



ANNUAL INFORMATION FORM

**FOR THE FISCAL YEAR ENDED
DECEMBER 31, 2022**

KRAKEN ROBOTICS INC.

**189 GLENCOE DRIVE
MT. PEARL, NL, CANADA
A1N 4P6**

APRIL 28, 2023

TABLE OF CONTENTS

	Page
CAUTIONARY NOTE ON FORWARD-LOOKING INFORMATION	1
ITEM 1: PRELIMINARY NOTES	2
1.1 Effective Date of Information	2
1.2 Financial Statements and Management Discussion and Analysis	2
1.3 Currency	2
1.4 Glossary	3
ITEM 2: CORPORATE STRUCTURE OF THE COMPANY	5
2.1 Name, Address & Incorporation	5
2.2 Intercorporate Relationships	6
ITEM 3: GENERAL DEVELOPMENT OF THE BUSINESS	6
3.1 Three Year History	6
3.2 History	13
3.3 Principal Markets	16
3.4 Product Development Strategy – Sensors to Systems	17
3.5 Principal Products and Services	17
3.6 Research and Development	25
3.7 Intellectual Property	28
3.8 Customers & Sales and Marketing Strategy	29
3.9 Competitive Conditions	29
ITEM 4: RISK FACTORS	31
ITEM 5: DIVIDENDS	40
ITEM 6: DESCRIPTION OF CAPITAL STRUCTURE	40
6.1 Authorized and Issued Capital	40
ITEM 7: MARKET FOR SECURITIES	41
7.1 Price Range and Trading Volume	41
7.2 Prior Sales	42
ITEM 8: ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER	42
ITEM 9: DIRECTORS AND EXECUTIVE OFFICERS	42
9.1 Name, Occupation and Security Holding	42
9.2 Shareholdings of Directors and Senior Officers	43
9.3 Cease Trade Orders, Bankruptcies, Penalties or Sanctions	44
9.4 Conflicts of Interest	44

TABLE OF CONTENTS

(continued)

Page

ITEM 10: LEGAL PROCEEDINGS AND REGULATORY ACTIONS	45
10.1 Legal Proceedings	45
10.2 Regulatory Actions	45
ITEM 11: INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	45
ITEM 12: TRANSFER AGENT AND REGISTRAR.....	45
ITEM 13: MATERIAL CONTRACTS	45
ITEM 14: INTEREST OF EXPERTS	46
14.1 Names of Experts	46
14.2 Interests of Experts	46
ITEM 15: ADDITIONAL INFORMATION	46

CAUTIONARY NOTE ON FORWARD-LOOKING INFORMATION

Throughout this AIF, references to “**Kraken**”, the “**Company**”, “**its**”, “**our**”, “**us**” and “**we**”, or related terms refer to Kraken Robotics Inc. and include, where the context requires, its subsidiaries.

Certain statements contained in this Annual Information Form (“**AIF**”) and the documents incorporated by reference herein constitute forward-looking information or forward-looking statements (collectively, “**forward-looking statements**”) within the meaning of applicable Canadian and United States securities laws. Forward-looking statements include statements concerning the Company’s current expectations, estimates, projections, assumptions and beliefs, and, in certain cases, can be identified by the use of words such as “**seeks**”, “**plans**”, “**expects**”, “**is expected**”, “**budget**”, “**scheduled**”, “**estimates**”, “**forecasts**”, “**intends**”, “**anticipates**”, or “**believes**”, or variations of such words and phrases or statements that certain actions, events or results “**may**”, “**could**”, “**should**”, “**would**”, “**might**” or “**will be taken**”, “**occur**” or “**be achieved**”, or the negative forms of any of these words and other similar expressions.

Forward-looking statements reflect the Company’s current expectations and assumptions, and are subject to a number of known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, performance or achievements to be materially different from any anticipated future results, performance or achievements expressed or implied by the forward-looking statements.

Should one or more of these risks and uncertainties materialize, or should underlying factors or assumptions prove incorrect, actual results may vary materially from those described in forward-looking statements. In making the forward-looking statements included in this AIF and the documents incorporated by reference herein, the Company has made various material assumptions, including, but not limited to:

- the Company will continue to be in compliance with regulatory requirements;
- the Company will have sufficient working capital and be able to secure additional funding necessary for the continued operation and development of the Company;
- the Company’s ability to maintain current and projected revenue if it fails to effectively compete for additional contracts; and
- key personnel will continue their employment with the Company and the Company will be able to obtain and retain additional qualified personnel, as needed, in a timely and cost-efficient manner.

Readers are cautioned not to place undue reliance on the forward-looking statements or the assumptions on which the Company’s forward-looking statements are based. Readers are also advised to carefully review and consider the risk factors identified in this AIF under Item 5: “**RISK FACTORS**” and elsewhere herein for a discussion of the factors that could cause the Company’s actual results, performance and achievements to be materially different from any anticipated future results, performance or achievements expressed or implied by the forward-looking statements.

Although the Company believes that the assumptions on which the forward-looking statements are made are reasonable, based on the information available to the Company on the date such statements were made, no assurances can be given as to whether these assumptions will prove to be correct. The forward-looking statements contained in this AIF and the documents incorporated by reference herein are



expressly qualified in their entirety by the foregoing cautionary statements and those made in our other filings with applicable securities regulators in Canada and the United States, if any. These factors are not intended to represent a complete list of the factors that could affect the Company and readers should not place undue reliance on forward-looking statements in this AIF.

Forward-looking statements speak only as of the date the statements are made. The Company assumes no obligation to update publicly or otherwise revise any forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking statements, except to the extent required by applicable securities laws. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect to those or other forward-looking statements.

ITEM 1: PRELIMINARY NOTES

1.1 Effective Date of Information All information contained herein is as at December 31, 2022, unless otherwise indicated, being the date of our most recently completed financial year. In this AIF, the use of the present tense and of the words “**is**”, “**are**”, “**current**”, “**currently**”, “**presently**”, “**now**” and similar expressions is to be construed as referring to information given as of that date.

1.2 Financial Statements and Management Discussion and Analysis

This AIF should be read in conjunction with the Company’s:

- (a) Audited annual financial statements for the years ended December 31, 2022 and 2021; and
- (b) Management discussion and analysis for the year ended December 31, 2022,

copies of which may be obtained online under the Company’s profile from the System for Electronic Document Analysis and Retrieval (“**SEDAR**”) at www.sedar.com.

All financial information in this AIF has been prepared in accordance with International Financial Reporting Standards (“**IFRS**”) as issued by the International Accounting Standards Board.

1.3 Currency

All dollar amounts referenced in this AIF are expressed in Canadian dollars, unless otherwise indicated. The Company’s financial statements are prepared in accordance with IFRS. All references to “**US\$**” are to United States dollars.



1.4 Glossary

In this AIF, the following terms have the meanings set forth:

“\$”	Means Canadian dollars.
“ACR”	Means “ area coverage rate ”, typically qualified as the area of seabed (expressed in square kilometres) that can be surveyed in a standard unit of time (expressed in hours). Standard units are km ² /hr
“Affiliate”	Means a company that is affiliated with another company as follows: (a) a company is an “ Affiliate ” of another company if: (i) one of them is the subsidiary of the other; or (ii) each of them is controlled by the same Person; (b) a company is “ controlled ” by a Person if: (i) voting securities of the company are held, other than by way of security only, by or for the benefit of that Person; and (ii) the voting securities, if voted, entitle the Person to elect a majority of the directors of the company; (c) a Person beneficially owns securities that are beneficially owned by: (i) a company controlled by that Person; or (ii) an Affiliate of that Person or an Affiliate of any company controlled by that Person.
“Associate”	Means a relationship with an individual or company: (a) an issuer of which the Person or company beneficially owns or controls, directly or indirectly, voting securities entitling him to more than 10% of the voting rights attached to outstanding securities of the issuer; (b) any partner of the Person or company; (c) any trust or estate in which a Person or company has a substantial beneficial interest or in respect of which an individual or company serves as trustee or in a similar capacity; (d) in the case of an individual, a relative of that individual, including: (i) that Person’s spouse or child; or (ii) any relative of the Person or of his spouse who has the same residence as that Person.
“AUV”	Means autonomous underwater vehicle, a pre-programmed underwater vehicle that is not controlled by an operator.
“bathymetry”	Means the study of underwater depth of lake, seas, or ocean floors. Bathymetry is the underwater equivalent to topography.
“BCIP”	Means the Canadian government’s Build in Canada Innovation Program.
“Board of Directors”	Means the board of directors of the Company.
“CBCA”	Means the Canada Business Corporations Act.
“Common Shares”	Means the issued and outstanding common shares of the Company.
“Company” or “Kraken”	Means Kraken Robotics Inc.
“DALO”	Means Danish Ministry of Defence, Acquisition and Logistics Organization.
“Exchange”	Means the TSX Venture Exchange.
“FCT”	Means Foreign Comparative Testing.



“Insider”	If used in relation to an issuer, means: (a) a director or senior officer of the issuer; (b) a director or senior officer of a corporation that is an Insider or subsidiary of the issuer; (c) a Person that beneficially owns or controls, directly or indirectly, voting shares carrying more than 10% of the voting rights attached to all outstanding voting shares of the issuer; or (d) the issuer itself if it holds any of its own securities.
“Instrument”	Means National Instrument 51-102 – Continuous Disclosure Obligations.
“ITAR”	Means the United States’ International Traffic in Arms Regulation.
“KB”	Means Kraken Robotics Brasil Ltda, a wholly-owned subsidiary of Kraken Subco existing under the laws of Brazil.
“KD”	Means Kraken Denmark ApS, a wholly-owned subsidiary of Kraken Subco existing under the laws of Denmark.
“KPG”	Means Kraken Power GmbH, an Affiliate of Kraken Subco registered under the laws of the Republic of Germany.
“Kraken Subco”	Means Kraken Robotic Systems Inc., a wholly-owned Canadian subsidiary of the Company.
“KRG”	Means Kraken Robotik GmbH, a wholly-owned subsidiary of Kraken Subco incorporated under the laws of the Republic of Germany.
“KRSL”	Means Kraken Robotics Services Ltd. (formerly PanGeo Subsea Inc.)
“KRSUK”	Means Kraken Robotics Services UK Ltd. (formerly PanGeo Subsea Scotland Limited)
“KUS”	Means Kraken Robotics US Inc., a wholly-owned subsidiary of Kraken Subco incorporated under the laws of the State of Delaware with a registered office in the State of Massachusetts.
“LARS”	Means Launch and Recovery System, an electro-mechanical system used to both deploy and remove underwater vehicles from launch and recovery point (the surface vessel or dock).
“MINSAS”	Means Miniature Interferometric Synthetic Aperture Sonar.
“NSPML”	Means NSP Maritime Link Inc.
“Ocean Infinity”	Means Ocean Infinity Limited.
“ODI”	Means Ocean Discovery Inc., a wholly-owned subsidiary of Kraken Subco incorporated under the laws of Canada.
“PanGeo”	Collectively refers to PGH Capital, KRSL and KRSUK.
“Person”	Means a company or an individual.
“PGH Capital”	Means PGH Capital Inc.
“RaaS”	Means the Company’s Robotics as a Service business.



“ROV”	Means Remotely Operated Vehicle, tethered underwater vehicles remotely controlled by an operator on a surface ship.
“SAR”	Means Synthetic Aperture Radar, a form of radar that is used to create high resolution images of objects, such as landscapes. SAR uses the motion of the radar antenna over a target region to provide finer spatial resolution than conventional beam-scanning radars. SAR is typically mounted on a moving platform, such as an aircraft or spacecraft.
“SAS”	Means Synthetic Aperture Sonar, the underwater cousin of SAR. SAS is a form of sonar in which sophisticated signal processing is used in combining a number of acoustic pings to form an image with much higher along-track resolution than conventional sonars.
“SSS”	Means Side Scan Sonar, a specialized system for detecting objects on the seafloor. Like other sonars, a side scan transmits sound energy and analyzes the return signal (echo) that has bounced off the seafloor or other objects.
“Stock Option Plan”	Means the incentive stock option plan of the Company.
“Stock Options”	Means the incentive stock options to purchase Common Shares pursuant to the terms of the Stock Option Plan.
“Towfish”	Means underwater vehicles that are tethered to a ship and towed below the water surface.
“UMS”	Means Unmanned Maritime System.
“UMV”	Means Unmanned Maritime Vehicle.
“USV”	Means Unmanned Surface Vessel, a vehicle that operates on the surface of the water without a crew.
“UUV”	Means Unmanned Underwater Vehicle.

ITEM 2: CORPORATE STRUCTURE OF THE COMPANY

2.1 Name, Address & Incorporation

The Company was initially incorporated as a capital pool company pursuant to the policies of the Exchange under the *Business Corporations Act* (British Columbia) on May 14, 2008 under the name of Anergy Capital Inc. The Company completed a qualifying transaction on February 18, 2015 and began to carry on the business of the Company as it is currently constituted, as more fully detailed in this AIF under Item 3: “**GENERAL DEVELOPMENT OF THE BUSINESS**”. In connection with the qualifying transaction, the Company continued under the CBCA and changed its name to “Kraken Sonar Inc.”. The Company became a Tier 2 Technology Issuer on the Exchange and its Common Shares resumed trading on the Exchange on February 24, 2015 under the ticker symbol “PNG”. The Company is a reporting issuer in all of the provinces and territories of Canada.

On September 20, 2017, the Company changed its name to “Kraken Robotics Inc.” and Kraken Subco changed its name to “Kraken Robotic Systems Inc.” to reflect the Company’s continued growth and evolution from manufacturing sensors to supplying complete robotic systems, software and services in the global UMS market.



The registered office of the Company is located at Suite 1600, 100 King Street West, Toronto, ON, M5X 1G5.

The head office and principal place of business of the Company are located at:

189 Glencoe Drive
Mt. Pearl, NL A1N 4P6
Phone: 709-757-5757 | Fax: 709-757-5858
Email: info@krakenrobotics.com | Website: www.krakenrobotics.com.

For further information regarding the Company, reference is made to its filings with the Canadian securities regulatory authorities available under the Company's profile on SEDAR at www.sedar.com.

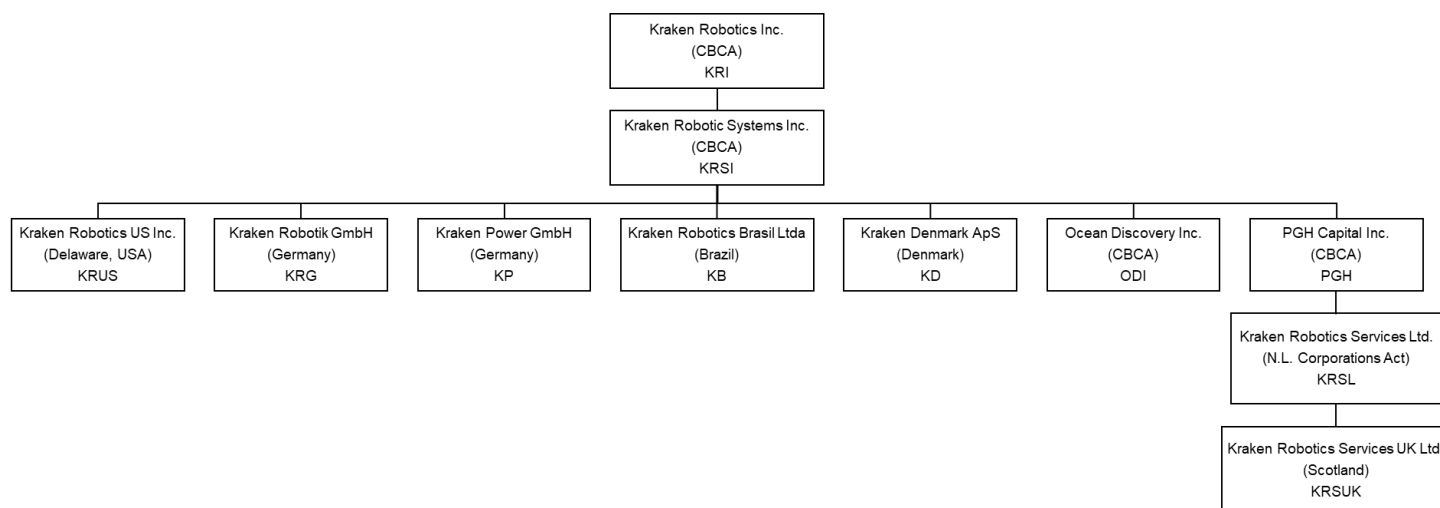
2.2 Intercorporate Relationships

As at the most recently completed financial year ended December 31, 2022, the Company had one wholly-owned subsidiary, Kraken Subco.

Kraken Subco is an entity incorporated under the CBCA, and has seven wholly-owned material subsidiaries, KUS, KRG, KPG, KB, KD, ODI and PGH Capital.

PGH Capital has two wholly-owned subsidiaries, KRSL and KRSUK.

The material subsidiaries bring different skillsets to the table including sensor, software, and system development, manufacturing and services allowing for cross-geography development. In this AIF, the term "Company" includes, where appropriate, Kraken Subco, KUS, KRG, KD, KPG, KB, PGH Capital, KRSL and KRSUK.



ITEM 3: GENERAL DEVELOPMENT OF THE BUSINESS

3.1 Three Year History

The following is a summary of the general development of the Company's business over the last three completed financial years.



(a) Equity Financings

On October 26, 2020, Kraken closed a short form prospectus offering comprised of 15,500,000 Common Shares at a price of \$0.67 per Common Share for aggregate gross proceeds of approximately \$10.4 million.

On April 6, 2021, the Company filed a final short form base shelf prospectus with securities regulators in each of the provinces and territories of Canada (the “**Base Shelf Prospectus**”). The Base Shelf Prospectus qualifies the distribution of Common Shares, warrants, subscription receipts, and debt securities, or any combination thereof from time to time, with an aggregate value of up to \$65.0 million during the 25-month period that the Base Shelf Prospectus is effective.

On July 26, 2021, the Company closed a short form prospectus offering comprised of 20,000,000 units at a price of \$0.50 per unit for gross proceeds of \$10 million. Each unit consisted of one Common Share and one-half of one Common Share purchase warrant, with each whole warrant exercisable for one Common Share at a price of \$0.60 per Common Share for a period of two years following the closing of the offering.

(b) Recent Development of the Business and Company Milestones

In January 2020, Kraken was awarded a contract valued at approximately \$0.5 million with the Government of Canada for Kraken’s SeaVision® 3D laser scanner. SeaVision® was initially pre-qualified under the Canadian government’s BCIP. Parks Canada and Kraken plan to conduct at-sea testing and evaluation of the SeaVision® system at a variety of archaeologically significant sites including the HMS *Erebus* and HMS *Terror* at the National Historic Site of Canada, Nunavut. Kraken was previously involved in Parks Canada’s discovery of the HMS *Erebus* during the Franklin Expedition in Summer 2014.

In January 2020, Kraken finalized the contract for the OceanVision™ project with the Ocean Supercluster and industry partners (Petroleum Research Newfoundland and Labrador, Ocean Choice International and Nunavut Fisheries Association). OceanVision™ is a three-year, \$18.8 million project focused on the development of new marine technologies and products to enable an underwater robotics data acquisition and data analytics as a service business. Under the OceanVision™ project, Canada’s Ocean Supercluster would provide an investment up to \$6.3 million, with the balance of project funding to be provided by other government agencies, industry partners, and Kraken.

In January 2020, Kraken signed an eight-year framework agreement with a leading international defense contractor. Under the agreement, Kraken’s Acoustic Signal Processing Group will provide development, maintenance and training to the customer to enhance and modernize their sonar product. The customer name and additional contract details cannot be disclosed for confidentiality reasons.

In March 2020, Kraken was awarded five new contracts for batteries, sonar sensors, and support totaling \$2.8 million.

In July 2020, NSPML joined Kraken’s OceanVision™ project. NSPML is an indirect wholly-owned subsidiary of Emera Inc., a multi-national energy company. OceanVision™ is a cross-sectoral pilot project designed to advance subsea technology and Robotics-as-a-Service (RaaS) capability. Along with providing expertise and knowledge of critical subsea infrastructure, NSPML will contribute over \$0.5 million during the term of the project.



In July 2020, Kraken received three defense customer orders totaling approximately \$1 million, including a follow-on order for MINSAS 60 LW sensors for man-portable vehicles. Delivery of this order occurred in Q4 2020. This product is currently being trialed on various man portable AUV platforms.

In August 2020, Kraken received approval for \$2.9 million in research and development funding from the National Research Council of Canada Industrial Research Assistance Program. The funding was received over a 26-month period and will be used to support the development of a seabed resident AUV, ThunderFish® XL.

In September 2020, Kraken entered into a contract secured through a competitive bid process with the DALO to supply minehunting sonar equipment to the Royal Danish Navy. Under the program, Kraken will provide its minehunting KATFISH™ towed SAS system, the Tentacle® Winch system, and LARS to be integrated onboard the Royal Danish Navy's optionally unmanned surface vessels. The aggregate value of the contract is US\$28.1 million, deliverable over a 5 to 10 year period, with the majority of funds (approximately US\$17.2 million) to be received over the two to three year product acquisition phase, with the remaining funds (approximately US\$10.9 million) being allocated to post sales service arrangements which will continue for the duration of the remaining term. The contract was entered into in the ordinary course, in accordance with applicable European procurement laws, and on terms normally observed in agreements of such nature.

Also in September 2020, Kraken entered into an agreement with Remontowa Shipbuilding S.A. to supply the Polish Navy with the KATFISH™ system, the Tentacle® system, and LARS. Kraken's equipment will be integrated onboard the Polish Navy's new KORMORAN II Mine CounterMeasure vessels in Gdansk, Poland.

In February 2021, Kraken received a new contract for subsea batteries totalling \$1.5 million, which were delivered during the year, and new funding awards totalling \$2.0 million across three of the Company's projects.

Also in February 2021, Kraken Subco earned ISO 9001:2015 certification for its Quality Management System, including manufacturing sites located in Mt. Pearl, Newfoundland and Dartmouth, Nova Scotia.

In March 2021, Kraken was awarded new contracts for subsea batteries totalling \$0.7 million, which were delivered during the year, and funding awards totalling \$1.5 million across two of the Company's projects.

In April 2021, Moya Cahill resigned as a director of Kraken. Following the resignation of Ms. Cahill, Kraken entered into a non-binding letter of intent in connection with the proposed acquisition of PGH Capital, the parent company of KRSL and KRSUK, from Cahill Innovation Inc. and Argentum Asset Management AS. PanGeo is a consulting services company specializing in high resolution 3D acoustic imaging solutions for the sub-seabed.

Kraken also acquired 13 Robotics Ltda. of Brazil, now operating as KB, for US\$0.22 million in cash. The KB team, with offices in Rio de Janeiro and Salvador, Brazil, consists of software developers and engineers who have significant experience in underwater robotics and autonomous systems for the energy markets.

Furthermore, in April 2021, Kraken announced that it had received a \$0.6 million order for its 6000-meter SeaPower® pressure tolerant batteries from Dive Technologies which was delivered in Q3 2021.



In May 2021, Kraken announced that it had received a \$0.5 million order for a 3000-meter rated AquaPix® MINSAS 120 sensors from an American autonomous underwater vehicle manufacturer. The order was delivered during the year.

Also in May 2021, Kraken received a second order for its 6000-meter rated AquaPix® MINSAS 120 sensors from Teledyne Gavia. This order, combined with the first order announced earlier in the year, resulted in an aggregate value of approximately \$1.75 million to \$2.0 million. The order was delivered in Q4 2021.

In July 2021, Kraken announced that its SeaVision® 3D laser scanner technology will be used in the Company's RaaS offering focused on three primary markets: mooring chain inspections, ship hull inspection, and offshore wind farm inspection.

In July 2021, Kraken announced that it had signed a definitive share purchase agreement (the "**PanGeo Agreement**") dated July 20, 2021 whereby Kraken Subco would acquire all of the issued share capital of PGH Capital (the "**PanGeo Transaction**"). The PanGeo Transaction was an arm's length acquisition and PanGeo's assets consist primarily of human capital/know-how and equipment comprised mostly of sub bottom imaging units and acoustic imaging units that are used to provide the services. The consideration for the PanGeo Transaction consisted of:

- a cash payment on closing of \$3 million;
- 12,068,965 Common Shares on closing having a deemed value of \$0.58 per Common Share and \$7 million in the aggregate;
- \$4 million to be paid in cash, plus interest at a rate of 6% per annum, on the second anniversary of the closing, to be evidenced by non-transferable promissory notes issued on closing, with up to 40% of the value of the promissory notes repayable in the form of Common Shares at the option of the Company, subject to the approval of the Exchange; and
- Potential earnout payments of up to an aggregate of \$9 million to be paid 50% in cash and 50% in Common Shares, subject to the approval of the Exchange, pursuant to an earn-out on the following terms:
 - an amount equal to 300% of the amount by which certain qualifying revenue in the one-year period immediately following the closing exceeds \$9.5 million, up to a maximum payment of \$4.5 million; and
 - the amount equal to 300% of the amount by which certain qualifying revenue in the two-year period immediately following the closing exceeds \$21.5 million, up to a maximum payment of \$9 million less any amount paid pursuant to the foregoing earnout amount.

In January 2023, Kraken paid the first earnout amount of \$4.5 million. The Company elected to satisfy 50% of the earnout through the issuance of an aggregate of 4,500,000 common shares at a deemed price of \$0.50 per consideration Share and the remaining 50% in cash.

PanGeo is a marine geophysical-geotechnical service delivery company specializing in high-resolution true 3D volumetric acoustic imaging solutions to mitigate risk in offshore installations. PanGeo offers a technology solution to clients that supports accurate positioning and continuous visualization of cables and pipelines during depth of burial surveys; helps identify buried anomalies threatening integrity of



pipe/cable in parallel with depth of burial survey; and provides true 3D volumetric imaging and accurate positioning of buried infrastructure for efficient site decommissioning. Corporate headquarters are in St. John's, Newfoundland with operations in Aberdeen, UK, and Dartmouth, Nova Scotia, Canada and a sales office in Virginia, USA. Kraken's primary business remains the design and manufacturing of hardware in the form of sensors, power systems, and underwater robotic systems, but the PanGeo acquisition will allow the Company to build a recurring revenue stream from the provision of consulting services using Kraken technology, among other benefits. See "*Risk Factors – Management of Growth and Acquisition Integration*".

In August 2021, Kraken completed the acquisition of PGH Capital.

In August 2021, KRSL secured \$2 million in funding from Canada's Ocean Supercluster for the development of wider scanning capability and increased efficiency called GeoScan.

In September 2021, Kraken announced an order for an AquaPix® MINSAS 120 sonar system from a Fortune 500 company with activities in the defense sector worth \$0.765 million.

In October 2021, Kraken signed a RaaS contract with the Canadian government for testing of Kraken's ultra-high resolution survey equipment with the Royal Canadian Navy, which was completed in April 2022. This \$0.5 million contract was funded under the Canadian government's *Innovative Solutions Canada* program, and the testing department for this service offering is the Royal Canadian Navy's Fleet Diving Unit Atlantic based in Nova Scotia.

In November 2021, Kraken and KRSL were awarded two contracts with an expected value of \$7.1 million from the Newfoundland Offshore Oil and Gas Industry Recovery Assistance Fund. The combined projects valued at \$9.2 million were executed between Q4 2021 and Q4 2022. Kraken and KRSL's inspection and survey platforms assist the offshore energy sector to acquire better, faster, and more valuable data. This enables offshore energy operators to make better-informed decisions regarding asset integrity, enhance energy recovery and reduce carbon emissions during inspection and survey operations.

In February 2022, Cathy Bennett resigned from the Board of Directors.

Also in February 2022, Kraken announced an order for subsea batteries from a US defense industry customer for integration on its AUVs valued at \$4.8 million with deliveries occurring in 2022. In addition, Kraken received an order for 1000-meter rated AquaPix® MINSAS 60 sonar from a new South Korean customer for use in a military application valued at \$0.3 million, which was delivered in 2022.

In March 2022, KRSL was awarded a \$5 Million Acoustic Corer™ contract in the US Gulf of Mexico with Couvillion Group to begin in Q2 2022. The 90-day campaign is the largest Acoustic Corer™ project undertaken by the Company to date.

In April 2022, Kraken successfully completed a RaaS contract with the Royal Canadian Navy, for testing of Kraken's ultra-high resolution survey equipment. This \$0.5 million contract was funded under the Canadian government's *Innovative Solutions Canada* program.

In May 2022, KRSL was awarded several cable depth of burial campaigns in Europe utilizing the Company's 3D acoustic Sub-Bottom Imager™. These contracts had a combined value of more than \$3 million and were completed throughout 2022.



In May 2022, Kraken was awarded contracts valued at more than \$1.6 million for its AquaPix® SAS. Deliveries occurred in 2022. Due to confidentiality reasons the customers cannot be named.

In July 2022, Kraken, under a contract with DALO, delivered minehunting sonar equipment to the Royal Danish Navy. This includes Kraken's KATFISH™ towed Synthetic Aperture Sonar, Tentacle® Winch and Autonomous Launch and Recovery System ("ALARS"). Kraken's minehunting systems are being integrated onboard the Royal Danish Navy's optionally unmanned surface vessels. Kraken's system acceptance tests with DALO and MCM Denmark were completed in the second half of the year and early 2023, following which MCM Denmark's upgraded capabilities are expected to be deployed operationally in early 2023.

In July 2022, Kraken was awarded new contracts valued at \$2.0 million for its 6000-meter rated AquaPix® Synthetic Aperture Sonar from a US defense contractor for deployment on AUVs built by the customer. Due to confidentiality reasons the customer cannot be named. Deliveries occurred in the second half of 2022.

In September 2022, Kraken signed a follow-on contract to supply minehunting systems as part of a contract for new Mine Countermeasure Vessels ("MCMVs") for a leading NATO Navy. As part of this new contract, Kraken will deliver additional KATFISH™, Tentacle® Winch and ALARS and topside systems. Kraken's sonar equipment will be integrated onboard new MCMVs, with deliveries occurring in 2023 and 2024.

In September 2022, KRSL, completed cable depth of burial surveys along the EstLink 1 and 2 cables during an offshore campaign utilizing PanGeo's SeaKite ROTV equipped with the Bottom Imager™. At September 2022, PanGeo had completed more than 10,000 km of cable DOB surveys to date.

In September 2022, after successful completion of an Innovative Solutions Canada Testing Stream contract with the Royal Canadian Navy earlier this year, Kraken has been among the first Canadian companies qualified to sell its innovation directly to the Government of Canada without further competition. This qualification for Kraken's OceanVision™ solution is under Canada's new Pathway to Commercialization framework initiated by ISC. While this approval does not have a value in of itself, direct purchases can be up to \$8 million per contract and are available to all government departments.

In September 2022, Kraken participated in the Royal Navy's WILTON Industry Show and Experiment ("WISEX") on the ranges in Kilbrannan Sound off Campbeltown, Scotland. WISEX provides an opportunity for industry to showcase new systems for consideration by the Royal Navy. With live demos and sea trials, the Royal Navy are better able to understand the demonstrated technology including software, sensors, and effectors necessary to implement a highly reliable Mine Hunting Capability.

In October 2022, Kraken received contracts from two customers totaling \$1.1 million for SAS. Due to confidentiality reasons the customers cannot be named but deliveries will go to the UK and Singapore for integration onto small man portable AUVs. This represents Kraken's first sale into Singapore and is reflective of our growing value proposition in the market of providing leading technologies at commercially competitive prices.

In October 2022, KRSL completed an Acoustic Coring campaign for ONE-Dyas in the North Sea. This is KRSL's second Acoustic Corer survey at ONE-Dyas's GEMS development, supporting foundation engineering of the N05-A gas platforms.



In October 2022, Kraken announced an order for subsea batteries from a manufacturer of AUVs. The order is valued at \$1.1 million and is a follow on from a \$4.8 million order from the same customer earlier this year. Due to confidentiality reasons the customer's name cannot be disclosed. Delivery occurred in Q4 2022.

In October 2022, Kraken received a purchase order from Qikiqtaaluk Corporation for our AquaPix® SAS which will be integrated to an AUV that the Qikiqtaaluk Corporation will use to conduct ghost gear detection operations in the Arctic. Delivery is expected in 2023 and the contract value is more than \$0.6 million.

In October 2022, Kraken received a \$1.1 million purchase order from an unnamed customer for several of our AquaPix® SAS. These systems will be integrated to AUVs for delivery to two distinct NATO navies. Delivery is expected in the first half of 2023.

In November 2022, Kraken signed a R&D contract with a global energy company which will provide \$8 million of cash funding to KB over a three-year period. Under this project, Kraken will continue development of artificial intelligence, machine learning software, and subsea autonomy solutions to intelligently analyze sensor data and learn how to respond to highly dynamic environments in the offshore oil and gas, wind, hydrographic, science, and defense industries. Due to customer confidentiality, further details cannot be released at this time.

In November 2022, KRSL completed over \$5 million in Sub-Bottom Imager projects year-to-date. This includes over 1,500 km of depth of burial surveys that have a cumulative contract value of over \$3 million. These surveys have supported the development of offshore wind farms in the US, Irish Sea, North Sea, Baltic Sea, and off the coast of Taiwan.

In November 2022, Kraken completed the offshore portion of a RaaS contract for the marine inspection of critical underwater infrastructure, including a submarine power cable. The contract value is \$0.5 million. Kraken completed the offshore survey in challenging sea state conditions, including up to 4 kts of cross current, by using the KATFISH™ high-speed towed synthetic aperture sonar system coupled with Kraken's ALARS.

In November 2022, Kraken received an initial order for subsea batteries valued at \$14 million, which included a significant advance payment. Deliveries will occur throughout 2023.

On December 1, 2022, Bernard Mills joined the Company's Board of Directors.

In December 2022, Kraken was awarded a prime contract with the Government of Canada to provide Remote Minehunting and Disposal Systems for the Department of National Defense. The contract consists of an estimated 24-month acquisition program followed by an initial five-year integrated logistics support program, which includes options for additional equipment, spare parts, training, and technical support. If all options in the acquisition and integrated logistics support programs are selected, the total value will exceed \$50 million, consisting of approximately \$40 million for the acquisition and \$10 million for integrated logistics support. Progress payments will be made over the 24-month term of the acquisition contract.

In December 2022, Kraken's AquaPix® MINSAS was selected as the standard payload offering on HII's new REMUS 620 Medium Class UUV. Also, the Company received an international RaaS contract for the high- resolution inspection of the critical sea routes and critical marine infrastructure valued at \$0.8 million.



Effective January 1, 2023, Kraken renamed PanGeo Scotland to Kraken Robotics Services UK Limited and PanGeo Canada to Kraken Robotics Services Ltd. From a branding perspective, the PanGeo brand name was retired and the service offering continues under the Kraken Robotics brand.

Effective January 1, 2023, Karl Kenny, Founder and President and Chief Executive Officer, was appointed Executive Chairman of Kraken and transitioned the President and Chief Executive Officer role to Greg Reid. David Shea, Executive Vice President of Products, took on the additional role of Chief Technology Officer.

In January 2023, the Company paid the first earnout amount of \$4.5 million (the “**First Earnout Amount**”) pursuant to the PanGeo Agreement. The Company elected to satisfy 50% of the First Earnout Amount through the issuance of an aggregate of 4,500,000 Common Shares at a deemed price of \$0.50 per Common Share and the remaining 50% of the First Earnout Amount in cash.

In February 2023, the Exchange recognized Kraken as a 2023 Top 50 Company. Kraken placed first in the technology category.

In March 2023, Kraken announced that it will provide subsea solutions to N-Sea with cable burial survey services during cable inspection and remedial burial campaign for a major interconnecting power cable asset in the North Sea. While contract values cannot be disclosed, Kraken has secured more than \$1.4 million to date in Q1 2023 in depth of burial and boulder detection project surveys.

In March 2023, Kraken received a \$1.3 million purchase order from an unnamed customer for our AquaPix® SAS. These systems will be integrated to a NATO Navy’s AUVs for use in minehunting and security applications. The Company also announced \$1.5 million in orders from a US defense customer for our AquaPix® SAS. These 6000-meter rated systems will be integrated to the customer’s AUVs. Delivery is expected in 2023.

In March 2023, Kraken received \$1.5 million in orders from a US defense customer for our AquaPix® SAS. These 6000-meter rated systems will be integrated to the customer’s AUVs. Delivery is expected in 2023.

In April 2023, Kraken received a \$4 million purchase order from a NATO navy customer for KATFISH spares. Delivery will occur over the next 12 months.

In April 2023, Kraken received a \$3 million purchase order for SeaPower® subsea batteries. Deliveries will occur in 2023.

ITEM 4: DESCRIPTION OF THE INDUSTRY AND BUSINESS

4.1 History

Kraken is a marine technology company providing ultra-high-resolution sensors, power systems, and underwater robotic systems. The Company’s goal is to become a leading provider of underwater robotics equipment and services. Leveraging technology development tracing back to 2009 at a previous company, Kraken started with eight employees in 2012 to develop and commercialize SAS technology. At December 31, 2022, Kraken had 211 employees with a head office in Mt. Pearl, Newfoundland, Canada and has shipped product and provided services to customers in over 20 countries.



Kraken has a highly capable team of engineers, scientists, and technicians with specialized skills. Scientific staff have world-leading expertise in sonar design, remote sensing, and signal processing for synthetic aperture sonar, anti-submarine warfare, and 3D optical imaging. Kraken's electrical and mechanical engineering teams have extensive experience designing tethered/towed and untethered/free-swimming underwater vehicles, custom payload sections, and LARS. Kraken's software engineering group develops applications for data acquisition, real-time processing, vehicle control, 3D visualization, telemetry, artificial intelligence, machine learning and data post-processing. The Company is supported by a team of technicians that perform assembly, inspection, testing, calibration, and troubleshooting of mechanical and electrical systems. Kraken's technical staff also have extensive experience performing system integration onboard customer-owned vehicles and conducting operations at sea to collect data for a variety of surveys, technical demonstrations, and collaborative research projects.

Kraken's products are sold into both the manned and the UUV market. The UUV can be divided into UUVs and USVs. UUVs are either AUVs, ROVs, or Towfish. UUVs are used extensively for military and commercial applications, such as undersea search and survey missions. USVs may be remotely operated or be fully autonomous.

Kraken was founded with the objective of commercializing a software-centric version of SAS at the lowest cost in the market to compete with more hardware-dependent and expensive SAS solutions. SAS is an advanced imaging technology which dramatically improves seabed surveys by providing ultra-high-resolution imagery at superior ACRs as compared to conventional SSS technologies. These legacy SAS systems were seen as the domain of global defense contractors using SAS for military surveillance purposes to detect seabed mines or other types of unexploded ordnances. SAS is the next generation of sonar, following side scan sonar and multi-beam echo sounders, which while capable of producing high resolution images of objects on the seabed, only do so at short range and corresponding low ACR. SAS, on the other hand, is capable of producing ultra-high-resolution imagery at long ranges, which can be more than ten times the range of conventional side scan sonar, all while achieving significantly higher ACR.

SAS is the underwater equivalent of SAR used in the satellite and communications industry. This technology is 'rare air technology' with Kraken having only a handful of competitors at the high end of the market. Customers using SAS technology are looking to get maximum ACR at the highest resolution, for the lowest cost. One factor affecting ACR is the length of the aperture (antenna). Traditional sonar technology such as SSS uses real apertures that are limited by the size of the underwater vehicle they are deployed on. SAS, on the other hand, uses the motion of the underwater vehicle along with highly sophisticated signal processing algorithms to 'spoof' the system into thinking the aperture is 40-50 times longer than it really is. The result is up to a 10-times increase in area coverage rates over traditional SSS. In other words, more area can be surveyed at a much higher resolution in less time. The graphic below illustrates the difference in image quality of a 20-metre towrope lying on the seabed:



Sides Scan Sonar vs SAS – Towrope

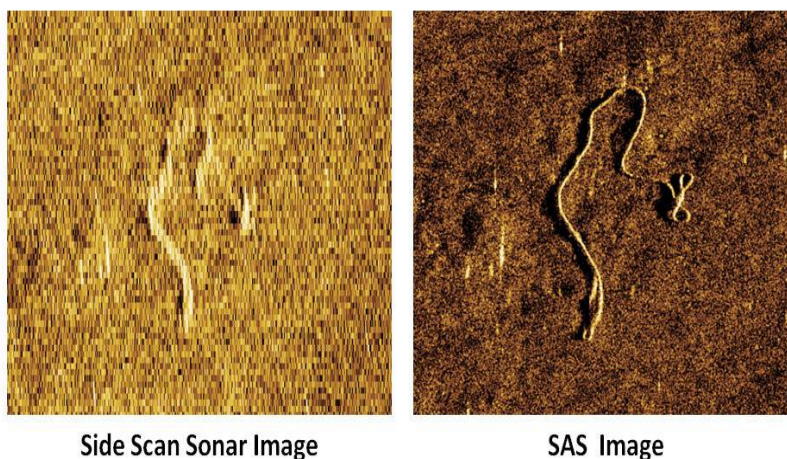


Figure 1: Side Scan vs SAS Images

In addition to improved area coverage rate, Kraken provides this data in real time, without the traditional limitations of extensive post mission processing. Furthermore, all of Kraken's SAS systems are Interferometric, meaning that they are able to simultaneously provide real-time ultra-high definition SAS bathymetry that is co-registered with the SAS imagery. Through a partnership with Teledyne-owned Caris, Kraken also offers Caris Onboard, an automated hydrographic processing workflow which can combine the imagery and bathymetry into real-time hydrographic databases certified to IHO SP44 standards.

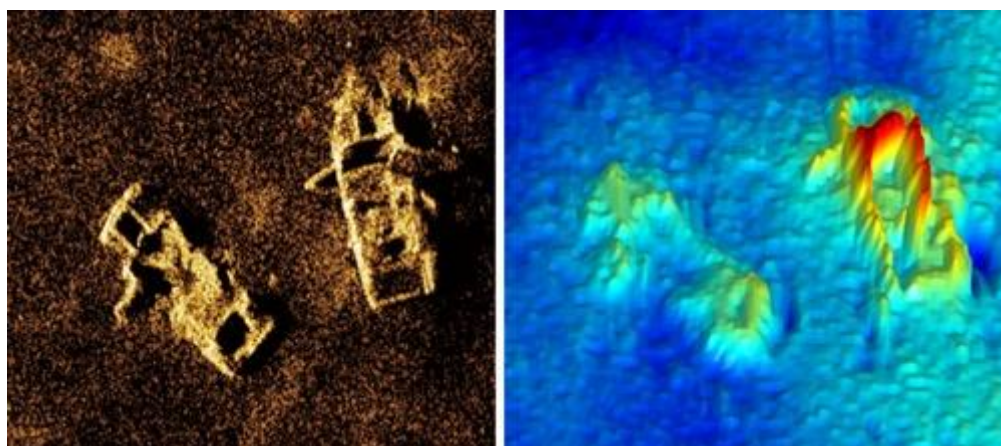


Figure 2: SAS Image and Bathymetry

As the Company has grown, Kraken has developed additional sensors and has designed and produced our own UUVs. In addition to selling products, Kraken has a RaaS business.

With the acquisition of PanGeo in 2021, Kraken now provides marine geophysical-geotechnical services through high resolution 3D volumetric acoustic imaging solutions to mitigate risk in offshore installations using its sub-bottom imager and Acoustic Corer technology. Kraken's service offering can provide accurate positioning and continuous visualization of cables and pipelines during depth of burial surveys and helps identify buried anomalies such as boulders and unexploded ordnances. This is in

addition to providing services using KATFISH and SeaVision for subsea surveys and infrastructure inspection.

4.2 Principal Markets

The principal market for Kraken's technology is the maritime robotics market which consists of defense contractors, national defense agencies, research institutions, oil and gas customers, seabed mining companies, search and salvage companies, and survey companies – both national and international. Today, these customers map the seafloor for many applications. Our perception of the ocean floor has expanded through the use of 3D geospatial applications. However, most 3D bathymetry maps that historically represent continuous global seafloor coverage are artist renditions. It was not until recently that concerted efforts have been made to compile sonar bathymetric data in the public and classified domains to produce higher-resolution 3D digital terrain models of the seafloor.

While the underwater robotics industry has multiple market segments, the military is currently the largest in terms of annual spending and in active robotic assets. The three main applications of underwater robotics for the military are mine counter measures (“MCM”); intelligence, signals intelligence, reconnaissance, and anti-submarine warfare.

In recent years, there has been a resurgence in underwater warfare as well as an emerging market in seabed warfare driving demand for unmanned systems. Key drivers include a mine warfare upgrade cycle, anti-submarine warfare, and the emergence of China in the underwater domain.

Traditionally the maritime robotics industry has been characterized by high costs for bespoke custom designs, low reliability, and high product life cycle costs due to products being expensive to operate and maintain. Industry pioneers and their government sponsors spent billions of dollars on AUVs, ROVs, and sensor development. With technological evolution, better endurance, miniaturization, and enhanced payloads, product capabilities and reliability have improved, pricing has declined, and adoption is increasing. Buyers of the technology have increased confidence that AUVs, ROVs, and other underwater robotics equipment can perform serious missions without failing.

In the commercial market, on which Kraken's service business is focused, various segments use underwater robotics for data capture and data analysis. These include cable & pipeline survey, subsea infrastructure monitoring, inspection repair & maintenance, hydrography and seabed mapping, search locate and recovery, treasure hunting & salvage, offshore wind wave and tidal farms, seafloor mineral exploration, ocean science, environmental monitoring, and marine archeology. In the oil and gas and offshore wind sectors, the build out of new and maintenance of existing infrastructure is a major driver for underwater sensors and robotics.

Kraken's growth will come from industry growth, an expanding product offering, and increasing market share. Based on various third-party sources, the maritime robotics and services market is estimated to be a \$30 billion market (including sensors, batteries, platforms, and services) (Source: Multiple industry reports). The industry is at an inflection point to greater adoption and growth driven by multiple drivers. These drivers include: military cutbacks for ‘dull, dirty, dangerous’ human tasking; an industry upgrade cycle in MCM applications; offshore oil and gas migrating into deeper water; growth of offshore wind; increasing interest in ocean mining; improved sensor performance / resolution; emerging opportunities in the Arctic; deep-sea asset recovery operations; increasing interest in ocean science. All of these market drivers result in increased demand for improved sensor performance and resolution on underwater platforms.



4.3 Product Development Strategy – Sensors to Systems

Kraken's product offering has evolved from 'sensors to systems' to supply vertically integrated, turnkey seabed survey solutions (sensors and vehicles) into the global defense and commercial AUV and ROV markets. Leveraging a strong background in developing sensors, Kraken has moved up the food chain, expanding its addressable market, increasing average selling prices, and capturing greater margin.

Kraken's product development has been a combination of in-house effort, partnering in other geographies, and selective M&A opportunities.

4.4 Principal Products and Services

The Company's products can be broadly characterized in two categories: (1) sensors and platforms; and (2) energy. The Company's principal sensor product is its SAS technology, which produces ultra-high resolution (2 cm) images at ranges far superior to conventional sonar technology. Our SAS systems are commercially available under the AquaPix® name and customized to seamlessly integrate into each customer's underwater vehicle. These products are primarily designed for use onboard AUVs, remotely operated tow vehicles, ROVs and tow bodies.

What is SAS?

SAS is a powerful imaging technique that coherently combines echoes from multiple acoustic pings along the trajectory of an underwater robot to construct a 'synthesized' sonar array. When synthetic aperture techniques are applied at sufficiently low acoustic frequencies, a modest-sized SAS can generate imagery with a constant azimuth resolution comparable to that of higher frequency sonar systems, but with significantly longer range.

Interferometric SAS ("INSAS") is strongly related to its airborne cousin – interferometric SAR ("INSAR"). While INSAR has transitioned into a commercial off-the-shelf product, INSAS has for a long time remained at the research stage. Some of the reasons for this delay have been the challenges in obtaining very high navigation accuracy through the ocean, as well as the high-computational cost of SAS imaging software. INSAS uses sophisticated signal processing techniques to compare the multiple observations of the same area of seafloor to calculate its depth. The image resolution of the seabed is significantly increased – often by an order of magnitude – compared to conventional sonar technology. INSAS systems can achieve image and bathymetry resolutions of a few centimetres even in very deep waters and at very long ranges.

INSAS hardware (transducer arrays and electronics), image processing and INSAS processing have been a research topic at the NATO Undersea Research Centre in La Spezia, Italy for many years. The introduction of hydrodynamically stable UUVs, cheaper and more powerful data collection and processing electronics, combined with advanced micro-navigation and auto-positioning methods has recently brought INSAS forward as a viable alternative to SSSs and multibeam echo-sounders for seabed imaging.

Kraken's SAS History

Kraken's AquaPix® hardware development commenced in January 2011 (at a previous company) with the first major sea trial occurring in August 2012. Kraken's INSAS signal processing software, 'INSIGHT', was developed in parallel.



Kraken's SAS technology has been tested by various strategic industry partners including Defence Research and Development Canada, the United States Navy's Sea Systems Command and the United Kingdom Ministry of Defence. A successful cooperative research and development agreement with the Naval Undersea Warfare Center ("NUWC") in Rhode Island in 2013 was a key validation point for Kraken's SAS technology.

AquaPix® INSAS

While conventional sonars are commonly used for seafloor imaging and bathymetry, they suffer from range and resolution limitations. However, these limitations are overcome by using INSAS systems such as those designed and manufactured by the Company.

The Company's ultra-high resolution INSAS with 3D bathymetric capabilities is called AquaPix®. AquaPix® is capable of providing detailed images with an along-track/across-track resolution better than 2 centimetre out to a range of 200 metres from each side of an underwater vehicle (400 metre swath). It can also produce bathymetric data with a resolution better than 25 centimetre out to full range while delivering very high depth accuracy, in compliance with IHO S44 special order requirements.

In addition to being used for military applications such as naval mine countermeasures, INSAS is a multi-market technology with great potential for offshore oil and gas surveying, hydrographic surveys, underwater archaeology, benthic habitat mapping and deep-sea mining. With high resolution INSAS it is possible to use image fusion techniques to combine the bathymetric data with the reflectivity data to create a real-time 3D representation of objects on the seabed. The ability to generate centimetre-scale resolution in all three dimensions has the potential to provide significant improvements in the detection, classification and identification of small seabed objects.

MINSAS

In 2014, Kraken announced the AquaPix® MINSAS, a next generation MINSAS designed for smaller diameter AUVs. MINSAS is optimized for the demanding size, weight, power and cost constraints of AUVs, is based upon a proven military design, and is ideal for a variety of seabed imaging and survey missions. The MINSAS payload section also includes Kraken's latest generation Real Time SAS Processor. The RTSAS enables real-time, onboard processing of SAS imagery and bathymetry, and allows operators to leverage Kraken's suite of post-processing tools, including the newly developed SASView 3D visualization and control software.

Since the launch of the AquaPix®, Kraken's MINSAS sensors have been used by numerous customers including Defence Research and Development Canada, Woods Hole Oceanographic Institute ("WHOI"), DSTO, Elta Systems, ECA Robotics, Fraunhofer, Atlas Elektronik, Lockheed Martin, Ocean Infinity, HII, Teledyne Gavia, Anduril Industries, and others. It has also been used in a number of high-profile seabed search applications, including being used to help discover the HMS Erebus during the Franklin Expedition in Canada's Arctic in 2014, and used to locate the Avro Arrow free flight models in Lake Ontario in 2017.





Figure 3: SS Ferrando Shipwreck Imaged by Kraken SAS (courtesy of ECA Robotics)

Additional SAS Developments

Kraken is leveraging the success of its INSAS and MINSAS developments towards additional SAS products. As the product is modular, it can be utilized for small, medium and large AUV and towed sonar applications. Recent developments include: Multi-spectral SAS and lightweight MINSAS (“**MINSAS-LW**”). Kraken discusses MS-SAS and MINSAS-LW in the R&D section that starts on page 25 of this AIF.

In 2020, Kraken became the first to achieve a practical resolution of 2 cm with a Commercial-Off-The-Shelf SAS, Kraken’s AquaPix® MINSAS. Kraken’s Ultra HD software improves the AquaPix® SAS image resolution from 3.0 x 3.3 cm (across along track) to an industry-leading 1.9 x 2.1 cm and maintains constant Ultra HD resolution across the entire swath. Compared to conventional SAS processing, the incredibly high pixel density of Kraken’s Ultra HD sonar imagery sets a new standard for seabed image quality, using Kraken’s advanced image processing techniques to extract all the available information from sonar echoes.

In 2020, Kraken began development of an innovative gap filler solution for unmanned underwater vehicles based on the Company’s AquaPix® SAS and SeaVision® 3D laser scanner. This solution fills the nadir gap with ultra-high definition data. The gap filler has been implemented in customer deliveries starting in 2021. Leveraging our background in SAS and underwater laser imaging systems, Kraken has developed two integrated nadir gap-filling technologies: (1) An acoustic gap reducer, based on Kraken’s AquaPix® system, which drastically reduces the size of the nadir gap while maintaining full SAS resolution and (2) An optical laser/camera gap filler, based on Kraken’s SeaVision® system, which fills the remainder of the nadir gap with ultra-high-resolution optical imagery and laser bathymetry. These



gap filling technologies maximize the area coverage rate for high-speed towed systems, such as Kraken's KATFISH™, as well as autonomous underwater vehicles.

KATFISH™ Intelligent SAS Towfish – Real time 3D seabed mapping

In 2015, Kraken kicked off the next stage in its sensors-to-systems strategy through the start of development of the KATFISH™ actively stabilized towed SAS Towfish product. KATFISH™ is an actively stable towed SAS for manned surface vessels or USVs. Built upon Kraken's proven, real-time SAS technology, KATFISH™ reached initial commercial release in 2018. Its advanced hydrodynamic control system allows for bottom following, terrain referencing and obstacle avoidance. The full system includes cable, towbody and operator's console. An Israeli defense company was the first customer for the KATFISH™. The KATFISH™ sells for \$2-\$3 million. Including topside equipment, cables, and launch and recovery equipment, the price of a complete KATFISH™ system could sell for upwards of \$5 million per system. Key operating metrics include:

- High-speed (up to 10 kts) actively controlled towbody, tightly integrated with Kraken sensor payloads
- MINSAS180 with gap filler
- Resolution: Up to 1.9cm x 2.1cm
- Swath width: Up to 400 metres
- Operating Depth: Up to 300 metres

Kraken is seeing significant opportunity for KATFISH™ across a range of markets and geographies. Kraken completed successful demonstrations in the U.S at the Advanced Naval Technology Exercise ("ANTX") in 2019 as well as at the Trident Warrior naval exercise in 2020. In addition, Kraken has cooperative research and development agreements (each, a "CRADA") with NUWC and National Oceanic and Atmospheric Administration ("NOAA"). Kraken continues to participate in foreign navy MCM bids both directly and in partnership with various defense prime contractors and is seeing robust activity in this market given the current geopolitical environment.

In September 2020, Kraken entered into a contract secured through a competitive bid process with DALO to supply minehunting sonar equipment to the Royal Danish Navy. Under the program, Kraken will provide its minehunting KATFISH™ towed SAS system, the Tentacle® Winch system, and LARS to be integrated onboard the Royal Danish Navy's optionally unmanned surface vessels.





Figure 4: KATFISH™

In September 2020, Kraken entered into an agreement with Remontowa Shipbuilding S.A. to supply the Polish Navy with the KATFISH™ system, the Tentacle® system, and LARS. Kraken's equipment will be integrated onboard the Polish Navy's new KORMORAN II Mine CounterMeasure vessels in Gdansk, Poland.

In September 2022, Kraken announced that it has signed a follow-on contract to supply minehunting systems as part of a contract for new Mine Countermeasure Vessels (MCMVs) for a leading NATO Navy. As part of this new contract, Kraken will deliver additional KATFISH™, Tentacle® Winch and ALARS and topside systems.

Tentacle® Winch and Launch and Recovery Systems ("LARS")

In 2016, Kraken established a Dartmouth, Nova Scotia office focused on the design and manufacture of LARS for Manned and Unmanned Maritime Vehicles. The Nova Scotia team, formerly employed at Rolls-Royce Naval Marine, have extensive experience and were responsible for the development of advanced LARS used by a wide variety of military, commercial and ocean science customers. Launch and recovery are some of the highest risk operations undertaken in the application of towed or autonomous underwater vehicles. The primary function of an autonomous LARS is to enable an unmanned vehicle and its payloads to be brought aboard a host ship safely, efficiently and without damage.

Next-generation surface vessels will carry a variety of unmanned vehicles and modular mission packages that will require specialized LARS. The team in Halifax is designing winches and LARS systems for both the KATFISH™ as well as future AUV and ROV products and also undertake custom design work for third parties. These LARS systems range in price from \$0.75 million to \$1 million. In addition, Kraken expects to work with other partners for subsea docking and residence applications as these technologies gain traction in the underwater vehicle market.

Tentacle® is a highly intelligent electric winch which can adjust cable scope through active feedback from underwater towed platform.

Tentacle® Winch forms the starting point for a complete LARS. Depicted below is a complete package of a KATFISH™ system and LARS including Tentacle Winch® and docking head. Kraken is currently

working on development of a smaller, lighter winch and LARS system for smaller USVs which are starting to emerge as important minehunting platforms for the defense market.

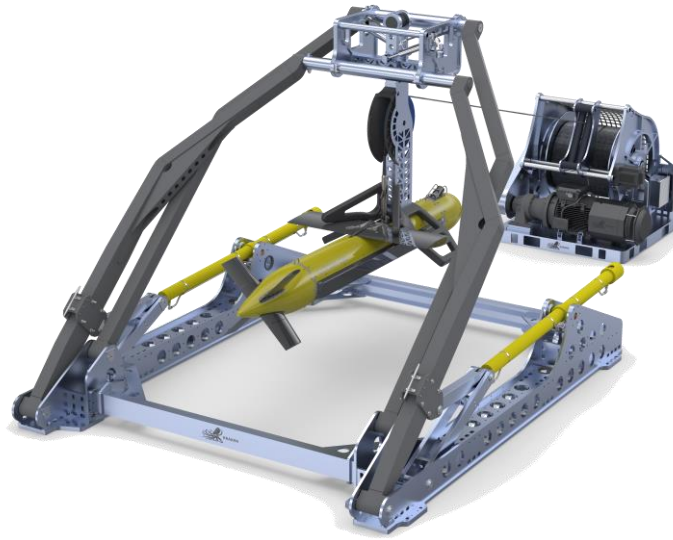


Figure 5: Render of LARS for KATFISH

Deep Sea Pressure Tolerant Batteries

Based in Rostock, Germany, KPG designs and manufactures unique pressure tolerant batteries, battery management systems, and electronics. These are specialized deep-sea components for AUVs and ROVs. KPG's unique pressure tolerant gel encapsulation technology for lithium polymer batteries provides an attractively priced, eco-friendly and superior alternative to oil compensated batteries currently used for subsea battery applications.

This durable silicone polymer encapsulation remains flexible, yet stable under pressure. This method of encapsulation allows Kraken to reduce the size and weight of traditional subsea battery packs by not requiring the cells to be located inside pressure housings or flooded with oil. As such, the battery design is no longer constrained by dimensions of the pressure or oil housings. They can now be contoured to better fit the shape of the vehicle, which improves packing efficiency and increases volumetric density. Ultimately, this technology reduces the size and weight of high-density battery packs for underwater vehicles and dramatically reduces the cost and weight versus traditional subsea batteries. Kraken Pressure Tolerant Battery Systems are modular and can be connected in banks to meet the vehicles voltage and capacity requirements. Each pack is individually rated to 6000 meters and contains its own battery management systems.



Figure 6: Deep Sea Batteries

In February 2022, Kraken announced an order for subsea batteries from a US defense industry customer for integration on the customer's AUVs. In October 2022, Kraken announced a follow on order for subsea batteries from a same AUV manufacturer for \$4.8 million.

In November 2022, Kraken announced that it has received an initial order for subsea batteries valued at \$14 million, which included a significant advance payment.

In April 2023, Kraken received a \$3 million purchase order for SeaPower® subsea batteries. Deliveries will occur in 2023

Robotics as a Service

Non-defense customers would typically prefer to hire companies like Kraken to provide product output (i.e. imaging and bathymetry data) as compared to purchasing and then operating and maintaining subsea survey and inspection equipment. For this segment of the market, Kraken's RaaS model will allow customers to gain exposure to next generation technologies, while minimizing the capital investment requirement. With the acquisition of PanGeo in July 2021, Kraken expanded its service offering to include specialized high-resolution 3D acoustic imaging solutions for the sub-seabed. In January 2023, the PanGeo brand was replaced with Kraken Robotics.

Kraken provides marine geophysical-geotechnical services specializing in high-resolution true 3D volumetric acoustic imaging solutions to mitigate risk in offshore installations. The technology offers a solution to clients that supports accurate positioning and continuous visualization of cables and pipelines during depth of burial surveys; helps identify buried anomalies threatening integrity of pipe/cable in parallel with depth of burial survey; and provides true 3D volumetric imaging and accurate positioning of buried infrastructure for efficient site decommissioning.

The PanGeo Transaction significantly accelerated our vertical move into the provision of services using our technology as part of a robotics/data as a service business model. As a result of the addition of PanGeo, we have also increased our exposure to the non-defense market, including the offshore renewable energy market, which will help to diversify our client base and provides a holistic solution of world-leading technologies and services in subsea acoustic and optical imaging using Kraken's suite of ultra-high resolution seabed 3D acoustic imaging sensors, autonomous robotics, and optical laser



scanning paired with PanGeo's suite of leading-edge sub-seabed high-resolution 3D acoustic imaging capabilities.

Kraken provides SeaVision® services to customers across mainly in offshore oil and gas and offshore wind. SeaVision® is a RGB underwater laser imaging system that offers the resolution, range and scan rate to deliver dense full color 3D point cloud images of subsea infrastructure with millimetre accuracy in real time. It operates in a twin pod configuration with each pod having three steerable laser lines, camera, and LED lights producing high-resolution point clouds in unprecedented scan speed and co-registered video data. The concentrated light source provides greater visibility even in high turbidity. SeaVision® can be operated in 2 modes, rotating the laser (a.k.a. scanning) or lasers in a fixed position (common approach provided by most laser suppliers, a.k.a. profiling). SeaVision® is an ideal tool for digital twinning applications and is a significant step forward in how different subsea assets can be inspected.

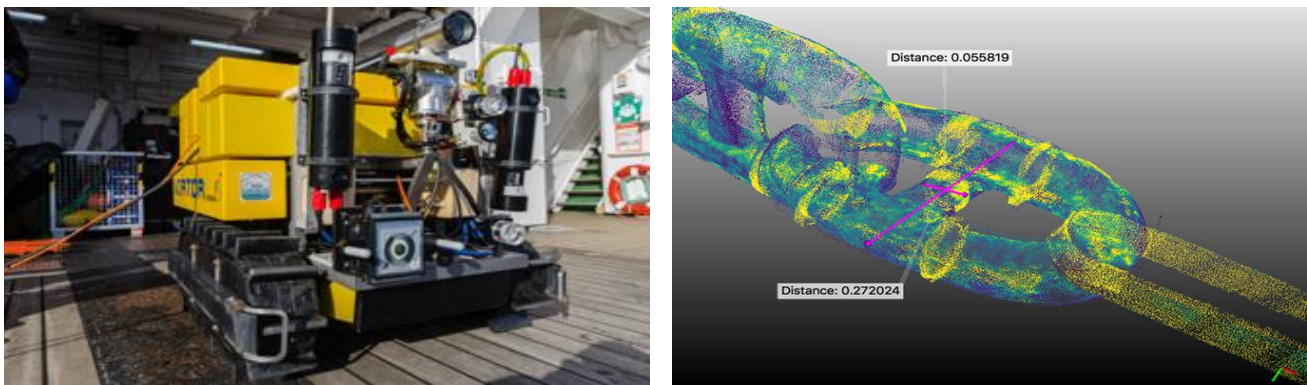


Figure 7: SeaVision® mounted on ROVs & Crawlers for Mooring Chain Inspection

Equipped with a high-resolution camera and laser, the system allows operators to reconstruct objects on the seabed in such a way that detailed models can be subsequently produced for 3D visualization. Its 3D imaging capabilities include generation of geo-registered 'as-built' models of structures on the seabed or in the water column, survey of subsea infrastructure and comparison against baseline models and detection of structural defects or other out-of-spec conditions that exceed threshold values.

The ability to generate accurate 3D reconstruction of underwater infrastructure is an important requirement for commercial, military, and ocean research applications. While sonar is the technology of choice for covering large areas, 3D laser systems such as Kraken's SeaVision® provide significantly higher resolution and accuracy at inspection ranges of under 10 metres. The initial SeaVision® system is designed for deployment on underwater robotic platforms such as ROVs and AUVs. A profiler version of the system has been developed for integration into Kraken's KATFISH™ towed SAS.

Altogether, Kraken can now provide a broader survey and inspection service offering for customers. The company's current fleet of service offering technologies includes KATFISH towed SAS sonars, SBI and SeaKite sub seabed imagers, Acoustic Corers, and SeaVision laser scanners & profilers. We can also integrate other technologies such as magnetometers into the above offering, providing customers a more integrated solutions capability to receive subsea and sub-seabed data.

4.5 Research and Development

Kraken has a significant team of scientists, engineers, software developers, and technologists focused on R&D. In Newfoundland, the Company operates two manufacturing facilities in Mt. Pearl. Kraken assembles and tests all sonar systems and unmanned vehicles in its Mt. Pearl facility and conducts regular sea trials in Conception Bay with convenient access to a variety of water depths and bottom types.

In St. John's, the Company has access to specialized test facilities at the Marine Institute, Memorial University of Newfoundland, and the National Research Council Ocean Coastal and River Engineering Research Centre. Kraken's Dartmouth office is located in the COVE facility with direct access to Halifax harbor for research and development as well as sea trials.

Kraken is recognized as a world leader in underwater technologies, and Kraken's engineering team has successfully brought several products from initial concept, prototyping, engineering test and evaluation, and ultimately to commercialization. Kraken has demonstrated success of managing the transition of products from R&D to commercial production using in-house resources.

Continuous research and development is needed to help the Company stay ahead of the competition. To help fund research and development, Kraken has received funding contributions from government agencies including the National Research Council of Canada Industrial Research Assistance Program. These contributions have and will continue to enable Kraken to accelerate the development of next generation underwater robotics equipment and services for both military and commercial applications. Below are details of contributions to Kraken over the last three financial years:

- In January 2020, Kraken finalized the contract for the OceanVision™ project with the Ocean Supercluster and industry partners (Petroleum Research Newfoundland and Labrador, Ocean Choice International and Nunavut Fisheries Association). OceanVision™ is a three-year, \$18.8 million project focused on the development of new marine technologies and products to enable an underwater robotics data acquisition and data analytics as a service business. Under the OceanVision™ project, Canada's Ocean Supercluster will provide an investment up to \$6.3 million, with the balance of project funding to be provided by other government agencies, industry partners, and Kraken.
- In July 2020, NSPML joined Kraken's OceanVision™ project. NSPML is an indirect wholly-owned subsidiary of Emera Inc., a multi-national energy company. Along with providing



expertise and knowledge of critical subsea infrastructure, NSPML will contribute over \$0.5 million during the term of the project.

- In August 2020, Kraken announced that it received \$2.9 million in research and development funding from the National Research Council of Canada Industrial Research Assistance Program. The funding will be provided over a 26-month period and be used to support the development of Kraken's seabed resident ThunderFish® XL AUV. Kraken will continue to apply for available government funding and work with partners to supplement its internal financing efforts for new product developments in the areas of sensors, underwater vehicles, and a powerful suite of visualization and data analytics software tools for interacting and manipulating datasets from Kraken and third-party sensors.
- In August 2021, Kraken announced that PanGeo secured \$2 million in funding from Canada's Ocean Supercluster for the development of wider scanning capability and increased efficiency from a project called GeoScan.
- In October 2021, Kraken announced that it has signed a RaaS contract with the Canadian government for the testing of Kraken's ultra-high resolution survey equipment with the Royal Canadian Navy, which was completed in April 2022. This \$0.5 million contract was funded under the Canadian government's *Innovative Solutions Canada* program, and the testing department for this service offering is the Royal Canadian Navy's Fleet Diving Unit Atlantic based in Nova Scotia.
- In November 2021, Kraken announced that it and PanGeo had been awarded two contracts with an expected value of \$7.1 million from the Newfoundland Offshore Oil and Gas Industry Recovery Assistance Fund. The combined projects valued at \$9.2 million were executed between Q4 2021 and Q4 2022. Kraken and PanGeo's inspection and survey platforms will assist the offshore energy sector to acquire better, faster, and more valuable data. This will enable offshore energy operators to make better-informed decisions regarding asset integrity, enhance energy recovery and reduce carbon emissions during inspection and survey operations.
- In November 2022, Kraken was awarded an \$8 million R&D program from a major energy company to continue development of autonomy software for use in subsea applications. This work will be carried out by Kraken's Brazilian subsidiary.

Next Generation SAS

Kraken has continuous sonar development efforts for next generation sonar sensors. These include longer range SAS, circular SAS, and multispectral SAS. These R&D efforts provide a variety of customer benefits including:

- Extended search range at constant high-resolution seabed pixels;
- Increased speed and accuracy for seabed classification and characterization; and
- Significantly reduced survey costs and overall risks for buried pipeline and power cables.



MINSAS-LW

In June 2019, Kraken was selected by the US Office of the Secretary of Defense, Comparative Test Office, to participate in a FCT program in support of a US Navy Program of Record managed by the Naval Sea Systems Command, EOD Program Office. The FCT is designed to test selected foreign technologies as evaluated by US military operators, with a view to future procurement. The contract value was \$0.9 million.

Under this contract, Kraken integrated its AquaPix® MINSAS sensor on a man-portable AUV owned by the U.S. Navy. Man-portable AUVs make up the largest deployment of all AUV classes world-wide. The U.S. Navy and its allies continue to invest in man-portable AUVs, which today utilize a range of sonar technologies. Kraken's AquaPix® MINSAS synthetic aperture sonar sensor is currently offered in the MINSAS 60, 120, and 180 configurations and has been traditionally integrated to medium- and large-size AUVs and Towfish. As part of this FCT contract, Kraken optimized the MINSAS 60 sensor making it better suited for small, man-portable AUVs while offering a significant increase in capability and performance for man-portable platforms.

Kraken believes that this initial contract has proven that our MINSAS-LW 60 is a reasonably priced, high-performance sonar upgrade path for existing man-portable AUVs as well as new builds.

In July 2020, Kraken received \$1 million of new defense contracts, which included a follow-on order for MINSAS 60 LW sensors for man-portable vehicles. Delivery of this order occurred in Q4 2020. The initial order shipped at the end of Q2 2020. This product has been trialed on various man portable AUV platforms and Kraken has started to see it integrated on various AUV platforms delivered to US and NATO navies. Kraken expects significant demand with this product going forward.



Figure 8: Lightweight MINSAS® Displayed at Warrior Expo

OceanVision™ - Kraken's Ocean Supercluster Project Submission

In June 2019, Kraken was approved by the Ocean Supercluster to move forward with OceanVision™ project with the \$18.8 million project being formally signed in January 2020. To fund the project, Canada's Ocean Supercluster provided an investment of \$6.3 million, while the balance of the project will be provided by government agencies, industry partners and Kraken. This project was largely completed at December 2022.

OceanVision™ was a three-year project with the objective of developing new technologies enabling an underwater robotics RaaS business. In other words, this end-to-end digitalization solution offers advanced sensors, robots and data analytics as a turnkey service solution for seafloor imaging and mapping. Using rapid high-throughput data analytics will make it possible to significantly reduce the cost of obtaining high resolution seafloor imaging and mapping allowing end-users to make more informed operational decisions in real-time.

The OceanVision™ project was based on several enabling technologies. These included unmanned maritime vehicles, advanced sensors, robotics, autonomous systems, big data management and big data predictive analytics. Through OceanVision™, Kraken and its partners met several Ocean Supercluster goals including:

- deploying innovative technology platforms across ocean sectors
- strengthening links between ocean value chains and technology providers
- filling capability gaps in the innovation ecosystem
- extending global reach and market opportunities

For industry users, such as the offshore oil and gas and offshore wind industry, OceanVision™ will help them save money, reduce risk, receive better intelligence and improve safety. This will be done by providing access to innovative technology including sensors, AUVs, artificial intelligence and big data that can reduce inspection maintenance and repair costs, improve operator safety and allow for increased uptime and profits.

4.6 Intellectual Property

The Company's success depends in part upon its ability to protect its intellectual property. To accomplish this, the Company relies upon a combination of intellectual property rights, including patents, copyrights, trademarks, and trade secrets in Canada, the United States, and in select foreign countries where it believes filing for such protection is appropriate. The Company has registered several trademarks with respect to its products and services. The Company has filed for patents in the area of certain hardware developments. The Company protects its proprietary source code and algorithms as trade secrets by limiting access to such proprietary source code and algorithms and its other know-how, trade secrets and intellectual property to employees who have a need to know such information. Further, each employee and consultant of the Company has agreed in writing to maintain the confidentiality of its know-how, trade secrets and other intellectual property. Kraken's service business (previously named PanGeo) has numerous patents and patent applications and its intellectual property has been built on over 25 years of academic and applied industrial research in acoustics and geophysics.



4.7 Customers & Sales and Marketing Strategy

Kraken products have been successfully qualified since 2013 by customers in more than 10 countries. Kraken is leveraging its defense markets wins to move into other markets including oil & gas, commercial survey, ocean mining and search & salvage. Customers include DRDC (Canada), DSTO (Australia), NAVSEA (US), Boeing (US), Lockheed Martin (US), Dive Technologies Inc. (US), WHOI (US), Royal Navy (UK), Atlas Elektronik (UK & Germany), Fraunhofer Institute (Germany), Deep Ocean AS (Norway), Elbit (Israel), ECA Robotics (France), Royal Danish Navy (Denmark), MPI (Norway), and Ocean Infinity (UK) amongst others. Kraken's SAS technology has been integrated on various AUV platforms including the Lockheed Marlin, HII REMUS, ISE Explorer, Fraunhofer DEDAVE, Atlas Sea Otter, ECA A18, MacArtney ROTV, Kongsberg Hugin, Dive LD, Teledyne SeaRaptor, and others. To our customers, Kraken products offer the advantages of cost, compactness, performance, and simplicity, resulting in the customer achieving the highest resolution seabed pixels at the lowest cost.

Kraken's products and services are marketed directly by the Company as well as through independent agents, consultants and systems integrators. Kraken participates in industry trade shows and its scientists and engineering personnel are actively engaged at the government and university research level.

Kraken has made significant efforts to develop relationships with a number of strategic partners including large defense contractors and commercial companies. Partnerships are a key part of Kraken's growth strategy and bring several benefits including:

- Reduce risk and time to market on new product developments;
- Add to the Company's technology platform and intellectual property portfolio;
- Provide an ability to leverage relationships for ongoing low-cost R&D;
- Add relationships with oil and gas and other commercial customers;
- Provides access to world class, low cost facilities for development and testing purposes; and
- Provides greater ability to access government funding including cross border funding.

Kraken has and will continue to develop international partnerships and pursue multi-sector collaborations to mitigate risk and deliver new products and services with better performance at a lower price than competitors. For more information on Kraken's partnerships and business activity, see "*General Development of the Business – Recent Development of the Business and Company Milestones*".

Kraken's service customers consist of major offshore energy and renewable developers and operators along with marine dredging and construction companies and offshore survey companies. Kraken has been successful in having our technology "spec'd in" on numerous subsea tenders and continues to work in influencing the decision makers to adopt Kraken technology in the development and maintenance of offshore wind farms and energy projects.

4.8 Competitive Conditions

The Company competes in a very specialized, niche industry with high barriers to entry. The Company's employees have intimate knowledge of the underwater robotics industry, significant experience in



advanced acoustics, deep industry insights and strong relationships with key decision-makers. In addition, Kraken is unique in having design, engineering and manufacturing expertise with both sonar technologies and AUVs.

Kraken sells both sensors and platforms and power in a market with larger competitors, in an industry lacking dominant players, and where consolidation is a theme. In addition, the market is often characterized by ‘co-opetition’ as companies partner together on larger industry bids. Kraken believes the keys to success are (1) product performance, quality and reliability; (2) technical talent; (3) price competitiveness; (4) strong customer service and support; and (5) funding.

The Company’s current products and technology compete in the following market segments:

- **SSS** – Kraken’s sonar technology competes with SSS products, which provide lower resolution images and smaller coverage areas relative to the Company’s SAS technology. While pricing for its SAS technology is at a premium to the SSS alternatives currently on the market, the Company believes that the performance of its SAS technology makes it the superior choice from a price-performance perspective. Kraken’s major competitors in this market segment are Edgetech, Sonardyne International Ltd., Klein Marine Systems Inc., and Marine Sonic Technology;
- **SAS** – Kraken’s sonar technology competes with other manufacturers of SAS products, including Kongsberg Gruppen ASA (Norway), Exail Technologies (France), Northrop Grumman (US), the Thales Group (France), Atlas Elektronik (Germany) and Raytheon Company (US). Unlike the Company, the majority of competitors do not sell their SAS products as stand-alone products, but rather sell them only as a component part of a UUV, meaning that the cost of acquiring SAS products from these competitors can run into the millions of dollars. Further, the Company’s SAS product currently sells at a discount to comparable stand-alone products sold by larger competitors. Kraken also believes the ability of its systems to do real time data processing onboard the underwater vehicle is a competitive advantage and significantly reduces post mission processing times versus the competition. The end result is better data, quicker, and cheaper.
- **Laser scanner** – Kraken’s SeaVision® laser scanner competes with offerings from Voyis, Cathyx Ocean, 3D at Depth, and Newton Labs. While some of these companies sell their solutions solely as a product, Kraken is focused on providing SeaVision® as a service. The Company believes its competitive advantage with SeaVision® includes the superior speed of under 4 seconds for a full resolution scan, real-time processing for immediate analysis and full-color vision using RGB lasers. Furthermore SeaVision® does not include any externally moving parts and is therefore optimally suited for ROV mounting and operation in challenging industrial inspection activities.
- **Towfish underwater vehicle** – The Company’s KATFISH™ towbody product competes in a market segment with 4-5 competitors. KATFISH™ is a high-speed (10 knots) active towbody, with tightly integrated Kraken sonar payloads. Competitor products in this segment include the Klein 5900, Raytheon AQS-20A, Northrup AQS-24A, and Thales T-SAS. Exail Technologies (the recently merged iXblue and ECA Robotics) are developing a towed SAS platform as part of the Belgium / Netherlands Navy MCM program upgrade. Competitive factors include range, resolution, area coverage rate, price, real time SAS processing capabilities, bathymetry, ITAR control and other factors. Kraken’s competitive advantage with KATFISH™ includes: speed, price, performance (most advanced active Towfish on the market), and the fact that our products are non-ITAR.



- **Deep sea batteries** – In this niche market, KPG competes with companies such as Southwest Electronic Energy Group, General Atomics, SubCtech, and Icteneu. Kraken believes its pressure tolerant gel encapsulation technology allows customers to increase power density at lower costs than competitor products. Ocean Infinity, a Kraken customer, has noted that in using Kraken batteries they receive more than a 50% increase in energy density in the same footprint as compared to competing solutions.
- **RaaS** – Kraken’s main competitors in the RaaS business model are traditional survey and subsea inspection companies, which are heavily invested in surface vessels and traditional technologies. These include Fugro GeoSurvey (USA / Netherlands); DeepOcean (Norway); DOF Subsea (Norway). Fugro has 10,000 employees worldwide. Fugro owns and operates only five AUVs (Hugin) worldwide. In contrast, Fugro also owns, operates or co-operates more than 40 vessels in their fleet (survey ships, ships for subsea work, and geotechnical vessels). This clearly demonstrates that Fugro is heavily invested into an infrastructure that requires large quantities of personnel and costly support vessels. While some innovations are being developed, existing Fugro contract work is heavily focused on labor-intensive methods and procedures, as their business model revolves around charging according to personnel time and vessel time with an appreciable markup.

As a metric for comparison, a typical ROV survey of an offshore pipeline requires 70 personnel onboard (2 x 12 hour shifts of 35 people), not including the ship’s crew, deployed on a dynamic positioning vessel with a work-class ROV. Typical cost for such a vessel would be \$0.12 million to \$0.16 million per day.

Kraken’s advantages in the RaaS space revolves around leveraging cutting-edge robotics, sensors and autonomy to drastically reduce the number of personnel and size of surface vessels required for ocean data acquisition, including survey, exploration, and inspection. Kraken’s KATFISH™ system only requires three personnel to operate, can be deployed and towed from a small-to-medium sized vessel of opportunity, and as the system is fully autonomous all data processing is performed automatically in real-time, including the georeferencing and mosaicking. The ultra-high-resolution SAS imagery and bathymetry are co-registered, in real-time, with zero post processing required.

Traditional competitors in the subseabed services business use conventional technology like magnetometers and sub-bottom profilers. Kraken’s technology targeted at the sub seabed offers higher resolution 3D volumetric imagery, which provides greater risk reduction for the end customer. Kraken is able to address certain scopes of work for companies such as Fugro, Deep Ocean, and DOF (noted above) and as such in some cases are sub-contractors to these companies, as opposed to competitors.

ITEM 5: RISK FACTORS

Prior to making an investment decision, investors should consider the investment risks and uncertainties set out below and those described elsewhere in this document, which are in addition to the usual risks and uncertainties associated with an investment in a business at an early stage of development.

The directors of the Company consider the risks and uncertainties set out below to be the most significant to potential investors in the Company; however, these are not all of the risks and uncertainties associated with an investment in securities of the Company. Additional risks and uncertainties not presently known to the Company, or that the Company currently deems immaterial, may also impair its operations. If any such risks actually occur, the assets, liabilities, financial condition, liquidity, results of operations (including future results of operations), and business and business prospects of the Company could be



materially adversely affected and the ability of the Company to implement its growth plans could be adversely affected.

An investment in the Company's Common Shares is speculative. An investment will be subject to certain material risks and investors should not invest in securities of the Company unless they can afford to lose their entire investment.

Uncertainty of Revenues

Since the date of incorporation, the Company has accumulated losses. While the Company has spent on headcount, R&D, marketing and infrastructure, it is starting to see meaningful revenue growth. The Company is subject to all of the business risks and uncertainties associated with any small business enterprise, including the risk that it will not achieve its growth objectives. Thus, there can be no assurance that losses will not continue.

Reliance on Management and Dependence on Key Personnel

The success of the Company is currently largely dependent upon on the performance of its directors and officers and the ability to attract and retain its key personnel. The loss of the services of these persons may have a material adverse effect on the Company's business and prospects. The Company will compete with numerous other companies for the recruitment and retention of qualified employees and contractors. There is no assurance that the Company can maintain the service of its directors and officers or other qualified personnel required to operate its business. Failure to do so could have a material adverse effect on the Company and its prospects.

Market for Securities

There can be no assurance that an active trading market in the Company's Common Shares will be sustained. The market price for the Company's Common Shares could be subject to wide fluctuations. Factors such as government regulation, interest rates, share price movements of the Company's peer companies and competitors, as well as overall market movements, may have a significant impact on the market price of the securities of Company. The stock market has from time to time experienced extreme price and volume fluctuations which have often been unrelated to the operating performance of particular companies.

The Company is unable to predict whether substantial amounts of its Common Shares will be sold in the open market. Any sales of substantial amounts of the Company's Common Shares in the public market, or the perception that such sales might occur, could materially and adversely affect the market price of the Company's Common Shares.

Litigation

The Company and/or its directors may be subject to a variety of civil or other legal proceedings, with or without merit. At this time, there are no known outstanding, pending or contemplated legal proceedings against the Company which are material to the Company's business and affairs.

Global Financial and Economic Conditions

Global financial and economic conditions can be volatile. Some of the key impacts of the financial market turmoil include contraction in credit markets resulting in a widening of credit risk, devaluations and high



volatility in global equity, commodity, foreign exchange markets and a lack of market liquidity. Such factors may impact the Company's ability to obtain financing in the future on favorable terms or obtain any financing at all. Additionally, global economic conditions may cause a long-term decrease in asset values and demand for the services and products of the Company. If such global volatility, market turmoil and a global recession occur, the Company's operations and financial condition could be adversely impacted.

Insurance and Uninsured Risk

The business of the Company will be subject to a number of risks and hazards generally, including adverse environmental conditions, industrial accidents, labour disputes, unusual or unexpected technological considerations, changes in the regulatory environment and political or social instability. Such occurrences or events could result in damage to the business of the Company.

It can be difficult or expensive to obtain the insurance needed by the Company for its business operations. As part of its business operations, the Company maintains insurance both as a corporate risk management strategy and to satisfy the requirements of many of its contracts. Insurance products are impacted by market fluctuations and can become expensive and sometimes difficult to obtain. There can be no assurance that the Company can secure all necessary or appropriate insurance at an affordable price for the required limits. Its failure to obtain such insurance could lead to uninsured losses that could have a material adverse effect on its results of operations or financial condition, or cause it to be out of compliance with its contractual obligations. The Company will periodically evaluate the cost and coverage of the insurance against certain risks to determine if it would be appropriate to obtain or continue to maintain such insurance. Without insurance, the Company may incur significant costs that could have a material adverse effect upon its financial performance and results of operations.

The Company may in the future be involved in product liability and product warranty claims relating to the products that it manufactures and distributes that, if adversely determined, could adversely affect the Company's financial condition, results of operations, and cash flows. Product liability claims can be expensive to defend and can divert the attention of management and other personnel for significant periods, regardless of the ultimate outcome. Claims of this nature could also have a negative impact on customer confidence in the Company's products.

No Dividends

The Company does not expect to pay dividends on the issued and outstanding Common Shares in the near-term or in the foreseeable future. If the Company generates any future earnings such cash resources will be retained and utilized to finance further growth and enhance current operations. The Board of Directors of the Company will determine if and when dividends should be declared and paid in the future based on the financial position of the Company and other factors relevant at that time. Until the Company pays dividends, which it may never do, a shareholder will not be able to receive a return on his or her investment in the Company's Common Shares unless such Common Shares are sold. In such event, a shareholder may only be able to sell his, her or its Common Shares at a price less than the price such shareholder originally paid for them, which could result in a loss of such shareholder's investment.

Government Contracts

The Company will depend, in part, on government contracts, which may only be partially funded, subject to termination, heavily regulated, and audited. The termination of one or more of these contracts could



have a negative impact on the operations of the Company. The termination of funding for a government program would result in a loss of anticipated future revenues attributable to that program that could have a negative impact on the operations of the Company. Also, no assurance can be given that the Company would be able to procure new contracts to offset the revenues lost as a result of any contract termination.

In addition, sales to the governments that the Company works with may be affected by:

- changes in procurement policies;
- changes in the structure and management of government departments;
- budget considerations;
- political developments domestically and abroad; and
- increased protectionism.

The influence of any of these factors, which are largely beyond the control of the Company, could also negatively impact the financial condition of the Company.

Competitive Bidding

The Company will derive significant revenue from contracts awarded through a competitive bidding process, which can impose substantial costs upon it, and the Company could fail to maintain its current and projected revenue if it fails to compete effectively. The Company expects that much of the business it will seek in the foreseeable future will be awarded through competitive bidding. Competitive bidding imposes substantial costs and presents a number of risks. Such risks include, but are not limited to:

- the need to bid on engagements in advance of the completion of their design, which may result in unforeseen difficulties in executing the engagement and cost overruns;
- the substantial cost and managerial time and effort that the Company spends to prepare bids and proposals for contracts that may not be awarded to it;
- the need to accurately estimate the resources and costs that will be required to service any contract the Company is awarded;
- the expense and delay that may arise if the Company's competitors protest or challenge contract awards made to it pursuant to competitive bidding, and the risk that any such protest or challenge could result in the resubmission of bids on modified specifications, or in termination, reduction, or modification of the awarded contract; and
- the opportunity cost of not bidding on and winning other contracts the Company might otherwise pursue.

To the extent the Company engages in competitive bidding and is unable to win particular contracts, it not only incurs substantial costs in the bidding process that could negatively affect the Company's operating results, but it may be precluded from operating in the market for services that are provided under those contracts for a number of years. Even if the Company wins a particular contract through



competitive bidding, its profit margins may be depressed as a result of the costs incurred through the bidding process.

Competition

Competition within the market of the Company may reduce its ability to procure future contracts and sales. The industry in which the Company operates is competitive. Many of the competitors of the Company are large, diversified corporations in the sensor and marine robotics products and services industry. Some of the competitors of the Company may have more extensive or more specialized engineering, manufacturing, and marketing capabilities. There can be no assurance that the Company can continue to compete effectively with these companies.

Development of New Technologies

The future success of the Company will depend on its ability to develop new technologies that achieve market acceptance. The marine sensor and robotics market is characterized by rapidly-changing technologies and evolving industry standards. Accordingly, the future performance of the Company depends on a number of factors, including its ability to:

- identify emerging technological trends in its market;
- develop and maintain competitive products and services;
- enhance its products and services by adding innovative features that differentiate its products from those of its competitors; and
- manufacture and bring products and services to market quickly at cost-effective prices.

In order to remain competitive in the future, the Company will need to continue to develop new products and services, which will require the investment of significant financial resources in new product development. In addition, there can be no assurance that the market for the products or services of the Company will develop or continue to expand as currently anticipated. The failure of the Company's technology to gain market acceptance could significantly reduce its revenues and harm its business. Furthermore, there is no assurance that the competitors of the Company will not develop competing technology, which gains market acceptance in advance of the products and services of the Company. The possibility that the competitors of the Company might develop new technology might cause the Company's existing products and services to become obsolete. If the Company fails in its new product and service development efforts or its products and services fail to achieve market acceptance more rapidly than its competitors, the Company's revenues will decline and its business, financial condition, and results of operations will be negatively affected.

Protection of Intellectual Property

The Company may be unable to adequately protect its intellectual property rights, which could affect its ability to compete. Protecting the Company's intellectual property rights is critical to its ability to compete and succeed as a company. The Company currently has trademark registrations, which are necessary and contribute significantly to the preservation of its competitive position in the market. Further, the Company relies on a combination of copyright, trademark, and trade secret laws, confidentiality procedures, contractual provisions and other measures to protect its proprietary information. All of these measures afford only limited protection. There can be no assurance that any of



these measures will not be challenged, invalidated or circumvented by third parties. In the future, the Company may not be able to obtain necessary licenses on commercially reasonable terms. The Company enters into confidentiality and invention assignment agreements with its employees so as to limit access to and disclosure of the Company's proprietary information. These measures may not suffice to deter misappropriation or independent third-party development of similar technologies.

Outside Suppliers

The Company's operations depend on component availability and the manufacture and delivery by key suppliers of certain products and services. Further, the Company's operations are dependent on the timely delivery of materials by outside suppliers. The Company cannot be sure that materials, components, and subsystems will be available in the quantities required, if at all, or at a reasonable cost. If any of the suppliers fail to meet the needs of the Company, it may not have readily available alternatives. The Company's inability to fill its supply needs would jeopardize its ability to satisfactorily complete its obligations under its contracts on a timely basis. This might result in reduced sales, contractually-imposed penalties for delay in delivery, termination of one or more of these contracts, or damage to the reputation of the Company and its relationships with its customers. All of these events could have a negative effect on the financial condition of the Company.

Inflation

Global markets have recently experienced high rates of inflation. In addition, governmental responses to inflation, such as increases in interest rates, may have a significant negative impact on the economy generally. Our operations are sensitive to increases in costs of materials, components, subsystems and labour that could be caused by inflationary pressures. Increased or persistent inflation or other upward economic pressures could continue to increase the Company's costs and could have a negative effect on the Company's business and financial condition.

Significant Sales of Common Shares

Sales of a significant number of the Company's Common Shares by existing shareholders could cause the market price of its common stock to decline. If the Company's shareholders sell substantial amounts of the Company's Common Shares, including Common Shares issued upon the exercise of outstanding options and warrants, the market price of the Company's Common Shares may decline. These sales also might make it more difficult for the Company to sell equity or equity-related securities in the future at a time and price that the Company deems appropriate. The Company is unable to predict the effect that sales may have on the then prevailing market price of its Common Shares.

Strategic Relationships, Investments and Acquisitions

The Company may pursue strategic relationships, investments, and acquisitions and may not be able to successfully manage its operations if it fails to successfully integrate the acquired technologies and/or businesses. As part of the business strategy of the Company, it may expand its product offerings to include products that are complementary to its existing products. This strategy may involve technology licensing agreements, joint development agreements, investments, or acquisitions of other businesses that offer complementary products. The risks that may be encountered in acquiring or licensing technology from third parties include the following:

- difficulty in integrating the third-party product with the products of the Company;



- undiscovered software errors in the third-party product;
- difficulties in selling the third-party product;
- difficulties in providing satisfactory support for the third-party product;
- potential infringement claims from the use of the third-party product; and
- discontinuation of third-party product lines.

The risks commonly encountered in the investment in or acquisition of businesses would accompany any future investments or acquisitions by the Company. Such risks may include the following:

- issues related to product transition (such as development, distribution, and customer support);
- the substantial management time devoted to such activities;
- the potential disruption of the Company's ongoing business;
- undisclosed liabilities;
- failure to realize anticipated benefits (such as synergies and cost savings);
- the difficulty of integrating previously-distinct businesses into one business unit; and
- technological uncertainty regarding the current and future functionality of the product.

Additional Capital

The Company may require additional capital, in which case it may need to raise additional funds from equity markets or lenders in the future. If the expenditures of the Company exceed its incoming cash flows, the Company may be required to raise additional capital. In addition, the Company may choose to pursue additional financing in order to capitalize on potential opportunities in the marketplace that may accelerate its growth objectives. The Company's ability to arrange such financing in the future will depend in part on the prevailing capital market conditions, as well as on its business performance. There can be no assurance that the Company will be successful in its efforts to raise additional funds, if needed, on satisfactory terms. If additional capital is raised by the issuance of Common Shares, shareholders may experience dilution to their equity interest in the Company.

Growth Management

If the Company fails to manage its growth effectively, its business and operating results could be adversely affected. The Company expects to continue to grow its operations domestically and internationally, and to hire additional employees. Any growth in its operations and staff will place a significant strain on its management systems and resources. If the Company fails to manage its future anticipated growth, it may experience higher operating expenses and may be unable to meet the expectations of investors with respect to future operating results. To manage this growth the Company must, amongst other things, continue to:

- improve its financial and management controls, reporting systems, and procedures;



- add and integrate new senior management personnel;
- improve its licensing models and procedures;
- hire, train, and retain qualified employees;
- maintain sufficient working capital;
- control expenses;
- diversify sales strategies; and
- invest in its internal networking infrastructure and facilities.

To the extent that this anticipated growth does not occur or occurs more slowly than the Company anticipates, the Company may not be able to reduce expenses to the same degree. If the Company incurs operating expenses out of proportion to revenue in any given quarter, its operating results may be adversely impacted.

Third Party Infringement Claims

The Company may receive claims that it has infringed the intellectual property rights of others. As the number of products in the marine sensor and robotics industry increases and the functionality of these products further overlap, the Company may become increasingly subject to infringement claims, including patent, trademark, and copyright infringement claims. In addition, former employers of our former, current, or future employees may assert claims that such employees have improperly disclosed to the Company the confidential or proprietary information of these former employers. Any such claim, with or without merit, could be time-consuming to defend, result in costly litigation, divert management's attention from the Company's core business, require it to stop selling or delay shipping, or cause the redesign of its product or products. In addition, the Company may be required to pay monetary amounts, such as damages, for royalty or licensing arrangements, or to satisfy indemnification obligations that it has with some of its customers.

The Company licenses and uses software from third parties in its business. These third-party software licenses may not continue to be available to the Company on acceptable terms. Also, these third parties may from time to time receive claims that they have infringed the intellectual property rights of others, including patent and copyright infringement claims, which may affect the Company's ability to continue licensing this software. The Company's inability to use any of this third-party software could result in shipment delays or other disruptions in its business, which could materially and adversely affect its operating results.

Defects

The Company's products may contain significant defects, which may result in liability and/or decreased sales. Despite efforts to test the products of the Company, significant errors or failures in such products may be experienced, or they might not work with other hardware or software as expected. This could delay the development or release of new products or new versions of products, or could adversely affect market acceptance of the Company's products. The Company's customers may claim that the Company is responsible for damages to the extent they are harmed by the failure of any of the Company's products. If the Company were to experience significant delays in the release of new products or new versions of



products, or if customers were dissatisfied with product functionality or performance, the Company could lose revenue or be subject to liability for service or warranty costs. Should this occur, the business and operating results of the Company could be adversely affected.

International Sales

Sales to international customers expose the Company to political and currency related risks, as well as legal and regulatory changes in the jurisdictions in which its customers operate.

Every transaction with international customers is subject to certain domestic and foreign laws and regulations, including, but not limited to import-export controls, technology transfer restrictions, taxation, the Corruption of Foreign Public Officials Act (Canada) and other anti-corruption laws. While the Company has firm policies in place to comply with such laws and regulations, a failure to comply with these laws and regulations could result in administrative, civil, or criminal liabilities, which would have an adverse effect on the business and operating results of the Company.

The Company's international business is very sensitive to alterations in regulations, political environments, or security risks that may have an influence on its ability to perform business operations outside of Canada, including those regarding taxation, investments, and repatriation of earnings. The international business of the Company may also be impacted by changes in foreign national priorities and government budgets and may be further affected by global economic circumstances and conditions, and fluctuations in foreign exchange rates.

Foreign Operations

Our operations are exposed to various levels of political, economic and other risks and uncertainties. These risks and uncertainties include, but are not limited to government regulations (or changes to such regulations) with respect to restrictions on production, export controls, income taxes, expropriation of property, repatriation of profits, environmental legislation, land use, local ownership requirements and land claims of local people, regional and national instability. These factors are beyond the Company's control and the effect of these factors cannot be accurately predicted. Any changes in the above may adversely affect our business, future development and operations.

Diseases and epidemics (such as COVID-19)

Emerging infectious diseases or the threat of outbreaks of viruses or other contagions or epidemic diseases, including the COVID-19 outbreak, could have a material adverse effect on the Company by causing operational and supply chain delays and disruptions (including as a result of government regulation and prevention measures), labour shortages and shutdowns, social unrest, breach of material contracts, government or regulatory actions or inactions, increased insurance premiums, decreased demand or the inability to sell and deliver its end products, governmental disruptions, capital markets volatility, or other unknown but potentially significant impacts. In addition, governments may impose strict emergencies measures in response to the threat or existence of an infectious disease. The full extent and impact of the COVID-19 pandemic is unknown and to date has included extreme volatility in financial markets, a slowdown in economic activity, extreme volatility in commodity prices and has raised the prospect of a global recession. The international response to COVID-19 has from time to time led to significant restrictions on travel, temporary business closures, quarantines, global stock market volatility and a general reduction in global consumer activity. Accordingly, any outbreak or threat of an outbreak of an epidemic disease or similar public health emergency, including COVID-19, could have a



material adverse effect on the Company's business, financial condition and results of operations. It is unknown whether and how the Company may be affected if a pandemic, such as the COVID-19 outbreak, continues to persist for an extended period of time.

Management of Growth and Acquisition Integration

The Company may be subject to growth related risks including capacity constraints and pressure on its internal systems and controls. The ability of the Company to manage growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. If the Company is unable to deal with this growth, any negative impact may have a material adverse effect on the Company's business, financial condition, results of operation and prospects.

In addition, the realization of the benefits of acquisitions made by the Company depend in part on successfully consolidating functions and integrating and leveraging operations, procedures and personnel in a timely and efficient manner as well as the Company's ability to share knowledge and realize revenues, synergies and other growth opportunities from combining the acquired businesses and operations with those of the Company. The integration of acquired businesses may depend on a number of factors, including without limitation: (i) the input of substantial management effort, time and resources; (ii) the successful incorporation of key personnel from acquired companies for post-acquisition periods; and (iii) the execution of effective non-competition agreements with certain employees or ex-employees of the acquired companies. Furthermore, there is no guarantee that the Company will be able to continue developing operations in its current jurisdictions or expand into new jurisdictions. Any such activities will require, among other things, various regulatory and other third-party approvals, licenses and permits and there is no guarantee that any or all required approvals, licenses and permits will be obtained.

ITEM 6: DIVIDENDS

No dividends have been paid during the Company's three most recently completed financial years. The Company does not have a formal dividend policy and it is not expected that one will be implemented during the current financial year. For the foreseeable future, should the Company generate any future earnings, such cash resources will be retained and utilized to finance further growth and enhance current operations. The Board of Directors of the Company will determine if and when dividends should be declared and paid in the future based on the financial position of the Company and other factors relevant at that time.

ITEM 7: DESCRIPTION OF CAPITAL STRUCTURE

7.1 Authorized and Issued Capital

The Company's authorized capital consists of an unlimited number of Common Shares, without par value, of which 206,051,735 Common Shares are issued and outstanding as of the date of this AIF.

The holders of Common Shares are entitled to one vote for each Common Share held and shall be entitled to dividends if, as and when declared by the Board of Directors. Holders of Common Shares are entitled, on liquidation, dissolution or winding up to receive such assets of the Company as are distributable to the holders of the Common Shares. There are no pre-emptive, redemption, retraction, purchase or conversion rights attaching to the Common Shares.



Options and Warrants

As of April 28, 2022, the Company has 9,980,000 Common Share purchase warrants outstanding with an exercise price of \$0.60 per Common Share and an expiry date of July 26, 2023 and the following Stock Options outstanding:

Security	Number	Number Exercisable	Exercise Price	Expiry Date
Options	1,200,000	1,200,000	0.57	July 14, 2023
Options	1,000,000	1,000,000	0.63	July 14, 2024
Options	1,000,000	750,000	0.50	July 30, 2026
Options	50,000	-	0.39	November 29, 2026
Options	5,718,750	1,297,500	0.395	May 3, 2027
Options	100,000	-	0.39	September 6, 2027
Options	400,000	133,334	0.59	December 7, 2027
Options	75,000	18,750	0.63	January 30, 2028
Options	100,000	25,000	0.58	February 27, 2028
	9,643,750	4,457,918		

ITEM 8: MARKET FOR SECURITIES

8.1 Price Range and Trading Volume

The Common Shares of the Company currently trade on the Exchange in Canada under the symbol “PNG” and the OTCQB market in the United States under the symbol “KRKNF”. As of December 31, 2022, the closing price of the Company’s Common Shares was \$0.57 per share on the Exchange and US\$0.429 on the OTCQB.

The following table sets out the volume of trading and the closing price ranges of the Company’s Common Shares for the most recently completed financial year and the current year to date:

Month / Year	High (\$)	Low (\$)	Trading Volume
April 1 – 28, 2023	0.58	0.50	1,236,980
March 2023	0.64	0.48	2,780,072
February 2023	0.64	0.56	1,756,641
January 2023	0.67	0.57	3,171,185
December 2022	0.65	0.52	6,682,797
November 2022	0.57	0.46	3,452,470
October 2022	0.49	0.37	2,006,705
September 2022	0.48	0.32	2,800,700
August 2022	0.40	0.29	1,346,704
July 2022	0.36	0.27	987,935
June 2022	0.36	0.27	647,708
May 2022	0.44	0.31	1,823,400



Month / Year	High (\$)	Low (\$)	Trading Volume
April 2022	0.48	0.40	2,121,784
March 2022	0.50	0.35	3,297,127
February 2022	0.38	0.32	1,283,541
January 2022	0.38	0.32	1,880,879

8.2 Prior Sales

During the 12 months of the financial year ending December 31, 2022, the Company issued the following securities convertible into Common Shares at the following prices:

Date	Type of Security	Number of Securities/Principal Amount	Price per Security
November 4, 2022	Options	25,000	\$0.395
November 30, 2022	Options	25,000	\$0.395
December 12, 2022	Options	75,000	\$0.44
December 13, 2022	Options	20,000	\$0.395
December 14, 2022	Options	76,500	\$0.395
December 15, 2022	Options	54,750	\$0.395
December 15, 2022	Options	50,000	\$0.39
December 15, 2022	Warrants	5,000	\$0.60

ITEM 9: ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

As at the date of this AIF, no Common Shares are held in escrow or subject to any contractual restriction on transfer.

ITEM 10: DIRECTORS AND EXECUTIVE OFFICERS

10.1 Name, Occupation and Security Holding

As of December 31, 2022, the name, municipality and country of residence, positions and offices held with the Company, principal occupation of each of the directors and executive officers of the Company is as follows:



Name, Province of Residence and Position with the Company	Principal Occupation During the Past Five Years	Date First Appointed	Number and Percentage of Common Shares held⁽¹⁾
Karl Kenny ⁽²⁾ St. John's, NL, Canada <i>Director & Executive Chair</i>	CEO of Kraken; CEO of Kraken Subco	February 18, 2015	20,060,049 9.7%
Greg Reid Toronto, ON, Canada <i>President & CEO</i>	COO of Kraken; CFO of Kraken.	June 1, 2015	7,952,749 3.8%
Joseph MacKay Halifax, NS, Canada <i>CFO & Corporate Secretary</i>	CFO of Kraken; Vice President of Clarus Securities	July 15, 2019	50,000 0%
David Shea Halifax, NS, Canada <i>Executive Vice-President, Products</i>	Senior Vice President, Engineering of Kraken Subco; Vice President, Engineering of Kraken Subco	February 18, 2015	1,037,500 0.5%
Moya Cahill ⁽⁴⁾ St. John's, NL, Canada <i>Executive Vice-President, Services</i>	Executive Vice President of Services and CEO of PanGeo	July 30, 2021	75,000 0%
Larry Puddister ⁽²⁾⁽³⁾ St. John's, NL, Canada <i>Director</i>	Executive Chairman of Pennecon Ltd; CEO of Newcrete	October 13, 2016	300,000 0.1%
Admiral Michael Connor Mystic, CT, United States <i>Director</i>	CEO of ThayerMahan Inc.; US Navy Admiral	October 4, 2017	300,000 0.1%
Shaun McEwan ⁽²⁾⁽³⁾ Ottawa, ON, Canada <i>Director</i>	President, ADGA Group Consultants Inc.	December 1, 2016	200,000 0.1%
Benard Mills Halifax, NS <i>Director</i>	Managing Director, Stelia North, President of Ultra Sonar Systems	November 30, 2022	Nil 0%

Notes:

1. The approximate number and percentage of Common Shares of the Company beneficially owned, directly or indirectly, or over which control or direction is exercised by each director or executive officer as of the date of this AIF. This information is not within the knowledge of the management of the Company and has been furnished by the respective individuals, or has been extracted from the register of shareholdings maintained by the Company's transfer agent or from Insider reports filed by the individuals and available through SEDI at www.sedi.ca.
2. Member of the Audit Committee.
3. Member of the Compensation Committee.
4. Ms. Cahill was previously a director but resigned from that position on April 8, 2021, and on July 30, 2021 became Executive Vice-President Services and CEO of Kraken's new subsidiary, PanGeo. Ms. Cahill was the CEO of PanGeo prior to its acquisition by Kraken.
5. Each Director and Officer of the Company will hold office until the next annual general meeting of shareholders of the Company.

10.2 Shareholdings of Directors and Senior Officers

As of the date of this AIF, the directors and executive officers of the Company, as a group, own beneficially, directly or indirectly, or exercise control or direction over 29,975,298 Common Shares or 14.5% of the issued and outstanding Common Shares of the Company on an undiluted basis.



10.3 Cease Trade Orders, Bankruptcies, Penalties or Sanctions

Except as disclosed herein, to the knowledge of the Company, none of the directors or executive officers of the Company, and no shareholder of the Company holding sufficient number of securities of the Company to affect materially the control of the Company is, or has been within the ten years before the date of this AIF, a director or executive officer of any company (including the Company) that:

- (a) was subject to an order that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer, or
- (b) was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer, where “order” refers to a cease trade or similar order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days.

Except as disclosed herein, to the knowledge of the Company, none of the directors or executive officers of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

- (a) is, as at the date of this AIF, or has been within the 10 years before the date of the AIF, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of that person, or
- (b) has, within the 10 years before the date of the AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or became subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

To the knowledge of the Company, as at the date of this AIF, no director or executive officer of the Company or a shareholder holding a sufficient number of securities of the Company to materially affect the control of the Company has been subject to:

- (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
- (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

10.4 Conflicts of Interest

Some of the directors and officers of the Company or a subsidiary of the Company are or may be engaged in business activities on their own behalf and on behalf of other corporations and situations may arise



where some of the directors may be in potential conflict of interest with the Company. Conflicts, if any, will be subject to the procedures and remedies under the CBCA or other applicable corporate legislation.

ITEM 11: LEGAL PROCEEDINGS AND REGULATORY ACTIONS

11.1 Legal Proceedings

The Company is not aware of any material or contemplated legal proceedings to which it is or was a party to, or of which any of its property is or was the subject.

11.2 Regulatory Actions

The Company is not aware of any:

- (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during the financial year ended December 31, 2022;
- (b) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision; or
- (c) settlement agreements the Company has entered into with a court relating to securities legislation or with the securities regulatory authority during the financial year ended December 31, 2022.

ITEM 12: INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as disclosed in this AIF, none of the following persons has any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or will materially affect the Company:

- (a) a director or executive officer of the Company;
- (b) a person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the outstanding Common Shares; and
- (c) any known associate or affiliate of any of the persons or companies referred to in (a) or (b).

ITEM 13: TRANSFER AGENT AND REGISTRAR

The Company's transfer agent for its Common Shares is Computershare Investor Services Inc. with an office at 510 Burrard Street, 2nd Floor Vancouver, British Columbia V6C 3B9.

ITEM 14: MATERIAL CONTRACTS

Other than the PanGeo Agreement, as disclosed herein and which is available on the Company's SEDAR profile at www.sedar.com, the Company currently does not have any material contracts:



- (a) required to be filed under section 12.2 of the Instrument at the time this AIF is filed, as required under section 12.3 of the Instrument, or
- (b) that would be required to be filed under section 12.2 of the Instrument at the time this AIF is filed, as required under section 12.3 of the Instrument, but for the fact that it was previously filed.

ITEM 15: INTEREST OF EXPERTS

15.1 Names of Experts

The persons referred to below have been named as having prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made under the Instrument during, or relating to, the Company's financial year ended December 31, 2022 and for the subsequent period to date:

- KPMG LLP, Chartered Accountants, who have prepared an independent Auditor's report dated April 28, 2023 in respect of the financial statements of Kraken for the years ended December 31, 2022 and 2021.

15.2 Interests of Experts

Based on information provided by the experts, none of the experts named under "Names of Experts", when or after they prepared the statement, report or valuation, has received any registered or beneficial interests, direct or indirect, in any securities or other property of the Company or of one of the Company's Associates or Affiliates (based on information provided to the Company by the experts) or is or is expected to be elected, appointed or employed as a director, officer or employee of the Company or of any Associate or Affiliate of the Company.

ITEM 16: ADDITIONAL INFORMATION

Additional information relating to Kraken may be found under the Company's profile on SEDAR at www.sedar.com. Additional information, including particulars of directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, where applicable and financial information is contained in the Company's Management Proxy Circular dated May 31, 2022. Further financial information is provided in the Company's audited Financial Statements and MD&A for its most recently completed financial year ended December 31, 2022.

