



**Hammerhead Resources Inc.
Consolidated Financial Statements
As at and for the Year Ended December 31, 2021**

Dated: March 30, 2022

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Hammerhead Resources Inc.

Opinion

We have audited the consolidated financial statements of Hammerhead Resources Inc. and its subsidiaries (the Company), which comprise the consolidated statements of financial position as at December 31, 2021 and 2020, and the consolidated statements of profit (loss) and comprehensive profit (loss), consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as at December 31, 2021 and 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

We conducted our audits 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 are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises 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, 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.

We obtained Management's Discussion & Analysis prior to the date of this auditor's report. 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 IFRSs, 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.

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.

Ernst + Young LLP

Chartered Professional Accountants
Calgary, Alberta
March 30, 2022

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

<i>As at</i> <i>(Cdn\$ thousands)</i>	Note	December 31, 2021	December 31, 2020
ASSETS			
Current assets			
Cash		12,239	6,078
Accounts receivable	19	49,433	30,298
Prepaid expenses and deposits		2,751	2,680
Risk management contracts	19	289	5,195
Total current assets		64,712	44,251
Property, plant and equipment	4	1,408,839	1,415,661
Total assets		1,473,551	1,459,912
LIABILITIES			
Current liabilities			
Accounts payable and accrued liabilities	19	116,866	54,193
Bank debt	6	—	163,600
Current portion of lease obligations	8	1,030	1,445
Risk management contracts	19	23,344	14,652
Total current liabilities		141,240	233,890
Bank debt	6	106,300	—
Term debt	7	134,747	120,435
Non-current portion of lease obligations	8	3,927	1,807
Risk management contracts	19	3,050	—
Warrant liability	10	11,360	11,264
Decommissioning obligations	9	29,569	31,499
Total liabilities		430,193	398,895
SHAREHOLDERS' EQUITY			
Common share capital	12	584,275	583,483
Preferred share capital	12	606,131	571,154
Contributed surplus		83,704	65,311
Deficit		(230,752)	(158,931)
Total shareholders' equity		1,043,358	1,061,017
Total liabilities and shareholders' equity		1,473,551	1,459,912

Commitments

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See accompanying notes to the consolidated financial statements.

Approved by the Board of Directors,

(signed)

Stewart Hanlon

Director and Audit Committee Chair

(signed)

Scott Sobie

President and Chief Executive Officer

CONSOLIDATED STATEMENTS OF PROFIT (LOSS) AND COMPREHENSIVE PROFIT (LOSS)

For the years ended

(Cdn\$ thousands, except per share amounts)

	Note	December 31, 2021	December 31, 2020
REVENUE			
Oil and gas revenue	16	439,843	263,514
Royalties		(38,577)	(17,185)
Oil and natural gas revenue, net of royalties		401,266	246,329
RISK MANAGEMENT CONTRACTS			
Realized (loss) gain on risk management contracts	19	(95,407)	66,121
Unrealized loss on risk management contracts	19	(16,649)	(18,353)
		(112,056)	47,768
OTHER INCOME			
		1,202	5,050
		290,412	299,147
EXPENSES			
Operating		82,721	77,477
Transportation		62,044	57,393
General and administrative		21,565	21,838
Optimization fees	18	19,708	670
Share-based compensation	13	14,039	7,155
Depletion, depreciation and impairment	4	127,333	135,184
Finance	17	21,264	37,344
(Gain) loss on foreign exchange		(350)	817
Loss (gain) on warrant revaluation	10	96	(3,981)
Gain on debt redemptions		—	(88,160)
Loss on asset disposition	5	13,813	—
Total expenses		362,233	245,737
Net (loss) profit and comprehensive (loss) profit		(71,821)	53,410
Net (loss) profit per common share			
Basic	12	(0.18)	0.14
Diluted	12	(0.18)	0.07

See accompanying notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

For the years ended

(Cdn\$ thousands)

	Note	December 31, 2021	December 31, 2020
Common share capital			
Balance, beginning of period		583,483	583,483
Long term retention program	12	527	—
Exercise of restricted share units	12	265	—
Balance, end of period		584,275	583,483
Preferred share capital			
Balance, beginning of period		571,154	468,338
Issued in private placement, net of share issue costs	12	34,977	91,577
Issued on exercise of purchase warrants		—	11,239
Balance, end of period		606,131	571,154
Contributed surplus			
Balance, beginning of period		65,311	56,959
Recognized under share-based compensation plans	13	18,658	8,352
Exercise of restricted share units	12	(265)	—
Balance, end of period		83,704	65,311
Deficit			
Balance, beginning of period		(158,931)	(212,341)
Net (loss) profit		(71,821)	53,410
Balance, end of period		(230,752)	(158,931)
Total shareholders' equity, beginning of period		1,061,017	896,439
Total shareholders' equity, end of period		1,043,358	1,061,017

See accompanying notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended

(Cdn\$ thousands)

	Note	December 31, 2021	December 31, 2020
OPERATING ACTIVITIES			
Net (loss) profit		(71,821)	53,410
Adjustments for non-cash items:			
Unrealized loss on risk management contracts	19	16,649	18,353
Share-based compensation	13	14,039	7,155
Depletion, depreciation and impairment	4	127,333	135,184
Finance, non-cash	17	14,685	10,209
Unrealized (gain) loss on foreign exchange		(341)	813
Loss (gain) on warrant revaluation	10	96	(3,981)
Gain on debt redemptions		—	(88,160)
Loss on asset disposition	5	13,813	—
Gain on farmout transaction		—	(3,496)
Funds from operations		114,453	129,487
Change in non-cash working capital	15	6,131	(9,801)
Net cash from operating activities		120,584	119,686
FINANCING ACTIVITIES			
Drawdown of bank debt	6	51,500	23,300
Repayment of bank debt	6	(108,800)	(149,700)
Debt extinguishment transaction costs		—	(1,186)
Issued Series IX first preferred shares, net of issue costs	12	34,977	102,512
Proceeds from exercise of 2014 Warrants		—	22
Payment of lease obligations		(1,441)	(1,522)
Non-cash settlement under long term retention program	12	527	—
Net cash used in financing activities		(23,237)	(26,574)
INVESTING ACTIVITIES			
Property, plant and equipment expenditures	4	(138,544)	(94,362)
Proceeds from asset disposition	5	10,027	—
Change in non-cash working capital	15	37,337	(18,966)
Net cash used in investing activities		(91,180)	(113,328)
Net change in cash		6,167	(20,216)
Cash, beginning of period		6,078	26,450
Foreign exchange revaluation		(6)	(156)
Cash, end of period		12,239	6,078

See accompanying notes to the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

As at and for the years ended December 31, 2021 and 2020.

1. REPORTING ENTITY

Hammerhead Resources Inc. ("HHR" or the "Company") is an oil and natural gas exploration, development and production company. HHR's reserves, producing properties and exploration prospects are located in the province of Alberta in the Deep Basin of West Central Alberta where it is developing multi-zone, liquids-rich oil and gas plays. The Company conducts certain of its operating activities jointly with others through unincorporated joint arrangements and these condensed interim consolidated financial statements reflect only the Company's share of assets, liabilities, revenues and expenses under these arrangements. The Company conducts all of its principal business in one reportable segment.

Hammerhead was incorporated pursuant to the provisions of the Business Corporations Act (Alberta) on November 27, 2009 under the name 1504140 Alberta Ltd. It changed its name to Canadian International Oil Corp. ("CIOC") on April 20, 2010. On October 1, 2017, CIOC amalgamated with its wholly owned subsidiary Canadian International Oil Operating Corp. and changed its name to "Hammerhead Resources Inc." On December 15, 2017, the Company dissolved its foreign subsidiary "Canadian International Oil (USA) Corp." On December 31, 2017, the Company dissolved its remaining foreign subsidiaries, "Canadian International Oil (Barbados) Corp." and "Canadian International Oil (Overseas) Corp." On March 11, 2019, the Company incorporated a new wholly owned subsidiary, "Prairie Lights Power GP Inc.", and formed an associated limited partnership; "Prairie Lights Power Limited Partnership", in order to initiate a power related project. The project is in its preliminary phase with no active operations as at the date of these annual consolidated financial statements.

The Company is controlled by Riverstone Holdings LLC. The Company's head office is located at Eighth Avenue Place, East Tower, Suite 2700, 525-8th Avenue SW, Calgary, Alberta, Canada, T2P 1G1.

2. BASIS OF PRESENTATION

(a) Statement of compliance

These annual consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. The Company's significant accounting policies under IFRS are presented in note 3. The annual consolidated financial statements were approved and authorized for issue by the Board of Directors of HHR on March 30, 2022 (the "Financial Statements").

(b) Basis of measurement

The Financial Statements have been prepared on a historical cost basis except for warrant liability (note 10) and derivative instruments (note 19), which are measured at fair value.

(c) Functional and presentation currency

The Financial Statements are presented in Canadian dollars ("Cdn\$"), which is also the Company's functional currency. All references to US\$ or USD are to United States dollars.

(d) Use of estimates and judgements

During the first quarter of 2020, the World Health Organization declared the Coronavirus disease ("COVID-19") to be a pandemic, triggering a sudden decline in economic activity and increase in economic uncertainty. The Company's operations are particularly sensitive to changes in the demand for, and prices of, crude oil, natural gas and natural gas liquids. While commodity demand initially declined in response to lockdown measures, subsequent supply shortages and economic re-opening plans have contributed to a recent rebound, resulting in extreme price volatility over the past two years. Management cannot reasonably estimate the length or severity of this pandemic, or the extent to which the disruption may materially impact our financial results into the future.

The preparation of the Financial Statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenues and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future years affected.

Information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most significant effect on the amounts recognized in the Financial Statements are as follows:

(i) Reserves

Reserves engineering is an inherently complex and subjective process of estimating underground accumulations of petroleum and natural gas. The process relies on interpretations of available geological, geophysical, engineering, economic and production data. The accuracy of a reserves estimate is a function of the quality and quantity of available data, the interpretation of that data, the accuracy of various economic assumptions and the judgement of those preparing the estimate. Because these estimates depend on many assumptions, all of which may differ from actual results, reserves estimates and estimates of future net revenue may be different from the sales volumes ultimately recovered and net revenues actually realized. Changes in market conditions, regulatory matters and the results of subsequent drilling, testing and production may require revisions to the original estimates. Estimates of reserves impact: (i) the assessment of whether or not a new well has found economically recoverable reserves; (ii) depletion rates; (iii) the determination of net recoverable amount of oil and gas properties for impairment assessment and measurement, and (iv) the determination of reserve lives which affect the timing of decommissioning activities, all of which could have a material impact on earnings and financial positions. HHR's reserves have been evaluated at December 31, 2021 and 2020 by independent third-party professional engineers, who work with information provided by the Company to evaluate reserves in accordance with National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities* ("NI 51-101").

(ii) Property, plant and equipment

HHR's oil and gas assets are grouped into a cash generating unit ("CGU"). A CGU is the lowest level of integrated assets that generate identifiable cash inflows that are largely independent of the cash inflows of other assets or groups of assets. The allocation of assets into CGUs require significant judgement and interpretation with respect to the integration between assets, geological formation, geographical proximity, the existence of common sales points and shared infrastructures, product type, similar exposure to market risk and the way in which management monitors its operations. The recoverability of HHR's oil and gas assets is assessed at the CGU level, and therefore, the determination of a CGU's costs could have a significant impact on impairment losses or impairment reversals.

Judgements are required to assess when impairment indicators are evident and impairment testing is required. The Company monitors internal and external indicators of impairment relating to its tangible assets. The recoverable amounts of the Company's CGU is determined based on the higher of the present value of value-in-use calculations and fair value less costs of disposal. Recoverable amounts calculated for impairment testing are based on estimates of future commodity prices, expected volumes, quantity of reserves and discount rates as well as future development costs, royalties and operating costs. These calculations require the use of estimates and assumptions, which by their nature, are subject to measurement uncertainty. In addition, judgement is exercised by management as to whether there have been indicators of impairment or of impairment reversal. Indicators of impairment or impairment reversal may include, but are not limited to a change in: the market value of assets, asset performance, estimates of future prices, royalties and costs, estimated quantity of reserves and appropriate discount rates.

(iii) Depletion

Oil and natural gas development and production assets are depleted on a unit-of-production basis at a rate calculated by reference to proved plus probable reserves determined in accordance with NI 51-101 and incorporate the estimated future cost of developing and extracting those reserves.

(iv) Provisions for decommissioning liability costs

Amounts recorded for decommissioning liabilities and the related accretion expense require the use of estimates with respect to the amount and timing of decommissioning expenditures and real interest rates. Actual costs and cash outflows can differ from estimates because of changes in law and regulations, public expectations, market conditions, discovery and analysis of site conditions and changes in technology. Decommissioning liabilities are recognized in the period when it becomes probable that there will be a future cash outflow.

(v) Leases

Management applies judgement in reviewing each of its contractual arrangements to determine whether the arrangement contains a lease within the scope of IFRS 16. Leases that are recognized are subject to further management judgement and estimation in various areas specific to the arrangement.

Where a contract is identified as containing a lease, the Company recognizes a right-of-use asset and a corresponding lease obligation on the statement of financial position, as of the date the asset becomes available for use.

The right-of-use assets is measured at cost, comprised of; the initial measurement of the lease liability; the lease payments made at or before the commencement date, net of lease incentives received; the direct costs incurred; and an estimate of the costs to be incurred in restoring the underlying asset to the condition required by the terms of the lease.

The lease liability is measured as the present value of the future lease payments, including; fixed payments, net of incentives received; variable lease payments that depend on an index or a rate; amounts expected to be payable under residual value guarantees, the exercise price of a purchase option if there is reasonable certainty the option will be exercised; and payments of penalties for terminating the lease, if the lease term reflects exercising the option to terminate.

After initial recognition, the right-of-use asset is amortized over the shorter of the useful life of the asset and the lease term, with the depreciation expense recognized in the statement of profit (loss). The carrying amount of the lease liability is increased to reflect interest on the lease and reduced to reflect the lease payments made.

Amendments to the lease could result in a reassessment or modification of the lease liability and the corresponding right-of-use asset. Such amendments may include, but are not limited to, a change in the lease term, a change in the assessment of an option to purchase the underlying asset, a change in the amounts expected to be payable under a residual value guarantee, a change in future lease payments resulting from a change in an index or a rate used to determine those payments, a change in the scope of the lease resulting from the addition or removal of the right to use one or more underlying assets, and a change in the consideration for the lease.

The Company determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease if it is reasonably certain not to be exercised. The Company applies judgement in evaluating whether it is reasonably certain to exercise the option to renew by considering all relevant factors that create an economic incentive for it to exercise the renewal. After the commencement date, the Company reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise (or not to exercise) the option to renew (e.g., a change in business strategy).

Where the rate implicit in a lease is not readily determinable, the discount rate of lease obligations is estimated using a discount rate similar to HHR's company-specific incremental borrowing rate. This rate represents the rate that HHR would incur to obtain the funds necessary to purchase an asset of a similar value, with similar payment terms and security in a similar economic environment.

(vi) Share-based compensation

Compensation costs recorded pursuant to share-based compensation plans are subject to the estimated fair values of the awards on the grant date and the estimated number of units that will ultimately vest. The Company uses the Black-Scholes option valuation model to estimate the fair value of options, which requires the Company to determine the most appropriate inputs including the expected life of the options, volatility, forfeiture rates, risk free interest rates and future dividends, which by nature are subject to measurement uncertainty.

(vii) Tax asset valuation and utilization

Tax interpretations, regulations and legislation in the various jurisdictions in which the Company operates are subject to change. The Company is also subject to income tax audits and reassessments which may change its provision for income taxes. Therefore, the determination of income taxes is by nature complex and requires making certain estimates and assumptions. HHR recognizes net deferred tax benefit related to deferred tax assets to the extent that it is probable that the deductible temporary differences will reverse in the foreseeable future. Assessing the recoverability of deferred tax assets requires the Company to make significant estimates related to expectations of

future taxable income. Estimates of future taxable income are based on forecast cash flows from operations and the application of existing tax laws in each jurisdiction. 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.

(viii) Fair value determination

The determination of fair value requires judgement and is based on market information, where available and appropriate. Fair value is best evidenced by an independent quoted market price for the same asset or liability in an active market. However, quoted market prices and active markets do not always exist. In those instances, fair valuation techniques are used. The Company applies judgement in determining the most appropriate inputs and the weighting ascribed to each such input as well as its selection of valuation methodologies. The calculation of fair value is based on market conditions as at each reporting date and may not be reflective of ultimate realizable value.

(ix) Risk management contracts

Derivative risk management contracts are valued using valuation techniques with market observable inputs. The most frequently applied valuation techniques include Black-Scholes option valuation model and forward pricing and swap models. The models incorporate various inputs including the credit quality of counterparties, foreign exchange spot and forward rates, volatilities of commodity prices and forward rate curves of the underlying commodity. Changes in any of these assumptions would impact fair value of the risk management contracts and as a result, future net profit (loss) and other comprehensive profit (loss).

(x) Warrant liability

The estimated fair value of the warrant liability depends on judgements regarding several key assumptions including volatility, projected and current share price, risk free rate, as well as likelihood and timing of a future liquidity event, among other considerations. Fluctuations in any of these assumptions could result in material differences in the warrant valuation.

(xi) Contingencies

By their nature, contingencies will only be resolved when one or more future events occur or fail to occur. The assessment of contingencies inherently involves the exercise of significant judgement and estimates of the outcome of future events, including estimates and amounts of future cash flows.

(xii) Capitalized general and administrative costs

The Company capitalizes general and administrative costs that are directly related to bringing an asset to a position in which it can be used to generate future economic benefits. Amounts recorded as capitalized general and administrative costs require the use of estimates and judgements and are, by nature, subject to measurement uncertainty.

3. SIGNIFICANT ACCOUNTING POLICIES

The accounting policies set out below have been applied consistently by the Company and its subsidiaries for all periods presented in these Financial Statements.

(a) Basis of consolidation

At December 31, 2021, the Financial Statements included the accounts of HHR and its wholly owned subsidiaries, including Prairie Lights Power GP Inc. and Prairie Lights Power Limited Partnership. Subsidiaries are consolidated from the date the Company obtains control and continues to be consolidated until the date such control ceases. Control is achieved when HHR 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. The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies. All inter-entity transactions have been eliminated upon consolidation between HHR and its subsidiaries in these Financial Statements. HHR's operations are viewed as a single operating segment by the chief operating decision maker of the Company for the purpose of resource allocation and assessing performance.

(b) Joint arrangements

HHR conducts some of its oil and gas activities through joint operations. A joint operation is a type of joint arrangement over which two or more parties have joint control and rights to the assets and obligations for the liabilities relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities (being those that significantly affect the returns of the arrangement) require unanimous consent of the parties sharing control. HHR does not have any joint arrangements that are material to the Company, or that are structured using separate vehicles. In relation to its interests in joint operations, HHR recognizes in the Financial Statements its share of assets, liabilities, revenues and expenses of the arrangements.

(c) Revenue recognition

Revenue associated with the sale of crude oil, natural gas and natural gas liquids is measured based on the consideration specified in contracts with customers. Revenue from contracts with customers is recognized when, or as, HHR satisfies a performance obligation by transferring a promised good or service to a customer. A good or service is transferred when the customer obtains control of that good or service. The transfer of control of crude oil, natural gas and natural gas liquids coincides with title passing to the customer and the customer taking physical possession. HHR satisfies its performance obligations at a point in time and the amounts of revenue recognized relating to performance obligations satisfied over time are not significant. While the transaction price is variable under the terms of the contract, at the time of delivery, there is only a minimal risk of a change in the transaction price to be allocated to the volume sold. Accordingly, at the point of sale there is not a significant risk of revenue reversal relative to the cumulative revenue recognized and there is no need to constrain any variable consideration. The amount of revenue recognized is based on the agreed upon transaction price, whereby any variability in revenue is related specifically to the Company's efforts to deliver production. Therefore, the resulting revenue is allocated to the production delivered in the period during which the variability occurs. As a result, HHR's revenue is recognized in the month of delivery.

(d) Foreign currency translation

Monetary assets and liabilities denominated in a foreign currency are translated at the rate of exchange in effect at the balance sheet date. Revenues and expenses are translated at the average exchange rates during the year. The corresponding realized and unrealized gains and losses from foreign currency translations are recognized in the consolidated statement of profit (loss).

(e) Financial instruments

Financial derivative instruments

Financial derivative instruments are included in current assets/liabilities except for those with maturities greater than 12 months after the end of the reporting period, which are classified as non-current assets/liabilities.

The Company has not designated any of its financial derivative contracts as effective accounting hedges, and therefore has not applied hedge accounting, even though the Company considers all commodity contracts to be economic hedges. As a result, all financial derivative contracts are measured at fair value, with any gains and losses recorded in the consolidated statement of profit (loss).

The fair value of a financial derivative instrument on initial recognition is normally the transaction price. Subsequent to initial recognition, the fair values are based on quoted market prices where available from active markets, otherwise fair values are estimated based on market prices at the reporting date for similar assets or liabilities with similar terms and conditions, or by discounting future payments of interest and principal at estimated interest rates that would be available to the Company at the reporting date.

Financial assets and liabilities

HHR's financial assets and financial liabilities are classified into two categories: Amortized Cost and Fair Value through Profit and Loss ("FVTPL"). The classification of financial assets is determined by their context in HHR's business model and by the characteristics of the financial asset's contractual cash flows. HHR does not classify any of its financial instruments as Fair Value through Other Comprehensive Income.

At initial recognition, financial instruments are measured at fair value. Measurement in subsequent periods depends on classification of the financial instrument as described below:

- Amortized Cost: Cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities and long-term debt are measured at amortized cost. The contractual cash flows received from the financial assets are solely payments of principal and interest and are held within a business model whose objective is to collect the contractual cash flows. The financial assets and financial liabilities are subsequently measured at amortized cost using the effective interest method.
- FVTPL: Risk management contract assets and liabilities are measured initially at FVTPL and are subsequently measured at fair value with changes in fair value recognized in the consolidated statements of profit (loss) and comprehensive profit (loss).

Impairment of financial assets

Impairment losses are recognized using an expected credit loss model. The Company has adopted the simplified expected credit loss model for its accounts receivable, which permits the use of the lifetime expected loss provision. To measure the expected credit losses, accounts receivable have been grouped based on shared credit risk characteristics and days past due. The Company uses judgement in making these assumptions and selecting the inputs into the expected loss calculation based on past history, existing market conditions and forward looking estimates at the end of each reporting period.

Offsetting

Financial assets and liabilities are offset and the net amount reported in the consolidated statement of financial position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously.

(f) Property, plant and equipment ("PP&E")

PP&E primarily consists of petroleum and natural gas development and production assets, and is measured at cost less accumulated depletion and depreciation and accumulated impairment losses. These costs include property acquisitions, development drilling, completions, gathering and infrastructure, estimated decommissioning costs and transfers from E&E.

Once technical feasibility and commercial viability has been met, all costs directly attributable to bringing an asset to the location and condition necessary for use are capitalized; this includes cash and non-cash overhead charges associated with staff dedicated to capital projects. Costs of replacing components of equipment are recognized as property, plant and equipment only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures are expensed as incurred. Such capitalized amounts generally represent costs incurred in developing proved and/or probable reserves and bringing in or enhancing production from such reserves.

The gain or loss from the divestitures of PP&E is recognized in the consolidated statements of profit (loss). In addition, risk-sharing agreements in which the Company cedes a portion of its working interest to a third-party are generally considered to be disposals of PP&E, potentially resulting in a gain or loss on disposition.

Exchanges of assets within PP&E are measured at fair value unless the exchange transaction lacks commercial substance or the fair value of neither the asset received nor the asset given up is reliably measurable. The cost of the acquired asset is measured at the fair value of the asset received, unless the fair value of the asset given up is more clearly evident. Where fair value is not used, the cost of the acquired asset is measured at the carrying amount of the asset given up. The gain or loss on derecognition of the asset given up is recognized in profit (loss).

An asset within PP&E is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying value of the asset) is included in profit (loss) in the period in which the item is derecognized.

(g) Depletion and depreciation

Development and production costs are accumulated on a CGU basis ("depletion units"). The net carrying value of each depletion unit is depleted using the unit-of-production method by reference to the ratio of production in the year to the related proved plus probable reserves, taking into account estimated future development costs necessary to bring those reserves into production. These estimates are reviewed by independent reserve engineers at least annually. Undeveloped land is not depreciated.

Proved plus probable reserves are estimated annually by independent and qualified reserve evaluators and represent the estimated quantities of petroleum and natural gas which geological, geophysical and engineering data demonstrate with a

specified degree of certainty to be recoverable in future years from known reservoirs and which are considered commercially producible.

Reserves are the remaining quantities of, petroleum and natural gas from known accumulations estimated to be recoverable from a given date forward. The estimates of reserves are determined from drilling, geological, geophysical and engineering data based on established technology and specified economic conditions. For depletion purposes, relative volumes of petroleum and natural gas production and reserves are converted at the energy equivalent conversion rate of six thousand cubic feet of natural gas to one barrel of crude oil.

For other assets, depreciation is recognized in profit (loss) on a straight-line basis over the estimated useful life of three years of each part of an item of property and equipment. Leasehold improvements are depreciated over the term of the lease. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Company will obtain ownership by the end of the lease term.

(h) Impairment

The Company reviews the carrying value of its PP&E at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the asset's estimated recoverable amount is calculated.

For the purpose of impairment testing, PP&E assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets, known as a CGU. The recoverable amount of a CGU is the greater of its value in use ("VIU") and its fair value less costs of disposal ("FVLCD").

FVLCD is defined as the amount obtainable from the sale of an asset or CGU in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal or in the case of a lack of comparable transactions, based upon discounted after tax cash flows. The Company calculates FVLCD by reference to the after-tax future cash flows expected to be derived from production of proved plus probable reserves, less estimated selling costs. The estimated after-tax future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. VIU is determined by estimating the present value of the future net cash flows expected to be derived from the continued use of the asset or CGU.

An impairment loss is recognized in the consolidated statements of profit (loss) if the carrying amount of an asset or CGU exceeds its estimated recoverable amount. Impairment losses recognized in respect of CGUs are allocated to reduce the carrying amounts of the assets in the CGU on a pro rata basis.

Impairment losses previously recognized are assessed at each reporting date for any indication that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimate used to determine the recoverable amount and is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depletion and depreciation, if no impairment loss had been recognized.

(i) Leases

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. A lease liability is recognized at the commencement date of the lease term as the present value of the lease payments that are not paid at that date. At the commencement date, a corresponding right-of-use asset is recognized at the amount of the lease obligation, adjusted for lease incentives received, retirement costs and initial direct costs. Depreciation is recognized on the right-of-use asset over the lease term. Interest expense is recognized on the lease liability using the effective interest rate method and payments are applied against the lease liability.

(j) Provisions and contingencies

Provisions are recognized when the Company has a present obligation as a result of a past event, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Provisions are measured based on the best estimate of discounted future cash outflows.

Decommissioning obligations

The Company's activities give rise to dismantling, decommissioning and site disturbance remediation activities. Asset retirement obligation estimates capitalized to PP&E are included in the depletable base. Decommissioning obligations are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at

the consolidated statement of financial position date. The present value of the estimated obligation is recorded as a liability with a corresponding increase in the carrying amount of the related asset. The obligation is subsequently adjusted at the end period to reflect the passage of time and changes in the estimated future cash flows underlying the obligation. The increase in the provision due to the passage of time is recognized as accretion costs whereas increases or decreases due to changes in the estimated future cash flows or changes in the real rate are capitalized. Actual costs incurred upon settlement or towards the settlement of the decommissioning obligations are charged against the provision to the extent the provision was established.

Contingencies

Contingent liabilities are disclosed when HHR has a possible obligation arising from a past event and whose existence will be confirmed only by the occurrence or non-occurrence of one or more future events not wholly under its control, or when HHR has a present obligation that arises from past events but is not recognized because it is not probable that an outflow of resources will be required to settle the obligation, or the amount of the obligation cannot be measured with sufficient reliability. When a contingency is substantiated by confirming events, can be reliably measured and will likely result in an economic outflow, a liability is recognized in the Financial Statements as the best estimate required to settle the obligation.

Contingent assets are only disclosed when the inflow of economic benefits is probable. When the economic benefit becomes virtually certain, the asset is no longer contingent and is recognized in the Financial Statements.

(k) Income taxes

Total income tax expense is composed of both current and deferred income taxes. Current income tax expense is the expected income tax payable on the taxable income for the current year, using tax rates enacted or substantively enacted at the reporting date and any adjustment to income tax payable in respect of previous periods.

Deferred tax is recognized on the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized on the initial recognition of assets or liabilities in a transaction that is not a business combination. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they are reversed, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to do so, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different taxable entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously. A deferred tax asset is recognized to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income or equity in the period in which the change occurs, depending on where the original deferred tax item was recorded.

(l) Finance expense

Finance expense includes interest expense on borrowings, amortization of debt issue costs, and accretion of decommissioning obligations and office lease provisions due to the passage of time. All borrowing costs are recognized in finance expense using the effective interest method.

(m) Share-based compensation

The Company's share-based compensation plans are all equity settled awards. Under the Company's share-based compensation plans, options, performance shares and restricted share units ("RSUs") are granted to directors, officers, and employees, whereby services are rendered as consideration for equity instruments. The fair value of options, performance shares and RSUs granted is estimated at the date of grant using a Black-Scholes valuation model and adjusted to reflect the number of awards that are expected to fully vest. The compensation cost of the options, performance shares and RSUs is recognized, together with the corresponding increase in contributed surplus, over the vesting period. Upon exercise of the options, consideration paid by the option holders and the value in contributed surplus pertaining to the exercised options are recorded as share capital.

(n) Per share amounts

Basic profit (loss) per common share is calculated by dividing profit (loss) for the period attributable to common shareholders of the Company by the weighted average number of common shares outstanding during the period.

Diluted profit (loss) per common share is calculated giving effect to the potential dilution that would occur if all outstanding "in-the-money" stock options and RSUs were exercised, all dilutive convertible preferred shares were exercised or converted to common shares, and all dilutive share purchase warrants are exercised. The weighted average number of common shares outstanding during the period is adjusted by the incremental number of shares calculated in accordance with the treasury stock method. The treasury stock method assumes that the deemed proceeds received from the exercise of all potentially dilutive instruments are used to repurchase common shares at the average market price during the period. In a period in which there is a loss, per share amounts are calculated without the inclusion of dilutive securities.

(o) Government grants

The Company may receive government grants which provide immediate financial assistance as compensation for costs or expenditures to be incurred. Government grants are accounted for when there is reasonable assurance that conditions attached to the grants are met and that the grants will be received. The Company recognizes government grants in profit (loss) on a systematic basis and in line with recognition of the expense that the grants are intended to compensate. Government grants related to expenses or losses already incurred are recognized in profit (loss) by deducting the grant from its related expense in the period in which it becomes receivable. Government grants related to assets are presented in the consolidated statement of financial position and are amortized into profit (loss) on a systematic basis over the life of the depreciable asset as a reduced depreciation expense.

(p) Future accounting pronouncements

Various amendments to existing standards and new accounting requirements have been released that are effective January 1, 2022. These standards and interpretations have not been applied to the Financial Statements. The Company does not anticipate the new requirements will have a material impact on the Company's Financial Statements on adoption.

4. PROPERTY, PLANT AND EQUIPMENT ("PP&E")

The following table reconciles movements of PP&E during the period:

<i>(Cdn\$ thousands)</i>	Development and Production Assets	Corporate Assets	Right-of-Use Assets	Total
PP&E, at cost:				
Balance - December 31, 2019	1,926,486	8,406	3,266	1,938,158
Additions ¹	101,361	1,316	—	102,677
Farmout transaction	3,496	—	—	3,496
Balance - December 31, 2020	2,031,343	9,722	3,266	2,044,331
Additions ¹	143,170	1,204	3,145	147,519
Dispositions	(51,360)	—	—	(51,360)
Balance - December 31, 2021	2,123,153	10,926	6,411	2,140,490
Accumulated depletion, depreciation and impairment				
Balance - December 31, 2019	488,234	4,517	735	493,486
Depletion and depreciation	132,859	1,590	735	135,184
Balance - December 31, 2020	621,093	6,107	1,470	628,670
Depletion, depreciation and impairment	125,111	1,481	741	127,333
Dispositions	(24,352)	—	—	(24,352)
Balance - December 31, 2021	721,852	7,588	2,211	731,651
Net book value - December 31, 2020	1,410,250	3,615	1,796	1,415,661
Net book value - December 31, 2021	1,401,301	3,338	4,200	1,408,839

¹ Additions for the year ended December 31, 2021 includes non-cash items of \$1.2 million related to decommissioning obligation assets and \$4.6 million related to share-based compensation (December 31, 2020 - \$7.1 million and \$1.2 million, respectively).

At December 31, 2021, an estimated \$2.4 billion in future development costs associated with the proved plus probable undeveloped reserves were included in the calculation of depletion (December 31, 2020 – \$2.5 billion).

(a) Capitalization of General and Administrative and Share-Based Compensation Expenses

During the year ended December 31, 2021, \$4.7 million (year ended December 31, 2020 – \$2.3 million) of directly attributable general and administrative expenses and \$4.6 million (year ended December 31, 2020 – \$1.2 million) of share-based compensation expenses were capitalized to PP&E assets. These amounts directly related to development activities conducted during the period.

(b) Impairment

At December 31, 2021 and 2020, the Company assessed its production and development assets for indicators of impairment and none were noted.

5. DISPOSITION

<i>Years Ended</i> <i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Proceeds from disposition	10,027	—
PP&E after net accumulated depletion and depreciation	(27,008)	—
Decommissioning liabilities disposed	3,168	—
Loss on disposition	(13,813)	—

During the year ended December 31, 2021, HHR disposed of certain non-core assets and undeveloped land for gross proceeds of \$10.0 million, resulting in a loss on disposition of \$13.8 million.

6. BANK DEBT

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Credit facility	106,300	—
Tranche A	—	105,600
Tranche B	—	55,000
Operating	—	3,000
Total bank debt outstanding	106,300	163,600
Bank debt due within one year	—	163,600
Bank debt due beyond one year	106,300	—

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Borrowing base capacity	175,000	125,600
Credit facility	(106,300)	—
Tranche A	—	(105,600)
Operating	—	(3,000)
Operating – guaranteed letters of credit	—	(910)
Undrawn bank debt capacity	68,700	16,090

On May 31, 2021, the Company amended its existing credit facility. The amended credit facility eliminated the tranche A and tranche B components of the previous facility and extended the maturity date of the bank debt. Under the amended credit facility agreement, the aggregate principal borrowing base was increased to \$175.0 million, consisting of a \$155.0 million revolving syndicated facility and a \$20.0 million operating facility. The amended credit facility agreement has a term date of May 31, 2022 and a maturity date of May 31, 2023, with an option to extend for an additional 364 days at the lenders' discretion.

Under the amended credit facility, borrowing base reviews are subject to re-determination semi-annually as of May 31st and November 30th of the respective year. The determination of the borrowing base is made by the lenders at their sole discretion.

On November 13, 2020, the CAD denominated guaranteed letters of credit were transferred to Export Development Canada ("EDC"). As at December 31, 2021, CAD denominated letters of credit held by EDC totaled \$13.8 million (December 31, 2020 - \$14.6 million). On August 17, 2021, the USD denominated letters of credit were transferred to EDC. As at December 31, 2021, the Company's USD denominated guaranteed letters of credit, translated into Canadian dollars and held by EDC, totaled \$0.9 million (December 31, 2020 - \$0.9 million held by the operating facility).

As at December 31, 2021, Hammerhead is compliant with all covenants and cross default clauses stated in the amended credit facility agreement. Covenants include reporting requirements and limitations on excess cash, indebtedness, equity issuances, acquisitions, dispositions, hedging, encumbrances, asset retirement obligations, as well as other standard business operating covenants. The Company is not subject to financial covenants. The lenders have first lien on all of the Company's assets.

Amounts borrowed under the amended credit facility bear interest at the Company's option based on the referenced Canadian prime lending rate, plus an applicable margin, or the bankers' acceptance rate in effect. The applicable rate is determined by the ratio of first lien indebtedness to earnings before interest, taxes, depreciation, depletion and amortization. The amended credit facility also includes standby fees on balances not drawn.

The following are the applicable prime and acceptance rates:

	Margin on Canadian Prime Rate	Bankers' Acceptance Rate	Standby Fee
Credit facility	1.75% - 5.25%	2.75% - 6.25%	0.69% - 1.56%

7. TERM DEBT

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
2020 Senior Notes – unsecured ¹	152,174	152,174
Redemption of principal	(31,526)	(31,526)
Paid-in-kind interest	23,374	8,714
Foreign exchange revaluation ²	(9,275)	(8,927)
Total carrying value of long-term debt	134,747	120,435

¹ The 2020 Senior Notes principal value of US\$112.0 million was translated at the June 19, 2020 foreign exchange rate of 1.3587.

² The 2020 Senior Notes are issued in US dollars and are revalued to Canadian dollars at each reporting period, using the period end foreign exchange rate. Changes in the foreign exchange rate will increase or decrease the Canadian dollar liability. The foreign exchange impact is recognized as an unrealized gain or loss in the consolidated statement of profit (loss) each reporting period.

On July 10, 2017, the Company issued US\$160.0 million unsecured senior notes due July 10, 2022 through a private placement (the "2017 Senior Notes"). Proceeds net of fees, discounts and costs totaled US\$148.0 million. The 2017 Senior Notes were carried at amortized cost, net of discounts and debt issue costs of US\$12.0 million and C\$0.3 million. The 2017 Senior Notes bore interest at 9% per annum, payable semi-annually in arrears on July 15 and January 15.

On June 19, 2020, the Company amended its existing senior note agreement whereby the holders of the 2017 Senior Notes approved an initial debt redemption of US\$48.0 million, reducing the aggregate principal balance owing from US\$160.0 million to US\$112.0 million (the "2020 Senior Notes"). The maturity date of the 2020 Senior Notes was extended to July 10, 2024 and bears interest at 12% per annum. Under the amended agreement, the Company has the option of paying interest as cash or as paid-in-kind ("PIK"). PIK interest is added to the principal payable balance of the 2020 Senior Notes and is due on maturity. Under the 2020 Senior Notes agreement, the Company was granted an additional debt redemption of US\$24.0 million, subject to the receipt of an additional equity draw on the June 2020 Investment Agreement on or before September 30, 2020. On September 29, 2020, the Company received an additional equity investment of \$25.0 million and subsequently redeemed US\$24.0 million related to the 2020 Senior Notes principal balance on October 10, 2020 for a total cost of US\$1.0 dollar.

The June 19, 2020 debt redemption of US\$48.0 million related to the 2017 Senior Notes was treated as a debt extinguishment in accordance with IFRS 9 Financial Instruments, as the debt redemption resulted in substantially different terms and cash flows.

If a change of control or a specified asset disposition occurs, each holder of the 2020 Senior Notes has the right to require the Company to purchase all or any part of the holder's 2020 Senior Notes for cash, at a price equal to 101% of the principal amount repurchased plus accrued and unpaid interest ("the Put Option"). While the Put Option met the definition of an embedded derivative, it is considered to be closely related to the underlying value of the term debt.

There are no maintenance financial covenants; however, there are standard business operating covenants, as well as covenants that may limit the Company's ability to incur additional debt. As at December 31, 2021, the Company was in compliance with all covenants related to the 2020 Senior Notes.

8. LEASE OBLIGATIONS

The Company incurs lease payments related to office facilities in Calgary and Grand Prairie. In the fourth quarter of 2021, the Company signed an amended lease agreement for its Calgary office space, which resulted in a lease modification. The Company has recognized lease liabilities measured at the present value of the remaining lease payments using an incremental borrowing rate for the Calgary and Grand Prairie offices of 4.6% and 7.0%, respectively (December 31, 2020 - 7.0% and 7.0%, respectively).

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Opening balance	3,252	4,774
Additions and modifications	3,145	—
Interest expense	181	286
Lease payments	(1,621)	(1,808)
Ending balance	4,957	3,252
Less: current portion	(1,030)	(1,445)
Ending balance - long-term portion	3,927	1,807

Variable payments which are not linked to an index relate to property tax. Such items are charged to operating expense and general and administrative expense in the consolidated statements of profit (loss) and are immaterial.

The following table details the undiscounted cash flows of Hammerhead's lease obligations:

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Less than 1 year	1,256	1,621
1-3 years	1,840	1,575
4-5 years	689	374
After 5 years	1,900	—
Total lease payments	5,685	3,570
Amounts representing interest	(728)	(318)
Present value of net lease payments	4,957	3,252

9. DECOMMISSIONING OBLIGATIONS

Decommissioning obligations arise as a result of the Company's net ownership interests in petroleum and natural gas assets including well sites, processing facilities and infrastructure. The following table provides a reconciliation of the carrying amount of the obligation associated with the retirement of oil and gas properties:

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Balance, beginning of period	31,499	24,345
Obligations incurred	2,590	1,511
Obligations disposed	(3,168)	—
Change in rates	(1,195)	5,530
Change in estimates	(182)	77
Accretion of decommissioning obligations ¹	25	36
Balance, end of period	29,569	31,499

¹ Accretion of the decommissioning obligation due to the passage of time is presented within finance expense in the consolidated statement of profit (loss). See note 17.

At December 31, 2021, a key assumption on which the carrying amount of the decommissioning obligations is based includes a risk free rate of 1.68% and an inflation rate of 1.82% (December 31, 2020 – 1.21% and 1.49%, respectively). As at December 31, 2021, the undiscounted and uninflated amount of the estimated cash flows required to settle the obligation is \$26.7 million (December 31, 2020 – \$27.3 million), which will be incurred over the next 35 years.

10. WARRANT LIABILITY

The following table summarizes the warrants outstanding:

<i>Number of warrants (000's)</i>	December 31, 2021	December 31, 2020
2020 Warrants	35,020	35,020
2013 Warrants	6,000	6,000
Total	41,020	41,020

The Company issued warrants in connection with the June 17 and December 8, 2020 investment agreements (the “2020 Warrants”) and the 2013 notes issuance (the “2013 Warrants”). The Company previously issued warrants in connection with the March 27, 2014 investment agreement (the “2014 Warrants”), which were fully exercised in 2020.

The warrants represent standalone written put options and are classified as a liability rather than equity as the warrants provide for a variable number of shares that could be issued which does not meet the ‘fixed for fixed’ requirement when classifying between debt or equity. The warrants were recorded at fair value upon inception and were net against the initial proceeds as a debt or equity issuance cost. The warrants are reassessed at the end of each reporting period with subsequent changes in fair value recognized through income as a non-cash item.

The warrants are considered a Level 3 financial instrument as the initial and subsequent valuations are based on prices or valuation techniques that are not based on observable market data. The 2020 and 2013 Warrants are valued using the Black-Scholes model, which requires several key assumptions including volatility, projected share price and likelihood of a future liquidity event, among other considerations.

2020 Warrants

On June 17, 2020 and December 8, 2020 the Company entered into investment agreements with affiliates of its shareholders, one of which holds a controlling interest in the Company (collectively the “2020 Investment Agreements” – see note 11) pursuant to which HHR issued under each respective agreement 33.7 million and 1.3 million common share purchase warrants. Each warrant entitles the holder to acquire one common share at a deemed exercise price equal to \$0.25 per share. The 2020 Warrants are exercisable at any point in time before the earlier of: i) the date on which a liquidity event occurs; and ii) the date of an initial public offering.

2014 Warrants

On March 27, 2014, the Company entered into an investment agreement with an affiliate of its controlling shareholder pursuant to which HHR issued 34.3 million Series II preferred share purchase warrants. The 2014 Warrants provided anti-dilution protection in the event HHR raised equity below \$2.65 per share down to a floor price of \$1.75 per share.

Closing of the 2015 Investment Agreement on June 30, 2015 triggered a right to exercise certain 2014 Warrants for additional Series II preferred shares and reduced the anti-dilution protection of the remaining 2014 Warrants from \$2.65 per share to \$2.25 per share.

Closing of the 2020 Investment Agreement on June 17, 2020 triggered a right to exercise the remaining 2014 Warrants for additional Series II preferred shares. As a result, all of the remaining 2014 Warrants were exercised on June 17, 2020 for nominal proceeds.

2013 Warrants

On May 1, 2013, the Company issued 6.0 million common share purchase warrants. Each warrant entitles the holder thereof to acquire on a cashless exercise basis, provided a liquidity event has occurred, at any time on or before the date that is the earlier of: (i) three years from the date on which a liquidity event occurs; and (ii) ten years from the date of issuance of the warrants, one common share at a deemed exercise price equal to the lesser of: (i) \$3.50 per share; and (ii) the liquidity price.

Additionally, immediately prior to the occurrence of a change of control transaction, each warrant will be automatically exercised on a cashless basis for 0.15 common shares per warrant.

The change in fair value of all warrants during the period is summarized in the following table:

<i>(Cdn\$ thousands)</i>	2020 Warrants	2014 Warrants	2013 Warrants	Total
Fair value at December 31, 2019	—	14,621	906	15,527
New warrants issued	10,935	—	—	10,935
Change in fair value	103	(3,404)	(680)	(3,981)
Exercise of warrants	—	(11,217)	—	(11,217)
Fair value at December 31, 2020	11,038	—	226	11,264
Change in fair value	151	—	(55)	96
Fair value at December 31, 2021	11,189	—	171	11,360

11. EQUITY COMMITMENT

(a) June 2020 Equity Commitment

On June 17, 2020, the Company entered into an investment agreement (“the June 2020 Investment Agreement”) with an affiliate of its controlling shareholder. Under the June 2020 Investment Agreement, the Company has agreed to issue up to 600.0 million Series IX first preferred shares and 33.7 million common share purchase warrants, in exchange for aggregate cash proceeds of up to \$300.0 million. The preferred shares have been classified as equity.

Under the June 2020 Investment Agreement, draws on the remaining equity commitment are subject to approval of the controlling shareholder and satisfaction of terms and conditions, at any time prior to June 17, 2024. On February 5, 2021 the Company received an additional equity investment of \$33.7 million cash proceeds in exchange for the issuance of 67.4 million Series IX first preferred shares.

		<i>(Cdn\$ thousands)</i>				
		Number of Shares (000's)	Gross Cash Proceeds	Issue Costs		Net Cash Proceeds
				Non-cash	Cash	
June 17, 2020	Initial draw	150,000	75,000	—	(1,125)	73,875
	Common share warrants ¹	—	—	(10,530)	—	—
September 29, 2020	Second draw	50,000	25,000	—	(14)	24,986
As at December 31, 2020		200,000	100,000	(10,530)	(1,139)	98,861
February 5, 2021	Third draw	67,405	33,702	—	(22)	33,680
As at December 31, 2021		267,405	133,702	(10,530)	(1,161)	132,541

¹ The initial valuation of the common share purchase warrants was treated as a transaction cost with all subsequent adjustments to the valuation of the warrants recognized through the consolidated statements of profit (loss).

(b) December 2020 Equity Commitment

On December 8, 2020, the Company entered into an investment agreement (“the December 2020 Investment Agreement”) with an affiliate of one of its shareholders (“the Investor”). Under the December 2020 Investment Agreement, the Company has agreed to issue up to 23.1 million Series IX first preferred shares and 1.3 million common share purchase warrants, in exchange for aggregate cash proceeds of up to \$11.6 million. The preferred shares have been classified as equity.

On February 5, 2021, the Company received an additional equity investment of \$1.3 million cash proceeds in exchange for the issuance of 2.6 million Series IX first preferred shares. The Investor may be required to invest all or a portion of the remaining equity commitment at any time prior to June 17, 2024, subject to further investment made by an affiliate of the controlling shareholder under the June 2020 Investment Agreement.

(Cdn\$ thousands)

		Number of Shares (000's)	Gross Cash Proceeds	Issue Costs		Net Cash Proceeds
				Non-cash	Cash	
December 8, 2020	Initial draw	7,700	3,850	—	(199)	3,651
	Common share warrants ¹	—	—	(405)	—	—
As at December 31, 2020		7,700	3,850	(405)	(199)	3,651
February 5, 2021	Second draw	2,595	1,298	—	—	1,298
As at December 31, 2021		10,295	5,148	(405)	(199)	4,949

¹ The initial valuation of the common share purchase warrants was treated as a transaction cost with all subsequent adjustments to the valuation of the warrants recognized through the consolidated statements of profit (loss).

12. SHARE CAPITAL

(a) Common shares

Authorized

The Company is authorized to issue an unlimited number of voting common shares.

Issued and outstanding

The following table summarizes common shares issued and outstanding:

	Number of shares (000's)	Amount (Cdn\$ thousands)
Balance, December 31, 2019	391,159	583,483
Return to treasury ¹	(121)	—
Balance, December 31, 2020	391,038	583,483
Long term retention program	—	527
Exercise of restricted share units	110	265
Balance, December 31, 2021	391,148	584,275

¹ Common shares returned to treasury to settle non-recourse loans.

(b) Preferred shares

Authorized

(i) Series I preferred shares

The Company is authorized to issue one non-voting Series I preferred share.

The Series I preferred share is issued to provide the holder with the right to elect a director of the Company. The Series I preferred share does not carry any dividend or liquidation rights and is redeemable at the option of the Company at a price of \$1.00 if the holder owns less than 5% of the outstanding common shares of the Company (including all Series II preferred shares calculated on an as-converted basis).

(ii) Series II preferred shares

The Company is authorized to issue an unlimited number of Series II preferred shares, which have voting rights on an 'as converted' basis. The Series II preferred shares have preferential rights over the common shares with respect to the distribution of any assets on dissolution, liquidation, or winding-up. If dividends are paid to common shareholders, the Series II preferred shares receive a pari-passu number of dividends as if they had been converted to common shares.

The Series II preferred shares are convertible, at the option of the holder, into common shares of the Company initially at a rate of 1.13208 common share per Series II preferred share, subject to certain adjustments. In the event of a sale

of the preferred shares by the holder or a liquidity event or an initial public offering, the Series II preferred shares are automatically converted into common shares.

(iii) Series III preferred shares

The Company is authorized to issue an unlimited number of Series III preferred shares, which have voting rights on an 'as converted' basis. The Series III preferred shares have preferential rights over the common shares and Series II preferred shares with respect to the payment of dividends and the distribution of any assets on dissolution, liquidation or winding-up. If dividends are paid to common shareholders, the Series III preferred shares receive a pari-passu number of dividends as if they had been converted to common shares.

Holders of the Series III preferred shares will be entitled to receive a dividend accruing at a rate of 10% per annum, compounded quarterly for the first two years following the date of issuance. HHR issued 40.0 million Series III preferred shares on June 30, 2015, and an additional 48.9 million Series III preferred shares on December 10, 2015. The dividends are only payable if and when declared by the Board of Directors, and any dividends declared can be settled through the issuance of cash or additional Series III shares, at the Company's option.

The Series III preferred shares plus any accrued share-based dividends are convertible, at the option of the holder, at any time including, without limitation, in connection with a liquidity event or an initial public offering. The conversion price per share is \$2.25 plus the amount of all unpaid dividends that have accrued and been compounded thereon, divided by \$2.25.

The Series III preferred shares plus any accrued share-based dividends may be purchased by the Company, at the option of the Company, in the event of an initial public offering, and any time after the second anniversary of the issue date at a price equal to the greater of: (i) the accreted value of the Series III preferred shares, plus all unpaid dividends that had accrued on such shares; and (ii) the fair market value if such shares were converted to common shares immediately prior to the purchase date.

(iv) Series IV preferred shares

The Company is authorized to issue one non-voting Series IV preferred share.

The Series IV preferred share is issued to provide the holder with the right to elect a director of the Company. The Series IV preferred share does not carry any dividend or liquidation rights and is redeemable at the option of the Company at a price of \$nil if the holder owns less than 5% of the outstanding common shares of the Company (including the Series II preferred shares and Series III preferred shares calculated on an as-converted basis, and assuming exercise or conversion of all then outstanding warrants, convertible equity or other equity-linked securities into common shares at their then applicable exercise or conversion prices).

(v) Series V preferred shares

On August 27, 2017, all of the issued and outstanding Series V preferred shares were automatically converted to common shares at a conversion rate of approximately 1.2 common shares per preferred share, in accordance with the Series V preferred share terms. As of December 31, 2021 and 2020 there were no Series V preferred shares outstanding.

(vi) Series VI preferred shares

The Company is authorized to issue one non-voting Series VI preferred share.

The Series VI preferred share is issued to provide the holder with the right to elect a director of the Company. The Series VI preferred share does not carry any dividend or liquidation rights and upon notice from the Company will be surrendered to the Company for consideration of \$1.00 if the holder owns less than 5% of the outstanding common shares of the Company (including the Series II preferred shares and Series III preferred shares calculated on an as-converted basis and assuming exercise or conversion of all then outstanding warrants, convertible equity or other equity-linked securities into common shares at their then applicable exercise or conversion prices).

(vii) Series VII preferred shares

The Company is authorized to issue an unlimited number of Series VII preferred shares, which have voting rights on an 'as converted' basis. Series VII preferred shares have preferential rights over all other shares of the Company with respect to the distribution of any assets on dissolution, liquidation, or winding-up. If dividends are paid to common shareholders, the Series VII preferred shares receive a pari-passu number of dividends as if they had been converted to common shares.

Holders of the Series VII preferred shares will be entitled to receive a dividend accruing at a rate of 15% per annum, compounded quarterly for the first five years following the date of issuance. HHR issued 33.3 million Series VII preferred shares on November 6, 2018. The dividends are only payable if and when declared by the Board of Directors, and while the 2020 Senior Notes are outstanding, are only payable with the issuance of additional Series VII shares (i.e. non-cash dividend or payment-in-kind dividend). After the 2020 Senior Notes have matured, any dividends declared can be settled with shares or cash, at the Company's option.

The Series VII preferred shares plus any accrued share-based dividends are convertible to common shares at the option of the holder, at any time including, without limitation, in connection with a liquidity event. The number of shares is determined by using the following formula: (a) the sum of the issue price of the Series VII preferred share (as increased for any compounded dividend not paid in cash) plus all accrued and unpaid dividends on such Series VII preferred share at such time, divided by (b) the issue price of such Series VII preferred share.

In the event of an initial public offering the shares are automatically converted to common shares. The conversion ratio is based on a required return, which varies based on the time passed since issuance. The number of common shares issued as a result of an initial public offering conversion may not exceed the maximum amount of common shares issuable assuming the dividends accrued and compounded for 5 years after the share issue date. The number of common shares issued as a result of an initial public offering must be at least as many as would have been obtained assuming the dividends accrued and compounded throughout the period from the issue date to the date of the initial public offering.

The Series VII preferred shares can be repurchased at the Company's option, at any time, subject to a minimum purchase amount. The purchase price is based on a required return, which varies based on the time passed since issuance.

(viii) Series VIII preferred shares

The Company is authorized to issue one non-voting Series VIII preferred share.

The Series VIII preferred share is issued to provide the holder with the right to elect two directors of the Company. The Series VIII preferred share does not carry any dividend or liquidation rights and upon notice from the Company will be surrendered to the Company for cancellation for consideration of \$3.00 if the holder owns less than 20% of the outstanding common shares of the Company (including the Series II preferred shares, Series III preferred shares and Series VII preferred shares calculated on an as-converted basis, and assuming exercise or conversion of all of the then outstanding warrants, convertible equity or other equity-linked securities into common shares at their then applicable exercise or conversion prices).

(ix) Series IX preferred shares

The Company is authorized to issue an unlimited number of Series IX preferred shares, which have voting rights on an 'as converted' basis. The Series IX preferred shares have preferential rights over the common shares and all other preferred shares with respect to the distribution of any assets on dissolution, liquidation or winding-up. If dividends are paid to common shareholders, the Series IX preferred shares receive a pari-passu number of dividends as if they had been converted to common shares.

The Series IX preferred shares are convertible, at the option of the holder, into common shares of the Company initially at a rate of one common share per Series IX preferred share. In the event of an initial public offering, the Series IX preferred shares are automatically converted into common shares.

Issued and outstanding

The following table summarizes preferred shares issued and outstanding:

	Number of shares (000's)	Amount (Cdn\$ thousands)
Series I preferred shares		
Balance, December 31, 2020 and December 31, 2021	one share	one dollar
Series II preferred shares		
Balance, December 31, 2020 and December 31, 2021	100,952	185,093
Series III preferred shares		
Balance, December 31, 2020 and December 31, 2021	88,889	198,945
Series IV preferred shares		
Balance, December 31, 2020 and December 31, 2021	one share	one dollar
Series VI preferred shares		
Balance, December 31, 2020 and December 31, 2021	one share	one dollar
Series VII preferred shares		
Balance, December 31, 2020 and December 31, 2021	33,333	95,539
Series VIII preferred shares		
Balance, December 31, 2020 and December 31, 2021	one share	three dollars
Series IX preferred shares		
Balance, December 31, 2020	207,700	91,577
Issued in private placement, net of share issue costs (note 11)	70,000	34,977
Balance, December 31, 2021	277,700	126,554
Balance, December 31, 2020	430,874	571,154
Balance, December 31, 2021	500,874	606,131

(c) Per share amounts

The Company uses the treasury stock method to determine the dilutive effect of stock options, RSUs, warrants and convertible preferred shares. Under this method, only "in-the-money" dilutive instruments impact the calculation of diluted profit (loss) per common share.

In computing the diluted loss per common share for the year ended December 31, 2021, the Company excluded the effect of all share options, RSUs, warrants and convertible preferred shares as they were anti-dilutive. In computing the diluted profit per common share for the year ended December 31, 2020, the Company excluded the effect of 1.7 million RSUs and 6.0 million warrants as they were anti-dilutive.

The following table outlines the weighted average number of common shares outstanding used in the calculation of basic and diluted net profit (loss) per common share:

Years Ended	December 31, 2021	December 31, 2020
<i>Number of shares (000's)</i>		
Weighted average common shares outstanding, basic	391,106	391,052
Effect of convertible preferred shares	—	351,220
Effect of share options and RSUs	—	18,317
Effect of common share purchase warrants	—	13,746
Weighted average common shares outstanding, diluted	391,106	774,335

13. SHARE-BASED COMPENSATION

Stock options

Options to acquire common shares are granted to officers and employees from time to time under the Company's Stock Option Plan. Options granted under this plan are to be settled through the issuance of new common shares of the Company and have a maximum term of ten years to expiry. The vesting schedule is determined at the discretion of the Company's Board of Directors; however, options typically vest in equal tranches over a four year period starting on the first anniversary of the grant date. Each option granted permits the holder to purchase one common share of the Company at the stated exercise price. The exercise price is equal to the market value of the shares on the grant date as determined by the Company's Board of Directors. The following table summarizes the change in stock options outstanding:

	Number of options (000's)	Weighted average exercise price (\$/share)
Balance at December 31, 2019	12,890	2.52
Granted	1,183	0.50
Expired	(1,562)	2.21
Forfeited	(292)	2.68
Balance at December 31, 2020	12,219	0.50
Expired	(1,339)	0.50
Forfeited	(177)	0.50
Balance at December 31, 2021	10,703	0.50

During the year ended December 31, 2021, nil options were issued (year ended December 31, 2020 - 1.2 million at a fair value of \$0.24/share using the Black-Scholes pricing model).

The following table summarizes information regarding share options outstanding at December 31, 2021:

Exercise price per common share	Number of options outstanding (000's)	Number of options exercisable (000's)	Weighted average remaining term (years)
\$0.00 - \$0.50	10,703	9,902	5.21

Restricted share units

Under the Company's Restricted Share Unit Plan, RSUs are awarded to officers and employees from time to time. The RSUs granted under this plan are to be settled through the issuance of common shares of the Company and have a maximum term of five years to expiry. The vesting schedule is determined at the discretion of the Company's Board of Directors; however, RSUs typically vest in equal tranches over a four year period starting on the first anniversary of the grant date. During the year ended December 31, 2021, HHR granted an annual issuance of RSUs to its officers and employees that is expected to cliff vest on April 1, 2022. Each RSU granted permits the holder to purchase one common share of the Company for \$0.01 per share.

The following table summarizes information regarding RSUs outstanding at December 31, 2021:

	Number of RSUs (000's)
Balance at December 31, 2019	19,821
Granted	112
Expired	(569)
Forfeited	(1,091)
Balance at December 31, 2020	18,273
Granted	43,380
Exercised	(110)
Expired	(1,693)
Forfeited	(4,872)
Balance at December 31, 2021	54,978
Exercisable at December 31, 2021	12,221

Performance shares

Under the Company's Performance Share Plan, performance shares are directly allocated to directors, officers and employees from time to time at nil cost. Performance shares allocated under this plan vest subject to satisfaction of certain performance and service criteria and are held in escrow to be released when both criteria have been met.

No performance shares have been issued since 2014, and all of the performance shares previously allocated to directors, officers and employees are fully vested. The Company has 2.0 million unallocated performance shares outstanding at December 31, 2021 and 2020.

Long-term retention program

On June 10, 2016, the Company advanced loans totaling \$7.4 million to participating officers and employees on a limited recourse basis by a pledge of common shares of the Company owned by the officers and employees. During the year ended December 31, 2021, \$0.5 million in loan principal was settled (year ended December 31, 2020 - \$0.3 million). The total value of the loans outstanding as of December 31, 2021 were \$5.8 million (December 31, 2020 - \$6.3 million).

Share-based compensation expense

The total fair value associated with share options, RSUs, performance shares, and long-term retention awards is recognized over the service period using cliff or graded vesting, resulting in share-based compensation expense as outlined in the following table:

<i>Years Ended</i> <i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Share-based compensation payments	18,658	8,352
Capitalized to developed and producing assets	(4,619)	(1,197)
Share-based compensation expense	14,039	7,155

14. DEFERRED INCOME TAX

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts for income tax purposes. The components of the unrecognized deferred tax asset are as follows:

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
PP&E	(81,924)	(78,119)
Decommissioning liability	6,801	7,245
Lease liability	903	416
Share and debt issue costs	(980)	171
Foreign exchange	(505)	(910)
Unrealized loss on risk management contracts	6,004	2,175
Charitable donations	160	145
Non-capital losses	101,621	88,958
Deferred income tax asset not recognized	(32,080)	(20,081)
Deferred income taxes	—	—

The deferred income tax provision differs from the expected amount calculated by applying the Canadian combined federal and provincial income tax rate of 23.00% (December 31, 2020 – 23.99%) as summarized in the following table:

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Net (loss) profit before income taxes	(71,821)	53,410
Statutory income tax rate	23.00 %	23.99 %
	(16,519)	12,813
Increase (decrease) resulting from:		
Share-based compensation	3,229	1,716
Warrant revaluation	22	(955)
Rate change	(50)	(586)
Prior year true-up	1,377	(293)
Change in unrecognized tax assets	12,000	(13,617)
Other	(59)	922
Deferred income tax expense (recovery)	—	—

At December 31, 2021, the Company had approximately \$441.8 million of non-capital losses which begin to expire after 2034 (December 31, 2020 – \$386.8 million). The Company has not recognized a deferred tax asset in relation to these losses because of the uncertainty regarding future taxable profits against which such losses can be offset.

15. SUPPLEMENTAL INFORMATION

Cash Flow Presentation

Changes in non-cash working capital and cash interest transactions are summarized in the following table:

<i>Years Ended</i> <i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Source (use) of cash:		
Accounts receivable	(19,134)	2,993
Prepaid expenses and deposits	(71)	(634)
Accounts payable and accrued liabilities	62,673	(31,126)
	43,468	(28,767)
Related to operating activities	6,131	(9,801)
Related to Investing activities	37,337	(18,966)
	43,468	(28,767)
Other:		
Interest paid	6,433	35,582
Interest received	65	106

16. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company's revenue from contracts with customers consists of crude oil and natural gas sales, treating, processing & gathering income and transportation income.

Hammerhead's crude oil and field condensate, natural gas and natural gas liquids are generally sold under variable price contracts. The transaction price for variable priced contracts is based on the commodity market price, adjusted for quality, location or other factors. Hammerhead is required to deliver nominated volumes of crude oil and field condensate, natural gas and natural gas liquids to the contract counterparty. Each barrel equivalent of commodity delivered is considered to be a distinct performance obligation. The amount of revenue recognized is based on the agreed transaction price and is recognized as performance obligations are satisfied, therefore resulting in revenue recognition in the same month as delivery. Revenues are typically collected on the 25th day of the month following production.

Treating, processing & gathering fees charged to third parties are generally sold under multi-year contracts at fixed fees that vary by volume.

During the year ended December 31, 2021 and the year ended December 31, 2020, transportation income relates primarily to take-or-pay mitigation.

The following table presents the Company's revenue from contracts with customers, disaggregated by revenue source:

<i>Years Ended</i> <i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Crude oil & field condensate	199,108	125,711
Natural gas	165,957	104,267
Natural gas liquids ("NGL")	74,778	33,536
Total oil and natural gas revenue	439,843	263,514
Treating, processing & gathering	1,343	954
Transportation income	180	411
Total revenue from contracts with customers	441,366	264,879

Included in accounts receivable at December 31, 2021 was \$43.2 million (December 31, 2020 – \$25.5 million) of accrued oil and natural gas sales, which was collected subsequent to year end.

HHR has applied the practical expedient to recognize revenue in the amount to which the Company has the right to invoice. As such, no disclosure is included relating to the amount of transaction price allocated to remaining performance obligations and when these amounts are expected to be recognized as revenue.

17. FINANCE EXPENSE

<i>Years Ended</i> <i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
<i>Senior Notes</i>		
Interest on 2017 Senior Notes	—	9,177
Interest on 2020 Senior Notes - PIK	14,660	8,714
Total Senior Notes interest	14,660	17,891
Interest and fees on bank debt	5,979	16,961
Interest on EDC facility - letters of credit	419	711
Interest on lease obligation	181	286
Amortization of financing costs (discount and debt issue)	—	1,459
Accretion – decommissioning liabilities	25	36
Total finance expense	21,264	37,344

18. OPTIMIZATION FEES

Optimization fees relate to a business improvement project intended to reduce costs and increase efficiencies throughout the Company. The project was initiated in late 2020 through a third party consulting group, and was completed in the fourth quarter of 2021.

19. FINANCIAL INSTRUMENTS, FAIR VALUES AND RISK MANAGEMENT

(a) Fair Values of Financial Instruments

The Company classifies fair value measurements using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The fair value hierarchy has the following levels:

- Level 1 – Values are based on unadjusted quoted prices available in active markets for identical assets or liabilities as of the reporting date.
- Level 2 – Values are based on inputs, including quoted forward prices for commodities, time value and volatility factors, which can be substantially observed or corroborated in the marketplace. Prices in Level 2 are either directly or indirectly observable as of the reporting date.
- Level 3 – Values are based on prices or valuation techniques that are not based on observable market data.

As at (Cdn\$ thousands)	December 31, 2021		December 31, 2020	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Financial assets at amortized cost:				
Cash	12,239	12,239	6,078	6,078
Accounts receivable	49,433	49,433	30,298	30,298
Financial assets at fair value through profit or loss:				
Risk management contracts	289	289	5,195	5,195
Financial liabilities at amortized cost:				
Accounts payable and accrued liabilities	116,866	116,866	54,193	54,193
Bank debt	106,300	106,300	163,600	163,600
Term debt	134,747	134,747	120,435	120,435
Financial liabilities at fair value through profit or loss:				
Risk management contracts	26,394	26,394	14,652	14,652
Warrant liability	11,360	11,360	11,264	11,264

Assessment of the significance of a particular input to the fair value measurement requires judgement and may affect the placement within the fair value hierarchy. The Company has estimated the fair value amounts using appropriate valuation methodologies and information available to management as of the valuation dates. The following methods and assumptions were used to estimate the fair value of each class of financial instrument for which it was practicable to estimate that value:

- **Cash, accounts receivable, prepaid expenses and deposits, accounts payable and accrued liabilities** - The carrying amounts approximate fair value due to the short-term maturity of these instruments.
- **Bank debt and long-term debt** - The bank debt and long-term debt are valued at amortized cost.
- **Risk management contracts** - The fair value of the risk management contracts are a level 2 in the fair value hierarchy. Inputs to the change in the fair value are disclosed in the note below.
- **Warrant liability** - The fair value of the warrant liability is a level 3 in the fair value hierarchy. Inputs to the change in fair value of the warrant liability are disclosed in note 10.

During the year ended December 31, 2021 and the year ended December 31, 2020, there were no transfers of any financial assets or liabilities between levels.

Risk management contracts are valued using valuation techniques with observable market inputs. The most frequently applied valuation techniques include forward pricing and swap models using present value calculations and third-party option valuation models. The models incorporate various inputs including the credit quality of counterparties, foreign exchange spot and forward rates, and forward rate curves and volatilities of the underlying commodity. The fair values of the risk management contracts are net of a credit valuation adjustment attributable to risk management contract counterparty default risk or the Company's own default risk.

(b) Risk Management

The Company's activities expose it to a variety of financial risks that arise as a result of its exploration, development, production and financing activities such as:

- Credit risk
- Liquidity risk
- Market risk
- Currency risk
- Interest rate risk; and
- Commodity price risk

This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risk and the Company's management of capital. The Board of Directors oversees management's establishment and execution of the Company's risk management framework. Management has implemented,

and monitors compliance with risk management policies. The Company's risk management policies are established to identify and analyze the risks faced by the Company to set appropriate risk limits and controls and to monitor risks and adherence to market conditions and the Company's activities.

(i) Credit Risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Company's accounts receivable from joint operators and oil and natural gas marketers.

Accounts Receivable

All of the Company's operations are conducted in Canada. The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. All of the Company's petroleum and natural gas production is marketed under standard industry terms. Accounts receivable from oil and natural gas marketers are normally collected on the 25th day of the month following production. The Company's policy to mitigate credit risk associated with these balances is to establish marketing relationships with a number of large purchasers and by entering into sales contracts with only established, credit-worthy counterparties. The Company historically has not experienced any collection issues with its oil and natural gas marketers.

Receivables from joint operators are typically collected within one to three months of the joint venture bill being issued. The Company attempts to mitigate the risk from joint venture receivables by obtaining the partners' pre-approval of significant capital expenditures. However, the receivables are from participants in the oil and natural gas sector and collection of the balances is dependent on industry factors such as commodity price fluctuations, escalating costs and the risk of unsuccessful drilling. In addition, further risks exist with joint operators as disagreements occasionally arise that may increase the potential for non-collection. The Company does not typically obtain collateral from oil and natural gas marketers or joint operators; however, the Company can withhold its production from joint operators in the event of non-payment.

For the year ended December 31, 2021 and 2020, HHR had four external customers that constituted more than 10 percent of commodity sales.

As at December 31, 2021, the maximum exposure to credit risk for loans and receivables at the reporting date by type of customer was:

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Oil and gas marketers	43,206	25,688
Joint venture	528	174
GST input tax credit	2,965	1,030
Risk management contracts	—	2,852
Other	2,734	554
Accounts receivable	49,433	30,298

HHR's allowance for doubtful accounts was \$0.1 million as at December 31, 2021 (December 31, 2020 – \$0.1 million). Based on industry experience, the Company considers its joint interest accounts receivable to be in default when the receivable is more than 90 days past due. When determining whether amounts that are past due are collectible, management assesses the creditworthiness and past payment history of the counterparty as well as the nature of the past due amount.

Risk management contracts

HHR executes with each of its risk management counterparties an International Swap and Derivatives Association ("ISDA") Master Agreement, which is a standard industry form contract containing general terms and conditions applicable to many types of derivative transactions. As of December 31, 2021, all of the risk management counterparties have entered inter-creditor agreements with the Company's lender to eliminate the need to post any collateral. HHR's risk management counterparties are all financial institutions that are engaged in similar activities and have similar economic characteristics that, in general, could cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. HHR does not require the posting of collateral for its

benefit under its risk management agreements. However, HHR's ISDA Master Agreements generally contain netting provisions whereby if on any date amounts would otherwise be payable by each party to the other, then on such date the party that owes the larger amount will pay the excess of that amount over the smaller amount owed by the other party, thus satisfying each party's obligations. These provisions generally apply to all risk management transactions or all risk management transactions of the same type (e.g., commodity, interest rate, etc.), with the particular counterparty.

HHR's risk management contracts are subject to master netting agreements that create a legally enforceable right to offset by counterparty. The following is a summary of HHR's financial assets and financial liabilities that were subject to offsetting at December 31, 2021 and December 31, 2020. The net asset amounts represent the maximum exposure to credit risk for risk management contracts at each reporting date.

December 31, 2021	Amount Offset		Net Amount Presented
	Gross Assets (Liabilities)	Gross Assets (Liabilities)	
<i>(Cdn\$ thousands)</i>			
Current:			
Risk management contract assets	289	—	289
Risk management contract liabilities	(23,344)	—	(23,344)
Long-term:			
Risk management contract liabilities	(3,050)	—	(3,050)
Net liability	(26,105)	—	(26,105)

December 31, 2020	Amount Offset		Net Amount Presented
	Gross Assets (Liabilities)	Gross Assets (Liabilities)	
<i>(Cdn\$ thousands)</i>			
Current:			
Risk management contract assets	5,195	—	5,195
Risk management contract liabilities	(14,652)	—	(14,652)
Net liability	(9,457)	—	(9,457)

(ii) Liquidity Risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting obligations associated with financial liabilities. The Company addresses its liquidity risk through its capital management of cash, working capital, credit facility capacity, equity issuance along with its planned capital expenditure program. As outlined in note 6, at December 31, 2021, the Company had \$68.7 million borrowing capacity under the credit facility.

In the next twelve months, HHR's credit facility will undergo two borrowing base redeterminations. The Company has determined that its current financial obligations, including current commitments (note 21), are adequately funded from the available borrowing capacity and from working capital derived from operations. However, any reduction in the borrowing base could result in a material impact to HHR's liquidity. Management believes that future funds generated from operations and equity issuances under the investment agreements entered into in 2020 will be sufficient to settle HHR's financial liabilities.

The following table summarizes timing of cash flows for the Company's financial liabilities at December 31, 2021:

<i>(Cdn\$ thousands)</i>	< 1 Year	1 to 5 Years	Total
Accounts payable and accrued liabilities	116,866	—	116,866
Estimated interest on bank debt and letters of credit	4,130	3,165	7,295
2020 Senior Notes and estimated interest	—	180,834	180,834
Risk management contracts	23,344	3,050	26,394
Lease liabilities	1,030	3,927	4,957
Total financial liabilities	145,370	190,976	336,346

Estimated interest rates for future periods related to the credit facility were calculated using the published Canadian prime lending rate, plus an applicable margin and bankers' acceptance rates in place as at the period end, based on the amended credit facility agreement terms and the Company's proportion of debt outstanding under each interest option as at December 31, 2021. Estimated interest was computed based on the estimated interest rate and the principal balance outstanding as at December 31, 2021. The existing maturity date in the amended credit facility agreement is May 31, 2023, with an option to extend for an additional 364 days at the lenders' discretion. Based on historical renewals on an annual basis, the principal balance of outstanding bank debt is not assumed to mature in the next five years.

The contractual maturity analysis assumes that both the principal amount of the 2020 Senior Notes and any PIK interest accrued is outstanding for the full term to maturity on July 10, 2024. Future PIK interest and principal payments have been converted from USD to CAD using the December 31, 2021 foreign exchange rate.

(iii) Market risk

Market risk is the risk that changes in market prices, such as commodity prices, foreign exchange rates and interest rates will affect the Company's income or the value of the financial instruments. The objective of market risk management is to manage and control market risk exposure within acceptable parameters, while optimizing the return. For the fair value on the Company's risk management contracts, see Commodity Price Risk section below.

The Company may use risk management contracts to manage market risks as disclosed below. All such transactions are conducted within risk management tolerances that are reviewed by the Board of Directors.

(iv) Currency Risk

Currency risk is the risk that the fair value of future cash flows will fluctuate as a result of changes in foreign exchange rates. Substantially all of the Company's petroleum and natural gas sales are conducted in Canada and are denominated in Canadian dollars; however, Canadian commodity prices are influenced by fluctuations in the Canada to US dollar exchange rate as global oil prices are generally denominated in US dollars.

The Company is also exposed to currency risk in relation to its 2020 Senior Notes, which are denominated in US dollars. A 10% strengthening (weakening) of the US dollar would have contributed a \$13.5 million increase (decrease) to the Company's net loss before tax for the year ended December 31, 2021 (year ended December 31, 2020 – \$12.0 million), resulting from the revaluation of the 2020 Senior Notes.

(v) Interest Rate Risk

Interest rate risk is the risk that future cash flows will fluctuate as a result of changes in market interest rates. The interest charged on the credit facility fluctuates with floating interest rates. The Company is exposed to interest rate risk related to borrowings drawn under the credit facility.

An increase or decrease in the interest rates by 1% would have increased or decreased interest expense by \$1.1 million for the year ended December 31, 2021 (year ended December 31, 2020 - \$2.4 million).

(vi) Commodity Price Risk

Commodity price risk is the risk that the fair value of future cash flows will fluctuate as a result of changes in commodity prices. Commodity prices for oil and natural gas are impacted not only by the relationship between the Canadian and United States dollars but also worldwide economic events that influence supply and demand.

HHR enters into risk management contracts to manage its exposure to commodity price fluctuations, which have served to protect and provide certainty on a portion of the Company's cash flows.

The following tables list the fair value of all outstanding risk management contracts by commodity type:

December 31, 2021	Crude Oil	Natural Gas	NGL	Total
<i>(Cdn\$ thousands)</i>				
Risk management contracts - current asset	276	13	—	289
Risk management contracts - current liability	(13,046)	(429)	(9,869)	(23,344)
Risk management contracts - long-term liability	(693)	(2,357)	—	(3,050)
Total net liability	(13,463)	(2,773)	(9,869)	(26,105)

December 31, 2020	Crude Oil	Natural Gas	Total
<i>(Cdn\$ thousands)</i>			
Risk management contracts - current asset	—	5,195	5,195
Risk management contracts - current liability	(11,954)	(2,698)	(14,652)
Total net (liability) asset	(11,954)	2,497	(9,457)

The following table summarizes commodity risk management contracts outstanding as at December 31, 2021:

Remaining Term	Reference	Total Daily Volume (bbls/d)	Weighted Average (Price/bbls)
Crude Oil Swaps			
Jan 1, 2022 – Dec 31, 2022	CDN\$ WTI	1,000	72.95
Jan 1, 2022 – Jun 30, 2022	US\$ WTI	1,000	75.15
Jan 1, 2022 – Dec 31, 2022	US\$ WTI	2,600	66.94
Jan 1, 2023 – Dec 31, 2023	US\$ WTI	1,100	65.00
NGL Swaps			
Jan 1, 2022 – Dec 31, 2022	CDN\$ OPIS	1,000	27.50

Remaining Term	Reference	Total Daily Volume (MMbtu/d)	Weighted Average (US\$/MMbtu)
Natural Gas Swaps			
Jan 1, 2022 - Dec 31, 2022	US\$ Dawn	30,000	3.50
Jan 1, 2023 - June 30, 2023	US\$ Dawn	30,000	3.04

The following tables show the breakdown of realized and unrealized gains and losses recognized by commodity type:

Year Ended December 31, 2021	Crude Oil	Natural Gas	NGL	Total
<i>(Cdn\$ thousands)</i>				
Realized loss on risk management contracts	(62,112)	(23,452)	(9,843)	(95,407)
Unrealized loss on risk management contracts	(1,509)	(5,271)	(9,869)	(16,649)
Loss on risk management contracts	(63,621)	(28,723)	(19,712)	(112,056)

Year Ended December 31, 2020	Crude Oil	Natural Gas	Total
<i>(Cdn\$ thousands)</i>			
Realized gain (loss) on risk management contracts	67,322	(1,201)	66,121
Unrealized (loss) gain on risk management contracts	(18,758)	405	(18,353)
Gain (loss) on risk management contracts	48,564	(796)	47,768

The Company's operational results and financial condition are largely dependent on the commodity price received for its oil and natural gas production. Commodity prices have fluctuated widely in recent years due to global and regional factors including supply and demand fundamentals, inventory levels, weather, economic and geopolitical factors.

HHR manages the risks associated with changes in commodity prices by entering into a variety of risk management contracts. The Company assesses the effects of movement in commodity prices on income before tax. When assessing the potential impact of these commodity price changes, the Company believes a 10% volatility is a reasonable measure. A 10% change in commodity prices would have resulted in the following impact to unrealized gains (losses) on risk management contracts and net income before tax, assuming all other variables, including the Canadian/United States dollar exchange rate, remain constant, for the year ended December 31, 2021:

<i>(\$000s)</i>	Increase 10%	Decrease 10%
Crude oil	(17.2)	17.2
Natural gas	(7.2)	7.2
NGL	(2.0)	2.0

(c) Capital Management

Hammerhead's objective when managing capital is to maintain a flexible capital structure and sufficient liquidity to meet its financial obligations and to execute its business plans. The Company considers its capital structure to include shareholders' equity, the funds available under outstanding debt agreements, funds from operations and working capital. Modifications to Hammerhead's capital structure can be accomplished through issuing common and preferred shares, issuing new debt or replacing existing debt, adjusting capital spending and acquiring or disposing of assets, though there is no certainty that any of these additional sources of capital would be available if required.

Hammerhead's short-term capital management objective is to fund its capital expenditures using primarily funds from operations, noting value-creating activities may be financed with a combination of funds from operations and other sources of capital. Adjusted EBITDA indicates the Company's ability to generate funds from its asset base on a continuing basis, for future development of its capital program and settlement of financial obligations. Adjusted EBITDA is not a standardized measure and therefore may not be comparable with the calculation of similar measures by other entities.

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Net profit (loss) before income tax	(71,821)	53,410
Add (deduct):		
Unrealized loss on risk management contracts	16,649	18,353
Optimization fees	19,708	670
Share-based compensation	14,039	7,155
Depletion and depreciation	127,333	135,184
Finance expense	21,264	37,344
(Gain) loss on foreign exchange	(350)	817
Loss (gain) on warrant liability	96	(3,981)
Gain on debt redemptions of financial liabilities	—	(88,160)
Loss on asset disposition	13,813	—
Other income, excluding transportation income	(1,022)	(4,639)
Adjusted EBITDA	139,709	156,153

Net debt is used to assess and monitor liquidity at a point in time, while net debt to adjusted EBITDA assists the company in monitoring its capital structure and financing requirements. Net debt, and net debt to adjusted EBITDA are not standardized measures and therefore may not be comparable with the calculation of similar measures by other entities.

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Total bank debt	106,300	163,600
Total term debt	134,747	120,435
Adjusted working capital deficit ¹	76,528	26,039
Total net debt	317,575	310,074
Adjusted EBITDA	139,709	156,153
Net debt to adjusted EBITDA	2.27	1.99

¹ Adjusted working capital deficit is calculated as current liabilities less current assets, excluding any bank debt classified as current.

20. RELATED PARTY TRANSACTIONS

All related party transactions occurred in the normal course of operations.

Key management personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company. Hammerhead has determined that the key management personnel of the Company consists of its officers and directors. The following table summarizes compensation paid or payable to key management personnel of the Company:

<i>(Cdn\$ thousands)</i>	December 31, 2021	December 31, 2020
Salaries, bonuses, benefits and director fees	4,852	4,101
Share based compensation	9,071	5,259
Total key management compensation	13,923	9,360

During the year ended December 31, 2021, key management personnel were granted an aggregate of 19.5 million RSUs (December 31, 2020 – nil) and nil stock options (December 31, 2020 – 0.6 million stock options with an average exercise price of \$0.50 per share).

At December 31, 2021, \$5.6 million in limited recourse loans previously advanced to key management personnel remained outstanding (December 31, 2020 - \$5.6 million). The loans bear interest at a fixed rate of 1% per annum, which resulted in the receipt of \$0.1 million in cash interest received by the Company from key management personnel during the year (December 31, 2020 – \$0.1 million).

21. COMMITMENTS

At December 31, 2021, the Company is committed to future payments under the following agreements:

<i>(Cdn\$ thousands)</i>	Year 1	Year 2	Year 3	Year 4	Year 5	Thereafter	Total
Office buildings ¹	912	912	788	763	763	763	4,901
Firm transportation & processing	94,533	101,171	98,816	87,740	67,357	219,767	669,384
Total annual commitments	95,445	102,083	99,604	88,503	68,120	220,530	674,285

¹ Relates to non-lease components and non-indexed variable payments.