



**TRITON**  
MINERALS

**March 2017**

Corporate Presentation



# Triton's Vision & Strategy

## ***Vision***

*To grow shareholder value by becoming a recognized producer of high value natural graphite concentrate from the Company's portfolio of assets in Mozambique.*

## **Strategy**

Rapid development of the Ancuabe Project to produce low cost, high margin, premium flake size graphite concentrate while developing a pipeline of projects for supply into the global graphite market.



# Investment Highlights

- ✓ Ancuabe is a premium large flake graphite project located in a proven graphite region of Mozambique
- ✓ High purity graphite with exceptional flake size distribution should make Ancuabe graphite suitable for both the lithium-ion batteries and expandable graphite markets
- ✓ New discovery at T16 has intersected highest ever graphite grades at Ancuabe, over significant thickness from near surface
- ✓ Metallurgical test work results differentiate Ancuabe graphite from peers
- ✓ Adjacent to AMG's graphite mine (returning to production in 2017) and access to power, road and port infrastructure. Strategic alliance with AMG (US\$550m specialty metals company)
- ✓ Resource upgrade and Scoping Study to be released in March 2017
- ✓ Strong Board, Management Team and balance sheet to support rapid project implementation
- ✓ Cornerstone Investor Shandong Tianye (20%) – Chinese real estate and resources investor



# Ancuabe - Value Proposition

Resource	<ul style="list-style-type: none"><li>Existing JORC Resource at T12: 14.9Mt at 5.4% based on limited drilling</li><li>Drilling results from T16 discovery and additional T12 drilling <b>to be incorporated in JORC Resource upgrade due in March 2017</b></li></ul>
Exploration results	<ul style="list-style-type: none"><li>T16 discovery confirmed during drilling campaign completed in December 2016. Outstanding results include:<ul style="list-style-type: none"><li>— 45 m at 9.7% TGC from 12 m downhole</li><li>— 34 m at 7.4% TGC from 12 m downhole</li><li>— 21 m at 6.2% TGC from 2 m downhole</li></ul></li></ul>
Metallurgical results	<ul style="list-style-type: none"><li>First quartile flake size distribution and purity<ul style="list-style-type: none"><li>— On average approximately 59% large flake graphite (&gt;180 microns), approximately 32% jumbo flake graphite (&gt;300 microns)</li><li>— Excellent concentrate purity greater than 98% on average (LOI1000)</li></ul></li></ul>
Markets	<ul style="list-style-type: none"><li>Ancuabe graphite suitable to supply two fastest growing markets for graphite:<ul style="list-style-type: none"><li>— Lithium-ion Batteries (LiB): Electric vehicles and battery storage Growth in United States (Tesla) and China where, Lithium-ion mega factories to grow by 6x by 2020.</li><li>— Chinese building materials: flame retardant materials mandated for use in building products, resulting in very strong demand for expandable graphite.</li></ul></li></ul>
Location	<ul style="list-style-type: none"><li>Located in Cabo Delgado province of Mozambique, a proven graphite region</li><li>Ancuabe Project adjacent to AMG's Ancuabe graphite mine (previous high grade/quality graphite production) – strategic alliance</li><li>Close to sealed road, medium voltage power and access to container port of Pemba, minimal impact on local communities</li></ul>
Development	<ul style="list-style-type: none"><li>Scoping study due for release in March 2017, targeting production of 50-60ktpa</li><li>Maiden Mineral Resource at T16 and an upgrade to the existing T12 Mineral Resource to be released in March 2017</li><li>PFS, JORC Mineral Reserve, product testing and off-take discussions targeted in 2017, following completion of Scoping study</li></ul>

# Corporate Snapshot – ASX:TON

## Capital structure

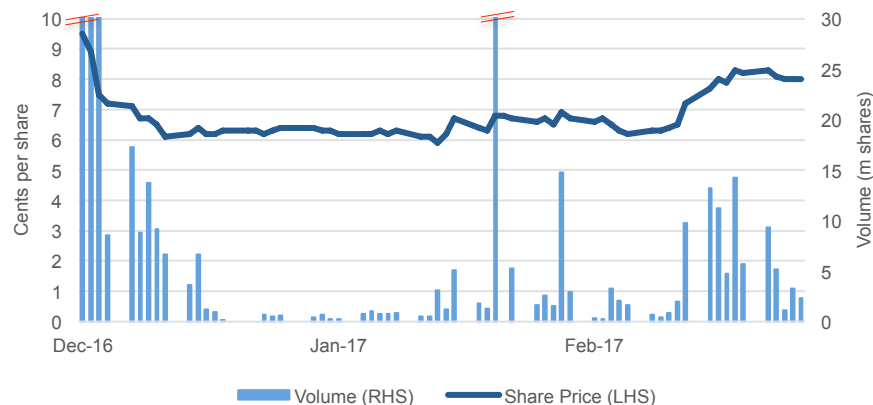
Share Price (7 March 2017)	A\$	0.075
Shares outstanding	m	657.8
Options <sup>1</sup>	m	87.5
Performance Rights	m	16.5
<b>Market capitalisation (undiluted)</b>	<b>A\$m</b>	<b>49.4</b>
Cash (March 2017 estimate)	A\$m	6.0
Debt	A\$m	-
<b>Enterprise Value</b>	<b>A\$m</b>	<b>43.4</b>

Note 1: 22.2m/\$0.15/16 March 2017, 0.7m/\$0.20/16 March 2017, 5.0m/\$1.00/23 July 2017, 5.0m/\$0.70/25 August 2017, 4.5m/\$0.2748/23 January 2018, 50.0m/\$0.10/30 June 2018

## Major Shareholders

Shandong Tianye Mining	20%
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## Share Price Performance



## Strategic stakeholders



- 20% shareholder



- Strategic alliance

# Board & Management

## Board of Directors

<b>Xingmin (Max) Ji</b> <i>Non Executive Chairman</i>	Bachelor of Arts MBA; Chairman of Minjar Gold as well as the CEO for Tianye Australia Group. Over 20 years of experience in the finance and investment fields, including Shanghai listed company.
<b>Peter Canterbury</b> <i>Managing Director</i>	Bachelor of Business (Accounting) CPA; Senior mining executive with significant experience in project development and operations in Australia, Europe and Africa. Previously the CEO of Bauxite Resources and also CFO of Sundance Resources. Lead role in rebuilding Sundance in 2010 and also negotiating the Mining and Development Convention in Cameroon for the integrated iron ore mine rail and port project.
<b>Patrick Burke</b> <i>Non Executive Deputy Chairman</i>	Bachelor of Law; Extensive legal and corporate advisory experience, Director for a number of ASX and AIM listed small to midcap resources companies over the past 10 years. Expertise is in Corporate commercial and securities law with an emphasis on capital raisings and M&A.
<b>Paula Ferreira</b> <i>Non Executive Director</i>	Bachelor of Accounting; Mozambican citizen and Chartered Accountant with 15 years experience in construction industry and 27 years in audit including managing partner of Deloitte & Touche in Mozambique. Strong knowledge of the business environment in Mozambique including the public sector and international funding agencies.
<b>Guanghui (Michael) Ji</b> <i>Non Executive Director</i>	Bachelor of Engineering; CEO of Minjar Gold and has worked for various leading mining companies in China and Mongolia. 15 years experience in production management and international mining resource development in the gold and non-ferrous metal mining and processing sector.

## Management

<b>Lisa Park</b> <i>General Manager – Studies &amp; Metallurgy</i>	Bachelor of Engineering (Chemical) & Masters of Applied Finance GAICD, FAUSIMM; Highly credentialed process engineer with broad experience across commodities and geographies, having held previous roles with AECOM, Fluor Australia, MMG Limited, Worley Parsons and Lycopodium.
<b>David Edwards</b> <i>CFO &amp; Company Secretary</i>	Bachelor of Economics FCA – Chief Financial Officer & Company Secretary; Experience in the resource and construction sectors and brings outstanding skills in corporate governance, strategy and business planning, debt and equity markets, investor relations, joint venture management and operations. Previously GM Finance with Clough Limited, Group Financial Controller for Fortescue Metals Limited.
<b>Gidião Mbanze</b> <i>Project Manager - Mozambique</i>	Bachelor of Aeronautical and Mechanical Engineering; 10 years of experience in Project Management Systems and Reliability engineering with some of the world's largest mining companies (BHPB & Vale)



# Development Strategy & Market Insights

- Graphite Market is a quality driven value add market where a combination of flake size and concentrate purity determines pricing
- Two fastest growing markets for graphite:
  - Chinese building materials: flame retardant materials mandated for use in building products, resulting in unprecedented demand for expandable graphite.
  - Lithium-ion Batteries (LiB): Electric vehicles and battery storage. Growth in United States (Tesla) and China where, Lithium-ion mega factories forecast to grow by 600% by 2020
- Ancuabe graphite suitable to supply both LiB and expandable graphite markets – many peers targeting only construction or spherical graphite for LiBs
- Ancuabe region has historical high grade graphite production from the adjacent GK Ancuabe mine owned by AMG
- Ancuabe production scale will be in line with market demand – targeting 50-60ktpa
- Utilise extensive studies already undertaken to fast track development
- Utilise strategic relationships in China (**Shandong Tianye**) and Europe (**AMG**)



# Graphite Market Characteristics

- Sales contracts negotiated based on end user specification requirements
- Quality of product (purity, flake size) and ability to consistently produce to required specifications are key determinants of success

## **Key factors impacting the sales price of flake graphite:**

- Flake size: larger sizes typically achieve higher prices
- Purity (concentration grade): 97-98% TGC is considered minimum specification for battery grade

**Chinese mines reportedly lack significant large and jumbo flake graphite therefore creating a market opportunity for large flake size producers**

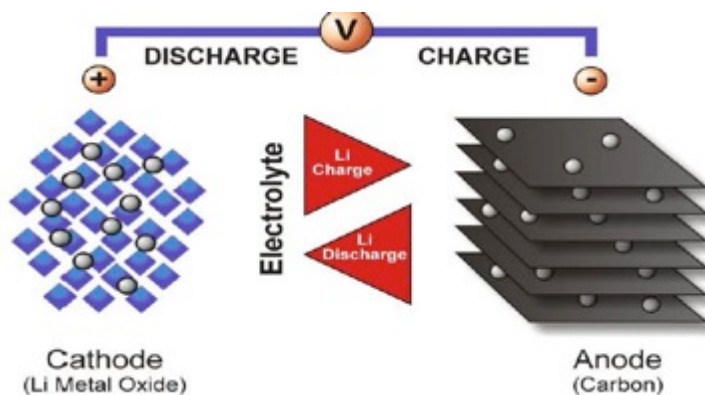


# Diverse Applications for Flake Graphite

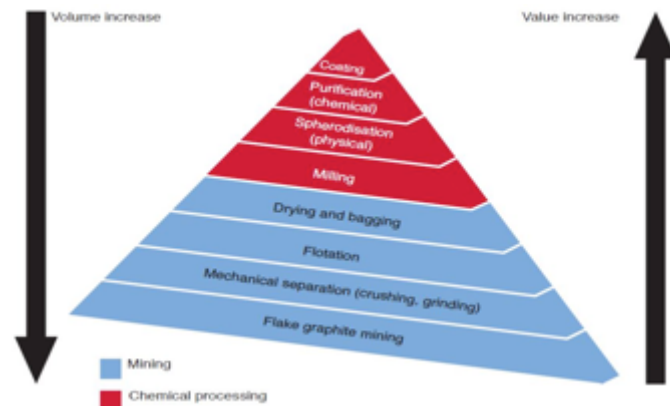
Type	Uses	Comments
<b>Battery Anode Materials</b> 	<ul style="list-style-type: none"> <li>Lithium Ion</li> <li>ESS- Vanadium Redox Flow</li> <li>Fuel Cells</li> </ul>	<ul style="list-style-type: none"> <li>A 10% penetration of EVs/HEVs would require all of the world's current annual production of graphite</li> <li>China new energy vehicle production tops 300,000 units by end of Q3 2016 (output up 95% on 2015)</li> </ul>
<b>Expandable Graphite</b> 	<ul style="list-style-type: none"> <li>Thermal applications</li> <li>Fire retardant foams</li> </ul>	<ul style="list-style-type: none"> <li>New Chinese building regulations mandate brominated flame retardants – expandable graphite is a key ingredient</li> </ul>
<b>Graphene</b> 	<ul style="list-style-type: none"> <li>Electronics</li> <li>Conductive Links</li> <li>Screens &amp; Displays</li> <li>Coatings &amp; Paints</li> <li>Composite Materials</li> </ul>	<ul style="list-style-type: none"> <li>Ultra thin, high strength and superb thermal conductivity, electrical conductivity and translucency</li> </ul>
<b>Traditional Applications</b> 	<ul style="list-style-type: none"> <li>Foundry crucibles</li> <li>Carbon steel</li> <li>Lubricants</li> <li>Nuclear pebble bed reactors and cores</li> </ul>	<ul style="list-style-type: none"> <li>Typically low price</li> <li>Chinese graphite production lack large and jumbo flake graphite</li> </ul>

# Graphite Market - Spherical Graphite

- **A critical and non-substitutable component in the LIBs as the anode (negative terminal).**
- Emerging technology markets are developing at a rapid pace and are a key end market for flake graphite product.
- **The key focus is on spherical graphite as the anode for LIBs -** forecast growth in anode consumption is a key growth factor



- Spherical purified graphite (**SPG**) is manufactured from high grade flake graphite concentrates.
- There are four steps to the production of SPG, which can be sold as either a coated or uncoated product: Milling and micronisation, Spheroidisation, Purification and Coating.
- **Spherical graphite derived from natural graphite is produced at approximately 1/3 the cost of synthetically produced spherical graphite.**



Source: Industrial Minerals



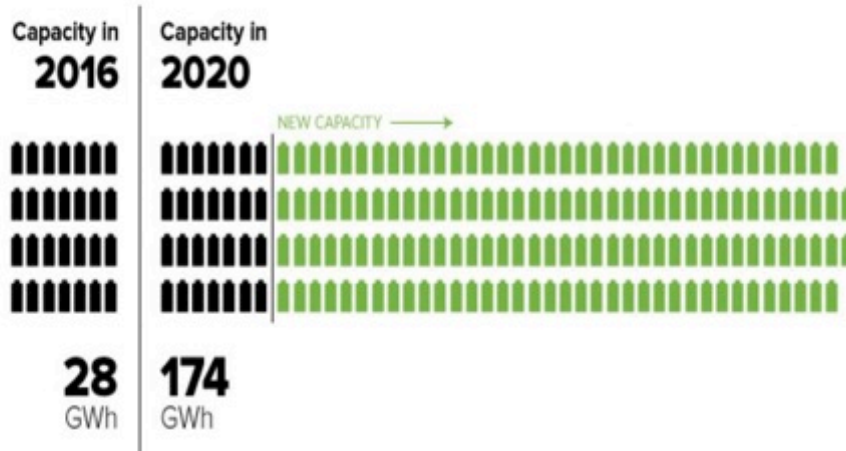
# Graphite Market – LIBs

## CHINA IS LEADING THE CHARGE

Lithium-ion megafactories in China to grow capacity 6X by 2020

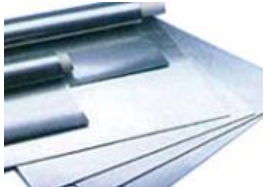


Global lithium-ion battery production capacity will increase by **521%** between 2016 and 2020.



“While the Tesla Gigafactory is vitally important from an EV vertical integration perspective, the **majority of new lithium-ion battery capacity is being built in China**. Some of these plants are expected to be huge such as the CATL facility at 50GWh – there is little doubt that China’s lithium-ion industry has come of age.”  
**Simon Moores – Benchmark Mineral Intelligence**

# Expanded Graphite Products



Flexible Graphite Sheet and Roll

“The growing trend of substituting non-halogenated flame retardants is sweeping the industry. Expandable graphite plays a major role as a non-halogenated flame retardant in flexible polyurethane foam.”

*Vijay J. Bhagat, R&D Center, Cleanline Products Pvt. Ltd*

- Expandable graphite is manufactured using natural graphite flake - a layered crystals consisting of sheets of carbon atoms.
- Expandable graphite is manufactured by the oxidation of graphite flake in sulphuric acid. When heated at high temperature it swells/expands up about 100 times to its original volume.
- Expandable graphite is used in the growing sectors of graphite foil (heat shield in electronic devices, nuclear furnace shields), graphite paper and as flame retardant building materials.
- **China has passed a requirement for the use of flame retardant material to be used in building going forward. The potential increase in demand could increase demand for expandable graphite by between 250kt and 1000kt in China alone.**

Expanded Graphite Cloth



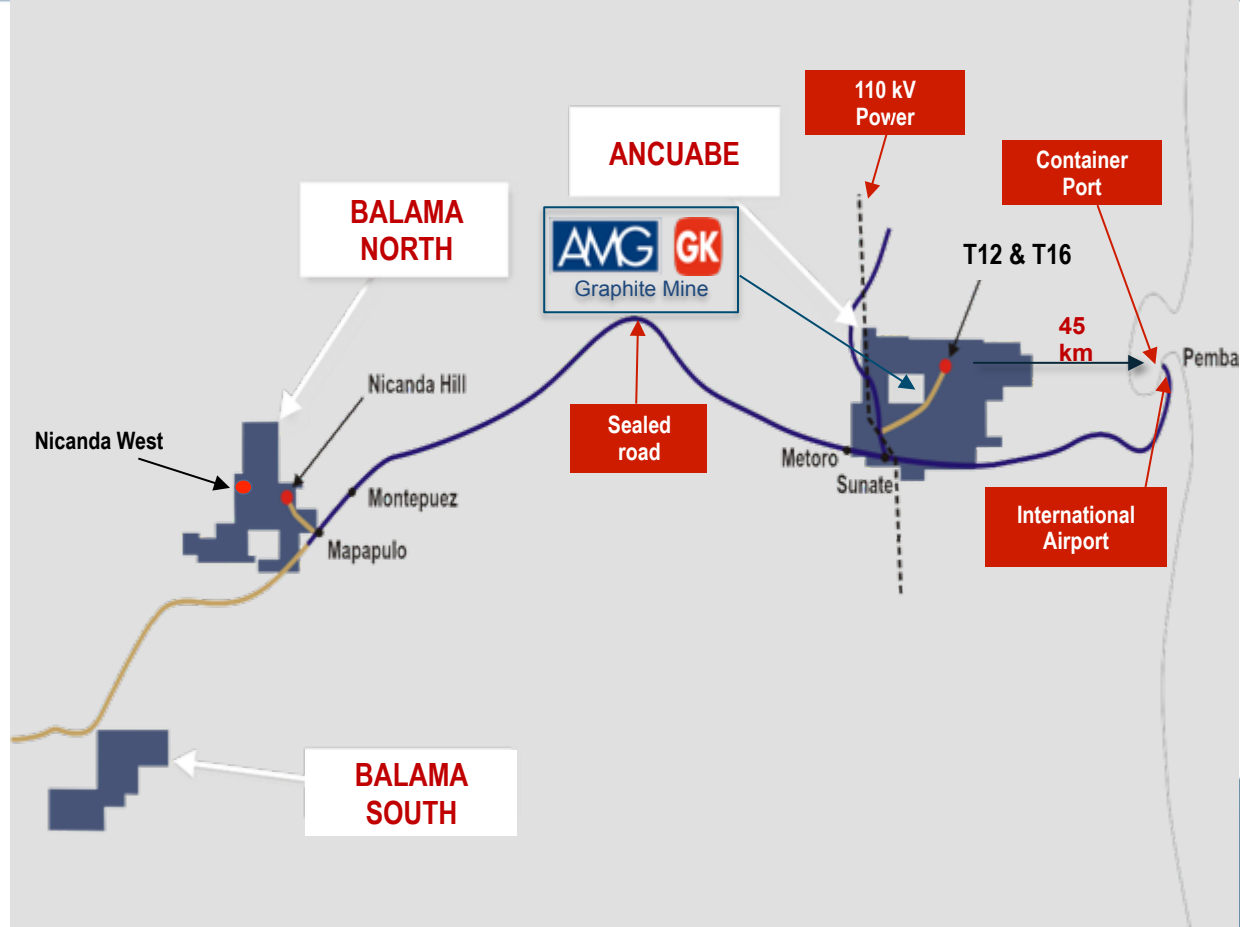
Flexible Graphite Ribbon Tape

Flexible Graphite Yarn



# Ancuabe Graphite Project

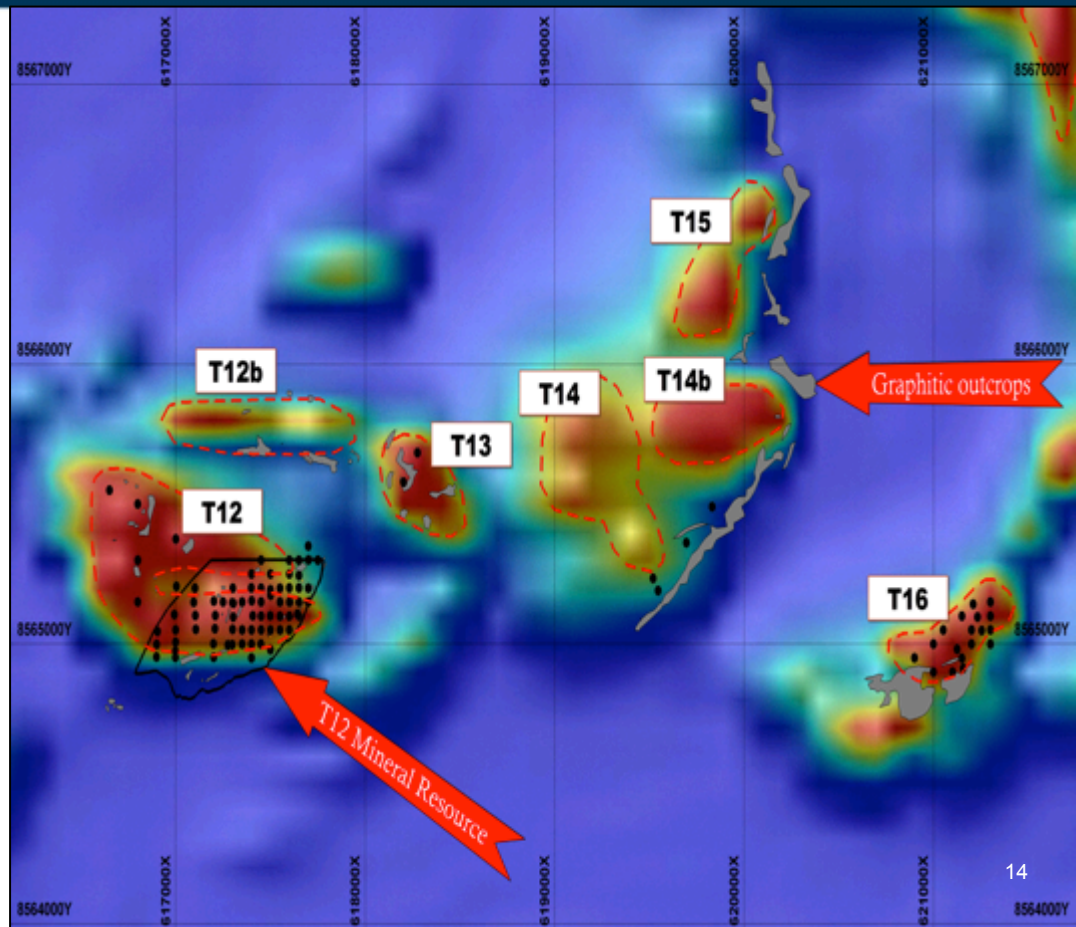
- Cabo Delgado province of Mozambique
- Ancuabe Project adjacent to AMG's Ancuabe graphite mine – strategic alliance
- Close to sealed road, medium voltage power and access to container port of Pemba
- Minimal local community impact



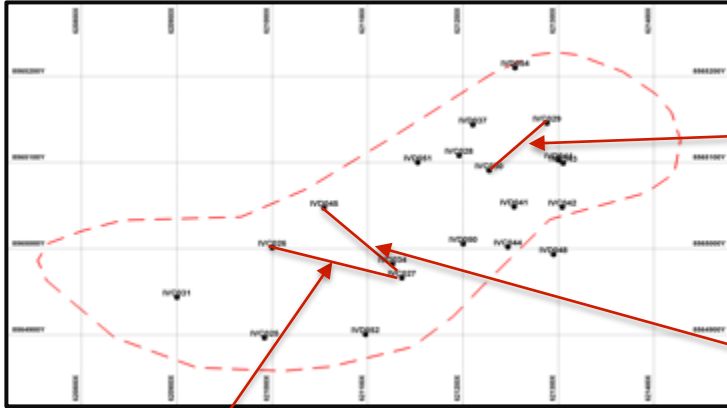
# Unconstrained Resource with Upside Potential

- Only drilled a small section of the identified mineralised zone
- Upside potential from extensions of existing T12 and T16 deposits
- Significant upside potential on the other identified targets of T12b, T13, T14, T14b, T15 & T17
- Further exploration as the project progresses has potential to enhance grade and life of mine

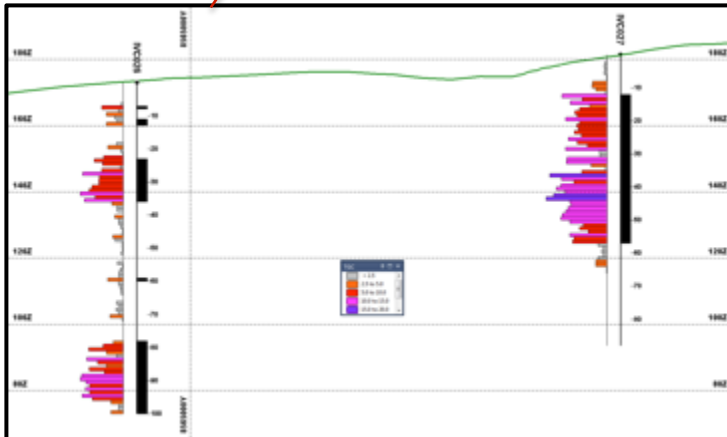
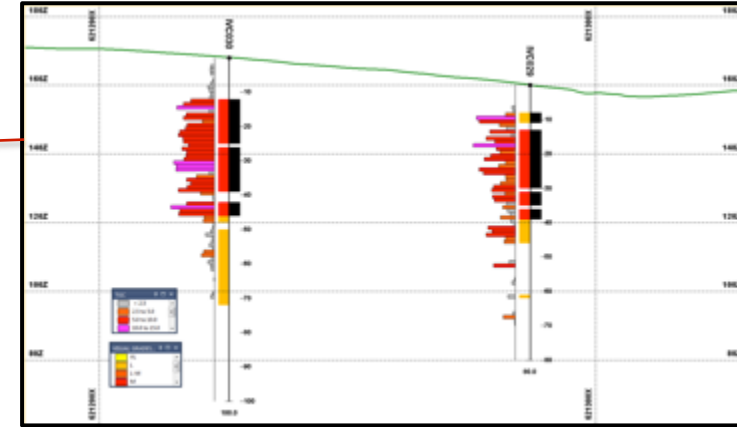
Now is the time to rapidly develop T12 and T16



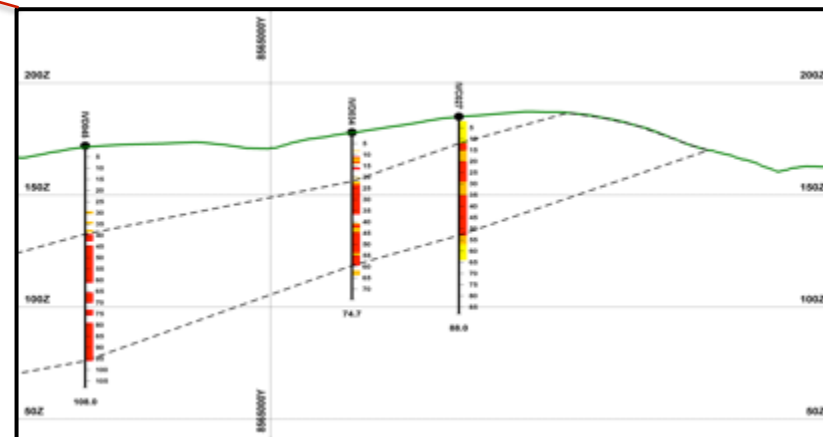
# Drilling Results at T16



Cross section  
through RC holes  
IVC029 and IVC030



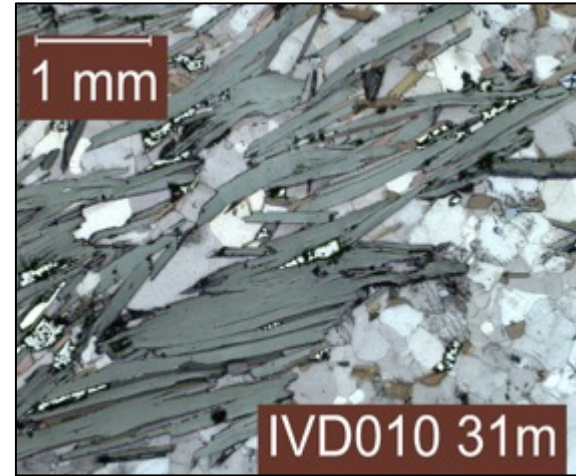
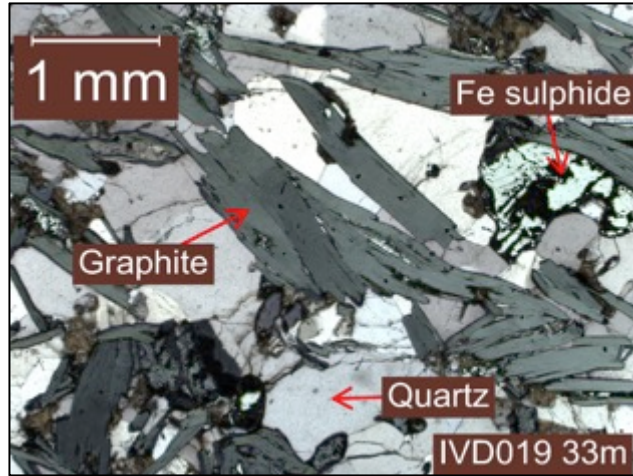
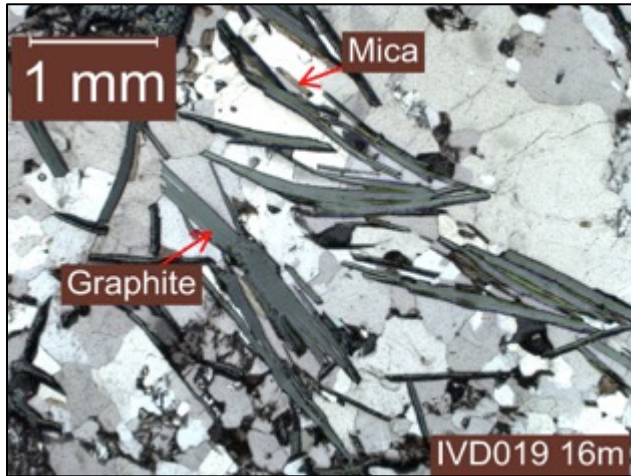
T16 cross section  
through IVD045,  
IVD034 and IVC027



Cross section  
through RC holes  
IVC026 and IVC027



# Petrographic Results at T12



Polished thin sections at T12



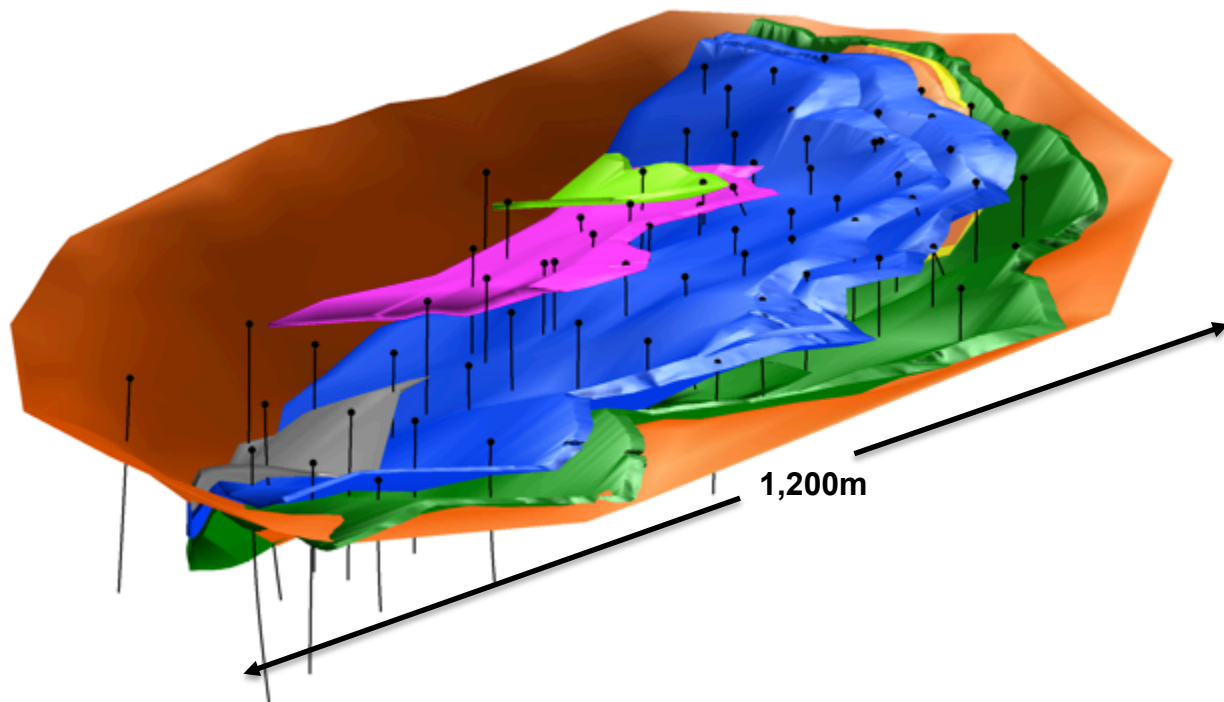
Core photograph of graphitic gneiss (approximately 6% TGC) between 36.86 and 41.5 m downhole in IVD019



# From VTEM to Resource Model

## Preliminary T12 3D pit

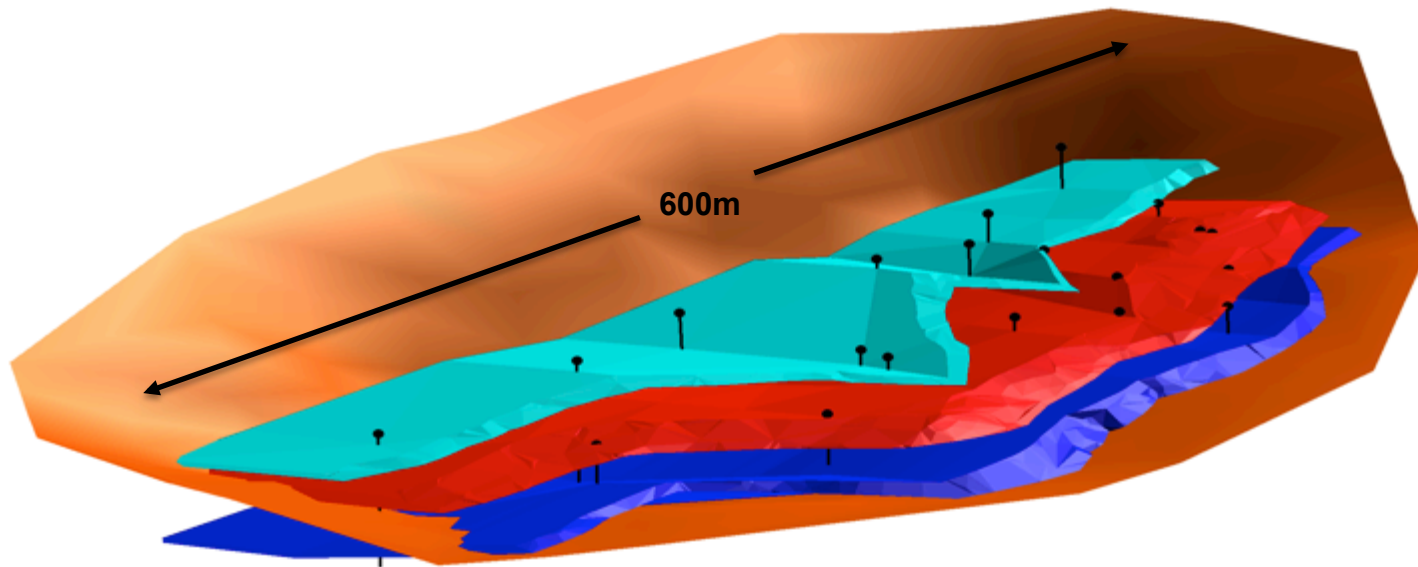
- Near surface access to mineralised zones
- Continuous wide sections of graphite layers



# From VTEM to Resource Model

## Preliminary T16 3D pit

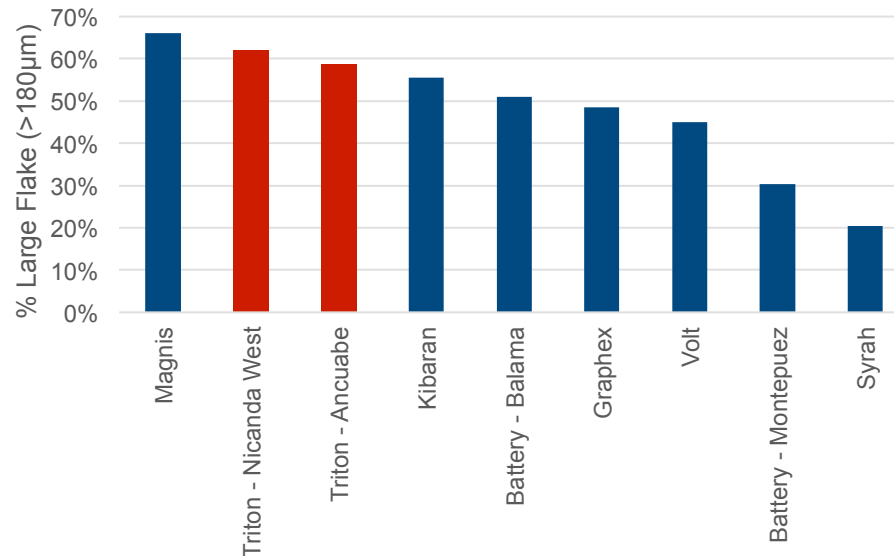
- Near surface access to mineralised zones
- Continuous wide sections of graphite layers





## Ancuabe flake size distribution is amongst best of peers

Flake Size Distribution - % Large Flake (>180µm)





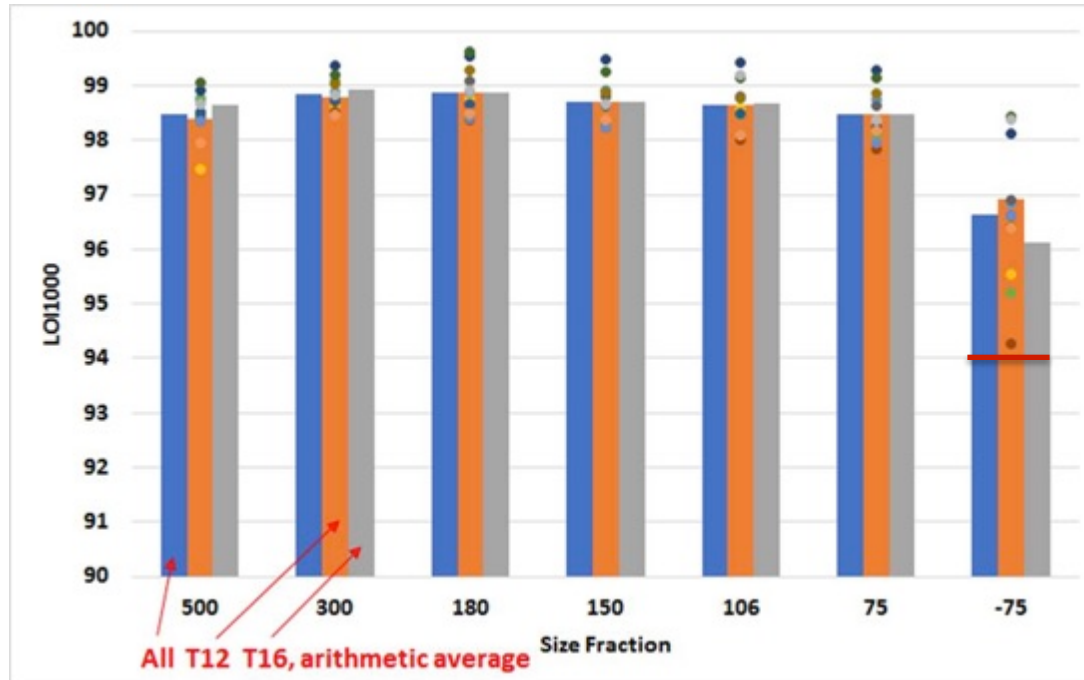
# Metallurgy

- Outstanding metallurgical testwork results released in February 2017 for the recent T16 discovery and additional metallurgical testwork results for T12 at Ancuabe confirm coarse, high-purity graphite flake concentrates:
  - On average approximately 59% large flake graphite (>180 microns), approximately 32% jumbo flake graphite (>300 microns)
  - Excellent concentrate purity greater than 98% on average (LOI1000)
- Final concentrate purity and flake size distribution are key determinants of price - realised Basket Price, not In-situ grade is key to project viability and economics
- Testwork not optimised – scope for coarser initial grind – preserve large flakes
- Next Stage Metallurgical testwork investigations have been defined and laboratories appointed
- Internationally recognised graphite consultants appointed to peer review metallurgical testwork and support product testwork



## Ancuabe upgrades easily to a high quality concentrate

Size Fraction Analysis of LOI1000





# Environmental Studies Underway

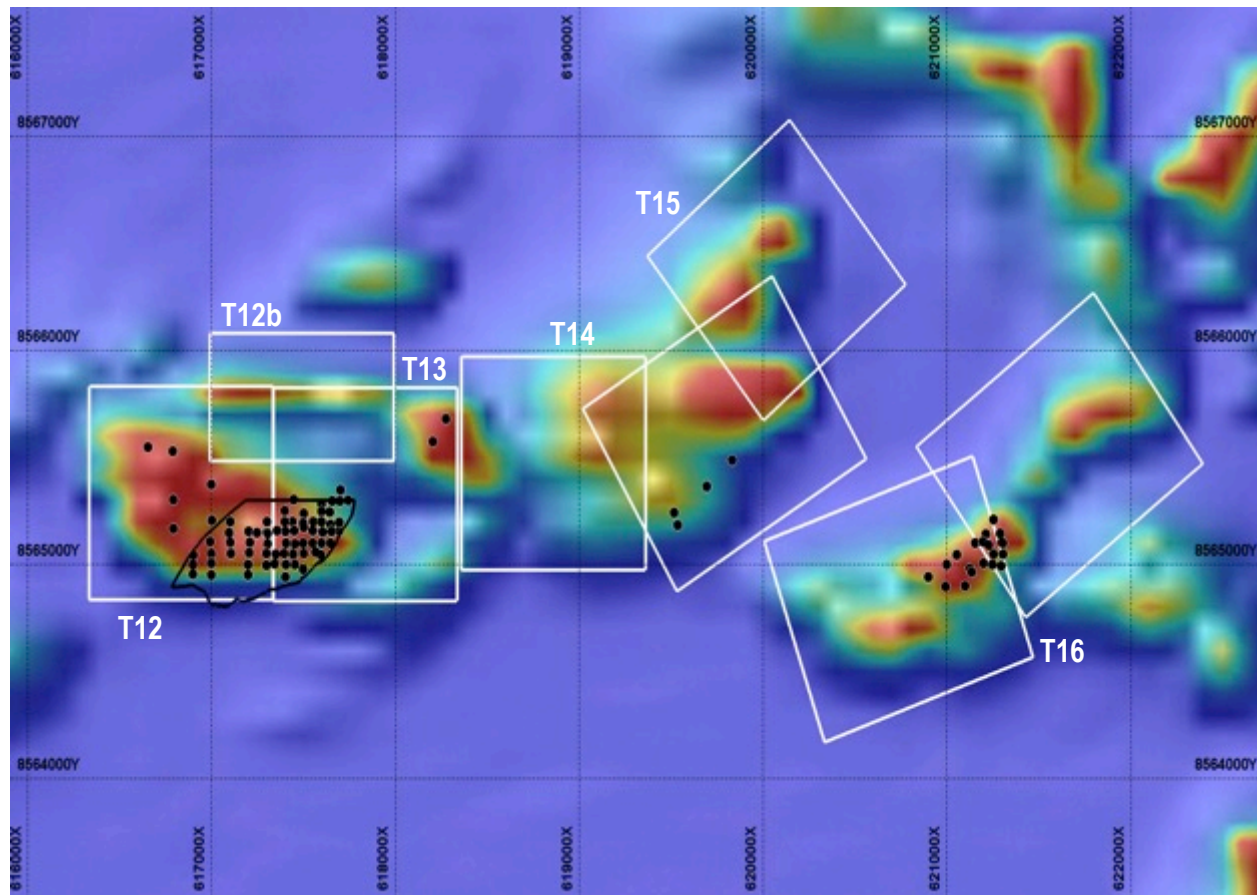
- Dry season studies completed 2015
- Wet season studies currently underway
- Additional studies planned in H1 2017
- EPDA submission April 2017
- Planned submission of ESHIA prior to end of Q3 2017





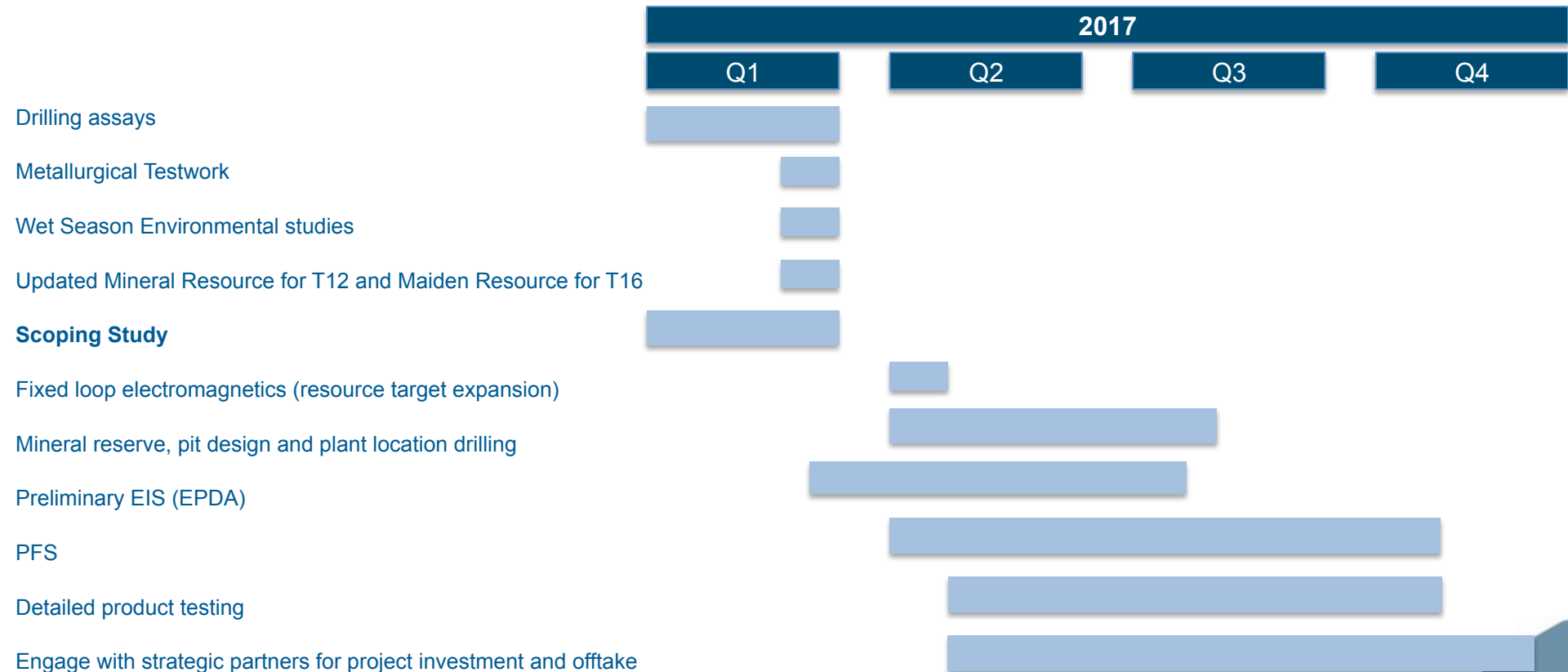
# And Next

- Fixed Loop Electromagnetic studies in April/May 2017
- Will assist identification of potential new areas and extensions of current resources
- Will guide extension drilling on T12 & T16 and exploration drilling on T12b to T15
- Infill drilling to commence April 2017 to progress JORC mineral reserve – targeted Q3 2017
- Geotechnical, hydrogeological and sterilisation drilling – May/ June 2017





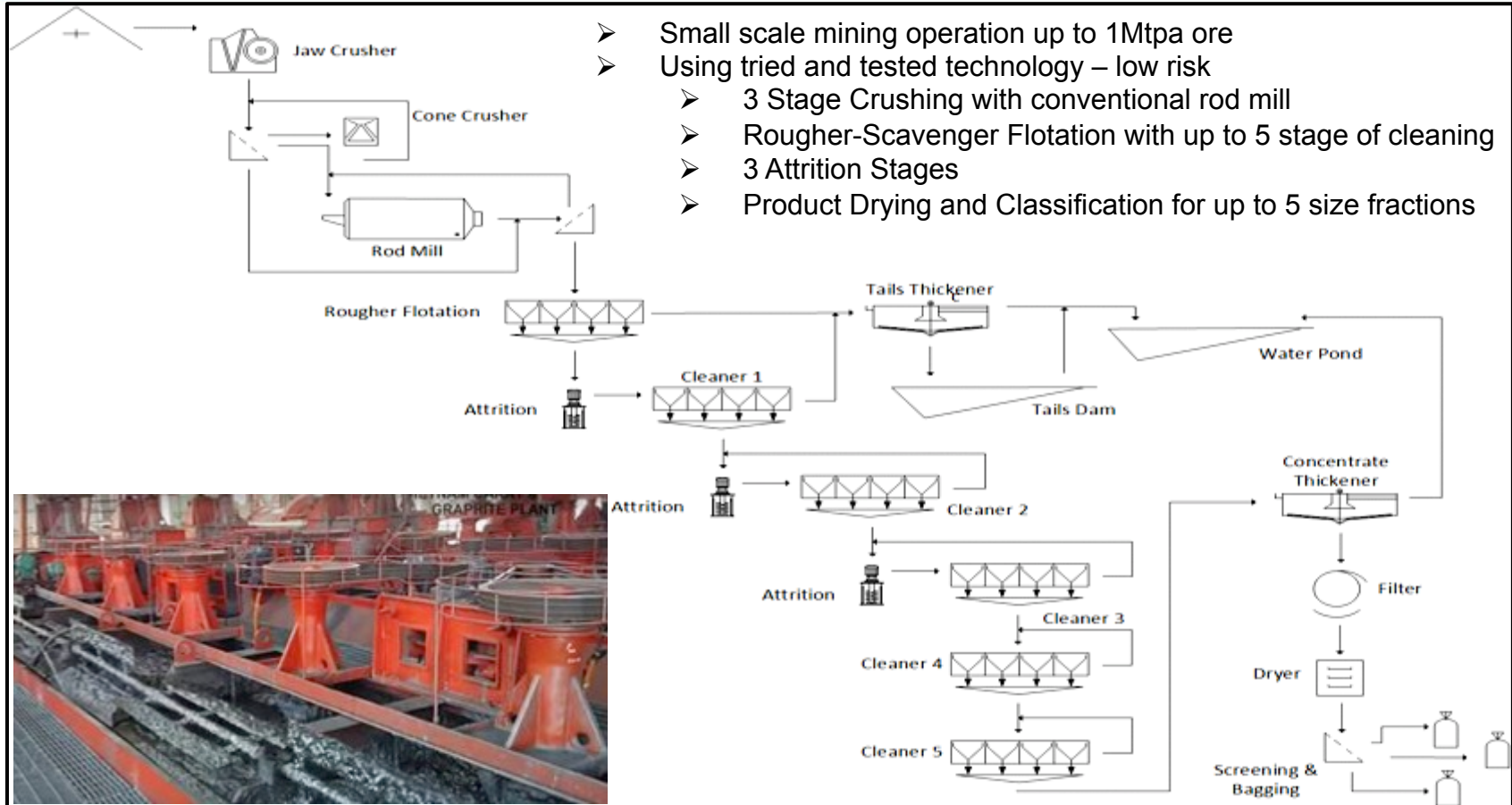
# Why Ancuabe – Fast Development Activities





# Ancuabe Conceptual Process Flow

- Small scale mining operation up to 1Mtpa ore
- Using tried and tested technology – low risk
  - 3 Stage Crushing with conventional rod mill
  - Rougher-Scavenger Flotation with up to 5 stage of cleaning
  - 3 Attrition Stages
  - Product Drying and Classification for up to 5 size fractions





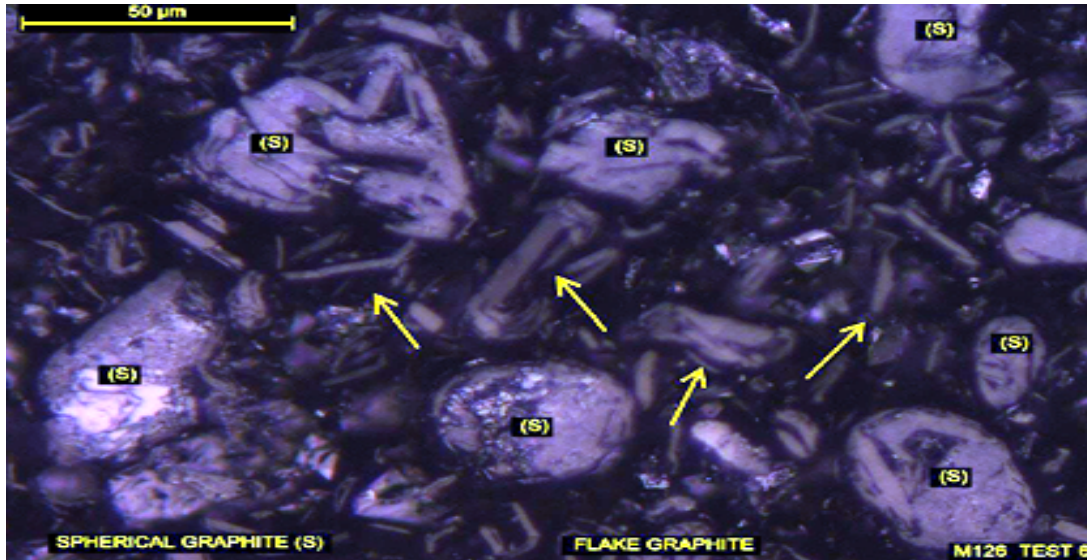
# Why Triton

- ✓ Experienced New Board and Management Team
- ✓ Strong balance sheet to support rapid development
- ✓ Cornerstone Investor Shandong Tianye (20%) – Chinese real estate and resources investor
- ✓ Experienced Implementation Team
- ✓ Outstanding Project: Ancuabe is a premium large flake graphite project, capable of producing high grade graphite concentrate via conventional processes, located in the proven graphite region of Mozambique. Ancuabe graphite suitable for both the lithium-ion batteries and expandable graphite markets
- ✓ Great logistics: close proximity to power, sealed road and container port infrastructure
- ✓ Resource upgrade and Scoping Study to be released in March 2017: PFS targeted completion end Q3 2017
- ✓ Project pipeline (Nicanda West and Nicanda Hill) confirming Triton's commitment to Mozambique and graphite markets

# Disclaimer

## Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not necessarily limited to, statements concerning Triton Minerals Limited's planned exploration program and other statements that are not historic facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should", "target" and similar expressions are forward-looking statements. Although Triton Minerals Limited believes that its expectations reflected in these are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements.





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