

# Rogue Resources Inc.

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Form 51-102F1

## Management's Discussion and Analysis For the six months ended October 31, 2018

This Management's Discussion and Analysis ("MD&A") has been prepared by management as of December 17, 2018 and should be read in conjunction with the audited financial statements of Rogue Resources Inc. ("Rogue" or the "Company") for the year ended April 30, 2018, prepared in accordance with International Financial Reporting Standards ("IFRS"). All dollar figures are expressed in Canadian dollars unless otherwise indicated. Further information on the Company can be found on SEDAR at [www.sedar.com](http://www.sedar.com) and the Company's website [www.roguerresources.ca](http://www.roguerresources.ca).

### Cautionary Statement on Forward Looking Statements

*This MD&A includes some statements that may be considered "forward-looking statements". All statements in this discussion that address the Company's expectations about future exploration and development are forward-looking statements. Although the Company believes the expectations presented in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, exploration successes, permitting successes, availability of capital and financing, and general economic, market, and business conditions. Readers are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements. The forward looking statements herein are made as of the date of this MD&A only; Rogue does not assume any obligation to update or revise them to reflect new information, estimates or opinions, future events or results or otherwise, except as required by applicable law.*

### Corporate Summary and Overall Performance

Rogue Resources Inc. ("Rogue" or the "Company") is a mining company focused on generating positive cash flow from assets. Not tied to any commodities, Rogue looks at rock value, searching for good grade deposits that can withstand all stages of the commodities market price cycle, in relatively safe jurisdictions. The team is experienced in analyzing, financing, advancing, building and running operations- to make money as miners.

Property acquisition, exploration and advancement has been funded through the issuance of shares to investors; at this time the Company does not use long term debt financing. The Company currently has no revenues from mineral producing operations.

The Company is a reporting issuer in British Columbia and trades on the TSX Venture Exchange under the symbol "RRS". The final section of this MD&A provides a detailed history for all properties.

Highlights for the period May 1, 2018 to December 17, 2018 are as follows:

#### **Properties**

##### **Snow White**

- BA Ryan Trucking and Logging selected as Contract Road Trucker.
- Ministry of Natural Resources and Forests provided the approval to harvest trees on site.
- 1,910 metre diamond drill program commenced and completed.

- Company amended the payment terms of the Company's previously announced acquisition of the Snow White quartz project. To date, Rogue made cash payments totaling \$75,000. Under the terms of the agreement, Rogue has agreed to deliver additional cash payments up to an aggregate of \$470,000 upon the earlier of achievement of certain production milestones and the end of 2023. Rogue also agreed to make payments equal to a maximum of \$355,000 in aggregate on the basis of \$1.00 per tonne of production of silica removed from the project. The Rogue common shares to be issued over the payment period and the 2% net return royalty remain unchanged from the original acquisition agreement.
- Metallurgical analysis completed with Anzaplan (Germany).
- Preliminary identification of an additional quartz zone to the South, requiring further review.
- Agreement signed with Township of Sables-Spanish Rivers, for 2018 hauling permit.
- Filing of National Instrument 43-101 Technical Report – *Standards of Disclosure for Mineral Projects* on SEDAR relating to the preliminary Resource Estimate on the Main Zone Quartz Deposit. The mineral resource estimate prepared by M.Plan International Limited ("M.Plan") includes a pit constrained indicated resource of 486,000 tonnes grading 97.05% SiO<sub>2</sub> and an inferred resource of 271,000 grading 94.34% SiO<sub>2</sub>.

### **Financing**

- Private placement announced in June 2018 closed in September 2018. Issued 756,276 NFT units of the Company at a price of \$0.18 per NFT unit for aggregate gross proceeds of \$136,130.

The acquisition of the Snow White property forms part of the Company's overall strategy to identify and develop additional assets with good grade, at an advanced developmental stage and in a jurisdiction that the team wants to work. There are also good synergies with the Company's existing work in silica.

The commodities markets continue to face challenges in 2018. The Langmuir nickel resource and Radio Hill iron ore projects are in good standing and do not require additional expenditures for the foreseeable future. However, the Langmuir property represents an excellent exploration target for additional nickel sulphide mineralization and the Radio Hill project is a prime 1,800 hectares of prospective land for gold mineralization now almost completely surrounded by GFG Resources' recently consolidated property package, which appears to contain the western extension of the Porcupine Destor Fault Zone.

The Company is a reporting issuer in British Columbia and trades on the TSX Venture Exchange under the symbol "RRS". The final section of this MD&A provides a detailed history for all properties.

### **Selected Annual Information**

The following table sets forth information of the Company at April 30<sup>th</sup> for each of the last three fiscal years prepared in accordance with IFRS. The selected financial information should be read in conjunction with the Audited Financial Statements of the Company.

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Other expense	\$ 20,828	\$ 7,348,781	\$ 3,517,372
Net loss	694,082	8,111,235	3,826,922
Net loss per share	0.06	0.90	0.64
Total assets	10,684,166	10,284,952	17,158,064
Long term debt	Nil	Nil	Nil
Dividends	Nil	Nil	Nil

### **Results of Operations**

#### **Six months ended October 31, 2018**

For the six months ended October 31, 2018 ("Q2-2019"), the Company incurred a net comprehensive loss of \$179,869 compared to a net loss of \$299,177 during the six months ended October 31, 2017 ("Q2-2018"). The significant decreases in expenses and increases in revenues between the periods is a result of the following:

- a decrease in corporate development and marketing activities to \$19,104 (Q2-2018 - \$105,960) due to fewer contracts with consultants;
- a decrease in loss on sale of available-for-sale investments to \$Nil (Q2-2018 - \$25,217) due to the Company selling its Rapier Gold Inc. shares in Q2-2019; and
- a decrease in the unrealized loss on available-for-sale investments to \$Nil (Q2-2018 – unrealized loss of \$71,582) which related to the decrease in the fair market value of available-for-sale investments in Q2-2018.

These decreases were partially offset by the following decrease in revenues between the periods:

- a decrease in deferred income tax recovery to \$30,433 (Q2-2018 - \$87,139) due to the decrease in flow-through expenditures compared to Q2-2018.

### Three months ended October 31, 2018

For the three months ended October 31, 2018 (“3 months Q2-2019”), the Company incurred a net comprehensive loss of \$99,304 compared to a net loss of \$143,601 during the three months ended October 31, 2017 (“3 months Q2-2018”). The significant decreases in expenses and increases in revenues between the periods is a result of the following:

- a decrease in corporate development and marketing activities to \$3,601 (3 months Q2-2018 - \$45,388) due to fewer contracts with consultants;
- a decrease in loss on sale of available-for-sale investments to \$Nil (3 months Q2-2018 - \$25,217) due to the Company selling its Rapier Gold Inc. shares during 3 months Q2-2018; and
- a decrease in the unrealized loss on available-for-sale investments to \$Nil (3 months Q2-2018 – unrealized loss of \$18,433) which related to the decrease in the fair market value of available-for-sale investments during 3 months Q2-2018.

These decreases were partially offset by the following decrease in revenues between the periods:

- a decrease in deferred income tax recovery to \$Nil (3 months Q2-2018 - \$37,153) due to the decrease in flow-through expenditures.

### Summary of Quarterly Results

The following table sets forth selected quarterly financial information for each of the last eight (8) quarters.

Quarter Ending	Other Income (Expense) (\$)	Net Income (Loss) (\$)	Net Income (Loss) per Share (\$)
October 31, 2018	-	(95,334)	(0.01)
July 31, 2018	1,159	(84,535)	(0.01)
April 30, 2018	1,931	(174,017)	0.00
January 31, 2018	1,156	(292,470)	(0.03)
October 31, 2017	(24,921)	(125,168)	(0.01)
July 31, 2017	1,006	(102,427)	(0.02)
April 30, 2017	(7,690,673)	(7,942,894)	(0.88)
January 31, 2017	1,734	(201,828)	(0.02)

**Note:** There were no discontinued operations or extraordinary items on the Company's financial statements during the above-mentioned periods.

### Liquidity and Capital Resources

The Company is in the business of acquiring, exploring, and advancing mineral properties. The Company has not yet determined whether the properties contain ore reserves that are economically recoverable. The recoverability of the amounts shown for exploration and evaluation assets are dependent upon the existence of economically recoverable reserves, securing and maintaining title and beneficial interest in the properties, the ability of the Company to obtain necessary financing to complete the development of those

reserves, and upon future profitable production or proceeds from the disposition of the exploration and evaluation assets.

The Company had a working capital deficit of \$24,258 at October 31, 2018, compared to a working capital surplus of \$507,644 as at April 30, 2018. As at October 31, 2018, the Company's cash on hand was \$86,097 (April 30, 2018 - \$647,415). The Company has insufficient working capital to cover its current liabilities.

The Company has financed its operations primarily by the issuance of share capital as the continued operations of the Company are largely dependent on the sale of equity securities to raise capital. The Company intends to use the majority of its proceeds for continued exploration on the Snow White project in Ontario, target evaluation and for general working capital.

### Flow-through Obligations

The Company entered into flow-through share subscription agreements whereby it was obligated to incur

- a. on or before December 31, 2017 a total of \$880,000 plus the mining exploration tax credits recoverable of \$80,091 (incurred);
- b. on or before December 31, 2018 a total of \$363,340 plus the mining exploration tax credits recoverable of \$16,920 (incurred); and
- c. on or before December 31, 2019 a total of \$250,000 (\$206,000 incurred as at October 31, 2018 and \$217,500 as at December 17, 2018).

### Commitments

In May 2016, the Company signed a 5-year sublease agreement to rent office space for the Company's Toronto office from a company related by a common officer/director. Rent was \$1,519 per month and increased to \$1,550 per month on January 1, 2018. The sublease term expires on April 30, 2021.

### Off-Balance Sheet Arrangements

The Company has not entered into any off-balance sheet arrangements.

### Transactions with Related Parties

#### a) Compensation of key management personnel

The Company's key management personnel have authority and responsibility for planning, directing and controlling the activities of the Company and consist of its directors, President and Chief Executive Officer, VP Technical and Corporate Secretary, and Chief Financial Officer. Compensation of the directors, officers and/or companies controlled by these individuals for the six months ended October 31, 2018 and 2017 were as follows:

	2018	2017
Key management compensation	<b>\$ 219,883*</b>	\$ 217,708
Total compensation of key management personnel	<b>\$ 219,883</b>	\$ 217,708

*\*Key management compensation of \$97,899 (2017 - \$98,296) have been capitalized under exploration and evaluation assets (see Note 5)*

#### b) Related party balances

Amounts due to related parties amounted to \$101,587 as at October 31, 2018 (April 30, 2018 - \$93,730). Amounts due to related parties are unsecured, non-interest bearing and have no specific repayment terms. Amounts due from related parties related to rent deposit total \$1,519 (April 30, 2018 - \$1,519).

**c) Other related party transactions**

During the six months ended October 31, 2018, the Company paid rent of \$9,298 (2017 - \$9,113) to companies related by common officers and directors.

During the six months ended October 31, 2018, the Company incurred a total of \$11,213 (2017 - \$Nil) related to legal services to a law firm in which a director of the Company is a partner.

The above transactions were in the normal course of operations and have been valued in these financial statements at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

**Proposed Transactions**

On October 10, 2018, the Company announced that it entered into a letter of intent (the "LOI") to acquire 100% of Victoria Gold Mines East Timmins Limited ("VGM"), the arm's length sole owner of the Golden Arrow Project ("Golden Arrow" or the "Mine") from a Timmins-based resource developer. The Mine is located south of Matheson, Ontario. The LOI also includes the acquisition of an affiliate of the Seller (the "Royalty Holder") that holds certain royalty interests in the Mine. Closing was conditional upon, among other things: confirmatory due diligence by the Company; execution of a definitive agreement based upon the terms of the Letter of Intent; arrangement and finalization of arrangements with a contract operator and toll miller(s). Further details of the terms of the LOI are available in the Company's press release dated October 10, 2018.

**Critical Accounting Estimates**

Mineral properties consist of exploration and mining concessions, options and contracts. Acquisition and exploration costs are capitalized and deferred until such time as the property is put into production, or the property is disposed of either through sale or abandonment. If put into production, the costs of acquisition and exploration will be written off over the life of the property based on estimated economic reserves. Proceeds received from the sale of any interest in a property will be credited against the carrying value of the property, with any excess included in operations for the year. If a property is abandoned, the acquisition and deferred exploration costs will be written off to operations.

Although the Company has taken steps to verify title to mineral properties in which it has an interest, in accordance with industry norms for the current stage of exploration of such properties, these procedures do not guarantee the Company's title. Property may be subject to unregistered prior agreements and non-compliance with regulatory requirements. The Company is not aware of any disputed claims of title.

Recorded costs of mineral properties and deferred exploration expenditures are not intended to reflect present or future values of mineral properties. The costs are subject to measurement uncertainty and it is reasonably possible, based on existing knowledge, that change in future conditions could require a material change in the recognized amount.

Management reviews capitalized costs on its mineral properties on a periodic basis and will recognize impairment in value based upon current exploration results and upon management's assessment of the future probability of profitable revenues from the property or from sale of the property.

The Company measures the cost of the services received for all stock options made to consultants, employees and directors based on an estimate of fair value at the grant date. The Company uses the Black-Scholes option pricing model to estimate the fair value of each stock option at the grant date. Stock options which vest immediately are recorded at the grant date. Stock options that vest over time are recorded over the vesting period using the graded vesting method. Stock options issued to outside consultants that vest over time are valued at the grant date and expensed as services are rendered. Stock based compensation is recognized as an expense or, if applicable, capitalized to exploration and evaluation assets with a corresponding increase in contributed surplus. On exercise of the stock option, consideration received and the estimated fair value previously recorded in contributed surplus is recorded as share capital.

## Financial Instruments and Other Instruments

The Company has not entered into any specialized financial agreements to minimize its investment risk, currency risk or commodity risk. As of the date hereof, the Company's investment in exploration and evaluation assets has full exposure to commodity risk, both upside and downside.

## Changes in Accounting Policies

New or revised accounting policies adopted by the Company on May 1, 2018 had no significant impact on the Company's financial position and results of operations. These policies and all accounting policies and new standards that are not yet adopted are disclosed in the six months ended October 31, 2018 financial statements.

## Other

### Outstanding Share Data as of the Report Date

On August 25, 2016, the share capital of the Company was consolidated on the basis of one new common share for every existing ten common shares ("Share Consolidation"); where the exchange results in a fractional share, the number of common shares is rounded to the nearest whole common share.

All comparative references to the number of shares, stock options, weighted average number of common shares and income or loss per share have been restated for the Share Consolidation.

As at December 17, 2018 and October 31, 2018, an aggregate of 15,949,204 and 15,949,204 common shares respectively (April 30, 2018 – 15,142,928 were issued and outstanding).

The Company had the following warrants outstanding as at December 17, 2018 and October 31, 2018 (April 30, 2018 – 5,006,038):

Expiry Date	Exercise Price	Number of Warrants
November 9, 2018**	\$ 0.25	566,333
November 30, 2018**	\$ 0.25	2,066,371
December 22, 2018	\$ 1.00	360,000
January 5, 2019	\$ 1.00	300,000
March 31, 2019	\$ 0.45	833,334
September 4, 2020	\$ 0.30	756,276
<b>Balance, October 31, 2018</b>		<b>4,882,314</b>

\*\*These warrants expired during November 2018. The remaining warrants outstanding as at December 17, 2018 are 2,249,610.

A summary of the Company's compensation warrants outstanding as at December 17, 2018 and October 31, 2018 (April 30, 2018 – 145,198) follows:

Expiry Date	Exercise Price	Number of Compensation Warrants
November 9, 2018***	\$ 0.25	67,148
January 5, 2019	\$ 1.00	16,450
<b>Balance, October 31, 2018</b>		<b>83,598</b>

\*\*\*These compensation warrants expired during November 2018. The remaining compensation warrants outstanding as at December 17, 2018 are 16,450.

The following table summarizes the Company's stock options outstanding as at December 17, 2018 and October 31, 2018 (April 30, 2018 – 658,578 and 409,411, options outstanding and exercisable respectively):

<b>Number of Options Outstanding</b>	<b>Number of Options Exercisable</b>	<b>Price</b>	<b>Expiry Date</b>
4,333	4,333	\$ 1.00	April 28, 2021
6,500	6,500	\$ 0.50	December 10, 2021
30,000	30,000	\$ 1.00	November 3, 2022
10,000	10,000	\$ 1.10	November 30, 2022
100,000	100,000	\$ 0.95	March 4, 2023
285,000	285,000	\$ 0.44	December 6, 2023
120,000	120,000	\$ 0.60	February 7, 2024
550,000	275,000	\$ 0.39	January 11, 2025
<b>1,105,833</b>	<b>830,833</b>		<b>Balance, October 31 and December 17, 2018</b>

### **Investor Relations, Promotion and Product Marketing**

During the six months ended October 31, 2018, the Company contracted with various contractors for investor support. As the Company continues to expand and adapt its marketing efforts it will continue working closely with its consultants to communicate the Rogue story moving forward.

### **Subsequent Events**

Subsequent to October 31, 2018, 2,632,704 warrants at an exercise price of \$0.25 per share and 67,148 compensation warrants expired at an exercise price of \$0.25 per warrant.

In December 2018, the Company further amended the payment terms previously announced acquisition of the Snow White quartz project and changed the \$25,000 cash payment due that month to be settled instead with the issuance of 200,000 common shares.

### **Disclosure Controls and Procedures**

Disclosure controls and procedures ("DC&P") are intended to provide reasonable assurance that information required to be disclosed is recorded, processed, summarized and reported within the time periods specified by securities regulations and that information required to be disclosed is accumulated and communicated to management. Internal controls over financial reporting ("ICFR") are intended to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purpose in accordance with Canadian generally accepted accounting principles.

TSX Venture listed companies are not required to provide representations in the annual filings relating to the establishment and maintenance of DC&P and ICFR, as defined in Multilateral Instrument 52-109. In particular, the CEO and CFO certifying officers do not make any representations relating to the establishment and maintenance of (a) controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation, and (b) a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP. The issuer's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in their certificates regarding the absence of misrepresentations and fair disclosure of financial information. Investors should be aware that inherent limitation on the ability of certifying officers of a venture issuer to design and implement on a cost effective basis DC&P and ICFR as defined in Multinational Instrument 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

## **Risks and Uncertainties**

The Company is subject to a number of risks and uncertainties due to the nature of its business. The Company's exploration and development activities expose the Company to various financial and operational risks that could have a significant impact on its level of operating cash flows in the future. Readers are advised to study and consider risk factors stressed below.

The following are identified as main risk factors that could cause actual results to differ materially from those stated in any forward-looking statements made by, or on behalf of, the Company.

### ***Financing***

The Company's future financial success depends on the ability to raise additional capital from the issuance of shares or the discovery of properties which could be economically justifiable to develop. Such development could take years to complete and resulting income, if any, is difficult to determine. The sales value of any mineralization potentially discovered by the Company is largely dependent upon factors beyond the Company's control, such as the market value of the products produced. It should be noted, as disclosed above, that the Company has insufficient working capital to cover its current liabilities.

### ***General Resource Exploration Risks and Competitive Conditions***

The resource exploration industry is an inherently risky business with significant capital expenditures and volatile metals markets. The marketability of any minerals discovered may be affected by numerous factors that are beyond the Company's control and which cannot be predicted, such as market fluctuations, mineral markets and processing equipment, and changes to government regulations, including those relating to royalties, allowable production, importing and exporting of minerals, and environmental protection. This industry is intensely competitive and there is no guarantee that, even if commercial quantities are discovered, a profitable market will exist for their sale. The Company competes with other junior exploration companies for the acquisition of mineral claims as well for the engagement of qualified contractors. Metal prices have fluctuated widely in recent years, and they are determined in international markets over which the Company has no influence.

### ***Governmental Regulation***

Regulatory standards continue to change, making the review process longer, more complex and therefore more expensive. Exploration and development on the Company's properties are affected by government regulations relating to such matters as environmental protection, health, safety and labour, mining law reform, restrictions on production, price control, tax increases, maintenance of claims, and tenure. There is no assurance that future changes in such regulations couldn't result in additional expenses and capital expenditures, decreasing availability of capital, increased competition, reserve uncertainty, title risks, and delays in operations. The Company relies on the expertise and commitment of its management team, advisors, employees and contractors to ensure compliance with current laws.

### ***Product Marketing***

The market for sale of industrial minerals is often quite opaque and challenging for new entrants to break into. This is the case for the sale of silica, the primary product from both the Snow White and Silicon Ridge Projects. The Company has worked with expert consultants to characterize the material, plan the project and identify the sales market. Management is now aggressively marketing the material across various identified sales verticals, with the objective to confirm buyers and verify the economic nature of the project.

## **Approval**

The Board of Directors of Rogue has approved the contents of this Management's Discussion and Analysis on December 17, 2018.

## Property Summaries and Exploration Updates:

### Québec Properties:

#### Silicon Ridge Project

Pursuant to an option agreement dated August 15, 2014, the Company acquired an option to earn a 100% interest in the Silicon Ridge Project located approximately 95 km northeast of Québec City for a payment of 850,000 shares (issued). The property is subject to a 2% NSR, of which one-half (1%) may be purchased for \$500,000 and the remaining one-half (1%) may be purchased for a further \$1,000,000.

Exploration on the Silicon Ridge Project began in September 2014 for the purpose of obtaining quartzite samples, determining the overall quartzite unit strike distance, and to submit a NI 43-101 compliant Technical Report.

An airborne Heli-Mag survey was flown over the property on December 7, 2014, which clearly defined the quartzite units. Comprehensive maps were produced showing the high and low mag areas located on the property.

Extensive community consultations in the region with various community groups, including the Zec des Martres, the Municipal Regional Offices of St. Urbain, Baie St. Paul and MRC de Charlevoix have taken place with follow up ongoing.

A baseline desktop study was initiated by WSP of Québec City, to identify and catalog physiographical sensitive areas on the claims and, WSP provided guidance on community relations, available labour and services in the region, and outlined the studies and government requirements for the project.

From May to July 2015, considerable work was undertaken to prepare the site for advanced exploration in the form of channel sampling and drilling.

In August 2015, the Company commenced its drill program. The initial 5,000 m drill program was expanded to 11,822 m. The drilling was spaced at 40 to 50 m on section and with section spacing of 50 m. There were 32 sections interpreted from the drilling.

ANZAPLAN provided the Company with a final report in April 2015 on the "Evaluation of a Quartzite Deposit in Canada for the Identification of Potential Application", identifying a number of potential high value applications that can be derived from the high grade silica mineralization hosted on the Silicon Ridge property. Based on the report, Rogue summarized the following table (Table 1) of the range of products that can potentially be produced from the Silicon Ridge quartzite, which include silicon metals, ferrosilicon, glasses, ceramics and fillers.

Table 1- Range of products that can potentially be produced from the Silicon Ridge quartzite

Ferrosilicon and Silicon Metal	High Value Applications of Silicon Ridge drill core samples and optical sorting reject fraction after full processing								Fillers (paint, coatings, sealants, silicone rubber and epoxy)
	Container Glass (coloured & clear), Float Glass (window, automotive)	Fibreglass (insulation & fabrics)	Borosilicate Glass, Pyrex	White Float Glass, Opal Glass, Crystal Glass	Solar Glass, Borofloat	Quartz Powder & Engineered Stone	Silicon Carbide, Fused Silica, Sodium/Potassium Silicate	Ceramics (body & glazes)	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The Company initiated a Bulk Sample program and 1,500 kilograms of quartzite from a surface exposure from the "G" quartzite were collected and shipped to Germany in April and May of 2015. This material was processed into a number of samples designed to aid in ongoing discussions with potential end users and consumers of silica. The samples include material potentially suitable for metallurgical grade silicon and ferrosilicon applications as well as glass, ceramics and fillers.

ANZAPLAN provided the Company with the results, in June and July 2016, from the crushing and optical sorting of the 1,500 kg bulk sample. The quartzite sample provided to ANZAPLAN for the bulk sample test work showed improved quality with less impurities compared to the previous drill core. After crushing and classification, the material was already at ferrosilicon feedstock specifications. The bulk sample was crushed and optically sorted to determine the amount of material that meets the specifications for high value silica products. The test work determined yield distributions when crushed of 89.4% of the material ranging in size from 20 to 120 mm, meeting the thresholds required for ferrosilicon quality and that 10.6% of the sample was <20 mm and meets the feedstock quality for further beneficiation to fulfill the requirements for certain glass, ceramics and fillers

The Company commissioned UK-based Roskill Information Services, in April 2016, for a detailed market study of the North American market for Rogue's identified silica products. This study was completed in May 2016.

After a competitive process, the Company awarded a contract for environmental consultation to SNC-Lavalin for the Silicon Ridge project in May 2016. SNC-Lavalin is responsible for completing the project application form for the certificate of authorization as required by the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques under Section 22 of the Québec Environment Quality Act for quarrying operations.

The Company commissioned Thermoroc Inc. of Salaberry de Valleyfield, Quebec to complete a ground penetrating radar survey. The survey was completed in October and designed to test the thickness of the overburden cover over the proposed surface expression of the quarry.

SNC-Lavalin of Quebec City, Quebec provided an estimate of the overburden for the Southwest Zone on the Silicon Ridge project. The volume of overburden was reduced by 36% from 624K m<sup>3</sup> to 402K m<sup>3</sup> based on Rogue's re-interpretation of the bedrock-overburden contact as supported by the identification of surface outcrop and the results of the ground penetrating radar. The re-interpretation used the block model previously developed for the Resource Estimate announced in June 2016 (details below) and included the modification of the wireframes used to define the differing geological units.

### ***Resource Estimate***

The mineral resource estimate completed by Met-Chem in June 2016 includes a pit-constrained measured and indicated resource of 9.7 Mt grading 98.6% SiO<sub>2</sub> and an inferred resource of 4.6 Mt grading 98.6% SiO<sub>2</sub>.

The resource estimate includes resources from 3 zones referred to as the South West, North East and Centre North zones, as summarized in the following table (Table 2). A significant portion of the estimate is derived from the South West Zone. All zones are open along strike and down dip and have potential for expansion.

The mineral resource for the Silicon Ridge Project incorporates assay results from 71 diamond drill holes totaling 11,822 m and from 510 m of surface channel samples. The estimate was prepared using a block model constrained with 3D wireframes of the principal mineralized domains. Values for SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub> and Fe<sub>2</sub>O<sub>3</sub> were interpolated into blocks using Inverse Distance Squared. A preliminary open pit optimization algorithm was run on the estimated grade block model to constrain the resources and to support the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") requirement that Mineral Resources have reasonable prospects for eventual economic extraction' (the "CIM Definitions"). Only mineralization contained within the preliminary pit shell has been included in the resource estimate.

**Table 2- Silicon Ridge Pit-Constrained Resource Estimate**

<b>ALL ZONES</b>					
	<b>Tonnes (Mt)</b>	<b>SiO<sub>2</sub> (%)</b>	<b>TiO<sub>2</sub> (%)</b>	<b>Al<sub>2</sub>O<sub>3</sub> (%)</b>	<b>Fe<sub>2</sub>O<sub>3</sub> (%)</b>
Measured	3.2	98.61	0.061	0.556	0.101
Indicated	6.5	98.60	0.062	0.564	0.122
<b>Measured + Indicated</b>	<b>9.7</b>	<b>98.60</b>	<b>0.062</b>	<b>0.561</b>	<b>0.115</b>
Inferred	4.6	98.64	0.062	0.532	0.131

<b>SOUTH WEST ZONE</b>					
	<b>Tonnes (Mt)</b>	<b>SiO<sub>2</sub> (%)</b>	<b>TiO<sub>2</sub> (%)</b>	<b>Al<sub>2</sub>O<sub>3</sub> (%)</b>	<b>Fe<sub>2</sub>O<sub>3</sub> (%)</b>
Measured	2.4	98.60	0.061	0.560	0.101
Indicated	3.9	98.60	0.062	0.576	0.109
<b>Measured + Indicated</b>	<b>6.3</b>	<b>98.60</b>	<b>0.061</b>	<b>0.570</b>	<b>0.106</b>
Inferred	2.5	98.70	0.061	0.544	0.096

<b>NORTH EAST ZONE</b>					
	<b>Tonnes (Mt)</b>	<b>SiO<sub>2</sub> (%)</b>	<b>TiO<sub>2</sub> (%)</b>	<b>Al<sub>2</sub>O<sub>3</sub> (%)</b>	<b>Fe<sub>2</sub>O<sub>3</sub> (%)</b>
Measured	0.8	98.66	0.063	0.544	0.102
Indicated	1.4	98.63	0.066	0.556	0.123
<b>Measured + Indicated</b>	<b>2.2</b>	<b>98.64</b>	<b>0.065</b>	<b>0.552</b>	<b>0.116</b>
Inferred	0.5	98.56	0.069	0.641	0.136

<b>CENTRE NORTH ZONE</b>					
	<b>Tonnes (Mt)</b>	<b>SiO<sub>2</sub> (%)</b>	<b>TiO<sub>2</sub> (%)</b>	<b>Al<sub>2</sub>O<sub>3</sub> (%)</b>	<b>Fe<sub>2</sub>O<sub>3</sub> (%)</b>
Measured	0.001	98.31	0.047	0.589	0.150
Indicated	1.2	98.56	0.061	0.535	0.163
<b>Measured + Indicated</b>	<b>1.2</b>	<b>98.56</b>	<b>0.061</b>	<b>0.535</b>	<b>0.163</b>
Inferred	1.6	98.56	0.060	0.479	0.183

Notes:

- 1) CIM Definitions (May 10, 2014) were followed for classification of Mineral Resources.
- 2) Cut-off grades of 98.1% SiO<sub>2</sub>, 0.8% Al<sub>2</sub>O<sub>3</sub>, 0.075% TiO<sub>2</sub> and 0.24% Fe<sub>2</sub>O<sub>3</sub>.
- 3) Density of 2.65 g/cm<sup>3</sup>.
- 4) The resources are constrained by a Lersch Grossman (LG) optimized pit shell using MineSight software.
- 5) LG pit shell defined using the following constraints:
  - i. 50 degree slope
  - ii. Offset of 85m from lakes and wetlands
  - iii. Product sales price of \$200/t and \$100/t for high value and ferrosilicon, respectively
  - iv. Processing cost of \$45.84/t and \$16.84/t of feed for high value and ferrosilicon, respectively
  - v. Mining cost of \$6.73/t and a G&A cost of \$2/t  
*(All pricing and costing will be refined for the PEA.)*
- 6) Mineral Resources are not Mineral Reserves and have no demonstrated economic viability. The estimate of Mineral Resources may be materially affected by mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and government factors ("Modifying Factors").
- 7) Numbers may not add due to rounding.

**Preliminary Economic Assessment**

The PEA, prepared by Met-Chem, demonstrates a good economic project, initially modeled with a 20-year mine life and 200,000 tonnes mined per year. The PEA uses the pit constrained measured resource of 3.2 million tonnes grading 98.6% SiO<sub>2</sub>, indicated resource of 6.5 Mt grading 98.6% SiO<sub>2</sub> and an inferred mineral resource of 4.6 Mt grading 98.6% SiO<sub>2</sub>, a resource estimate developed by Met-Chem and previously announced by the Company on June 7, 2016 and supported by a National Instrument 43-101 technical report filed on SEDAR.com on July 20, 2016 titled "NI 43-101 Technical Report on the Silicon Ridge Minerals Resources Quebec – Canada" effective date June 7, 2016. The PEA has a base case pre-tax net present value with a 10% discount rate of \$36.5 million and an internal rate of return of 40% and an after tax NPV<sub>10%</sub> of \$23.8 million and an IRR of 33.9%. The technical report supporting this PEA was filed on SEDAR on October 26, 2016.

A summary of the PEA Study is presented in the following tables:

<b>Economic Model Output</b>		
	<b>Pre-Tax</b>	<b>After-Tax</b>
Net Present Value <sub>10%</sub>	\$36.5.M	\$23.8M
Internal Rate of Return	40%	33.9%
	Payback (After-Tax)	3.1 yrs

<b>Production Highlights</b>		
Total Resource Mined, from South West and Central North Zones	4,000,000	tonnes
Mining Rate	200,000	tonnes / year
Modeled Operating Life	20	years
Total Saleable Product ( <i>across all end use products</i> )	3,287,932	tonnes sold
Average Stripping Ratio	2.6:1	

<b>Economic Model Highlights</b>	
Pre-production Capital Costs Including Directs, Indirects and Contingency	\$13.1M
Total Life of Mine Revenue	\$291.9M
Blended Average Revenue of Quartzite Sold ( <i>across all end use products</i> )	\$88.80 / tonne sold
Total Operating Costs Over Life of Mine	\$149.9M
Average Total Operating Cost ( <i>mining + processing + G&amp;A + royalty</i> )	\$45.59 / tonne sold
Operating Profit	\$142.1M
Free Cash Flow (Pre-Tax)	\$124.6M
Free Cash Flow (After-Tax)	\$81.3M

A sensitivity analysis reveals that the Project's viability will not be significantly vulnerable to variations in capital and operating costs within the margins of error associated with the PEA estimates. However, the Project's viability remains more vulnerable to the larger uncertainty in future market prices.

The economics are preliminary in nature. It incorporates inferred mineral resources that are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. It should not be considered a prefeasibility or feasibility study. There can be no certainty that the estimates contained in this report will be realized. In addition, mineral resources that are not mineral reserves do not have demonstrated economic viability.

The results of the economic analysis are forward-looking information that is subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here.

#### **Updated Preliminary Economic Assessment**

An optimized PEA focusing on a direct ship option ("DSO"), was prepared by SNC-Lavalin, demonstrates a good economic project, initially modeled with a 20-year mine life and 200,000 tonnes mined per year. The optimized PEA uses a new DSO pit constrained Measured resource of 2.5 million tonnes ("Mt") grading 98.62% SiO<sub>2</sub>, Indicated resource of 5.3 Mt grading 98.62% SiO<sub>2</sub> and an Inferred mineral resource of 2.1 Mt grading 98.66% SiO<sub>2</sub>. The new DSO resource estimate includes resources from 3 zones referred to as the South West, North East and Centre North zones, as summarized in the following tables.

<b>ALL ZONES</b>	<b>Tonnes (Mt)</b>	<b>SiO2 (%)</b>	<b>TiO2 (%)</b>	<b>Al2O3 (%)</b>	<b>Fe2O3 (%)</b>
Measured	2.5	98.62	0.061	0.543	0.097
Indicated	5.3	98.62	0.061	0.537	0.117
<b>Measured + Indicated</b>	7.7	98.62	0.061	0.539	0.110
<b>Inferred</b>	2.1	98.66	0.059	0.508	0.131

<b>SOUTH WEST ZONE</b>	<b>Tonnes (Mt)</b>	<b>SiO2 (%)</b>	<b>TiO2 (%)</b>	<b>Al2O3 (%)</b>	<b>Fe2O3 (%)</b>
Measured	2.0	98.62	0.060	0.540	0.096
Indicated	3.1	98.62	0.060	0.545	0.104
<b>Measured + Indicated</b>	5.0	98.62	0.060	0.543	0.101
<b>Inferred</b>	0.9	98.69	0.059	0.519	0.097

<b>NORTH EAST ZONE</b>	<b>Tonnes (Mt)</b>	<b>SiO2 (%)</b>	<b>TiO2 (%)</b>	<b>Al2O3 (%)</b>	<b>Fe2O3 (%)</b>
Measured	0.5	98.62	0.063	0.555	0.099
Indicated	1.1	98.62	0.065	0.533	0.118
<b>Measured + Indicated</b>	1.6	98.62	0.064	0.540	0.112
<b>Inferred</b>	0.2	98.63	0.063	0.561	0.124

<b>CENTRE NORTH ZONE</b>	<b>Tonnes (Mt)</b>	<b>SiO2 (%)</b>	<b>TiO2 (%)</b>	<b>Al2O3 (%)</b>	<b>Fe2O3 (%)</b>
Measured	n/a	n/a	n/a	n/a	n/a
Indicated	1.1	98.60	0.058	0.520	0.150
<b>Measured + Indicated</b>	1.1	98.60	0.058	0.520	0.150
<b>Inferred</b>	1.0	98.64	0.059	0.486	0.164

The updated PEA has a base case pre-tax net present value with a 10% discount rate of \$33.8 million and an internal rate of return of 157% and an after tax NPV<sub>10%</sub> of \$23.4 million and an IRR of 132%. The technical report supporting this PEA was filed on SEDAR on July 7, 2017.

A summary of the Optimized PEA Study is presented in the following tables:

	<b>Optimized PEA- Base Case</b>		<b>Q3 2016 PEA</b> <i>(for comparison)</i>
Pre-production Capital	<b>\$3.5M</b>		\$13.1M
	<b>Pre-Tax</b>	<b>After-Tax</b>	After-Tax
Net Present Value <sub>10%</sub>	<b>\$33.8M</b>	<b>\$23.4M</b>	\$23.8M
Internal Rate of Return	<b>157%</b>	<b>132%</b>	33.9%
	Payback (After-Tax)	<b>&lt;1 year</b>	3.1 years

<b>Production Highlights</b>		
Total Resource Mined, from South West and North East Zones	4,000,000	Tonnes
Mining Rate	200,000	tonnes / year
Modeled Operating Life	20	Years
Total Saleable Product ( <i>across all end use products</i> )	3,420,000	tonnes sold
Average Stripping Ratio	2.0:1	
<b>Economic Model Highlights</b>		
Pre-production Capital Costs Including Directs, Indirects and Contingency	\$3.5M	
Total Life of Mine Revenue	\$171M	
Blended Average Revenue of Quartzite Sold (" <i>Commodity</i> " only- see below)	\$50 / tonne sold	
Total Operating Costs Over Life of Mine	\$89M	
Average Total Operating Cost ( <i>mining + processing + owners cost + royalty</i> )	\$26.02 / tonne sold	
Operating Profit	\$82M	
Free Cash Flow (Pre-Tax)	\$78.3M	
Free Cash Flow (After-Tax)	\$51.8M	

A sensitivity analysis reveals that the Project's viability will not be vulnerable to variations in capital and operating costs within the margins of error associated with the PEA estimates. However, the Project's viability remains more vulnerable to the larger uncertainty in future market prices.

The economics are preliminary in nature. It incorporates inferred mineral resources that are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. It should not be considered a prefeasibility or feasibility study. There can be no certainty that the estimates contained in this report will be realized. In addition, mineral resources that are not mineral reserves do not have demonstrated economic viability.

The results of the economic analysis are forward-looking information that is subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here.

In August, the Company was notified by the MFFP that a decision on the Section 128.7 application would not be made until a policy study forming part of the Province-wide action plan for the development of forest-dwelling caribou habitat is completed in Spring of 2018. The Company was further notified by the MFFP on March 2, 2018 that the ongoing policy study of the Province-wide action plan will be further extended until the fall of 2018. As of the date of this filing, the Company has not received any further notifications from the MFFP on the anticipated timing of the Province-wide action plan.

The Company submitted the application for the bail d'exploitation minière permit ("BEX") in the form and content as described in Quebec's Mining Act for its Silicon Ridge project. Based upon communications with the representatives of the Ministère de l'Énergie et des Ressources naturelles ("MERN"), Rogue has provided all the required information for the Ministry to complete the application process except for the requirement that the MFFP provides its decision on the Section 128.7 Authorization.

The Company has also submitted the application for the Certificate of Authorization ("CofA") with Ministère de Développement durable, de l'Environnement et de la Lutte contre les changements climatiques ("MDDELCC") and based on communications with representatives of the MDDELCC, the Company has provided all of the required information for the Ministry to complete the application process except for the MFFP's Section 128.7 Authorization and the BEX from the MERN.

## **Ontario properties:**

### **Snow White Property**

The Snow White property contains a northeast trending quartz/silica-rich zone that may be suitable as a raw materials supply for silicon metal and silica fillers. The Company announced the acquisition of the project in October 2017 and conducted confirmatory due diligence and closed the acquisition on December 14, 2017.

Under the terms of the agreement, the Company has purchased the project by delivering, among other things, the following to seller, a Sudbury-based prospector:

- cash payment at execution of \$25,000 (paid);
- issuance of 150,000 (issued) Rogue common shares at closing, subject to the approval of the TSXV;
- additional cash payments of up to an aggregate of \$725,000 (\$25,000 paid) following closing upon the earlier of achievement of certain milestones and anniversaries of closing (the "payment period");
- additional issuance of up to an aggregate of 900,000 Rogue common shares (50,000 common shares issued) during the payment period, subject to the approval of the TSXV; and
- grant of a 2% net return on all quartz/silica from the project, subject to a reservation by the Company of a buy back right upon payment of an additional \$2 million to the seller.

Upon an uncured event of default under the agreement, the project shall revert to the seller and the Company shall have no interest in the project.

On June 18, 2018 the Company announced that it had amended the payment terms of the Company's previously announced acquisition of the Snow White quartz project. To date, Rogue made cash payments totaling \$75,000. Under the terms of the agreement, Rogue has agreed to deliver additional cash payments up to an aggregate of \$470,000 upon the earlier of achievement of certain production milestones and the end of 2023. Rogue also agreed to make payments equal to a maximum of \$355,000 in aggregate based on \$1.00 per tonne of production of silica removed from the project. The Rogue common shares to be issued over the payment period and the 2% net return royalty remain unchanged from the original acquisition agreement.

The Snow White property consists of eight staked mining claims representing approximately 145 hectares, located approximately 26 km northwest of the town of Massey, 125 km west of the city of Sudbury and 500km north-northwest of Toronto. The project currently has Class A and Class B Pit-Quarry-Aggregate Permits for unlimited annual silica/quartz production. The area surrounding the project is equipped with good infrastructure, an existing access road, and is also proximate to deep-water ports on Lake Huron that the Company expects could ease transportation logistics in respect of the project.

Snow White's material has been drilled and metallurgically tested over the past two decades. In 2000, Globe Specialty Metals Inc. (now part of Ferroglobe PLC), completed furnace testing on a 933 tonne bulk sample at their facility in Niagara Falls, New York which indicated that the shipment met all of the specification requirements and that a good quality silicon metal was produced in the furnace during the testing.

Additional areas of possible quartz mineralization have been identified within the project's property boundaries and could represent targets for future exploration.

Rogue filed a National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* technical report on Snow White in calendar Q1-2018.

A 300 kg sample of previously blasted material from the Snow White quarry was optically sorted by a German-based optical sorter manufacturer with a large US testing facility to determine the effectiveness of the optical sorter to remove lower quality quartz with inclusions, veinlets and staining from the higher purity quartz. The sorting test work was successful in sorting out the lower quality quartz and algorithms were developed to differentiate the material into different quality lots using colour alone.

In May 2018, the Company commenced its drill program completing 1,910 m in 36 holes. The drilling was spaced at 10 to 40 m on section and with section spacing of 20 to 40 m. There were 7 sections consisting of between 2 to 6 drill holes with an average of 5 holes per section.

**Resource Estimate**

The mineral resource estimate completed by M. Plan in August 2018 includes a pit-constrained indicated resource of 486,000 t grading 97.05% SiO<sub>2</sub> and an inferred resource of 271,000 t grading 94.34% SiO<sub>2</sub>.

The resource estimate is summarized in the following table (Table 3). All of the estimate is derived from the Main Zone on the Snow White Property. The Main Zone is open along strike and down dip and has potential for expansion.

The mineral resource for the Snow White Project incorporates assay results from 36 diamond drill holes totaling 1,910 m. The estimate was prepared using a block model constrained with 3D wireframes of the principal mineralized domains. Values for SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub> and Fe<sub>2</sub>O<sub>3</sub> were interpolated into blocks using Inverse Distance Squared. A preliminary open pit optimization algorithm was run on the estimated grade block model to constrain the resources and to support the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") requirement that Mineral Resources have reasonable prospects for eventual economic extraction' (the "CIM Definitions"). Only mineralization contained within the preliminary pit shell has been included in the resource estimate.

<b>Main Zone</b>						
<b>Description</b>	<b>Category</b>	<b>Tonnes (MT)</b>	<b>SiO<sub>2</sub> (%)</b>	<b>TiO<sub>2</sub> (%)</b>	<b>Al<sub>2</sub>O<sub>3</sub> (%)</b>	<b>Fe<sub>2</sub>O<sub>3</sub> (%)</b>
Permitted (Water Table - Above 305masl)	Indicated	236,000	96.89	0.008	0.195	0.113
	Inferred	75,000	92.91	0.010	0.384	0.177
Unpermitted (Below 305masl)	Indicated	251,000	97.21	0.010	0.254	0.149
	Inferred	196,000	94.89	0.009	0.361	0.195
<b>Total</b>	<b>Indicated</b>	<b>486,000</b>	<b>97.05</b>	<b>0.009</b>	<b>0.225</b>	<b>0.131</b>
<b>Total</b>	<b>Inferred</b>	<b>271,000</b>	<b>94.34</b>	<b>0.009</b>	<b>0.368</b>	<b>0.190</b>

Notes:

- 8) CIM definitions (May 10, 2014) were followed for classification of Mineral Resources.
- 9) Cut-off grades of  $Al_2O_3 \leq 2.4$  wt.-%;  $Fe_2O_3 \leq 0.53$  wt.-% and  $TiO_2 \leq 0.054$  wt.-%.  $P_2O_5$  was too low in concentration to affect the quality of the material and as a result ANZAPLAN did not determine a cut-off grade.
- 10) Density of 2.644 g/cm<sup>3</sup>.
- 11) The resources are constrained by a Lersch Grossman (LG) optimized pit shell using Geovia Whittle™ software.
- 12) LG pit shell defined using the following constraints:
  - vi. 55 degree slope
  - vii. Offset of 30 m from lakes and wetlands
  - viii. Product sales price of CAD \$85.00/t.
  - ix. Processing cost of CAD \$20.20 t.
  - x. Mining cost of CAD \$5.50/t and a G&A cost of CAD \$2.00/t  
(All pricing and costing will be refined for the PEA.)
- 13) Mineral Resources are not Mineral Reserves and have no demonstrated economic viability. The estimate of Mineral Resources may be materially affected by mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and government factors ("Modifying Factors").
- 14) There are currently no measured resources at the Snow White Project.
- 15) Numbers may not add due to rounding.
- 16) Effective date of the resource estimate is August 4, 2018.

## Radio Hill Property

The Radio Hill property appears to be on the western extension of the Porcupine-Destor Fault Zone, one of the most productive gold structures in the world. This has been a very active district recently, with Tahoe Resources Inc. (formerly Lake Shore Gold Corp) Timmins West mine 45 km away, plus Tahoe's recent 144 Zone discoveries, Goldcorp Inc.'s acquisition of the Borden Gold project (85 km away) and Probe Metals Inc.'s recent acquisition of the Ivanhoe project located to Pen Gold's west and the West Porcupine and Ross properties to the east. The Radio Hill property represents prospective land for gold exploration and adjoins the Pen Gold property that forms part of the camp consolidation announced by GFG Resources Inc's acquisition of Rapier Gold announced in November 2017 and closed in February 2018.

The Company announced a plan to drill at its Radio Hill property, which comprises a 1,800 hectare land package located 85 km southwest of Timmins, Ontario. The Company plans to drill priority structural targets along the interpreted western extension of the PDFZ, one of the most productive gold structures in the world. This has been a very active district recently with Tahoe Resources (formerly Lakeshore Gold's Timmins West mine, 45 km away, plus the recently discovered 144 Exploration Area), Goldcorp's acquisition of the Borden Gold project (85 km away) and Probe Metals' recent acquisition of the Ivanhoe project located to Radio Hill's west.

A three year exploration permit was received from the MNDM to complete the diamond drilling on the property in November 17, 2017. The Radio Hill drill program has been postponed given the acquisition of the Snow White property until a later date. The Company will continue to monitor the exploration activity on the adjoining properties as part of its ongoing activities on the Radio Hill property.

## Summary

The Radio Hill iron ore project comprises banded iron formation; a magnetite rich formation that forms a topographical high and covers an area over two km long with a maximum width of about 500 m. Historical drilling tested the iron to a vertical depth of 400 m with mineralization reported to continue at depth.

In 2008, Geotech Ltd. conducted a combined magnetic-VTEM survey over Radio Hill and the adjacent Timmins West project, a land package totalling 12,160 hectares. The 742 line-km survey covered a 50 km<sup>2</sup> area with 75 m line spacing. A number of electro-magnetic (EM) and magnetic anomalies were identified in the survey area. The Radio Hill iron formation is easily identified in the total field magnetic survey, as is the

relatively unexplored Nat River Iron Formation. The airborne survey has been used to identify priority targets along the Nat River formation. In June 2010, the Company commissioned Micon International Inc. to prepare a *Technical Property of Merit Report* on the property.

Following the exploration recommendations of the Property of Merit Report, the Company initiated and completed a 10,500 m drill program and reported the final assays from that campaign on August 2, 2012. The drilling and assay work show the banded iron formation is as thick at 400m and extends to depth beyond the limits of open pit mining, with the grades increasing at depth. Ore characterization and metallurgy indicates the magnetite is fine-grained and requires fine grinding to liberate silica.

Further geo-metallurgical work on the iron ore was initiated early in 2015 to better understand the iron ores mineralogy and define a metallurgical process for testing the ores.

A Phase 1 (preliminary) Baseline Environmental Study was also initiated in early 2015. Recent LIDAR survey data covering the Radio Hill iron ore deposit has been purchased.

A three year exploration permit was issued to the Company in November 2017 by the MNDM, to complete up to 2,500 metres of diamond drilling on the Radio Hill property on selected targets.

### **Acquisition Costs and Net Smelter Royalty (NSR)**

In April 2011, and amended in October 2013, the Company completed its option agreement to earn a 100% interest on its Radio Hill Iron Ore property located in the Timmins mining district of Ontario by making a final \$100,000 payment and issuing 2,000 shares. In lieu of an NSR on the iron rights, the agreement requires a \$50,000 annual payment to be paid in perpetuity until commencement of commercial production, at which time a \$7,000,000 payment is required in addition to accrued cost of living increase. On June 16, 2016, the Company executed an amendment to the Radio Hill Option Agreement whereby the Company maintains its option on the iron mineralization, but now at the sole discretion of the Company, can either issue 10,000 shares of the Company or pay \$50,000 to the Optionors on an annual basis. The Company issued 10,000 shares to its Optionors in June 2016 and 10,000 shares to its Optionors in February 2017.

### **Infrastructure**

When developing iron ore projects, infrastructure and its costs are paramount. The project's location, in proximity (4 km) to the Canadian National Railway (CN) and to Timmins, together with the associated mining infrastructure in the Timmins area. The Radio Hill iron deposit is connected to Highway 101 by an 8 km long gravel road. This road runs north to south across the deposit and extends from the highway to the CN railroad Kukatush siding at the southern property boundary. During the early 1960s a railroad grade was constructed from this siding to the south edge of the Radio Hill deposit and remains intact for future use. Power lines come within kilometres of the property and potential hydro power generation exists about 20 km to the southwest on the Groundhog River. Natural gas is located in Timmins and could be extended west to the project.

### **Timmins West/Pen South Property Group**

Through staking, the Company acquired a 100% interest in mineral claims known as Timmins West located in Penhorwood, Kenogaming and Keith Townships, Ontario.

In July 2016, a mutually beneficial solution was agreed, which was to provide Rapier a period of exclusivity for the month of July 2016, to acquire 100% of the property. The Company completed the sale of its Pen South property to Rapier for \$325,000 and 1,500,000 Rapier shares. The terms of the agreement include Rapier acquiring 100% of the Pen South property, subject to a 2% NSR. The entire NSR may be purchased for \$3,000,000. Rogue also retains the right to repurchase any individual claim within the property for \$1 if Rapier or any potential successor does not meet the outstanding government exploration work requirement and/or intends to abandon or allow the claim to lapse.

### **Langmuir Nickel Project (includes W4 Deposit)**

#### **Summary**

The Langmuir property is 100% owned (part of which is subject to a 2% NSR) and comprises a large package of ultramafic and mafic flows and sills favorable for hosting nickel, copper and platinum group

mineralization. The road-accessible Langmuir property is located approximately 8 km east of the Redstone nickel mill and approximately 35 km south of Xstrata's Kidd Creek Metallurgical site in Timmins, Ontario.

The property is largely covered by overburden or swamp that substantially hampered pre-1990s exploration. Advances in airborne geophysical surveys and soil sampling techniques have allowed the Company to see beneath the overburden and identify potential nickel deposits in bedrock. A VTEM electromagnetic airborne survey system identified more than 20 separate clusters of airborne EM anomalies. In 2007, the Company drilled a number of these targets. A drill hole on the W4 geophysical target intersected 72.5 m of nickel mineralization averaging 1.14% nickel with 0.11 g/t platinum and 0.26 g/t palladium. Subsequent drilling and exploration defined a moderate-sized nickel resource (see below). Sulphide mineralization at Langmuir W4 has been interpreted as three sub-parallel nickel sulphide zones hosted by komatiitic peridotite flows. These east-west trending komatiite flow units are vertical to steeply dipping and separated by thin graphitic argillite interflow units. The nickel sulphide mineralization consists primarily of pentlandite and pyrrhotite occurring as fine disseminations, fracture fillings and blebs.

### Resource Estimate

A mineral resource estimate for this deposit has been reported in accordance with NI 43-101 and was estimated in conformity with generally accepted CIM Definitions. The resource estimate is the result of an extensive diamond drill program (69 drill holes for 22,152 m) in 2007 and 2008.

<b>Mineral Resource Statement*, Langmuir W4 Nickel Project (May 12, 2010)</b>					
<b>Category</b>	<b>Quantity Tonnes</b>	<b>Grade Ni %</b>	<b>Grade Cu %</b>	<b>Metal Nickel lbs. 000's</b>	<b>Metal Copper lbs. 000's</b>
<b>Open Pit**</b>					
Indicated	590,000	0.99	0.06	12,816	840
Inferred	125,000	0.88	0.06	2,437	157
<b>Underground **</b>					
Indicated	87,000	1.04	0.08	1,997	149
Inferred	46,000	0.91	0.05	923	53
<b>Combined</b>					
Indicated	677,000	1.00	0.06	14,813	989
Inferred	171,000	0.89	0.06	3,360	210

\*Mineral resources are reported in relation to optimized pit shells. Mineral resources are not mineral reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All assays have been capped where appropriate.

\*\* Open pit mineral resources are reported at a cut-off of 0.40 percent nickel inside a conceptual pit shell. Underground mineral resources are reported at 0.70 percent nickel and include resource blocks above cut-off outside the conceptual pit shell. Cut-off grades are based on a nickel price of US\$8 per pound and a metallurgical recovery of eighty-seven percent, without considering revenues from other metals.

The mineral resources are reported at two cut-off grades to reflect the "reasonable prospects" for economic extraction. SRK Consulting Canada Inc. ("SRK") of Toronto considers most of the mineral resources are amenable for open pit extraction, while the portion below a conceptual pit shell could be extracted using an underground mining method. A complete Technical Report, compiled in accordance to NI 43-101 Guidelines, has been filed on behalf of the Company and is available for viewing at [www.sedar.com](http://www.sedar.com).

Following the resource estimate in late 2010, the Company completed drilling of seven (NQ) holes to test mineralization extensions to the east of the existing mineral resource, and six (HQ) holes to provide material for metallurgical testing. This additional drilling was used to update the resource model. The new drilling has allowed a more confident definition of nickel mineralization for the mining studies and has provided material for low, medium and high grade composite metallurgical samples allowing for a better understanding of the metallurgical properties of the nickel mineralization. From these holes SRK and the Company selected two composites of core material suitable for both flotation testing as well as hardness testing (SAG Design tests). This material was forwarded to the Inspectorate Exploration & Mining Services Laboratories in Richmond, BC where metallurgical test work was conducted. Initial studies show that recoveries are above 70%.

The brief reopening in 2014-15 of the Redstone Nickel Mill adjacent to the Langmuir claims created new interest in the area. In early 2015, the VTEM and magnetic airborne surveys previously conducted on the project were reprocessed and evaluated by a consulting geophysicist to identify new targets. Previous

environmental and metallurgical work carried out on the project by the Company was also reviewed as geo-metallurgy on the nickel mineralized ultramafics, for an improved understand of the mineralogy.

### **Exploration Potential**

The W4 deposit was one of several promising geophysical targets on the Langmuir property. Several similar targets remain untested and the exploration upside potential at Langmuir remains high. The VTEM geophysical surveys and modeling programs have identified anomalous areas along strike and at depth of the discovery zone that have not been fully tested. In addition, the geological model used for targeting and the eventual discovery of the W4 deposit suggests that the potential for other similar high-grade, moderate-sized deposits exists. This geological model within similar Archean-aged rocks was taken from the Kambalda nickel camp in Western Australia which show nickel deposits clustered within a volcanic flow localized along the flanks of a domal structure. Nickel ore deposits in the Kambalda camp often occur in groups or clusters; for example, 12 nickel deposits occur within an ultramafic flow unit of approximately 8 km x 4 km in area.

On April 30, 2017, the Company decided to write-down the property's exploration costs to \$Nil to focus on its other properties. \$7,692,491 in exploration costs were written off during the year ended April 30, 2017.