Equity Research

Triton Minerals Ltd[1,7]

BUY

TON-ASX

Last: **A$0.29**

November 26, 2014 ▲ Target: **A$0.86**

Impressive scoping study results

A robust project

The independent study indicates Triton's Nicanda Hill Deposit is a technically low risk and economically robust graphite project. The study was based entirely on indicated resources and a base-case mining inventory of 51 Mt grading at 12.4%TGC for 6.3Mt of contained graphite. The study's 29 year mine life is projected to deliver graphite only revenue of US$6bn.

Low operating and capital costs on 210,000tpa of graphite

The study estimates an initial capital cost of US$110 million and a free on board cost (FOB) to the Port of Pemba of US$315 per tonne over life of mine. The capital provides for a 1.8Mtpa plant resulting in an average annual production of 210,000t graphite in concentrate.

PFS, mining licence and further offtake discussions to follow

Completion of the scoping study now positions Triton to commence more advanced offtake discussions, apply for a mining licence and commence a pre-feasibility study. Triton confirms that discussions continue with six (6) separate potential end users or graphite intermediaries that made contact with the company over the last 12 months.

Analysis shows Triton as the top ranked graphite developer

In our view, the critical components required to develop a project to production are purity, flake distribution and offtake (the latter likely dependent on the former) to ensure a market; and grade, a flexible resource, metallurgy and infrastructure to ensure low cost production and transport. Triton comes out as the top ranked graphite developer based on this analysis.

Rate as a BUY with an increased price target of A$0.86/sh

We have completed a SOTP valuation on Triton Minerals that returns a risked 0.6x $NPV_{10\%}$ of A$0.63/share for an assumed operation at Nicanda Hill, an in-situ resource valuation for additional resources, by-product potential and exploration upside of A$0.22/share and A$0.01/share for cash. Our target price has risen A$0.08/share to reflect increased confidence at the scoping stage and increased production. This is balanced against more conservative flake size, price, strip ratio and grade assumptions.

What's Changed	Old	New
Rating	BUY	n.c
Target (A$)	$0.78	$0.86
Graphite Production 2016E (kt)	-	6.44
Graphite Production 2017E (kt)	33.12	67.28
Graphite Production 2018E (kt)	86.40	163.80

Share Data	
Share o/s (mm, basic/f.d. itm)	309.7
52-week high/low (A$)	0.86/0.052
Market cap (A$m)	$88.25
EV (A$m)	$85.25
Net debt (m)	$0.00
Projected return	201%
NAV0%/share	$1.28
NAV10%/share	$0.86
P/NAV0%	0.22
P/NAV10%	0.33

Financial Data			
YE Dec. 31	FY16E	FY17E	FY19E
Graphite production (kt)	6	67	164
Cash costs (US$/t)	$219	$219	$219
Capex (US$m)	-$111	-$1.0	-$1.0
Free cashflow (A$m)	-$126	$10	$38
EPS	$0.00	$0.02	$0.07
CFPS	-$0.00	$0.03	$0.12
P/E	-	14.1	3.9
P/CF	-	8.5	2.3
EV/EBITDA	434.4	5.50	1.58

All figures in A$ unless otherwise noted

Current Chart Previous Research

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Scoping study

The independent scoping study indicates Triton's Nicanda Hill Deposit is a technically low risk and economically robust graphite project. The study was based entirely on indicated resource and a base-case mining inventory of 51 Mt grading at 12.4%TGC for 6.3Mt of contained graphite. The study's 29 year mine life is projected to deliver graphite only revenue of US$6bn and an NPV_{10} of US$1.23 billion (IRR 137%). Payback on capital is forecast within 12 months of commissioning.

The study estimates an initial capital cost of US$110 million and a free on board cost (FOB) to the Port of Pemba of US$315 per tonne over life of mine. The capital provides for a 1.8Mtpa plant resulting in average annual production of 210,000 tonnes of graphite in concentrate.

A pre-feasibility study is scheduled to commence as a result of the positive scoping study. The PFS will focus on production of premium quality flake graphite concentrates from 2017. The scoping study does not contain updated metallurgical test work. We expect this later this quarter.

Our view - A robust project and largely in line with expectations

The results of the study are impressive and largely in line with our original expectations. Although one significant change, increased production to 210ktpa from our assumed 115ktpa, has resulted in a higher NPV, slightly higher capital cost and significantly lower processing cost than we initially assumed.

A comparison of the scoping study assumptions with our original assumptions in our initiation report (23/10/14) is shown below.

Figure 1. Comparison of our original (initiation report) assumptions and the scoping study

	Scoping Study	Our assumption	Variance
Initial capital (US$m)	110	80	Negative
Mining cost (US$/t)	3.97	3.00	Negative
Processing Cost (US$/t)	14.74	30.00	Positive
G&A (US$/t)	3.29	1.50	Negative
Sustaining Capex (USmpa)	1.0	0.5	Negative
Cost FOB (US$/t)	315	379	Positive
Royalty (%)	3	3	-
Average price (US$/t con)	985	1010	Negative
Mine Life (years)	29	27	-
LOM Graphite (Mt)	6.3	3.0	Positive
Annual production (Kt)	210	115	Positive
Head grade (%)	12.4	15.0	Negative
Strip Ratio (w/o)	1.0	0.6	Negative
Metallurgical Recovery (%)	90	96	Negative
Concentrate grade (%)	94	96	Negative
Vanadium credits	nil	nil	-

Source: GMP research, company data

The study assumes a US$985/t life of mine price for graphite which is slightly lower than our original assumption (US$1010/t) but less conservative than our current price assumption (US$806/t) based on more conservative flake size estimation (Fig.6).

Head grade likely to improve

The mining inventory utilized entirely indicated resources. However when inferred resources from the high grade MGM (Mutola, Grande & Macico) zone is incorporated we feel that a head grade closer to our initial assumption of 15% TGC is possible. We would expect infill drilling in 2015 and the remaining assay results from 2014 drilling, to convert more of this high grade material to indicated resources. This represents upside to the current study.

Importantly grade is relatively high which should favour low operating costs should the project go into production.

Low FOB costs, low capital costs, but higher than expected

The FOB costs are extremely competitive and benefit greatly from the economies of scale available from utilising a larger plant. The capital cost is low and reflects the favourable infrastructure and relatively simple processing plant design. The initial and sustaining capital are higher than our original assumption (+US$30m, 1US$0.6mpa) due to the larger plant and production scenario and the capital assumed to connect to grid power. In our view, the reliability of this grid power needs to be proven before it is relied on, and this will no doubt be assessed in greater detail as part of the feasibility study.

Our analysis indicates that Nicanda Hill will operate at the lowest capital intensity of the sector (Fig.11).

Flake size distribution test work continuing

Preliminary microscopic analysis indicates that favourable flake size distribution will attract a strong basket price. The concentrate produced is expected to be high grade (94%), high purity (97%) and exhibit good graphite (90%) recovery through a simple crush and flotation plant. We would expect these numbers to potentially improve given the flexibility of the resource and ability to 'cherry pick'. The 90% metallurgical recovery and 94% concentrate grade used in the study are perhaps a little conservative; we believe there is scope for these to improve.

Flake size distribution test work remains in its infancy. The results of a more detailed metallurgical study are expected later this quarter. As part of our valuation we have allowed for some grinding of flake sizes during the processing of the graphite and taken a more conservative approach on flake size as discussed in the valuation section below.

Increased production and low strip ratio

The key benefits of increased production are economies of scale and increased operating margins. The larger plant allows for lower cost per tonne production at minimal increases to life of mine capital expenditure. This increase in production is the key driver of increased value between our initial assumed mine plan and that in the scoping study. Production is effectively limited by the requirements of customers and can increase (or decrease) dependent on demand given the flexibility of the overall resource.

The strip ratio remains low, but is higher than we had initially estimated.

PFS, mining licence and offtake

Completion of the scoping study now positions Triton to commence more advanced offtake discussions, apply for a mining licence and commence a pre-feasibility study.

Triton confirms that discussions continue with six separate potential end users or graphite intermediaries that made contact with the company over the last 12 months. These groups are located in Europe, Japan, China and North America. Various bulk samples have been supplied to the different groups and further samples have been requested to obtain a better understanding of the physical properties of the Nicanda Hill graphitic material.

With the completion of the scoping study which demonstrates robust economics, Triton is now in a position to advance and hopefully finalise an offtake agreement in the near future with one or more of these groups. Further, with the very encouraging scoping study results, Triton is now able to be more proactive in marketing the Nicanda Hill graphite to a broader range or potential end users or graphite intermediaries, all with the intent of securing a formal offtake agreement in the near future.

Vanadium upside

It is early days, but the Nicanda Hill mineralisation also hosts vanadium as well as low grade zinc. 3.93Mt of vanadium in the current resource represents one of the largest vanadium deposits in the world. Vanadium and zinc can be viewed as potential by-products and additional upside potential as the company progresses towards becoming a significant graphite producer.

Graphite market outlook

Currently the traditional graphite market is small but demand is expected to increase substantially through new applications and especially batteries. A resource in the region of 1.5 billion tonnes has the potential to flood the traditional market (~1mtpa). However, a large resource has a number of benefits as it will enable the company to cherry pick the product to suit demand. This potentially provides scope to supply high value large flake to traditional natural flake markets, fine grained graphite for spherical graphite in batteries and also graphite to the sizeable carbon market (~50Mt). It is this flexibility that is afforded by a large resource base that we feel is more important than the potential to produce large amounts of graphite.

Favourable Infrastructure and regime

Regional infrastructure is favourable. The project is just 9km from a sealed road all the way to the deep-water port of Pemba. Grid power is available in the nearby town of Montepeuz although its reliability is uncertain. The deep-water port at Pemba is growing at a rapid rate due to the discovery of natural gas in the region. This and the advancement of regional graphite production will likely lead to (and already is) the support services required. Access to the port for what we assume would be trucks of graphite concentrate will likely require a new or refurbished road to bypass the city centre. Water for processing looks likely to be sourced from nearby ground water supply.

Mozambique appears to be a favourable and supportive environment for mining. The country already hosts a number of coal mining projects, a small graphite mine as well as a mineral sands project as well as the world's largest graphite development projects. The nation has just undergone peaceful elections.

Updated valuation

We continue to value Triton on a sum-of-the-parts basis, using a risked NAV calculated for its assumed 100% ownership interest in Balama North and an in-situ resource based valuation of future resource and exploration potential. A summary is shown in the table below.

Figure 2. Triton Resources sum of the parts valuation

Asset	Discount rate	NAV "X" Factor	NAV Target (A$)	Target Price (A$)
Balama North Project	10%	0.60 X	$194.2	$0.63
Exploration Upside	n.a	n.a	$68.5	$0.22
Cash	n.a	n.a	$3.0	$0.01
Total NAV			**$265.7**	**$0.86**

Source: GMP research

Nicanda Hill, Mozambique

We have modelled the Nicanda Hill Project to commence production in late 2017, using a twenty seven and a half year mine life based on the 1.8mtpa operation in the scoping study compared to our previously modelled 0.8mtpa. This operation utilizes 47mt of the 51mt mining inventory to produce 5.2mt of graphite. Previously we modelled 21mt of ore processed to produce 3.0mt of graphite.

Figure 3. Nicanda Hill assumed mine production plan

Mine Plan	FY18	FY19	FY20	FY21
Total Plant Feed (Mt)	0.2	0.9	1.8	1.8
Average Head Grade (% TGC)	13	13	13	13
Metallurgical Recovery (%)	90	90	90	90
Graphite Produced (Kt)	37	105	211	211

Source: GMP research

Our production ramp up (FY18-19) is constrained only by demand and offtake rather than by mining or processing.

In the following table, we have used assumptions based on the scoping study, advice from management and our observations from other graphite projects in East Africa. The table shows a comparison of our current modelled assumptions against the scoping study and our original assumptions at the time of the resource estimate and prior to the scoping study results.

Figure 4. Nicanda Hill modelling assumptions (life of mine)

Assumption	Current Model	Initiation note	Scoping study
Mining Cost (US$/t)	4.00	3.00	3.97
Processing Cost (US$/t)	28.00	30.00	14.74
G&A Cost (US$/t)	1.25	1.50	3.29
Trucking (US$/wmt)	50.00	50.00	-
Shipping (US$/wmt)	50.00	50.00	-
Costs FOB (US$/t)	346.00	379.00	315.00
Purity (%)	97.00	97.00	97.00
Sustaining Capex (US$Mpa)	1.00	0.40	1.00
Government Royalty (%)	3.00	3.00	3.00
Tax (%)	30.00	30.00	Pre-tax
Government Free Carry (%)	-	-	-
LOM basket price (US$/t)	806	1,010	985
V2O5 Price (US$/t)	n.a	n.a	n.a
A$/US$	0.88	0.88	n.a
Initial Capex (US$m)	110.00	80.00	110.00

Source: GMP research

We have updated our basket price assumptions. Our previous flake size assumptions were taken from Triton's latest announcement on flake size distribution statistics. These results were taken from microscopic studies rather than metallurgical test work. We have taken a more conservative approach on flake sizes to reflect our expectation that the metallurgical processes (crushing and grinding) will reduce that flake size to some degree.

Figure 5. Updated flake size assumptions compared to microscopic studies announced by TON

Flake Size	Current Model (%)	Company announced (%)
Jumbo	5.0	8.5
Large	12.0	16.0
Medium	20.0	35.2
Small	27.0	17.1
Fine	36.0	23.2
Total	**100.0**	**100.0**

Source: GMP research, TON announcement

We combine these flake size assumptions and Stormcrow's price forecast for graphite, a source that is reportedly well viewed and accepted by graphite developers, to determine annual basket prices for Nicanda's product. We feel this provides a conservative assumption for our valuation.

The price forecast only takes flake size into account (see table below) and does not account for purity variations, which will likely effect desirability to offtakers and could result in premium pricing. Given Triton expects to produce extremely high purity material, an additional level of conservatism can be assumed.

Figure 6.Basket pricing for graphite product from Nicanda Hill

Year	Jumbo		Large		Medium		Small		Amorphous		Basket (US$/t)
	Price	%	Price	%	Price	%	Price	%	Price	%	
2014	$1,726	5%	$1,192	12%	$991	20%	$874	27%	$524	36%	$852
2015	$1,884	5%	$976	12%	$959	20%	$806	27%	$509	36%	$804
2016	$1,676	5%	$996	12%	$867	20%	$784	27%	$493	36%	$766
2017	$1,555	5%	$684	12%	$521	20%	$476	27%	$342	36%	$532
2018	$2,596	5%	$811	12%	$500	20%	$481	27%	$347	36%	$582
2019	$3,573	5%	$947	12%	$508	20%	$487	27%	$353	36%	$653
Long-term	$6,175	5%	$1,165	12%	$517	20%	$493	27%	$359	36%	$814

Source: GMP research, company data, Stormcrow

We value the Nicanda Hill Project on a post-tax DCF basis, calculating an $NPV_{10\%}$ of **A$324m** and a favourable **IRR of 36%.** As the project is now at the scoping study stage we reduce our risking (from a 0.55x NAV risk factor to a 0.6x NAV risk factor), to arrive at a risked NAV of **A$194m, or A$0.63/share.** We have assumed Triton Minerals' 100% interest after final vendor payment.

The key differences between our valuation of the project and the NPV completed in the scoping study are due to the following;

- time value of money (we model from today rather than construction),
- we model tax,
- we model lower revenue per tonne,
- we also model the cost of the vendor payment and the BFS,
- we model depreciation, and
- we model higher concentrate transport costs.

Remaining resources, exploration upside and vanadium and zinc optionality valuation

We have valued the remaining 150Mt of contained graphite resources, exploration potential along strike and at Charmers and the potential for vanadium and zinc credits at US$60m. The scoping study completed by Syrah on vanadium processing gives us a degree of confidence that vanadium production is achievable. The indicated and inferred resources and EM coverage confirm there is much more graphite available should markets require it.

The US$60m valuation represents a heavily discounted in-situ tonnes valuation of US$2.50/t contained graphite on the remaining 150Mt of graphite. This represents just 54% of what the market values Syrah's in-situ tonnes at currently and is significantly below our graphite universe median in-situ resource tonne valuation of US$9.65/t graphite.

Therefore the valuation of resource, exploration and by-product credit potential within the portfolio is conservatively estimated at **A$68m, or A$0.22/share**.

Cash and investments

We estimate that the company has net cash of **A$3m** which we value at **A$0.01/share**

Peer analysis

As outlined in our initiation note on 23rd October 2014, the graphite market is a relatively small market, albeit a growing one. We estimate that demand can accommodate in excess of 300,000t of additional supply between now and 2020 which likely approximates to up to four new mines from a list of over fifty junior developers and explorers. Although many developers including Syrah, Talga and Triton intend to expand into less traditional graphite markets, it is clear that any research of a graphite developer requires an extensive review of its peers. We have taken the opportunity to update our review of the sector based on updated published assumptions in the scoping study.

In our view, the critical components required to develop a project to production are purity, flake distribution and offtake (the latter likely dependent on the former) to ensure a market; and grade, a flexible resource, metallurgy and infrastructure to ensure low cost production and transport. We believe Triton has all of these requirements (with the exception of offtake) and we continue to compare Triton with other developers and explorers in Figure 7 overleaf.

In the table (Figure 7), companies are sorted from top to bottom in the order they rank. Our ranking is calculated on the number of critical advantages (in green) minus the number of critical disadvantages (in red) a company has over peers. This is perhaps somewhat crude as certain factors such as offtake, current valuation (EV and associated ratios), operating margin, flake distribution (basket price) and purity could arguably require a favourable weighting over others that are perhaps less critical. Nevertheless we feel it is a useful guide as to what to look out for amongst peers and why Triton is the standout.

Our initiation report (23 October 2014) discusses the merits of each criteria in detail.

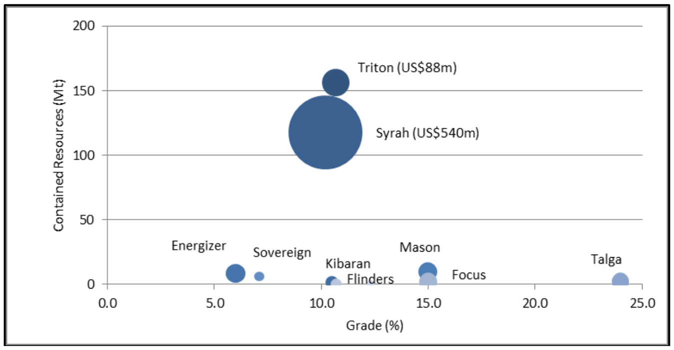
Figure7. Peer Analysis of graphite developers and explorers and ranking (as at 24th November 2014)

Company	Code	EV (US$)	Country	Deposit	Ownership	Production (ktpa)	Capex (US$m)	Opex (Us$/t conc)	Cost FOB (US$/t)	Basket Price (US$/t)	Production (EV/t)	Resource (Mt)	Grade (%)	Resource (EV/ t)	Credits (penalties)	Stage
Triton	TON-AU	$ 75.13	Mozambique	Balama North	100%*	210	110	$ 250.00	$ 315.00	$ 951	$ 0.36	155.9	10.7	$ 0.48	V, Z	Exploration
Syrah	SYR-AU	$ 540.59	Mozambique	Balama	100%	220	133	$ 212.00	$ 240.00	$ 971	$ 2.46	117.6	10.2	$ 4.60	V, Z	Scoping
Kibaran	KNL-AU	$ 15.06	Tanzania	Epanko	100%	40	56	$ 489.00		$ 1,121	$ 0.38	1.56	10.5	$ 9.65	No	Scoping
Energizer	ENZR-NY	$ 36.41	Madagascar	Molo	100%	84	162	$ 418.00	$ 520.00	$ 1,049	$ 0.43	8.6	6	$ 4.23	V	Scoping
Flinders	FDR-CA	$ 12.59	Sweden	Woxna	100%	17	17	$ 662.00	$ 730.00	$ 1,058	$ 0.74	0.275	10.7	$ 45.79	No	Scoping
Mason	LLG-CA	$ 35.17	Canada	Lac Gueret	100%	50	130	$ 390.00		$ 938	$ 0.70	9.9	15	$ 3.55	No	Scoping
Sovereign	SVM	$ 9.42	Malawi	Duwi	100%	30	n.a	n.a		$ 1,184	$ 0.31	6.13	7.1	$ 1.54	No	Exploration
Magnis	MNS	$ 50.79	Tanzania	Nachu	100%	n.a	n.a	n.a		n.a	n.a	n.a	n.a	n.a	No	Exploration
Talga	TLG	$ 29.81	Sweden	Nunasvaara	100%	46	26	$ 425.00	$ 455.00	$ 524	$ 0.65	2.17	24	$ 13.74	No	Scoping
Focus	FMS-TSX	$ 34.37	Canada	Lac Knife	100%	44	147.74	$ 441.00		$ 1,005	$ 0.78	1.8	15	$ 19.10	No	Feasibility
Archer	AXE	$ 6.28	Australia	Campoona	100%	n.a	n.a	n.a		Fine	n.a	0.4	12.3	$ 15.71	No	Exploration

Company	Strip Ratio	Head Grade (%)	Fraser Rank	Flow sheet	Recovery	Purity	Conc. Grade	Offtake?	Operating Margin (US$/t Con)	Operating Margin (US$mpa)	First production	EV/Op. Margin (US$/t)	Capex/t (US$/t)	Capex/EV	Capex/ Margin	Rank Score
Triton	1	12.4	76	CF	90%	97%	94%	No	$ 701.00	$ 147.21	2017	$ 0.51	$ 523.81	1.46	0.75	11
Syrah	0.9	19	76	CF	92%	97%	97%	mou	$ 759.00	$ 166.98	2016	$ 3.24	$ 604.55	0.25	0.80	10
Kibaran	2.2	9.96	62	GFD	96%	93%	?	10,000t	$ 632.00	$ 25.28	2016	$ 0.60	$ 1,400.00	3.72	2.22	5
Energizer	1.65	8.5	103	GFD	89%	98%	97%	No	$ 631.00	$ 53.00	2016	$ 0.69	$ 1,928.57	4.45	3.06	2
Flinders	5.3	10.9	1	GFD	96%	94%	90%	contract	$ 396.00	$ 6.73	2014	$ 1.87	$ 1,000.00	1.35	2.53	0
Mason	0.76	27.4	21	FPG	97%	96%	94%	No	$ 548.00	$ 27.40	2015	$ 1.28	$ 2,600.00	3.70	4.74	0
Sovereign	n.a	n.a	No Rank	n.a	88%	92%	n.a	No	n.a	n.a	Unknown	n.a	n.a	n.a	n.a	-1
Magnis	n.a	n.a	62	n.a	n.a	n.a	n.a	No	n.a	n.a	Unknown	n.a	n.a	n.a	n.a	-1
Talga	4	23.6	1	GFD	77%	80%	?	No	$ 99.00	$ 4.55	Unknown	$ 6.55	$ 565.22	0.87	5.71	-2
Focus	1.2	15.66	21	GFD	91%	96%	98%	Contract	$ 564.00	$ 24.82	2016	$ 1.39	$ 3,357.73	4.30	5.95	-2
Archer	n.a	n.a	11	n.a	n.a	n.a	n.a	No	n.a	n.a	Unknown	n.a	n.a	n.a	n.a	-2

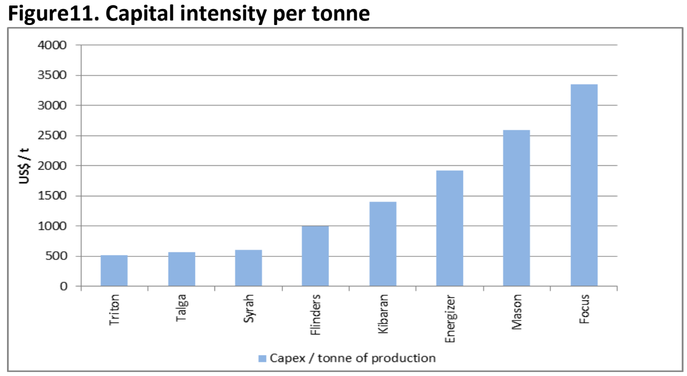
*Source: GMP research. *100% assumed. NB: Ton = GMP Assumptions. TLG = No account for Graphene sales. Flow sheet: C = crush, F= float, G = grind, D= dry, P= polish. Credits: V= vanadium, Z = zinc*

Figure 8. Bubble chart showing size, grade and EV (bubble size)



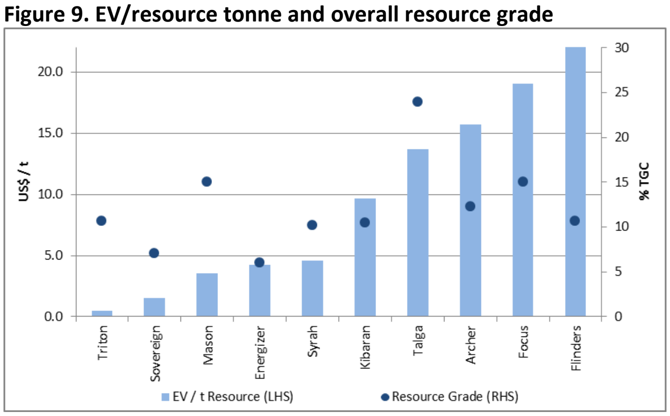
Source: GMP research

Figure11. Capital intensity per tonne



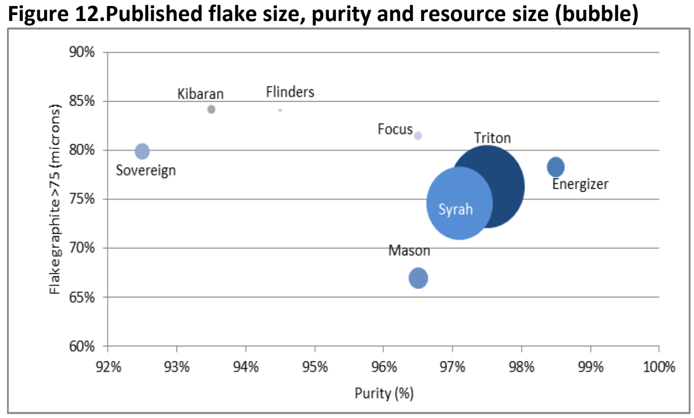
Source: GMP research

Figure 9. EV/resource tonne and overall resource grade



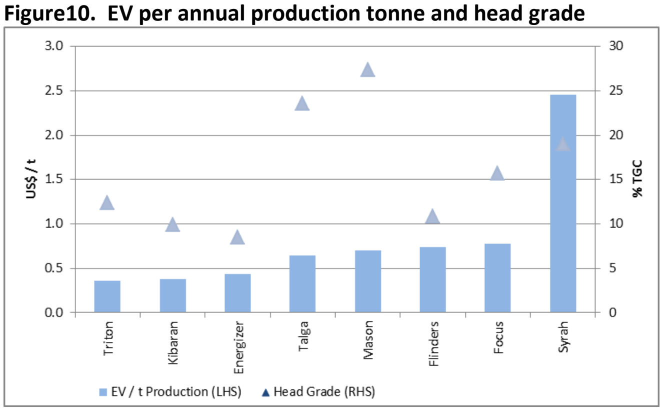
Source: GMP research

Figure 12.Published flake size, purity and resource size (bubble)



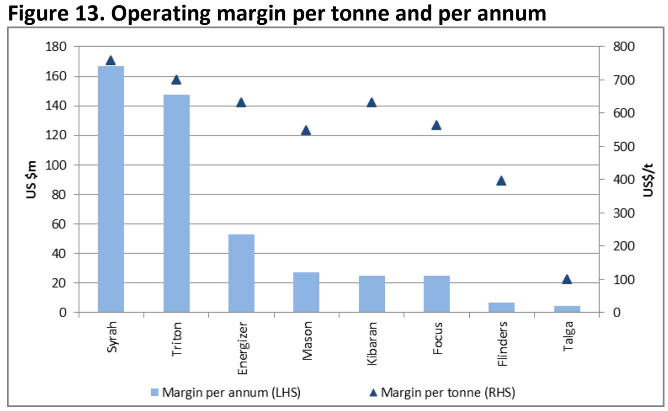
Source: GMP research

Figure10. EV per annual production tonne and head grade



Source: GMP research

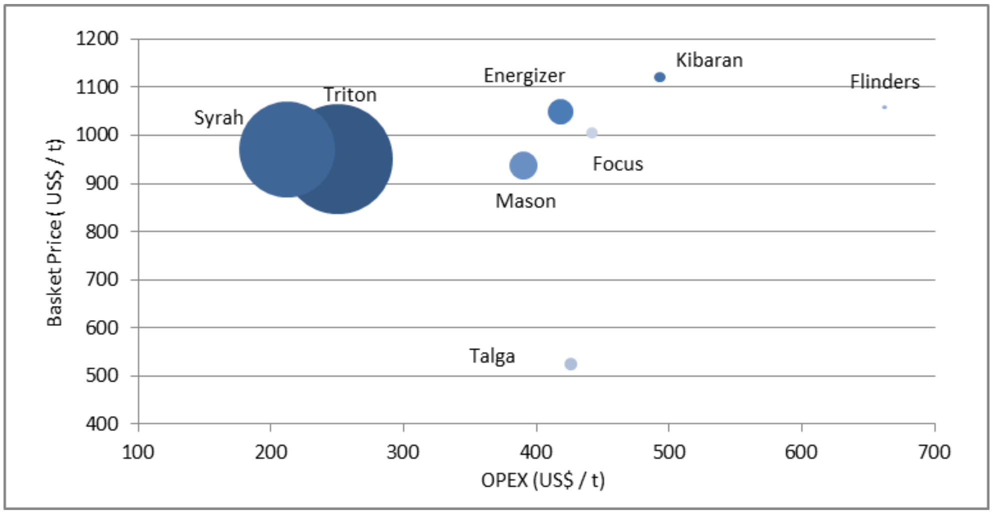
Figure 13. Operating margin per tonne and per annum



Source: GMP research

Low costs and a high quality desirable product will result in better operating margins and a stronger case to secure limited offtake. Flexibility and scale are key. The companies that are most likely to succeed will have high purity, good flake distribution and low costs as the result of high grades. Those less likely to succeed with have low purity, low production, high cost and/or low grade projects.

Figure 14. Bubble chart showing cost, resource size (bubble) and basket price



Source: GMP research

In a sector where only a finite number of developers will develop profitable mines, it is those with low costs, strong production bases, resource flexibility and can attract strong basket prices that stand out from the crowd. Triton is clearly one of these as shown in the bubble chart above.

We expect a re-rating of Triton Resources' valuation on the back of this scoping study.

Upcoming news flow

- Pre-feasibility study – 2015
- Mining licence – 1H15
- Infill drilling on MGM zone – 1H15
- Offtake discussion - ongoing

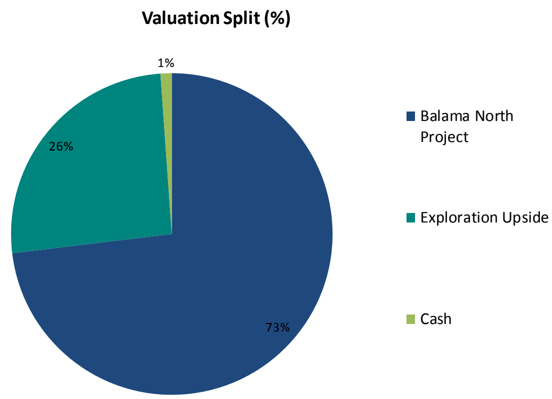
TRITON MINERALS LTD

Ticker	TON
Recommendation	**BUY**
Target Share price (A$)	0.86
Current Share price (A$)	0.29
Implied Return (%)	201%
P/NAV (x)	0.22

Financial Yr. End	31 December
Shares on issue (m)	309.7
Market Cap (A$)	88.3
Enterprise Value (A$)	85.3
Cash (A$)	3.0
Project IRR (%)	30%

Valuation

Asset	Discount rate	NAV "X" Factor	NAV Target (A$)	Target Price (A$)
Balama North Project	10%	0.60 X	$194.2	$0.63
Exploration Upside	n.a	n.a	$68.5	$0.22
Cash	n.a	n.a	$3.0	$0.01
Total NAV			**$265.7**	**$0.86**



Profit & Loss (A$m)

A$M	FY2018	FY2019	FY2020	FY2021
Revenue	$35.7	$100.1	$167.6	$167.6
Cost of Sales	$16.8	$41.0	$52.7	$52.7
Gross Profit	**$18.9**	**$59.1**	**$114.9**	**$114.9**
EBITDA	$15.5	$53.8	$107.6	$107.6
Net Profit before tax	$13.8	$50.2	$104.5	$107.4
Tax Payable	(-$4.1)	(-$14.8)	(-$30.6)	(-$30.6)
Profit after tax	**$9.7**	**$35.3**	**$73.9**	**$76.7**

Balance Sheet

Assets	FY2018	FY2019	FY2020	FY2021
Cash	$5.7	$26.8	$90.9	$170.6
PPE & Exp. & Dev.	$148.6	$144.0	$136.7	$129.6
Total Current Assets	$5.7	$26.9	$91.0	$170.7
Total Assets	**$156.6**	**$151.7**	**$201.4**	**$265.0**
Liabilities				
Senior Debt	$0.0	$0.0	$0.0	$0.0
Total Current Liabilities	$0.2	$0.2	$0.2	$0.2
Total Liabilities	**$2.2**	**$2.2**	**$2.2**	**$2.2**

Ratios and Key Financial Data

	FY2018	FY2019	FY2020	FY2021
EPS (AUDc)	2.0c	7.3c	15.3c	15.9c
FCFPS (A$)	2.2c	8.0c	16.2c	16.8c
P/E ratio (x)	14.1	3.9	1.9	1.8
P/FCF (x)	13.2	3.6	1.8	1.7
EV/EBITDA (x)	5.5	1.6	0.8	0.8
Current ratio (x)	25.0	118.0	398.5	747.5
Shares on Issue (M)	482.6	482.6	482.6	482.6

Reserve and Resources Statement (100% of Project)

Status	Tonnes (Mt)	Grade (%)	TGC (t)	EV / t
Total Reserves	-	-	-	-
M&I only	-	-	-	-
Total Resource	1457.0	0.11	155,754,000	$0.5
Production	47.0	12%	5,239,665	$16

Cashflow Generation

	FY2018	FY2019	FY2020	FY2021
Cashflow generated	$10.4	$38.6	$78.4	$81.1
Equity Placement	$0.0	$0.0	$0.0	$0.0
Debt Funding	$0.0	$0.0	$0.0	$0.0
Capital Expenditure	$1.1	$1.1	$1.1	$1.1

Production Profile (TGC tonnes) (100% of Project)

Operation	FY2018	FY2019	FY2020	FY2021
Balama North Project	67,275	163,800	210,600	210,600
Total	**67,275**	**163,800**	**210,600**	**210,600**

Directors & Management

Chairman	Alan Jenks
CEO	Brad Boyle
Executive Director	Alfred Gillman

Major Shareholders

Directors	14.0%
Top 20	46.0%

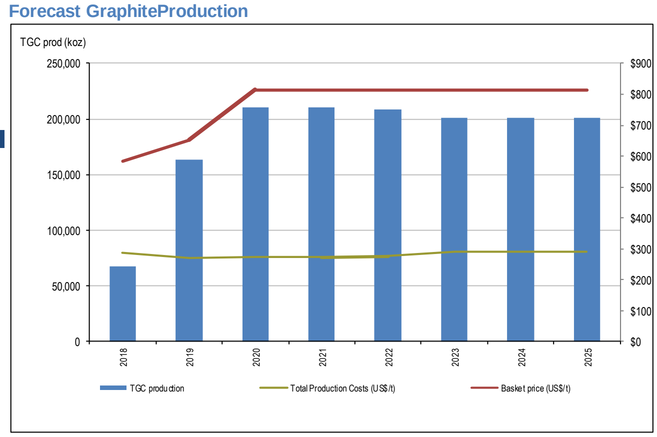
Cash Cost (US$)

USD / t	FY2018	FY2019	FY2020	FY2021
BasketPrice	$582	$652	$814	$814
C1 Cash costs	$219	$219	$219	$219
C3 Production Cost	$287	$271	$273	$273
FOB Pemba Cost	$345	$329	$331	$331
Landed Cost	$404	$388	$390	$390

Basket Price Dynamics(US$)

USD / t	Jumbo	Large	Medium	Small
Flake Size (basket Distribution)	5%	12%	20%	27%
2017	$1,555	$820	$521	$476
2018	$2,596	$811	$500	$481
2019	$3,573	$947	$508	$487
Long Term	$6,175	$1,165	$517	$493

Forecast GraphiteProduction



Source: Company data, GMP estimates

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