TREVALI MINING CORPORATION

CONSOLIDATED FINANCIAL STATEMENTS

Year ended December 31, 2018 and 2017

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MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The accompanying consolidated financial statements of Trevali Mining Corporation have been prepared by management in accordance with International Financial Reporting Standards and reflect management's best estimates and judgments based on information currently available. The financial information contained elsewhere in this report has been reviewed to ensure consistency with the consolidated financial statements.

Management maintains systems of internal control designed to provide reasonable assurance that the assets are safeguarded. All transactions are authorized and duly recorded, and financial records are properly maintained to facilitate financial statements in a timely manner. The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the consolidated financial statements. The Board carries out this responsibility principally through its Audit Committee.

The Audit Committee of the Board of Directors has reviewed the consolidated financial statements with management and the external auditors. PricewaterhouseCoopers LLP, an independent firm of Chartered Professional Accountants, appointed as external auditors by the shareholders, have audited the consolidated financial statements and their report is included herein.

/s/ Mark Cruise

Mark Cruise
President and Chief Executive Officer

/s/ Gerbrand van Heerden

Gerbrand van Heerden
Chief Financial Officer

Vancouver, British Columbia, Canada
February 20, 2019

Independent auditor's report

To the Shareholders of Trevali Mining Corporation

Our opinion

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of Trevali Mining Corporation and its subsidiaries, (together, the Company) as at December 31, 2018 and 2017, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRS).

What we have audited
The Company's consolidated financial statements comprise:

- the consolidated statements of financial position as at December 31, 2018 and 2017;
- the consolidated statements of operations for the years then ended;
- the consolidated statements of comprehensive (loss) income for the years then ended;
- the consolidated statements of cash flows for the years then ended;
- the consolidated statements of changes in shareholders' equity for the years then ended; and
- the notes to the consolidated financial statements, which include significant accounting policies.

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence
We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada. We have fulfilled our other ethical responsibilities in accordance with these requirements.

PricewaterhouseCoopers LLP
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Other information

Management is responsible for the other information. The other information comprises the Management's Discussion and Analysis.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company’s financial reporting process.

Auditor’s responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditor's report is Graziano DeLucchi.

(Signed) "PricewaterhouseCoopers LLP"

Chartered Professional Accountants

Vancouver, British Columbia
February 20, 2019

TREVALI MINING CORPORATION
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(Expressed in thousands of United States Dollars)

	Notes		December 31, 2018		December 31, 2017
ASSETS					
Current					
Cash and cash equivalents		$	65,462	$	94,135
Restricted cash			1,217		3,210
Settlement and other receivables	7		73,016		88,931
Prepaids			6,242		5,981
Inventories	8		63,161		66,537
			209,098		258,794
Reclamation bonds and other			8,471		8,381
Long-term receivables	9		12,387		19,714
Investment and advances	10		3,129		–
Exploration and evaluation assets	11		118,755		62,168
Property, plant and equipment	12		473,900		760,746
Deferred income tax	21		–		8,521
Goodwill	4		–		61,835
		$	825,740	$	1,180,159
LIABILITIES AND SHAREHOLDERS' EQUITY					
Liabilities					
Current					
Accounts payable and accrued liabilities	13	$	58,541	$	69,630
Due to related parties	18		1,539		8,410
Debt	14		132,167		36,404
			192,247		114,444
Debt	14		257		124,153
Reclamation and rehabilitation provision	15		46,727		47,690
Other provisions			2,956		2,877
Deferred income taxes	21		96,309		145,932
			338,496		435,096
Shareholders' equity					
Share capital	16		763,596		770,129
Share-based payment reserve	17		17,935		20,626
Deficit			(242,551)		(37,114)
Accumulated other comprehensive loss			(46,766)		(46,500)
			492,214		707,141
Non-controlling interests	25		(4,970)		37,922
			487,244		745,063
		$	825,740	$	1,180,159

Commitments and contingencies (Note 22)

The accompanying notes are an integral part of these consolidated financial statements.

Signed on behalf of the Board,

/s/ Mr. Russell Ball
Mr. Russell Ball, Director

/s/ Mr. Anton Drescher
Mr. Anton Drescher, Director

TREVALI MINING CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(Expressed in thousands of United States Dollars except for share and per share amounts)
Years Ended December 31, 2018 and 2017

	Notes	2018	2017
REVENUES	**19**	$ 402,589	$ 330,533
MINE OPERATING EXPENSES			
Production		215,726	185,688
Distribution		29,965	11,631
Royalties		11,609	6,595
Depreciation, depletion and amortization		67,562	40,532
		324,862	244,446
GROSS PROFIT		77,727	86,087
General and administrative		8,240	7,590
Operating profit		69,487	78,497
OTHER			
Loss on foreign exchange		1,684	6,917
Interest expense		14,408	20,509
Business acquisition costs		–	12,619
Impairments	**5**	311,828	–
Other expense (income), net		106	(1,467)
(Loss) income before taxes		(258,539)	39,919
Current income tax expense	**21**	13,159	7,878
Deferred income tax (recovery) expense	**21**	(41,103)	11,814
Net (loss) income for the year		$ (230,595)	$ 20,227
Attributable to:			
Owners of Trevali		$ (222,225)	$ 18,764
Non-controlling interests	**25**	(8,370)	1,463
		$ (230,595)	$ 20,227
(Loss) income per share			
Basic		$ (0.27)	$ 0.03
Diluted		$ (0.27)	$ 0.03
Weighted average number of shares outstanding (000's)			
Basic		830,120	544,451
Diluted		830,120	556,093

The accompanying notes are an integral part of these consolidated financial statements.

TREVALI MINING CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(Expressed in thousands of United States Dollars)
Years Ended December 31, 2018 and 2017

	Notes	2018	2017
Net (loss) income for the year		$ (230,595)	$ 20,227
Other comprehensive loss			
Unrealized loss on investments in equity securities		$ (266)	$ (473)
Total comprehensive (loss) income for the year		$ (230,861)	$ 19,754
Total comprehensive (loss) income attributable to:			
Owners of Trevali		$ (222,491)	$ 18,291
Non-controlling interests		(8,370)	1,463
		$ (230,861)	$ 19,754

The accompanying notes are an integral part of these consolidated financial statements.

TREVALI MINING CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in thousands of United States Dollars)
Years Ended December 31, 2018 and 2017

	Notes	2018	2017
OPERATING ACTIVITIES			
Net (loss) income for the year		$ (230,595)	$ 20,227
Items not affecting cash:			
Depreciation, depletion and amortization		67,562	40,532
Share-based payment expenses		1,302	6,995
Unrealized (gain) loss on foreign exchange		(5,874)	4,285
Accrued interest and accretion	24	14,867	12,281
Loss from write off of property plant and equipment		3,025	–
Deferred income tax		(41,103)	11,814
Impairment		311,828	–
Cash generated by operating activities before working capital changes		121,012	96,134
Changes in non-cash working capital items:			
Restricted cash		1,911	428
Settlement and other receivables		15,312	(31,556)
Prepaids		(760)	4,545
Inventories		3,376	48,849
Accounts payable and accrued liabilities		(18,727)	8,493
Due to related parties		(6,089)	(12,110)
Net cash provided by operating activities		116,035	114,783
INVESTING ACTIVITIES			
Recovery of value added taxes receivable		2,990	–
Tingo sale receivable	9	3,800	–
(Increase) decrease in reclamation bonds		(4,382)	1,372
Investment in Puma	10	(3,129)	–
Purchase of plant, equipment and exploration and evaluation assets		(79,878)	(59,102)
Purchase of Perkoa and Rosh Pinah Mines, net		–	(222,710)
Net cash used in investing activities		(80,599)	(280,440)
FINANCING ACTIVITIES			
Share units settled in cash		(82)	(4,044)
Shares issued for private placement		–	200,374
Stock options and warrants exercised		1,404	2,752
Debt and Revolving Facility, net	14	–	158,108
Share issuance costs on shares issued to Glencore		–	(155)
Repayment of debt, net	14	(165,000)	(104,809)
Drawdown on new Revolving Credit Facility	14	149,500	30,000
Interest payments	14	(7,218)	(7,463)
Payments on finance leases		(12,057)	(25,991)
Rosh Pinah share buy-back	25	(23,101)	–
Dividends paid to non-controlling interest	25	(2,991)	–
Normal Course Issuer Bid		(3,490)	–
Net cash (used in) provided by financing activities		(63,035)	248,772
Effect of foreign exchange on cash		(1,074)	(116)
(Decrease) increase in cash and cash equivalents for the year		(28,673)	82,999
Cash and cash equivalents, beginning of year		94,135	11,136
Cash and cash equivalents, end of year		$ 65,462	$ 94,135

Supplemental Cash Flows Information (Note 24)

The accompanying notes are an integral part of these consolidated financial statements.

TREVALI MINING CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Expressed in thousands of United States Dollars except for share amounts)
Years Ended December 31, 2018 and 2017

	Notes	Number of shares	Share Capital	Share-based payment reserve	Deficit	Accumulated other comprehensive loss	Non-controlling interests	Total equity
Balance, December 31, 2017		825,725,260	$ 770,129	$ 20,626	$ (37,114)	$ (46,500)	$ 37,922	$ 745,063
Net loss for the year		–	–	–	(222,225)	–	(8,370)	(230,595)
Unrealized loss on investment		–	–	–	–	(266)	–	(266)
Total comprehensive loss		–	–	–	(222,225)	(266)	(8,370)	(230,861)
Share-based payment		–	–	1,302	–	–	–	1,302
Share units issued	**16**	2,249,426	2,826	(2,826)	–	–	–	–
Exercise of options and warrants	**16/17**	3,221,399	1,404	-	–	–	–	1,404
Share units settled in cash		–	–	(82)	–	–	–	(82)
Reallocation of share-based payment		–	1,085	(1,085)	–	–	–	–
Share buy-back	**16**	(12,700,000)	(11,848)	–	8,358	–	–	(3,490)
Dividends paid	**25**	–	–	–	–	–	(2,991)	(2,991)
Change in ownership interest in Rosh Pinah	**25**	–	–	–	8,430	–	(31,531)	(23,101)
Balance, December 31, 2018		818,496,085	$ 763,596	$ 17,935	$ (242,551)	$ (46,766)	$ (4,970)	$ 487,244

	Notes	Number of shares	Share Capital	Share-based payment reserve	Deficit	Accumulated other comprehensive loss	Non-controlling interests	Total equity
Balance, December 31, 2016		401,606,025	$ 336,712	$ 22,100	$ (55,878)	$ (46,027)	$ –	$ 256,907
Net income for the year		–	–	–	18,764	–	1,463	20,227
Unrealized loss on investment		–	–	–	–	(473)	–	(473)
Total comprehensive income		–	–	–	18,764	(473)	1,463	19,754
Share-based payment		–	–	7,201	–	–	–	7,201
Exercise of options and warrants		2,197,604	2,250	(2,250)	–	–	–	–
Shares issued on the bought deal private placement of subscription receipts, net of fees	**4**	220,455,000	200,374	–	–	–	–	200,374
Shares issued on the Glencore Acquisition, net of fees	**4**	193,432,310	219,288	–	–	–	–	219,288
Deferred income taxes on share issuance costs		–	5,649	–	–	–	–	5,649
Exercise of options and warrants		7,274,121	2,752	–	–	–	–	2,752
Share units settled in cash		–	–	(4,044)	–	–	–	(4,044)
Bonus share units issued		760,200	723	–	–	–	–	723
Reallocation from share-based payment		–	2,381	(2,381)	–	–	–	–
Acquisition of Perkoa and Rosh Pinah	**4**	–	–	–	–	–	36,459	36,459
Balance, December 31, 2017		825,725,260	$ 770,129	$ 20,626	$ (37,114)	$ (46,500)	$ 37,922	$ 745,063

The accompanying notes are an integral part of these consolidated financial statements.

(Expressed in thousands of United States Dollars except for share and per share amounts)

1. DESCRIPTION OF BUSINESS

Trevali Mining Corporation (“Trevali” or "Company") is a publicly listed company incorporated under the laws of British Columbia, Canada. The Company’s common shares are listed under the symbol (i) “TV” on both the Toronto Stock Exchange (“TSX”) and Bolsa de Valores de Lima in Peru, (ii) “TREVF” on the OTCQX International Quotation System in the United States, and (iii) “4T1” on the Frankfurt Stock Exchange. The Company’s registered office is located at 1400 – 1199 West Hastings Street, Vancouver, B.C., V6E 3T5, Canada.

The Company is a natural resource company engaged in the acquisition, exploration, development and production from mineral properties. The Company produces zinc concentrates from the Perkoa mine in Burkina Faso, and zinc and lead-silver concentrates from the Rosh Pinah mine in Namibia, the Caribou mine in the Bathurst Mining Camp, northern New Brunswick, Canada and the Santander mine in Peru. In addition, Trevali owns the Halfmile project and Restigouche polymetallic deposits, an effective 44% interest in the Gergarub project in Namibia and options to acquire majority positions in the Heath Steele and Murray Brook deposits located in New Brunswick, Canada and the Ruttan mine in northern Manitoba, Canada.

Trevali’s principal subsidiaries and geographic location are as follows:

		Ownership		
Legal name	**Country**	**2018**	**2017**	**Main activity**
Nantou Mining Burkina Faso S.A.	Burkina Faso	90.0%	90.0%	Zinc production
Rosh Pinah Zinc Corporation (Proprietary) Ltd.	Namibia	90.0%	80.1%	Zinc, lead-silver production
Trevali Mining (New Brunswick) Ltd.	Canada	100.0%	100.0%	Zinc, lead-silver production
Trevali (Peru) S.A.C.	Peru	100.0%	100.0%	Zinc, lead-silver production
Trevali Mining (Maritimes) Ltd.	Canada	100.0%	100.0%	Exploration

2. BASIS OF PREPARATION

Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (“IFRS”).

These consolidated financial statements were reviewed by the Audit Committee, and approved by the Board of Directors for issue on February 20, 2019.

Basis of measurement

These consolidated financial statements have been prepared on a historical cost basis, except for those assets and liabilities that are measured at revalued amounts or fair values at the end of each reporting period.

The accounting policies set out in Note 3 have been applied consistently by the Company and its subsidiaries in preparing the consolidated financial statements for the years ended December 31, 2018 and 2017.

Use of accounting estimates and judgments

The preparation of financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, the accompanying disclosures and the disclosure of contingent liabilities at the date of the consolidated financial statements.

Management reviews these estimates and assumptions on an ongoing basis, based on experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities. Revisions to accounting estimates are recognized in the period in which the estimate is revised and in any future period affected.

Management has identified a number of areas where significant judgments, estimates and assumptions are required. Further information on each of these areas is described below.

Critical accounting estimates and judgments

Significant assumptions and judgments about the future and other sources of estimation uncertainty that management has made at the end of the reporting year, which could result in a material adjustment to the carrying amounts of assets and liabilities, in the event that actual results differ from assumptions made, relate to the following significant areas:

a) Business combinations and goodwill

Management applies judgment in determining whether the assets acquired and liabilities assumed constitute a business, in which case the acquisition is accounted for as a business combination. Specifically, judgment is used in considering whether the inputs of the acquiree and processes applied to those inputs have the ability to create outputs for the purpose of providing a return.

The assessment of fair values on acquisition includes those mineral reserves and resources that may be reliably measured. In determining these fair values, the use of estimates and assumptions such as future cash flows, metal prices, exchange rates and appropriate discount rates are taken into consideration. Changes in such estimates and assumptions could result in significant differences in the amount of goodwill recognized.

b) Review of asset carrying values and impairment assessment

Impairment assessments require the use of estimates and assumptions such as future zinc, lead and silver metal prices (considering current and historical prices, price trends and related factors), operating and capital costs, discount rates, foreign exchange rates, closure and rehabilitation costs, exploration potential, mineral reserves and resources, operating performance (which includes production and sales volumes) and estimated life-of-mines ranging from seven to twenty years. These estimates and assumptions are subject to risk and uncertainty. Therefore, there is a possibility that changes in circumstances will impact these projections, which may impact the recoverable amount of assets and/or cost generating units (“CGUs”). In such circumstances, some or all of the carrying amount of the assets/CGUs may be further impaired or the impairment charge reduced with the impact recognized in the statement of operations.

c) Deferred income taxes

Judgment is required to determine which arrangements are considered to be a tax on income as opposed to an operating cost. Judgment is also required to determine whether deferred tax assets are recognised in the statement of financial position. Deferred tax assets, including those arising from unutilised tax losses, require the Company to assess the likelihood that it will generate sufficient taxable earnings in future periods, in order to utilise recognised deferred tax assets. Judgment is also required in respect of the application of existing tax laws in each jurisdiction.

Assumptions about the generation of future taxable profits depend on management’s estimates of future cash flows. These estimates of future taxable income are based on forecast cash flows from operations (which are impacted by production and sales volumes, commodity prices, reserves, operating costs, closure and rehabilitation costs, capital expenditure, and other capital management transactions). To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Company to realize the net deferred tax assets recorded at the reporting date could be impacted.

d) Reclamation and rehabilitation provision

The ultimate costs for reclamation and rehabilitation are uncertain, and cost estimates can vary in response to many factors, including estimates of the nature, extent and timing of rehabilitation activities, technological changes, regulatory changes, cost increases as compared to inflation rates, the risk-free interest rate for discounting future cash flows, foreign exchange rates, and estimates of the underlying currencies in which the provisions will ultimately be settled. The Company estimates its costs based on studies using current restoration standards and techniques, and the provision at the reporting date represents management's best estimate of the present value of the future rehabilitation costs required.

e) Useful lives of mineral properties, plant and equipment

Estimated mineral resources are used in determining the depreciation of certain assets. This results in depreciation expense proportional to the depletion of the anticipated remaining life-of-mine production. The estimate of the remaining lives of the Company's producing mineral properties is based on a combination of quantitative and qualitative factors including historical production and financial results, mineral resources reported under National Instrument 43-101 ("NI 43-101"), estimates of ore mineral feed production from areas not included in the NI 43-101 reports, and management's intent to operate the property. The estimated remaining lives of the producing mineral properties are used to calculate amortization and depletion expense, assess impairment charges and the carrying values of assets, and for forecasting the timing of the payment of reclamation and remediation costs.

There are numerous uncertainties inherent in the estimation of the remaining lives of the producing mineral properties, and assumptions that are valid at the time of estimation may change significantly when new information becomes available. Changes in the forecast prices of commodities, exchange rates, or production costs may change the economic status of the resources, estimates of production from areas not included in the NI 43-101 reports, and management's intent to operate the property, and may ultimately have a material impact on the estimated remaining lives of the properties.

f) Estimated mineral reserves and resources

Judgment is required in evaluating whether expenditures meet the criteria to be capitalized, including the probability that future economic benefits will be generated. Determination of probable future economic benefit is based on management's evaluation of the technical feasibility and commercial viability of the geological properties of a given ore body based on information obtained through evaluation activities, including metallurgical testing, resource and reserve estimates and the economic assessment of whether the ore body can be mined economically.

g) Revenue recognition

Management exercises judgment when taking into consideration all of the relevant facts and circumstances when applying each step of the model for the recognition of revenue when control of goods is transferred to, or a service is performed for, the customer.

3. SIGNIFICANT ACCOUNTING POLICIES

Adoption of New IFRS Pronouncements

Trevali adopted the IFRS 15 and IFRS 9 (as listed below) as at January 1, 2018. The nature and effect of these changes as a result of the adoption of these new standards are described below. Other than the changes described below, the accounting policies adopted are consistent with those of the previous financial year.

Revenue Recognition

Trevali adopted IFRS 15: Revenue from contracts with customers ("IFRS 15") on January 1, 2018 in accordance with the transitional provisions of the standard. The new revenue standard introduces a single principles-based, five-step model for the recognition of revenue when control of goods is transferred to, or a service is performed for, the customer. The five steps are to identify the contract(s) with the customer, identify the performance obligations in the contract, determine the transaction price, allocate the transaction price to each performance obligation and recognize revenue as each performance obligation is satisfied. IFRS 15 also requires enhanced disclosures about revenue to help users better understand the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers. The Company elected to apply IFRS 15 using a modified retroactive approach, based on management's analysis, the timing and amount of Trevali's revenue from product sales did not change under IFRS 15 and therefore no cumulative effect was recognized on initial adoption.

Financial Instruments

Trevali adopted IFRS 9: Financial instruments ("IFRS 9") on January 1, 2018 in accordance with the transitional provisions of the standard. Trevali elected not to adopt the hedging requirements of IFRS 9 at this time but may adopt them in a future period.

IFRS 9 addresses the classification, measurement and recognition of financial assets and financial liabilities and supersedes the guidance relating to the classification and measurement of financial instruments in IAS 39: Financial Instruments: Recognition and Measurement ("IAS 39").

Under IFRS 9, there is a change in the classification and measurement requirements relating to financial assets. Previously, there were four categories of financial assets: loans and receivables, fair value through profit or loss, held to maturity and available for sale. IFRS 9 requires financial assets to be classified into three measurement categories on initial recognition: fair value through profit and loss, fair value through other comprehensive income and amortized cost. Investments in equity instruments are required to be measured by default at fair value through profit or loss (but there is an irrevocable option for each equity instrument to present fair value changes in other comprehensive income). Measurement and classification of financial assets is dependent on the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial asset.

For financial liabilities, the standard retains most of the IAS 39 requirements. The main change is that, in cases where the fair value option is taken for financial liabilities, the part of a fair value change relating to an entity's own credit risk is recorded in other comprehensive income rather than the income statement, unless this creates an accounting mismatch.

IFRS 9 introduces a new three-stage expected credit loss model for calculating impairment for financial assets. IFRS 9 no longer requires a triggering event to have occurred before credit losses are recognized. An entity is required to recognize expected credit losses when financial instruments are initially recognized and to update the amount of expected credit losses recognized at each reporting date to reflect changes in the credit risk of the financial instruments. In addition, IFRS 9 requires additional disclosure requirements about expected credit losses and credit risk.

Trevali assessed the classification and measurement of its financial assets and financial liabilities under IFRS 9 and determined IFRS 9has no quantitative impact on the Company's financial statement as at January 1, 2018. IFRS 9 does have an impact on the classification of the Company's financial instruments as follows:

Cash equivalents

Cash equivalents were reclassified from loans and receivables to amortized cost or fair value through profit or loss, depending on their nature. The fair value of $94.1 million as at January 1, 2018 is deemed to be the starting amortized cost for cash equivalents classified as subsequently measured at amortized cost. There was no impact on retained earnings as at January 1, 2018 because of this reclassification.

Investments in marketable equity securities

Trevali made the irrevocable classification choice to record fair value changes on its investments in equity instruments through other comprehensive income. As a result, there was no impact on retained earnings as at January 1, 2018.

Restricted cash

Restricted cash was reclassified from loans and receivables to amortized cost.

Settlement receivables

Prior to the adoption of IFRS 9, the exposure of provisionally-priced sales to commodity price movements previously led to embedded derivatives being separated from the host trade receivable and accounted for separately. Under IFRS 9, embedded derivatives are no longer separated from financial assets. Instead, the entire receivable must now be measured at fair value through profit or loss, with subsequent changes in fair value recognized in the statement of operations each period until final settlement.

Other receivables

Other receivables were reclassified from loans and receivables to amortized cost, as these were assessed as being held to collect contractual cash flows. There was no impact on retained earnings as at January 1, 2018 because of this reclassification.

Expected credit losses

Credit risk arises from cash and cash equivalents, restricted cash, and other receivables. The Company limits its credit exposure on cash and cash equivalents and restricted cash by holding its deposits mainly with institutions with strong investment-grade ratings by a primary ratings agency. All the Company's settlement receivables are with Glencore – a related party (Note 7). Although Trevali is exposed to credit losses due to the non-performance of its counterparties, there are no significant concentrations of credit risk and Trevali does not consider this to be a material risk.

Accounting Policies

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries.

Control is achieved when Trevali is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, Trevali controls an investee if, and only if, Trevali has all of the following:

- power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- exposure, or rights, to variable returns from its involvement with the investee; and
- the ability to use its power over the investee to affect its returns.

When Trevali has less than a majority of the voting rights of an investee or similar rights of an investee, it considers all relevant facts and circumstances in assessing whether it has power over the investee including:

- the size of Trevali's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- potential voting rights held by Trevali, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that Trevali has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

The Company reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above. Consolidation of a subsidiary begins when Trevali obtains control over the subsidiary and ceases when Trevali loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of operations and other comprehensive income from the date Trevali gains control until the date when Trevali ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in Trevali's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions with any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received being recognized directly in equity and attributed to equity holders of Trevali.

Business combinations and goodwill

Acquisitions of subsidiaries and businesses are accounted for using the acquisition method of accounting. The cost of the acquisition is measured at fair value, which is calculated as the sum of the acquisition date fair values of the assets transferred, liabilities incurred to the former owners of the acquiree and the equity interests issued in exchange for control of the acquiree. The identifiable assets, liabilities and contingent liabilities ("identifiable net assets") are recognized at their fair value at the date of acquisition. Acquisition related costs are recognized in the consolidated statement of operations as incurred.

Where a business combination is achieved in stages, Trevali's previously held interests in the acquired entity are remeasured to fair value at the acquisition date (i.e. the date Trevali attains control) and the resulting gain or loss, if any, is recognized in the consolidated statement of operations.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. Goodwill is, from the acquisition date, allocated to the CGU that are expected to benefit from the synergies of the combination.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to the CGUs that are expected to benefit from the synergies of the combination. CGUs to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the CGU is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. An impairment loss recognized for goodwill is not able to be reversed in subsequent periods.

On disposal of the relevant CGU, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, Trevali reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted for additional information obtained during the “measurement period” (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity’s net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests’ proportionate share of the recognized amounts of the acquiree’s identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another IFRS.

Revenue

Revenue consists of zinc and lead-silver concentrate sales. Trevali’s performance obligations relate primarily to the delivery of these products to its customer, Glencore (a related party), with each separate delivery or shipment representing a separate performance obligation.

Revenue is recognized when control of the goods or services is transferred to the customer. In most instances, revenue is recognized when the product is delivered to the destination specified by the customer, which is typically the vessel on which it is shipped or the customer’s premises.

Revenue is measured at the amount to which the Company expects to be entitled, being the estimate of the price expected to be received at the end of the relevant quotational period (“QP”) stipulated in the off-take agreement, i.e., the forward price, and a corresponding trade receivable is recognized. Revenue excludes any applicable sales taxes.

Adjustments to the sales price occur based on movements in quoted market prices up to the end of the QP are referred to as provisional pricing arrangements. The period between provisional invoicing and the end of the QP can be between one and six months. The revenue adjustment mechanism embedded within provisionally priced sales arrangements has the character of a commodity derivative and are, therefore, within the scope of IFRS 9 and not within the scope of IFRS 15. Accordingly, the fair value of the final sales price adjustment is re-estimated continuously, and changes in fair value are recognized as an adjustment to revenue and are disclosed separately. In all cases, fair value is estimated by reference to forward market prices.

Cash and cash equivalents

Cash and cash equivalents include cash on account and short-term deposits with an original maturity of three months or less, but exclude any restricted cash. Restricted cash is not available for use by the Company and therefore is not considered highly liquid.

Settlement receivables

Settlement receivables, presented in settlement and other receivables, relate to the zinc and lead-silver concentrate sales contracts where the receivable amounts vary based on the underlying commodity prices. Settlement receivables are classified as fair value through profit or loss and are recorded at fair value at each reporting period based on published price assessments or quoted commodity prices up to the date of final pricing. The changes in fair value are recorded in revenues.

Investments

Investments are classified, at Trevali's election, as subsequently measured at fair value through other comprehensive income. Investment transactions are recognized on the trade date with transaction costs included in the underlying balance. Fair values are determined by reference to quoted market prices at the statement of financial position date.

When investments are disposed, the cumulative gains and losses recognized in other comprehensive income are not recorded through profit and loss but rather remain within equity. Dividends are recognized in profit and these investments are not assessed for impairment.

Foreign currency translation

In preparing the financial statements of the individual entities, transactions in currencies other than the entity's functional currency are recorded at the rates of exchange prevailing at the dates of the transactions. At each statement of financial position date, monetary assets and liabilities are translated using the period end foreign exchange rate. Non-monetary assets and liabilities are translated using the historical rate on the date of the transaction. Non-monetary assets and liabilities that are stated at fair value are translated using the historical rate on the date that the fair value was determined. All gains and losses on translation of foreign currency transactions within entities are included in profit or loss.

Inventories

Stockpile inventories represent mineralized material that has been mined and hauled to the surface from the underground mines. Cost is determined using the weighted average method and comprises material costs, labour costs and allocated production related overhead costs. This inventoried stockpile is ready for processing and is expected to be processed within twelve months. Concentrate inventory includes mineralized material that went through the milling process. Stockpile and concentrate inventories are carried at the lower of cost or net realizable value.

Net realizable value is the estimated selling price net of any estimated selling costs in the ordinary course of business. Write-downs of mineralized stockpiled inventories and concentrate, resulting from net realizable value impairments, are reported as an expense within cost of sales in the period of write-down or capitalized during the pre-production phase.

Supplies inventories are valued at the lower of average cost and net realizable value. Replacement cost is used as the best available measure of net realizable value.

Exploration and evaluation

Exploration and evaluation expenditure relates to costs incurred in the search for mineral resources, the determination of technical feasibility, and the assessment of commercial viability of an identified resource. Costs include exploration and production licences, researching and analyzing historical exploration data, exploratory drilling, trenching, sampling and the costs of pre-feasibility studies.

The Company capitalizes the cost of acquiring interests in mineral rights, licenses and properties in business combinations, asset acquisitions or option agreements.

As the capitalized exploration and evaluation expenditure asset is not available for use, it is not depreciated. All capitalized exploration and evaluation expenditure is monitored for indications of impairment. Where a potential impairment is indicated, an assessment is performed for each area of interest or at the CGU level. To the extent that capitalized expenditure is not expected to be recovered it is charged to the consolidated statement of operations.

Administration costs that are not directly attributable to a specific exploration area are charged to the consolidated statement of operations. Licence costs paid in connection with a right to explore in an existing exploration area are capitalized and amortized over the term of the permit.

Exploration and evaluation assets are transferred to property, plant and equipment once the Company determines that probable future economic benefits will be generated as a result of the expenditures. At that time, the property is considered to enter the development phase, and subsequent evaluation costs are capitalized.

Property, plant and equipment

Property, plant and equipment are stated at cost, being the fair value of the consideration given to acquire or construct the asset, including directly attributable costs required to bring the asset to the location or to a condition necessary for operation and the direct cost of dismantling and removing the asset, less accumulated depreciation and any accumulated impairment losses.

Property, plant and equipment are depreciated to their estimated residual value over the estimated useful life of the specific asset concerned, or the estimated remaining life of the associated mine ("LOM") or lease. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Depreciation commences when the asset is available for use. The major categories of property, plant and equipment are depreciated/amortized on a units of production ("UOP"), straight-line and/or declining balance basis as follows:

Buildings and infrastructure	10 – 25 years
Mine development	UOP
Equipment and other	10% – 30% declining balance / 1 – 10 years

When economically viable reserves have been determined and the decision to proceed with development has been approved, the expenditures related to development and construction are capitalized as mine development costs and classified as a component of property, plant and equipment. Costs associated with the commissioning of new assets incurred in the period before their intended use are capitalized. Development expenditure is net of the proceeds of the sale of metals from mineralized stockpiles extracted during the development phase.

Expenditures on major maintenance or repairs includes the cost of replacement parts of assets and overhaul costs. Where an asset or part of an asset is replaced, and it is probable that further future economic benefit will flow to the Company, the expenditure is capitalized. Similarly, overhaul costs associated with major maintenance are capitalized when it is probable that future economic benefit will flow to the Company and any remaining costs of previous overhauls relating to the same asset are derecognized. All other expenditures are expensed as incurred.

Impairment or impairment reversals

The Company conducts, at least annually, an internal review of asset values which is used as a source of information to assess for any indications of impairment or impairment reversal. Formal impairment tests are carried out, at least annually, for CGUs containing goodwill and for all other non-current assets when events or changes in circumstances indicate the carrying value may not be recoverable.

A formal impairment test involves determining whether the carrying amounts are in excess (or below, as the case may be) of their recoverable amounts. An asset's recoverable amount is determined as the higher of its fair value less costs of disposal and its value in use. Such reviews are undertaken on an asset-by-asset basis, except where assets do not generate cash flows independent of other assets, in which case the review is undertaken at the CGU level.

If the carrying amount of an asset exceeds its recoverable amount, an impairment loss is recorded in the consolidated statement of operations to reflect the asset at the lower amount.

For those assets which were impaired in prior periods, if their recoverable amount exceeds their carrying amount, an impairment reversal is recorded in the consolidated statement of operations to reflect the asset at the higher amount to the extent the increased carrying amount does not exceed the carrying value of the asset that would have been determined had no impairment been recognized.

For the purpose of goodwill impairment testing, goodwill has been allocated to the CGUs, or groups of CGUs, that are expected to benefit from the synergies of the business combination and which represent the level at which management monitors and manages the goodwill. In assessing whether an impairment is required, the carrying value of the CGU is compared with its recoverable amount.

The recoverable amount is the higher of its fair value less costs of disposal ("FVLCD") and its value in use ("VIU"). If the recoverable amount of the CGU is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit on a pro-rata basis of the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognized directly in the consolidated statement of operations. An impairment loss recognized for goodwill cannot be reversed in subsequent periods.

Trade payables

Trade payables, presented in accounts payable and accrued liabilities, are non-interest bearing if paid when due and are recognized at face amount, except when fair value is materially different. Trade payables are subsequently measured at amortized cost.

Debt

Debt is initially recorded at fair value, less transaction costs and is subsequently measured at amortized cost, calculated using the effective interest rate method.

Reclamation and rehabilitation provision

Reclamation and rehabilitation costs arising from the installation of plant and other site preparation work, discounted using a risk free rate specific to the liability and the currency in which they are denominated to their net present value, are provided for and capitalised at the time such an obligation arises. The costs are charged to the consolidated statement of operations over the life of the operation through depreciation of the asset and the unwinding of the discount on the provision.

Costs for restoration of subsequent site disturbance, which is created on an ongoing basis during production, are provided for at their net present values and charged to the consolidated statement of operations as extraction progresses.

Changes in the estimated timing of the rehabilitation or changes to the estimated future costs are accounted for prospectively by recognizing an adjustment to the rehabilitation liability and a corresponding adjustment to the asset to which it relates, provided a reduction, if any, in the provision is not greater than the depreciated capitalised cost of the related asset, in which case the capitalised cost is reduced to Nil and the remaining adjustment recognized in the consolidated statement of operations.

Income taxes

Income taxes consist of current and deferred income taxes. Current taxes represent income taxes expected to be payable based on enacted or substantively enacted tax rates at the period end on expected current taxable income, and any adjustment to tax payable in respect of previous years. Deferred taxes are recognized for temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable income, using enacted or substantively enacted income tax rates which are expected to be effective at the time of reversal of the underlying temporary difference. Deferred tax assets and unused tax losses are only recognized to the extent that their recoverability is probable. Deferred tax assets are reviewed at reporting period end and amended to the extent that it is no longer probable that the related benefit will be realized. To the extent that a deferred tax asset not previously recognized subsequently fulfils the criteria for recognition, an asset is then recognized.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same authority and Trevali has both the right and the intention to settle its current tax assets and liabilities on a net or simultaneous basis. The tax effect of certain temporary differences is not recognized principally with respect to the initial recognition of an asset or liability (other than those arising in a business combination or in a manner that initially impacted accounting or taxable profit) and it is probable the temporary difference will not reverse in the foreseeable future. Deferred tax is provided in respect of fair value adjustments on acquisitions. These adjustments may relate to assets such as extraction rights that, in general, are not eligible for income tax allowances.

Current and deferred tax are recognized as an expense or income in the consolidated statement of operations, except when they relate to items that are recognized outside the consolidated statement of operations (whether in other comprehensive income or directly in equity) or where they arise from the initial accounting for a business combination.

Royalties, extraction taxes and other levies/taxes are treated as taxation arrangements when they have the characteristics of an income tax including being imposed and determined in accordance with regulations established by the respective government’s taxation authority and the amount payable is based on taxable income – rather than physical quantities produced or as a percentage of revenues – after adjustment for temporary differences. For such arrangements, current and deferred tax is provided on the same basis as described above for other forms of taxation. Obligations arising from royalty arrangements that do not satisfy these criteria are recognized as current provisions and included in cost of goods sold.

Trevali assesses its liabilities and contingencies for all tax years open to audit based upon the latest information available. Inherent uncertainties exist in estimates of tax contingencies due to complexities of interpretation and changes in tax laws. For those matters where it is probable that an adjustment will be made, the Company records its best estimate of these tax liabilities, including related interest charges.

Share capital

The proceeds from the exercise of stock options and warrants are recorded as share capital in the amount for which the option and warrant enabled the holder to purchase a share in the Company. Commissions paid to underwriters, and other related share issue costs, such as legal and auditing, on the issue of the Company’s shares are charged directly to capital stock. Common shares issued for consideration other than cash are valued based on their market value at the date the shares are issued.

Valuation of equity units issued in private placements

The Company has adopted the relative fair value method with respect to the measurement of shares and warrants issued as private placement units. The Company allocates the net proceeds, based on the relative fair values, to each component.

Bonus shares, restricted share units and deferred share units

The fair value method of accounting is used for share-based payment transactions. Under this method, the cost of bonus shares and other equity-settled share-based payment arrangements, such as restricted share units (“RSUs”) and deferred share units (“DSUs”), are recorded based on the estimated fair value at the grant date, including an estimate of the forfeiture rate, and the expense is recognized over the vesting period. For employees eligible for normal retirement prior to vesting, the expense is recognized over the period from the grant date to the date they are eligible for retirement.

Share-based payment expense relating to cash-settled awards, including deferred and restricted share units, is accrued over the vesting period of the units based on the quoted market value of the Company’s shares. As these awards will be settled in cash, the expense and liability are adjusted each reporting period for changes in the underlying share price.

Earnings (loss) per share

Basic earnings (loss) per share is calculated using the weighted average number of common shares outstanding during the period. The Company uses the treasury stock method to compute the dilutive effect of options, warrants and similar instruments. Under this method, the dilutive effect on earnings per share is calculated presuming the exercise of outstanding options, warrants and similar instruments. It assumes that the proceeds of such exercise would be used to repurchase common shares at the average market price during the period. However, the calculation of diluted loss per share excludes the effects of various conversions and exercise of options and warrants that would be anti-dilutive.

Borrowing costs

Borrowing costs are expensed as incurred except where they relate to the financing of construction or development of qualifying assets in which case they are capitalized up to the date when the qualifying asset is ready for its intended use.

Financial instruments

Financial assets

On initial recognition, financial assets are recognized at fair value and are subsequently classified and measured at: (i) amortized cost; (ii) fair value through other comprehensive income (“FVOCI”); or (iii) fair value through profit or loss (“FVTPL”). The classification of financial assets is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. A financial asset is measured at fair value net of transaction costs that are directly attributable to its acquisition except for financial assets at FVTPL where transaction costs are expensed. All financial assets not classified and measured at amortized cost or FVOCI are measured at FVTPL. On initial recognition of an equity instrument that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment’s fair value in other comprehensive. The classification determines the method by which the financial assets are carried on the balance sheet subsequent to inception and how changes in value are recorded. Cash and cash equivalent are classified as FVTPL. Restricted cash and settlement and other receivables are measured at amortized cost with subsequent impairments recognized in profit or loss.

Impairment

An ‘expected credit loss’ impairment model applies which requires a loss allowance to be recognized based on expected credit losses. The estimated present value of future cash flows associated with the asset is determined and an impairment loss is recognized for the difference between this amount and the carrying amount as follows: the carrying amount of the asset is reduced to estimated present value of the future cash flows associated with the asset, discounted at the financial asset’s original effective interest rate, either directly or through the use of an allowance account and the resulting loss is recognized in profit or loss for the period. In a subsequent period, if the amount of the impairment loss related to financial assets measured at amortized cost decreases, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

Financial liabilities

Financial liabilities are designated as either: (i) fair value through profit or loss; or (ii) other financial liabilities. All financial liabilities are classified and subsequently measured at amortized cost except for financial liabilities at FVTPL. The classification determines the method by which the financial liabilities are carried on the balance sheet subsequent to inception and how changes in value are recorded. Accounts payable are classified as other financial liabilities and carried on the balance sheet at amortized cost.

New accounting standards

The Company's consolidated financial statements have been prepared based on all IFRS and interpretations effective as at December 31, 2018. The following new standards, amendments to standards and interpretations are not yet effective or have otherwise not yet been adopted by the Company:

IFRS 16: Leases ("IFRS 16")

IFRS 16 was issued by the IASB in January 2016 and is effective for annual periods beginning on or after January 1, 2019. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17: Leases. At the commencement date of a lease, a lessee will recognize a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). Lessees will be required to separately recognize the interest expense on the lease liability and the depreciation expense on the right-of-use asset. The new standard also requires more extensive disclosures than under IAS 17.

The Company will apply the new standard on its effective date of January 1, 2019 using the modified retrospective approach, which means the cumulative impact of adoption will be recognized upon adoption and comparatives will not be restated. The Company will record right-of-use assets based on the lease liabilities determined as at January 1, 2019 and as a result, will not have a retained earnings adjustment on transition.

The Company will apply the transitional practical expedient to apply the criteria of IFRS 16 only to arrangements that were previously identified as leases by applying IAS 17, and IFRIC 4: Determining whether an Arrangement contains a Lease. Only contracts entered into or amended after January 1, 2019, will be assessed for being, or containing, leases by applying the criteria of the new standard. The Company has further elected to use the available exemptions as permitted by IFRS 16 for lease contracts for which the lease terms ends within 12 months as of the date of initial application, and lease contracts for which the underlying asset is of low-value.

As at December 31, 2018, the review of the effect of adopting IFRS 16 on the Company's financial statements is nearing completion. Work related to the calculation and review of the lease balances under the requirements of IFRS 16 is being finalized.

The Company's existing operating lease commitments under IAS 17, as disclosed in Note 22, will be the main source of leases under the new standard. The final quantitative impact of adopting IFRS 16 will be provided in the Company's report for the first quarter of 2019.

Compared with the existing accounting for operating leases, the classification of expenses will be impacted which will lead to some improvement in the Company's operating profit, while its interest expense will increase. In addition, the classification between cash flow from operating activities and cash flow from financing activities will also change.

(Expressed in thousands of United States Dollars except for share and per share amounts)

4. PURCHASE OF THE PERKOA AND ROSH PINAH MINES

On August 31, 2017, Trevali completed the acquisition ("Acquisition") of a portfolio of zinc assets from Glencore plc and certain of its subsidiaries ("Glencore") including a 90% interest in the Perkoa mine in Burkina Faso, an 80.1% interest in the Rosh Pinah mine in Namibia, an effective 39% interest in the Gergarub project in Namibia, and an option to acquire a 100% interest in the Heath Steele project in Canada along with related exploration properties and other assets. The aggregate purchase price totaled $464.7 million consisting of $245.2 million cash and the issuance of 193,432,310 Trevali common shares to Glencore totaling $219.4 million ($219.3 million net of fees) based on the closing share price of C$1.43 on August 31, 2017. After the completion of this transaction, Glencore became a 25.6% shareholder of Trevali.

The cash consideration of the Acquisition was funded through a combination of: (i) the issuance of 220,455,000 Trevali common shares, from a bought deal private placement of subscription receipts completed in March 2017, at a price of C$1.20 per common share for gross proceeds of $211.0 million (C$264.5 million); and, (ii) advances under a $160.0 million senior secured term loan and a $30.0 million senior secured revolving working capital loan (a portion of these proceeds was also used to retire existing Trevali long-term debt).

This acquisition was a business combination and has been accounted for in accordance with the IFRS 3: Business combinations ("IFRS 3") measurement and recognition provisions. IFRS 3 requires the purchase consideration to be allocated to the assets acquired and liabilities assumed based upon their estimated fair values at the date of acquisition.

Fair values have been determined based on third party appraisals, discounted cash flow models, and quoted market prices, as deemed appropriate. Acquisition costs, such as advisory, legal and other professional fees, totalling $12.6 million were expensed during the year ended December 31, 2017.

The allocation of the purchase price includes $61.8 million of goodwill relating to the recognition of deferred income tax liabilities on the Acquisition. The Company recorded a deferred tax liability for the difference between the assigned value and the tax bases of assets acquired and liabilities assumed. None of the goodwill is deductible for tax purposes. The Company estimates that had these assets been acquired at the beginning of the 2017 year, revenues would have been approximately $488.6 million and earnings before tax approximately $67.7 million.

The following table summarizes the fair value of the consideration paid and the estimates of the fair values of assets acquired and liabilities assumed from Glencore as of August 31, 2017.

Purchase Price:		
Share Consideration – 193,432,310 Trevali common shares issued	$	219,443
Cash Consideration		245,216
	$	464,659
Fair values of assets acquired and liabilities assumed:		
Cash and cash equivalents	$	22,506
Reclamation bond		544
Trade and other receivables		43,594
Prepaids and other		7,986
Inventory		98,580
Exploration and evaluation assets		50,617
Property, plant and equipment		405,920
Goodwill		61,835
Trade and other payables		(46,056)
Payable to related parties		(18,476)
Reclamation and rehabilitation provision		(10,851)
Other non-current provisions		(2,625)
Non-controlling interests		(36,459)
Deferred income tax liabilities		(112,456)
	$	464,659

(Expressed in thousands of United States Dollars except for share and per share amounts)

5. IMPAIRMENTS

	Year ended December 31,	
	2018	**2017**
Property, plant and equipment		
Perkoa	$ 40,877	$ –
Caribou	69,229	–
Santander	88,373	–
Goodwill	61,835	–
Exploration and evaluation assets (Note 11)	51,514	–
Impairment	$ 311,828	$ –
Deferred income tax recovery (Note 21)	(48,788)	–
Impairment, net	$ 263,040	$ –

The Company carries out a regular assessment of whether there is an indication of asset impairment.

The recoverable amounts of the property, plant and equipment and intangible assets were measured based on FVLCD, determined by discounted cash flow techniques based on the most recent approved financial budgets and three-year business plans, which are underpinned and supported by life of mine plans of the respective operations. The valuation models use the most recent reserve and resource estimates, relevant cost assumptions generally based on past experience and where possible, market forecasts of commodity price and foreign exchange rate assumptions discounted using operation specific weighted average cost of capital rates (“WACC”) ranging from 8% – 10%. The valuations remain sensitive to LME price of zinc (assumptions between $1.15 – $1.27 per pound were used) and a deterioration in the pricing outlook may result in additional impairments. The determination of FVLCD uses Level 3 valuation techniques.

Perkoa

During 2018, the Company’s zinc price assumptions were revised downwards, which together with marginally decreasing grades, recoveries at depth and mining sequencing shifting to the hanging wall, resulted in a net $36.4 million impairment of the Perkoa Mine ($40.9 million property, plant and equipment write-down net of a $4.5 million deferred income tax recovery), to its estimated recoverable amount of $156.9 million. The valuation remains sensitive to the key assumptions used, price of zinc and changes to the expected reserves and further deterioration in the pricing outlook or decreases to reserves may result in additional impairment. Should the average LME zinc prices decrease or increase by 10% from the assumptions used (over the remaining life of mine), a further $91.9 million of impairment or $91.1 million reversal would be recognized.

Caribou

During 2018, the Company’s zinc price assumptions were revised downwards, which together with geotechnical operational challenges encountered in late 2018, reduced mining rate and increased operating cost base, resulted in a net $54.4 million impairment of the Caribou Mine ($69.2 million property, plant and equipment write-down net of a $14.8 million deferred income tax recovery), to its estimated recoverable amount of $52.9 million. The valuation remains sensitive to the key assumptions used, price of zinc and changes to the expected reserves and further deterioration in the pricing outlook or decreases to reserves may result in additional impairment. Should the average LME zinc prices decrease or increase by 10% from the assumptions used (over the remaining life of mine), a further $52.9 million of impairment or $69.3 million reversal would be recognized.

Santander

During 2018, the Company's zinc price assumptions were revised downwards, which together with increased operating and capital expenditures, resulted in a net $69.8 million impairment of the Santander Mine ($88.4 million property, plant and equipment write-down net of a $18.5 million deferred income tax recovery), to its estimated recoverable amount of $52.6 million. The valuation remains sensitive to the key assumptions used, price of zinc and changes to the expected reserves and further deterioration in the pricing outlook or decreases to reserves may result in additional impairment. Should the average LME zinc prices decrease or increase by 10% from the assumptions used (over the remaining life of mine), a further $34.5 million of impairment or $27.7 million reversal would be recognized.

Goodwill

During 2018, the Company's zinc price assumptions were revised downwards, which together with increased projected operating costs, resulted in a write off of the entire $61.8 million goodwill balance (Rosh Pinah segment).

6. RISK MANAGEMENT AND FINANCIAL INSTRUMENTS

The Company's financial assets and liabilities consist of cash and cash equivalents, restricted cash, settlement receivables, reclamation bonds and other, long-term receivable, accounts payable, due to related parties, finance leases and debt.

Fair value of financial instruments
Fair value represents the price at which a financial instrument could be exchanged in an active market, in an arm's length transaction between knowledgeable and willing parties who are under no compulsion to act.

The carrying and fair values of the financial instruments are accounted for as follows:

a) The fair values for short-term financial assets and liabilities, which include cash, restricted cash, settlement receivables, accounts payable and due to related parties, approximate carrying values due to the immediate or short-term maturities of these financial instruments.

b) The reclamation bonds are interest bearing and the carrying values represent fair values.

c) For the finance leases, the market rate of interest is determined by reference to similar lease agreements, if available, and discounted cash flows based on our cost of borrowing where market values are not available. The latter are considered Level 2 fair value measurements with significant other observable inputs on the fair value hierarchy.

d) The fair value of the $275.0 million Revolving Credit Facility (the "Facility") approximates its carrying value as its interest rate approximates the market rate.

Capital risk management

The Company's capital risk management objectives include continuing to operate as a going concern while maximizing the return to shareholders. The selling price of zinc and lead-silver concentrates and optimizing production costs and capital expenditures are key factors in helping the Company reach its capital risk management objectives. The capital structure of the Company includes shareholders' equity and debt.

Credit risk

As at December 31, 2018, the Company's maximum exposure to credit risk was the book value of cash and cash equivalents, restricted cash, accounts receivable, value added and other taxes receivable and an investment available-for-sale. The Company limits its credit exposure on cash and cash equivalents and restricted cash by holding its deposits mainly with institutions with strong investment-grade ratings by a primary ratings agency. All the Company's trade accounts receivables are with Glencore – a related party (Note 18).

Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in satisfying financial obligations as they fall due. The Company manages its liquidity risk through its budgeting and forecasting process. Budgets are prepared annually, and forecasts are prepared and reviewed on a regular basis, to help determine the funding requirements to support the Company's current operations and expansion and development plans and by managing its capital structure as described above.

At December 31, 2018, the Company had cash and cash equivalents totaling $65.5 million (2017 – $94.1 million) and working capital of $16.9 million (2017 – $144.4 million). For the year ended December 31, 2018, cash generated by operating activities totalled $116.0 million. In addition, the Company had $128.9 million of the Facility available for draw-down (Note 14).

As at December 31, 2018, the Company's significant commitments include the $136.5 million Facility (Note 14), the environmental reclamation and rehabilitation obligations (Note 15) and current accounts payable and accrued liabilities (Note 13).

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices. Market risk comprises of three types of risk: commodity price risk, interest rate risk, and foreign currency risk.

a) Commodity price risk

The Company is exposed to commodity price risk arising from changes to the market prices for zinc, lead and silver between the time of the provisional invoicing of concentrates to the time of final price settlement. The Company is exposed to this risk during the quotational periods ranging from one to six months, depending on the terms and conditions of the various concentrate off-take contracts. Management estimates that a 5% decrease in the market prices for zinc, lead and silver would reduce the provisionally priced mark-to-market revenues and related accounts receivable by $2.8 million as of December 31, 2018.

b) Interest rate risk

Interest rate risk consists of the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates.

The Company's cash consists primarily of cash held in bank accounts and short-term deposits. Due to the short-term nature of these financial instruments, fluctuations in market rates do not have a significant impact on estimated fair values as of December 31, 2018 and 2017.

The Company is exposed to interest rate cash flow risk on certain debt amounts as the payments will fluctuate during their term with changes in the interest rate. Based on the amount owing at December 31, 2018, and assuming that all other variables remain constant, a 1% change in the LIBOR rate would result in an increase/decrease of $1.5 million in the interest expense accrued by the Company per annum.

c) Foreign currency risk

The Company is exposed to foreign currency risk to the extent expenditures incurred or funds received and balances maintained by the Company are denominated in currencies other than the United States dollar including the Western African franc, Namibian dollar, Canadian dollar and the Peruvian soles. The Company's net monetary assets/(liabilities) are summarized below by currency with a sensitivity analysis for the impact on net income of a change in the absolute rate of exchange for each currency of 10%.

(Expressed in thousands of United States Dollars except for share and per share amounts)

	Net monetary assets/ (liabilities)	Currency change of +/- 10%
West African franc	$ 20,469	2,047
Namibian dollars	(4,467)	(447)
Canadian dollars	(4,951)	(495)
Peruvian soles	4,382	438
	$ 15,433	$ 1,543

7. SETTLEMENT AND OTHER RECEIVABLES

	December 31, 2018	**December 31, 2017**
Settlement receivables – Glencore (Note 18)	$ 56,091	$ 70,360
Burkina Faso VAT	5,614	5,000
Peru IGV sales tax	5,004	5,447
Namibia VAT	2,917	5,052
Namibia income taxes receivable	1,746	2,131
Other	1,644	941
	$ 73,016	$ 88,931

8. INVENTORIES

	December 31, 2018	**December 31, 2017**
Mineralized stockpiles	$ 3,687	$ 8,209
Concentrates		
Site	23,683	19,346
In-transit	4,483	7,090
Port	5,565	8,037
Materials and supplies	25,743	23,855
	$ 63,161	$ 66,537

9. LONG-TERM RECEIVABLES

	December 31, 2018	**December 31, 2017**
Burkina Faso VAT	$ 12,387	$ 15,914
Receivable from the sale of Tingo	–	3,800
	$ 12,387	$ 19,714

During the year ended December 31, 2014, the Company sold its 100% interest in Compania Hidroelectrica Tingo S.A.C. (“Tingo”) for $13.5 million. During July 2018, the final sale proceeds were collected supported by the $3.8 million letter of credit (see Note 14).

(Expressed in thousands of United States Dollars except for share and per share amounts)

10. INVESTMENT AND ADVANCES

During April 2018, Trevali entered into an Option Agreement with Puma Exploration Inc. ("Puma") pursuant to which Trevali has an option to acquire an interest in the Murray Brook Deposit and has formed a strategic exploration alliance in the northern portion of the Bathurst Mining Camp in New Brunswick.

As part of this agreement, Trevali has the option to advance up to $5.5 million (C$7.5 million) of funding to Puma in order for Puma to finalize the 100-percent acquisition of the Murray Brook Deposit ultimately leading to a 75:25 percent ownership interest between Trevali and Puma, respectively, and a 51:49 percent ownership in the Murray Brook East Property, respectively.

As at December 31, 2018, Trevali has advanced a total of $2.7 million (C$3.5 million) to Puma to fund a portion of the remaining Murray Brook purchase price and invested $0.4 million (C$0.5 million) in Puma units consisting of 5,555,556 common shares at C$0.09 per share and 2,777,777 warrants exercisable at C$0.12 per share (each warrant is fully transferrable with a three-year term expiring on February 28, 2021).

A remaining $3.0 million (C$4.0 million) may be advanced to Puma at Trevali's option, $2.3 million (C$3.0 million) by March 31, 2019 and $0.7 million (C$1.0 million) by April 30, 2019.

11. EXPLORATION AND EVALUATION ASSETS

	Perkoa Mine, Burkina Faso	Gergarub and other, Namibia	Halfmile, Stratmat and other, Canada	Santander, Peru	Total
January 1, 2017	$ –	$ –	$ 9,118	$ –	$ 9,118
Business acquisition (Note 4)	176	37,213	13,228	–	50,617
Net additions	43	-	2,390	–	2,433
December 31, 2017	$ 219	$ 37,213	$ 24,736	$ –	$ 62,168
Net additions	2,068	1,706	3,493	5,570	12,837
Reclassification (Note 12)	–	–	89,756	5,508	95,264
Impairment	–	–	(51,514)	–	(51,514)
December 31, 2018	$ 2,287	$ 38,919	$ 66,471	$ 11,078	$ 118,755

The Company has an indirect effective 44% (2017: 39%) interest in the Gergarub project (Namibia) and a 100% interest in the Heath Steele Option (Canada) and various exploration properties in Burkina Faso.

During 2018, the Company reclassified the $81.8 million carrying value of Halfmile from property, plant and equipment (Mine development). Subsequently, a net impairment of $62.2 million ($73.2 million exploration and evaluation assets and $11.0 million deferred income tax) was recorded relating to Halfmile following a valuation review following the decline in commodity prices. In addition, the Company wrote off $9.6 million representing the full carrying value of Stratmat which is no longer considered commercially viable.

(Expressed in thousands of United States Dollars except for share and per share amounts)

12. PROPERTY, PLANT AND EQUIPMENT

	Buildings and infrastructure	Mine Development	Equipment and other	Total
Net book value				
January 1, 2018	$ 198,059	$ 492,076	$ 70,611	$ 760,746
Additions	3,015	50,573	23,134	76,722
Disposals	–	(1,473)	(1,550)	(3,023)
Depreciation	(26,815)	(31,605)	(9,142)	(67,562)
Impairment (Note 5)	(12,110)	(182,784)	(3,585)	(198,479)
Reclassification (Note 11)	62	(97,721)	2,395	(95,264)
Change in reclamation and rehabilitation provision	–	760	–	760
December 31, 2018	$ 162,211	$ 229,826	$ 81,863	$ 473,900
Gross carrying value	$ 235,693	$ 531,581	$ 103,544	$ 870,818
Accumulated depreciation and impairment	$ (73,482)	$ (301,755)	$ (21,681)	$ (396,918)

Equipment and other includes expenditure for construction in progress of $13 million.

	Buildings and infrastructure	Mine Development	Equipment and other	Total
Net book value				
January 1, 2017	$ 33,291	$ 260,738	$ 39,880	$ 333,909
Business acquisition	157,649	218,834	29,437	405,920
Additions	5,013	36,090	28,877	69,980
Disposals	–	(51)	(153)	(204)
Depreciation	(17,711)	(22,438)	(10,551)	(50,700)
Reclassification	19,817	(1,705)	(18,112)	–
Change in reclamation and rehabilitation provision	–	608	–	608
Change in estimate on assets under finance lease	–	–	1,233	1,233
December 31, 2017	$ 198,059	$ 492,076	$ 70,611	$ 760,746
Gross carrying value	$ 235,144	$ 537,966	$ 82,565	$ 855,675
Accumulated depreciation	$ (37,085)	$ (45,890)	$ (11,954)	$ (94,929)

13. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	December 31, 2018	**December 31, 2017**
Trade payables	$ 32,318	$ 45,519
Accrued payroll and other	18,097	14,760
Corporate income taxes	785	1,994
Burkina Faso royalty payable	2,666	1,756
Burkina Faso community payable	3,760	2,997
Other	915	2,604
	$ 58,541	$ 69,630

(Expressed in thousands of United States Dollars except for share and per share amounts)

14. DEBT

		December 31, 2018		December 31, 2017
Credit Facilities				
Revolving Credit Facility, net of fees	$	132,004	$	–
Term Facility, net of fees		–		148,308
		132,004		148,308
Finance leases		420		12,249
Total debt	$	132,424	$	160,557
Current		132,167		36,404
Non-current	$	257	$	124,153

Credit Facilities

During August 2017, Trevali entered into a $190.0 million five-year senior secured credit facility comprised of a $160.0 million senior-secured, amortizing non-revolving five-year credit facility (“Term Facility”) and a $30.0 million senior-secured, revolving three-year credit facility (“Revolving Facility”). The Term Facility is repayable on a quarterly instalment basis. The Term Facility and Revolving Facility advances bear interest on a sliding scale: (i) at a rate of LIBOR plus between 3.0% to 4.0% or (ii) at a base rate plus between 2.0% to 3.0%. Trevali provided security on the credit facilities in the form of a general pledge of the Company’s assets including unconditional joint and several guarantees by existing and future directly owned material subsidiaries and by an assignment of the Company’s concentrate off-take contracts and various insurance policies.

During September 2018, Trevali entered into an amended and restated credit agreement with a syndicate of lenders for the $275.0 million Facility. This Facility replaced the August 2017 $160.0 million Term Facility and $30.0 million Revolving Facility.

The Facility bears interest on a sliding scale: (i) at a rate of LIBOR plus between 2.0% to 3.0%; or (ii) at a base rate plus between 1.0% to 2.0%, based on the Company’s consolidated leverage ratio. Commitment fees for the undrawn portion of the Facility will also be on a sliding scale between 0.45% to 0.68%. The Facility matures in four years on September 18, 2022.

Trevali has letters of credit, issued under the Facility, totaling $9.6 million to support $5.8 million in various reclamation bonding requirements with its Caribou Mine and $3.8 million to secure funding receipts related to a long-term receivable (Note 9).

Covenants

Trevali must maintain certain financial covenants including tangible net worth (“TNW”), interest coverage and leverage ratios. As at December 31, 2018, the Company did not meet the TNW ratio as a result of impairment charges that were recognised which provides the syndicate of lenders the option to accelerate the repayment terms of the Facility. As a result, the carrying value of the Facility was reclassified to current liabilities despite an impairment having no impact on operating cash flows. Subsequent to year end, the tangible net worth covenant was amended with the support of the full banking syndicate and confirmed the option to accelerate repayment will not be exercised. From the date the amendment was executed, February 5, 2019, the Company is in full compliance with its debt covenants including the interest coverage and leverage ratio covenants.

2017 refinancing

On August 31, 2017, Trevali refinanced its operations and retired the $20.0 million working capital facility, all remaining senior secured notes and the Santander Mine concentration plant finance lease. The Company paid a prepayment interest penalty totaling $5.2 million and expensed all remaining deferred loan fees and bond discounts totaling $2.2 million relating to the senior secured notes.

(Expressed in thousands of United States Dollars except for share and per share amounts)

Finance leases

During 2017, the Caribou Mine leased mobile mining equipment totaling $13.2 million over five-year terms with effective interest rates ranging from 5.63% to 6.03% per annum. Trevali paid out the majority of the leases during 2018.

15. RECLAMATION AND REHABILITATION

The Company's provision for environmental reclamation and rehabilitation consists of costs accrued based on the best estimate of mine closure and reclamation and rehabilitation activities that will be required at its sites upon completion of mining and related activity. These activities include costs for earthworks, including land re-contouring and re-vegetation, water treatment and demolition. The Company's provision for future site closure and reclamation costs is based on the level of known disturbance at the balance sheet date, known legal requirements and estimates prepared by internal and third-party specialists.

The assumptions used in the estimation of the provision are as follows:

	Undiscounted liability for closure	Remaining Life-of-Mine (Years)	Pre-tax discount rate	Inflation factor	Present value of cash flow required on closure
Perkoa	$ 7,971	7	2.49%	2.00%	$ 7,914
Rosh Pinah	5,584	11	8.50%	5.50%	4,112
Caribou	22,912	16	2.15%	1.50%	21,129
Santander	17,666	8	2.78%	3.00%	13,123
Halfmile	458	20	2.15%	1.50%	449
	$ 54,591				$ 46,727

The following is a continuity schedule of the Company's estimated provisions:

	Year ended December 31, 2018	Year ended December 31, 2017
Beginning of the year	$ 47,690	$ 33,468
Accretion	4,046	1,275
Business acquisition (Note 4)	–	10,851
Change in discount rate	(1,584)	497
Change in estimates	(714)	(346)
Change in foreign exchange rates	(2,711)	1,945
End of the year	$ 46,727	$ 47,690

16. SHARE CAPITAL

Authorized: Unlimited number of common shares without par value.

During the year ended December 31, 2018, Trevali:

a) issued 2,249,426 common shares related to the short-term incentive plan bonus shares; and

b) issued 3,221,399 shares from the exercise of stock options and warrants for aggregate gross proceeds of $1.4 million.

During November 2018, the Company announced its normal course issuer bid to purchase and cancel up to 40,000,000 common shares representing approximately 6.5% of Trevali's public float of common shares, as calculated in accordance with the rules of the TSX. The maximum aggregate purchase price is C$20 million, over a twelve month period commencing on November 19, 2018 and expiring no later than November 18, 2019. For the year ended December 31, 2018, the Company purchased and cancelled 12,700,000 common shares at a total consideration of $3.5 million (C$4.7 million).

(Expressed in thousands of United States Dollars except for share and per share amounts)

17. SHARE-BASED PAYMENT RESERVE

Stock options

As at December 31, 2018 and 2017, Trevali had outstanding stock options enabling the holders to acquire common shares as follows:

	December 31, 2018			December 31, 2017		
Expiry date	Exercise price (C$)	Number of options	Exercisable	Exercise price (C$)	Number of options	Exercisable
May 1, 2018	–	–	–	$0.77	527,500	527,500
May 31, 2018	–	–	–	$0.62	320,000	320,000
August 30, 2018	–	–	–	$0.72	30,000	30,000
June 24, 2019	$1.01	886,200	886,200	$1.01	911,200	911,200
August 15, 2019	$1.29	188,500	188,500	$1.29	248,500	248,500
January 30, 2020	$1.03	2,584,794	2,584,794	$1.03	2,734,794	2,734,794
June 1, 2021	$0.45	2,740,500	2,740,500	$0.45	3,132,367	3,132,367
January 20, 2022	$1.21	1,277,100	1,277,100	$1.21	1,451,000	1,451,000
August 31, 2022	$1.59	553,540	184,513	$1.59	553,540	–
January 23, 2023	$1.52	1,585,600	–	–	–	–
January 23, 2023	$0.90	200,300	–	–	–	–
	$1.00	10,016,534	7,861,607	$0.79	9,908,901	9,355,361

At December 31, 2018, the weighted average remaining contractual life of the stock options was 2.31 years (December 31, 2017 – 2.72 years).

Stock option transactions are as follows:

	December 31, 2018		December 31, 2017	
	Number of options	Weighted average exercise price (C$)	Number of options	Weighted average exercise price (C$)
Opening balance	9,908,901	$0.79	9,561,661	$0.76
Granted	1,785,900	$1.45	2,033,440	$1.31
Exercised	(1,649,367)	$0.75	(1,657,833)	$0.70
Forfeited	(28,900)	$1.21	(28,367)	$0.58
Ending balance	10,016,534	$1.00	9,908,901	$0.79

The weighted average market price on the exercise of options for the year ended December 31, 2018 was C$1.30 (December 31, 2017 – C$1.48).

During the year ended December 31, 2018, Trevali granted 1,785,900 stock options with exercise prices ranging from C$0.90 to C$1.52 per share exercisable for a period of five years with a three-year vesting schedule. Trevali recorded $0.7 million (2017 – $1.4 million) in total share-based payment expense related to its stock option plan.

The fair value of stock options granted was estimated using the Black-Scholes option pricing model with the following weighted average calculations for the years ended December 31, 2018 and 2017:

	December 31, 2018	December 31, 2017
Risk-free interest rate	2.03%	1.03%
Expected life of options	5 years	5 years
Annualized volatility	63.79%	64.05%
Dividend rate	nil	nil
Forfeiture rate	5.27%	5.60%

(Expressed in thousands of United States Dollars except for share and per share amounts)

Warrants

Warrants transactions are summarized as follows:

	December 31, 2018		December 31, 2017	
	Number of warrants	Weighted average exercise price (C$)	Number of warrants	Weighted average exercise price (C$)
Opening balance	2,286,592	$0.35	7,902,880	$0.40
Exercised	(1,572,032)	$0.35	(5,616,288)	$0.41
Ending balance	714,560	$0.35	2,286,592	$0.35

The weighted average market price on the exercise of warrants for the year ended December 31, 2018 was C$1.23 (December 31, 2017 – C$1.43). All warrants expire on December 31, 2020.

Bonus shares, RSUs and DSUs

During the year ended December 31, 2018, Trevali granted 1,068,100 RSUs and 269,800 DSUs and redeemed previously granted 2,249,426 Bonus shares, 99,362 RSUs and 156,433 DSUs for common stock of Trevali. Trevali recorded $0.6 million (2017 – $5.7 million) in share-based payment expense related to the incentive plan for the grant of bonus shares, RSUs and DSUs with $nil ($4.6 million) recorded as business acquisition costs and $nil (2017 – $0.1 million) capitalized to exploration and evaluation assets.

At December 31, 2018 and 2017, share units outstanding were as follows:

Bonus shares	December 31, 2018		December 31, 2017	
	Number of units	Weighted average fair value (C$)	Number of units	Weighted average fair value (C$)
Opening balance	2,249,426	$0.74	2,112,000	$0.72
Granted	–	–	672,800	$1.23
Forfeited	–	–	(28,772)	$1.42
Redeemed	(2,249,426)	$0.74	(506,602)	$1.41
Ending balance	–	–	2,249,426	$0.74

RSUs	December 31, 2018		December 31, 2017	
	Number of units	Weighted average fair value (C$)	Number of units	Weighted average fair value (C$)
Opening balance	298,090	$1.56	3,731,670	$0.86
Granted	1,068,100	$1.31	970,890	$1.33
Forfeited	(128,300)	$1.52	(137,040)	$1.47
Redeemed	(99,362)	$0.76	(4,267,430)	$1.46
Ending balance	1,138,528	$1.40	298,090	$1.56

DSUs	December 31, 2018		December 31, 2017	
	Number of units	Weighted average fair value (C$)	Number of units	Weighted average fair value (C$)
Opening balance	605,893	$0.86	996,453	$0.71
Granted	269,800	$1.52	310,000	$1.23
Redeemed	(156,433)	$1.39	(700,560)	$0.81
Ending balance	719,260	$1.00	605,893	$0.86

(Expressed in thousands of United States Dollars except for share and per share amounts)

18. RELATED PARTY TRANSACTIONS AND BALANCES

Glencore

On August 31, 2017, Glencore acquired 193,432,310 Trevali common shares as part of Trevali's acquisition of the Perkoa and Rosh Pinah mines (Note 4). As of December 31, 2018, Glencore owns 210,835,925 Trevali common shares representing approximately 25.8% of the total issued and outstanding common shares.

Glencore purchases Trevali's concentrate production under separate off-take agreements with each of its mines. Trevali entered into the following transactions during the years ended December 31, 2018 and 2017:

		Year ended December 31,		
		2018		2017
Net revenue on concentrate sales	$	402,589	$	330,533
Concentrate plant finance lease – principal and interest		–		24,963
Santander working capital facility – principal and interest		–		16,431
Production costs		17,294		18,326
Mine development[1]		10,303		13,599
Interest expense on concentrate sales advances	$	387	$	–
		December 31, 2018		December 31, 2017
Payable to Glencore	$	1,539	$	8,407

[1]Capitalised to property, plant and equipment.

P.E. Minerals Namibia (Proprietary) Limited

P.E. Minerals Namibia (Proprietary) Limited is a minority shareholder of Rosh Pinah and owns the right to use the Rosh Pinah Mine Grant Number ML39 with Trevali paying a market rate lease. This mining licence expires during 2020 and negotiations with the Ministry of Mines and Energy in Namibia to renew the license commenced during 2018. Management does not foresee any reason for the license application to be denied.

Management compensation

		Year ended December 31,		
		2018		2017
Salaries and benefits	$	2,969	$	1,138
Share-based compensation		930		6,265
Other short term benefits		51		464
	$	3,950	$	7,867

19. REVENUES

		Zinc		Lead-Silver		Total
Year ended December 31, 2018						
Revenues	$	526,177	$	62,309	$	588,486
Provisional pricing adjustments		(58,645)		(3,113)		(61,758)
Smelting and refining costs		111,355		12,784		124,139
Revenues, net	$	356,177	$	46,412	$	402,589
Year ended December 31, 2017						
Revenues	$	338,457	$	82,710	$	421,167
Provisional pricing adjustments		1,265		654		1,919
Smelting and refining costs		75,564		16,989		92,553
Revenues, net	$	264,158	$	66,375	$	330,533

The Company delivered all concentrate to Glencore, a related party, under the terms of various off-take agreements. Revenues are disclosed net of smelting and refining charges.

(Expressed in thousands of United States Dollars except for share and per share amounts)

20. INTEREST EXPENSE

	Note	Year ended December 31, 2018	2017
Credit facilities	14	$ –	$ 3,231
Debt	14	8,689	8,359
Trade payable and receivable		486	427
Related party		387	–
Finance leases		803	378
Accretion on finance lease		–	1,626
Accretion on reclamation and rehabilitation provision	15	4,043	1,275
Prepayment interest penalty	14	–	5,213
		$ 14,408	$ 20,509

21. INCOME TAXES

Income tax expense differs from the amount that would result from applying the Canadian federal and provincial income tax rates to earnings before income taxes. These differences result from the following items:

	December 31, 2018	December 31, 2017
(Loss) income before income tax	$ (258,539)	$ 39,919
Canadian statutory rate	27%	26%
Expected income tax (recovery) expense	(69,806)	10,378
Increase (decrease) due to:		
Non-deductible expenses	5,779	6,398
Impairments and losses for which no tax benefit has been recorded	25,454	–
New Brunswick Mining Tax (current and deferred)	(2,333)	5,636
Amounts over-provided for in prior years	251	2,361
Differences between foreign and Canadian tax rates	(2,913)	(254)
Foreign exchange on translation	(2,628)	(542)
Changes in Canadian provincial tax rates	(2,087)	680
Non-deductible goodwill write-down	23,194	–
Withholding tax	946	–
Use of previously unrecognized tax assets	(3,801)	(4,965)
Income tax (recovery) expense	$ (27,944)	$ 19,692

Income tax expense consists of the following:

	December 31, 2018	December 31, 2017
Current income tax	$ 13,159	$ 7,878
Deferred income tax (recovery) expense	(41,103)	11,814
	$ (27,944)	$ 19,692

(Expressed in thousands of United States Dollars except for share and per share amounts)

The components of recognized net deferred tax liabilities as at December 31, 2018 and 2017, are as follows:

	December 31, 2018	December 31, 2017
Non-capital losses carried forward	$ 9,017	$ 25,539
Tax value of share and debt issuance costs	–	2,730
Reclamation and rehabilitation provision	2,508	14,274
Unrealized gains	–	(5,497)
Book value in excess of tax value of property, plant and equipment	(107,809)	(170,904)
Current assets and liabilities	(25)	(3,553)
Net deferred tax liabilities	$ (96,309)	$ (137,411)

The deferred tax assets and liabilities as at December 31, 2018 and 2017, are presented as follows:

	December 31, 2018	December 31, 2017
Deferred income tax assets	$ –	$ 8,521
Deferred income tax liabilities	(96,309)	(145,932)
	$ (96,309)	$ (137,411)

The components of unrecognized deferred tax assets are as follows:

	December 31, 2018	December 31, 2017
Non-capital losses	$ 16,951	$ 5,757
Capital losses and other	607	714
Share and debt issue costs	1,803	–
Asset retirement obligation	12,546	–
Unrealized foreign exchange losses	5,591	–
Property plant and equipment expenditures	5,376	–
Other	448	–
	$ 43,322	$ 6,471

At December 31, 2018, the Company had $80.4 million of Canadian non-capital losses available for carry forward (2017: $84.6 million) which may be applied to reduce future years' taxable income. These losses, if not utilized, will expire on various dates between 2023 and 2038. In addition, we have $15.1 million of foreign non-capital losses available for carry forward (2017: $35.4 million).

22. COMMITMENTS AND CONTINGENCIES

Commitments

In the normal course of business, the Company enters into contracts that give rise to commitments for future minimum payments. The following table summarizes the approximate timing of payment of the remaining maturities of the Company's commitments at December 31, 2018 in undiscounted cashflows:

	2019	2020	2021	2022	Beyond 2022	Total
Operating lease obligations	$ 5,430	$ 4,105	$ 1,042	$ 796	$ 682	$ 12,055
Purchase and related commitments	37,479	36,060	36,060	23,950	13,172	146,721
Reclamation and rehabilitation	–	–	–	–	54,591	54,591
	$ 42,909	$ 40,165	$ 37,102	$ 24,746	$ 68,445	$ 213,367

The Company enters into commitments for capital expenditures in advance of the expenditures being incurred. Approvals are obtained prior to expenditure being incurred in line with the Company's capital budget.

(Expressed in thousands of United States Dollars except for share and per share amounts)

Contingencies

The Company and its subsidiaries are subject to routine legal proceedings and tax audits. Although the Company cannot predict the result of any legal proceeding or tax filing, the Company believes that the likelihood of any liability arising from any such claim is remote and that the liability, if any, arising from any litigation or tax filing assessment, individually or in aggregate, will not have a significant effect on the financial position or profitability of the Company and its subsidiaries.

The Company operates in Burkina Faso, Namibia, Canada and Peru and is subject to various tax and environmental laws and regulations. The Company is in material compliance with those laws and regulations and all probable contingencies have been reasonably estimated and accrued.

23. SEGMENTED INFORMATION

The Company's executive management team manages its business, including the allocation of resources, on a project by project basis, except where the Company's projects are substantially connected and share resources and administrative functions. The Company has four operating segments: Perkoa Mine, Burkina Faso; Rosh Pinah Mine, Namibia; Caribou Mine, Canada and Santander Mine, Peru and a Corporate and other segment including the Company's head office, general corporate administration and activity and the Canadian evaluation and exploration program.

Year ended December 31, 2018	Perkoa Mine	Rosh Pinah Mine	Caribou Mine	Santander Mine	Corporate and other	Total
Revenues	$ 162,487	$ 91,980	$ 82,917	$ 65,205	$ –	$ 402,589
Mine operating expenses	108,402	50,233	60,802	37,863	–	257,300
General and administration	–	–	–	–	8,240	8,240
Adjusted EBITDA	54,085	41,747	22,115	27,342	(8,240)	137,049
Depreciation, depletion and amortization	27,904	17,991	10,751	10,916	–	67,562
Adjusted EBIT	26,181	23,756	11,364	16,426	(8,240)	69,487
Loss on foreign exchange						1,684
Interest expense						14,408
Impairments						311,828
Other expense, net						106
Income tax expense						(27,944)
Net loss						(230,595)
Capital expenditures	20,894	19,533	20,898	14,169	1,228	76,722
Exploration expenditures	–	–	–	–	–	12,837
Assets	362,380	294,872	114,761	84,779	(31,051)	825,741
Liabilities	(445,361)	(164,289)	(121,223)	(60,132)	452,509	(338,496)
Net assets (liabilities)	$ (82,981)	$ 130,583	$ (6,462)	$ 24,647	$ 421,458	$ 487,245

(Expressed in thousands of United States Dollars except for share and per share amounts)

Year ended December 31, 2017	Perkoa Mine	Rosh Pinah Mine	Caribou Mine	Santander Mine	Corporate and other	Total
Revenues	$ 94,303	45,632	118,447	$ 72,151	–	$ 330,533
Mine operating expenses	71,444	35,381	59,695	37,394	–	203,914
General and administration	196	–	395	672	6,327	7,590
Adjusted EBITDA	22,663	10,251	58,357	34,085	(6,327)	119,029
Depreciation, depletion and amortization	10,761	4,109	13,972	11,690	–	40,532
Adjusted EBIT	11,902	6,142	44,385	22,395	(6,327)	78,497
Loss on foreign exchange						6,917
Interest expense						20,509
Business acquisition cost						12,619
Other expense, net						(1,467)
Income tax expense						19,692
Net income						20,227
Capital expenditures	6,775	14,097	26,971	21,253	884	69,980
Exploration expenditures	–	–	–	–	–	2,433
Assets	285,939	393,142	176,958	169,503	154,617	1,180,159
Liabilities	(185,128)	(191,527)	(143,410)	(73,727)	158,696	(435,096)
Net assets	$ 100,811	$ 201,615	$ 33,548	$ 95,776	$ 313,313	$ 745,063

24. SUPPLEMENTAL CASH FLOWS INFORMATION

Accrued interest and accretion consist of the following:

	December 31, 2018	December 31, 2017
Accrued interest and accretion on finance leases	$ 803	$ 1,626
Accretion of reclamation and rehabilitation provision	4,046	1,275
Accrued interest and accretion on debt	6,340	9,382
Accrued interest on reclamation bond	3,678	(2)
	$ 14,867	$ 12,281

Non-cash investing and financing transactions:

	December 31, 2018	December 31, 2017
Due to related parties included in property, plant and equipment	$ (566)	$ 217
Accounts payable and accrued liabilities included in property, plant and equipment	$ 14,876	$ 3,284
Promissory note provided as deposit on Caribou mine fleet	$ –	$ 2,064
Mining equipment leased at the Caribou mine	$ –	$ 13,212
Share-based payment included in exploration and evaluation	$ –	$ 103
Fair value of bonus shares, RSUs and DSUs issued	$ 2,826	$ 529

(Expressed in thousands of United States Dollars except for share and per share amounts)

25. NON-CONTROLLING INTERESTS

	Perkoa Mine	Rosh Pinah Mine	Total
January 1, 2018	$ (20,166)	$ 58,088	$ 37,922
Net loss attributable to non-controlling interests	(2,937)	(5,433)	(8,370)
Dividends paid to non-controlling interests	–	(2,991)	(2,991)
Share buy-back – Rosh Pinah	–	(31,531)	(31,531)
December 31, 2018	$ (23,103)	$ 18,133	$ (4,970)
January 1, 2017	$ –	$ –	$ –
Business acquisition – August 31, 2017 (Note 4)	(20,725)	57,184	36,459
Net income attributable to non-controlling interests	559	904	1,463
December 31, 2017	$ (20,166)	$ 58,088	$ 37,922

The Mining Convention between Nantou Mining and the Government of Burkina Faso, signed by the Minister of Mines of Burkina Faso on August 27, 2008, sets out the fiscal and legal terms with respect to the operation of the Perkoa Exploitation Permit, including taxation rates applicable to the project, per the 2003 Mining Code. The Convention is valid for 20 years commencing on the date of the grant and may be renewed for subsequent periods of five years. The Government of Burkina Faso holds a 10% interest in accordance with the Mining Code.

The payments of the 10% earnings to the Government of Burkina Faso shall only start once all investments have been recovered by the majority shareholder. As of December 31, 2018, no earnings are due to the Government of Burkina Faso.

On May 31, 2018, Trevali's majority-owned operating subsidiary Rosh Pinah Zinc Corporation (Proprietary) Limited ("Rosh Pinah") in Namibia completed a partial share buy-back of issued Rosh Pinah shares under agreements with its Namibian shareholders for an aggregate amount of $23.1 million (net of transaction fees). The tendered shares were subsequently cancelled increasing Trevali's effective beneficial ownership in Rosh Pinah from 80.1% to 90.0%.