



# ADAPTING TO CHANGE

2021 Environmental, Social, and Governance Report



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## Message from Our President & CEO

2020 was a challenging year. In March, the world rapidly transformed as oil prices collapsed and COVID-19 emerged and strained health care systems. The global economy fell by 3.5%, and global demand for energy fell by 4% while demand for oil fell by a record 20% in April 2020 before settling at -9% while gas fell by 2%. These challenges threatened the health and resiliency of individuals and companies. Companies and individuals acted with tenacity and agility to respond to the ever changing conditions.

At Hammerhead Resources, we took measures to ensure our stability as our resiliency was being tested. We reduced our capital spending, managed debt, maintained our talent base and prioritized the safety of our people, communities and assets. As COVID-19 emerged in Alberta, we developed a pandemic plan to enable us to deal with any potential or actual events, which could impact the health and welfare of our workforce and our operations; this plan was created to support our existing operational and emergency response plans and ensure our team had the knowledge, skills, and training to effectively respond to a pandemic. As part of this training, we examined risks that the pandemic could have on our business, risks such as: personnel, physical, information technology, regulatory compliance, company forecasts, and financial. Then, in early March, as part of our response to COVID-19, we enacted our Pandemic Plan and mandated Hammerhead pandemic safety measures for all Hammerhead personnel, complying with Alberta Health Services' (AHS) and the Province of Alberta's mandatory health and safety measures. We focused on providing a safe environment for our critical drilling, completions, and operation's teams and restricted public access to our sites. We implemented our business continuity plan and seamlessly transitioned our office personnel to working from home in large part through the diligent support of our IT Team. We addressed both Pandemic and ESG related risks, while maintaining strong financial discipline with a focus on generating free cash flow and returns. We continued to focus on working to achieve compliance in our operations and working towards achieving our corporate vision of becoming a top Montney Producer.

Despite being hit hard by the disruption caused by COVID-19, 2020 was a milestone year for Hammerhead in our ongoing work in sustainability and continuous improvement. We released our inaugural ESG report; we continued to produce oil and gas safely, responsibly, and profitably for the benefit of our stakeholders, communities, and the world while conducting our business with respect and care and delivering maximum shareholder value. We increased our production, reaching a new average of 30 Mboe/d. We established an ESG lead position and formed an ESG Steering Committee. We started exploring



and investing in new initiatives and technologies to reduce our carbon footprint, seeking to better understand how we will follow through on our commitment to become net-zero by 2050. We completed our first non-venting multi-well pad, and we set out a target to start reducing our emissions intensity. We also made significant strides in our ESG reporting and we are proud of the progress we have made to date. However, we know we need to continually raise the bar to meet and exceed the expectations of our communities and stakeholders.

Moving forward, we intend to further refine our sustainability goals and mission as we continue working to identify the short-term and long-term climate-related risks and opportunities facing our business, industry, and stakeholders. We are working to identify these risks throughout each of our departments, so we can continue to improve our climate-related disclosures through more robust, detailed frameworks in the future. In our 2021 Report, we expanded our framework to include the United Nations' (UN) Sustainable Development Goals (SDGs), the Global Reporting Initiative's (GRI) Sustainability Reporting Standards, and Sustainability Accounting Standards Board (SASB) Standards. This combination of frameworks enables Hammerhead to report on our sustainability impacts transparently and credibly. We are planning to start aligning our disclosures with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in our upcoming 2022 report, which include conducting climate scenario analyses aligned with those outlined by the International Energy Agency (IEA). This approach will further demonstrate the resiliency of our business strategy while we transition to a low-carbon economy.

Mr. Scott Sobie  
President & CEO



### Accountability

to our plans, values, and people

### Innovation

focused on business, technical, and operational compliance

### Debate

open, constructive, and challenging conversations to push us to new ideas

### Respect

due regard shown for the abilities and efforts of our colleagues and stakeholders

 INCREASED PRODUCTION  
**30 Mboe/d average in 2020**

 DECREASED SPILL VOLUME  
**2 m<sup>3</sup> in 2020**



## About this Report

This 2021 Environmental, Social, and Governance (ESG) Report is Hammerhead Resources Inc.'s second ESG report, following our inaugural report in 2020. Hammerhead publishes a full-length ESG Report annually. The information within this Report is intended as a resource for our stakeholders, illustrating our progress and continued commitment to economic, environmental, and social performance and long-term value creation and growth. This report details the activities, initiatives, and performance progress made by Hammerhead during the 2020 operating year. The data for comparative periods is presented, when available, to provide trending information as well as context for HHR's performance results.

This report was compiled using a combination of frameworks, including the UN's SDGs, the GRI's Sustainability Reporting Standards, SASB's Oil and Gas Exploration and Production Standards, and TCFD's framework as a guide. This combination of frameworks enables Hammerhead to report on our sustainability impacts transparently and credibly. Details related to compliance with these standards are in the Reporting Framework Tables found at the end of this report. The information herein was reviewed by Hammerhead's ESG Team and Burnet, Duckworth, and Palmer LLP.

The terms HHR, Hammerhead, Hammerhead Resources, our, we, us, the Company, the Organization, and the Corporation refer to Hammerhead Resources Inc.

Refer to HHR's 2021 ESG Report Disclaimers. For any questions or concerns regarding this report please contact our ESG Team at [sustainability@hhres.com](mailto:sustainability@hhres.com).



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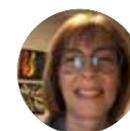
# ABOUT HAMMERHEAD

Hammerhead Resources is a leading Upstream Alberta-based, growth-oriented, private-equity owned energy company committed to delivering strong and sustainable corporate, operational, environmental, and financial performance.

Hammerhead promotes day-to-day innovation and upholds the corporate values of accountability, innovation, debate, and respect. We are a tight-knit community made up of strong technical and innovative minds with 141 employees and contractors across our operations in northern Alberta, our field office in Grande Prairie, and our head office in Calgary. We are committed to meeting and exceeding regulatory compliance measures, focusing on reducing emissions through new technologies, and working to improve efficiencies and resiliency while adding value for our stakeholders and producing responsible, reliable, and sustainable energy needed to meet society's energy demands.

*"HHR provides an essential service, providing energy to the people of Alberta and beyond. It has been a complete team effort to ensure our staff have had the tools to stay safe, whether working in the field, office, or from home through this pandemic."*

Nicki Stevens, SVP Production, Marketing & ESG





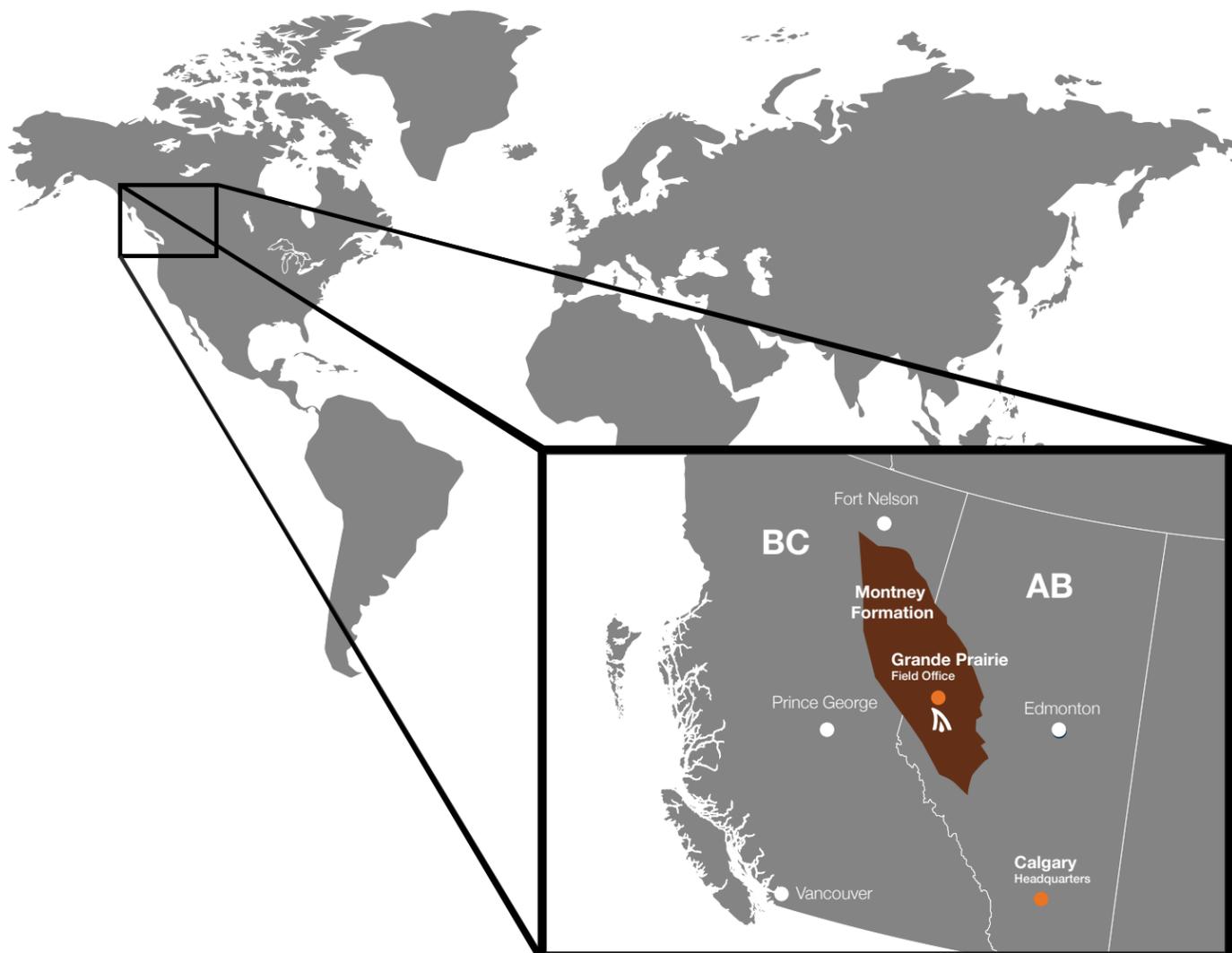
2020 At a Glance

- Our Approach to Sustainability
- Materiality
- Covid-19 Safety & Continuity

*In the spirit of meaningful and respectful relationship building with Indigenous peoples where Hammerhead conducts its business and operations, we acknowledge the land as an important part of reconciliation. We acknowledge the many First Nations, Métis and Inuit whose footsteps have been imprinted on the land for generations. We show appreciation for the Elders who have gone before us and those still with us today.*

*We are grateful to live, learn and work in our head office located within the traditional territories of Niitsitapi (Blackfoot) and the people of the Treaty 7 region in Southern Alberta, which includes the Siksika, the Piikani, the Kainai, the Tsuut'ina and the Stoney Nakoda First Nations, including Chiniki, Bearpaw, and Wesley First Nations and home to Métis Nation of Alberta, Region 3.*

*We are equally grateful to live, learn and work with our field operations in the traditional territories of the Cree, Dene, Nakoda Sioux, Iroquois and Inuit as well as Métis Nation of Alberta Region 4 who share a deep history with this land.*



## 2020 at a Glance

**Focused on the light-oil rich Montney play, specifically in the Gold Creek, Karr, and Simonette areas in northwest Alberta.**



309 MMboe 2P Reserves



14.7 Net Wells Completed  
12.4 Net Wells Brought on Production



18 Disposal Wells



Midstream Partnership, utilizing third-party gas processing infrastructure



Working interest in all plants we produce to

300 km of active HHR pipelines

Sales oil egress through Pembina's Peace Pipeline

Sales gas egress through TCPL

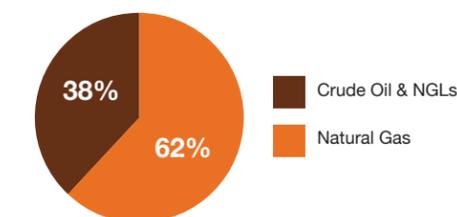
**116**  
Wells Active

**6**  
Wells Shut-In

**30**  
Mboe/d average

**35.5**  
Mboe/d production record achieved

**10,991,964**  
BOE Total Production



11-12-068-04W6 Battery



2020 At a Glance

Our Approach to Sustainability

Materiality

Covid-19 Safety & Continuity



## Our Approach to Sustainability

For 2020, we aligned our sustainability progress with the UN SDGs. The SDGs address 17 of the world's pressing economic growth, social development, and environmental sustainability challenges and represent the world's comprehensive plan to achieve a sustainable future and limit climate change risks. This plan translates global needs and material risks into actionable goals, strategies, and opportunities, requiring participation from governments and industries, including our own. Currently, the oil and gas industry provides approximately 55% of the world's energy supply. Access to affordable, reliable, and sustainable energy is essential for economic growth, employment, education, poverty reduction, and global health, but the industry's dependency on natural, social, and human capital can positively and negatively impact a range of areas covered by the SDGs. In our inaugural report, we looked at sustainability from a global to local viewpoint, working to understand how we create sustainable value in a low carbon economy. We started with the UN's SDGs, working to understand the 17 goals driving global change. In this report, we utilized our understandings and mapped our material issues against the SDGs that we believe are most applicable to our activities as illustrated throughout this report by the SDG icons. In future reports, we plan to continue to assess these connections and demonstrate our contributions to these goals.

In 2020, socio-economic and socio-political trends combined with the COVID-19 pandemic decreased global energy demand. Hence, 2020 became a year of corporate reflection, resiliency, and transformation as producers re-examined how they do business in an uncertain market. This required Hammerhead to re-evaluate how we move forward to meet the energy demands of today, create a better tomorrow, minimize climate risk to and impacts from our operations to people and the environment, and continue to grow and evolve as a sustainable energy company.

### OUR SUSTAINABILITY GOAL

To safely, sustainably, and profitably produce oil and gas for the benefit of our stakeholders.

### OUR SUSTAINABILITY MISSION

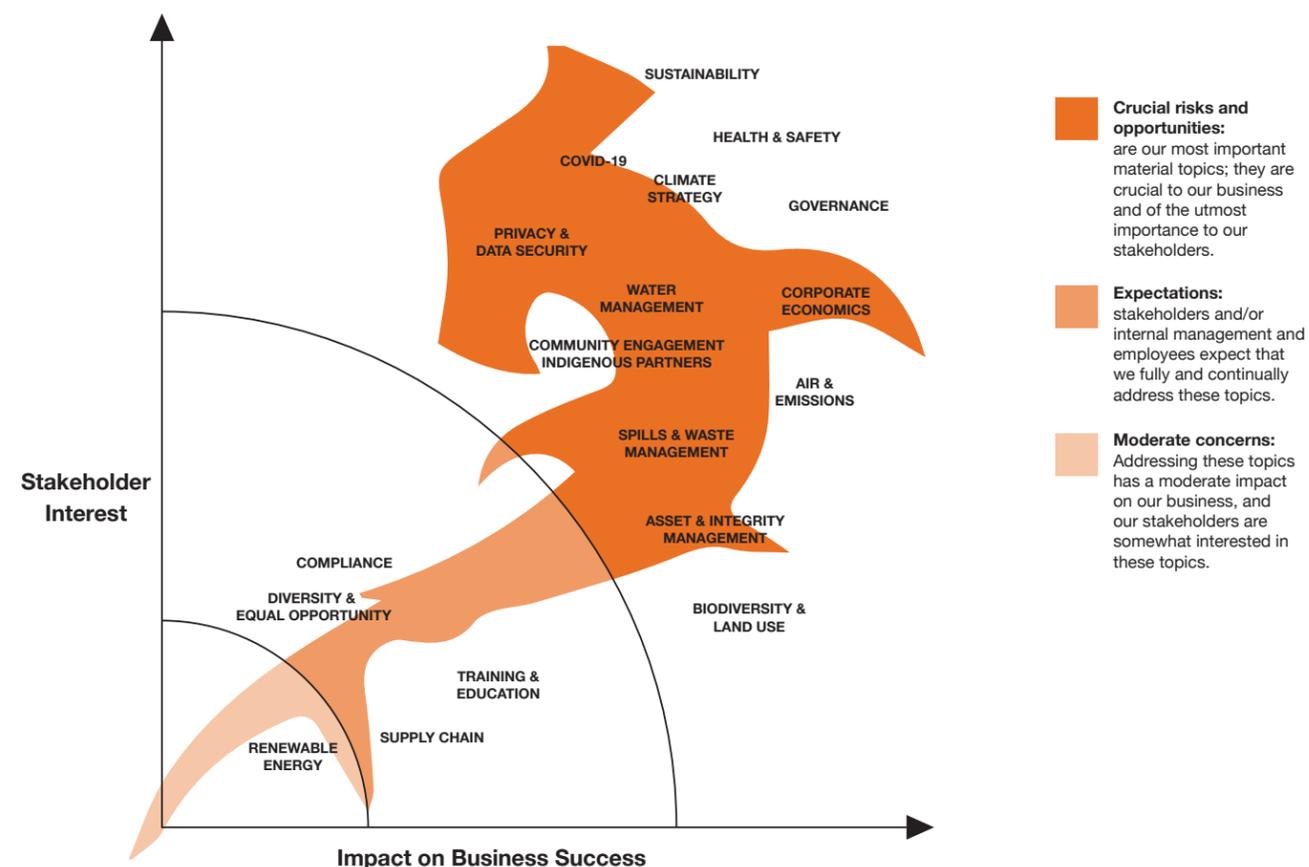
To conduct our business with respect and care for our employees, external stakeholders, communities, and the environment in which we operate while delivering maximum shareholder value.

### WE STRIVE TO:

- Conduct our business with high standards of ethical conduct and corporate governance
- Integrate sustainability into our governance and corporate strategy
- Meet or exceed all rules, regulations, policies, and standards governing and supporting energy developments in Alberta
- Provide a safe work environment for our staff, and the communities in which we operate
- Protect the environment for future generations
- Engage stakeholders throughout our projects and work collaboratively
- Contribute meaningfully to the communities we work and live in

## Materiality

At Hammerhead, our approach to sustainability and the topics and metrics we measure and report on continues to evolve. In our 2020 ESG Report, Better Every Day, we examined sustainability topics that were material to our business and reflected our Company's economic, environmental, and social impacts in 2019, looking back to 2017, evaluating topics based on their risk, separating them into crucial risks and opportunities, expectations, and material concerns. In this 2021 ESG Report, Adapting to Change, we conducted an expanded Materiality Assessment with additional stakeholders. In future reports, we will continue to expand our materiality input network to broaden understanding and perspective on our material impacts. We examined key ESG frameworks, global trends, industry standards, and regulations; we engaged stakeholders through surveys to determine the material topics based on how our stakeholders' perceived risks. The resulting materiality topics were reviewed and approved by HHR's ESG Team. This report details the approved topics, discusses how we currently address and plan to mitigate the ongoing risk, and considers opportunities to create goals and targets as we continue to develop our ESG framework and reporting.

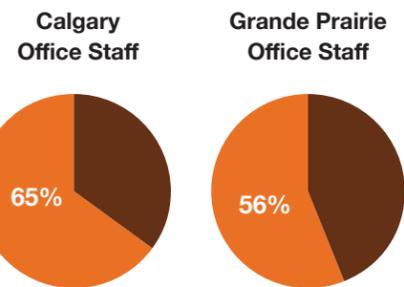




## Covid-19 Safety & Continuity



### WORK FROM HOME (% of 2020)



2020 was the year the world sped towards a possible apocalyptic end. At COVID-19's onset, the world grappled with little information to understand the implications of this unknown virus. Hammerhead was no different, so we focused on the health and safety of our stakeholders as we collectively responded to this crisis while ensuring operational continuity and working to create a better future. In March, the Alberta Provincial Government (GOA) and AHS introduced work from home measures for non-essential workers to offset the virus' spread. Our leadership chose to follow and implement the most stringent measures outlined by the GOA and AHS. We shifted most of our personnel to remote-based working for 63% of the year through two transition periods.



Pandemic Response Team: Marcel Preteau, Nicki Stevens, Rhonda Hansen, Judy Campbell, Ann Gosselin, Bob Kyllö, Darrel Turner, Jill Terakita-Jones

We formed a Pandemic Response Team to stay current on GOA and AHS announcements, formulate and communicate our compliance strategies, and advise the Senior Management Team on how best to move forward. We provided clear, open, and honest communication to our personnel while addressing HHR's basic needs of safety, stability, and security.

Prior to the second transition back to home, in October, our Pandemic Response Team introduced the GO-EVO App to all HHR personnel and had temperature stations installed in our offices. The GO-EVO App required staff to answer mandatory COVID-19 screening questions, take a mandatory temperature check prior to entering the office, and sign off once all tasks were completed.



## Throughout these unprecedented times, Hammerhead personnel showed resiliency, adaptability, and teamwork.

Our IT Team enabled our staff to seamlessly transition to working from home by successfully addressing all software and hardware issues in a timely and efficient manner, improving our communication amidst the chaos, and ensuring operational continuity while defending against cyber-security fraud and breach attempts.



HHR's HR department created weekly newsletters to keep us connected with majority of personnel working from home and critical operations employees carrying on in the office. Our first newsletter was released April 10, 2020. The newsletters provided key updates on COVID-19, HSE, and IT. They recapped the week's operations and kept spirits up by engaging employees in weekly challenges and contests.

*"Since I can't travel to my favourite holiday place, I plan to wear one of my Hawaiian shirts at least once every week until we can."*

**Bruce Newberry, Senior Marketer**  
Favourite Holiday Shirt Contest



*"As we pursue our growth strategy, we strive to maintain the small company nimbleness and decisiveness that got us here. 2020 certainly put these values to the test as we were forced to pivot and respond to unexpected marketplace and workplace changes. The competence, motivation, and engagement shown by our business support teams deserves a ton of recognition for our successes over the past year!"*

**Marcel Preteau,**  
Manager, Automation,  
Integration &  
Performance Reporting





# ENVIRONMENT

HHR is committed to sustainable development and protection of the environment. We are actively working to address climate change risks and reduce our environmental impacts while continuously looking for ways to innovate, mitigate, and reduce our carbon footprint. Our Environmental Management System (EMS) includes our environmental standards, regulatory requirements, and environmental procedures while our Health Safety and Environment (HSE) Team provides environmental oversight to our teams through auditing and inspections, ensuring environmental stewardship.

*“Responsible, sustainable development results in good environmental decisions, ensuring our actions today contribute to our shared future.”*

Scott Sobie, President & CEO



Climate Change

Our Strategy

Air &amp; Greenhouse Gas Emissions

Low Carbon Technology



## Climate Change



Climate change is driving the global transition to a low carbon economy. The UN's Framework Convention on Climate Change's (UNFCCC) 2015 Paris Agreement aims to keep the mean global temperature from rising above 2 degrees Celsius (°C) from pre-industrial levels and achieve net-zero emissions by 2050. This will require capping greenhouse gas (GHG) emissions and taking measures to move to a low-carbon future to offset climate change risks. Technological developments and innovative practices will be key to mitigating these risks and reducing emissions going forward.

### Our Strategy

HHR is committed to decreasing our emissions and becoming net zero by 2050 or sooner. To date, we are working to fully identify and set targets to reduce our GHG emissions. This includes monitoring and repairing fugitive emissions leaks and pursuing low carbon initiatives through new technologies while constructing new sites and modifying existing sites. We are examining acute impacts from extreme weather conditions through our pipeline geohazard review preparing for business continuity in the face of these potential disruptions. We are working to understand potential shifts in energy supply and demand during a global pandemic while being compliant with ever changing regulatory requirements (i.e., Canada's commitment to achieving net zero emissions by 2050 and reducing GHG emissions by 30% in 2030; Alberta's initiative to reduce methane by 45% by 2025 from 2014 levels to name a few).



#### DID YOU KNOW

Greenhouse gases are produced when hydrocarbons, such as natural gas and oil, are burned for electricity generation, industrial uses, transportation, and to heat homes and commercial buildings. They trap heat in the earth's atmosphere, causing global temperatures to increase.



Canada produces less than 1.5% of global GHG emissions.

Canada's oil and gas industry produces ~0.3% of global GHG emissions.



<https://www.capp.ca/environment/climate-change/>

## OUR EMISSIONS TARGET: NET ZERO BY 2050

**Climate Change Strategy:** we believe that continuous action is needed to decrease our impacts, so we can maintain our focus on the economic viability of our development actions, reduce the risks of climate change to our business, and explore new low-carbon technologies and innovations.

Our climate strategy will continue to evolve and be refined as new technologies, innovations, and climate risks emerge.

#### What we mean by net zero:

- Achieving a balance between sources of anthropogenic emissions and removal by sinks of greenhouse gases (Paris Agreement, 4.1)
- Having a net-zero carbon footprint

#### What this looks like:

Achieving a balance between our operation's Scope 1 and 2 emissions and the total deductions from sinks and reduction opportunities (e.g., energy efficiencies, carbon capture, use, and storage, land carbon projects, emission offsets, renewable energy technologies and instrumentation, etc.) across our operations

#### The result:

- Economic, lower-emission solutions
- Net zero balance



- Climate Change
- Our Strategy
- Air & Greenhouse Gas Emissions**
- Low Carbon Technology

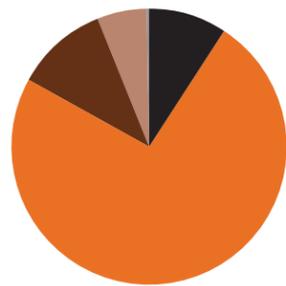


## Air & Greenhouse Gas Emissions



Our operations generate GHG emissions, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), Nitrous Oxide (N<sub>2</sub>O), and atmospheric emissions, including sulphur dioxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), and particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>). These emissions are from combustion, venting, and leaks. They contribute to climate change and impact air quality and the environment. Our air emissions programs monitor, measure, collect, analyze, and report data in compliance with regulatory requirements while we explore opportunities to economically improve our emissions performances and minimize our impacts to the environment and communities. Our facilities are designed to meet Alberta's Ambient Air Quality Objectives (AAAQO's). We track both Scope 1 and Scope 2 emissions. Scope 1 emissions are direct emissions from HHR sources. Scope 2 emissions are indirect emissions from the generation of purchased third-party power. We plan to start delineating our Scope 3 emissions, which include emissions upstream and downstream of our activities, in 2021. We are committed to continually refining our processes and disclosures as we work towards our net-zero goal, understanding that new wells and facilities will have a material impact on our overall emissions and emissions intensity as these new assets are constructed and brought online.

### HAMMERHEAD RESOURCES 2020 GHG EMISSIONS



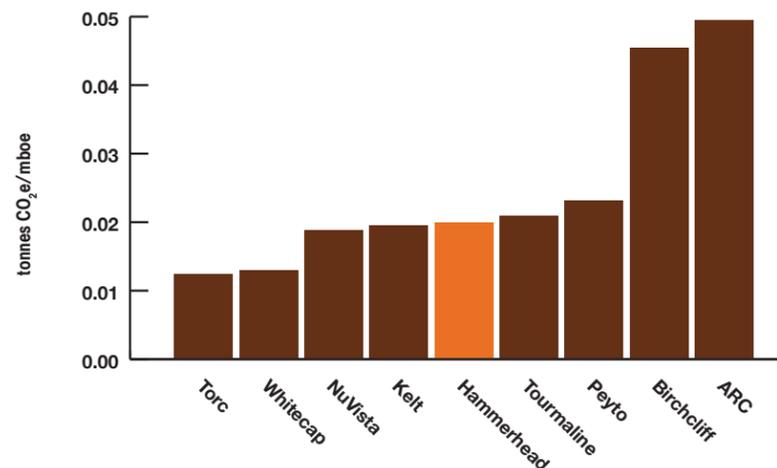
- Electricity
- Drilling and Completions Combustion
- Venting
- Fuel Gas Combustion
- Flaring

### TOTAL EMISSIONS

**222,148**  
tonne CO<sub>2</sub>e

(0.021 CO<sub>2</sub>eT/BOE)

### 2019 SCOPE 1 & 2 EMISSION INTENSITY PEER COMPARISON<sup>1</sup>

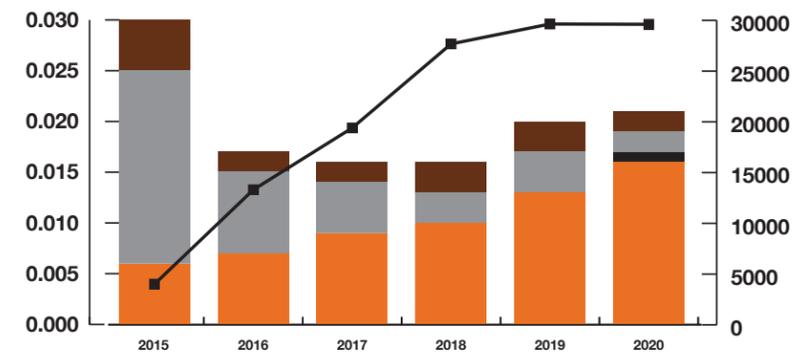


<sup>1</sup> Emissions from competitors sourced through CDP and publicly available ESG reports

## Scope 1 Emissions

HHR's Scope 1 emissions are from fuel gas combustion from our compressors, power generators, and process heaters, including flared emissions and vented emissions. In 2019, we started implementing solutions to reduce our Scope 1 emissions. In 2020, we refined our Scope 1 emissions to capture drilling and completions combustion, which we did not previously track; this disclosure presents a more accurate understanding of our overall direct emissions but resulted in a minor increase in our emissions intensity.

### 2020 SCOPE 1 CO<sub>2</sub>e EMISSIONS INTENSITY



- TIER Fuel Emissions Intensity BOE
- Flare Emissions Intensity
- D&C Fuel
- Vent Emissions Intensity
- Daily Production

**VENTED EMISSIONS**  
**1.7%**  
Decrease

Equivalent to  
**728**  
less cars on the road per year



**FLARE COMBUSTION EMISSIONS**  
**11.7%**  
Decrease

Equivalent to  
**5,172**  
less cars on the road per year



**FUEL GAS COMBUSTION EMISSIONS**  
**10.8%**  
Increase

2020 was the first full year of the 11-12-068-03W6 battery operations, increasing our fuel gas emissions.

## Scope 2 Emissions

In 2020, we started tracking and measuring our indirect, Scope 2 emissions. We focused on our Calgary office and Grande Prairie field operations that utilize utility supplied power. In the field, we only purchase utility power for our Simonette field; however, this field was shut-in throughout 2020 due to commodity prices, so it did not generate any Scope 2 emissions. While we anticipate our Scope 2 emissions to be a very small component of our emissions, moving forward, we intend to further delineate our Scope 2 emissions, ensuring our Field Office is incorporated into our calculations.



10-07-068-03W6 Oil Satellite

## 2020 MILESTONES:

- Commenced operations at our first non-venting, instrument air, and solar power site: Gold Creek Oil Satellite at 10-07-068-03W6
- Implemented HHR's Fugitive Emissions Management Program (FEMP) and Methane Reduction and Retrofit Compliance Plan (MRRCP)
- 50 site surveys completed
- 24 Compressor seals tested
- 232 fugitive pneumatic source leaks identified
- 52% of the source leaks repaired
- Completed 25 engine performance tests as part of our Multi-Sector Air Pollutants Regulation (MSAPR) program

## 2021 INITIATIVES

- Disclose and refine our air emissions programs
- Survey and screen our well sites and facilities
- Reduce flaring and methane venting by 10%
- Retrofit and evaluate new third-party emission technologies and initiatives at four existing pads
- Equip a greenfield, zero-venting pad, which will become HHR's new standard for controls
- Complete performance tests and engine checks on MSAPR stationary spark-ignition engines
- Submit HHR's first TIER aggregate compliance report for 2020
- Quantify HHR's NO<sub>x</sub>, SO<sub>x</sub>, VOC, and PM emissions annually
- Start generating offsets as part of our Carbon Offset Portfolio
- Perform compliance scenario analysis to understand future cost of compliance
- Review alternative energy initiatives and implications to HHR

## Low Carbon Technology



### Zero Venting Padsites

#### GEN I

Upstream oil and gas operation devices are generally powered by instrument gas. HHR believes that doing things differently results in continuous improvement. We constructed 10-07-068-03W6 in 2019 with instrument air and used solar power to compress that air, ensuring the site would have negligible emissions. Electrical power is supplied by batteries, which are subsequently charged by two banks of solar panels, powering the instrument air building. In the event additional power is needed to safely run the site, a backup generator would be used in those situations. This site not only reduces HHR's overall methane emissions but also provides an opportunity to generate carbon credit offsets to balance our emissions portfolio as we work towards our net-zero goal. 10-07 was brought onstream in June 2020.

#### GEN II

Using the learnings from our 10-07 site, we participated in a study funded by Emission Reduction Alberta (ERA) and Sustainable Development Technology Canada in partnership with Westgen Technologies to evaluate the commercial feasibility of retrofitting pad sites with similar technology as GEN I. As part of the study, in 2021, we selected two pad sites to retrofit with plans to retrofit two additional pad sites.

### Alternative Power Plant

We are progressing a high efficiency, low emissions, gas driven, electric generation project in the Grande Prairie area to displace 400 MW of existing coal fired generation in Alberta. This project will be onstream in early 2025, utilizing best-in-class turbine technology.



10-07-068-03W6 Solar Installation



Water Use Management

Land

Asset Integrity

Spill Management

## Water Use Management

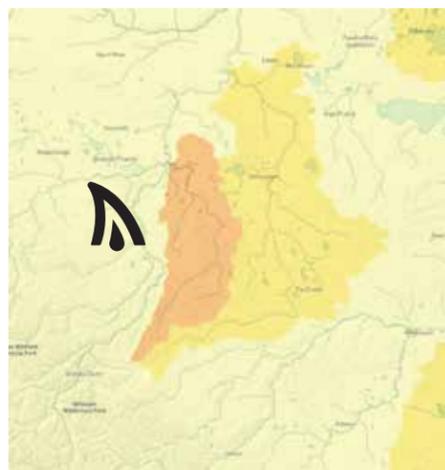


Water is essential to the communities in which we operate; it is a fundamental human right. Yet, water resources are under pressure from population growth, economic development, pollution, and climate change. Water use has grown at twice the rate of the population during the last century. This development has led the World Resources Institute (WRI) to create the Aqueduct Water Risk Atlas (2019), which maps and analyzes current and future water risk around the globe.

At HHR, we use fresh and saline water throughout our operations, which are in a low water risk area, but we are taking proactive measures given our proximity to the medium-high water risk areas. Our engineered storage ponds provide freshwater security when access to the Smoky River is restricted to protect wildlife, aquatic life, and other key environmental sensitivities. Our water strategy continues to be focused on sustainable water sources, strategically selected to reduce environmental impacts and in compliance with Alberta Environment and Parks (AEP) and the Alberta Energy Regulator's (AER) rules, regulations, and standards governing water use and industry best practices. Our goal is to protect our water resources.



HHR Aquatic Assessment



**Overall Water Risk**

Low (0-1)	Low - Medium (1-2)	Medium-high (2-3)	High (3-4)	Extremely high (4-5)
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HHR's Operations overlaid on Aqueduct Water Risk Atlas



In 2020, we worked with Foothills Stream Crossing Partnership (FSCP) to conduct 11 water crossing inspections as part of our efforts to mitigate any existing or potential impacts, ensuring viable aquatic habitat and stream basin viability. In 2021, we are planning to conduct 25 water crossing inspections.



Stream Crossing Inspection of LOC181068



Groundwater Monitoring



**285,769 m<sup>3</sup>**  
total water usage

**95,000 m<sup>3</sup>**  
Water Reserves in HHR  
licensed water reservoirs

**40%**  
increase in our produced  
water injection volumes

## Our Water Process

- Identify, assess, and manage water risks
- Protect groundwater using established well casing and cementing practices
- Monitor surface water to ensure operational impacts are either negligible or mitigated before they become a problem
  - This continues HHR's track record of having minimal Asset Retirement Obligations (ARO), regarding remediation of sites.
- Monitor and protect groundwater on our sites to ensure early detection of environmental issues and be proactive rather than reactive, protecting the integrity of our sites, the surrounding land, and groundwater with minimal future environmental liability on site
- Recycle and inject produced water
- Obtain required regulatory licenses for withdrawals
- Measure and publicly disclose water usage



- Water Use Management
- Land**
- Asset Integrity
- Spill Management

## Land



### Biodiversity & Minimal Impact

Our operations are located within Alberta's Boreal Forest Natural Area in the Central Mixedwood and Lower Foothills natural subregions, which are comprised of forests interwoven by low-lying wetlands and watercourses, providing key habitats for diverse wildlife species and aquatic communities.

As part of our Minimal Impact Philosophy, our Development Team is focused on minimizing our overall footprint, using an integrated, phased approach to the planning and sizing of the well pads they design to maximize the number of wells that can be drilled vertically or horizontally off one location. They work closely with our Land Management Team in choosing the location; our Land Management Team conducts Pre-Disturbance Environmental Site Assessments for these sites to determine and document land-use classifications, topography, drainage, erosion potential, possible wetlands, vegetation species, soil characteristics, and environment sensitivities. We also conduct wildlife sweeps and studies to better understand the areas we will be working in and plan monitoring programs to avoid human-wildlife conflict. Conceptual construction and reclamation plans are completed to mitigate any potential impacts to soil and vegetation on-site and have a plan to support biodiversity restoration at the asset's end of life cycle. Once a site is operational, our Operations Team manages and tracks onsite surface water and ensures vegetation controls are used to inhibit the spread of weeds and minimize biological hazards and impacts.



Evergreen Learning and Innovation Centre  
Inspiring Responsible Resource Development Through Innovation

HHR continues to sit on the advisory committee for the Wetland Centre along with Ducks Unlimited Canada and the Evergreen Learning and Innovation Society. In 2020 HHR, in collaboration with Ducks Unlimited and Pembina Pipeline, helped create a Wetland Interpretive Trail to assist with educating the public, industry and governments on the ecosystems that create different wetlands and their importance to the landscape. Wetlands contribute to biodiversity, clean water, and moderation of climate change, and HHR is proud to support a forum for collaboration and education facilitating a continuously innovative approach to economic development while conserving and protecting wetlands.



### HHR'S MINIMAL IMPACT PHILOSOPHY



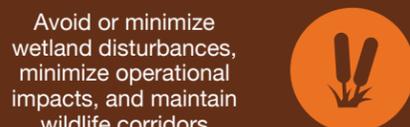
Plan ahead



Minimize required clearing, sensory disturbance to wildlife, and surface disturbances



Monitor wildlife and avoid human-wildlife conflict



Avoid or minimize wetland disturbances, minimize operational impacts, and maintain wildlife corridors



Be considerate of others and leave no trace

- Water Use Management
- Land
- Asset Integrity**
- Spill Management

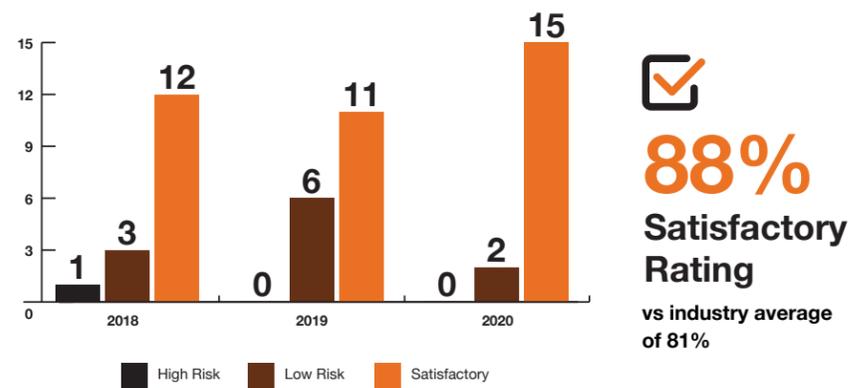


## Regulatory Compliance



We are committed to operating in compliance with the industry, safety, regulatory, and environmental rules, regulations, and standards governing our Industry. All HHR wells and facilities are licensed by the AER, and they meet and exceed current industry safety and environmental standards. In 2020, AER field inspectors monitored and inspected our sites; they found no high risk, 2 low risk, which required HHR mitigation, and 15 satisfactory inspections.

### AER FIELD INSPECTIONS



HHR Signage complies with OGCR

## Pipeline Integrity

We monitor and manage approximately 300 km of pipelines and right of ways (ROW), from the design to construction, operation, maintenance, discontinuation, and abandonment stages, helping to ensure the health and safety of our people, the community, and the environment. We use state of the art monitoring systems, including aerial inspections with IR camera imaging technology and smart pig technology, to detect changes in pipeline operability and integrity, helping to prevent and detect potential releases. We regularly inspect ROWs not only to comply with AER requirements but also to ensure proper operation and maintenance. We also conduct pipeline risk assessments to identify hazards, such as external and internal corrosion, cracking, and mechanical damage, and associated risks and present controls and mitigation measures, as required.

## Pipeline Geohazards

In 2020, we conducted a proactive geohazard baseline assessment of our pipeline system, screening and delineating potential slope hazards (landslides and gully erosions sites) and water course crossings to understand natural earth movement and ensure pipeline integrity, reduce potential impacts, and assess higher risk pipelines moving forward. We are planning to conduct field investigations on the pipeline segments that were identified as having the highest potential consequence in 2021.



HHR Piping

## Asset Integrity



Our Asset Integrity Team works with our Development, Construction, Operations, and Environmental Teams to review and assess our internal practices and determine areas for improvement. Our integrity programs are integral components to the safety and sustainability of our operations.



**0**  
Pipeline Incidents

- Asset Integrity
- Spill Management**
- Waste Management
- Asset Retirement & Reclamation



**Our goal is a zero spill and release environment.**

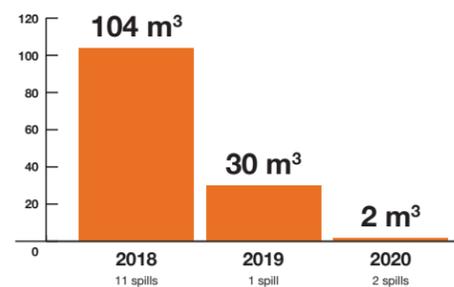


**DID YOU KNOW**

Reportable Spills & Releases in Alberta:

- a pipeline leak or break
- release of a substance that has, is, or could cause an adverse effect
- release of a substance into a water body, watercourse, groundwater, or surface water
- release of a substance off-site
- release of a substance exceeding 2 m<sup>3</sup> onsite that has or may cause an adverse effect
- release of a substance off-site

**REPORTABLE SPILL HISTORY**



Spill Response Remediation

**Spill Management**



Spills have the potential to impact local communities and reduce biodiversity through habitat loss. Our goal is a zero spill and release environment, but, when they do occur, immediate detection and response is key. As part of our Spill Response, we implement containment measures, report spills to the AER, and create assessment and remediation plans. These plans delineate the release and resulting impacts, evaluate contaminant constituents and the possible risk to both on and/or off-site ecological receptors. They confirm the extent of possible impacts and excavation activities required to meet regulatory requirements while safeguarding our workers, the public, and the environment.



**Waste Management**



All energy development projects generate waste; at Hammerhead, we are committed to waste minimization through re-using, recycling, or treating whenever possible. We follow the AER's requirements for waste management, including handling, treatment, and disposal of upstream oilfield waste. We actively manage oilfield wastes to minimize potential environmental, health, and safety impacts, which can result from the production and release of oilfield wastes. We have instituted guidelines and steps to control, manage, reduce, re-use, recycle, recover, characterize, measure, report, track, store, handle, manifest, transport, and dispose of all our oilfield wastes in compliance with the AER's regulatory requirements. A consistent approach to waste management enforces a culture that respects and manages environmental sustainability for future operations.

**Asset Retirement & Reclamation**



We proactively maintain our regulatory obligations, including well suspensions, well abandonments, and site closures and reclamation activities. We actively monitor our active wells and ensure we are in compliance with the AER when we suspend and/or abandon a well. In 2020, we shut-in 9 wells due to unfavorable economics. As part of this process, we classified these wells based on the AER's risk requirements, planned to suspend them following 12 months of inactive status, conducted annual field inspections, as required, and complied with the AER's requirements for inactive and suspended wells. In 2020, we also examined our Crown leases and were able to reclaim 14.85 ha of Crown Land.

**Liability Management Rating (LMR) Program**

In Alberta, LMR is calculated as a ratio of a company's deemed assets (production) to its deemed liabilities (abandonment and reclamation costs). The AER continues to require companies to have an LMR above 1.0, meaning those companies can cover their assets' end of life abandonment, remediation, and reclamation costs. Our average 2020 LMR is less than our 2019 LMR (38.07) as we shut in the Simonette field, which had producing wells but nonetheless, Hammerhead remains far above the industry average.

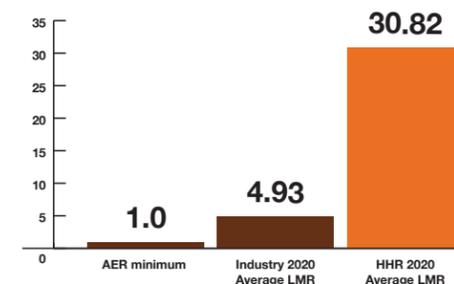
**27 m<sup>3</sup>**  
**Dangerous Oilfield Waste (DOW)**

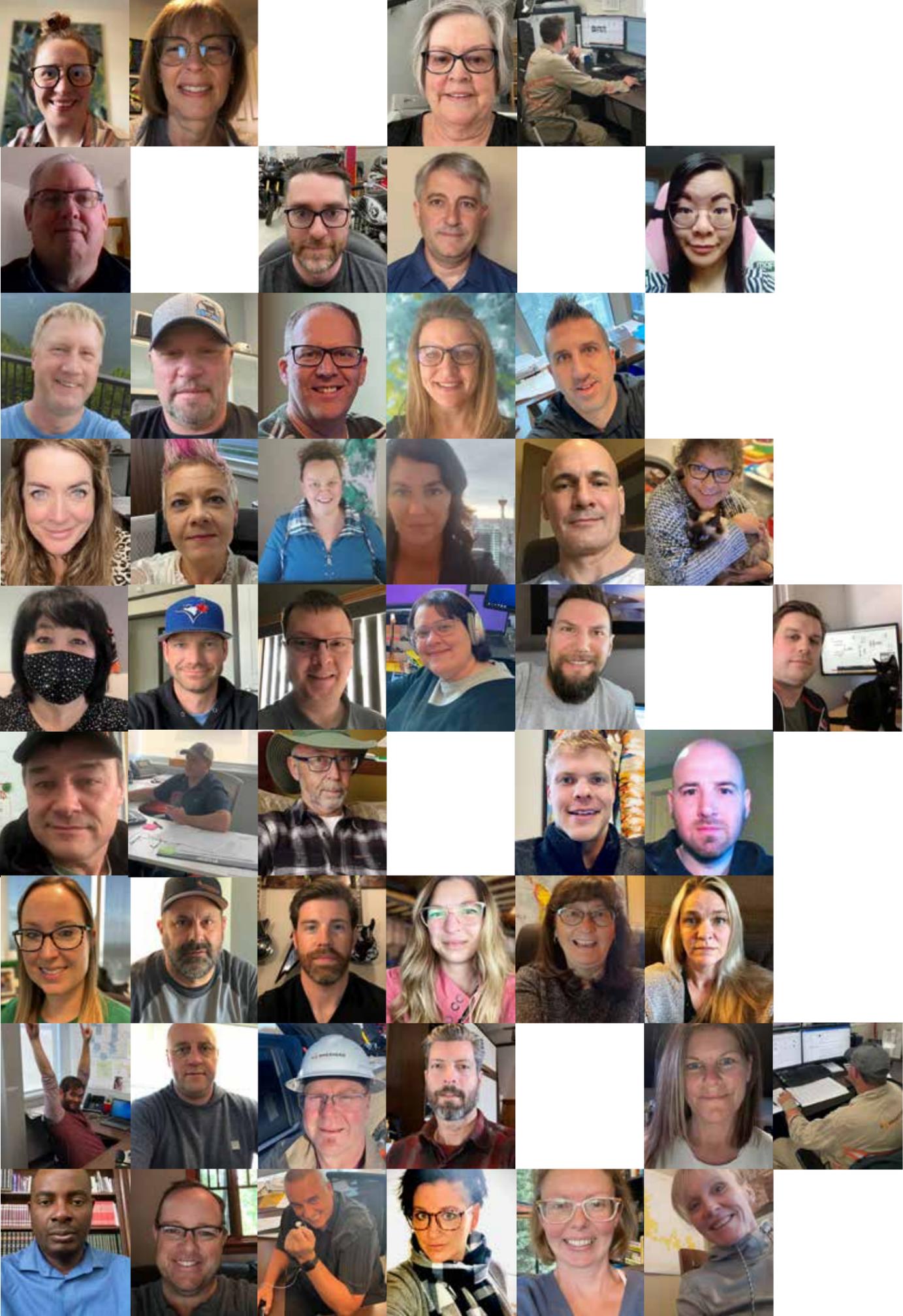
Based on our 2020 Waste Manifests

**1,996 m<sup>3</sup>**  
**NonDOW**

**0**  
**Legacy Assets**

**AER LMR PROGRAM**





# SOCIAL

Increased awareness of environmental and social issues we face as a global community has highlighted the necessity of responsible governance practices at the forefront of every industry. At Hammerhead, we understand the link between successfully managing relationships and a responsible, sustainable business. We believe that safety performance is an integral part of our business success and corporate responsibility and that strong relationships with our employees, the communities we work in, our stakeholders, and integrating with our Indigenous Partners are integral to the success of our projects.

*"In 2020, we followed COVID protocol in our personal lives, tried to stay free and clear of the potential to pass COVID on to coworkers, kept focused on the tasks at hand in the work environment, and tried to stay positive and battle through these unusual times!"*

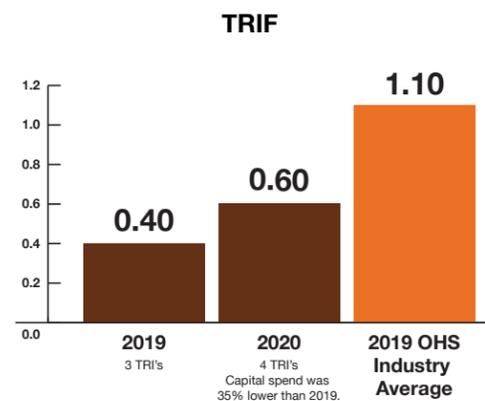
Gold Creek Field Operations Team



- Health & Safety
- Indigenous Partners
- Stakeholder Relations
- Community Engagement



Annually, HHR aims to beat industry average.



## Health & Safety



Despite the COVID-19 pandemic, we maintained our commitment to workplace health and safety throughout 2020. Our strong focus on safety (i.e., prevention and continuous improvement) ensures our employees and contractors have the tools they need to develop and operate our assets in the safest manner possible. HHR's fully engaged field staff drive our HSE culture from the bottom up; however, it is a shared responsibility of our Senior Management, employees, and contractors. This responsibility is guided by our health and safety policies, resources, and processes in place, and our commitment to do zero-harm. We measure our progress using industry-standard metrics: Recordable Injuries, Total Recordable Injury Frequency (TRIF), Lost Time Injuries (LTI), Lost Time Injury Frequency Rate (LTIF). We consistently incorporate lessons learned from all incidents into our standards and processes, minimizing the potential for recurrence.



09-03-068-04W6 Battery

*"The success of our health and safety efforts depends on the cooperation, support, and active involvement of all Hammerhead Resources personnel."*

Darrel Turner, HSE Manager



## RAMP



We design, maintain, and operate our assets with a focus on process safety and asset integrity to safeguard our employees and contractors, protect the public, and minimize potential risks to the environment. We believe that proactive hazard identification (HID) is key to mitigating these risks and eliminating potential incidents from occurring. We developed a hazard prevention program, RAMP, that promotes HIDs as part of everyday life at Hammerhead. We train and educate all HHR personnel, so they can evaluate the severity of a situation, mitigate, and control any potential hazards, and be able to discuss the plan and lessons learned to facilitate a work safe environment. We empower our teams with the knowledge to understand potential risks, how to prevent them, and understand the potential energy that a worker may be exposed to. This ensures our people are able to mitigate potential incidents from occurring.

- R** Recognize the hazard
- A** Assess the potential damage
- M** Mitigate and control the risk
- P** Proceed with a communication plan

**4** Recordable Injuries

**LTI**  
2019: 0.0  
2020: 0.0

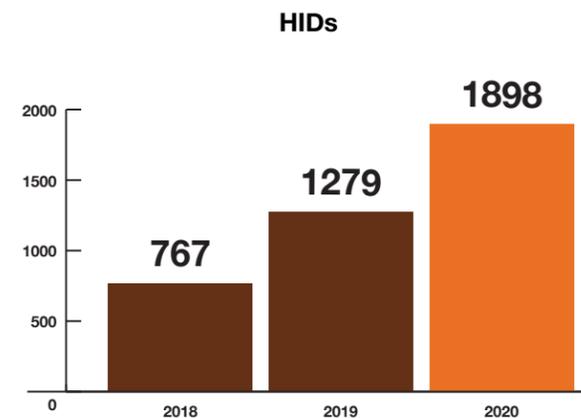


**LTIF**  
2019: 0.0  
2020: 0.0

## INCIDENT REPORTING

**0** Catastrophic  
**1914** Near Misses/HIDs  
(16 Near Misses and 1898 HIDs)

**2** Major  
**8** Serious  
**76** Minor



**75%** of the HIDs identified in 2020 prevented injuries, damage to property, and liquid spills on and off lease.

**COVID-19**  
We introduced eCompliance software related to COVID-19; the program includes an off-line function as well as forms that can be signed digitally and tracked within the program, enabling us to issue work permits electronically.

- Health & Safety
- Indigenous Partners
- Stakeholder Relations
- Community Engagement



## Emergency Preparedness and Response

### HHR's ERP App



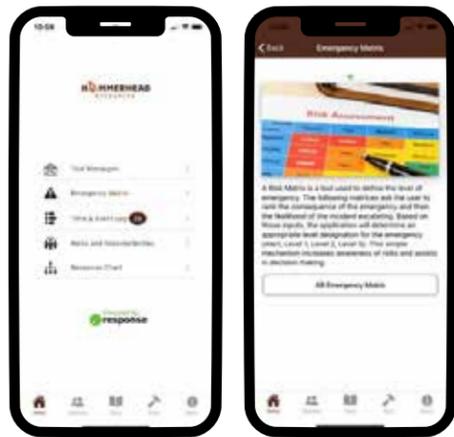
#### 24-hr Emergency Number: 1-877-431-5716

HHR has a comprehensive Emergency Management System in place that guides how we consistently and effectively respond to potential incidents that could affect the community, our workforce, the environment, our assets, and our reputation. Our Emergency Management System is comprised of two parts: 24-hour emergency line and our Corporate Emergency Response Plan (ERP).

Our 24-hour emergency line provides the public, emergency responders, and stakeholders with immediate access to information and a live dispatcher, who can address concerns, liaise with the right HHR people, and prompt an immediate response, if required. Our emergency number is posted on our website, displayed at all our facilities, and included in all orientation material.

Our Corporate Emergency Response Plan (ERP) was developed to protect the public, our employees, contractors, and the environment. The ERP includes supplemental information and plans for specific hazards, such as field response plans for potential spills. It is reviewed and updated annually. We conduct full field-based emergency response exercises every three years and undertake table-top exercises regularly to ensure we are familiar with our ERP and able to effectively respond.

In 2020, we added a mobile app to our ERP program; this app ensures our ERP is readily available and accessible to all our workers and provides them with the tools to assess and respond to any operational incident accordingly.

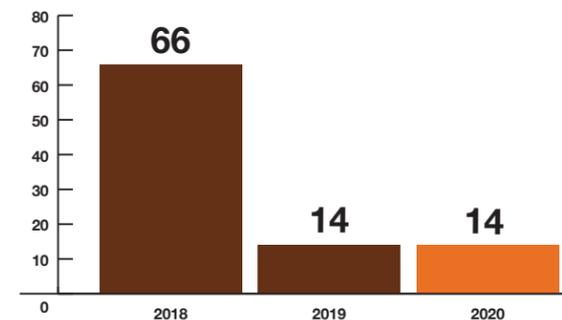


## Road Safety



At HHR, we are committed to keeping the roads we drive on safe; therefore, in 2018 we established a road safety policy to address and deter speeding infractions for both our personnel and third-party service company personnel. When infractions happen, people are brought in to inform, educate, and build action plans to avoid future fines. This policy is included in HHR's safety orientation for all staff and contractors. Fines collected are donated back to charitable organizations within the Grande Prairie region.

### ROAD INFRACTIONS



- Health & Safety
- Indigenous Partners**
- Stakeholder Relations**
- Community Engagement



## Indigenous Partners



We do not have any assets within Indigenous lands, but our activity is focused within the traditional area occupied by the Treaty 8 First Nations members and the Métis people of Region 4. Our goal is to continue to facilitate constructive dialogues, resulting in a better understanding of the impacts of our projects in traditional areas. Constructive dialogues are transparent. At HHR, we are transparent about our potential development plans and activities. We recognize the unique interests and goals each Friend of Hammerhead has and work with the elders and elected leaders of Indigenous communities to understand their priorities and concerns for their communities. We ensure they have time to consider our projects and provide input from the conceptual stage, ensuring we address community concerns early and learn from one another throughout this stage. We follow established government policies, but we do not rush through the consultation process. We allow Indigenous communities the time to complete a detailed assessment, ensuring a proper consultation without pushing projects through that have not been properly assessed.

**We have moved roads, leases, bored pipelines, and even cancelled locations as a means of mitigation for community concerns.**



Your generosity is greatly appreciated during these unpredictable Covid times.

Thank you sincerely for your support,

Kapweho First Nation

## Activities

We strive to support our Indigenous Partners through engagement activities, volunteer activities, and financial means. However, in 2020, our support was different than normal; rather than in person engagement activities and volunteer activities, the pandemic caused our communication and support to be conducted remotely. During the pandemic our collaboration extended beyond our traditional relationships to other remote communities. Unfortunately, because of Alberta's enhanced public health measures, we were forced to put a hold on planned events including our reconciliation through education program.

## Stakeholder Relations



Stakeholder engagement is essential to the successful execution of our development projects and operation of our assets. We are committed to developing and maintaining positive, stable relationships, based on mutual trust, respect, and understanding with all stakeholder and communities within our area of operations. We respect everyone's rights on shared lands, support economic development in our area of operations, and commit to continuously improving and adding to these mutually beneficial collaborations. We believe that successful planning of a project starts with identifying all the stakeholders and by considering everyone who could be affected, directly or indirectly, by our operations. Our goal is to establish mutually beneficial collaborations and facilitate positive outcomes that resolve differences through consultation, negotiation, and dedication.

### STAKEHOLDERS

- Employees & Contractors
- Governments & Regulators
- Landowners

- Local Communities
- Stakeholders/Investors
- Suppliers



**We respect the rights of Indigenous Peoples, including their right to self-determination and to maintain their culture, identity, traditions, and customs.**

**We recognize the Aboriginal and Treaty Rights of First Nations, Métis, and Inuit peoples detailed in Canada's Constitution Act.**

**We are committed to working collaboratively with Indigenous communities in an atmosphere of integrity, honour, and respect.**

**We believe that projects should be designed, constructed, and operated to minimize impacts, generate shared value, and enhance our relationships.**



### FRIENDS OF HAMMERHEAD

**Aseniwuche  
Winewak Nation**

**East Prairie Métis  
Settlement**

**Gift Lake Métis Settlement**

**Horse Lake First Nation**

**Sturgeon Lake Cree Nation**

**Sucker Creek Cree Nation**

- Health & Safety
- Indigenous Partners
- Stakeholder Relations
- Community Engagement**



## Community Engagement



We are committed to supporting long term economic and social benefits for our stakeholders. Our foundation is built on the communities that we serve and who serve us. With a long-term investment approach, we are growing with our community through hiring local employees, sourcing local service providers and contractors, supporting local Indigenous contractors, consulting with Indigenous communities, supporting and volunteering with local charities and supporting local development through tax contributions and revenue generation.

Hammerhead is committed to creating a connection between our corporate goals and the communities in which we work. Contributing to the wellbeing and the quality of life in our community is part of being a good neighbour and a good business partner. We support local events with the goal of getting to know the people that make up these communities and we strive to give back by making meaningful contributions to programs and initiatives.

*“Extend my gratitude to you and everyone at Hammerhead Resources for being such champions of our cause and the families we support here in Calgary. Last year was a difficult year for us and the oil and gas industry, and your support remains unwavering and your generosity is helping us adapt so we can serve the families of Calgary.”*

**Tim McAllen, Inn from the Cold, Calgary**



HHR Rampage Volleyball Club Jersey Presentation



HHR's 2020 Calgary Drop In Centre Cheque Presentation

### HHR Community Contributions

- Investments and donations
- Partnerships with local and regional organizations
- Community outreach
- Local sourcing of goods and supplies

### Calgary Drop-In Centre

- HHR donated \$10,000

### Calgary Senior Resource Centre

- HHR personnel volunteered throughout 2020
- Delivered food to seniors who could not leave their homes
- Conducted follow up visits with these seniors to check in on their welfare

### Cartoons for a Cause

- In October 2020, when the Calgary office reopened, we started Cartoons for a Cause to liven up the office and improve our mental health while raising funds to support Calgary Mental Health Association
- HHR raised \$5,200 for the Cartoons, donating >\$10,000 over the 2020 calendar year

### Festival of Trees

- We sponsored the Elves room at the annual Festival of Trees (an enchanted Christmas wonderland) in GP, which is the largest fundraiser for the Regional Grande Prairie Hospital, marking the beginning of the Christmas season in GP

### Grande Prairie Regional Hospital Update

- On June 26, 2020, the Alberta Government announced that the Grande Prairie Regional Hospital was now complete; the \$850.3 MM facility was handed over to Alberta Health Services on July 1, 2020. This is a huge milestone for HHR as well as we donated \$400K to the Ambulatory Care Waiting Area and have been patiently waiting for the construction to be completed.

### Inn from the Cold

- HHR supported and volunteered at Inn from the Cold's hot lunch program
- HHR personnel served hot lunches to Inn from the Cold's residents pre-COVID
- HHR personnel supported Inn from the Cold financially during COVID with a \$10,000 donation

### Rampage Volleyball Club

- HHR sponsored the Rampage Volleyball Club, enabling them to update their equipment as well as rent an additional court
- Enabled them to continue practicing and playing while adhering to the mandated restrictions throughout the pandemic

### The Ronald McDonald Charities Alberta 2020 GP Shoot for the House

- HHR sponsored, volunteered, and participated in this charity event, which raised over \$200,000



HHR Cartoons for a Cause



## Our People



Our people are the driving force behind Hammerhead's success. We are committed to creating a productive and inclusive workplace that reflects the communities where we work, and where people feel valued, respected, and are treated with dignity. Our culture inspires and motivates people to work with integrity, trust, and commitment to achieve success. The diversity of perspectives, skills, and backgrounds that make up our team equip us to effectively evaluate and execute projects and create sustainable, risk managed, long term growth plans.

## Organization Health



We care about fostering a culture where our employees feel that they are heard, and that their contribution to our overall success as a company is recognized. In 2020, 118 HHR employees and contractors were invited to participate in an Organizational Health Index (OHI) survey to measure Hammerhead's overall health as an organization, determine health outcomes, and understand management practices. 91% of our active employees responded to the survey, providing over 200 comments, recommendations, and opinions.

### THE RESULTS:



**Top 10%**  
 of all organizations surveyed

*"We are here to support and empower each other in all ways possible on a personal and professional level."*

**Rhonda Hansen,**  
 Field Office Administrator,  
 Pandemic Response  
 Team Member



### OHI SURVEY RESULTS

HHR's leaders are focused on people; they are supportive, inspiring, and challenging

People at every level of HHR are focused on continuous improvement, indicating this is a day-to-day behaviour to be harnessed

Strong familial environment

**HHR is comprised of a strong core of dedicated employees who treat each other like family and with respect.**

## Professional Development



Hammerhead offers training, resources, and professional development to our employees. Personal long-term career goals, annual performance, operational goals and objectives are part of our employees' development. Hammerhead encourages continuous personal and professional development for all employees. We provide our people with platforms, such as lunch & learns, town-halls, committees, and workshops. HHR encourages open, honest communication and empowers employees to take charge of their professional development and work towards their professional goals.

### Lunch & Learns

In 2020, we held lunch & learns for HHR personnel to further their understanding and knowledge on specific topics as part of our continuous improvement culture.

#### IT Lunch & Learn (February 2020)

Our IT group held their "Cybersecurity . . . Your Company and You" in February 2020 for all HHR personnel. This lunch & learn educated all HHR end users on cyber-security and common, everyday cyber-risks, such as phishing and ransomware.

#### ESG Lunch & Learn (December 2020)

"Unlocking the Mystery of ESG" was our first virtual 'bring-your-lunch' & learn. It set out the who, what, where, when, and why of ESG reporting, explaining how corporate reporting has evolved from purely financial metrics to both financial and non-financial criteria in the sustainability world. This team building, knowledge sharing exercise examined the criteria and pillars of an ESG report and reviewed the logic driving sustainability and sustainable investing trends today.



### HHR MEMBERSHIPS

- Memberships of Association
- Alberta Energy Regulator
- Alberta One-Call
- Association of Professional Engineers and Geoscientists of Alberta
- Canadian Association of Petroleum Land Administration
- Calgary Exchange Group
- Circle for Aboriginal Relations
- Canadian Association of Petroleum Landmen
- Canadian Payroll Association
- Canadian Society of Exploration Geophysicists
- Canada's Oil and Gas Entrepreneurs
- Explorers and Producers Association of Canada
- Foothills BC and Sask. Shippers Group
- Foothills Stream Crossing Partnership
- Gas Processing Association of Canada
- Gas Transmission Northwest Shipper Group
- Human Resources Institute of Alberta
- Human Resources Association of Calgary
- International Right of Way Association
- L2P Well Delivery Network
- Mercer Total Compensation Survey for the Petroleum Industry
- Montney Producer Group
- Northern Border Pipeline Shipper Group
- Nova Gas Transmission Tolls, Tariffs, Facilities, and Procedures
- Petroleum Acquisition and Divestiture Association
- Petroleum Joint Venture Association
- Society of Petroleum Engineers
- SPE Montney Workshop Committee Member
- SPE Hydraulic Fracturing Technology Conference and Exhibition
- TC Energy Mainline Tolls, Tariffs, and Facilities
- Western Canadian Spill Services
- Wetland Center Advisory Group



# GOVERNANCE

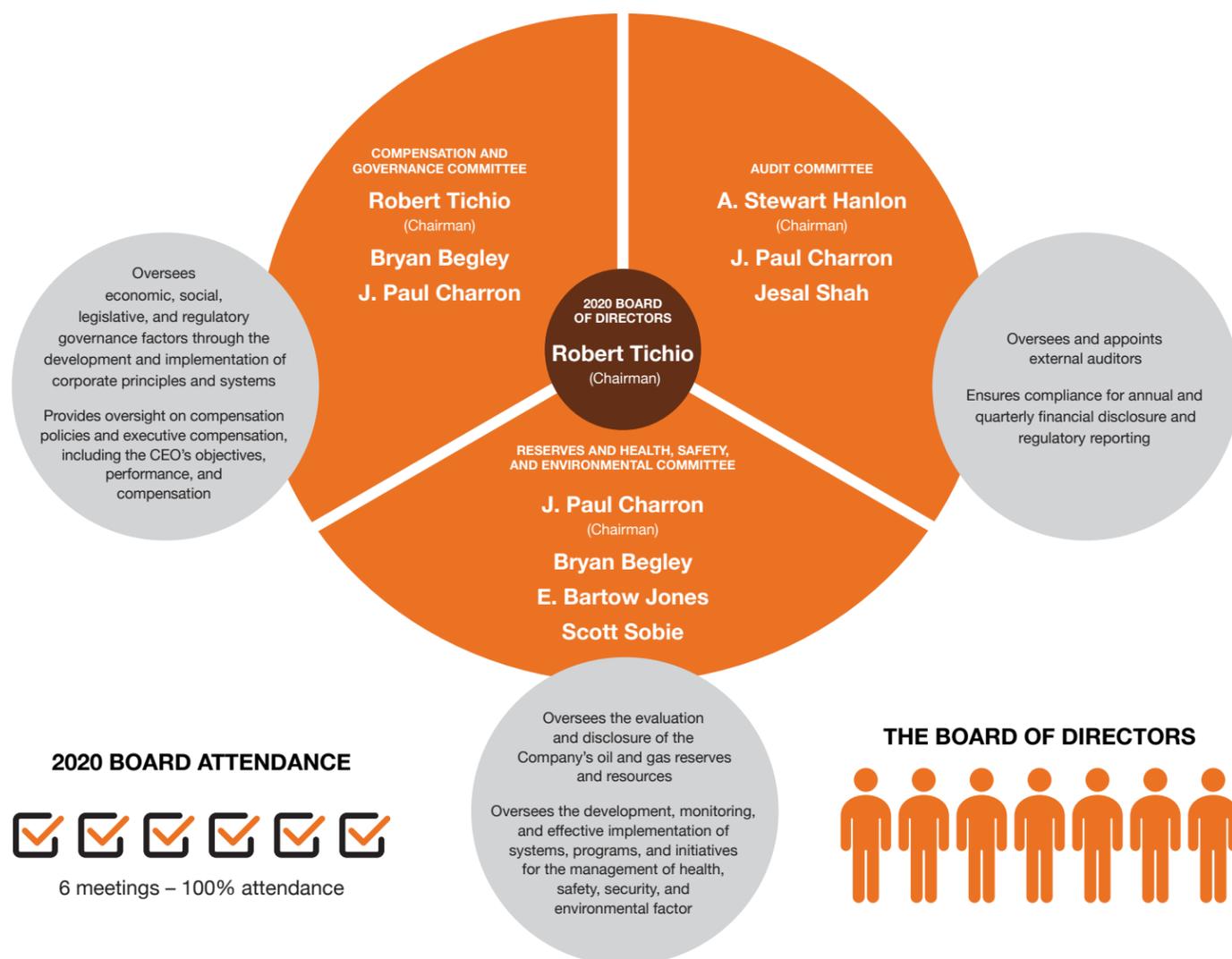
HHR's corporate culture of continuous improvement is built on good governance and the values of accountability, innovation, debate, and respect. We are committed to operating in accordance with the highest ethical and professional standards, meeting and exceeding industry standards, regulatory requirements, and company policies. Compliance is critical to our success and is why we continually review, audit, and modify our current practices and policies based on our existing risks and implement processes to address new risks. This corporate culture is driven internally by our Senior Management Team and overseen by the Board of Directors (Board).

- The Board
- Senior Management
- ESG Team
- Board ESG Oversight



## The Board

Our Board is made up of seven members who effectively lead and oversee the management, Company conduct, and the activities of HHR. They participate on three committees: the Compensation and Governance Committee, the Reserves and Health, Safety, and Environmental Committee, and the Audit Committee. The Board also directs and provides oversight and feedback to HHR's Senior Management Team on all aspects of the business, including HHR's responsible decision making and risk management policies and procedures, which HHR's Senior Management Team is responsible for.



## Senior Management

Our Senior Management Team identifies risks to the Company, ensuring that all reasonable steps are taken to implement systems and execute procedures to adequately address these risks. This Team ensures the appropriate safety, environmental, and social responsibility principles and practices are in place and being adhered to.

The Senior Management Team evaluates, prioritizes, and manages day-to-day sustainability impacts and risks to the Company. They incorporate sustainability concepts and practices into their business planning as demonstrated in our inaugural ESG Report.

### Corporate Leadership

HHR is committed to corporate leadership guided by honesty, good faith, care, diligence, and skill in compliance with the Business Corporations Act (Alberta) and the Company's articles and bylaws.

### Corporate Stewardship

This stewardship is exemplified through HHR's development, transparency, community engagement, investment, accountability, and disclosure to our Stakeholders.

*"Expanding our understanding of risks to include climate-related risks and opportunities is a logical and critical next step in increasing our transparency and demonstrating our accountability at HHR."*

Mike Kohut  
SVP and CFO



HHR's Calgary Headquarters

- Senior Management
- ESG Team
- Board ESG Oversight
- Policies & Plans



*“As a fiduciary of its investors, industry partners, and other stakeholders, Riverstone recognizes that it must invest in a sustainable, ethical, and socially responsible way, with strong and defined commitments to ESG standards across its portfolio of investments. Hammerhead has been publicly recognized for both its efforts in improving key ESG metrics as well as its level of disclosure and transparency. As majority shareholders and Board members of Hammerhead, while we appreciate there is always more that can be done, we applaud the company’s efforts in this area and its culture of continuous improvement which has permeated all levels of the organization.”*

Jesal Shah,  
Board ESG Sponsor

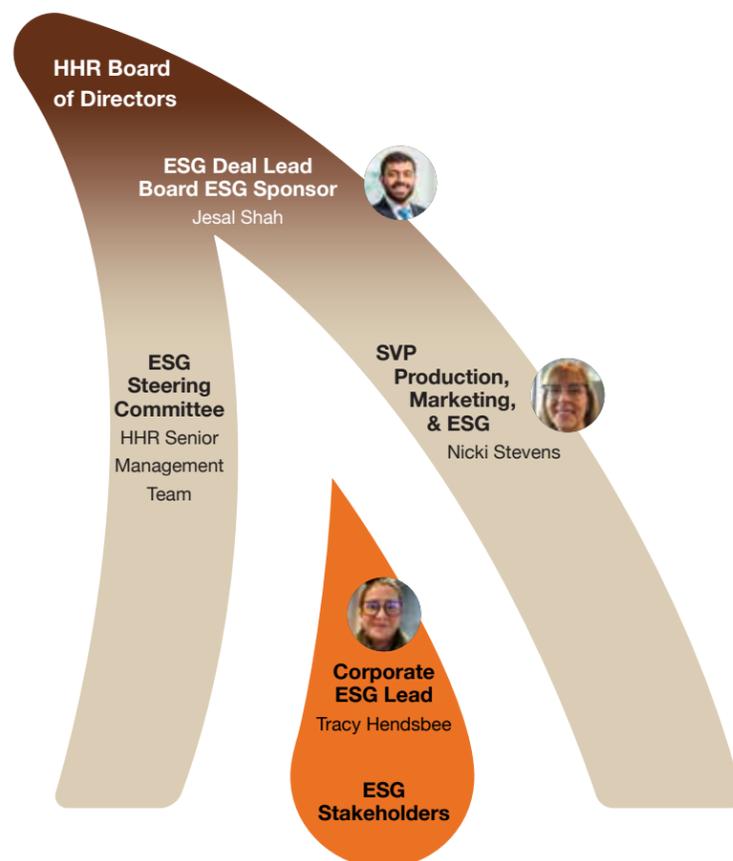


### ESG Team

In 2020, HHR established our ESG Team led by our Corporate ESG Lead. This initiative is sponsored by the Board, overseen by SVP Production, Marketing, & ESG along with the ESG Steering Committee. Our Corporate ESG Lead is focused on creating sustainable value at HHR as HHR’s sustainability mission, vision, disclosures, strategies, and targets continue to evolve.

### Board ESG Oversight

The Board is responsible for ensuring there is appropriate oversight on ESG strategies, practices, and risk. Annual surveys are used as a means to assess HHR’s progress towards achieving ESG goals and targets. ESG matters are a standing agenda item at HHR’s quarterly board meetings. Historically, safety and spills were the ESG focus; however, in 2020, ESG topics were expanded to include emissions. Reporting will continue to expand as HHR builds out its longer term sustainability strategy.



## Policies & Plans

Our mission is to conduct our business with respect and care for our employees, external stakeholders, and the communities and environments in which we operate while delivering maximum shareholder value. Our policies and plans reflect and clarify this mission; they are reviewed annually and updated as required. The following policies and plans were introduced or updated in 2020.



### Acceptable Use

In 2020, Hammerhead introduced its Acceptable Use Policy. Hammerhead is committed to providing a secure, yet open network that protects the integrity and confidentiality of information while maintaining accessibility. All members of HHR are responsible for ensuring the appropriate use, security, and protection of information technology and operational technology systems and assets over which they have control.



### Accountability

All members of HHR are responsible for HHR’s ESG performance with the ultimate accountability residing with HHR’s CEO. In 2020, HHR’s Senior Management Team tied 20% of its employees’ performance to ESG, linking performance, ESG, and compensation.



### Diversity & Inclusivity

HHR is committed to diversity and inclusivity. HHR plans to establish a Diversity and Inclusivity Commitment by the end of 2021.

### POLICIES, PLANS, & STANDARDS

- Acceptable Use Policy
- Alcohol & Drug Policy
- Anti-Corruption Policy
- Cell Phone Safety
- Code of Conduct
- Competency Management and Development
- Corporate Emergency Response Plan
- Corporate Sponsorship Policy
- Covid-19 Preparedness Guideline
- Covid-19 Returning to the Workplace Plan
- Emergency Response Policy Statement
- Emergency Response Plan
- Enforcement of Health, Safety, and Environment Standards
- Field COVID-19 Exposure Prevention Plan
- First Aid Services, Equipment, and Supplies
- Fit for Duty
- Guiding principles for Worker Safety
- Health & Safety Policy
- HSE Protection Principles
- Pandemic Plan
- Personal Protection and Safety Equipment
- Prime Contractor
- Protection of Personal Information Policy
- Road Safety
- Vehicle Safety
- Whistleblower Policy
- Worker Health and Safety Rights
- Workplace Harassment & Violence Prevention Policy
- Wildlife Safety & Firearms Policy

- Senior Management
- ESG Team
- Board ESG Oversight
- Policies & Plans**



### Pandemic Plan

HHR is committed to being prepared to deal quickly and effectively with a real or potential pandemic event, which could negatively impact the health and welfare of its employees and our operations. In March 2020, we formalized our pandemic plan.

#### COVID-19 Preparedness

In March 2020, we released our COVID-19 Preparedness Guideline. This Guideline presents HHR's prevention, response, business continuity, and position classifications procedures to ensure our essential workers have the tools to keep themselves and their colleagues safe while they continue working.

#### COVID-19 Returning to the Workplace

The safety of HHR personnel is of paramount concern during these unprecedented times. Our people have shown professionalism, dedication, and versatility in performing their jobs while working in the field and remotely from our corporate offices. While adhering to Alberta's enhanced public measures and "Stay at Home" restrictions, HHR has developed this guideline, focusing on changes that will be required to the offices, health monitoring, workplace safety and behaviour, and engagement with outside parties when we return to the workplace.

#### Field COVID-19 Exposure Prevention Plan

HHR has a duty to provide a safe and health workplace; the introduction of COVID-19 has added additional risks to our worksites and the field personnel and vendors who work there. This plan ensures all personnel understand COVID-19 risks, so they can identify COVID-19 hazards, create Workplace COVID-19 Safety Plans, control COVID-19 risks, implement preventative controls, and communicate COVID-19 information to our field personnel and vendors to keep them and their workplaces free of hazards. This Plan also details what is expected of workers if they get sick, have symptoms of COVID-19, are/have been exposed to someone with COVID-19, and/or need to report an exposure at the workplace.

### Protection of Personal Information

HHR is committed to protecting the privacy of its employees, clients, customers, and HHR's personal, privileged, and/or confidential information. In late 2020, HHR formalized this commitment and released our Protection of Personal Information Policy, detailing HHR's obligations and procedures for dealing with personal information.



### Supply Chain

HHR continues to evaluate contractors and suppliers based on technical excellence, quality, reliability, safe work performance, service price, delivery, and project-specific factors. We safeguard all confidential information as per our vendor contracts and licensing agreements. In 2020, we started drafting and evaluating proposal guidelines to ensure confidentiality of information, proposals, news releases, costs, liability, amendments, and exceptions to proposals could be incorporated into HHR's RFP process with the goal of releasing the updated Request for Proposal (RFP) Guideline in 2021.

### Transparency

Since 2016, HHR has and continues to publicly report payments to governments as required by the Extractive Sector Transparency Measures Act (ESTMA). Our annual ESTMA reports can be found on our website.

### Whistleblowers

HHR does not tolerate inappropriate behaviour. We are dedicated to maintaining a high standard of honesty and integrity, any perceived acts or circumstances of financial or ethical misconduct are identified, addressed, and subsequently corrected. Whistleblowers are safeguarded and protected, by law, from any form of retaliation. As part of our 2020 Whistleblower Policy review, in 2021, we will institute an anonymous, third-party operated, Whistleblower hotline.

## Data Governance & Cyber-Security

Global digital transformation is increasing our reliance on information technology tools and targeting informed decision-making, improved process efficiencies, and effective cyber resiliency. HHR is committed to operational and cyber-security resiliency. Our IT Support Team critically assesses HHR's network to safeguard and ensure business continuity while anticipating and responding to technological advances and threats. We are committed to continuously improving our cyber-security defences.



HHR's IT Support Team

#### 2020 IT MILESTONES

- Established our HHR's Operational and Cyber-Security Resiliency Program
- Advanced the formal data curation of many corporate performance metrics and feedback indicators
- Introduced machine learning to our well design optimization analytics
- Adopted technology-based staff collaboration
- Automated our field equipment preventative and corrective maintenance program
- Weathered the surge in malicious cyber-activity, of which 80% were phishing attacks
- Commissioned an independent expert assessment of our existing cyber-security measures
- Aligned with the Center for Internet Security 20 Critical Security Controls (CSC 20) framework



## Looking Forward

As we worked through our first ESG report last year, we recognized that the next logical step would be to continue improving our climate disclosure through more robust and detailed frameworks. In October 2020, after evaluating the TCFD processes and required assessments, we committed to publishing TCFD aligned disclosures in future reports. This commitment is based on our understanding that TCFD reporting helps stakeholders understand measures required to account for climate-related risk. We acknowledge that this alignment requires a multi-year, staged approach. We have been working diligently since late 2019 to establish our baseline understanding of Scope 1 and scope 2 emissions and create a data management system to assist in tracking, forecasting, and setting future targets. We will continue to evolve our Scope 1 and 2 emissions reporting to achieve compliance with regulatory requirements while monitoring for future changes. We have set 2021 emissions reduction targets in flaring and venting intensity. In 2021, our goal is to expand into the Governance, Risk, and Strategy topics of TCFD as we work towards formalizing current practices, and establishing new practices where required. We anticipate being fully aligned to the TCFD framework by the end of 2022.



## HHR's Targeted TCFD Progress

TOPIC	Disclosure Focus Area	Disclosure	2020	2021	2022	2023
GOVERNANCE	Disclose the organization's governance around climate-related risks and opportunities	• Describe the Board's oversight of climate-related risks and opportunities.				
		• Describe management's role in assessing and managing climate-related risks and opportunities				
STRATEGY	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material	• Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.				
		• Describe the impact of the climate-related risks and opportunities on the organization's businesses, strategy, and financial planning				
		• Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2 DegC or lower scenario				
RISK MANAGEMENT	Disclose how the organization identifies, assesses, and manages climate-related risks	• Describe the organization's processes for identifying and assessing climate-related risks				
		• Describe the organization's processes for managing climate-related risks				
		• Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management				
METRICS & TARGETS	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	• Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.				
		• Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks				
		• Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets				

No formal process established

Initiated guidelines and putting processes in place

Formal process in place

Effectively maintain, monitor, and update process as required

# Performance Table

	Unit	2017	2018	2019	2020
<b>Economics</b>					
Economic Value Generated & Distributed					
Revenue	in 000's CAD	217,337	359,523	337,979	263,514
Operating Costs <sup>1</sup>					
Operating Costs	in 000's CAD	77,940	117,084	82,964	85,749
Transportation Costs	in 000's CAD	30,858	49,533	59,028	57,393
Capital Expenditures <sup>2</sup>	in 000's CAD	492,631	475,767	146,713	92,072
Employee Wages & Benefits					
Labour Costs <sup>3</sup>	in 000's CAD	13,537	15,715	17,651	17,771
Capitalized Salary and Wages	in 000's CAD	4,159	5,180	5,103	2,290
Interest Payments on Debt <sup>4</sup>	in 000's CAD	17,429	28,956	33,215	35,563
Income and Resources Taxes	in 000's CAD	28,766	31,265	20,031	16,715
Funds from Operations	in 000's CAD	69,063	142,064	152,393	129,487
Net Capital Investment <sup>5</sup>	in 000's CAD	496,790	480,947	151,816	94,362
Production Split					
Oil & NGLs	%	39	42	38	38
Gas	%	61	58	62	62
BOE					
Annual BOE	boe	6,935,747	10,167,880	10,830,451	10,991,964
Average BOE	boe/d	19,002	27,857	29,672	30,031
Reserves					
Reserves Total	mmboe	369	407	410	309
ESTMA reported payments to Governments					
Royalties	in 000's CAD	28,766	35,294	21,032	11,043
Payments to Government	in 000's CAD	381	1,800	754	867
Payments to Municipalities	in 000's CAD	1,386	1,677	1,865	2,040
<b>Regulatory Compliance</b>					
AER Inspections	Count	26	16	17	17
High Risk	Count	4	1	0	0
Low Risk	Count	8	3	6	2
Satisfactory	Count	14	12	11	15
Fines or penalties	Count	0	0	0	0
Designated Problem Sites	Count	0	0	0	0
LMR	Annual Average	41.83	39.46	34.36	30.82

<b>Environmental Emissions<sup>6</sup></b>					
Scope 1 GHG Emissions	tCO <sub>2</sub> e/yr	115,249	156,707	215,138	222,148
Scope 1 GHG Intensity	tCO <sub>2</sub> e/boe	0.018	0.015	0.020	0.021
Scope 1 GHG Intensity	tCO <sub>2</sub> e/OE	0.102	0.098	0.125	0.129
Scope 1 Emissions by Activity					
Drilling & Completions Combustion	tCO <sub>2</sub> e/yr	NPT	NPT	NPT	13,119
Fuel Gas Combustion	tCO <sub>2</sub> e/yr	65,706	99,825	143,161	164,182
Flare Emissions	tCO <sub>2</sub> e/yr	37,071	30,784	44,637	20,855
Vent Emissions	tCO <sub>2</sub> e/yr	12,472	26,097	27,340	23,992

	Unit	2017	2018	2019	2020
<b>Environmental Emissions<sup>6</sup> CONT'D</b>					
Scope 1 Emissions Intensity by Activity					
Drilling & Completions Combustion	tCO <sub>2</sub> e/boe	NPT	NPT	NPT	0.001
Fuel Gas Combustion	tCO <sub>2</sub> e/boe	0.009	0.010	0.013	0.016
Flare Emissions	tCO <sub>2</sub> e/boe	0.005	0.003	0.004	0.002
Vent Emissions	tCO <sub>2</sub> e/boe	0.002	0.003	0.003	0.002
Scope 2 GHG					
Calgary Office - NG Consumption	GJ	NPT	NPT	NPT	130
Calgary Office - Electricity Consumption	kWh	NPT	NPT	NPT	388,547
<b>Water</b>					
Water Diverted					
Freshwater Diverted	m <sup>3</sup> /yr	465,755	571,626	281,725	378,857
Non-Freshwater Diverted (i.e., Produced Water)	m <sup>3</sup> /yr	0	43,513	158,471	1,625
Total Water Diverted	m <sup>3</sup> /yr	465,755	615,139	440,196	380,482
Water Used					
Freshwater Used	m <sup>3</sup> /yr	465,755	571,626	281,725	284,144
Non-Freshwater Used (i.e., Produced Water)	m <sup>3</sup> /yr	0	43,513	158,471	1,625
Total Water Used	m <sup>3</sup> /yr	465,755	615,139	440,196	285,769
Freshwater use as % of total water use	%	100	93	64	99
Freshwater Intensity	m <sup>3</sup> /boe	0.07	0.06	0.03	0.04
HHR Storage Reservoirs Balance (Freshwater)					
04-35 Reservoir 1 Balance December 31, 2020 <sup>7</sup>	m <sup>3</sup>	-	-	-	74,000
04-35 Reservoir 2 Balance December 31, 2020 <sup>7</sup>	m <sup>3</sup>	-	-	-	21,000
Water Injected (Non-Fresh Water Volumes)					
00/05-36-067-04W6	m <sup>3</sup> /yr	-	34,342	150,997	110,611
00/15-01-068-04W6	m <sup>3</sup> /yr	-	0	4,086	71,019
03/13-36-067-04W6	m <sup>3</sup> /yr	-	0	3,388	40,347
Total Water Injection	m <sup>3</sup> /yr	0	34,342	158,471	221,977
Water Discharged					
Fresh Water Discharged	m <sup>3</sup> /yr	0	0	1,864	0
Other Water Discharged	m <sup>3</sup> /yr	0	0	0	0
<b>Waste Management</b>					
Total Oilfield Waste Manifested & Disposed	m <sup>3</sup> /yr	49,355	67,366	3,433	2,023
Total DOW	m <sup>3</sup> /yr	22	26	10	27
Total Non-DOW	m <sup>3</sup> /yr	49,333	67,340	3,423	1,996
<b>Spills<sup>8</sup></b>					
Number of Reportable Spills	Count	3	11	1	2
Volume of Reportable Spills	m <sup>3</sup> /yr	82	104	30	2

	Unit	2017	2018	2019	2020
<b>Land &amp; Wetlands</b>					
Area Developed, Disturbed, & Reclaimed					
Area Reclaimed in 2020	ha	-	-	-	14.85
Area Constructed in 2020	ha	-	-	-	10.55
Current Footprint (Total Acquired)	ha	609.34	770.44	861.60	892.82
Total Area of Land to be Reclaimed	ha	323.51	337.74	276.82	272.95
Total Area of Land Reclaimed	ha	15.42	20.32	33.98	48.83
Land Acquired					
Total Net Montney Lands	Net acres	202,291	204,692	190,452	177,428
Land Use					
Total Land Use per Well	ha/well	1.05	0.38	0.34	1.40
Total Land use per Multi-well Battery	ha/multi-well battery	NPT	NPT	9.40	40.67
Wetlands					
Wetland Avoidance	%	NPT	94	92	93
Total Wetlands Footprint (Acquired)	ha	NPT	8.44	16.77	17.11
Total Wetlands Disturbed	ha	NPT	7.25	0.36	0.26
Total Wetlands Reclaimed	ha	NPT	0	0	0
<b>Health &amp; Safety</b>					
Recordable Injuries	Count	12	8	3	4
LTI	Count	2	2	0	0
TRIF	Frequency per 200,000 manhours	0.8	0.5	0.4	0.6
Exposure Hours <sup>6</sup>	Actual Manhours	3,044,124	3,552,277	1,678,678	1,345,728
First Aid Incidents	Count	21	32	7	5
Medical Aid Incidents	Count	10	3	3	2
Fatalities	Count	0	0	0	0
Hazard Identifications	Count	367	767	1,279	1,898
Road Patrol Infractions	Count	16	66	14	14

**Notes:**

<sup>1</sup> Operating costs include expenses from operations, general and administrative costs, excluding Employee Wages & Benefits, exploration expenditures and research and development costs.

<sup>2</sup> Capital Expenditures consists of total net capital expenditures excluding Capitalized Salary and Wages.

<sup>3</sup> Labour costs consists of operational and corporate employee costs. The total balance is the gross expense incurred before Capitalized Salaries and Wages.

<sup>4</sup> Interest includes interest incurred related to the Company's Bank Debt, Term Debt and letters of credit

<sup>5</sup> Net Capital Investments consists of total Capital Expenditures and Capitalized Salary and Wages, net of dispositions.

<sup>6</sup> Indicates additional information was available for 2017 to 2019 and all previously published numbers updated to reflect the latest data.

<sup>7</sup> Based on visual estimate from Operations.

<sup>8</sup> Spend includes Indigenous and Community engagement; 2020 anomalous due to market conditions.

<sup>9</sup> Spend includes registered charities; 2020 anomalous due to market conditions.

<sup>10</sup> Economic opportunities considers operating and capital expenses with Grande Prairie companies.

	Unit	2017	2018	2019	2020
<b>Workforce<sup>6</sup></b>					
Contractors		G.P.	Calgary	G.P.	Calgary
Total Number of Contractors	Count	NPT	NPT	NPT	15
Calgary	Count	NPT		15	12
Grande Prairie	Count	NPT		52	56
Employees		Gender NPT		Gender NPT	Gender NPT
Permanent - Full Time	Count	48	71	73	28
Permanent - Part Time	Count	1	1	3	2
HQ Personnel	Count	44	59	60	25
Field Personnel	Count	5	13	16	5
Calgary	Count	NPT		NPT	55
Grande Prairie	Count	NPT		NPT	17
Workforce by Age and Gender		Female	Male	Female	Male
0-24 years	Count	2	1	1	0
22-34 years	Count	6	7	6	12
35-44 years	Count	4	10	8	11
45-54 years	Count	6	7	6	14
55-64 years	Count	1	4	4	8
65 and over	Count	0	1	1	1
Calgary	%	37	53	31	51
Grande Prairie	%	2	8	4	14
Women in Leadership & Technical Positions					
Supervisory Roles	Count	1	3	3	4
Senior Leadership Roles	Count	1	1	1	1
Operations or Technical Positions	Count	NPT		NPT	6
Employee Turnover					
Average Tenure	Yrs.	3.25	1.00	1.82	3.78
Voluntary Turnover Rate	%	2	3	7	1
Total Turnover	%	9	7	15	12
Employee Development					
Education, Training, & Development	\$ CAD	113,771	152,970	114,494	58,872
Professional Memberships	\$ CAD	21,151	67,108	79,904	72,903
<b>Communities</b>					
Investment <sup>8</sup>	\$ CAD	22,450	45,500	65,500	17,018
Donations <sup>9</sup>	\$ CAD	292,288	339,685	326,491	88,810
Economic Opportunities in Communities We Work In					
Local Economic Opportunities Generated <sup>10</sup>	\$ CAD	NPT	NPT	NPT	175,922,476
Total Economic Opportunities	%	NPT	NPT	NPT	47
<b>Indigenous Partners</b>					
HHR Procurement spend on Indigenous owned Suppliers	\$ CAD	NPT	NPT	NPT	446,984

## GRI Content Index

We referenced GRI Standards in developing the content for this report; specific standards referenced and disclosures reported are listed in the GRI Context Index below.

GRI Disclosure ID	Description	Reporting Location
102-1	Name of the Organization	<a href="#">About this Report</a> , <a href="#">About Hammerhead</a>
102-2	Activities, brands, products, and services	<a href="#">About Hammerhead, 2020 at a Glance</a>
102-3	Location of headquarters	<a href="#">About Hammerhead</a>
102-4	Location of operations	<a href="#">About Hammerhead</a>
102-5	Ownership and legal form	<a href="#">About this Report</a> , <a href="#">About Hammerhead</a>
102-6	Markets served	<a href="#">About Hammerhead</a>
102-7	Scale of Organization	<a href="#">About Hammerhead</a>
102-8	Information on employees and other workers	<a href="#">About Hammerhead</a> , <a href="#">Social</a> , <a href="#">Performance Table</a>
102-9	Supply Chain	<a href="#">Governance</a> , <a href="#">Policies</a>
102-10	Significant Changes to the organization and its supply chain	There have been no significant changes
G4-DMA	Procurement Practices	<a href="#">Supply Chain</a>
102-11	Precautionary principle or approach	<a href="#">Governance</a> , <a href="#">Policies</a> , <a href="#">Environment</a>
102-12	External initiatives	<a href="#">Memberships</a> , <a href="#">Governance</a> , <a href="#">Policies</a>
102-13	Membership of associations	<a href="#">Memberships</a>
102-14	Statement from senior decision-maker	<a href="#">Message from Our President &amp; CEO</a>
102-16	Values, principals, standards, and norms of behavior	<a href="#">Message from Our President &amp; CEO</a> , <a href="#">Governance</a> , <a href="#">Policies</a>
102-18	Governance structure	<a href="#">Governance</a> , <a href="#">ESG Governance Structure</a>
102-40	List of stakeholder groups	<a href="#">Stakeholders</a>
102-41	Collective bargaining agreements	Not Covered by this Report
102-42	Identifying and selecting stakeholders	<a href="#">Indigenous Partners</a> , <a href="#">Stakeholders</a>
102-43	Approach to stakeholder engagement	<a href="#">Stakeholders</a>
102-44	Key topics and concerns raised	<a href="#">Materiality</a>
102-45	Entities included in the consolidated financial statements	Not Covered by this Report
G4-EC1	Economic Performance: Direct Economic Value Generated and Distributed	<a href="#">Performance Table</a>
102-46	Defining report content and topic Boundaries	<a href="#">Materiality</a>
102-47	List of material topics	<a href="#">Materiality</a>
102-48	Restatements of information	<a href="#">About this Report</a> , <a href="#">About Hammerhead</a>
102-49	Changes in reporting	<a href="#">Message from Our President &amp; CEO</a> , <a href="#">Our Approach to Sustainability</a>
102-50	Reporting period	<a href="#">About this Report</a>
102-51	Date of most recent report	<a href="#">About this Report</a>
102-52	Reporting cycle	<a href="#">About this Report</a>
102-53	Contact point for questions regarding the report	<a href="#">About this Report</a>
102-54	Claims of reporting in accordance with the GRI Standards	<a href="#">About this Report</a>
102-55	GRI content index	<a href="#">GRI Context Table</a>
102-56	External assurance	<a href="#">BDP</a>
201-1	Direct economic value generated and distributed	<a href="#">Performance Table</a>
204	Responsible Supply Chain	<a href="#">Social</a> , <a href="#">Supply Chain</a>
OG1	Reserves	<a href="#">2020 at a Glance</a> , <a href="#">Performance Table</a>
207	Tax Transparency	<a href="#">Governance</a> , <a href="#">Transparency</a> , <a href="#">Performance Table</a> , <a href="#">ESTMA</a>
303	Water Management	<a href="#">Water Management</a> , <a href="#">Water Process</a> , <a href="#">Performance Table</a>
G4-EN8	Water Management	<a href="#">Performance Table</a>
304	Biodiversity/Land Use	<a href="#">Biodiversity/Land Use</a>
305	Emissions	<a href="#">Air &amp; Greenhouse Gas Emissions</a> , <a href="#">Performance Table</a>
G4-EN15	Emissions	<a href="#">Air &amp; Greenhouse Gas Emissions</a> , <a href="#">Performance Table</a>
G4-EN16	Emissions	<a href="#">Air &amp; Greenhouse Gas Emissions</a> , <a href="#">Performance Table</a>
G4-EMA	Energy	<a href="#">Air &amp; Greenhouse Gas Emissions</a>
306	Spills/Waste Management	<a href="#">Spill Management</a> , <a href="#">Waste Management</a>
307	Environmental Impact/Asset Retirement	<a href="#">Asset Integrity</a> , <a href="#">LMR</a>
403	Safety	<a href="#">Asset Integrity</a> , <a href="#">Health &amp; Safety</a>
404	Employee Development	<a href="#">Professional Development</a>
405	Diversity	<a href="#">Policies</a>
411	First Nations Policies	<a href="#">Indigenous Partners</a>
G4-DMA	Indigenous Rights	<a href="#">Indigenous Partners</a>
OG9	Indigenous Peoples	<a href="#">Indigenous Partners</a>
412	Human Rights	<a href="#">Policies</a>
413	Local Impact/Community Engagement	<a href="#">Community Engagement</a>
G4-DMA	Local Communities	<a href="#">Stakeholder Engagement</a> , <a href="#">Community Engagement</a>
G4-SO8	Compliance	<a href="#">Regulatory Compliance</a>
G4-DMA	Emergency Preparedness	<a href="#">Emergency Preparedness and Response</a>
OG-13	Asset Integrity & Process Safety	<a href="#">Asset Integrity</a>

## SASB Index

We referenced SASB Accounting Standards for Upstream Oil and Gas in developing the content of this report. Specific disclosures reported are listed in the SASB Index below.

Topic	Accounting Metric	Reporting Location
GHGs	<ul style="list-style-type: none"> <li>Gross Scope 1 emissions</li> <li>Percentage methane</li> <li>Percentage covered under emissions-limiting regulations</li> </ul>	<a href="#">Environment</a> , <a href="#">Air &amp; Greenhouse Gas Emissions</a> , <a href="#">Performance Table</a>
	Amount of gross Scope 1 emissions from: <ul style="list-style-type: none"> <li>Flared hydrocarbons</li> <li>Other combustion</li> <li>Process emissions</li> <li>Vented releases</li> <li>Fugitive emissions/leaks</li> </ul>	<a href="#">Environment</a> , <a href="#">Air &amp; Greenhouse Gas Emissions</a> , <a href="#">Performance Table</a>
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	<a href="#">Environment</a> , <a href="#">Our Strategy</a> , <a href="#">Air &amp; Greenhouse Gas Emissions</a>
Air Quality	Air emissions for: <ul style="list-style-type: none"> <li>NO<sub>x</sub>, excluding N2O</li> <li>SO<sub>x</sub></li> <li>VOCs</li> <li>PM10"</li> </ul>	2022 Reporting Target
Water Mgmt.	Freshwater: <ul style="list-style-type: none"> <li>Total freshwater withdrawn</li> <li>Percentage recycled</li> <li>Percentage in regions with high or extremely high baseline water stress</li> </ul>	<a href="#">Performance Table</a>
	Volume of produced water and flowback generated: <ul style="list-style-type: none"> <li>Percentage discharged</li> <li>Percentage injected</li> <li>Percentage recycled</li> <li>Hydrocarbon content in discharged water</li> </ul>	2022 Reporting Target
	Hydraulically fractured wells <ul style="list-style-type: none"> <li>Percentage from which there is public disclosure of all fracturing fluid chemicals used</li> </ul>	2022 Reporting Target
	Hydraulic Fracturing Sites <ul style="list-style-type: none"> <li>Percentage where ground or surface water quality deteriorated compared to a baseline</li> </ul>	2022 Reporting Target
Biodiversity Impacts	Description of: <ul style="list-style-type: none"> <li>Environmental management policies</li> <li>Practices for active sites</li> </ul>	<a href="#">Environment</a> , <a href="#">Biodiversity &amp; Land Use</a>
	Hydrocarbon spills: <ul style="list-style-type: none"> <li>Number and aggregate volume of spills with ESI rankings 8-10</li> <li>Volume recovered</li> </ul>	<a href="#">Environment</a> , <a href="#">Spill Management</a>
	In and near sites with protected conservation status or endangered species habitats, percentage of: <ul style="list-style-type: none"> <li>Proved reserves</li> <li>Probable reserves</li> </ul>	2022 Reporting Target
Security, Human Rights & Rights of Indigenous Peoples	In or near areas of conflict, percentage of: <ul style="list-style-type: none"> <li>Proved reserves</li> <li>Probable reserves</li> </ul>	Not Applicable
	In or near areas of Indigenous lands, percentage of: <ul style="list-style-type: none"> <li>Proved reserves</li> <li>Probable reserves</li> </ul>	2022 Reporting Target
	Discussion of engagement processes and due diligence practices, regarding human rights, Indigenous rights, and operation in areas of conflict	<a href="#">Indigenous Partners</a> , <a href="#">Friends of Hammerhead</a>

## Important Information concerning this Report

This report and its contents are confidential and may not be reproduced or forwarded to any other person, or published (in whole or in part) for any purpose. This report is provided for informational purposes only as of the date hereof, is not complete, and may not contain certain material information about Hammerhead Resources Inc. ("Hammerhead", "Hammerhead Resources" or the "Company"), including important disclosures and risk factors associated with an investment in Hammerhead. This report does not take into account the particular investment objectives or financial circumstances of any specific person who may receive it.

### Forward Looking Statements

Certain statements contained in this report constitute forward-looking statements or information (collectively "forward-looking statements") within the meaning of applicable securities legislation, including, but not limited to: management's assessment of future plans, operations, values, vision, goals, focus of operations, sustainability mission, initiatives and strategies, including capital allocation, acquisition opportunities and drilling plans; Hammerhead's strategy for its business and assets; infrastructure capacity; the Company's commitment and plans in respect of ESG; expectations that the Company will be one of the top five Montney producers; the Company's plans to become carbon neutral or "net zero" by 2050 and to reduce GHG emissions by 2030; the Company's plans to exceed regulatory compliance measures, focus on reducing emissions, improving efficiencies and resiliency while adding value for its stakeholders; the Company's plans to use technological developments and innovative practices to mitigate climate change risks and reduce emissions going forward; the Company's 2021 initiatives; the anticipated benefits to be derived from the Company's Grand Prairie project and the timing thereof; the number of water crossing inspections expected to be completed by the Company; the Company's plans to conduct field investigations on the pipeline segments that were identified as having the highest potential consequences in 2021; the Company's belief that hazard identification will help mitigate risks and eliminate potential incidents from occurring; the Company's targeted lost time injuries and total recordable injury frequency for 2021; the Company's commitment to quickly and effectively deal with a potential pandemic event; the Company's release of an updated Request for Proposal (RFP) Guideline and the anticipated timing thereof; the Company's 2021 emissions reduction targets; the Company's plans to be fully aligned to the TCFD framework by the end of 2022; the Company's future climate-related disclosure practices with respect to governance, strategy, risk management and metrics & targets, its ability to effectively maintain, monitor and update such processes and the anticipated timing of the foregoing; and other matters related to the foregoing. Statements relating to "reserves" are forward-looking statements, as they involve the implied assessment, based on estimates and assumptions that the reserves and resources described exist in the quantities predicted or estimated and can be profitably produced in the future. Forward-looking statements are typically identified by words such as "anticipate", "continue", "estimate", "expect", "forecast", "may", "will", "project", "could", "plan", "intend", "should", "believe", "outlook", "potential", "target" and similar words suggesting future events or future performance or may be identified by reference to a future date. Accordingly, undue reliance should not be placed on forward-looking statements because Hammerhead can give no assurance that such expectations will prove to be correct.

With respect to forward-looking statements contained in this report, Hammerhead has made assumptions regarding, among other things: availability of future acquisition opportunities; future capital expenditure levels; future oil and natural gas prices; future oil and natural gas production levels; pipeline capacity; future exchange rates and interest rates; ability to obtain equipment and services in a timely manner to carry out development activities; ability to market oil and natural gas successfully to current and new customers; the impact of increasing competition; the ability to obtain financing on acceptable terms; the general stability of the economic and political environments in which Hammerhead operates; the timely receipt of any required regulatory approvals; the ability of Hammerhead to obtain qualified staff, equipment and services in a timely and cost efficient manner; that Hammerhead will have sufficient cash flow, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; that Hammerhead's conduct and results of operations will be consistent with its expectations; that Hammerhead will have the ability to develop its oil and gas properties in the manner currently contemplated; the estimates of Hammerhead's reserves and contingent resource volumes and the assumptions related thereto (including commodity prices and development costs) are accurate in all material respects; that Hammerhead will have the ability to add production and reserves through development and exploitation activities; and the impact (and duration thereof) that the COVID-19 pandemic will have on: (i) the demand for crude oil, NGLs and natural gas; (ii) the supply chain, including the Company's ability to obtain the equipment and services it requires; (iii) the Company's ability to produce, transport and/or sell its crude oil, NGLs and natural gas; that technological developments and innovative practices will be available to the Company; the ability of the Company to be one of the top five Montney producers; the Company's ability to become carbon neutral and reduce emissions on the timeline anticipated; the Company's ability to exceed regulatory compliance measures, improve efficiencies and resiliency, add value for its stakeholders and achieve its initiatives; the ability of the Company to be fully aligned to the TCFD framework by the end of 2022; the Company's ability to effectively maintain, monitor and update future climate-related disclosure practices with respect to governance, strategy, risk management and metrics & targets; and that hazard identification will help mitigate risks and eliminate potential incidents from occurring. Although Hammerhead believes that the expectations reflected in the forward-looking statements contained in this report, and the assumptions on which such forward-looking statements are made, are reasonable, there can be no assurance that such expectations will prove to be correct. Readers are cautioned that the foregoing list is not exhaustive of all assumptions which have been considered.

Readers are cautioned not to place undue reliance on forward-looking statements included in this report, as there can be no assurance that the plans, intentions or expectations upon which the forward-looking statements are based will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur, which may cause Hammerhead's actual performance and financial results in future periods to differ materially from any estimates or projections of future performance or results expressed or implied by such forward-looking statements. These risks and uncertainties include, among other things, the ability of management to execute its business plan; general economic and business conditions; the risks of the oil and natural gas industry, such as operational risks in exploring for, developing and producing crude oil and natural gas and market demand; the possibility that government policies or laws may change or governmental approvals may be delayed or withheld; risks and uncertainties involving geology of oil and natural gas deposits; Hammerhead's ability to enter into or renew leases; potential delays or changes in plans with respect to exploration or development projects or capital expenditures; unexpected downtime; unexpected drilling results; delays in anticipated timing of drilling and completion of wells; the uncertainty of estimates and projections relating to production (including decline rates), costs and expenses; fluctuations in oil and natural gas prices, foreign currency exchange rates and interest rates; risks inherent in Hammerhead's operations, including credit risk; uncertainty in amounts and timing of royalty payments; health, safety and environmental risks; risks associated with unexpected potential future law suits and regulatory actions against Hammerhead; uncertainties

Topic	Accounting Metric	Reporting Location
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	<a href="#">Governance, Policies, Stakeholder Relations, Community Engagement</a>
	Number and duration of non-technical delays	2022 Reporting Target
Workforce Health & Safety	Totals: <ul style="list-style-type: none"> <li>Recordable incident rate (TRIR)</li> <li>Fatality rate</li> <li>Near miss frequency rate (NMFR)</li> <li>Average hours of health, safety, and emergency response training for: <ul style="list-style-type: none"> <li>Full-time employees</li> <li>Contract employees</li> <li>Short-service employees</li> </ul> </li> </ul>	<a href="#">Health &amp; Safety, Performance Table</a>
	Discussion of management systems used to integrate a culture of safety throughout the exploration and production lifecycle	<a href="#">Health &amp; Safety</a>
Reserves Valuation & Capital Expenditures	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions	Not covered by this Report
	Estimated carbon dioxide emissions embedded in proved hydrocarbon reserves	2022 Reporting Target
	Amount: <ul style="list-style-type: none"> <li>Invested in renewable energy</li> <li>Revenue generated by renewable energy sales</li> </ul>	2022 Reporting Target
	Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	Not covered by this Report
Business Ethics & Transparency	In countries that have the 20 lowest rankings in Transparency International's Corruption Percentage Index, percentage of: <ul style="list-style-type: none"> <li>Proved reserves</li> <li>Probable reserves</li> </ul>	<a href="#">About Hammerhead, Performance Table</a>
	Description of the management system for prevention of corruption and bribery throughout the value chain	<a href="#">Governance, Policies</a>
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	<a href="#">Governance, Environment</a>
Critical Incident Risk Management	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1)	<a href="#">Spill Management</a>
	Description of management systems used to identify and mitigate catastrophic and tail-end risks	2022 Reporting Target
Activity Metrics	Production of: <ul style="list-style-type: none"> <li>oil</li> <li>natural gas</li> <li>synthetic oil</li> <li>synthetic gas</li> </ul>	<a href="#">Performance Table</a>
	Number of off shore sites	Not Applicable
	Number of terrestrial sites	2022 Reporting Target

as to the availability and cost of financing; the effect of the COVID-19 pandemic on the Company's business, operations and financial condition; potential disruption of the Company's operations as a result of the COVID-19 pandemic through potential loss of manpower and labour pools resulting from, among other things, quarantines in the Company's operating areas; inability to access sufficient capital from internal and external sources; that the Company will not be one of the top five Montney producers; that the Company will not become carbon neutral by 2050; that the Company will not be able to exceed regulatory compliance measures, reduce emissions, improve efficiencies and resiliency or add value for its stakeholders; the Company will not be able to use technological developments and innovative practices to mitigate climate change risks and reduce emissions; that the Company's 2021 initiatives will not be successful; the Company's Grand Prairie project will not be successful; the number of water crossing inspections completed by the Company will be less than anticipated; that the Company will not be able to quickly and effectively deal with a potential pandemic event; that the Company will not be able to achieve its 2021 emissions reduction targets; and that the Company will not be fully aligned to the TCFD framework in the time anticipated. Readers are cautioned that the foregoing list is not exhaustive of all possible risks and uncertainties.

The forward-looking statements contained in this report speak only as of the date of this report. Except as expressly required by applicable securities laws, Hammerhead does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The forward-looking statements contained in this report are expressly qualified by this cautionary statement.

## No Offer or Solicitation Regarding Securities

This report is provided for informational purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any security in Canada, the United States or any other jurisdiction. Hammerhead does not intend to solicit and is not soliciting, any action with respect to any security or any other contractual relationship with Hammerhead.

The contents of this report have not been approved or disapproved by any securities commission or regulatory authority in Canada, the United States or any other jurisdiction, and Hammerhead expressly disclaims any duty on Hammerhead to make disclosure or any filings with any securities commission or regulatory authority, beyond that imposed by applicable laws. The contents of this report are neither sufficient for, nor intended by Hammerhead to be used in connection with, any decision relating to the purchase or sale of any existing or future securities. Hammerhead does not intend to provide financial, investment, tax, legal, or accounting advice. Persons considering the purchase or sale of any securities should consult with their own independent professional advisors.

## Oil & Gas Information

The estimates of Hammerhead's: (i) 2017 reserves set forth in this report have been prepared by McDaniel & Associates Consultants ("McDaniel") as of December 31, 2017 with a preparation date of February 27, 2018; (ii) 2018 reserves set forth in this report have been prepared by McDaniel as of December 31, 2018 with a preparation date of March 20, 2019; (iii) 2019 reserves set forth in this report have been prepared by McDaniel as of December 31, 2019 with a preparation date of April 1, 2020; and (iv) 2020 reserves set forth in this report have been prepared by McDaniel as of December 31, 2020 with a preparation date of March 31, 2021, each in accordance with National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities ("NI 51-101") and the Canadian Oil and Gas Evaluation Handbook (the "COGEH") and using McDaniel's forecast prices and costs as at January 1, 2018, and using 3 Consultant Average price forecast for January 1, 2019, January 1, 2020 and January 1, 2021, respectively. The reference to 309 MMboe of reserves of the year-ended December 31, 2020, consists of 102 MMbbl of light crude oil and medium crude oil, 1,047 Bcf of conventional natural gas and 32 MMbbl of natural gas liquids. Estimates of the net present value of the future net revenue from Hammerhead's reserves do not represent the fair market value of Hammerhead's reserves. The estimates of reserves and future net revenue from individual properties or wells may not reflect the same confidence level as estimates of reserves and future net revenue for all properties and wells, due to the effects of aggregation.

The reference to the Company's 30,031 boe/d average 2020 production set forth in this report consists of 7,798 bbls/d of light crude oil and medium crude oil, 111,450 mcf/d of conventional natural gas and 3,658 bbls/d of natural gas liquids.

"BOEs" may be misleading, particularly if used in isolation. A BOE conversion ratio of six thousand cubic feet of natural gas to one barrel of oil equivalent (6 mcf: 1 bbl) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

## Third Party Information

Certain market, third party and industry data contained in this summary is based upon information from government or other industry publications and reports or based on estimates derived from such publications and reports. Government and industry publications and reports generally indicate that they have obtained their information from sources believed to be reliable, but the Company has not conducted its own independent verification of such information. This report also includes certain data derived from certain industry participants, including information as to Scope 1 and Scope 2 emissions intensity of the Company's peers, which has been retrieved from the public record of such industry participants. No representation or warranty of any kind, express or implied, is made by Hammerhead as to the accuracy or completeness of the information contained in this document, and nothing contained in this report is, or shall be relied upon as, a promise or rereport by Hammerhead.

## Sources

i <https://www.iea.org/reports/global-energy-review-2021/economic-impacts-of-covid-19#abstract>

ii <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

