

MOD RESOURCES (MOD)

Gearing up for a big year in 2018

Analyst Stuart McIntyre
Email steuarmcintyre@boeq.com.au
Phone +61 2 8072 2909
Date 5 February 2018

We say

Price

Target

Strategic Target

BUY

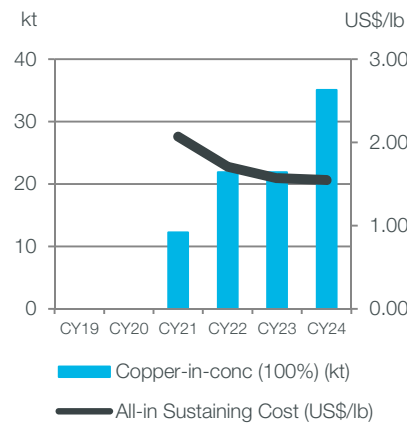
0.06 0.14 0.20

MOD remains our Top Pick in the ASX copper space, and after completing two very robust studies for its T3 copper project last week, we increase our price target by 40% to 14c, an implied return of over 130%. While MOD's valuation is now very comfortably underpinned by the T3 project, for us MOD is still very much about its district scale exploration potential, and with 8 rigs on site and \$10m in cash, we believe MOD is shaping up for a big year in 2018. We maintain our conviction Buy.

SHARE PRICE CHART



T3 PRODUCTION & COSTS (@ 4MTPA)



COMPANY DATA & RATIOS

Enterprise value	\$110m
Diluted market cap*	\$120m
Diluted shares*	1,997m
Free float	100%
12 month price range	\$0.033-0.09
GICS sector	Materials
Board & Management hold	~17% (FD)
*Diluted for ~101m options	

IMPLIED RETURN

Implied all-in return	133%
-----------------------	------

VALUATION UNDERPINNED BY ROBUST T3 PROJECT

Last week MOD delivered two very robust studies for its T3 copper project in Botswana. A PFS for 2.5mtpa and an expanded case for 4mtpa. Using the 4mtpa case, **at current prices our NPV₁₀ for MOD's 70%-share of T3 is ~A\$260m, more than double MOD's EV of A\$110m.** Healthy cash margins of >50% are forecast at spot Cu prices.

\$10M EXPLORATION BUDGET WITH 8 RIGS DRILLING

While MOD's valuation appears compelling, **for us, the MOD story is all about the company's district scale exploration potential.** MOD holds a very large prospective tenement package in the Kalahari copper belt in Botswana comprising 12,600km² – bigger than Rio's iron ore holdings in the Pilbara!

INCREASING PRICE TARGET 40% TO 14c

We increase our price target 40% from 10c to 14c as we now use MOD's 4mtpa case for T3 as our base case. We are also using higher copper prices of US\$3.20/lb (spot US\$3.18/lb) vs. US\$2.80/lb previously. We have also reduced our discount to NPV for T3 from 30% to 20% on delivery of the higher confidence studies. We also lift our Strategic Target 25% (or 4c) to 20c.

T3 STUDIES CONFIRM ROBUST, LONG LIFE PROJECT

Last week MOD released two open pit studies for its 70%-owned T3 copper project in Botswana:

- A 2.5mtpa Base Case
- A 4.0mtpa Expanded Case

The Base Case is based on Reserves only, while the Expanded Case includes ~34% of the assumed mining inventory from inferred resources.

Given the high quality of the infill drilling results at T3 since the last resource update, we are very confident most of the inferred resources included in the Expanded Case will move into the higher confidence measured and indicated categories in the next resource update for T3, due in April 2018. As such, we now use MOD's 4mtpa case as the basis of our base case valuation.

After a deep dive on the detail of these studies, we largely endorse MOD's estimates in our forecasts, as set out below:

T3 Operating Metrics (100%-basis)		Base Case	Expanded Case	Blue Ocean
Plant size	mtpa	2.5	4.0	4.0
Initial capex	US\$m	155	155	160
Expansion capex (in year 3)	US\$m	-	37	40
Average copper head grade	%	1.02	0.86	0.86
Average copper recovery	%	93.1	92.3	92.3
Copper-in-conc	ktpa	23	28	27
AISC (post Ag credit)	US\$/lb	1.36	1.46	1.52
Average strip ratio (waste:ore)	x	4.76	4.28	4.28
Mine life	years	8.8	11.7	11.7

T3 Financial Metrics (100%-basis)		Base Case	Expanded Case	Blue Ocean
Copper Price	US\$/lb	3.03	3.02	3.20
AISC Margins	%	55	52	53
Average FCF (pre-tax)	US\$m	77	85	93
Pre-Tax NPV	US\$m	281	402	427
Pre-tax IRR	%	39	38	38
Post-Tax NPV	US\$m	-	-	276
Post-tax IRR	%	-	-	29

Source: Company, Blue Ocean Estimates
Note: NPVs calculated using an 8% real / 10% nominal discount rate

The Botswana Govt has advised MOD that grid power will be extended to within 12km from the T3 project from 2020. MOD's studies assume the T3 project benefits from grid power from 2022, effectively baking in a 2 year delay on the Govt installation of grid power. Grid power represents a material benefit to the project, as it more than halves T3's power costs to ~US10c/kwhr from ~US23c/kwhr using diesel gensets. According to MOD, the benefit of grid power adds a material ~US\$10m p.a. to EBITDA.

T3 RESERVE & RESOURCE

As part of the studies for T3, MOD released an updated T3 resource statement, including a larger 50mt resource at a lower 0.25% copper cut-off, as set out below.

An updated T3 Resource is due in April CY18.

The T3 Resource at a range of cut-off grades

JORC Category	Cut-off Cu (%)	Quantity (t)	Grade Cu (%)	Grade Ag (g/t)	Contained Cu (Kt)	Contained Ag (Moz)
Measured	0.25	10,290,000	1.15	11.59	154	3.83
	0.5	8,954,000	1.27	12.50	113	3.60
	1.0	6,548,000	1.45	13.58	95	2.86
	1.5	2,179,000	1.90	17.91	41	1.25
Indicated	0.25	14,161,000	1.01	10.93	143	4.98
	0.5	11,202,000	1.19	12.50	133	4.50
	1.0	7,240,000	1.42	14.07	103	3.28
	1.5	2,200,000	1.89	18.07	42	1.28
Inferred	0.25	25,620,000	0.76	9.98	195	8.22
	0.5	15,810,000	1.03	13.09	162	6.65
	1.0	6,786,000	1.42	16.59	96	3.62
	1.5	2,108,000	1.91	20.66	40	1.40
TOTAL (Measured, Indicated) & Inferred)	0.25	50,071,000	0.92	10.58	461	17.03
	0.5	35,966,000	1.14	12.79	409	14.79
	1.0	20,574,000	1.43	14.73	293	9.74
	1.5	6,487,000	1.90	18.84	123	3.93

Source: Company

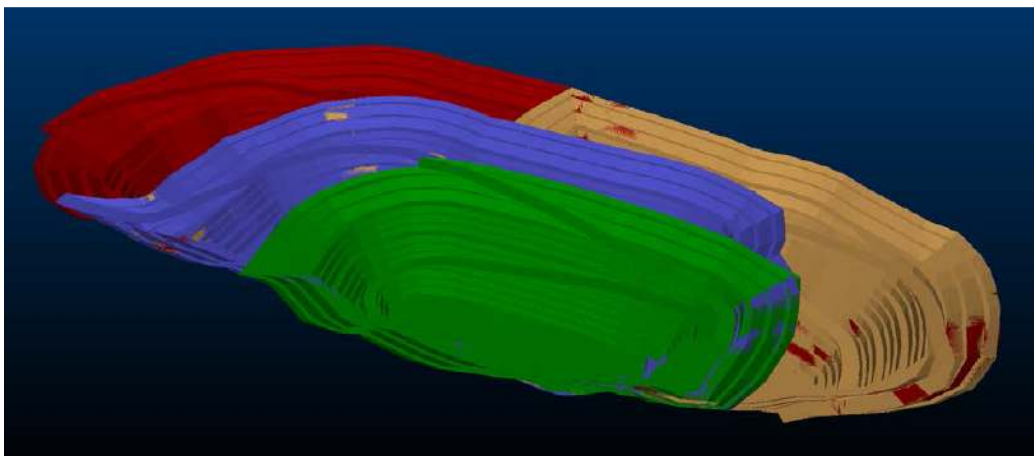
MOD also released a maiden reserve for T3 based on a copper price of US\$2.91/lb:

The T3 Reserve

Ore Reserve Category	Tonnes (Mt)	Copper		Silver	
		Grade (%)	kt	Grade (ppm)	Moz
Proved	8.78	1.13	98.95	11.1	3.14
Probable	12.65	0.94	118.64	9.7	3.93
Total Ore Reserve	21.43	1.02	217.59	10.3	7.07

Source: Company. Reserve grade reduced by 14% due to ore loss and dilution assumptions.

The planned 4 stage T3 pit (Base Case)

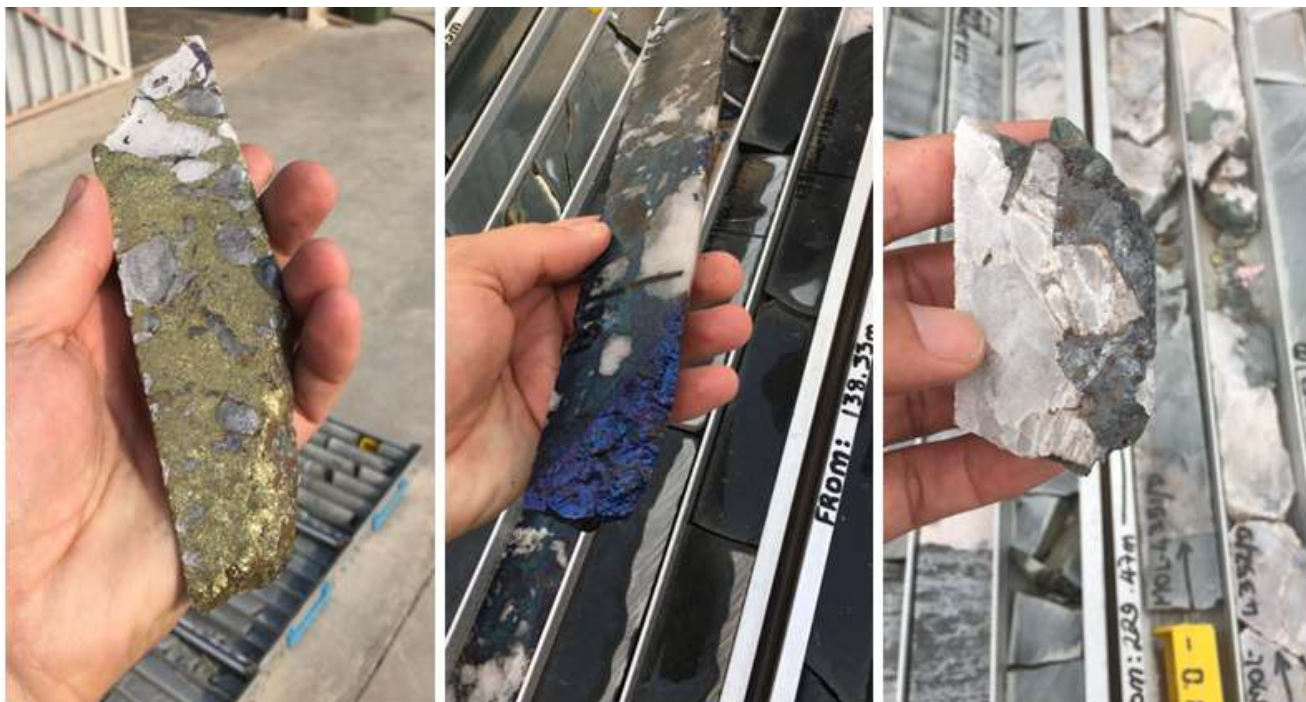


Source: Company

T3 METALLURGICAL TESTWORK

Based on the core logging data, the ratio of the 3 key copper sulphide minerals at T3 is:

- 60% Chalcopyrite - CuFeS_2 : 35% copper by weight. Brassy to golden yellow colour
- 30% Bornite - Cu_5FeS_4 : 63% copper by weight. Iridescent blue / purple (peacock ore)
- 10% Chalcocite - Cu_2S : 78% copper by weight. Dark-gray to black with a metallic luster



Chalcopyrite

Bornite

Chalcocite

Source: Blue Ocean Equities site visit October 2016

The flotation test work results on all three copper sulphide domains was very encouraging:

T3 flotation test work results

Domain	Mass	Copper		Silver	
	% Recovery	% Recovery	Conc Grade %	% Recovery	Conc Grade g/t
Chalcopyrite	3.15	93.3	33.1	82.6	199
Bornite	3.15	96.2	43.6	92.2	668
Chalcocite	2.31	93.4	48.6	89.0	850

Source: Company

These results were based on mineralised intervals taken from 21 holes selected to best represent each of the 3 ore domains spatially and at a range of depths and grades likely to be presented to the process plant.

The concentrates were generally low in deleterious elements and below penalty levels for smelters, however several samples did return results above penalty levels. No smelter penalties were considered in MOD's studies and future test work will consider penalty element rejection. There is also potential to blend concentrates to minimise penalty elements and further studies will be conducted as part of the feasibility study.

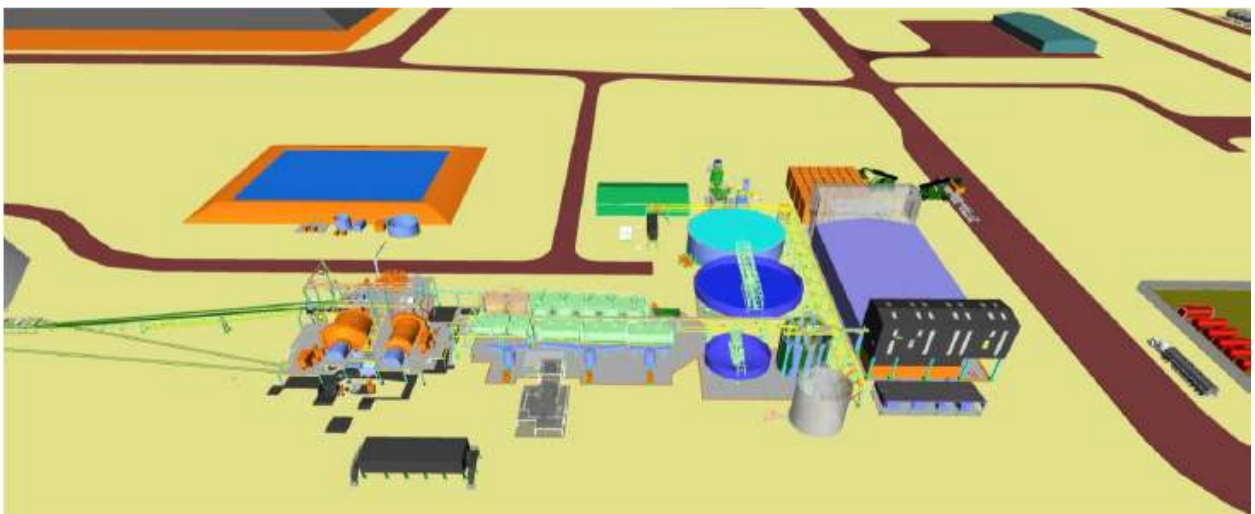
T3 PROCESS PLANT

The 2.5mtpa T3 process plant design is relatively simple and uses a conventional flow sheet comprising:

- Crushing & grinding
- Rougher and cleaner flotation
- Concentrate will be thickened, filtered and stockpiled
- Concentrate will be loaded into 2 tonne bulk bags for storage and subsequent transport

Allowance has been made in the design for expansion to 4mtpa during year 3.

The 2.5mtpa T3 sulphide flotation plant



Source: Company

Flotation tailings will be dewatered by thickening and disposed of in the Tailing Storage Facility (TSF). The TSF will be lined with an HDPE membrane.

INFRASTRUCTURE

The T3 project is well positioned with respect to all the key required infrastructure:

Power: The PFS assumes T3 operates for the first 3 years using diesel gensets with a total installed capacity of 14.1MW. MOD has been advised by Botswana Power Corporation that grid power is planned to be extended along the Ghanzi Highway from 2020 (only ~12km from T3). The PFS assumes T3 is able to connect to lower cost grid power from CY22.

Water: Flow testing of 7 water boreholes has demonstrated the potential (subject to further testing) for a sustainable water supply to meet the demands of the process plant and related activities.

Access: T3 is ideally located within 12km of the Ghanzi Highway in an area of freehold cattle farms.

Labour: The PFS assumes all personnel will be based in the town of Ghanzi ~80km west of T3 along the Ghanzi Highway. MOD has commenced construction of an accommodation village and operations base in Ghanzi.

BREAKDOWN OF CAPEX & OPEX

The capex and opex estimates for T3 outlined below are accurate to $\pm 25\%$:

T3 capex for 2.5mtpa (Base Case)

Detailed Capital Costs	Base Case(US\$'000)
Mining – Establishment	4,500
Process Plant	60,985
Tailings Storage	8,733
Infrastructure	18,823
Contingency	17,098
Corporate and Owners	10,985
Mining Pre-strip Costs	33,735
Initial Development Capital	154,859

Source: Company

The initial capital for T3 includes pre-production pre-stripping of ~14.9mt of overburden over ~10 months at a cost of ~US\$33.7m.

The required capital to expand the plant from 2.5mtpa to 4mtpa is estimated at US\$37m.

These estimates were prepared independently by Minnovo and each estimate is based on indicative quotes from contractors with known capability.

T3 opex for both the Base Case & Expansion Case

Cost item	Base Case US\$/lb	Expansion Case US\$/lb
Mining Costs	0.64	0.75
Power Cost	0.14	0.15
Processing Cost	0.22	0.22
Site Administration	0.12	0.09
Logistics	0.17	0.17
Treatment and Refining Charges	0.16	0.16
C1 Cost (pre by product credit)	1.45	1.54
Silver By-Product Credit	(0.23)	(0.24)
C1 Cost (post by product credit)	1.22	1.30
Royalties	0.07	0.08
Total Cash Production Costs (C2)	1.29	1.38
Sustaining Capital	0.07	0.08
All in Sustaining Costs(AISC)	1.36	1.46

Source: Company

Both the Base Case and Expansion Case assume contract mining via a conventional drill & blast, truck & shovel operation and standard 10m benches. Where possible, cost estimates are based on indicative quotes from 2-3 mining contractors.

Studies assume an average mining cost per tonne of material mined (both ore and waste) of ~US\$2.65/t, which we believe should be achievable.

T3 DEVELOPMENT SCHEDULE

MOD aims to complete final studies for T3 by Q4 CY18, followed by a decision to mine by the end of Q4 CY18 as set out in the company's preliminary development schedule below:

Milestone	Target Timeline (CY)
Commence FS	Q1 2018
Completion of FS	Q4 2018
EIA Approvals	Q4 2018
Decision to Mine	Q4 2018

Source: Company

It is worth noting that MOD's preliminary development schedule is subject to favourable permitting timelines and available funding.

In our experience, the timeframes for both permitting and project debt are often beyond the company's control and can be a source of delays. As such we have built in an addition 6-month buffer into our assumed development schedule for T3. We assume:

- Feasibility Studies are completed by Q4 CY18
- A 6-month buffer to allow for potential delays in:
 - o securing all necessary permits (EIA process began for T3 in Dec 2017)
 - o securing debt – i.e. obtaining independent experts report, securing credit approved term sheets from mandated lead banks, loan documentation, etc
 - o securing sufficient offtake to satisfy debt providers
- Decision to mine at end Q2 CY19
- An 18-month construction period, with first production in early CY21

POTENTIAL UPSIDE TO OUR 4MTPA CASE

While our new 14c price target has a 133% return to target, we believe it's worth highlighting the sensitivity of T3 to higher copper prices:

NPV post-tax (US\$m) (100%-basis)		Copper Price (US\$/lb)				
		2.00	2.50	3.00	3.50	4.00
Discount	6%	25	193	360	528	696
Rate	8%	0	143	286	429	573
(nominal)	10%	-20	103	226	350	473
	12%	-35	71	178	284	391

Source: Company

We believe it's also worth noting that the NPV's above exclude the potential benefit from:

- High-grade underground ore from T1
- High-grade underground ore from T3
- Potential for tax incentives via in a stability agreement with the Govt, which we believe could be material. i.e. There is potential for tax holiday in the early years of the project via accelerated depreciation, etc. For now, our valuation assumes MOD pays 30% tax for every year of the operation

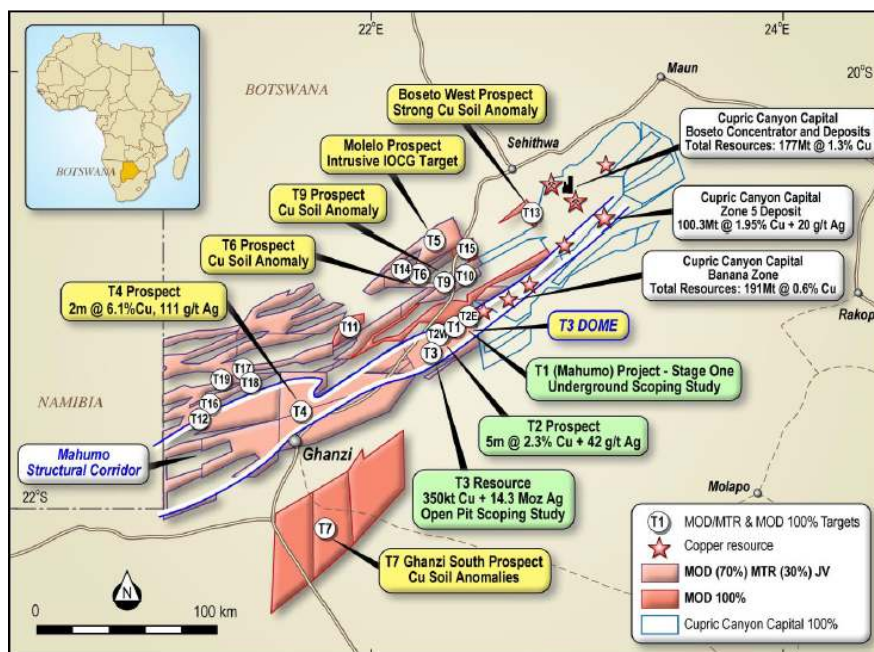
NEAR-TERM CATALYSTS

MOD had A\$10m in cash at end December 2017 and with [8 drill rigs active on site](#), we see a number of key near-term catalysts for MOD:

- **MOD is attending the 121 Mining Conference and Indaba Mining Conference in Cape Town this week**
 - We believe MOD's recently completed studies and growing resource base increase its appeal with global institutional investors looking for copper exposure
- **T3 Resource update in April 2018**
 - Given the quality of the infill drilling results released to date at T3, we are confident the bulk of the inferred material including in the mining inventory of MOD's 4mtpa case will be upgraded into the measured and indicated category
- **Exploration drilling results from 6 key areas:**
 - T3 underground (drilling underway)
 - T-Rex (drilling underway)
 - T1 underground (drilling from Feb 2018)
 - T3 Dome (drilling from March 2018)
 - T20 Dome (drilling from May 2018)
 - T7 Dome (drilling from June 2018)
- **Bankable Feasibility Study for T3 by Q4 CY18, with potential to include ore from at least 3 ore sources:**
 - T3 open pit (incorporating the April 2018 resource upgrade)
 - T3 underground (subject to drilling results)
 - T1 underground (subject to drilling results). T1 is located ~20km from T3 and has an existing 2.7mt resource @ 2.0% Cu +50g/t Ag)
 - Potential for other ore sources with exploration success at regional targets?

EXPLORATION: DISTRICT SCALE POTENTIAL

MOD's holdings comprise prospecting licences with a *very* large area comprising over ~12,600km² in the relatively unexplored central and western Kalahari Copper Belt.



Despite over 6.5mt of copper in resource being defined to date in this prospective copper belt, MOD's adjacent leases are largely underexplored.

All the resources in the belt are sediment hosted deposits which occur within (two) sequences folded into domes and intersected by major geological structures, shallow angle thrusts, etc. This raises the potential for widespread copper sulphide mineralisation.

Source: Company

MOD is aiming to find more shallow, thick, flat lying copper bearing structures like T3.

Drilling in 1H CY18 is designed to **advance three resource projects:**

- (1) T3 Pit (resource update due ~April CY18)
- (2) T3 Underground (drilling in progress)
- (3) T1 Underground (drilling to begin in Feb 2018)

The regional exploration programme plans to **test the district scale potential of four areas:**

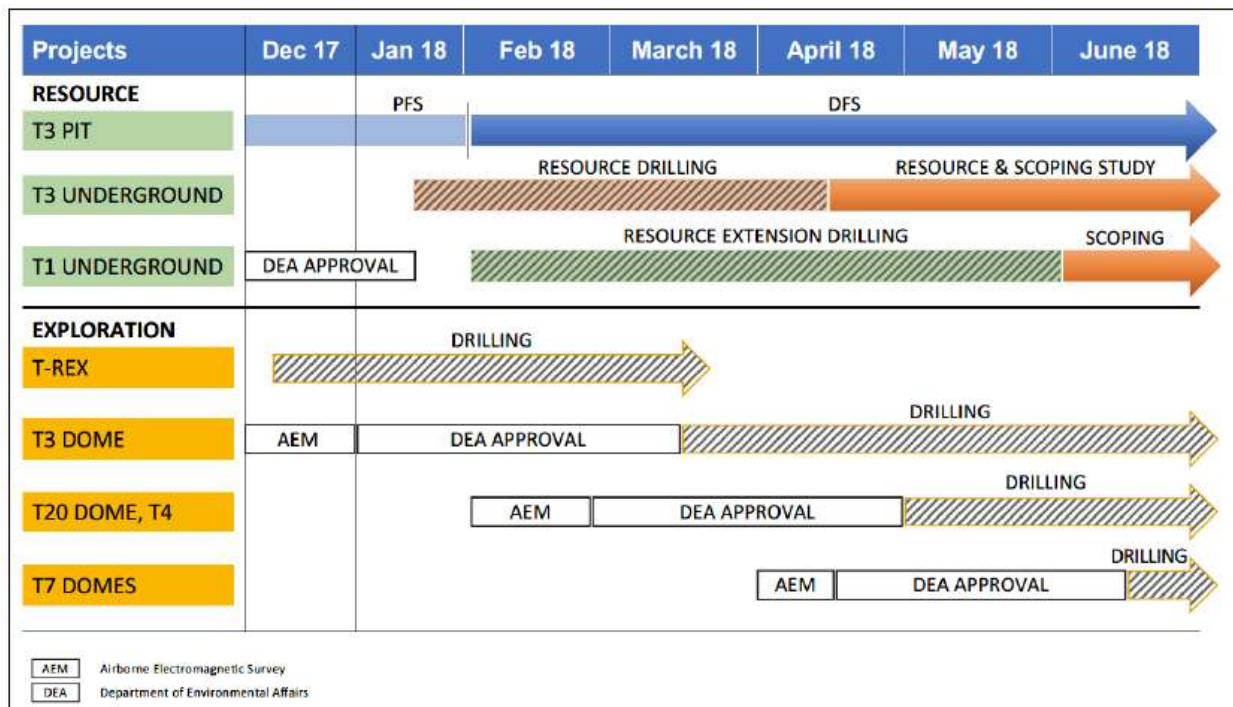
- (1) T-Rex (drilling has commenced)
- (2) T3 Dome (drilling to begin in March 2018)
- (3) T20 Dome (drilling to begin in May 2018)
- (4) T7 Dome (drilling to begin in June 2018)

This initiative follows successful soil sampling programs (~31,800 samples collected to date) which has resulted in many copper and zinc anomalies scattered along 140km of the 'Central Structural Corridor' (CSC), with similar characteristics to the anomaly that lead to the discovery of T3. The potential of the CSC is supported by results from the initial Airborne EM (AEM) survey along the T3 Dome (announced 21 July 2017). This identified many targets for drilling expected to start in March.

Importantly, MOD discovered the T1 and T3 copper/silver deposits and the T2 copper/silver prospect by drilling below copper and zinc soil anomalies. Similarly, T4 was discovered by a previous explorer drilling below a soil anomaly. No other soil anomalies within the CSC have been drilled.

Eight drill rigs are currently operating at T3 (6 diamond and 2 RC). Several of these rigs will move onto T1 resource drilling in Feb and onto regional targets as approvals are received.

The first 6 months of MOD’s drilling campaign in CY18 is outlined below:



Source: Company

Three of the exploration areas (T3 Dome, T20 Dome and T7 Domes) include large domal structures interpreted from magnetics, within the interpreted prospective sequence. **Drilling has commenced at T-Rex, an 11km long anticline centred around T3, with first assay results expected in February.**

Domes are considered prime structural traps for sediment hosted copper mineralisation. A recent example is Ivanhoe Mines’ substantial, high-grade Kamo-a-Kakula copper discovery in the Democratic Republic of Congo, which appears related to a series of shallow domes.

In an exploration update in late Jan 2018, MOD’s Managing Director, Mr Julian Hanna, said:

- “We see potential for other T3-type vein hosted copper deposits, associated with other soil anomalies and AEM targets already identified within our regional licences. At the same time, we will be testing the wider potential for district scale sediment hosted copper mineralisation which may occur in this highly prospective, underexplored copper belt,”
- “This coincides with an improved copper price, [a leap in understanding of the geology](#) and potential of this copper belt and access to many targets which have been awaiting environmental approval.”

PRICE TARGET & RATING

We increase our Price Target for MOD by 40% to 14c (from 10c) based on:

- The 4mtpa case outlined in studies released by MOD last week
- Higher copper prices of US\$3.20/lb (prev. US\$2.80/lb) in line with spot of ~US\$3.18/lb
- We have also reduced our discount to NPV from 30% to 20% to account for the higher confidence studies released last week $\pm 25\%$ (previously $\pm 35\%$)

We rate MOD Resources a high conviction Buy and our 14c Price Target represents an implied return of 133%.

On our forecasts, MOD's 70% share of operational cash flow from T3 (after tax), once the 4mtpa plant is up and running is ~A\$85m p.a...which we believe makes MOD very cheap given the company's current enterprise value is only A\$110m.

STRATEGIC TARGET

We increase our longer-term Strategic Target 25% to A20c (from A16c) based on removing the discounts applied to our valuation to zero.

Our 20c Strategic Target represents an implied return of 233%.

It's important to remember that MOD has its foot on a *very* substantial tenement package covering over ~12,600km² of the southern end of the Kalahari copper belt in Botswana and the company believes its ground may in time prove to be a copper *district*.

If the company can successfully find another shallow, high grade deposit, with thick, flat-lying zones of mineralisation like T3, we believe the market may begin pricing in a much higher probability of further exploration success, and may begin pricing in this copper *district* potential. If this occurs, we believe it is likely even our Strategic Price Target may prove to be too low.

KEY RISKS

MOD Resources is exposed to all the normal risks associated with developing and operating mining projects, including funding and construction risk.

Assuming the company makes the transition into production, the company's revenues will be derived from the sale of copper and silver. Fluctuations in the copper and silver price as well as the Australian dollar could impact the company's reported cash flow (in A\$), profitability and share price.

As MOD's T3 copper project is based in Botswana, an investment in MOD Resources also carries Botswana sovereign risk. An overview of Botswana sovereign risk is outlined on the next page.

BOTSWANA: A PREFERRED JURISDICTION IN AFRICA

Botswana is a landlocked country in southern Africa, with a strong stable democracy and a consistent record of uninterrupted democratic elections dating back to 1966.

Botswana is topographically flat with the Kalahari Desert stretching across ~70% of the country. With a population of just over 2 million, it is also one of the most sparsely populated nations in the world.

Botswana has an internationally respected mining industry, Mining Act and English language based commerce.



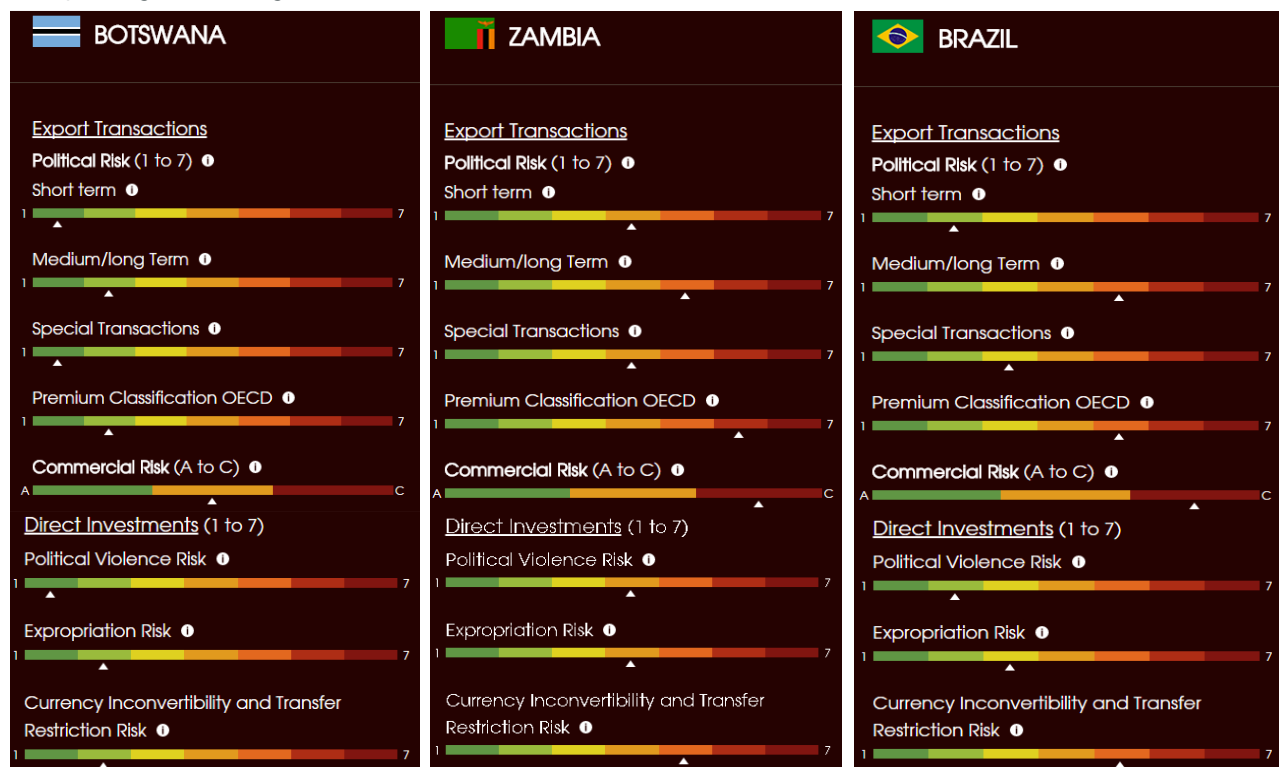
Source: Company Reports

SOVEREIGN RISK

The images below show a comparison of country risk according to Credendo, Belgium’s state-owned credit insurer and the world’s second largest credit insurer. Credendo provides cover for companies and banks against political and commercial risks relating to international transactions. According to Credendo:

- **Botswana is much lower risk than Zambia**, being **lower risk on all 8 measures below**. Zambia is the home of the Lumwana copper project, previously owned by Equinox Minerals (EQN). Equinox was acquired by Barrick Gold for C\$7.3bn in April 2011.
- **Botswana is much lower sovereign risk than Brazil**, again being **lower risk on all 8 measures below**. One of MOD’s ASX-listed copper developing peers is the Brazil-based Avanco Resources (AVB). Avanco achieved first copper production in April 2016.

Comparing Sovereign Risk



Risk Score*: **Botswana: 13/52**

Zambia: 35/52

Brazil: 28/52

Source: Credendo 3 February 2018. *Our estimate which assumes A=1,B=2,C=3 for Commercial Risk

MODEL SUMMARY: FINANCIALS & VALUATION (A\$M)
Stock Details

Recommendation:	BUY					Enterprise Value	\$110m
Target	\$0.14	Share Price	\$0.060	Strategic Target (ST)	\$0.20	Diluted MCap	\$120m
NAV	\$0.14	52 Week High	\$0.090	Implied Return to ST	233%	Diluted Shares	1,997m
Implied Return	133%	52 Week Low	\$0.033			Free Float	100%
						Avg Daily Value	\$0.4m

Macro Assumptions	CY17E	CY18E	CY19E	CY20E	CY21E
Copper Price (US\$/lb)	2.80	3.20	3.20	3.20	3.20
Silver Price (US\$/oz)	17.05	18.00	18.00	18.00	18.00
Exchange Rate (A\$/US\$)	0.77	0.76	0.75	0.74	0.73

Profit & Loss (A\$m)	CY17E	CY18E	CY19E	CY20E	CY21E
Revenue	-	-	-	-	86
Operating Costs	-	-	-	-	(53)
Operating Profit	-	-	-	-	33
Corporate & Other	(4)	(4)	(4)	(4)	(5)
Exploration Expense	(3)	(5)	(3)	(1)	(1)
EBITDA	(7)	(9)	(7)	(5)	26
D&A	(0)	(0)	(0)	(0)	(7)
EBIT	(7)	(9)	(7)	(5)	19
Net Interest Expense	0	0	-	(3)	(10)
Pre-Tax Profit	(7)	(9)	(7)	(7)	9
Tax Expense	-	-	-	-	(3)
Minorities (5% Govt)	-	-	-	-	-
Underlying Profit	(7)	(9)	(7)	(7)	6
Significant Items (post tax)	(0)	-	-	-	-
Reported Profit	(7)	(9)	(7)	(7)	6

Cash Flow (A\$m)	CY17E	CY18E	CY19E	CY20E	CY21E
Operating Cashflow	(3)	(4)	(4)	(4)	27
Tax	-	-	-	-	(3)
Net Interest	0	0	-	(3)	(10)
Net Operating Cash Flow	(3)	(4)	(4)	(7)	15
Exploration	(8)	(11)	(6)	(1)	(3)
Capex	(0)	-	(50)	(102)	(5)
Acquisitions / Disposals	-	-	-	-	-
Other	0	-	-	-	-
Net Investing Cash Flow	(8)	(11)	(56)	(103)	(7)
Equity Issue	14	10	74	-	-
Borrowing / Repayments	(1)	(1)	-	106	-
Dividends	-	-	-	-	-
Other	2	-	-	-	-
Net Financing Cash Flow	15	10	74	106	-
Change in Cash Position	4	(5)	14	(3)	7
FX Adjustments	(0)	-	-	-	-
Cash Balance	26	18	91	36	43

Balance Sheet (A\$m)	CY17E	CY18E	CY19E	CY20E	CY21E
Cash	10	5	19	16	24
Other Current Assets	4	4	4	4	4
PP&E	0	0	50	152	149
Exploration & Development	18	23	26	27	28
Other Non Current Assets	(0)	(0)	(0)	(0)	(0)
Total Assets	31	32	99	198	204
Debt	1	-	-	106	106
Other Liabilities	3	3	3	3	3
Net Assets	28	29	96	89	95

Ratio Analysis		CY17E	CY18E	CY19E	CY20E	CY21E
Diluted Shares	m	1,915	2,103	3,334	3,334	3,334
EPS - Diluted	Ac	(0.4)	(0.5)	(0.2)	(0.2)	0.2
P/E	x	n.m.	n.m.	n.m.	n.m.	33.3x
CFPS - Diluted	Ac	(0.2)	(0.2)	(0.1)	(0.2)	0.4
P/CF	x	n.m.	n.m.	n.m.	n.m.	13.7x
FCF - Diluted	Ac	(0.2)	(0.2)	(1.6)	(3.2)	0.6
P/FCF	x	n.m.	n.m.	n.m.	n.m.	9.9x
Dividends	Ac	-	-	-	-	-
Dividend yield	%	-	-	-	-	-
Payout Ratio	%	-	-	-	-	-
Franking	%	-	-	-	-	-
Enterprise Value	A\$m	110	115	101	210	203
EV/EBITDA	x	n.m.	(12.4x)	(14.9x)	(46.2x)	7.8x
ROE	%	(23%)	(32%)	(7%)	(8%)	6%
ROA	%	(21%)	(29%)	(7%)	(4%)	3%
Net Debt or (Cash)	A\$m	(9)	(5)	(19)	90	83
Gearing (ND/(ND+E))	%	(50%)	(22%)	(25%)	50%	47%
Gearing (NDE)	%	(34%)	(18%)	(20%)	102%	88%

Reserves & Resources

Resources		mt	% Cu	g/t Ag	% CuEq*	kt Cu	kt CuEq*
T3	M+H	20.2	1.22%	12.5	1.32%	247	267
	Inferred	15.8	1.03%	13.1	1.13%	162	179
	M+H+I	36.0	1.14%	12.8	1.24%	409	445
T1 (Mahumo)	M+H	2.2	1.88%	48.2	2.27%	42	51
	Inferred	0.4	2.52%	57.4	2.98%	11	13
	M+H+I	2.7	2.00%	50.0	2.40%	53	64
		mt	% Cu	g/t Ag	% CuEq*	kt Cu	kt CuEq*
Total	M+H+I	38.6	1.20%	15.4	1.32%	462	510
Reserves		mt	% Cu	g/t Ag	% CuEq*	kt Cu	kt CuEq*
T3	P+P	21.4	1.02%	10.3	1.10%	218	235

*CuEq based on US\$3.20/lb Cu & US\$18/oz Ag

Earnings Sensitivity		CY21E	CY22E	CY21E	CY22E	
Copper Price	US\$/lb	+10%	5.5	9.8	91%	34%
Silver Price	US\$/oz	+10%	0.4	0.7	6%	2%
FX translation to A\$ accts	A\$/US\$	-10%	1.2	3.8	21%	13%

Valuation	Discount	Stake	A\$m	A\$/sh
T3 (unrisked)	-	70%	259	0.13
T3 (risk-adjusted)	20%	70%	207	0.10
T1 (risk-adjusted)	60%	100%	28	0.01
Exploration & Other Projects			75	0.04
Corporate & Other			(44)	(0.02)
Debt			(0.5)	(0.00)
Cash			10.0	0.01
Option Strikes			0.3	0.00
Risk adjusted NAV			276	0.14

Source: Company data, Blue Ocean Equities

CONTACTS

ANALYST

Steuart McIntyre

Senior Resource Analyst

P +61 2 8072 2909

E steartmcintyre@boeq.com.au

AUTHORITY

David O'Halloran

Executive Director

P +61 2 8072 2904

E doh@boeq.com.au

Philip Pepe

Senior Industrials Analyst

P +61 2 8072 2921

E philpepe@boeq.com.au

Stuart Turner

Senior Industrials Analyst

P +61 2 8072 2923

E stuartturner@boeq.com.au

Justin Pezzano

Research Associate

P +61 2 8072 2926

E justinpezzano@boeq.com.au

Michael Gerges

Investment Analyst

P +61 2 8072 2935

E michaelgerges@boeq.com.au

Mathan Somasundaram

Market Portfolio Strategy

P +612 8072 2916

E mathan@boeq.com.au

Josie Nicol

Dealing Associate

P +61 2 8072 2931

E josienicol@boeq.com.au

Adam Stratton

Institutional Dealing

P +61 2 8072 2913

E adamstratton@boeq.com.au

Scott Calcraft

Institutional Dealing

P +61 2 8072 2920

E scottcalcraft@boeq.com.au

Doc Cromme

Institutional Dealing

P +61 2 8072 2925

E doccromme@boeq.com.au

Tim Potts

Institutional/HNW Dealing

P +61 2 8072 2906

E timpotts@boeq.com.au

HEAD OFFICE

Blue Ocean Equities Pty. Ltd.

AFSL No. 412765

ABN 53 151186935

P +61 2 8072 2988

E info@boeq.com.au

W blueoceanequities.com.au

Level 29, 88 Phillip Street

Sydney NSW 2000

Australia

DISCLAIMER

This document is a private communication to clients and is not intended for public circulation or for the use of any third party, without the prior approval of Blue Ocean Equities Pty Limited. This is general investment advice for Institutional and Sophisticated Investors only and does not constitute personal advice to any person. Because this document has been prepared without consideration of any specific client's financial situation, particular needs and investment objectives you should consult your own investment adviser before any investment decision is made on the basis of this document.

While this document is based on information from sources which are considered reliable, Blue Ocean Equities Pty Limited has not verified independently the information contained in the document and Blue Ocean Equities Limited and its directors, employees and consultants do not represent, warrant or guarantee, expressly or by implication, that the information contained in this document is complete or accurate. Nor does Blue Ocean Equities Limited accept any responsibility for updating any advice, views opinions, or recommendations contained in this document or for correcting any error or omission which may become apparent after the document has been issued.

Except insofar as liability under any statute cannot be excluded. Blue Ocean Equities Pty Limited and its directors, employees and consultants do not accept any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission in this document or for any resulting loss or damage (whether direct, indirect, consequential or otherwise) suffered by the recipient of this document or any other person.

DISCLOSURE

Blue Ocean Equities Pty Limited, its employees, consultants and its associates within the meaning of Chapter 7 of the Corporations Law may receive commissions, underwriting and management fees from transactions involving securities referred to in this document, and may from time to time hold interests in the securities referred to in this document.

Blue Ocean Equities Pty Limited and associates hold a material number of shares in MOD Resources at the date of this report and this position may change at any time without notice.

Steuart McIntyre does not own shares in MOD Resources.