COLOSSUS
IONIC CLAY PROJECT

Unlocking a new frontier of Rare Earths in the Poços De Caldas Alkaline Complex

VIRIDIS
MINING & MINERALS

Investor Presentation

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This document contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2012 JORC Code) and available for viewing at https://viridismining.com.au/. VMM confirms that it is not aware of any new information or data that materially affects the information included in any original ASX market announcements.
The release of this document on ASX has been authorized by the Board of Viridis Mining and Minerals Limited.

Competent Person Statement

Dr. José Marques Braga Júnior, the in-country Executive Director of Viridis' Brazilian subsidiary (Viridis Mining and Minerals Brazil Ltd), compiled and evaluated the technical information in this release and is a member of the Australian Institute of Geoscientists (AIG) (MAusIMM, 2024, 336416), accepted to report in accordance with ASX listing rules. Dr Braga has sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting of Regulation, Exploration Results, Mineral Resources, and Ore Reserves. Dr Braga consents to the inclusion in the report of the matters based on information in the form and context in which it appears.

All announcements referred to throughout can be found on the Company's website – viridismining.com.au.

Corporate Summary

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Capitalisation Data

Current shares on Issue[1]	64.26 Million
Share Price[1]	$1.18
Market Capitalisation (MC)[1]	**$75.8 Million**
BALANCE SHEET	
Cash Balance[2]	$8,585,000
Debt[2]	Nil

1. As at market close 5 July 2024
2. Cash balance as of 31 March 2024 and $8m Capital Raise at 2 May 2024

Board & Management

Agha Shahzad Pervez	Executive Chairman
Tim Harrison	Non-Executive Director
Jose Carlos Guedes	Non-Executive Director
Faheem Ahmed	Non-Executive Director
Christopher Gerteisen	Non-Executive Director
Rafael Moreno	Chief Executive Officer

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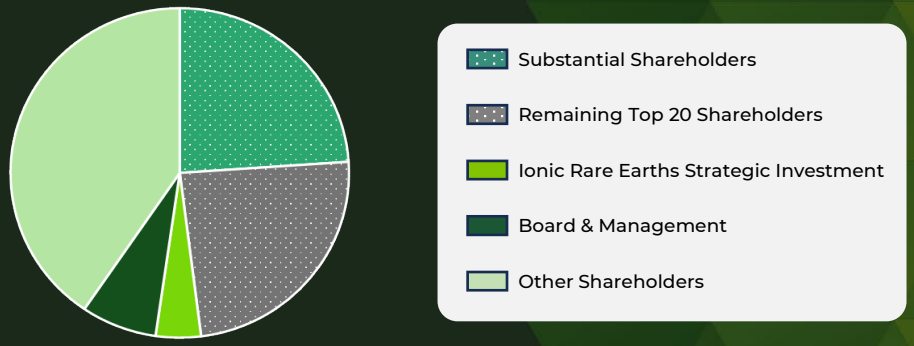
Perth WA 6000

Shareholder Breakdown



Colossus Value Proposition : Progressing Rapidly from Explorer to Producer

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World Class Geology	Homogenous mineralisation, highest individual grade in Alkaline complex (>27,000ppm), significant HREO from surface
Significant Exploration Upside	Since project acquisition, landholding in and around Alkaline complex has increased to 239 km^2; MRE covers 16km^2 (7% of total landholding) – 201Mt @ 2,590ppm and 668ppm MREO
True Ionic Clay Project	Initial bulk metallurgical testing with standard AMSUL wash providing some of the highest recoveries worldwide
Local and State Government Signed MOUs	Only project in Alkaline complex to have BOTH local and state government agreements to develop Colossus
We've Got the Team	Experienced Board and Management team who have a history of delivering major operational Ionic REE projects. In-country team 40+ and growing to deliver on aggressive development timeline
We've Got the Technology	JV with world leading REO Separation and Refining technology provider Ionic Rare Earths (ASX:IXR)
Accelerated Pathway to Production	Government agreements, experienced team in REE projects and mature technology to support rapid path to production

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Colossus Project

Progressing from Grassroots Exploration to Development

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Poços De Caldas : Strategic Land Position in Ideal Location

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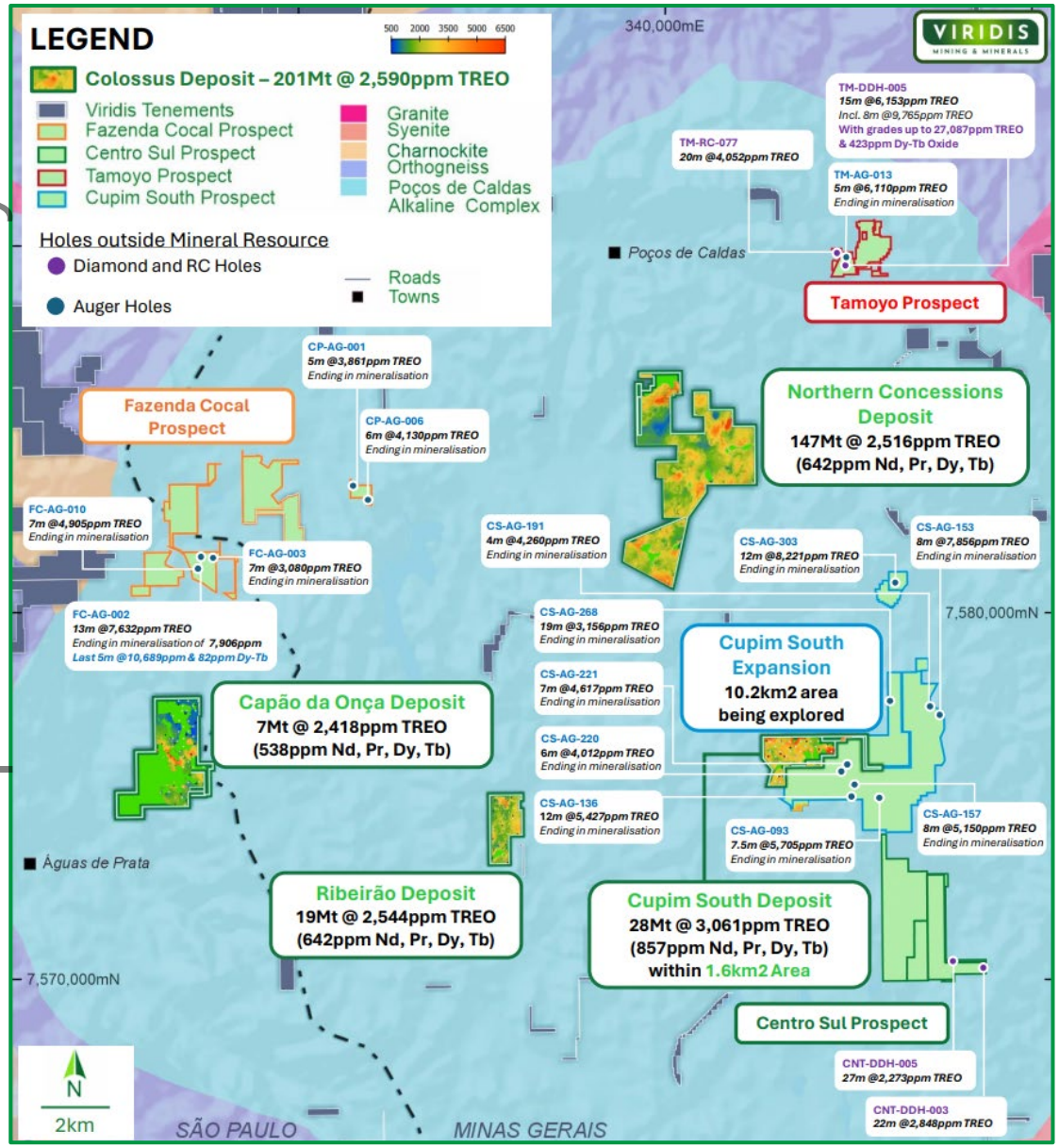


Unlocking the True Geological Potential of the Colossus Project

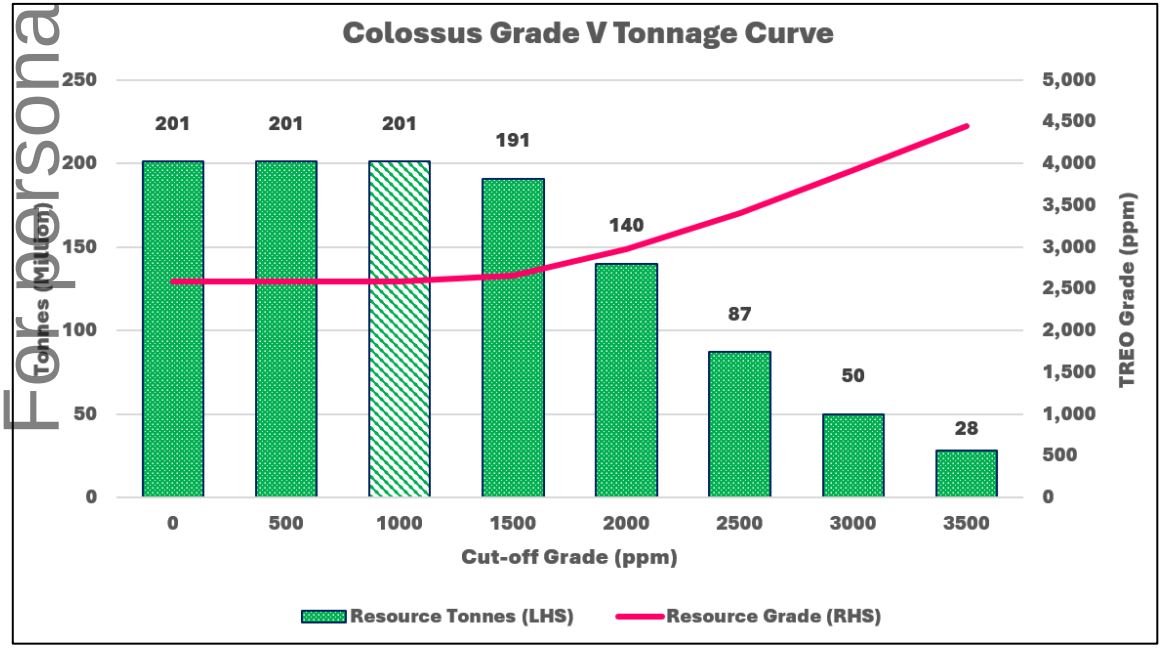
- Poços De Caldas ("PDC") – Largest Alkaline Complex in Southern Hemisphere and is homogenously mineralised with Rare Earths.
- Local community is supportive of mining operations with numerous bauxite, alumina, clay, peat mines and chemical plants. Ample infrastructure, paved roads and mining focused labor force.
- Remainder of significant areas within the Complex are held by major corporations such as Alcoa and CBA.
- Maiden Resource Estimate covers 16 km2, less than 7% of total landholding (239 km2).
- Viridis remains the last major opportunity to gain significant exposure to this remarkable complex.

1. ASX: VMM Announcement dated 03 July 2024

MAIDEN RESOURCE (MRE): Globally Significant Size and MREO Content

Colossus Project Maiden Resource Estimate at 1,000pm Cut-Off

Category	License	Million Tonnes (Mt)	TREO (ppm)	Pr6O11 (ppm)	Nd2O3 (ppm)	Tb4O7 (ppm)	Dy2O3 (ppm)	MREO (ppm)	MREO/TREO
Indicated	Northern Concessions (NC)	50	2,511	145	441	5	25	616	25%
	Cupim South (CS)	10	3,014	204	612	6	31	853	28%
	Capao Da Onca (CDO)	2	2,481	152	414	4	22	592	24%
	Indicated Sub-Total	**62**	**2,590**	**154**	**467**	**5**	**26**	**653**	**25%**
Inferred	Northern Concessions (NC)	97	2,519	151	473	5	26	656	26%
	Cupim South (CS)	18	3,087	199	620	6	34	859	28%
	Ribeirao (RA)	19	2,544	159	455	4	24	642	25%
	Capao Da Onca (CDO)	5	2,393	132	358	4	22	517	22%
	Inferred Sub-Total	**139**	**2,591**	**158**	**486**	**5**	**27**	**675**	**26%**
GLOBAL RESOURCE (INDICATED & INFERRED)		**201**	**2,590**	**157**	**480**	**5**	**27**	**668**	**26%**



- High-Grade IAC REE Project at 1,000ppm Cut-Off:
  - 201Mt @ 2,590ppm TREO;
  - Including, 62Mt Indicated Resource
- Globally significant MREO content – 668ppm, 26% MREO.
- High DyTb content at 1,000ppm Cut-off – 32ppm DyTb.
- At 3,000ppm TREO cutoff, MRE is 50Mt @ 3,917ppm TREO with **an incredible 1,144ppm MREO content leading to higher basket values**
- Enormous potential at Cupim South having a remarkable grade of 3,061ppm TREO / 853ppm MREO.
- No part of the Resource sits within environmental encumberments.

1 ASX: VMM Announcement dated 04 Jun 2024, 'Globally Significant Colossus Rare Earth Ionic Adsorption Clay Project Maiden Mineral Resource Estimate"

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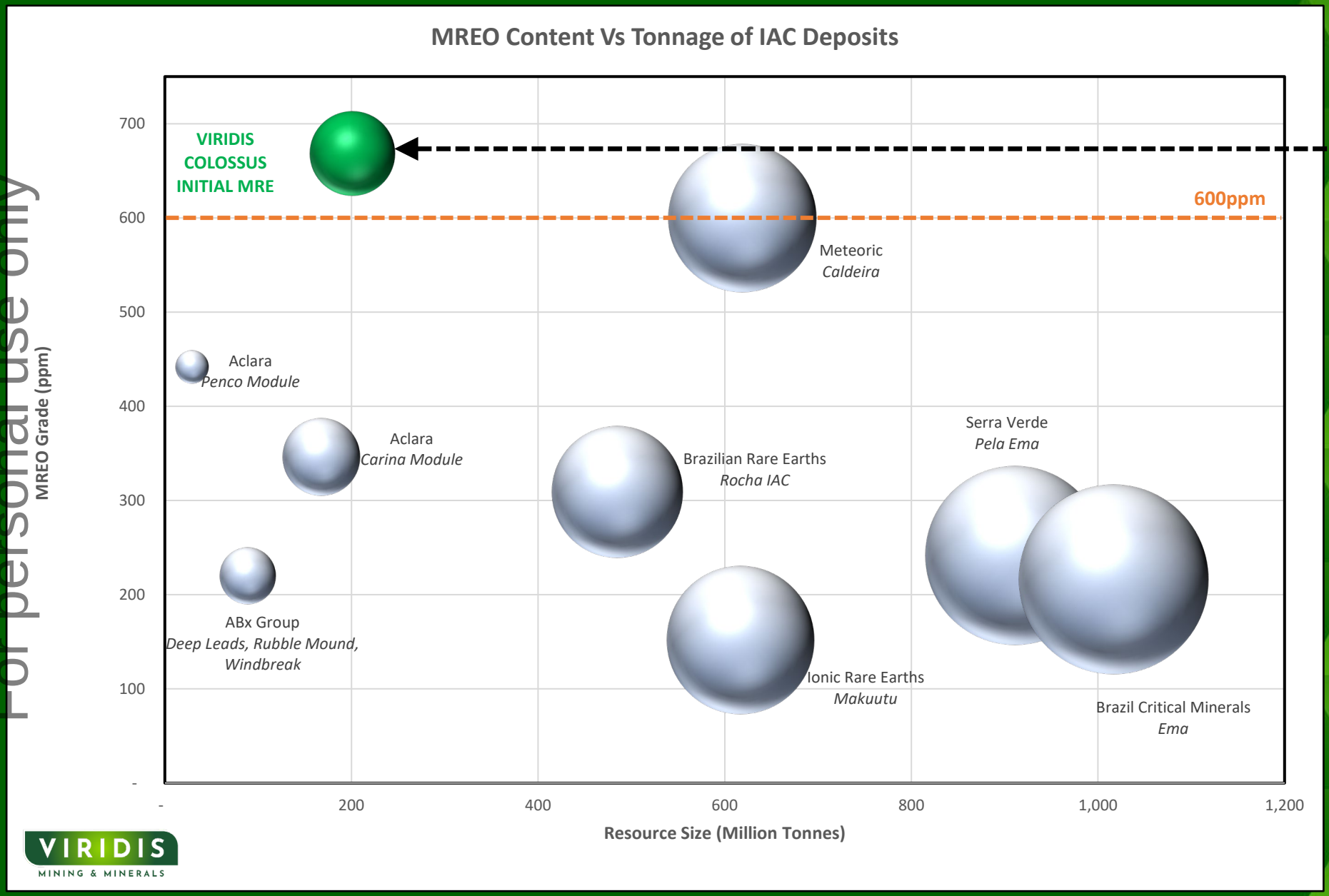
Superior MREO Content: Premier IAC Project Globally by VALUE



668ppm MREO (Nd, Pr, Dy, Tb)

Superior Basket Value

Lower CAPEX & OPEX

Better Margins

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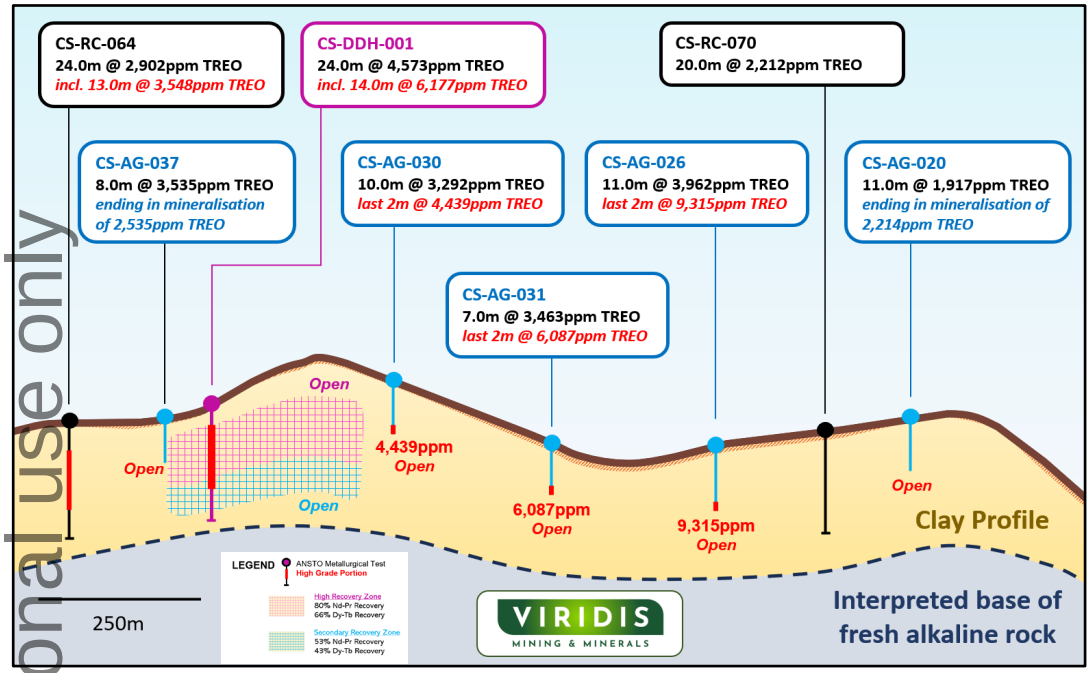
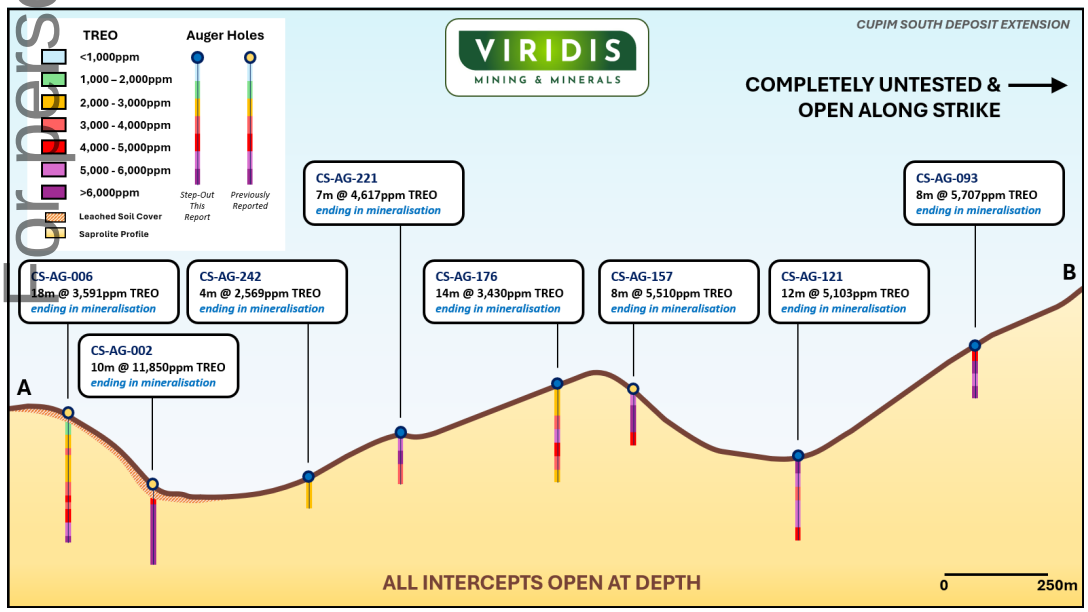
Metallurgical Testing : A True Iconic Clay REE Project



Cupim South



Cupim South Extension

Metallurgy – First Hole Tested by ANSTO[1]

- 11.9m at 80% Nd-Pr Recovery from 3.3m. [Ammonia Sulphate, pH4, room temp., 30 minutes cycle]
- 0.01ppm of U and <0.01ppm of Th (below detection limit)
- Unoptimised conditions providing ANSTO with significant upside scope

DRILL HOLE	DRILL LOG				RECOVERY - Ammonium Sulphate [pH4, Room Temp.]							
DRILL ID	From m	To m	Intercept m	Head Assay TREE ppm	Pr %	Nd %	Tb %	Dy %	Nd-Pr %	Dy-Tb %	Magnets %	TREE-Ce %
CS-DDH-001	3.3	6.3	3.0	3,807	76	80	56	55	78	55	**79**	74
	6.3	9.3	3.0	6,284	80	79	66	68	79	67	**79**	78
	9.3	12.3	3.0	5,821	83	84	70	73	84	72	**83**	84
	12.3	15.2	2.9	4,842	75	80	68	71	77	70	**78**	80
	15.2	18.2	3.0	3,456	49	53	44	45	51	45	52	54
	18.2	21.2	3.0	1,713	55	57	42	43	56	43	56	54

Metallurgy – Bulk Composite Test Work[2]

- Overall average ionic recoveries at Colossus to be one of the highest worldwide for this form of test work:

  Northern Concessions:
  Average Recovery of Nd + Pr (63%) & Dy + Tb (65%)

  Cupim South:
  Average Recovery of Nd + Pr (67%) & Dy + Tb (53%)

  Capão da Onça:
  Average Recovery of Nd + Pr (59%) Dy + Tb (59%)

  Ribeirão:
  Average Recovery of Nd + Pr (59%) & Dy + Tb (49%)

1 ASX: VMM Announcement dated 20 March 2024, '80% Average Ionic Recoveries from First Colossus Hole'
2 ASX: VMM Announcement dated 18 April 2024, 'Colossus Achieves Highest Overall Bulk Ionic Recoveries Globally'
3 ASX: VMM Announcement dated 12 June 2024, 'StepOut Drilling Multiplies Cupim-South High Grade Footprint'

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Development Strategy : Colossus Starts with Northern Concessions

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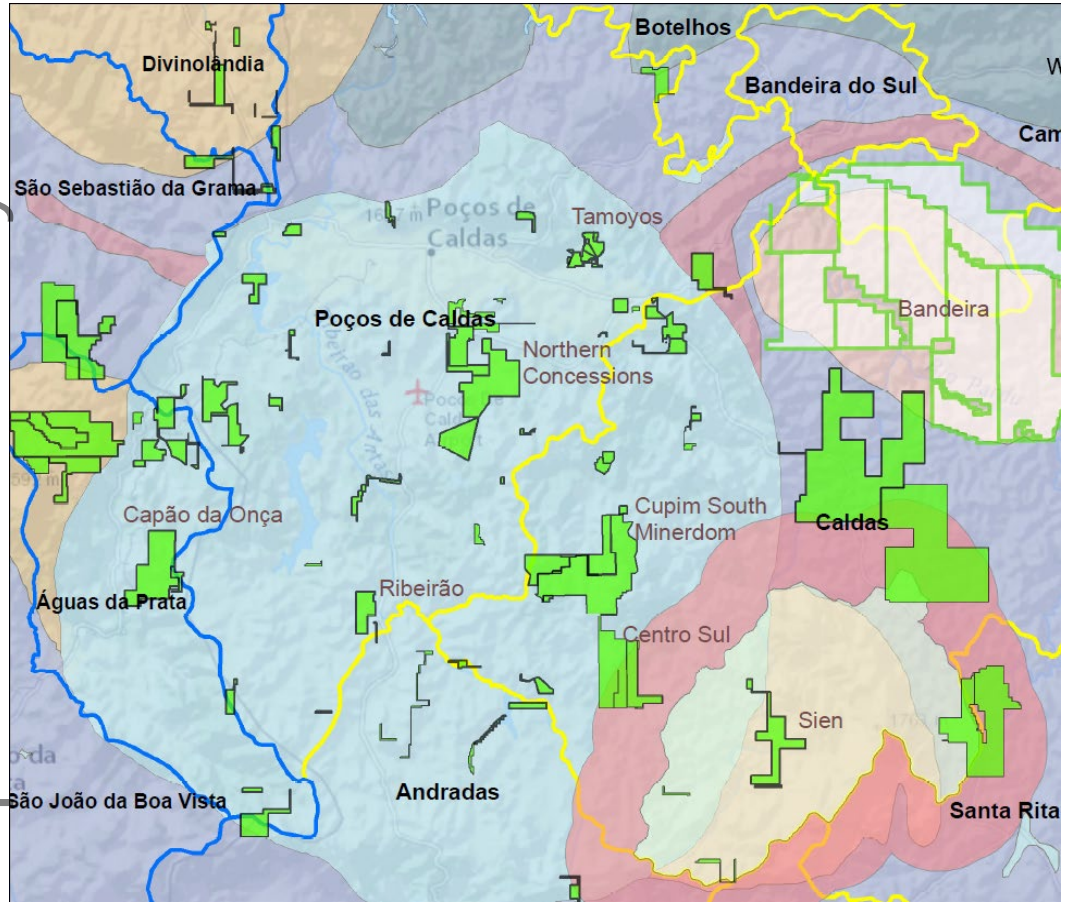
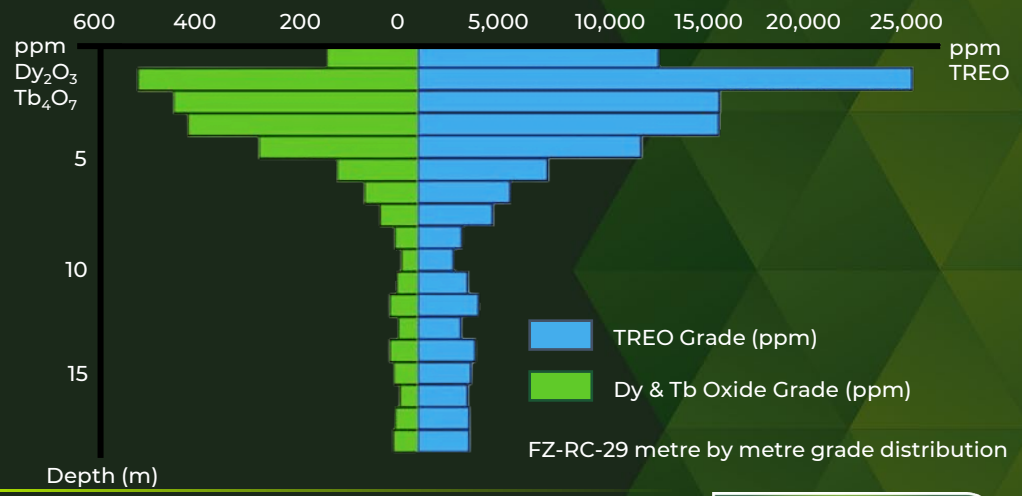


FAZENDA: Heavy Rare Earth Potential

- FZ-RC-029 returned over 500ppm Dy-Tb oxide (441ppm Dy and 96ppm Tb Oxides) close to surface.
- First 5.5m intercepting 5,486ppm Nd-Pr and 386ppm Dy-Tb Oxide.
- Confirmation of shallow Dy-Tb potential which can transform early mine life economics and cashflows at Fazenda Mining License.

De-risked Pathway to Production

- Initial Production Facility to be located at contiguous Northern Concessions in the Municipality of Pocos De Caldas (PCD)
- Quickest path to production with the PCD formally supporting the Environmental Approval of the Project with the signing of the recent MoU, allowing Colossus to be fast-tracked through permitting with minimised bureaucratic roadblocks.
- PCD are willing to support the Colossus Project through supply of power, water, sewage to our future facilities as per MoU.
- Access to local established brownfield infrastructure, with ample mining professionals, contractors and consultants.
- Engineering based on production facility in the Northern Concession with the ability to connect the contiguous southern tenements once regulatory approvals received.
- Decade of high feed grade (~3917ppm TREO @ 1144ppm MREO) feeding 5Mtpa Production facility



1 ASX: VMM Announcement dated 06 Feb 2024, 'Spectacular Shallow Intercepts up to 23,556ppm TREO - Amended'

Key Work Program for 2024:

Execution Activities on Critical Path

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Engineering / Scoping Study / Pre-Feasibility Study

- Scoping Study to be completed in Q3 2024, with the initial focus being on the highly prospective Northern Concessions.
- Pre-Feasibility Study to commence in Q3 2024, with an aim to complete by Q1 2025.
- Commence Pilot Plant Design in Q3 2024.

Resource Development

- 201Mt @ 2,590 ppm TREO JORC Compliant MRE completed in June 2024.
- Updated Resource Estimate to be delivered in Q4 2024.
- Cupim South highest grade individual deposit globally, remarkable 857ppm MREO – from exploring only 1.6km^2 area. Another 10.2km^2 being explored

Metallurgy and Flowsheet Test Work with ANSTO

- Viridis to conduct further metallurgical testing across Northern Concessions.
- Leaching optimisation testing to commence in June 2024, followed by a work program to test the preferred operating conditions for Impurity Removal and Mixed Rare Earth Carbonate (MREC) precipitation.

Environmental Approvals

- Viridis has engaged leading Environmental consultant Alger to deliver environmental approvals for Colossus.
- Alger aim to deliver Construction approval by Q2 2026.

HATCH

BNA MINING SOLUTIONS

ANSTO

ALGER Consultoria e Assessoria Jurídica

1. VMM ASX announcement 15 Feb 2024 "Hatch awarded Colossus Scoping Study and Eng Support Contractor"
2. VMM ASX announcement 19 Jan 2024 "Colossus Exploration and Development Update"
3. VMM ASX announcement 20 Mar 2024 "80% Average Ionic Recoveries from First Colossus Hole"

Government Signed MOUs: De-risking the Colossus Regulatory and Environmental Approvals Process

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"Viridis has entered into two crucial non-binding MoUs with the State Government of Minas Gerais and the associated State Secretary for Economic Development (Invest Minas) and the local Municipality of Poços De Caldas" [1]

Fotos Paulo Vitor de Campos / Mantiqueira

Poços de Caldas, conhecida por suas belezas naturais e seu potencial turístico, está agora no radar global dos investidores de alta tecnologia. Nesta quinta-feira (29), um marco significativo foi estabelecido com a assinatura do protocolo de investimentos entre o Governo de Minas e a empresa australiana Viridis Mineração e Minerais. O investimento previsto é de R$ 1,35 bilhão, destinado ao Projeto Colossus, que visa a exploração de terras raras na região. PAGINA 8

Agreement with : State of Minas Gerais/Invest Minas

- MoU with the Government of Minas Gerais and Invest Minas is a selective initiative to form strategic partnerships with private companies that will strengthen the local economy in a sustainable manner.
- The selection by Invest Minas at such an early stage in our development journey highlights the importance of Colossus at local, state and federal levels.
- The Agreement through Invest Minas will facilitate and fast track regulatory and environmental approvals between Viridis and government departments.

Agreement with : Municipality of Pocos De Caldas

- MoU with Poços De Caldas solidifies the commitment from the local government to support the development of the Colossus Project through supply of power, water, sewage to our future Production and Mining facilities.
- The local Secretariat of the Environment will assist Viridis to obtain authorisation and/or environmental license from the State of Minas Gerais to carry out interventions in the area, as well as operating authorisation.
- Environmental approvals (issued by the State) can't be attained without approval from the local government. This MoU will help de-risk and accelerate the project approvals and execution timeline.

1. VMM ASX announcement 4 Mar 2024 'Viridis Signs Key MoU's with State of Minas Gerias and Poços De Caldas"

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Flowsheet Development: ANSTO & Engineering Contractor Testing

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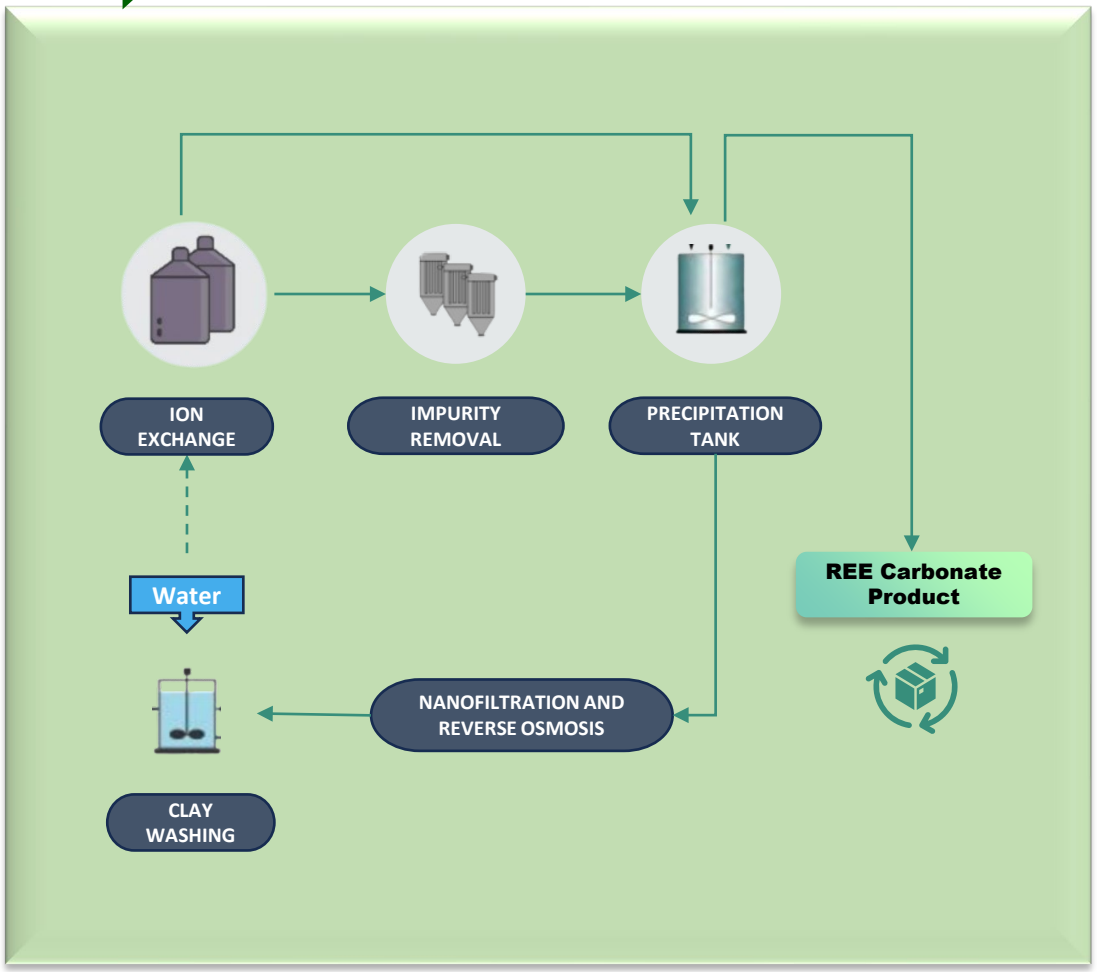
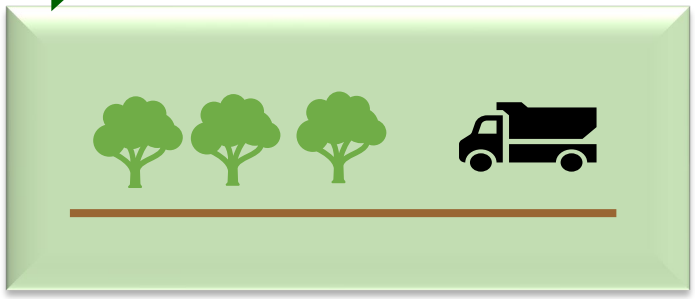
CLAY MINING

ION EXCHANGE PROCESSING - ANSTO



CLAY BACKFILL & REVEGETATION



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Downstream Technology: JV For Separation / Refining / Recycling

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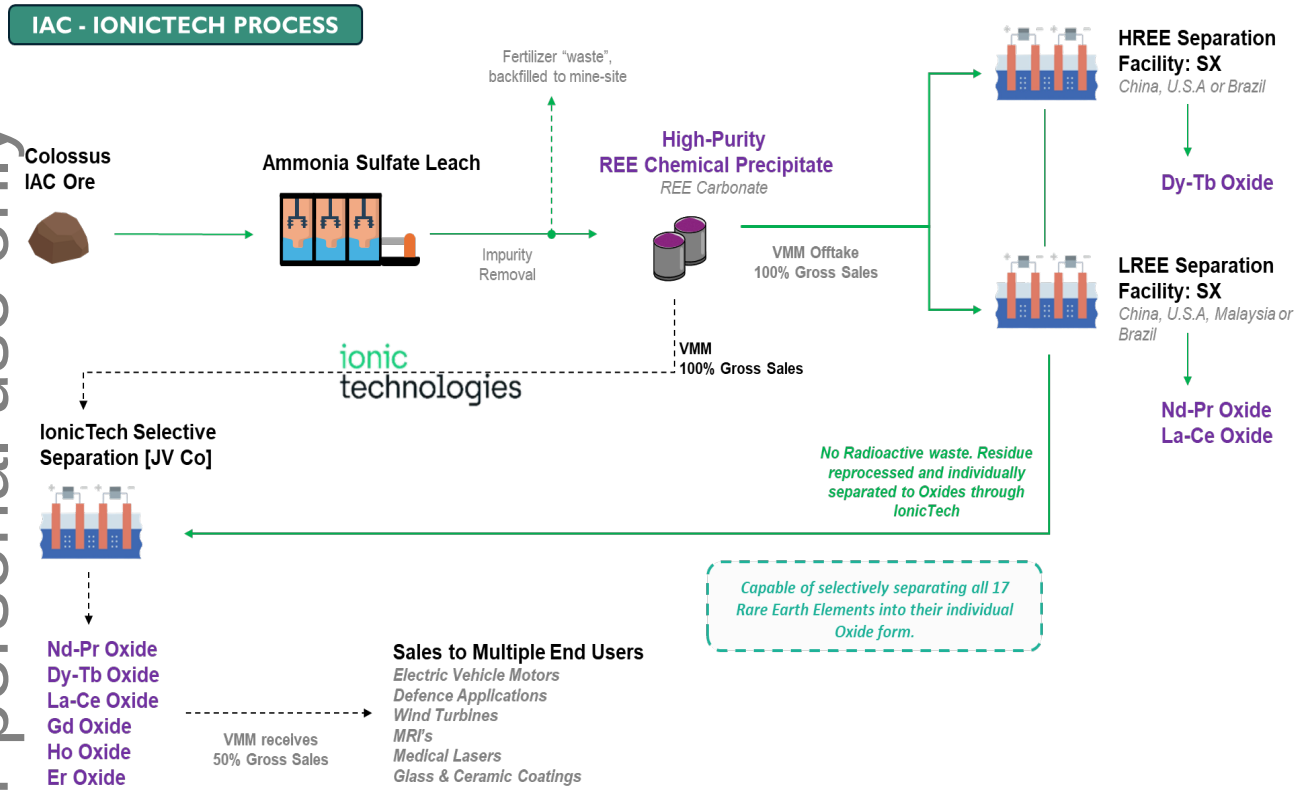

Conceptual flowsheet for Colossus integrating IonicTech into its downstream plant, exemplifies the simplicity of processing an Ionic Clay Project and developing a MREC through a single leaching agent.

Joint Venture with Ionic Rare Earths (IXR)

- Colossus positioned to become the first producer of refined Rare Earth Oxides ('REO') in Brazil, through a Joint Venture signed with IXR[1].
- The JV has exclusive global (excluding Asia and Uganda) rights to commercialise Selective Separation Technology ('SST') for downstream processing, and exclusive rights to commercialise IXR's Rare Earth Recycling Technology ('RRT') in Brazil.
- The new JV company formed will be 50/50 owned by both Viridis and Ionic Rare Earths respectively. All IP developed will be exclusively owned by the JV in order to scale the technology across numerous Ionic Clay projects in Brazil and REE projects globally.
- The JV provides optionality to Colossus to produce both a Mixed Rare Earth Carbonate and refined Oxides based on future offtake agreements and customer requirements.

1. VMM ASX announcement 3 Apr 2024 'Viridis Enters JV for Separation, Refining and Recycling of Rare Earths"'

Anticipated Project Milestones: Work Program to Initial Production

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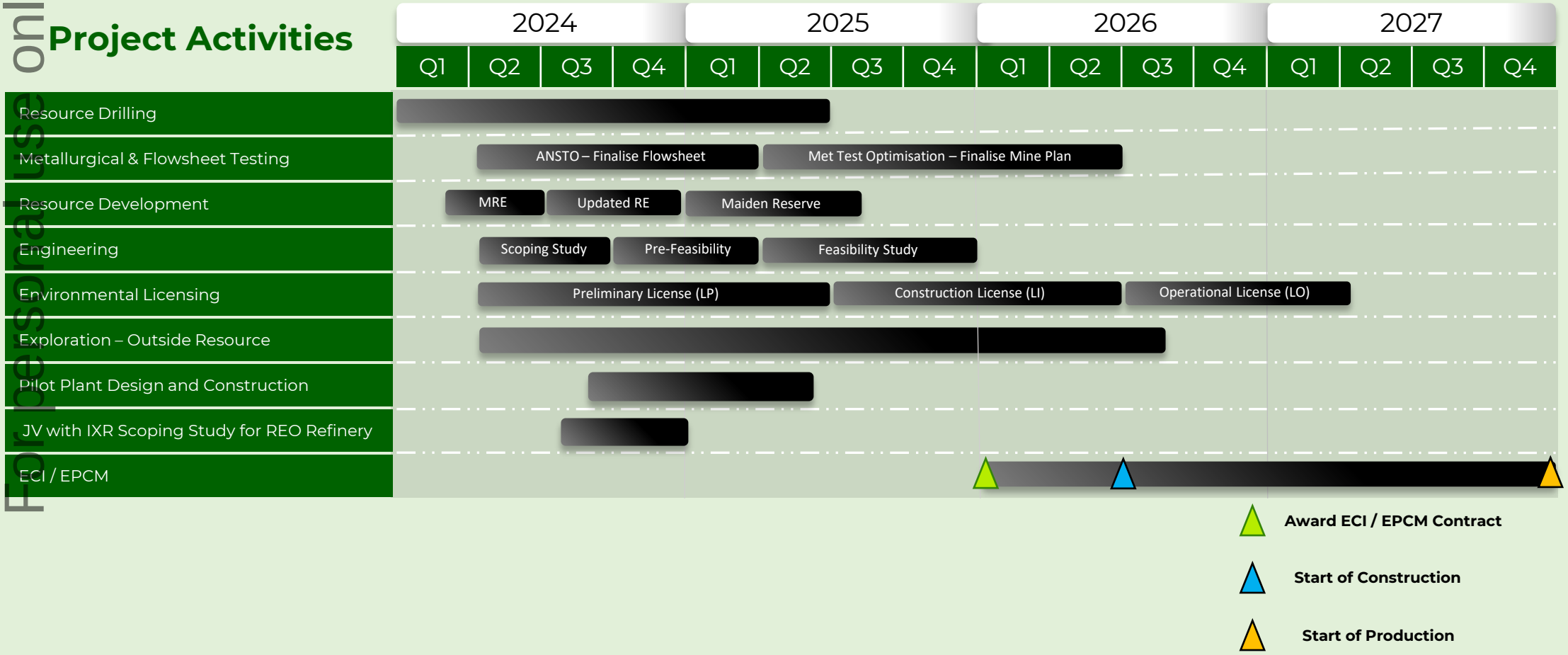

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THANK YOU

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