383
2027	Development of 2,3 &5E ore drives, Continue 4D ore drive development	ML2496 ML2471 ML2470 ML2469 ML2468 ML2500 ML2467
	Stoping 1-3D, 2-5B, 1-3A Commence Stoping 3A	ML2470 ML2469 ML2468 ML2500 ML2467 ML7496
	Resource Extension drilling of orebody	ML2478, 2477, 2479, 2481, 2480, 2496, 2499, 2497, 2500
	Operations support	ML100359, ML100382
	Geological and operations support	ML100383

2028	Development of 2,3 &5E ore drives, Continue 4D ore drive development	ML2469 ML2471 ML2470 ML2469 ML2468 ML2500 ML2467
	Stoping 1-3D, 2-5B, 1-3A Commence Stoping 3E	ML2471 ML2470 ML2469 ML2484 ML2468 ML2500 ML2467 ML7496
	Development (Operations support)	ML100359, ML100382
	Resource Extension drilling of orebody	ML2478, 2477, 2479, 2481, 2480, 2496, 2499, 2497, 2500

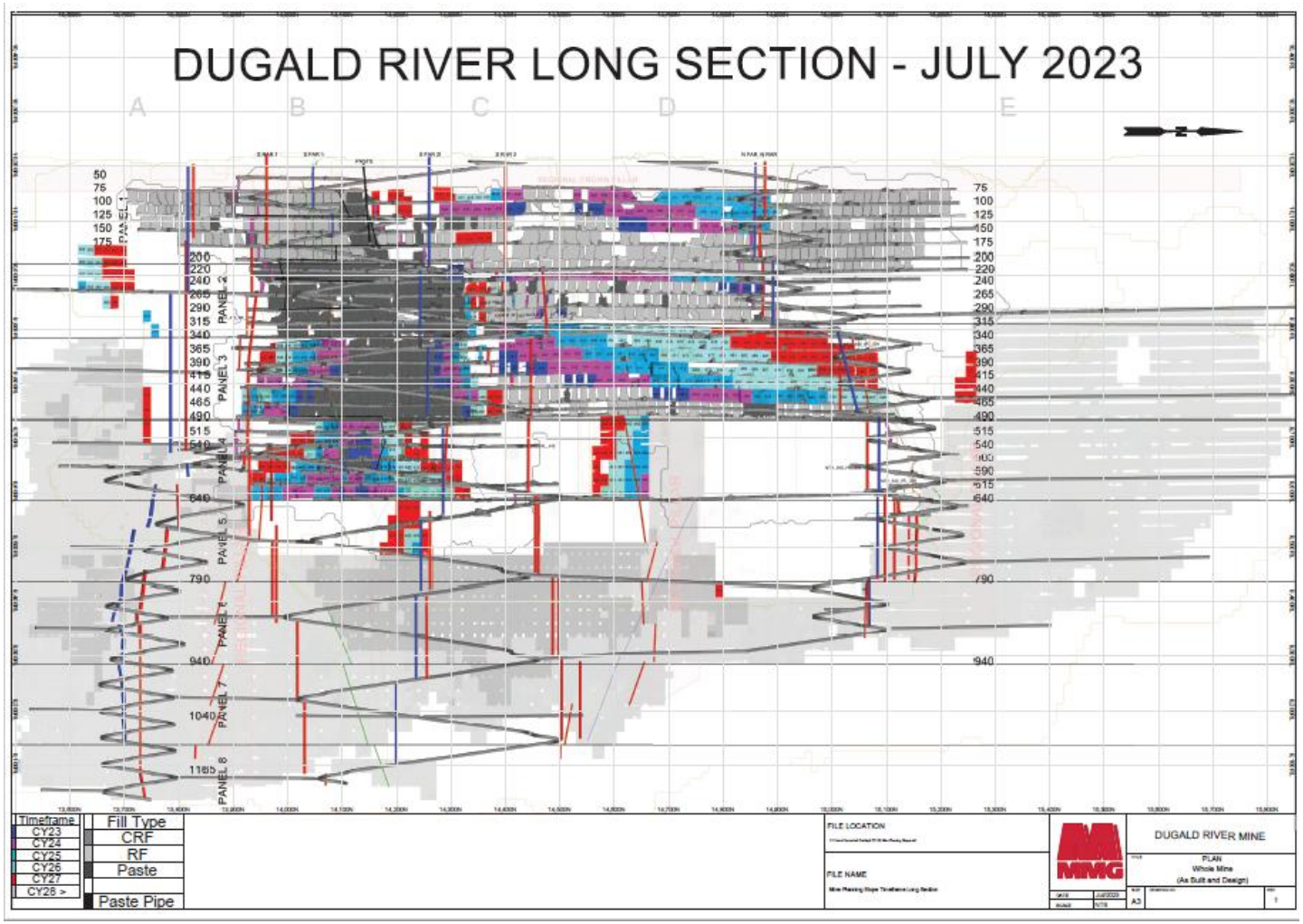


Figure 9 – Long section (looking West) of asbuilt mine and planned mine design. Planned stopes to 5 years are coloured by year (see legend), with completed stopes (dark grey), planned stopes of Inferred Resource (pale grey polygons), completed development (textured grey polygons), planned development (smoothed grey polygons) and vent and surface lines (blue and red traces).

3.2 Compliance with the current development plan

3.2.1 Compliance with the current development plan.

Not applicable.

3.2.2 Significant changes from the current plan

Not applicable.

4. Maps and spatial data

4.1 Map and spatial data requirements

Maps required	Map to include	Shapefiles
Mine plan	Current layout of the mine including pits, infrastructure, dumps, lease boundary and dams. Yearly mine development for the period of the plan. Include additional infrastructure, yearly pit boundaries and mining lease boundaries.	• Current mine plan – include pits and infrastructure. • Mine extraction sequence by year for the proposed plan period - mining strips, blocks or panels • Additional infrastructure to be built during the proposed plan period • Exploration target areas • Mine plan for the end of mine life – include residual pits and rehabilitated areas. • Historic mining (yearly strips, blocks, panels etc)
Resource Map	Remaining resources within the LDP ML's. Differentiate resource categories (e.g. measured, indicated and inferred). Pit boundaries and mining lease boundaries. Target minerals.	• Resource layers of the various confidence categories. (e.g. measured, indicated and inferred) • Resources exhausted
Local Geology	Outline of the local geological and structural features relevant to development activities. Refer to section 2.a.1.	• Local geology features • Target seams

The Shapefile guide is available at the following link under *'Area description guides':*
https://www.business.qld.gov.au/industries/mining-energy-water/resources/petroleum-energy/legislation-policies/policies-guidelines

Disclaimer:

The information requested in this document is for use in assessing an Initial Development Plan under the Mineral Resources Act 1989 (The Act). The Spatial information provided will be used internally only, will not be released publicly and will be treated as 'Financial and Technical' information under the Act.

This is a suggestion / example only. The content is not intended to replace or substitute legislation or relevant guidelines.

Any likeness of examples given in this template to real life cases is purely coincidental and not intentional.

LENGTH OF TERM STATEMENT

DUGALD RIVER NORTHEAST MLA

MMG Dugald River Pty Ltd (MMG) currently own and operate the Dugald Rive Mine, which consists of 1 EPM, 1 MDL and 40 individual MLs. The mine is located approximately 85km northwest of Cloncurry, in North-West Queensland (Figure 1). This document has been prepared to provide necessary information to support the Dugald River Northwest Mining Lease Application (MLA) and includes details to justify the requested initial term of 23 years.

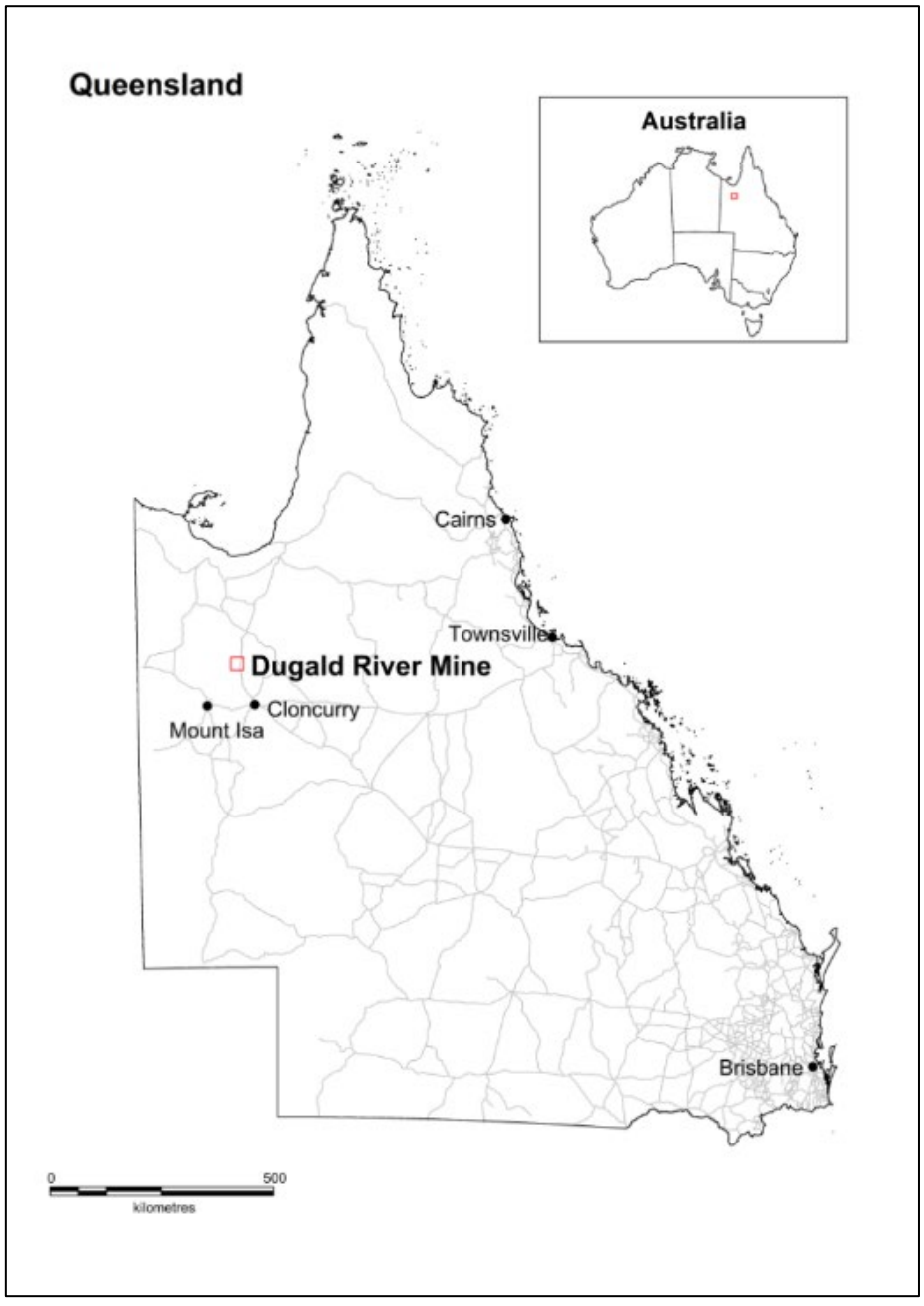


Figure 1 - Locality map of the Dugald River Mine

Access to the Dugald River Mine is via the sealed Burke Development Road from the township of Cloncurry. The area surrounding the mine consists of grazing land and low-lying hills.

The Dugald River deposit was first discovered in the 1880's, however it wasn't until the 1950's that systematic exploration activities were conducted. The first mining leases were granted over the area in the 1970's. In 2012 mine development activities commenced, with the mine commencing commercially operation in May 2018 by MMG Dugald River Pty Ltd.

The Dugald River deposit is one of the largest and highest-grade known deposits of zinc, lead and silver in the world. As reported in the 2022 MROR report, the deposit has a Mineral Resource of 61 million tonnes at 11.9% zinc, 1.1% lead and 23g/t silver.

Exploration activities continue to occur across the tenements held by MMG to the west, south and north of the existing operations. MMG is currently undergoing studies for mine expansion opportunity's, involving exploration activities for base metals and renewable energy infrastructure to support the life of the operation.

MMG is seeking to apply for a mining lease for the purpose of infrastructure to support access and infrastructure options (Figure 2), including.

- Due to its proximity to the site village, the area has been considered suitable for exercise tracks to support site personnel after work activities such as walking and running.

In this case MMG are seeking an initial term of 23 years for the Dugald River Northeast MLA. This term is linked to the current remaining Life of Mine (LoM) for the project and is supported by the following activity timeline.

Years 1-3

- Conduct operational assessment of the location and access of the running and walking tracks for use by the mine camp occupants.

Years 3-4

- Design and construct exercise facilities (walking/running tracks) to support use by the mine camp occupants.

Years 4-23

- Maintain exercise walking and running tracks.

The Dugald River deposit consists of an underground mine accessed by two declines (north and south). Ore is extracted via traditional underground techniques at an annual rate of 1.8Mt per annum. Current underground development extends around 650m below surface with the Inferred Resource reaching around 1km deep. The operation has produced between 170,000 – 180,000 tonnes of zinc concentrate per annum. Based on this rate and the known resource, the LoM for Dugald River is currently planned out to 2046.

Based on these considerations MMG Dugald River has sought an initial term of 23 years for the MLA to provide sufficient time to develop and operate the proposed catchment dams, access tracks and firebreaks and to align with the LoM of Dugald River Mine.

The total proposed area of the MLA is 43 hectares or 0.4km^2 (Figure 2 and Figure 3).

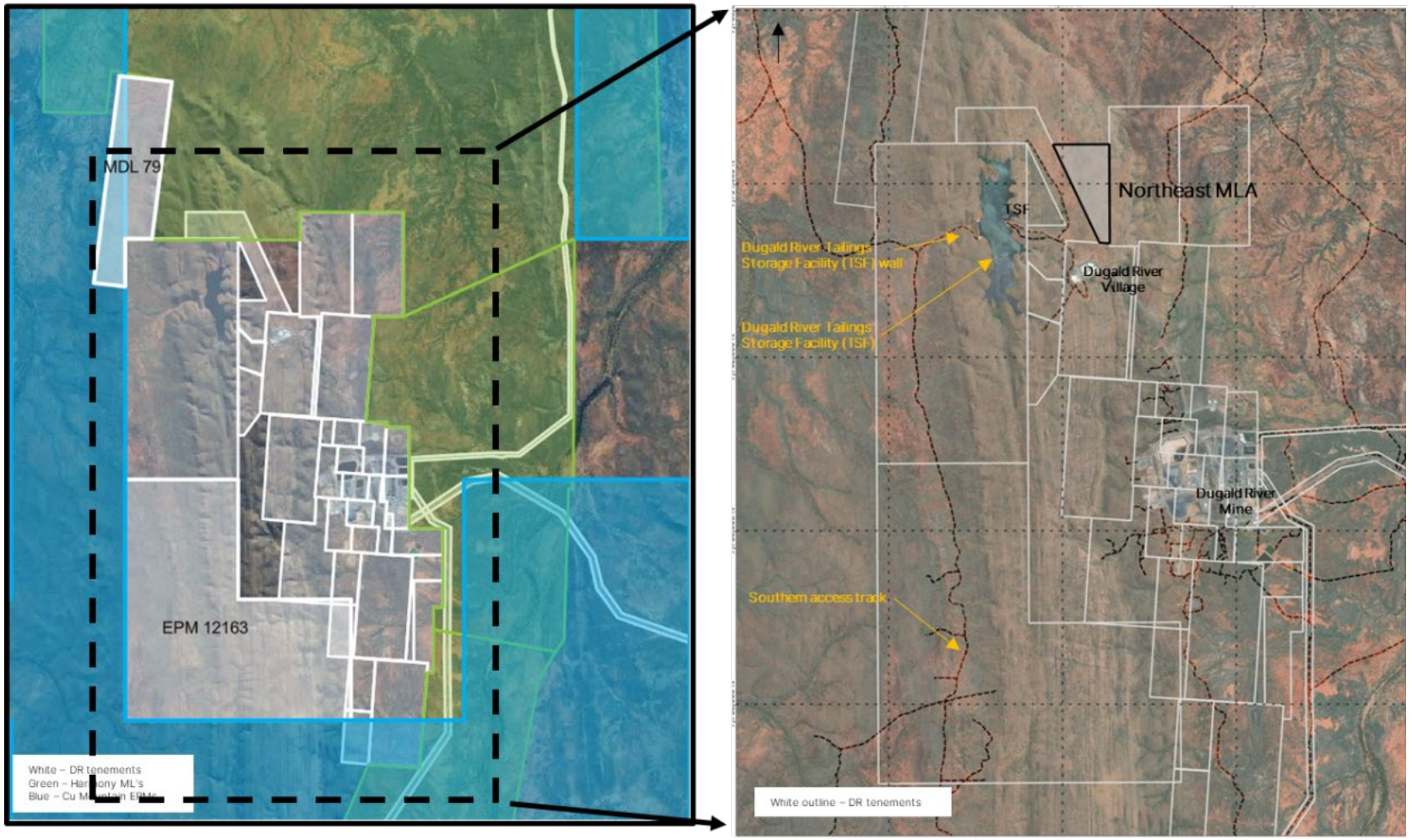


Figure 2 – Aerial image of the Dugald River Mine, existing tenements held by MMG Dugald River Pty Ltd and Northeast MLA (right) and the surrounding leases (left)

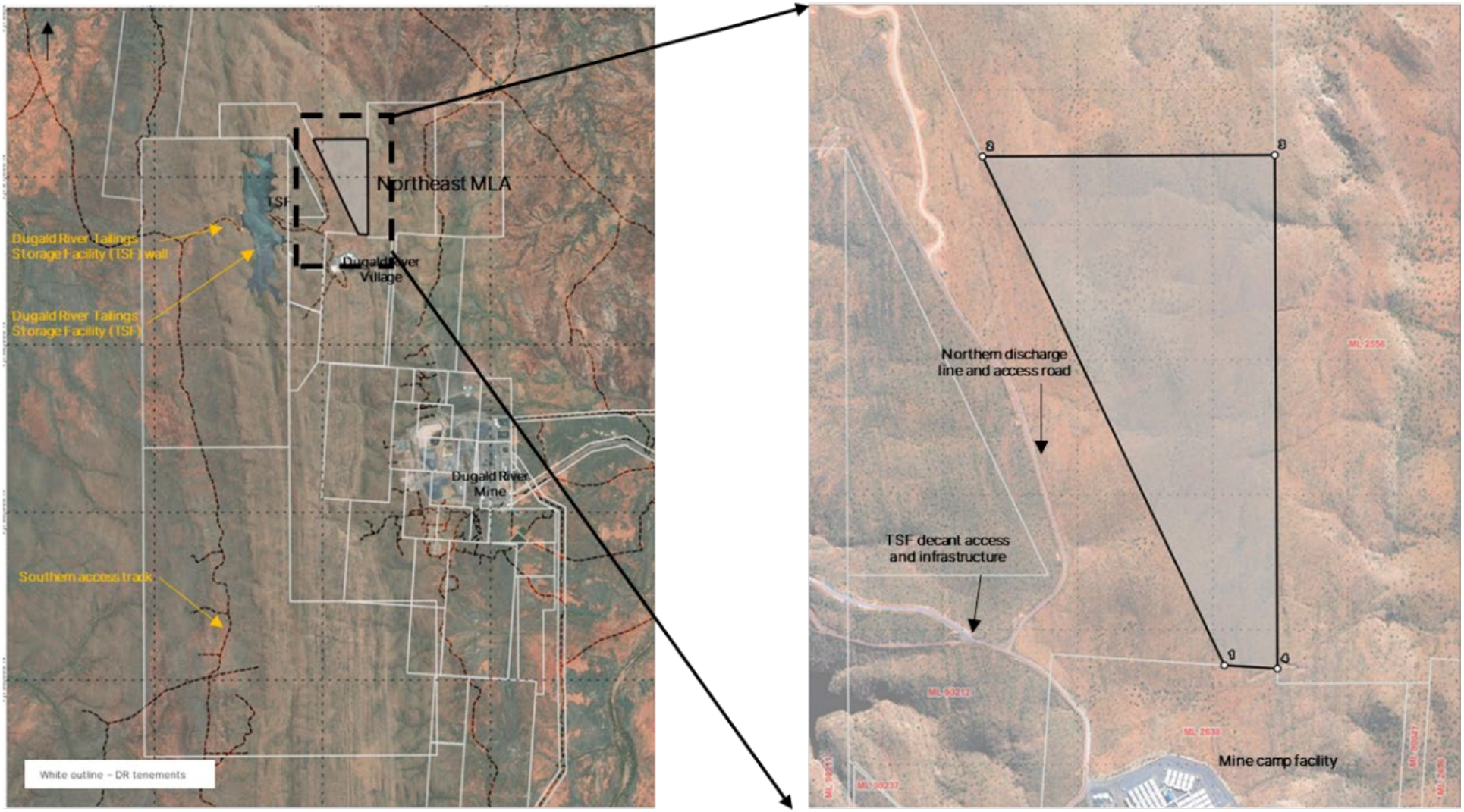


Figure 3 – Aerial image of the Northeast MLA boundary

SIZE AND SHAPE STATEMENT

DUGALD RIVER NORTHEAST MLA

MMG Dugald River Pty Ltd (MMG) currently own and operate the Dugald Rive Mine, which consists of 1 EPM, 1 MDL and 40 individual ML's. The mine is located approximately 85km northwest of Cloncurry, in North-West Queensland (Figure 1). This document has been prepared to provide necessary information to support the Dugald River Northeast Mining Lease Application (MLA) and includes details to justify the requested size and shape.

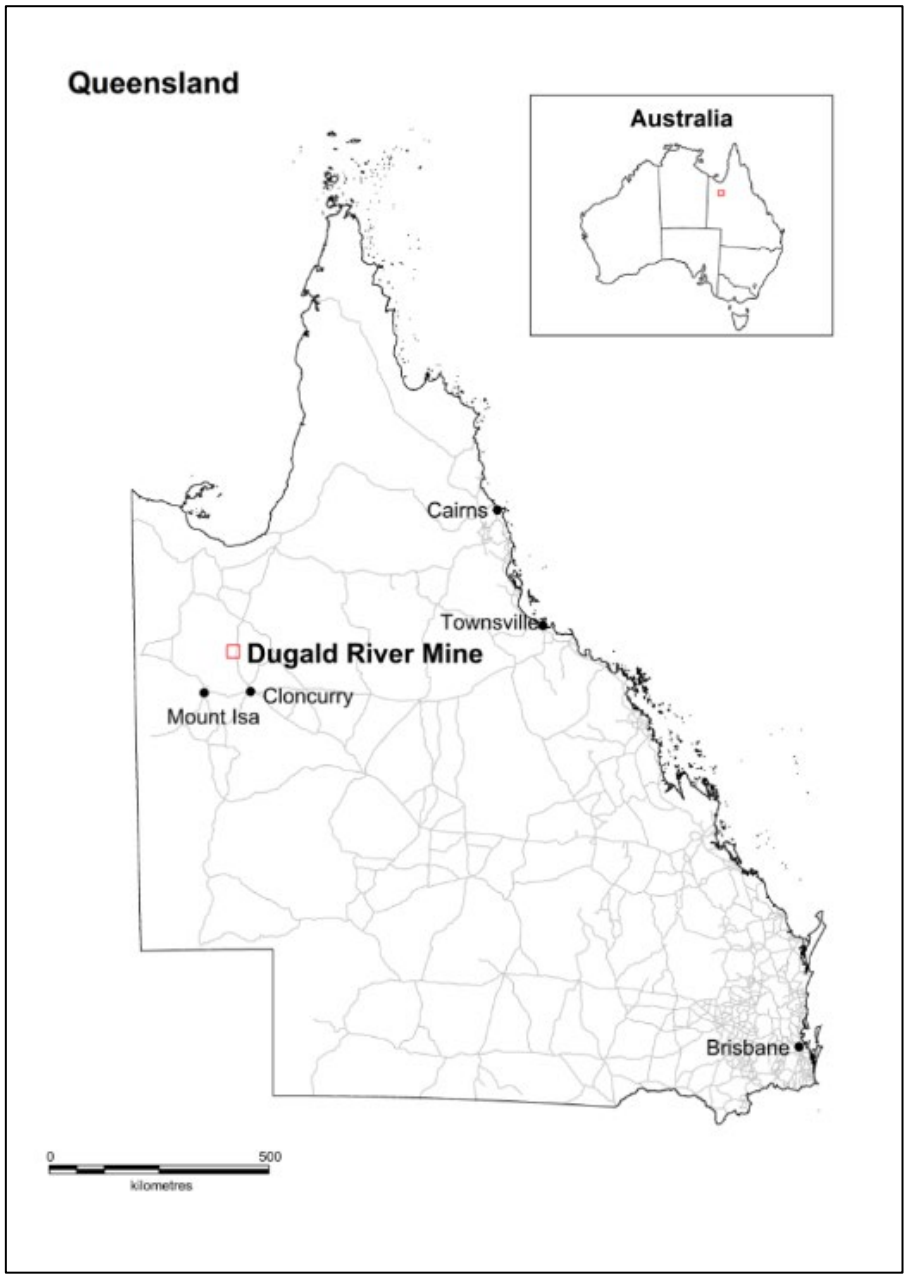


Figure 1 - Locality map of the Dugald River Mine

Access to the Dugald River Mine is via the sealed Burke Development Road from the township of Cloncurry. The area surrounding the mine consists of grazing land and low-lying hills.

The Dugald River deposit was first discovered in the 1880's, however it wasn't until the 1950's that systematic exploration activities were conducted. The first mining leases were granted over the area in the 1970's. In 2012 mine development activities commenced, with the mine commencing commercially operation in May 2018 by MMG Dugald River Pty Ltd.

The Dugald River deposit is one of the largest and highest-grade known deposits of zinc, lead and silver in the world. As reported in the 2022 MROR report, the deposit has a Mineral Resource of 61 million tonnes at 11.9% zinc, 1.1% lead and 23g/t silver.

The Dugald River deposit consists of an underground mine accessed by two declines (north and south). Ore is extracted via traditional underground techniques at an annual rate of 1.8Mt per annum. Current underground development extends around 650m below surface with the Inferred Resource reaching around 1km deep. The operation has produced between 170,000 – 180,000 tonnes of zinc concentrate per annum.

Exploration activities continue to occur across the tenements held by MMG to the west, south and north of the existing operations. MMG is currently undergoing studies for mine expansion opportunity's, involving exploration activities for base metals and renewable energy infrastructure to support the life of the operation.

MMG has prepared and lodged the Dugald River Northeast MLA for the purpose of securing space for necessary project infrastructure (Figure 2), including:

- Due to its proximity to the site village, the area has been considered suitable for exercise tracks to support site personnel after work activities such as walking and running.

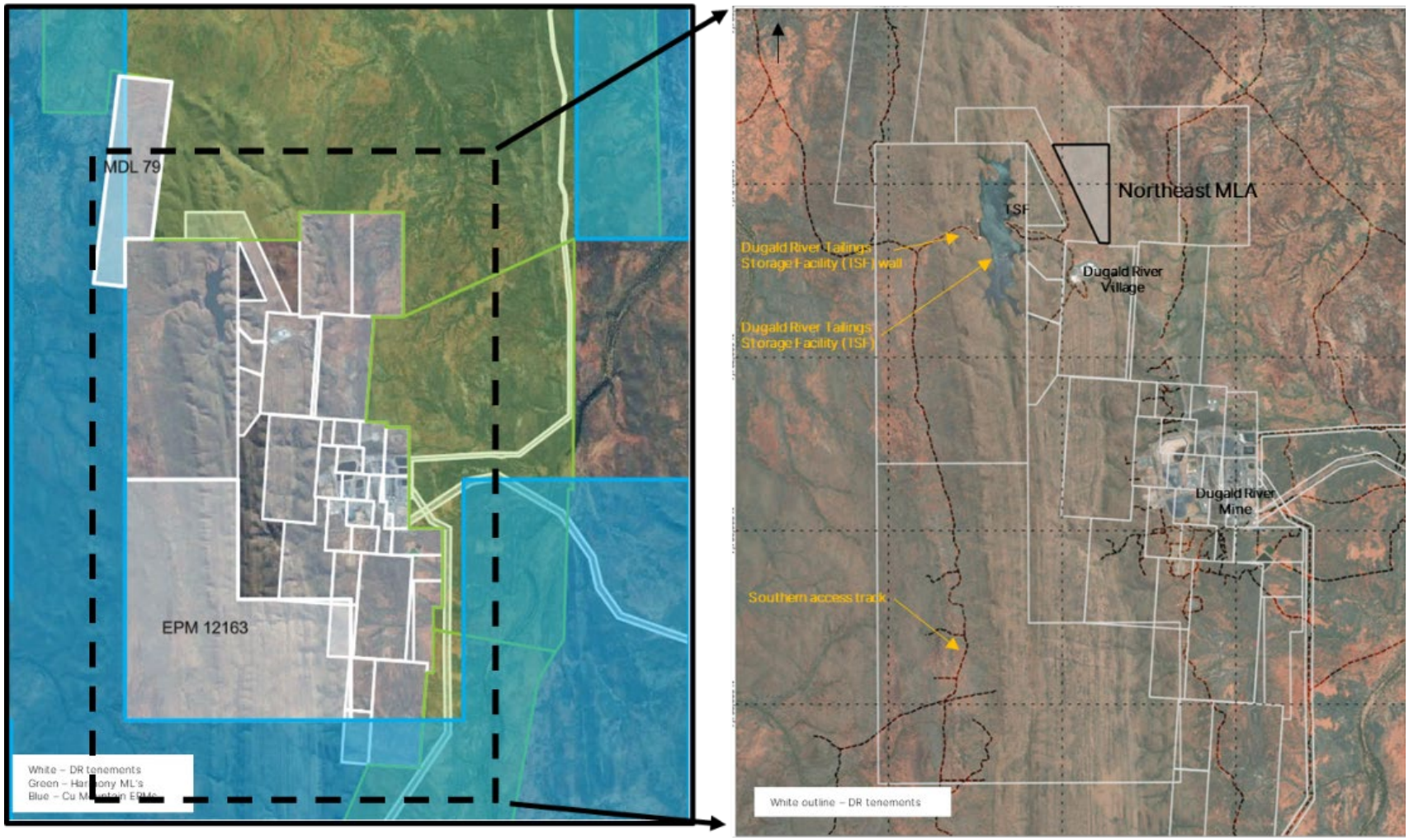


Figure 2 – Aerial image of the Dugald River Mine, existing tenements held by MMG Dugald River Pty Ltd and Northeast MLA (right) and the surrounding leases (left)

Adjacent Mining Leases

The proposed MLA is bounded to the:

- East by the following ML held by MMG.
    - ML 2556
- West by the following ML held by MMG:
    - 90212
- South by the following ML held by MMG.
    - ML2638
- North – MLs held by another party.

Size and Shape Justification

The Mining Lease application is to secure the currently vacant parcel of land into a mining lease. This will abut northern, southern and western boundaries of the MMG Dugald River Pty Ltd held mining leases.

The following information provides justification of the size and shape of the proposed MLA.

Infrastructure

Securing this parcel of land will provide confidence to operational improvement studies for proposed exercise walking/running tracks for use by the mine camp occupants.

Details

The proposed Mining Lease is shown in Figures 2 and 3 and represents a land area of 43.5 ha or 0.45 km^2.

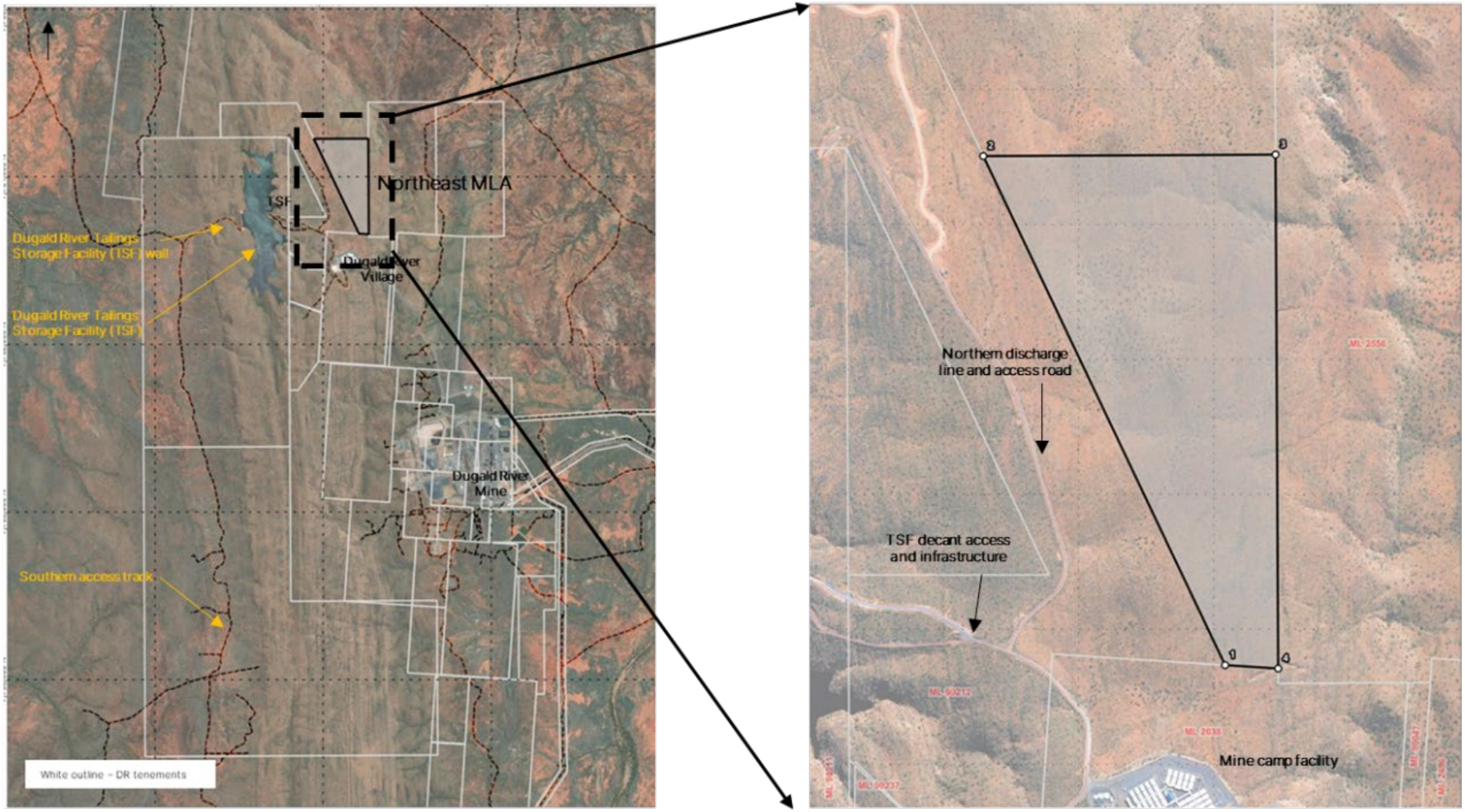
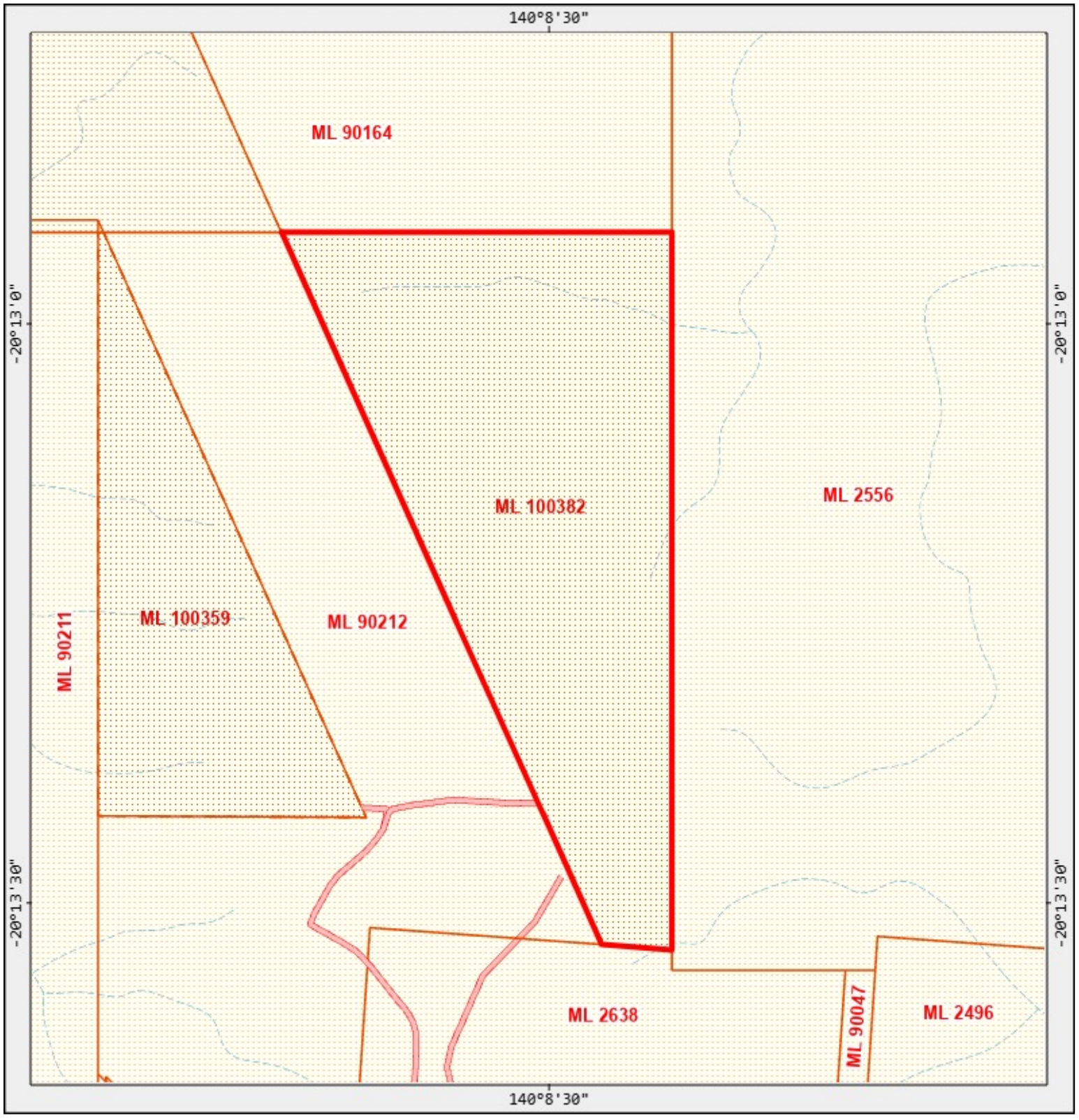


Figure 3 - Aerial image of the Northeast MLA boundary

ML 100382 Sketch Map



A product of
GeoResGlobe



Legend located on next page

N

0 250 metres

Scale: 1:9027

Printed at: A4

Print date: 15/10/2026

Projection: Web Mercator EPSG 102100 (3857)

For more information, visit https://georesglobe.information.qld.gov.au/help-info/Contact-us.html

Includes material © State of Queensland 2026. You are responsible for ensuring that the map is suitable for your purposes. The State of Queensland makes no representation or warranties in relation to the map contents and disclaims all liability.

If imagery is displayed, imagery includes material © CNES reproduced under license from Airbus DS, all rights reserved © 21AT © Earth-i, all rights reserved, © Planet Labs PBC, 2023

Queensland Government
Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development

ML 100382 Sketch Map

Legend

- ML infrastructure permit application
- ML infrastructure surface area application
- ML infrastructure access application
- ML infrastructure permit granted
- ML infrastructure surface area granted
- ML infrastructure access granted
- ML permit application
- ML surface area application
- ML access application
- ML permit granted
- ML surface area granted
- ML surface restricted land granted
- ML access granted

Places: ML infrastructure permit application

- ML 100382

Attribution

Esri, Geoscience Australia, NASA, NGA, USGS

Esri Community Maps Contributors, Department of Resources, DESI, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, METI/NASA, USGS

© State of Queensland (Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development) 2025

© State of Queensland (Department of Resources) 2023

Land information details

In this worksheet, input the land information details that will be included in your new permit application. The column headings with * are mandatory and require data to be completed either by selection of an item from a pick-list or entering some text. You can 'copy and paste' multiple items in the same column. Each individual cell will give you instruction on how to enter the correct data. See Instructions tab for more assistance with completing form.

Lot number	Plan number	Land tenure type *	Land tenure name (if applicable)	Current land usage *	Proposed usage *	Land owner's name *	Land owners address	Is compensation required? *	Land subject to erosion control works
36	AP23793	Unallocated state land		Grazing	Access	[redacted]		No	
036	AP23793	Lands lease		Grazing	Access			No	
2577	PH139	Lands lease		Grazing	Access			Yes	
36	AP23793	Unallocated state land		Grazing	Permit			No	
036	AP23793	Lands lease		Grazing	Permit			No	
93	SP353339	Lands lease		Grazing	Permit			Yes	
93	SP353339	Lands lease		Grazing	Access			Yes	
211	SP136468	Lands lease		Grazing	Access			Yes	
92	SP353339	Lands lease		Grazing	Access			Yes	
35	B15753	Freehold		Grazing	Access			No	
	45841012	Road reserve		Road	Access			Yes	

Adjoining land information details for mining lease applications

In this worksheet, input the land information details that will be included in your new mining lease application. The column headings with * are mandatory and require data to be completed either by selection of an item from a pick-list or entering some texts. You can 'copy and paste' multiple items in the same column. Each individual cell will give you instruction on how to enter the correct data.

Lot number	Plan number	Land tenure type *	Land tenure name (if applicable)
59	TG40	Lands lease	[redacted]
27	B15753	Freehold	[redacted]
36	B15753	Freehold	[redacted]
28	B15753	Freehold	[redacted]
92	SP353339	Lands lease	[redacted]
35	B15753	Freehold	[redacted]