

# HORIZONTE

**HORIZONTE MINERALS PLC**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**SIX MONTHS ENDED 30 JUNE 2017**

## **Background**

This Management's Discussion and Analysis of the financial position and results of operations is prepared as at 10 August 2017 and should be read in conjunction with the Condensed Consolidated Financial Statements of Horizonte Minerals plc as at 31 December 2016 and which have been prepared in accordance with International Financial Reporting Standards and International Accounting Standards.

Horizonte Minerals plc (the 'Company') is a publicly listed company, the shares of which are listed on the London Stock Exchange on the AIM market ('AIM') and on the Toronto Stock Exchange (the 'TSX'), in both instances under the symbol 'HZM'.

## **Company Overview**

- Araguaia is an advanced nickel laterite project being developed by Horizonte as the next tier one ferro-nickel project in Brazil
  - 100% owned by Horizonte
  - Located south of the Carajás Mining district in northern Brazil, with good access to infrastructure
  - Transaction with Glencore completed in 2016 to acquire the adjacent Vale dos Sonhos deposit places the enlarged project among the largest high-grade un-developed nickel saprolite projects globally
- Updated NI 43-101 compliant PFS issued during 2016, demonstrated:
  - Robust economics based on a 28 year life of mine ('LOM') producing ~14,500 tonnes per annum ('TPA') nickel in ferronickel from a single line Rotary Kiln Electric Furnace ('RKEF')
  - Post tax NPV<sub>8</sub> of US\$581 million at a nickel price of US\$14,000/t and an NPV<sub>8</sub> of US\$328 million at US\$12,000/t Ni
  - Post tax IRR of 26.4% at US\$14,000/t and 19.3% at US\$12,000/t Ni
- Project is expected to generate US\$1.3 billion in free cash flow over LOM at US\$12,000/t Ni
- High grade ore with average nickel grade of 1.96% for the first 10 years of production
- Project on the lower range of the global cost curve with C1 cash costs of US\$3.15/lb Ni (US\$6,948/t Ni)
- 43-101 Proven and Probable Mineral Reserve Estimate of 24.6 Mt grading 1.77% Ni
- Established permitting pathway with Preliminary Licence successfully obtained

- Feasibility Study ('FS') underway for delivery Q4 2017 into Q1 2018

## **Highlights for Q2 2017**

- Award of three new mineral exploration concession areas adjacent to Araguaia North deposits in April 2017
- Significant advancements made by sustainability team towards the Installation Licence ('LI') submission
- Bolstered sustainability team, hiring new specialists in environmental and social disciplines
- High grade drilling results received from 30 hole pre-excavation drilling programme
- Trial excavation work underway with the aim of converting Probable Reserve to Proven Reserve, confirm resource re-conciliation and overall mining conditions
- Awarded further contracts for key parts of the FS

## **Events after the Reporting Date**

- The Araguaia environmental licensing strategy was presented to State Environmental Minister on 4 July 2017
- New flora and fauna inventories completed, involving over 20 biologists and multiple specialists contracted from the Pará State
- Water and power line routes frozen with licence applications under preparation
- Close to finalisation of environmental control plans for the RKEF process plant and mine site infrastructure

## **Review of Operations**

### **Introduction**

Horizonte is currently engaged in the execution of a Feasibility Study on its 100% owned Araguaia Nickel Project ('Araguaia' or 'the Project'), which it is developing as the next tier-one ferro-nickel project in Brazil. This follows Horizonte's acquisition of Araguaia's adjacent Glencore Araguaia Project ('GAP') for consideration of US\$2 million in equity with a total purchase price of US\$8 million in a transaction which completed in 2016. GAP is an advanced project, with a significant amount of high quality work completed initially by Falconbridge and subsequently Xstrata / Glencore. Total historic spend on GAP is in the order of US\$75 million, demonstrating the significant discount of Horizonte's acquisition to the money previously expended.

Having completed a Pre-Feasibility Study ('PFS') in 2016 on the combined Araguaia project, the Company successfully raised £9 million to fund a Feasibility Study ('FS') which is currently underway and due for completion in Q4 into Q1 2018, with a view to developing Araguaia through to production (subject to funding) around 2020.

The Company has a strong institutional shareholder structure, which includes Teck Resources Limited (17.9%), Lombard Odier Asset Management (14.1%) JP Morgan (8.4%), Hargreave Hale (6.4%) and Glencore (6.4%).

### **Araguaia Project**

Araguaia is located on the eastern margin of the State of Pará, north-eastern Brazil, to the north of the town of Conceição do Araguaia (population of 46,206), south of the main Carajás Mining District. The Project has good regional infrastructure including a network of Federal highways and roads, with access to low tariff hydro-electric power. The Carajás Mining District, situated approximately 200km northwest of the Project, is host to a number of major iron and copper mines operated by mining major Vale SA. The Company believes that Araguaia has the potential to deliver a resource with size and grades comparable to other nickel laterite projects and mining operations in Brazil and globally.

The Araguaia Project areas comprise 27 exploration licences totalling 123,611 ha and the landholdings which comprise the Araguaia Projects do not form part of any native reserves.

### **Feasibility Study**

Following the successful £9 million fundraise in 2016 which saw the Company add further institutional investors to its share register, Horizonte appointed a Feasibility Study Manager in January 2017 to commence the Feasibility Study.. Wagner Oliveira joined the nickel development team (ex Falconbridge; Xstrata; Anglo American) bringing considerable experience in the nickel arena having worked with Anglo American plc on its Barro Alto ferronickel operation and prior to this at the Codemin ferronickel plant in Brazil.

Contracts have been awarded for the Araguaia Feasibility Study to leading consultants including: Worley Parsons Group to undertake the process engineering; Snowden Mining Industry Consultants to undertake the mine planning, Mineral Resource Estimate and the reserve estimate; Environmental Resources Management (ERM) to undertake the hydrogeology and the environmental and social permitting; and other local specialised consulting groups have been appointed for additional sections of the FS.

The Feasibility Study is at an advanced state with a number of the principal work streams over 50% complete with a targeted completion in Q4 into Q1 2018.

### **Pre-Feasibility Study (2016)**

In October 2016 Horizonte issued a PFS prepared in accordance with Canadian National Instrument 43-101 ('NI 43-101'), for the combined Araguaia project. This PFS demonstrated robust economics based on a 28 year LOM producing ~14,500 tonnes per annum ('TPA') nickel in ferronickel from a single line Rotary Kiln Electric Furnace ('RKEF') plant with a post-tax NPV<sub>8</sub> of US\$328 million and IRR of 19.3% at US\$12,000/t Ni.

The report considers open pit mining for the exploitation of nickel laterite to establish the production of run of mine ('ROM') from eight open pits to supply a targeted 0.9 million tonnes per annum ('Mt/a') of ore to a processing and smelter facility. This facility will use the proven RKEF process with the product being sold at free on board ('FOB') at the selected port of export. A Base Case of 0.9 Mt/a production throughput was selected because of the Company's objective to minimise the capital expenditure and overall capital intensity, and to optimise overall cash flow, payback, and the economics of the Project. Opportunity exists to increase production subject to further engineering and there is potential to increase the mineral reserve base.

<b>Pre-Feasibility Study key Indicators</b>	<b>Value</b>	
Nickel price	\$12,000/t	\$14,000/t
NPV <sub>8</sub> post tax	\$328M	\$581M
IRR post tax	19.3%	26.4%
Initial mine life	28	28
Capital costs – pre-production	\$354M	\$354M
C1 costs	\$3.15/lb \$6,948/t	\$3.15/lb \$6,948/t
Free cash flow over LOM (after capital payback)	\$1,259M	\$1,946M
Payback period (After taxation)	4.5 years	3.4 years
Breakeven Ni price on NPV8 post tax	\$9,426/t	\$9,426/t
Average annual production of nickel	~ 14,500tpa	~ 14,500tpa
Average Ni grade – Year 1 to 10	1.96%	1.96%
Product grade quality	30% Ni in FeNi	30% Ni in FeNi

### **Operating Cost Estimates**

<b>Item</b>	<b>\$ million</b>	<b>\$/tonne - ore</b>
Mining (contractor)	815.3	33.1
Processing	2,187.1	88.7
Total operating costs	3,002.4	121.8

### **Economic Analysis and Sensitivities**

#### **Base Case economic model headline results before taxation**

Item	Unit	Value - \$14,000/t	Value - \$12,000/t
Net Cashflow	\$M	2,293.4	1,482.7
NVP8	\$M	699.3	400.6
IRR	%	28.9	21.0
Production payback period	Years	3.1	4.2

#### Base Case economic model headline results after taxation

Item	Unit	Value - \$14,000/t	Value - \$12,000/t
Net Cashflow	\$M	1,945.8	1,258.7
NVP8	\$M	581.3	328.0
IRR	%	26.4	19.3
Production year payback	Years	3.4	4.5

#### Base Case economic model inputs

Item	Unit	Value
Pre-Production period	Years	2.0
Life of project production	Years	27.6
LOM ore mined and processed	Kt	24,646
LOM waste mined	Kt	59,061
LOM Average Ni grade	%	1.77
LOM Average Fe grade	%	17.90
LOM Average Ni recovery	%	93.0
LOM Average Fe recovery	%	21.4
LOM Average product Ni grade	%	30.0
LOM Average product Fe grade	%	70.0
Plant throughput	Mtpa	0.9
LOM Ni Price	\$/t	14,000 & 12,000
LOM Fe price	\$/t	85

The LOM Ni price of US\$12,000 (Base Case) and US\$14,000 (Consensus Case) were adopted following a review of multiple information sources including; price forecasts from Consensus Economics together with analysis of average nickel prices over the past 10 years combined with industry benchmarking.

#### Pre Tax Sensitivity table for NPV<sub>8</sub>

The sensitivity analysis determines how the NPV<sub>8</sub> is affected with changes to one variable at a time while holding the other variables constant. The pre-tax results of the Base Case sensitivity analysis are presented in the table below.

	-20%	-10%	-5%	0%	5%	10%	20%
Grade Ni	36	182	255	328	401	474	619
Grade Fe	323	326	327	328	329	330	333
Mining reserves	303	315	327	328	336	346	363
Recovery Ni	36	182	255	328	401	438	438
Recovery Fe	323	326	327	328	329	330	333
Price Ni	23	176	252	328	404	480	632
Price Fe	323	326	327	328	329	330	333
Pre-production capital	386	357	342	328	314	299	270
Production capital	333	330	329	328	327	326	323
Mining cost	378	353	340	328	302	277	225
Processing cost	430	379	354	328	302	277	225
Overhead cost	361	345	336	328	319	310	292

All figures in the table above are expressed in US\$M

### **Mineral Resources**

Mineral Resources reported for the Project deposits, which are included in the PFS, were prepared under the supervision of Mr. Andrew F. Ross BSc (Hons), MSc, FAusIMM, an Independent Qualified Person as defined in NI 43-101.

### **Updated Mineral Resources for the Araguaia Project effective as at 30 September 2016 by material type (0.90% Ni cut-off grade)**

Araguaia	Category	Material type	Tonnage (kT)	Bulk density (t/m <sup>3</sup> )	Contained Ni metal (kT)	Ni	Fe	MgO	SiO <sub>2</sub>
						(%)	(%)	(%)	(%)
Subtotal	Measured	Limonite	1,232	1.39	15	1.2	37.43	2	17.15
Subtotal	Measured	Transition	6,645	1.26	116	1.75	18.89	10.2	42.06
Subtotal	Measured	Saprolite	10,291	1.4	130	1.27	12.03	24.08	41.24
<b>Total</b>	<b>Measured</b>	<b>All</b>	<b>18,168</b>	<b>1.35</b>	<b>261</b>	<b>1.44</b>	<b>16.26</b>	<b>17.51</b>	<b>39.91</b>

Subtotal	Indicated	Limonite	19,472	1.4	218	1.12	36.2	2.39	20.53
Subtotal	Indicated	Transition	31,143	1.2	444	1.43	21.39	11.24	38.92
Subtotal	Indicated	Saprolite	51,279	1.32	610	1.19	11.82	25.79	40.58
<b>Total</b>	<b>Indicated</b>	<b>All</b>	<b>101,893</b>	<b>1.3</b>	<b>1,272</b>	<b>1.25</b>	<b>19.4</b>	<b>16.87</b>	<b>36.24</b>
<b>Total</b>	<b>Measured + Indicated</b>	<b>All</b>	<b>120,061</b>	<b>1.3</b>	<b>1,533</b>	<b>1.28</b>	<b>18.93</b>	<b>16.97</b>	<b>36.8</b>
Subtotal	Inferred	Limonite	2,837	1.37	31	1.08	34.8	2.97	23.05
Subtotal	Inferred	Transition	4,955	1.2	65	1.31	21.2	11.11	39.05
Subtotal	Inferred	Saprolite	5,643	1.35	65	1.16	11.8	24.31	41.8
<b>Total</b>	<b>Inferred</b>	<b>All</b>	<b>13,435</b>	<b>1.3</b>	<b>161</b>	<b>1.2</b>	<b>20.12</b>	<b>14.94</b>	<b>36.83</b>

*Note: Totals may not add due to rounding. Mineral Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*

### **Mineral Reserves**

Mineral Reserves reported for the Project deposits, which are included in the PFS were established by Snowden in accordance with the CIM Definition Standards using only Indicated and Measured Resources, under the supervision of Mr. Frank Blanchfield B.Eng, FAusIMM, an Independent Qualified Person as defined in NI 43-101.

A Mineral Reserve estimate of 24,646.6 kt (dry) at an average grade of 1.77% Ni was estimated. The detailed breakdown of the Mineral Reserve allocated by deposit is presented in the following table:

#### **Mineral Reserves for the Araguaia Project effective as at September 30, 2016**

Class	Deposit	Ore dry mass (kt)	Ni	Fe	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub> /MgO
			(%)	(%)	(%)	
Probable	Baião	2,381	1.8	18.7	4.93	2.52
Probable	Pequizeiro	11,828	1.73	16.8	5.91	2.83
Probable	Pequizeiro West	165	1.67	19.7	4.47	3.58
Probable	Jacutinga	1,198	1.82	16.7	3.16	2.16
Probable	Vila Oito East	1,190	1.64	15	3.74	1.99
Probable	Vila Oito	2,449	1.79	14.2	3.62	2.05
Probable	Vila Oito West	549	1.73	20.3	5.04	3.65
Probable	VDS	4,886	1.85	22.7	6.28	2.72
<b>Total Probable</b>		<b>24,646</b>	<b>1.77</b>	<b>17.9</b>	<b>5.39</b>	<b>2.58</b>
Proven		-	-	-	-	-
<b>Total Proven and Probable</b>		<b>24,646</b>	<b>1.77</b>	<b>17.9</b>	<b>5.39</b>	<b>2.58</b>

A nickel spot price of US\$12,000/tonne was used in the Mineral Reserve estimate. The Mineral Reserve estimate resulted in a marginal cut-off grade of 1.28% Ni.

### **Mining**

Seven shallow open pits were designed for Araguaia and one for GAP through a process of pit optimisation using costs and process recoveries. All eight pits are designed using smoothed pit shells with the removal of small satellite pits through a standard process of pit optimisation, waste dump design and pit design. To minimise capital, the Base Case also assumes contractor mining using typical truck and excavator fleet which includes ore haulage to the plant. This fleet is supported by the usual array of support and ancillary equipment. Grade and mineralogy will be closely monitored in the mining process using close spaced grade control drilling ahead of mining.

High grade nickel feed is targeted in the early years of production. The average nickel grade of the feed to the plants is as follows:

- Years 1 to 5 – average grade 2.0% Ni
- Years 6 to 10 – average grade 1.9% Ni
- Years 11 to 28 – average grade 1.7% Ni

A number of processing constraints were applied to the schedule. These included a 13-month processing feed quantity ramp-up period, and specific process feed grade constraints throughout the life of the Project:

- Fe grade between 15.0% and 18.0%
- Al<sub>2</sub>O<sub>3</sub> grade between 4.0% and 5.5%
- SiO<sub>2</sub>/MgO ratio between 2.2 and 2.6

### **Environmental and Social Baseline Studies**

The Araguaia Project is planned as a long life operation creating approximately 450 direct jobs in the operational phase of the mine. The Company seeks to be a partner-of-choice with the local community in the development of the Project to ensure long-term sustainable benefits are received by local stakeholders. Key socio-economic programmes planned for the region include initiatives for public health, environmental education, local government capacity building and economic development. The economic development programme will focus on maximising local employment as well as the development of local suppliers and small regional enterprises. With this in mind a public hearing ('Hearing') was held in January 2015 in Conceição do Araguaia, the municipality where the Araguaia Project is located. The primary aim of the Hearing was to inform, clarify and encourage further community participation in project planning and it was attended by over 1,000 people including representatives of the local and State authorities. The outcome was positive. The Hearing is a part of the environmental licence process and necessary for the awarding of the LP.

The Social & Environmental Impact Assessment ('SEIA') was finalised and the report submitted to the Brazilian State licensing authority ('SEMA') in June 2014 for the Araguaia Project's LP evaluation. In



September 2015, the Brazilian State licensing authority (SEMA) technical team visited the Araguaia Project to assess the social and environmental impact assessment. In June 2016 the Company announced that its wholly-owned subsidiary Araguaia Niquel Mineração Ltda had been awarded the LP for the mining and beneficiation plant to produce ferronickel at Araguaia. The LP was approved with consideration of the terms set out in the Company's SEIA, and conditions outlined by the Pará State Environmental Agency. This follows the unanimous approval of the licence in a meeting held in the Pará capital of Belém on 23 May 2016, by the Pará State Committee of Environment ('COEMA'), which consisted of State Government ministers, NGOs and representatives from civil society groups.

### **Araguaia Permitting**

The areas within the Project are located 100% within the Pará State, therefore the Project will continue to be permitted by the State Environmental Agency. The Brazilian mine permitting process with environmental agencies has three key stages:

- The recently obtained preliminary licence ("LP");
- The installation licence ("LI"), which permits the start of construction;
- Finally the licence to operate once construction is complete ("LO").

The granting of the LP is often regarded as the most important licence as it outlines the parameters of the Project as agreed upon by all stakeholders and is the only environmental licensing process that requires approval of the State Government Environmental Council. The LP was awarded to Horizonte Minerals for Araguaia in 2016.

The Company is now focused on obtaining the LI, which once awarded, in parallel with the mining concession, allows construction to start. Horizonte will also work in partnership with the Federal University of Pará to undertake studies identifying possibilities for use of the slag product from Araguaia and potential local industries, which could benefit from the final ferronickel product.

### **Technical Disclosure**

All scientific and technical information contained in this Management's Discussion and Analysis has been prepared by or under the supervision of Mr Francis Roger Billington, BSc (Hons), P.Geol. (APGO), a "qualified person" within the meaning of NI 43-101. For further details on the Araguaia Project, please refer to "Prefeasibility Study (PFS) for the Araguaia Nickel Project Federative Republic of Brazil NI 43-101 Technical Report", dated 30 September 2016 available on the Company's website at [www.horizonteminerals.com](http://www.horizonteminerals.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).

## Summary of Financial and Operating Performance

### Summary of Cashflows

>> 6 months ended	<b>30 June 2017</b>	30 June 2016
	<b>£</b>	(Restated)
	<b>£</b>	£
>> Net cash flows used in operating activities	<b>(907,256)</b>	(408,820)
>> Net cash used in investing activities	<b>(2,490,476)</b>	(749,022)
>> Net cash flow generated from financing activities	<b>(19,432)</b>	-
>> Net increase/(decrease) in cash and cash equivalents	<b>(3,417,164)</b>	(1,157,842)

The net cash flows used in operating activities for the Six months ended 30 June 2017 and 30 June 2016 are driven by activities in the management of the Enlarged Araguaia Project. These management activities increased in the six months to 30 June 2017 compared to the same period in 2016, due to the implementation of the feasibility study programme at the beginning of 2017. See 'Results from Operations' for further analysis.

Cash used in investing activities has increased considerably to (£2,490,476) in the six months ended 30 June 2017 when compared to (£749,022) in the six months ended 30 June 2016. The higher spend during 2017 as compared to 2016 is driven by the higher overall level of exploration expenditure, as a result of the feasibility study work being undertaken, including drilling, trial mining and technical study's.

Cashflows from financing activities in 2017 were as a result of some residual fees associated with the issue of equity for the £9m placing undertaken in the final quarter of 2016, there were no such fees in Q1 2016.

### Quarterly Financial Information

Quarter Ended	30 June 2017	31 March 2017	31 December 2016	30 September 2016 (Restated)	30 June 2016 (Restated)	31 March 2016 (Restated)	31 December 2015 (Restated)	30 September 2015 (Restated)	30 June 2015 (Restated)
	£	£	£	£	£	£	£	£	£
Revenue	—	—	—	—	—	—	—	—	—
Profit/(Loss) from continuing operations	(477,572)	(457,740)	(813,308)	(353,963)	(337,345)	(241,718)	(300,476)	(272,524)	(356,583)

Total comprehensive income attributable to owners of the parent	(2,976,934)	(154,975)	370,401	(241,229)	4,566,593	3,873,081	475,805	(4,346,595)	(991,989)
Basic earnings/(loss) per share	(0.041)	(0.038)	(0.09)	(0.05)	(0.05)	(0.036)	(0.047)	(0.055)	(0.072)

Refer to restatement of prior year numbers note in the annual report and MD&A for December 2016 for details of the adjustments made in respect of prior periods as a result of restating the deferred tax assets, deferred tax liabilities and contingent consideration payable to Teck.

Profit/(loss) from continuing operations in each of the periods disclosed is driven on an on-going basis by administrative expenses, including exploration costs expensed, together with stock option charges, (loss)/gain on foreign exchange and finance income and costs.

The loss from continuing operations in the second quarter of 2017 of £(477,572) was after administrative expenses of £(376,487), and a gain on fair value of contingent consideration of £120,885 due to a strengthening of Sterling against the United States Dollar, in which the contingent consideration is denominated. There was also a share based payment charge of £28,424 and a loss on foreign exchange translation of £141,613.

Total comprehensive income attributable to equity holders of the company is driven by results from continuing operations, combined with finance income and costs and exchange differences arising on translating foreign operations.

Exchange differences arising on translating foreign operations arise as the values of the exploration assets of the Company are denominated in the currency of the country in which they are located.

During the second quarter of 2017 the total comprehensive income attributable to equity holders of the company was (£2,976,934), was after exchange differences arising on translating foreign operations of £(2,499,362) as the Brazilian Real weakened against Sterling in the quarter.

## Results from Operations

	6 months ended 30 June 2017	6 months ended 30 June 2016 (Restated)	3 months ended 30 June 2017	3 months ended 30 June 2016 (Restated)
>>	£	£	£	£
>> <b>Analysis of Operating Loss:</b>				
>> <b>General and Administration Costs</b>				
>> Compensation	(137,659)	(131,524)	(87,838)	(63,921)
>> Travel/Expenses	(118,320)	(36,692)	(58,078)	(21,543)
>> Exploration Costs Expensed	(179,634)	(86,988)	(104,264)	(45,188)
>> Professional Fees	(124,675)	(73,114)	(69,080)	(35,218)
>> Investor Relations	(69,340)	(32,034)	(41,007)	(24,432)
>> TSX fees and associated costs	(20,614)	(12,866)	(14,704)	(1,976)
>> Overheads/Other	(4,306)	(11,810)	(1,516)	(8,660)
>> <b>Total General and Administration Costs</b>	<b>(654,548)</b>	(385,028)	<b>(376,487)</b>	(200,938)
>> Charge for share options granted (non-cash)	(78,810)	(18,184)	(28,424)	(9,092)
>> Changes in fair value of contingent consideration	153,095	(463,301)	120,885	(363,534)
>> Gain / (Loss) on Foreign Exchange	(245,553)	80,300	(141,613)	35,988
>> <b>Operating Loss</b>	<b>(825,816)</b>	(786,213)	<b>(425,639)</b>	(537,576)

Refer to restatement of prior year numbers note for details of the adjustments made in respect of prior periods as a result of restating the deferred tax assets, deferred tax liabilities and contingent consideration payable to Teck.

General and Administration costs have increased during the six month period to 30 June 2017 compared to the same period in the prior year. This has been driven by an increase in exploration activity in Brazil as a result of the initiation of the Feasibility Study work programmes at the end of 2016.

Within General and Administration costs:

- > Compensation of £(137,659) was higher in 2017 versus 2016, when it amounted to £(131,524) due to the increase in head count across the company due to increased exploration activity.
- > Exploration costs expensed amounted to £(229,634) in 2017 as compared to £(86,988) in 2016. The increase in costs in this area is due to an increase in the level of activity around the Feasibility Study.

- > The level of professional fees has also been increased in 2017 to £(124,675) as compared to 2016 (£(73,114)). This is due to an increase in activity regarding the capital raising activities undertaken in Q4 2016 and legal fees as a result of overall increased activity. Professional fees include legal fees and fees from technical and specialist advisors as well as corporate advisory, accounting, audit and secretarial charges.
- > Investor relations charges were higher in 2017 at £(69,340), compared to £(32,034) in 2016 as a result of increase in expenditure as a result of the growing profile of the company in both Canada and the UK.
- > The charge for stock options has increased to £(78,810) during 2017, as compared to £(18,184) during 2016 as new options issued in 2016, were done so towards the end of the year and so the charge for these is not included in the prior period. These are non-cash charges.

There have also been a number of non-cash cost items which impacted Profit / (Loss) from operations and which arose in Q2 2017 and 2016, as follows:

- > The change in fair value of contingent consideration in the first six months of 2017 resulted in a gain of £153,095 primarily as a result of the movement in the USD foreign exchange rate during the period. The contingent consideration is priced in USD and so has decreased in value when denominated in GBP. In the prior year the charge of £463,301 was also due to exchange rate changes in the functional currency in which the Teck Contingent Consideration liability. See 'Contingent consideration' in 'Critical Accounting Policies and Estimates' for further analysis and explanation.

Additional movements:

- > The (loss)/gain on foreign exchange is associated with movements arising on cash deposits held by the Company in currencies other than Sterling.

## Analysis of Intangible Assets

	Goodwill	Exploration licences	Exploration and evaluation costs	Total
	£	£	£	£
Cost				
At 1 January 2016	192,028	3,174,275	16,679,799	20,046,102
Additions	-	-	399,468	399,468
Impairment	-	-	-	-
Exchange rate movements	<u>28,422</u>	<u>472,267</u>	<u>2,485,964</u>	<u>2,986,653</u>
Net book amount at 30 June 2016	<b>220,450</b>	<b>3,646,542</b>	<b>19,565,231</b>	<b>23,432,223</b>
At 1 January 2017	280,060	5,645,185	26,092,551	32,017,796
Additions	-	-	2,716,012	2,716,012
Impairment	-	-	-	-
Exchange rate movements	<u>(19,144)</u>	<u>(316,663)</u>	<u>(1,880,073)</u>	<u>(2,196,735)</u>
Net book amount at 30 June 2017	<b>260,916</b>	<b>5,328,522</b>	<b>26,928,491</b>	<b>32,257,013</b>

Exploration and evaluation costs comprise the Araguaia project. Exploration licences comprise the Vale dos Sonhos licence acquired from a subsidiary of Glencore in November 2015 and the further licences that were acquired when the Glencore transaction completed during 2016. Impairment reviews for exploration and evaluation assets are carried out either on a project by project basis or by geographical area. The Group's sole intangible asset as at 30 June 2017 comprises the Araguaia/GAP Project.

The accounting policies of the Group specify that intangible assets are to be denominated in the functional currency of the country in which the asset is located. The accounting policies of the Group specify that intangible assets are to be denominated in the functional currency of the country in which the asset is located. The Araguaia / GAP Projects are thus denominated in Brazilian Reais.

## Other Information

### Outstanding Share Data

	2017 Number	2017 £	2016 Number	2016 £
>> Group and Company				
>> Issued and fully paid				
>> Ordinary shares of 1p each				
>> At 1 January	<b>1,171,934,300</b>	<b>11,719,343</b>	671,204,378	6,712,044

>> Issue of ordinary shares	-	-	-
>> At 30 June 2017	<b>1,171,934,300</b>	<b>11,719,343</b>	671,204,378 6,712,044

### **Stock Options in the Company**

Total options outstanding as at the date of this document amount to 96,150,000 with exercise prices ranging from 3.00 pence to 15.5 pence, and which will be fully vested by 28 September 2018. There is no other share-based compensation paid by the Company.

The Company recognises as an expense the cost of stock based compensation based upon the estimated fair value of new stock options granted. The fair value of each stock option is estimated on the date of grant using the Black-Scholes option pricing model and is expensed over the vesting period.

### **Liquidity, Capital Reserves and Financing Activities**

The Company is not in commercial production on any of its properties and accordingly it does not generate cash from operations and finances its activities by raising capital through equity issues.

As at 30 June 2017 the Company had £5,655,064 in cash at bank and on deposit meaning the Company is fully funded for the end of the Feasibility Study and beyond. As at 30 June 2016 cash at bank and on deposit amounted to £1,660,194.

All of the Company's cash and cash equivalents as at 30 June 2017 are held in interest bearing accounts. The Company has not invested in any short-term commercial paper, asset backed securities or other financial instruments.

In management's view the Company has sufficient financial resources to fund currently planned exploration programmes and ongoing operating expenditures over the next 12 months, which are reviewed and adjusted on a regular basis as appropriate and in line with the financial resources of the Company. The Company will continue to be dependent on raising equity capital as required until and unless it reaches the production stage and generates cash flow from operations.

### **Prior year Restatement**

These financial statements reflect prior year adjustments in respect of a deferred tax asset, contingent consideration and associated exchange differences and finance costs. Both the deferred tax asset and contingent consideration arose from the acquisition of Teck Cominco Brasil S.A. in 2010, which was accounted for as a business combination. The initial recognition of both of these items required management to make an assessment of the probabilities of the tax losses being utilised and the fair value of the contingent consideration to be paid.

Following the recent review undertaken of the relevant recognition criteria, and conditions relating to both items it has been concluded that the level of deferred tax recognised at the time of the

acquisition requires re-calculation. The recognition of the deferred tax asset at an early stage in the Araguaia project did not meet the criteria prescribed by IAS 12 - Income Taxes, of it being probable that they could be utilised.

It has also been concluded that the fair value of the contingent consideration applied at time of acquisition similarly requires re calculation. This liability relates to payments due to the vendors upon utilisation of brought forward tax losses of Teck Cominco. The payments would be 50% of the tax effect of the losses utilised from the date of acquisition up to August 2020. The fair value originally calculated assumed 100% utilisation of the brought forward tax losses and was not a probability weighted to reflect the underlying risks of the project and the requirement to utilise the losses within a set timeframe.

Management have restated the appropriate figures for the quarter ended 31 March 2016 in line with the adjustments made in the 2016 annual report and accounts and MD&A. Please refer to the Annual Report and MD&A for further details.

### **Critical Accounting Policies and Estimates**

The financial information disclosed within this document was prepared on a going concern basis using accounting policies consistent with International Financial Reporting Standards (IFRS).

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the end of each reporting period.

Significant items subject to such estimates include:

### **Impairment of exploration and evaluation costs**

Exploration and evaluation costs have a carrying value at 30 June 2017 of £32,257,012 (2016 (Restated): £23,432,223). Management tests annually whether exploration projects have future economic value in accordance with the accounting policy. Each exploration project is subject to an annual review by either a consultant or senior company geologist to determine if the exploration results returned to date warrant further exploration expenditure and have the potential to result in an economic discovery. This review takes into consideration long-term metal prices, anticipated resource volumes and grades, permitting and infrastructure. In the event that a project does not represent an economic exploration target and results indicate there is no additional upside, a decision will be made to discontinue exploration. The Directors have reviewed the estimated value of each project prepared by management and do not consider any impairment is necessary.

### **Estimated impairment of goodwill**

Goodwill has a carrying value at 30 June 2017 of £260,916 (2016: £262,202). The Group tests annually whether goodwill has suffered any impairment, in accordance with the accounting policy.

Management has concluded that there is no impairment charge necessary to the carrying value of goodwill.



### **Contingent consideration**

Contingent consideration has a carrying value of £3,606,900 at 30 June 2017 (2016 Restated: £3,875,706). There are two contingent consideration arrangements in place as at 30 June 2017:

- A contingent consideration arrangement that requires the Group to pay the former owners of Teck Cominco Brasil S.A (subsequently renamed Araguaia Niquel Mineração Ltda) 50% of the tax effect upon utilisation of the tax losses existing in Teck Cominco Brasil S.A at the date of acquisition. Under the terms of the acquisition agreement, tax losses that existed at the date of acquisition and which are subsequently utilised in a period greater than 10 years from that date are not subject to the contingent consideration arrangement.

This acquisition was accounted for as a business combination and an assessment of the fair value of the contingent consideration was made at the date of acquisition. This fair value is reassessed in each subsequent accounting period. In arriving at an estimate of the fair value management make an assessment of the probability of utilisation of all or part of the tax losses by the end of the 10 year period which is August 2020. The Group has used discounted cash flow analysis to determine when it is anticipated that the tax losses will be utilised and any potential contingent consideration paid. These cash flows could be affected by movements in a number of factors including the timing of the development and commissioning of the project, commodity prices, operating costs, capital expenditure, production levels, grades, recoveries and interest rates. Because of the condition of the acquisition agreement to utilise tax losses prior to August 2020 a critical assumption in the assessment of value of the contingent consideration is the timing of commencement of profitable production.

As explained in the MD&A as at December 2016 and in the Annual Report, following a reassessment of the IFRS accounting requirements, management determined that the value attributed to the contingent consideration must be reviewed at the end of each reporting period and adjusted to reflect the current best estimate. This review was not completed in prior years and accordingly, a restatement of prior years' financial statements has been made. These adjustments continue to be reflected in the 2017 quarterly financial statements in the prior year comparatives only. The current year numbers are not affected.

- A contingent consideration arrangement that requires the Group to pay Xstrata Brasil Mineração Ltda US\$1,000,000 after the date of issuance of a feasibility study comprising the Araguaia project and the Vale dos Sonhos ('VdS') and Serra do Tapa ('SdT') project areas ('GAP') (together the 'Enlarged Project'), to be satisfied in shares in the Company (at the 5 day volume weighted average price taken on the tenth business day after the date of such issuance) or cash, at the election of the Company; and remaining consideration of US\$5,000,000 to be paid in cash, as at the date of first commercial production from any of the resource areas within the Enlarged Project area. The critical assumptions relating to the

assessment of the contingent consideration of S\$5,000,000 are similar to those described above for the contingent consideration payable to the former owners of Teck Cominco Brasil S.A.

### **Current and deferred taxation**

The Group is subject to income taxes in numerous jurisdictions. Judgment is required in determining the worldwide provision for such taxes. The Group recognises liabilities for anticipated tax issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will affect the current and deferred income tax assets and liabilities in the period in which such determination is made.

Deferred tax liabilities have been recognised on the fair value gains in exploration assets arising on the acquisitions of Araguaia Niquel Mineração Ltda (formerly Teck Cominco Brasil S.A) and Lontra Empreendimentos e Participações Ltda. A deferred tax asset has been recognised on acquisition of Araguaia Niquel Mineração Ltda to the extent that it can be set against the deferred tax liability arising on the fair value gains. In determining whether a deferred tax asset in excess of this amount should be recognized management must make an assessment of the probability that the tax losses will be utilized and a deferred tax asset is only recognised if it is considered probable that the tax losses will be utilized.

As explained in this MD&A and in the Audited Annual Report for 2016, following a reassessment of the IFRS accounting requirements, management determined based on information available at the time of preparation of the 2010 financial statements, the utilization of these losses had a lower probability at the time of the acquisition in 2010 and a restatement derecognizing the deferred tax asset has been made. Management review the position each financial period and this assessment remains. As such these unaudited condensed quarterly financial statements reflect these adjustments.

### **Forward Looking Statements**

*Except for statements of historical fact relating to the Company, certain information contained in this management's discussion and analysis constitutes 'forward-looking information' under Canadian securities legislation. Forward-looking information includes, but is not limited to, statements with respect to the potential of the Company's properties; the future price of minerals; success of exploration activities; cost and timing of future exploration and development; the estimation of mineral resources; requirements for additional capital and other statements relating to the financial and business prospects of the Company. Generally, forward-looking information can be identified by the use of forward-looking terminology such as 'plans', 'expects' or 'does not expect', 'is expected', 'budget', 'scheduled', 'estimates', 'forecasts', 'intends', 'anticipates' or 'does not anticipate', or 'believes', or variations of such words and phrases or statements that certain actions, events or results 'may', 'could', 'would', 'might' or 'will be taken', 'occur' or 'be achieved'. Forward-looking information is inherently subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to risks related to:*

*The Company's goal of creating shareholder value by concentrating on the acquisition and development of properties that have the potential to contain economic mineral deposits;*

- future plans for the Araguaia Project and other property interests held by the Company or which may be acquired on a going forward basis, if at all;*
- management's outlook regarding future trends;*
- the Company's ability to meet its working capital needs at the current level in the short term; and*
- governmental regulation and environmental liability.*

*Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, and are inherently subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to risks related to: unexpected events and delays during permitting; the possibility that future exploration results will not be consistent with the Company's expectations; timing and availability of external financing on acceptable terms and in light of the current decline in global liquidity and credit availability; uncertainty of mineral resources; future prices of minerals; currency exchange rates; government regulation of mining operations; failure of equipment or processes to operate as anticipated; risks inherent in mineral exploration and development including environmental hazards, industrial accidents, unusual or unexpected geological formations; and uncertain political and economic environments. Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.*

### **Additional Information**

Additional information relating to the Company, including its annual financial statements for its most recently completed fiscal year as well as its annual information form are available on SEDAR at [www.sedar.com](http://www.sedar.com).