Kenneth Williamson, P.Geo, M.Sc.
Kenneth Williamson 3DGeo-Solution
605 Ch. Harricana, Val-d'Or, QC
kenneth@3dgeo-solution.com
Mob. 819-550-0085

NI 43-101 Technical Report and Mineral Resource Estimate for the O'Brien Project, Abitibi, Québec

Prepared for

Radisson Mining Resources Inc.
700 Dallaire Ave, 2nd Floor
Rouyn-Noranda (Québec) J9X 4V9

Project Location

Latitude 48° 14' 07" N, Longitude 78° 22' 54" W

Cadillac Township

Province of Quebec, Canada

Prepared by

Kenneth Williamson, P.Geo, M.Sc.

Effective Date: July 15, 2019
Signature Date: August 29, 2019

SIGNATURE PAGE – KENNETH WILLIAMSON 3DGEO-SOLUTION

NI 43-101 Technical Report and Mineral Resource Estimate for the O'Brien Project, Abitibi, Québec

Project Location

Latitude 48° 14' 07" N, Longitude 78° 22' 54" W

Cadillac Township

Province of Quebec, Canada

Prepared for

Radisson Mining Resources Inc.
700 Dallaire Ave, 2nd Floor
Rouyn-Noranda (Québec) J9X 4V9

(Original signed and sealed)

Signed at Val-d'Or on August 29th, 2019

Kenneth Williamson, P.Geo, M.Sc. (OGQ #1490)
Kenneth Williamson 3DGeo-Solution
Val-d'Or (Québec)

CERTIFICATE OF AUTHOR –Kenneth Williamson

I, Kenneth Williamson, P.Geo, M.Sc. (OGQ #1490, PGO #2176), do hereby certify that:

1. I am a professional geoscientist, working as an independent senior geologist and operating as Kenneth Williamson 3DGeo-Solution, with an office located at 605 Ch. Harricana, Val-d'Or, QC.
2. This certificate applies to the technical report entitled "NI 43 101 Technical Report and Mineral Resource Estimate for the O'Brien Project, Abitibi, Québec" with an effective date of July 15, 2019.
3. I am a member in good standing of the Ordre des Géologues du Québec (OGQ licence #1490) and of the Professional Geoscientists of Ontario (PGO licence #2176). I graduated with a Master's degree from Université Laval (Ste-Foy, Québec) in 2001.
4. I have practiced my profession continuously as a geologist since 2004, for a total of fifteen (15) years, during which time I have been involved in mineral exploration, mine geology, litho-structural interpretation and modeling, as well as in resource modeling projects for gold properties in Canada.
5. I have read the definition of "qualified person" set out in National Instrument 43-101/Regulation 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I have visited the O'Brien Project on April 30, 2019.
7. I am the author of items 1 to 27 of the report titled "NI 43 101 Technical Report and Mineral Resource Estimate for the O'Brien Project, Abitibi, Québec", with an effective date of July 15, 2019 and a signature date of August 29, 2019, prepared for Radisson Mining Resources Inc.
8. I have not had prior involvement with the property that is the subject of this technical report.
9. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1, and the items of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
11. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading

Dated at Val d'Or, Québec this 29th day of August, 2019.

(Original signed and sealed)

Kenneth Williamson, P.Geo, M.Sc. (OGQ #1490)
Kenneth Williamson 3DGeo-Solution

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. SUMMARY

1.1 Introduction

Kenneth Williamson, P.Geo, M.Sc., was contracted by Mario Bouchard, President and CEO of Radisson Mining Resources ("Radisson" or the "issuer"), to prepare a revised mineral resource estimate for the O'Brien Project (the "Project") and a supporting Technical Report in accordance with Canadian Securities Administrators' National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects ("NI 43-101" or "43-101") and its related Form 43 101F1.

Kenneth Williamson, P.Geo, M.Sc., is an independent senior geologist, operating as Kenneth Williamson 3DGeo-Solution, with an office located at 605 Ch. Harricana, Val-d'Or, QC.

This Technical Report supersedes the previous resource estimate of March 2018, in that it adds an additional 14,000 metres of new drilling and it is based on a new litho-structural interpretation of the deposit.

1.2 Contributors and Qualified Person

This Technical Report and the 2019 MRE were prepared by Kenneth Williamson of KW3DGS. Kenneth Williamson, P.Geo, M.Sc., is a professional geologist member in good standing of the Ordre des Géologues du Québec (OGQ licence #1490) and of the Professional Geoscientists of Ontario (licence #2176), and is the independent qualified person ("QP") as defined by NI 43-101 for all sections of the Technical Report.

1.3 Property Description and Location

The Project is located in the province of Québec, Canada, just north of the municipality of Cadillac, within the new limits of the city of Rouyn-Noranda. Cadillac lies approximately 45 km east of downtown Rouyn-Noranda, 45 km west of downtown Val-d'Or and 55 km south of Amos.

The current O'Brien Project consists of 21 contiguous claims covering an aggregate area of 637.43 ha. It represents the amalgamation of the former O'Brien and Kewagama properties.

The former O'Brien property included a mining lease that expired in 2008 and was subsequently converted back into claims.

The former Kewagama claim group owned by Radisson (100%), with a 2% NSR royalty payable to KWG Resources Inc. in the event of commercial production.

A $1,000,000 payment must be made to Breakwater Resources Ltd (now Nyrstar) upon reaching commercial production on either the O'Brien or Kewagama claim groups, against which shall be deducted any costs required to restore the O'Brien tailing ponds.

1.4 Accessibility, Climate, Local resources, Infrastructure and Physiography

The O'Brien Project is located in the northwest part of the Abitibi administrative region, in the western part of Cadillac Township. Highway 117 runs just south of the Project's boundary. Well-maintained secondary gravel roads provide easy access to the old O'Brien and Kewagama mine sites. A large power line straddles the south part of the Project and a railway connected to the national network passes through Cadillac, just 2 km to the south.

Radisson has an exploration office and a large, well-equipped core logging and storage facility at the O'Brien mine site. Surface facilities also include large areas for stockpiling ore and waste materials. A tailings facility of 4 hectares and a polishing basin are located directly north of the old mill. A security guard patrols the mine site several times a day and Radisson has implemented additional measures to maintain security.

The region is under the influence of a continental climate marked by cold, dry winters and mild, humid summers. The topography of the project area is relatively flat to gently rolling, with local relief up to 20 m. Low-lying grounds are characterized by swamps and ponds, and overall drainage is very poor throughout the area. The Blake River flows northeast, running from the southwest corner through the Project to reach Lac Preissac, 3.2 km northeast of the property. The Project lies within the boreal forest domain.

1.5 Geological Setting and Mineralization

The O'Brien Project is located along the CLLDZ, in the southeastern part of the Cadillac Mining Camp. In Québec, about forty or so gold deposits, which have produced over 60 million ounces of gold since the early 20th century, are associated with this major structure and its subsidiary faults.

The Cadillac Mining Camp covers a 25 km long stretch of the CLLFZ, from the former Mouska mine in the west to the former Lapa-Cadillac mine to the east. Within the CMC, the CLLFZ runs along an E-W axis and separates the Pontiac metasedimentary Subprovince to the south from the Abitibi volcano-sedimentary Subprovince to the north. The CMC is underlain by rocks of the Southern Volcanic Zone of the Abitibi Subprovince intruded by Proterozoic diabase dykes.

The Project straddles the Piché Group volcanic rocks and CLLFZ. The Piché Group is a relatively thin band of interlayered mafic volcanic rocks and conglomerates, intruded by QFP dykes. With a few significant exceptions like the Vintage Zone, the Piché Group is host of most of the gold mineralisation occurrences on the property.

Gold production at the O'Brien mine came from a few quartz veins mostly hosted by the O'Brien Mine conglomerate and the northern QFP dyke. Approximately 95% of the O'Brien ore came from four veins (No. 1, No. 4, No. 9 or "F") in the eastern part of the mine. The veins contained high-grade shoots that occasionally yielded considerable amounts of visible gold.

Within the Zone 36 East area, the main mineralized structures ("veins") are generally narrow, ranging in true thickness from several centimetres to 6.7 m, but have good continuity both horizontally and vertically. Gold-bearing veins occur in different lithologies of the Piché Group and the Pontiac Group.

In the Kewagama area, the gold mineralization occurs in rocks of the Piché Group, and differed in style by presenting series of smaller veins instead of bigger single vein as within the O'Brien deposit.

KW3DGS interpreted that gold mineralized hydrothermal fluids circulation through such fault network has resulted in the development of gold-bearing quartz(-carbonate-sulphides) veins and veinlets. In places, competency contrast between rocks of different composition has likely also favoured the creation of the mineralized veins along lithological contacts.

1.6 Drilling, Sampling Method, Approach and Analysis

Diamond drilling core is the principal source of information for geological data. From September 2017 to the end of January 2019, Radisson drilled 14,013.5 metres of surface diamond drill holes. Five (5) of these are wedges. Seven holes were abandoned due to strong deviations. This drilling was aimed on zone 36E and F.

In addition to this drilling, some 2,288.6 metres of historical drilling from Zone F, are included in this MRE 2019, that was left out of the previous MRE 2018.This area is located to the west of zone 36E (west of 693975E) and East of the former O'Brien mine, bringing a total of 16,302.1 metres of additional drilling to the new MRE 2019.

During the first half of 2019, Radisson deployed efforts at relogging some 520 m of older holes in order to verify the presence of gold mineralization indications within specific intervals, and complemented the sampling of these holes over previously unsampled intervals.

Core boxes are received on a daily basis at the core shack on the Project. Drill core is logged and sampled by experienced and qualified geologists or by a geologist-in-training under the supervision of a qualified geologist.

Sawing is carried out by an experienced technician who follows the geologist's markings using an electric core saw. One half of the core is placed in a plastic bag with the matching sample tag while the other half is replaced in the core box and stored for future reference. Individual sample bags are placed in rice bags along with the list of samples, and samples are usually shipped to the laboratory once a drill hole has been fully sampled.

For the 2018 and 2019 drilling program (up to OB-19-91; the last hole used in the current Mineral Resource Estimate), Radisson used ALS Minerals (ALS), an independent commercial laboratory located in Val D'Or, Québec for both the sample preparation and assaying. ALS is a commercial laboratory independent of Radisson with no interest in the Project. ALS received ISO/IEC 17025 accreditation through the Standards Council of Canada ("SCC").

In addition, Radisson selected a series of pulps and rejects from holes drilled in 2018 (from OB-18-69 to OB-18-83) and requested another laboratory, SGS, to run duplicate assays.

SGS is a commercial laboratory located in Val-d'Or, QC and is independent of Radisson with no interest in the Project. SGS received ISO/IEC 17025 accreditation through the Standards Council of Canada ("SCC").

At both laboratories, Samples are totally crushed, then split and pulverised. Core samples are analyzed by fire assay with atomic absorption. If visible gold is observed, the sample is sent for metallic sieve. In that case, the entire sample is pulverized and assayed. Assay results are provided as Excel or PDF spreadsheets or through a web base system which offers direct access to results.

Radisson has a QA/QC program for drill core that includes the insertion of one blank, one standard and one pulp duplicate per group of 20 samples.

KW3DGS is in the opinion that the sample preparation, analysis and security procedures and QA/QC protocols used by Radisson for the O'Brien Project are appropriate for an advanced exploration program. Duplicates should also be implemented to complete the QA/QC coverage.

1.7 Data Verification

KW3DGS's data verification included visits to the project's office, as well as to the logging and core storage facilities, completed by Kenneth Williamson on April 30, 2019. It also included a review of selected core intervals, drill hole collar locations, assays, the QA/QC program, downhole surveys, information on mined-out areas, and the descriptions of lithologies, alterations and structures.

For assays and survey data a comparison of the database with original certificates were performed. Any discrepancies found were corrected and incorporated into the database. KW3DGS is of the opinion that the data verification process demonstrates the validity of the data and protocols for the Kewagama and 36 East areas of the Project.

KW3DGS considers the Radisson database to be valid and of sufficient quality to be used for the mineral resource estimate herein.

1.8 Mineral Resource Estimates

The mineral resource estimate for the O'Brien Project (the "2019 MRE) herein was prepared by Kenneth Williamson, P.Geo., M. Sc., using all available information. The main objective of the mandate assigned by the issuer was to use the additional 2017-2019 drilling programs and the new litho-structural interpretation of the deposit to prepare a new Mineral Resource Estimate for the O'Brien project.

The 2019 resource area measures 2,130 m along strike (E-W), 540 m across and is reaching depth of 1,530 m below surface. The resource estimate is based on a compilation of historical and recent diamond drill holes and a litho-structural model constructed by KW3DGS.

The GEMS diamond drill hole database contains 693 DDH (280 from underground and 413 from surface), of which, inside the resource estimate area. All 693 holes, together representing 147,363 m of drilling, were compiled and validated at the time of the estimate.

The 2019 mineralized zones model honors as best as possible all of the geometrical constraints imposed by the new litho-structural interpretation. From the several mineralized trends interpreted, KW3DGS created a total of 63 mineralized solids that honour the drill hole database.

KW3DGS is of the opinion that the current mineral resource estimate can be categorized as Indicated and Inferred mineral resources based on data density, search ellipse criteria, drill hole density, and interpolation parameters. KW3DGS considers the 2019 MRE to be reliable and based on quality data, reasonable hypotheses and parameters that follow CIM Definition Standards.

Table 1.1 displays the results of the 2019 Mineral Resource Estimate for the O'Brien Project (63 mineralized zones) at the official 5.00 g/t Au cut-off grade, as well as the sensitivity at other cut-off grades. The reader should be cautioned that the figures presented in Table 1.1 should not be misinterpreted as a mineral resource statement apart from the official scenario at 5.00 g/t Au. The reported quantities and grade estimates at different cut-off grades are only presented to demonstrate the sensitivity of the resource model to the selection of a reporting cut-off grade.

Table 1.1 - 2019 O'Brien Project Mineral Resource Estimate at a 5.00 g/t Au cut-off, sensitivity at other cut-off scenarios

		INDICATED RESOURCES			INFERRED RESOURCES		
	Cut-off grade (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)
ALL ZONES	> 7.00 g/t Au	544,600	12.16	212,800	243,600	9.69	75,900
	> 6.00 g/t Au	712,100	10.82	247,700	374,700	8.54	102,900
	> 5.00 g/t Au	**949,700**	**9.48**	**289,400**	**617,400**	**7.31**	**145,000**
	> 4.00 g/t Au	1,350,300	7.99	346,700	975,000	6.27	196,600
	> 3.50 g/t Au	1,599,900	7.32	376,800	1,208,100	5.78	224,700
	> 3.00 g/t Au	1,906,200	6.67	408,700	1,500,200	5.29	255,000

Notes to Accompany Mineral Resource Table:

1. The independent qualified person for the current 2019 MRE, as defined by NI 43-101, is Kenneth Williamson, P.Geo, M.Sc., of Kenneth Williamson 3DGeo-Solution. The effective date of the estimate is July 15th, 2019.
2. The Mineral Resources are classified as Indicated and Inferred Mineral Resources and are based on the 2014 CIM Definition Standards.
3. These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability.
4. Results are presented undiluted.
5. Sensitivity was assessed using cut-off grades from 3.00 g/t Au to 7.00 g/t Au. Cut-off grade is function of prevailing market condition (gold price, exchange rates, mining costs, etc.) and must therefore be re-evaluated accordingly.
6. Base case cut-off grade of 5.00 g/t Au was established considering the narrow nature of the mineralized zones, a gold price of 1,350.00 US$/oz or 1,755.00 C$/oz using a 1.30 exchange rate, a recovery of 87.4%, a gold selling cost of 5.00 C$/oz, an overall mining cost of 67.50 C$/t, a processing cost of 65.00 C$/t and a G&A / Environmental cost of 32.50 C$/t.
7. High grade capping of 60.00 g/t Au was applied to raw assay grades prior to compositing. Compositing length was established at 1.50 m. Interpolation was realized using an inverse distance cubed (ID^3) methodology within a 3m x 3m x 3m cell-size block model.
8. Density data (g/cm^3) was set to 2.82 g/cm^3 based on available density measurements.
9. A minimum true thickness of 1.5 m was applied for the construction of the mineralized zones model, which consist of 63 different mineralized zones.
10. Following recommendation of Form 43-101F1, the number of metric tons and ounces was rounded to the nearest hundredth. Any discrepancies in the totals are due to rounding effects.
11. Kenneth Williamson 3DGeo-Solution is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially impact the current Mineral Resource Estimate.

1.9 Interpretation and Conclusions

Kenneth Williamson 3DGeo-Solution prepared a mineral resource estimate for the O'Brien Project using additional holes from the 2017-2019 drilling programs and the new litho-structural interpretation of the deposit.

KW3DGS concludes the following after conducting a detailed review of all pertinent information and completing the 2019 MRE:

- Geological and grade continuity were demonstrated for the 63 gold-bearing zones of the O'Brien Project.
- The geometrical and structural constraints imposed by the new litho-structural model provided valuable insights to create a completely new mineralized zones model, which reflects the nature and style of the old O'Brien mine.
- The interpolation of the mineralized zones was constrained by the new mineralized zones wireframe model.
- The estimated Indicated Resources now stand, using a base case cutt-off grade of 5.00 g/t Au, at 289,400 ounces of gold (949,700 t at 9.48 g/t Au) and Inferred Resources at 145,000 ounces of gold (617,400 t at 7.31 g/t Au).
- The 2019 Indicated Resources represent a 74% increase in ounces compared to the 2018 MRE. The 2019 Inferred Resources represent a 52% increase in total ounces compared to the 2018 MRE.
- Grade increased by 14% in the Indicated category, and by 1% in the Inferred category.
- It is likely that additional diamond drilling on multiple zones would increase the Indicated Resources and upgrade some of the Inferred Resources to Indicated Resources.
- There is also the potential for upgrading some of the Indicated Resources to Measured Resources through detailed geological mapping, infill drilling and systematic channel sampling from the underground workings.

The risks related to the estimation of the mineral resource of the O'Brien Project are mainly related to the heterogeneous and nuggety nature of the deposit, which could impact the estimated grade value and continuity within some given zones.

KW3DGS believes there are several opportunities to add additional resources to the O'Brien Project. The following list provides a description of the main target areas defined by KW3DGS:

- **Target 1**: Testing the steep SE-plunging trend of the mineralization in the F Zone. Area is open from around -650m below surface.
- **Target 2**: Testing both the steep SE- and SW-plunging mineralized trends below Zone 36 East area.

- **Target 3**: Testing the steep SE-plunging mineralized trends below some the Kewagama Mine stopes.
- **Target 4**: Testing the area between Zone 36 East and Kewagama Mine
- **Target 5**: Testing the down-plunge and the lateral extension components of the Vintage Zone area.
- **Target 6**: Testing for defining Inferred Resources at depth (down from 500m below surface).

KW3DGS concludes that the current 2019 MRE allows the O'Brien Project to advance towards the Feasibility Study (FS) stage. KW3DGS is of the opinion that the Project can be advanced to a Feasibility Study (FS) stage conditional to that some more exploration work is carried out in advanced and in preparation for such feasibility study.

1.10 Recommendations

Based on the results and conclusions of the 2019 Mineral Resource Estimate, KW3DGS recommends that the O'Brien Project be advanced to the next development phase, which would be a Feasibility Study (FS).

KW3DGS is of the opinion that prior to commencing such FS, more exploration and underground exploration work, in particular a bulk sample, and a subsequent MRE update, should be completed.

KW3DGS recommends further definition drilling to upgrade inferred resources to in indicated category.

KW3DGS recommends further exploration drilling within the O'Brien Project to increase inferred resources.

KW3DGS recommends gathering more density and ICP data from selected portions, including mineralized portions, of drill core.

KW3DGS recommend carrying out an underground exploration program, including a bulk sampling program.

KW3DGS recommends mechanical stripping in areas where mineralized zones are projected to reach surface.

KW3DGS recommends finalizing the collar and position verification work for all the historical underground drill holes and channel samples.

KW3DGS also recommends to include provisions for environmental and hydrogeological characterization studies.

If additional work proves has a positive impact on the project, the current resource estimate should be updated, which would include compiled and validated historical drill holes, future drill holes, underground channel samples and updated 3D models of voids and mineralized zones.

The stakeholder mapping and communication plan should be pursued. According to Radisson, environmental studies are in progress and will be completed by the fall of 2019. A groundwater sampling is planned in the Shaft #3 to characterize the water quality and see if the arsenic contamination is similar or higher than the average of the concentration found in the fall of 2018 into the shaft #2.

In summary, KW3DGS recommends a two-phase work program as follows:

- **Phase 1:**
  - Underground drillhole collars verification on the eastern part of the former O'Brien Mine
  - Continue surface conversion drilling
  - Continue surface exploration drilling
  - Density and ICP programs
  - Social Licence Management
  - Environmental and hydrogeological characterization testing
  - Waste rock and old waste pad characterization
  - Underground bulk Sample planning
  - Update the Mineral Resource Estimation

- **Phase 2**
  - Bulk Sample execution
  - Mechanical stripping
  - FS on Phase 1 updated Mineral Resource Estimation
  - Continue surface conversion drilling
  - Continue density and ICP programs

KW3DGS has prepared a cost estimate for the recommended two-phase work program to serve as a guideline for the project.

Expenditures for Phase 1 are estimated at C$7,271,450 (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at C$1,750,000 (incl. 15% for contingencies). The grand total is C$9,021,450 (incl. 15% for contingencies). Phase 2 is contingent upon the success of Phase 1. The budget for the proposed program does not include the costs related to the Bulk Sample execution.

KW3DGS is of the opinion that the recommended two-phase work program and proposed expenditures are appropriate and well thought out, and that the character of the Project is of sufficient merit to justify the recommended program. KW3DGS believes that the proposed budget reasonably reflects the type and amount of the contemplated activities.

2. INTRODUCTION

2.1 Overview

Kenneth Williamson 3DGeo-Solution ("KW3DGS") was contracted by Mario Bouchard, President and CEO of Radisson Mining Resources ("Radisson" or the "issuer"), to prepare an updated mineral resource estimate for the O'Brien Project (the "Project") and a supporting Technical Report in accordance with Canadian Securities Administrators' National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects ("NI 43-101" or "43-101") and its related Form 43 101F1.

Kenneth Williamson, P.Geo, M.Sc., operating as "Kenneth Williamson 3DGeo-Solution" or "KW3DGS", is an independent mining and senior consulting geologist based in Val-d'Or (Québec).

Radisson is a Canadian mineral exploration company trading publicly on the TSX Venture Exchange under the symbol RDS.

Located north of the town of Cadillac in the province of Québec, the Project consists of two claim groups (O'Brien and Kewagama) that host the former O'Brien mine, the former Kewagama mine, the 36 East Zone and the Vintage Zone. For the purpose of this Technical Report, the term "O'Brien Project" covers the entire property and the O'Brien mine, Kewagama mine, 36 East Zone and Vintage Zone, amongst other, will be referred to as "areas" instead of mines or zones.

This Technical Report revises, on the basis of the new litho-structural interpretation and an additional 14,000 metres of new drilling, the previous resource estimate of March 2018

The updated mineral resource estimate herein ("2019 MRE") follows CIM Definition Standards.

2.2 Report Responsibility and Qualified Persons

This Technical Report and the 2019 MRE were prepared by Kenneth Williamson, P.Geo, M.Sc., of KW3DGS.

Kenneth Williamson, P.Geo, M.Sc., is a professional geologist member in good standing of the Ordre des Géologues du Québec (OGQ licence #1490) and of the Professional Geoscientists of Ontario (licence #2176), and is the independent qualified person ("QP") as defined by NI 43-101 for all sections of the Technical Report.

Kenneth Williamson visited the Project site on April 30th, 2019 at which time he examined mineralized exploration diamond drill core, reviewed the core logging and sampling procedures, and performed onsite data verification.

2.3 Effective Date

The effective date of this Technical Report is July 15 of 2019.

2.4 Sources of Information

The documentation listed in items 3 and 27 were used to support the Technical Report. Excerpts or summaries from documents authored by other consultants are indicated in the text.

KW3DGS's review of the Project was based on published material in addition to the data, professional opinions and unpublished material submitted by Radisson. KW3DGS has reviewed all the data provided by the issuer.

KW3DGS has also consulted the Government of Québec's online claim management and assessment work databases (GESTIM and SIGEOM, respectively), as well as technical reports, AIFs, MD&A reports, and press releases published by Radisson on SEDAR (www.sedar.com).

KW3DGS reviewed the information used to prepare this Technical Report, including the conclusions and recommendations, and believes that the said information is valid and appropriate for preparation of the current Technical Report.

2.5 Currency, Units of Measure, and Abbreviations

All currency amounts are stated in Canadian Dollars ($, C$, CAD) or US dollars (US$, USD). Quantities are stated in metric units, as per standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area, and grams per metric ton (g/t) for the grades of gold and other precious metals. Contained gold is stated in troy ounces (oz). Wherever applicable, imperial units have been converted to the International System of Units (SI units) for consistency.

A list of abbreviations used in this report is provided in Table 2.1 whereas Table 2.2 provides the conversion factors used.

Table 2.1 - List of abbreviations

Abbreviation or Symbol	Unit or Term
%	Percent
% solids	Percent solids by weight
$	Canadian dollar
$/t	Dollars per metric ton
°	Angular degree
°C	Degree Celsius
μm	Micron (micrometre)
43-101	National Instrument 43-101 – Standards of Disclosure for Mineral Projects (Regulation 43-101 in Québec)
As	Arsenic
Au	Gold
Az	Azimuth
CA	Certificate of authorization
CA	Core angle
CAD, C$	Canadian dollar
CAD:USD	Canadian-American exchange rate
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIM Definition Standards	CIM Definition Standards for Mineral Resources and Mineral Reserves
CIP	Carbon-in-pulp
CL	Core length
CLLFZ	Cadillac–Larder Lake Fault Zone

Abbreviation or Symbol	Unit or Term
cm	Centimetre
cm^2	Square centimetre
cm^3	Cubic centimetre
CoG	cut-off grade
cpy, CPY	Chalcopyrite
CRM	Certified reference material
CSA	Canadian Securities Administrators
Cu	Copper
CV	Coefficient of variation
d	Day (24 hours)
deg	Angular degree
DEM	Digital elevation model
dm	Decametre
DDH	Diamond drill hole
EM	Electromagnetics
Fe	Iron
ft, '	Foot (12 inches)
ft^3/ton	cubic feet per short ton
FS	Feasibility study
g	Gram
G	Billion
G&A	General and administration
Ga	Billion years
GESTIM	Gestion des titres miniers (MERN's online claim management system)
h	Hour (60 minutes)
ha	Hectare
HLEM	Horizontal loop electromagnetic
ICP-AES	Inductively coupled plasma atomic emission spectroscopy
ICP-OES	Inductively coupled plasma optical emission spectroscopy
ICP-MS	Inductively coupled plasma mass spectroscopy
ID2	Inverse distance squared
ID3	Inverse distance cubed
ID6	Inverse distance power six
in, "	Inch
in^2	Square inches
IP	Induced polarization
ISO	International Organization for Standardization
JV	Joint venture
JVA	Joint venture agreement
k	Thousand (000)
kg	Kilogram
km	Kilometre
km^2	Square kilometre
km/h	Kilometres per hour
koz	Thousand ounces
L	Litre
M	Million
m	Metre
m^2	Square metre
m^3	Cubic metre
Ma	Million years
Mag, MAG	Magnetometer, magnetometric
masl	Metres above mean sea level
MDDELCC	Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques du Québec (Québec's Ministry of Sustainable Energy, Environment and the Fight Against Climate Change)
MERN	Ministère de l'Énergie et des Ressources Naturelles du Québec (Québec's Ministry of Energy and Natural Resources)
MERQ	Former name of MERN
MFFP	Ministère des Forêts, de la Faune et des Parcs (Québec's Ministry of Forests, Wildlife and Parks)

Abbreviation or Symbol	Unit or Term
mL	Millilitre
mm	Millimetre
Moz	Million (troy) ounces
MRC	Municipalité régionale de comté (Regional county municipality in English)
MRE	Mineral resource estimate
Mt	Million metric tons (tonnes)
NAD 83	North American Datum of 1983
NAG	Non-acid generating
NI 43-101	National Instrument 43-101 – Standards of Disclosure for Mineral Projects (Regulation 43-101 in Québec)
NN	Nearest neighbour
NTS	National Topographic System
OGQ	Ordre des géologues du Québec (Québec order of geologists)
OIQ	Ordre des ingénieurs du Québec (Québec order of engineer)
OK	Ordinary kriging
oz	Troy ounce
oz/st, oz/t, oz/ton	Ounce (troy) per short ton (2,000 lbs)
PEA	Preliminary economic assessment
PFS	Prefeasibility study
po, PO	Pyrrhotite
ppb	Parts per billion
ppm	Parts per million
py, PY	Pyrite
QA	Quality assurance
QC	Quality control
QFP	Quartz-feldspar porphyry
QP	Qualified person (as defined in National Instrument 43-101)
qz, QZ	Quartz
R&R	Reserves and resources
RQD	Rock quality designation
SCC	Standards Council of Canada
SD	Standard deviation
SG	Specific gravity
SIGÉOM, SIGEOM	Système d'information géominière (the MERN's online spatial reference geomining information system)
t	Metric ton ("tonne") (1,000 kg)
ton	Short ton (2,000 lbs)
UCoG	Underground cut-off grade
USD, US$	American dollar
UTM	Universal Transverse Mercator (coordinate system)
VG	Visible gold
VLF	Very low frequency
VMS	Volcanogenic massive sulphide

Table 2.2 - Conversion factors for measurements

Imperial Unit	Multiplied by	Metric Unit
1 inch	25.4	mm
1 foot	0.3048	m
1 acre	0.405	ha
1 ounce (troy)	31.1035	g
1 pound (avdp)	0.4535	kg
1 ton (short)	0.9072	t
1 ounce (troy) / ton (short)	34.2857	g/t

2.6 Important Notice

This Technical Report supports the disclosure of the MRE 2019 covering the O'Brien Project. Due to insufficient compilation and validation work, the former O'Brien mine is not included in the present Mineral Resource Estimate.

3. RELIANCE ON OTHER EXPERTS

This Technical Report has been prepared by KW3DGS at the request of the issuer. Kenneth Williamson, P.Geo, M.Sc., of KW3DGS is the qualified and independent person ("QP") who reviewed the technical documentation relevant to the report, prepared a mineral resource estimate on the O'Brien Project, and prepared recommendations for a follow-up work program.

As the QP, Kenneth Williamson relied on the following people or sources of information during the preparation of this Technical Report:

- The issuer supplied information about mining titles, option agreements, royalty agreements, environmental liabilities, permits and details of negotiations with First Nations. KW3DGS consulted the mining titles and their status, as well as any agreements and technical data supplied by the issuer (or its agents) and any available public sources of relevant technical information. KW3DGS is not qualified to express any legal opinion with respect to property titles, current ownership or possible litigation.

- MRB & Associates, and in particular Bryan Sinkunas, provided technical support and expertise during the data compilation and validation process.

- The 2017 metallurgical study and associated information was taken from an internal report prepared by Khalil Nasrallah of Dundee Sustainable Technologies.

- The 2018 metallurgical study and associated information was taken from an internal report prepared by Cathy Chouinard, ing.jr and Guillaume Noël, ing. of the Centre Technologique des Résidus Industriels.

- The 2019 metallurgical study and associated information was taken from an internal report prepared by Lesley Hendry and Dan Imeson of SGS Minerals Services.

- Pierre-Jean Lafleur, Eng., of P.J. Lafleur Géo-Conseil Inc., provided parameters and insights to establish the official cut-off grade for the mineral resource estimate.

Historical geological and/or technical reports for projects in the vicinity of the Project prepared before the implementation of NI 43-101 in 2001 were prepared by authors that appear to have been qualified. KW3DGS considers such historical information to be prepared according to standards that were acceptable to the exploration community at the time. However, some of the digital data gathered are incomplete and do not fully meet the current requirements of NI 43-101, and were therefore discarded.

KW3DGS has no reason to believe that any of the information and/or data used to prepare this Technical Report is invalid or contains misrepresentations.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The O'Brien Project is located in the province of Québec, Canada, just north of the municipality of Cadillac. The municipality of Cadillac is located at approximately 50 km from the city of Rouyn-Noranda to the west and 50 km from the city of Val-d'Or to the east (Figure 4.1). The southern boundary of the Project overlaps a small portion of the urban limits of the municipality of Cadillac (Figure 4.2).

The Project is located on NTS map sheet 32 D/01, in the township of Cadillac. The Project is approximately centered at Latitude 48º14'07" N and Longitude 78º22'54" W, or 694330E and 5345765N (NAD 83, Zone 17) in UTM coordinate system.

4.2 Tenure Rights

In Québec, the ownership and granting of mining titles for mineral substances are primarily governed by the *Mining Act* (http://legisquebec.gouv.qc.ca/en/ShowTdm/cs/M-13.1) and related regulations. Details on the current legislation, such as: reporting requirements; land access and use; fees and charges; permitting, and; required work are summarized on the Government of Quebec – Ministère de l'Énergie et des Ressources Naturelles ("MERN") website:
(https://mern.gouv.qc.ca/english/publications/online/mines/claim/index.asp).

4.3 Property Disposition and Mineral Royalties

The current O'Brien Project, regrouping the former O'Brien and Kewagama properties, consists of 21 contiguous claims (Table 4.1) covering an area of 637.43 ha (Figure 4.2).

The former O'Brien property is formed by a contiguous block of fifteen (15) complete claims and parts of six (6) other claims, for an overall area of 524.5 ha. The former O'Brien property included a mining lease, but at its expiry date in 2008, it has been converted back into claims.

The former Kewagama claim group consists of a contiguous block comprising parts of 6 claims covering an aggregate area of 112 ha.

Radisson owns a 100% interest on the entire O'Brien Project.

However,

A $1,000,000 payment must be made to Breakwater Resources Ltd (now Nyrstar) upon reaching commercial production on either the O'Brien or Kewagama claim groups, against which shall be deducted any costs required to restore the O'Brien tailing ponds.

There is also a 2% NSR royalty payable to KWG Resources Inc. in the event of commercial production taking place on the Kewagama claim group.

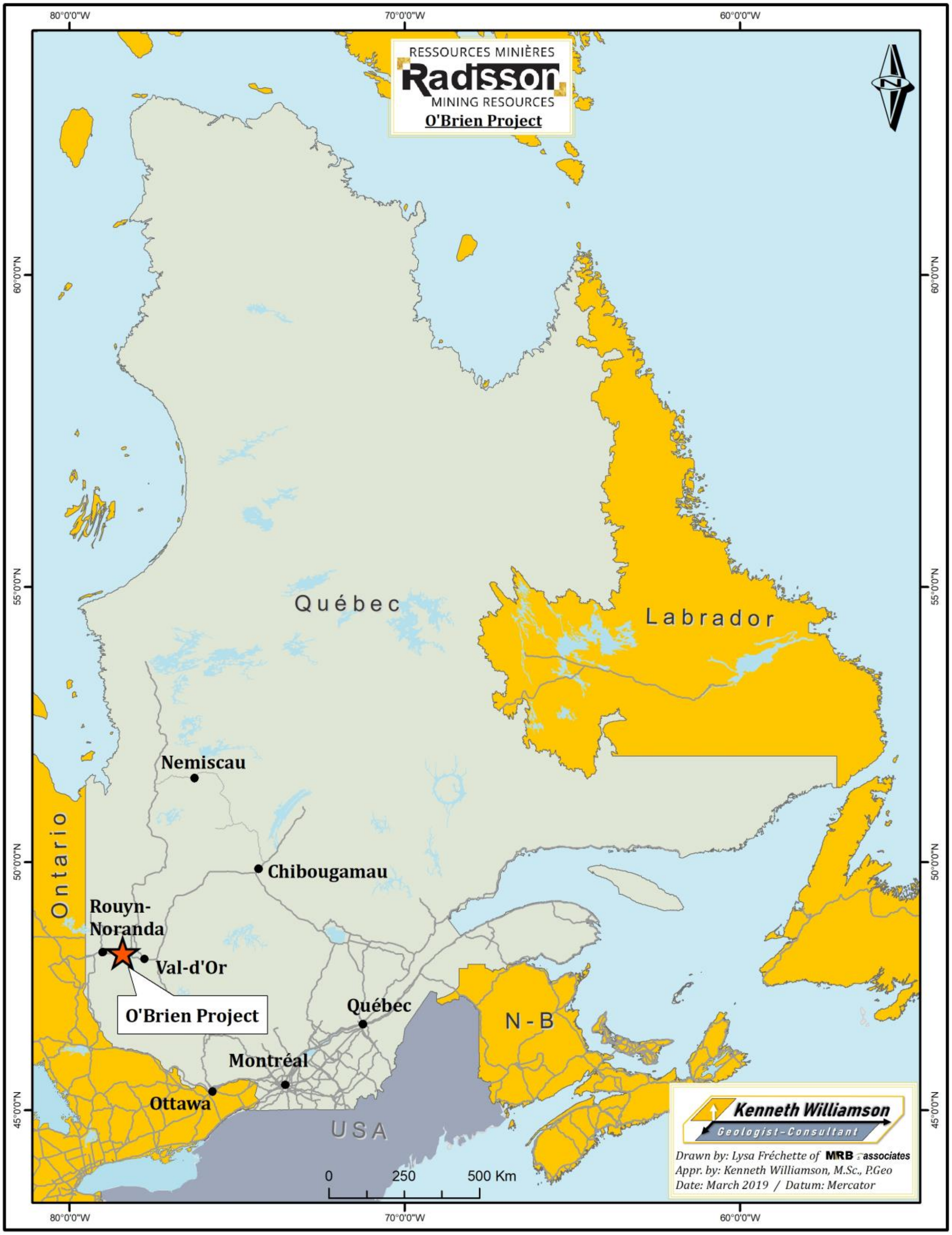

Figure 4.1 - Location of the O'Brien Project in the Province of Québec

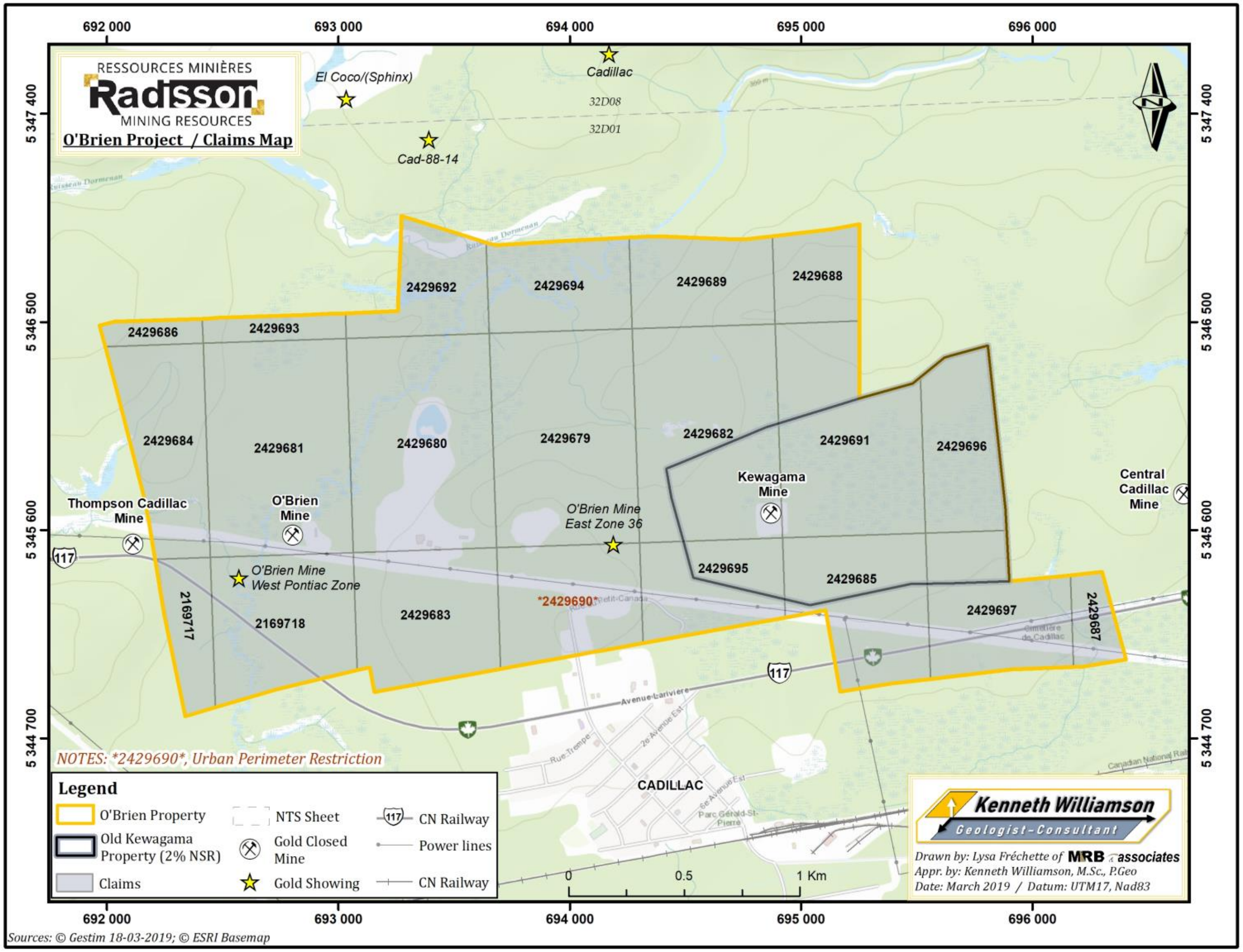

Figure 4.2 - Location map of the O'Brien Project mining titles

Table 4.1 - Mining title list

Type of Mining Lease	Title Number	NTS sheet	Status	Area (ha)	Registration Date	Expiration Date	Holder
CDC	2169717	32D01	Active	12.67	August 7, 2008	August 6, 2020	Ressources Minières Radisson inc. 100 %
CDC	2169718	32D01	Active	35.61	August 7, 2008	August 6, 2020	Ressources Minières Radisson inc. 100 %
CDC	2429679	32D01	Active	57.37	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429680	32D01	Active	57.37	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429681	32D01	Active	57.37	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429682	32D01	Active	57.37	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429683	32D01	Active	34.65	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429684	32D01	Active	29.92	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429685	32D01	Active	33.92	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429686	32D01	Active	4.57	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429687	32D01	Active	7.27	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429688	32D01	Active	14.76	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429689	32D01	Active	23.71	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429690	32D01	Active	29.69	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429691	32D01	Active	49.52	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429692	32D01	Active	19.99	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429693	32D01	Active	6.65	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429694	32D01	Active	24.02	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429695	32D01	Active	24.12	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429696	32D01	Active	24.75	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %
CDC	2429697	32D01	Active	32.13	July 30, 2015	March 1, 2021	Ressources Minières Radisson inc. 100 %

4.4 Claim Status

Claim status was supplied by Radisson. The status of all claims was also verified using GESTIM, the Québec government's online claim management system at: https://gestim.mines.gouv.qc.ca. In date of March 18, 2019, according to the GESTIM website, all mining titles related to the Project are registered to Ressources Minières Radisson Inc.

KW3DGS has not verified the legal titles to the Property or any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties; however, KW3DGS that Radisson is responsible to have conducted the proper legal due diligence.

4.5 Urban Perimeter

Part of the Project is subject to regulations respecting an "urban perimeter" (claim 2429690 on Figure 4.2) or an "area dedicated to vacationing". These areas, as documented in GESTIM, fall under "Exploration Prohibited" (see Bill 70, 2013, chapter 32, section 124).

However, as the O'Brien Project only includes mining rights obtained before December 10, 2013 Exploration is thus permitted on mining rights overlapping the urban perimeter and the area dedicated to vacationing until it is determined by the regional county municipality ("MRC" in French) that such urban perimeter or area dedicated to vacationing are declared mining-incompatible territories. More details are presented in section 61 of the *Mining Act*.

4.6 Environment

Radisson is presently exempted by the MERN of all liabilities associated with the onsite historical tailings. However, should a decision to use the same area for future tailings in made, Radisson would acquire all liabilities for past and present tailings, including the significant amount of arsenic trioxide stored in 8,938 metal barrels underground at the O'Brien mine in 1956. The barrels were then stored within two (2) drifts on 1500' level of the mine (15-G-West and 15-F-West drifts) and the entries of these drifts were sealed.

The mine was reactivated and pumped out in 1972, but no information about the barrels is available for that period. In 1981, Darius Gold Mines, then owner of the O'Brien mine, got the concrete walls from the 1500' level demolished, as a potential buyer for the arsenic trioxide had been found. Later that year, the potential buyer withdrew.

In 1985, waterproof and reinforced concrete plugs (2.3 m wide) at the entrance of the two (2) drifts containing the barrels on level 1500 have been reconstructed prior to the second flooding in 1985 by Sulpetro Minerals Ltd. The storage site has not been visited since the O'Brien since then. In 1989, GERLED, a government entity with the mandate to catalogue and monitor all known dangerous waste material sites in the province, categorized this storage site as a class 1 dangerous waste material site.

Radisson addressed the issue through a basic hydrogeological study (Fournier and Leblanc, 2017). The study concluded that it was not possible to determine limiting impacts of such an underground storage facility on the economic potential of the MRE 2018 (Beausoleil, 2018). Radisson is actually working on a complete hydrogeological study with the same consultant comprising the sampling of the shaft #2 and #3 (0-500m) to optimize the information of the groundwater quality.

4.7 Permits

In Québec, for any exploration program that involves tree-cutting (to build access roads or drill pads or, or in preparation for mechanical outcrop stripping for example), it is required to obtain a permit from the MERN. Permitting timelines is typically of 3 to 4 weeks.

4.8 Comments on Item 4

KW3DGS is not aware of any other significant factors and risks that may affect access, ownership, or the right or ability to perform the current mineral resource estimate on the Project.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The O'Brien Project is located just north of the Municipality of Cadillac, in the northwest part of the Abitibi administrative region, can easily be accessed via Trans-Canadian Highway 117 (Figure 5.1).

From this main Highway 117, well-maintained secondary gravel roads provide year-round easy access to the old O'Brien mine site, in particular to the main Radisson site office and core shack facility.

5.2 Climate

The region is considered a "continental climate", marked by cold- dry winters and mild-humid summers.

Statistics for the 1981–2010 period show a daily average temperature for July of 16.7°C and a daily average temperature for January of -17.9°C, with a record low of -49.5°C and a record high of 35.5°C. Annual precipitation indicate a mean rainfall of 985 mm. Snow usually accumulates from October to May, with a peak from November to March. *(climat.meteo.gc.ca/climate_normals)*

Climatic conditions do not seriously impact exploration activities, but can force seasonal adjustments for certain types of work. Drilling in wet areas can only be conducted during winter for instance.

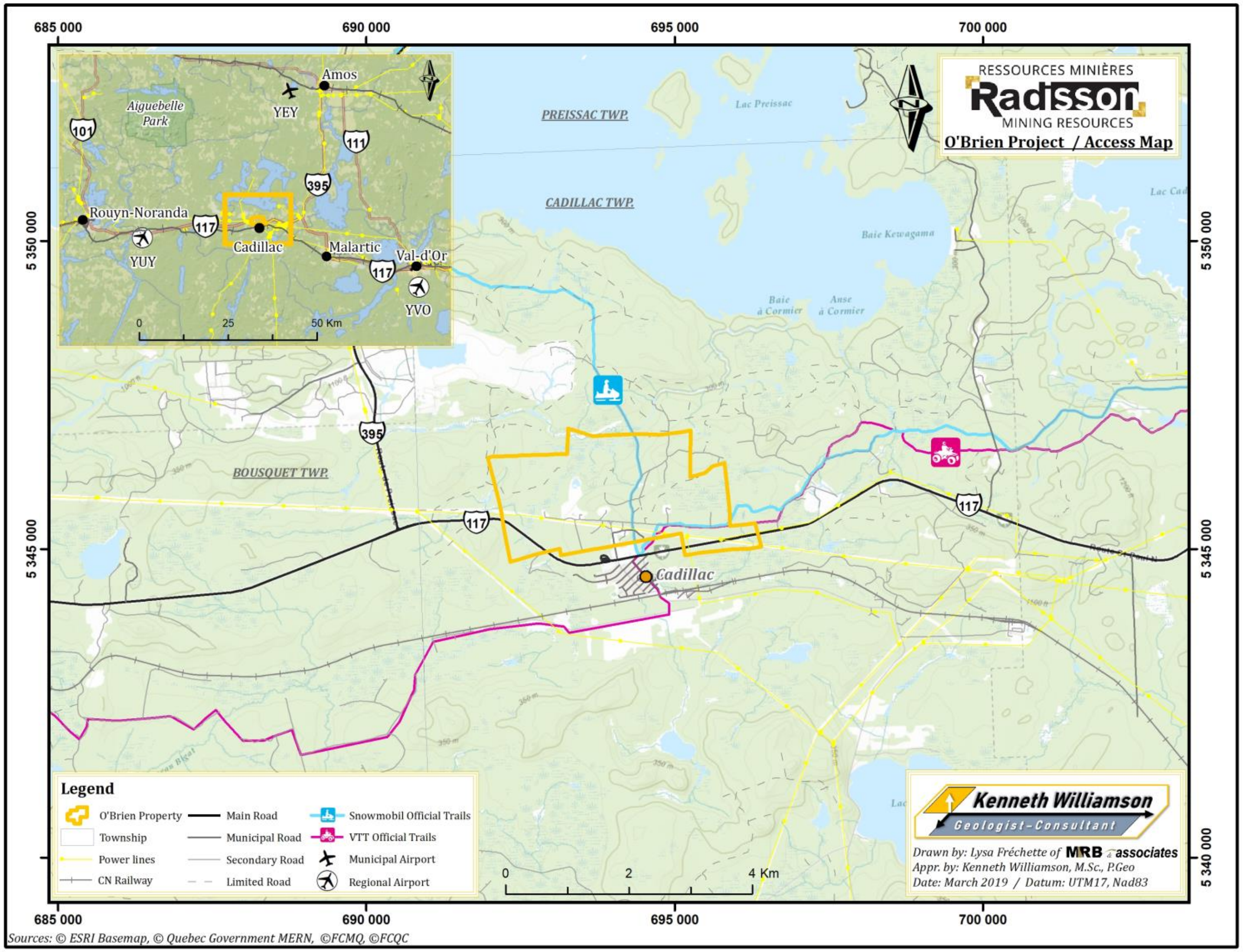

Figure 5.1 - Topography and accessibility of the O'Brien Project

5.3 Local Resources and Infrastructure

As shown on Figure 5.1, the Project is centered between Rouyn-Noranda (45 km to the west), Val-d'Or (45km to the east) and Amos (55km to the north).

Rouyn-Noranda is a town of approximately 41,000 inhabitants and is considered as the regional centre for the western Abitibi region. Val-d'Or is a town of roughly 32,500 inhabitants and can be viewed as the eastern Abitibi mining center. Both Rouyn-Noranda and Val-d'Or have regional airports with several flights to Montreal offered by Air Canada and Air Creebec. With about 10,000 inhabitants, Amos is the center of the northern portion of the Abitibi region. In addition, full infrastructure and experienced workforce are also available in a number of smaller towns. The Agnico-Eagle's LaRonde Mill is located about 7 km west of the Project and is the closest mill facility. There are three (3) other active mills in the area; Doyon-Westwood (Cadillac), Canadian Malartic (Malartic) and Camflo (Dubuisson).

The project is located about 2 km north of Cadillac which is accessible by the Highway 117 and by the national railway, both passing through Cadillac. A large power line runs across the south part of the Project

On site, only the mill building and garage still remain from the old O'Brien mine; most of the mine surface infrastructure was dismantled in 2012. Subsisting surface facilities also include large areas for stockpiling ore and waste materials, as well as a tailings facility of 4 hectares and a polishing basin just north of the old mill. Radisson has its exploration office and a large, well-equipped core logging and storage facility at the O'Brien mine site. A security system is operational in the core logging, storage and garage facilities. A chained link fence and locked gates closes the outline of the facility area.

5.4 Physiography

The topography of the project area is relatively flat with local smooth and gentle hills reaching an elevation of up to 20 m. The approximate elevation of the Project varies from 305 to 350 masl. With an overall poor drainage, the area is characterized by swamps and ponds occupying the low-lying grounds. The Blake River flows through the Project in a northeast direction, from the southwestern corner, passing through the O'Brien mine area to ultimately reach Lac Preissac approximately 3.5 km further.

The Project lies within the boreal forest domain, dominated by black spruce, balsam fir and tamarack in the wet areas. White birch, jack pine and poplar are only established on better-drained areas.

6. HISTORY

The following chronological overview of historical work on the former O'Brien Mine and Kewagama Mine properties comprising the O'Brien Project was mainly taken from Beausoleil (2018) and Evans (2007), and was reviewed and updated by KW3DGS.

6.1 Former O'Brien Mine Property

6.1.1 O'Brien Gold Mines Ltd – 1924 to 1957

1924: Claims were staked in 1924 by Austin Dumont and W. Herweston from M.J. O'Brien Company Ltd., and No. 1 Vein was discovered by prospecting.

1925: No. 1 Shaft was sunk to a depth of 110 ft and underground development commenced.

1926-1929: Diamond drilling was carried out, comprising twelve (12) holes for a total of 6,000 ft. Five principal veins (No. 1 to No. 5) were interpreted and delineated by surface diamond drilling and underground work. High-grade ore milled during 1928 amounted to several hundred ounces.

1929: Stoping commenced on the most easterly shoot.

1930: No. 2 Shaft (which became the main shaft) was sunk to a depth of 300 ft. Levels were established at depths of 100, 200 and 300 ft.

1932-1933: An amalgamation mill, with a capacity of 90 tons per day, was built in 1932 and began operating. While in operation, the mill was processing about 75 to 80 tons per day.

1934: The No. 2 Shaft was extended from 300 ft to 500 ft deep, and the 400' and 500' levels developed. As of July 1934, the mine had produced 38,730 metric tons of ore, averaging 15.43 g/t Au.

1935: No. 2 Shaft reached a depth of 1,035 ft, and stations were established at approximately 625, 750, 875 and 1,000 ft.

Roasting and cyaniding facilities were added.

Production from September 9, 1934, to October 5, 1935, was given as 26,662 metric tons of ore, averaging 9.19 g/t Au. Of this, 66.12% was recovered as bullion, and 26.12% was saved in concentrates for re-processing by the new addition to the mill.

1937-1939: The milling capacity was increased to 150 tons per day.

No. 3 Shaft was sunk to a depth of 1,500 ft, with stations were established at 125-ft intervals.

1940: Crude arsenic was sold to Deloro Smelting & Refining Company in Deloro, Ontario, with production sales continuing until 1950.

1941: No. 2 Shaft was converted to skips with an ore transfer system at the 2,125' level and production stoping change to inclined cut and fill in the deeper levels.

The sinking of the internal No. 4 Shaft began in October 1941.

1942-1949: Steady production which peaked in 1942 at 63,086 metric tons milled averaging 12.79 g/t Au, and reserves were at their highest at 218,648 metric tons averaging 12.14 g/t Au. Reserves slowly declined between 1942 and1949 and fell off rapidly thereafter.

No. 4 Shaft was completed in July 1949 at depth of 3,480 ft.

1952: Rising costs eroded profits to a break-even point and ore reserves declined to a 2-year supply.

Leads to new high-grade ore were considered to be exhausted on the development levels, and the most favourable prospecting ground was considered to be at the depth.

The last commercial crude arsenic shipment was made between 1951 and 1952 to Belgium.

1954: Seven (7) underground drillholes totalling 4,000 ft were drilled between depths of 3,450 and 4,000 ft, and results reported in 1954 demonstrated continuity of the No. 1 vein, although gold values could not support shaft sinking or a continuing operation.

1956-1958: O'Brien mine was closed down. Surface facilities were cleaned to recover accumulated gold. The mine closed because of rising operating costs, lower grades, and the fixed price of gold at US$35.00.

The O'Brien mine produced 6,313 metric tons of crude arsenic of which 5,176 metric tons were sold. The remaining stockpile containing an estimated 1,150 metric tons of crude arsenic (arsenic trioxide) was stored in 8,938 barrels west of the No. 3 Shaft on the 1500' level in the 15-G-West and 15-F-West drifts. Drift entries were sealed with concrete plugs about 1.2 m wide. The mine was flooded thereafter.

Between 1926 and 1956, a total of 35,700 ft of underground development (e.g. mainly drifts, but also crosscuts, raises and shafts), and close to 6,200 m of drilling from surface and over 54,000 m of underground drilling. The overall production shows a total of 587,120.8 ounces of gold, produced from 1,197,147 metric tons milled with an average grade of 15.25 g/t Au (Table 6.1). Recoveries averaged 96.0%.

Table 6.1 - Total gold production from the O'Brien mine from 1926 to 1957

Year	Metric Ton Mined (Hoisted)	Metric Ton Milled	Au (g/t) Milled grade	Ounces of Gold Recovered	Metric Ton Development	Au (g/t) Development	Metric Ton Stopes	Au (g/t) Stopes
1926-1932		1,574	94.50	4,782				
1933		13,481	10.97	4,755				
1934		24,796	9.57	7,626				
1935		26,662	6.07	5,200.9				
1936		24,497	18.89	14,875.6				
1937		33,897	33.84	36,879.5				
1938	50,912	50,902	24.61	40,280.2	23,037	12.00	27,875	32.57
1939	52,516	61,286	19.05	37,538.7	22,606	7.89	29,711	34.59
1940	61,286	61,563	14.40	28,494.2	13,808	10.90	45,746	16.77
1941	62,757	62,730	12.52	25257,4	3,468	7.34	53,534	14.40
1942	63,066	63,086	12.79	25,947.0	9,306	11.38	53,760	13.78
1943	62,882	62,701	13.04	26,286.2	3,346	8.64	59,536	13.92
1944	50,552	50,652	16.00	26,049.0	2,875	10.80	47,677	17.11
1945	44,810	44,918	17.98	25,964.2	6,718	14.47	38,092	19.34
1946	45,748	45,784	15.54	22,868.2	4,129	9.60	41,620	16.80
1947	48,053	48,048	14.95	23,092.4	3,200	9.02	44,853	16.05
1948	49,600	49,699	17.09	27,308.5	6,173	7.89	43,427	19.27
1949	52,890	52,702	15.89	26,920.5	3,771	9.02	49,119	17.18
1950	60,550	60,686	14.49	28,266.9	5,197	8.88	55,353	15.77
1951	59,139	59,139	14.66	27,870.9	3,509	8.13	55,630	15.77
1952	61,393	61,393	13.02	25,705.7	2,631	11.69	58,762	13.71
1953	58,088	58,088	12.84	23,973.6	1,420	8.88	56,668	13.44
1954	62,879	62,879	12.74	25,752.5	1,761	10.22	61,118	13.37
1955	63,616	63,616	11.37	23,251.7	1,328	8.23	62,287	11.97
1956	52,012	52,370	11.94	20,099.6	351	7.61	51,661	11.04
1957				2,074.4				
TOTAL	1,062,749	1,197,147	15.25	587,120.8	118,635	10.07	936,427	16.17

6.1.2 **Darius Gold Mines Inc. – 1969 to 1981**

1969: Abandoned since its closure in 1956, the O'Brien mine was acquired by A. N. Ferris and the property renamed the Ferris property. The property was re-evaluated, and surface stripping was carried out.

1972-1973: Darius Gold Mines Inc. was created and initiated an exploration and reassessment program at the former O'Brien mine.

A brief study on the tailings from the former O'Brien mine was carried out to ascertain the form of the contained gold and the amount that might be recoverable by further treatment.

Darius also dewatered the mine down to the 9th level (1400') and began a sampling program, which lasted for several years.

1974: Darius carried out an underground bulk sampling program composed of many samples.

A dump ramp was built on the west side of the headframe, and one mucking machine and four 1-ton cars were purchased. Track was installed from the cage, and cars were dumped one at a time directly into the truck. Between February and April 1974, a total of 171 metric tons was extracted from the 375' level in the F and G veins.

1975: At the end of February 1975, a total of 2,500 metric tons averaging 3.14 g/t Au were extracted during the bulk sampling program at the O'Brien mine.

A total of 2,406 linear feet of drift backs were sampled on the 375', 500', 625', 750' and 875' levels. A total of 523 ft of drifting and 422 ft of raising (three raises) were completed.

Seventeen (17) underground holes (74-1 to 74-11, D-16, D-18, D-19, D-21, D-24 and D-25) were drilled for a total of 2,985 ft.

1976: Thirty-two (32) underground holes were drilled for a total of 4,275 ft.

Following the underground drilling campaign, Robert E. Schaaf carried out a mineral inventory compilation on veins No. 1 S, No. 1 N, F9 and H-4-14.

1977: In October 1977, Goldfield Mining Consolidated acquired a 51% interest in the property for US$4,635,000, in return of committing to make the mine operational and explore adjacent properties.

Additional restoration work and bulk sampling were performed. Amongst other, Darius built a mill with a capacity of 200 short tons per day, which could be increased to 500 short tons per day. The mill was completed on June 1, 1978, for about C$3 million.

1978: A total of 11,018 metric tons grading 1.07 g/t Au were milled in the new mill. The ore essentially came from drifting.

1979: Surface drilling, comprising twenty-four (24) holes for a total of 3,979.8 m, was performed in order to test the areas that had never been explored.

A total of 36,106 metric tons grading 3.04 g/t Au were milled in the new mill. The ore was produced from small stopes.

1980: Surface drilling, comprising thirty-three (33) holes for a total of 4,995.5 m, was done in order to continue testing areas that had never been explored.

A total of 33,706 metric tons grading 3.73 g/t Au were milled in the new mill. The ore was produced from small stopes.

1981: The mine was closed at the end of August, and the mill ceased activity in October.

Between 1974 and 1981, a total 10,852.4 ounces of gold were produced from 128,373 metric tons milled averaging 2.63 g/t Au. It is estimated that 47,587 metric tons averaging 2.79 g/t Au were milled on site (Table 6.2; from Beausoleil, 2018). Recoveries averaged 70.0%.

During the year, Darius believed it had a buyer for the crude arsenic stored on the 1500' level since 1956. The concrete wall from the level 1500' was bolted. Later, the potential buyer withdrew.

Table 6.2 - Total gold production from the O'Brien mine from 1974 to 1981

Year	Metric Tonnes Milled	Au g/t Milled grade	Ounces of Gold Recovered
1974-1975	2,500	3.14	252.4
1978	11,266	0.78	282.6
1979	36,114	2.48	2,875.7
1980	33,388	3.15	3,381.2
1981	45,105*	2.79*	4,060.4*
TOTAL	128,373	2.63	10,852.4

** Estimated data*

6.1.3 Sulpetro Minerals / Novamin Resources / Breakwater Resources – 1981 to 1986

1981: In December, Sulpetro Minerals (Sulpetro) bought the property for C$2,800,000 for the purpose of treating ore from its adjoining Kewagama mine to the east (known as Kewagama Division). The O'Brien property was renamed O'Brien Division.

Sulpetro tried unsuccessfully to find other buyers for the crude arsenic stored on the 1500' level.

1982: Some Kewagama material was processed in the O'Brien mill; while efforts were being deployed, including rebuilding the gravity circuit, to improve the gold recovery rate.

The mine became standby and was allowed to flood to the 1,500' depth after November 1982.

1985: In April, new waterproof and reinforced concrete plugs (2.3 m wide) at the entrance of each drift containing crude arsenic are installed.

In August, the Ministry authorized the flooding of the mine.

The surface infrastructure was kept, but all electrical equipment was removed from the No. 2 Shaft.

1985-1986: In January 1986, Sulpetro was reorganized into Novamin.

Magnetometric (49.5 line-km) and VLF electromagnetic (49.5 line-km) surveys over the property, including a limited amount of IP (4.9 line-km) surveys.

1986-1987: Surface drilling was done in the area of the No. 3 Shaft, extending the No. 2 and No. 4 vein structures towards the New Alger property boundary. A first campaign of eight (8) drill holes totalling 1,999.8 m was drilled, followed by an additional eight (8) new holes totalling 2,185 m in a second campaign.

The Zone 36 East, a series of gold-bearing quartz echelon veins that were similar in nature and character to the mined structures of the O'Brien mine, was discovered.

1988: Novamin drilled eight (8) additional holes on Zone 36 East for a total of 2,198.5 m.

1989: Breakwater completed the acquisition of Novamin and continued drilling the property. Twenty-four (24) holes were drilled on Zone 36 East for a total of 7832.1 m.

With enough drilling information, Breakwater estimated a resource on the Zone 36 East of ***249,746 metric tons averaging 8.23 g/t Au using a cut-off grade of 3.4 g/t Au and totalling 66,071 ounces***. This inventory was developed using the following parameters: a 7.6-m (25-ft) lateral and 45.7-m (150-ft) vertical maximum zone of influence from each intersect; grade-thickness cut-off was 3.4 g/t Au over 1.2 m, with combined individually cut grades diluted to 1.2 m (4 ft) if necessary; and zero values assigned to missing samples; high-grade capping grade established at 34.3 g/t Au. Neither the gold price nor the exchange rate was mentioned in Breakwater's report.

These resources are historical in nature and should not be relied upon. It is unlikely that they conform to current NI 43-101 requirements or follow CIM Definition Standards, and they have not been verified to determine their relevance or reliability. They are included in this section for illustrative purposes only and should not be disclosed out of context.

6.1.4 Historical work completed by the Radisson – 1992 to 2017

1992: Negotiations were started between Breakwater and Radisson.

1994: On October 24, 1994, a deal was signed whereby Radisson could earn a 50% interest in Breakwater's O'Brien property.

Radisson then compiled data, reinterpreted the Zone 36 East, and, with the objective of increasing the Breakwater resource on the zone, drilled twelve (12) holes totalling 3,998.4 m.

Radisson's resource of Zone 36 East was estimated at ***489,277 metric tons at 7.20 g/t Au using a cut-off grade of 3.4 g/t Au, for a total of 113,260 ounces***. This inventory was developed using a 7.6-m (25-ft) and 45.7-m (150-ft) vertical maximum zone of influence from each pierce point. Individually cut assays were established at 34.3 g/t Au. Specific gravity was fixed at 2.67. A 3.4 g/t Au / 1.2 m (true thickness) cut-off was used. Neither the gold price nor the exchange rate was mentioned in Radisson's related report.

These resources are historical in nature and should not be relied upon. It is unlikely that they conform to current NI 43-101 requirements or follow CIM Definition Standards, and they have not been verified to determine their relevance or reliability. They are included in this section for illustrative purposes only and should not be disclosed out of context.

1996: Radisson added thirty-one (31) holes for a total of 11,962.8 m. The purpose of this campaign was to increase the confidence level of the mineral inventory from the surface to 1,200 ft elevation, and to demonstrate the presence of an extension of the veins at a vertical depth below 2000 ft.

Gold resources were re-estimated to ***1,270,000 metric tons at an average grade of 6.9 g/t Au for a total of 281,740 ounces. Of this total, 735,600 metric tons, averaging 7.2 g/t Au for a total of 170,280 ounces were in Zone 36 East.*** This inventory was developed using a 7.6-m (25-ft) and 45.7-m (150-ft) vertical maximum zone of influence from each pierce point. Assays were cut at 34.3 g/t Au. Specific gravity was fixed at 2.67. A 3.4 g/t Au / 1.2 m (true thickness) cut-off was used. Gold price and the exchange rate are unknown.

These resources are historical in nature and should not be relied upon. It is unlikely that they conform to current NI 43-101 requirements or follow CIM Definition Standards, and they have not been verified to determine their relevance or reliability. They are included in this section for illustrative purposes only and should not be disclosed out of context.

1996: Mechanical stripping of eleven (11) outcrops at a distance of 400 ft east of the No. 2 Shaft was realised in order to evaluate the gold potential of two gold-bearing structures located near the contact of the Piché and Pontiac groups. Some anomalous gold values were obtained from quartz veins in sedimentary rocks.

1997: Radisson drilled seven (7) holes for a total of 1,283 m targeting the quartz veins associated with the contact zone between the Pontiac Group and the

Piché Group. Despite some economic grades, this drilling campaign was unsuccessful.

Radisson drilled an additional twenty-three (23) holes for a total of 4,555 m, targeting the Zone 36 East between sections 32E and 44E, from surface to a vertical depth of 230 m.

1998: Radisson purchased 100% of the rights to the O'Brien property as well as all the infrastructure, in addition to acquiring the adjacent Kewagama property.

An independent study signed by Roscoe Postle Associates Inc. ("RPA") updated the gold resources in Zone 36 East in the O'Brien mine. As at April 30, 1998, using a cut-off grade of 5.1 g/t Au, RPA estimated that indicated resources down to a depth of 610 m below surface amounted to ***348,365 metric tons at 9.9 g/t Au cut to 68.5 g/t Au (14.5 g/t uncut), for a total of 111,000 contained ounces (162,000 oz uncut), and inferred resources to the same depth amounted to 15,422 metric tons at 18.6 g/t Au cut to 68.5 g/t Au (19.8 g/t uncut), for a total of 9,000 contained ounces of gold (10,000 oz uncut)***. The specific gravity was set at 2.67 g/cm^3. The price of gold was US$300/oz with a CAD:USD exchange rate of 1.444.

These resources are historical in nature and should not be relied upon. It is unlikely that they conform to current NI 43-101 requirements or follow CIM Definition Standards, and they have not been verified to determine their relevance or reliability. They are included in this section for illustrative purposes only and should not be disclosed out of context.

RPA's mandate also included a PFS to evaluate the viability of commercial production for the project. The study concluded that the project would not be profitable at the US$300/oz gold price and exchange rate of 1.444. The resources would have to increase, and a better grade than the cut grade of 6.9 g/t Au would have to be confirmed, as well as a metallurgical recovery of at least 90%.

Two metallurgical tests were completed in two Canadian laboratories in 1998 on sulphide concentrates originating from Zone 36 East and Zone F. Two different processes were used: bioleaching at the BC Research Laboratory in Vancouver, British Columbia, and microwaves at the EMR Technology Laboratory in Fredericton, New Brunswick. The objective was to reach 90% recovery for sulphide-related gold at a competitive processing cost. With direct cyanidation, the recovery barely reached 80%.

Radisson drilled two (2) holes for a total of 546.8 m on targets identified outside the known zones north of the Cadillac–Larder Lake Fault Zone ("CLLFZ"). The Vintage Zone, interpreted to be a network of horizontal gold-bearing quartz veins with free gold, was discovered.

Radisson drilled five (5) more holes for a total of 1,402.7 m to locate other gold-bearing veins north of the CLLFZ. Despite some interesting findings, nothing significant came out of the campaign.

2001: On August 24, 2001, Radisson signed an initial agreement with Rocmec Mining Inc. ("Rocmec") concerning preliminary tests and the use of a new extraction technology applied to the gold-bearing quartz veins on the O'Brien property.

Rocmec drilled an initial series of thermal holes supervised by Radisson personnel. This work allowed 1.54 metric tons of gold-bearing quartz vein material to be extracted. The extracted sample was processed on a Deister table in the Radisson concentrator, on site in Cadillac. The gold in the batch totalled 35.245 grams, or a grade of 22.83 g/t Au. Recovery reached 77%. This work confirmed a high rate of recovery by gravimetry and an excellent grade for the smoky quartz veins in the former O'Brien mine.

2003: In the summer of 2003, a surface exploration program was carried out for the purposes of verifying the surface extraction potential of gold-bearing quartz veins in the O'Brien mine area, approximately 900 ft east of the headframe, and the potential of the Zone 36 East veins. The O'Brien property was stripped to reveal new smoky quartz veins. The samples taken in the stripped zones did not yield economic grades.

Radisson drilled three (3) holes for a total of 210.3 m of drilling. Two composite core samples drilled on the same zone, one from a vein and the other from its wall, were analyzed at Laboratoire LTM in Val-d'Or. The test was intended to determine the content of the vein and the wall, as well as to verify the gold recovery ratio by gravimetric method. A content of 4.80 g/t Au was obtained for the vein with a 63% recovery by gravity. The wall yielded 2.40 g/t Au gold and an equivalent recovery. On their own, these results could not justify a major surface bulk sample test, and it was decided to discontinue efforts to verify this scenario.

Surface exploration efforts on the O'Brien property are stopped.

2004: Radisson initiated an initial deep diamond drilling campaign to verify depth potential of "Contact Zone"-type gold mineralization along the CLLFZ. One hole (OB04-01A) was drilled under Zone 36 East, reaching a total length of 1,535 m, and confirmed the continuity of Zone 36 East at depth, doubling up its vertical extension.

2006: A high-resolution aeromagnetic, horizontal gradiometer and XDS-VLF-EM survey was carried out on the O'Brien and Kewagama properties in June 2006. The survey, which was the first phase of the 2006 exploration program, was conducted by Terraquest Ltd with a flight line spacing of 50 m. Data from this survey was used to define drill targets north of the CLLFZ.

Radisson also carried out a litho-geochemical sampling program focusing on the talc-chlorite schists in drill core stored at the O'Brien mine site. The program's objective was to verify the presence of mineralization similar to the D Zone on the Wood/Pandora project.

Three (3) holes totalling 1,198 m were drilled on the No. 2 Vein, Zone 36 East and the North Zone.

2007: RPA estimated the mineral resources of Zone 36 East using the historical surface and underground drilling data available in April 2007.

At a 5.8 g/t Au cut-off grade, RPA estimated that the ***indicated resources of Zone 36 East amount to 251,295 metric tons at an average cut grade of 12.3 g/t Au for a total of 97,000 contained ounces. RPA estimated that the inferred resources totalled 165,110 metric tons at an average cut grade of 9.9 g/t Au for a total of 54,000 contained ounces.*** The resources provided below were estimated using a conventional 2D longitudinal block resource estimation methodology, a horizontal thickness for indicated resources ranging from 1.2 to 2.7 m with an average of 1.4 m, a gold price of US$575/oz, a USD:CAD exchange rate of 0.87, a gold recovery of 90%, a specific gravity of 2.67, and a selected capping level of 68.5 g/t Au.

These resources are historical in nature and should not be relied upon. It is unlikely that they conform to current NI 43-101 requirements or follow CIM Definition Standards, and they have not been verified to determine their relevance or reliability. They are included in this section for illustrative purposes only and should not be disclosed out of context.

RPA's study showed that the Zone 36 East mineralization was very sensitive to cutting high gold assays, and the cut indicated average grade was approximately 36% lower than the uncut Indicated average grade. Cutting high gold assays reduced the contained gold in the global resource by approximately 30% from the uncut figure.

Exploration program with the purpose was to test the resource blocks identified in the 2007 43-101 report on the Zone 36 East resources (Evans, 2007) was established by Radisson. It included 60.8 km of line cutting, 46.1 km of IP, and 2,053.2 m of diamond drilling in fifteen (15) holes (OB07-120 to OB07-134). The drilling program continued until March 2008.

In late 2007, negotiations were initiated with Aurizon Mines Ltd ("Aurizon") who was interested in becoming Radisson's partner on the O'Brien-Kewagama project.

2008: From January to March 2008, the drilling program totalled 3,738.7 m in twenty-one (21) holes.

Radisson agreed to grant Aurizon an option to acquire an undivided 50% interest in the O'Brien-Kewagama project. The transaction was subject to a number of conditions, including completion of satisfactory due diligence. Aurizon, after an extensive audit process, requested that it be entitled to earn a 75% interest in the project, but Radisson declined the request.

Radisson drilled seven (7) holes for a total of 1,920.6 m.

2011: Six (6) holes were drilled for a total of 1,989.0 m. The program was designed to carry out resource definition drilling on Zone 36 East to categorize the inferred resource and potentially increase total resources.

2012: An exploration drilling program was carried out on the O'Brien property totalling 2,112.5 m in three (3) holes. The holes also returned gold intersections in the Pontiac Group sandstone to the south of the formations containing O'Brien-type mineralization. Visible gold was observed in two of the holes.

2013: RPA estimated the mineral resources of Zone 36 East using the historical surface and underground drilling data available up to December 2012.

At the 3.4 g/t Au gold cut-off grade, RPA estimated that the indicated resources of Zone 36 East stood at ***508,032 metric tons at an average cut grade of 6.5 g/t Au for a total of 106,000 contained ounces. RPA estimates that the Inferred resources amount to 287,582 metric tons at an average cut grade of 7.29 g/t Au for a total of 67,000 contained ounces***. The resources presented above were estimated using a block model in GEMCOM software, a minimum horizontal width of approximately of 1.8 m, a gold price of US$1,600/oz, a USD:CAD exchange rate of 1.0, a gold recovery of 90%, a specific gravity of 2.67, and a selected capping level of 51.9 g/t Au.

These resources are historical in nature and should not be relied upon. It is unlikely that they conform to current NI 43-101 requirements or follow CIM Definition Standards, and they have not been verified to determine their relevance or reliability. They are included in this section for illustrative purposes only and should not be disclosed out of context.

According to RPA, there some of the inferred resource of Zone 36 East could potentially be converted to indicated through additional drilling. RPA also considered the eastern extension of Zone 36 East, up to the Kewagama property, to be open, and that follow-up exploration on the 2011 and 2012 results was warranted.

6.2 Former Kewagama Property

6.2.1 Kewagama Gold Mines Ltd – 1928 to 1980

1928: Activity on the property commenced in 1928 with trenching and diamond drilling by Cartier Malartic Gold Mines.

1931: Eight (8) of the present claims were acquired by Canadian Gold Operators Ltd ("Canadian Gold").

1932-1933: A considerable amount of development was carried out by Canadian Gold, including diamond drilling (10 holes aggregating about 5,000 ft), the sinking of a two-compartment shaft to a depth of 125 ft, and approximately 1,500 ft of lateral work (drifts and crosscuts) at the 125' level. The shaft is 4,800 ft east of the O'Brien No. 2 Shaft. The work indicated that geological and structural conditions of the Kewagama property are essentially similar to those of the adjoining O'Brien property.

Exploration revealed the presence of several gold-bearing quartz veins. Four veins (Nos. 1, 6, 7 and 8) were developed and investigated. Although the limited amount of drifting that was done on these veins did not establish any ore shoots, it did disclose encouraging gold values.

The property was closed down in April 1933.

1934-1935: The underground workings were flooded.

1936: Kewagama Gold was created from the acquisition of Canadian Gold by Ventures Ltd.

1937-1938: The shaft was deepened to 524 ft, with three compartments, and new levels were established at 250, 375 and 500 ft. At a point 400 ft east of the shaft, a winze was from the 500' level to the 700' level, and new sublevels were established at 550, 600, and 700 ft. Lateral developments were carried out on four levels from the shaft, and three sublevels from the winze. A total of 12,600 ft of drilling was drilled.

Although interesting gold assays were obtained from the material encountered, especially on the lower levels, commercial grade ore was not present in sufficient quantity to assure a profitable venture

1939: All operations were suspended in early 1939 due to the restrictions on gold mining with the outbreak of World War II.

1940: A total of 2,470 metric tons of stockpiled development ore, having an average grade of 9.9 g/t Au, was processed at the neighbouring Thompson-Cadillac Mill, from which 790.7 ounces of gold were recovered.

1947: A magnetometer survey was completed over the Piché Group (Cadillac Shear Zone) and the Cadillac Formation north of the shear, to determine whether the gold mineralization of the neighbouring Wood-Central and Pandora properties to the east continued onto the Kewagama property.

1964: Falconbridge Nickel Mines, the successor to Ventures Ltd, initiated a surface drilling program in 1964, partially for assessment work. Four (4) holes totalling 981.7 ft were drilled approximately 50 ft apart to trace the upward extension of the Winze Zone that had been partially developed from the 500' level from 1937 to 1939.

1973-1974: Surface exploration was renewed by Kewagama Gold under the direction of Derry, Michener & Booth, Geological Consultants. A program of overburden (basal till) sampling for gold was conducted along the 2,800-ft strike length of the favourable Cadillac Belt of rocks extending east of the 1964 Falconbridge drill holes and north of the Cadillac Shear, to explore the iron formation environment that had been productive on the neighbouring Wood-Central and Pandora properties to the east.

Diamond drilling followed, consisting of thirteen (13) holes for a total of 3,149 ft. Results were considered encouraging and worthy of underground investigation.

1976: Management control of the company was acquired by A. N. Ferris of Cadillac. Québec.

1977: The mine site was cleared of bush and leveled.

1978: A temporary mining plant/service building, a hoist room, a headframe, a mine dry and a machine shop were constructed.

1979-1980: The hoist was operative in early 1979, and the mine was dewatered and secured in May. Inspection of underground workings took place, followed immediately by sampling and planning. The company rehabilitated and sank approximately 200 ft deeper, cut a station on the 700' level and drove 800 ft of drift.

On November 12, 1980, an agreement was signed with St-Joseph Explorations Ltd (later Sulpetro Minerals Ltd). In light of strong gold prices and the excellent outlook, St-Joseph Explorations decided to continue exploring the Kewagama property.

6.2.2 Sulpetro Minerals / Novamin Resources / Breakwater Resources – 1981 to 1998

1981: Sulpetro deepened the shaft to 1,150 ft. Ore and waste passes were driven from the 7th level to the 4th level. Thirty-one (31) surface holes were drilled for a total of 4,789.8 m. Geophysical surveys (Mag, VLF, IP) were carried out on the Kewagama property. Five (5) of the holes were drilled to test a coincident Mag and IP anomaly between lines 3+20E and 4+00E. The result was the discovery of the West IP Zone.

1982: Development continued on the 6th and 7th levels, and the Winze Zone was mined out, producing 11,340 metric tons averaging 3.03 g/t Au. Production also continued from the Q, R and S veins until operations were suspended in November 1982.

1988: Four (4) surface diamond drill holes totalling 1,005.8 m were drilled by Novamin to test the Piché Group "Mine Horizon" lithologies between the O'Brien and Kewagama property boundaries at the westernmost end of the 500' level in the Kewagama underground workings. These holes intersected favourable lithologies that could host ore-grade gold mineralization laterally and at depth.

1994: On July 25, the wooden Kewagama shaft was struck by lightning and burned down.

1995: Breakwater re-activated the exploration activities on the Kewagama property, and established new surveyed grid lines spaced 100 m apart, with a cumulative length of 16 km.

As a first step, a compilation of historical work was completed to better understand the geological setting and assess the economic potential of the Kewagama property. Consequently, geological mapping was conducted to study the lithological and structural controls on gold distribution and to build a geological compilation map of the Kewagama property.

6.2.3 Historical work completed by Radisson – 1999 to 2011

1999: Radisson became 100% owner of the Kewagama property in 1999. A compilation of existing data began that same year with the objective of assessing the potential of existing gold showings.

2003: Radisson drilled one hole for 176 m in March 2003. Drilling took place in the western sector of the property to verify the existence of near-surface quartz veins.

2004: An initial deep-drilling campaign was carried out in 2004 to study "Contact Zone"-type gold mineralization on the O'Brien and Kewagama properties. Seven (7) holes were drilled on the Kewagama property, ranging in length from 690 to 1,580 m, for a total of 4,839.1 m.

2005: Radisson drilled five (5) holes for a total of 3,030.0 m. The purpose was to investigate the area between Zone 36 East and the Kewagama shaft, at a depth of 460 to 600 m.

2006: A high-resolution aeromagnetic, horizontal gradiometer and XDS-VLF-EM survey was carried out on the O'Brien and Kewagama properties in June 2006. The survey, which was the first phase of the 2006 exploration program, was conducted by Terraquest Ltd with a flight line spacing of 50 m. Data from this survey was used to define drill targets north of the CLLFZ.

A diamond drilling program was then carried out on the property. Five (5) holes totalling 2,237.0 m were drilled on the No. 2 Vein, Zone 36 East and the North Zone.

The 2006 drilling program confirmed the discovery of the North Zone, confirming the potential for gold mineralization north of the CLLFZ. At the time, the North Zone extended for more than 300 m along strike, from section 43E to 53E.

2008: In the fall of 2008, an exploration drilling program targeted two priority sectors on the Kewagama property: the area between Zone 36 East and the Kewagama mine, and the down-dip extensions of the gold zones below the old Kewagama mine stopes.

Eleven (11) holes totalling 4,946.8 m were drilled on the property.

Holes KW08-155A, 157 and 158 were drilled in the area between Zone 36 East and the former Kewagama mine. Hole KW08-157 cut a narrow high-grade zone. In addition, several high-grade quartz veins were intersected in the sedimentary rock of the Cadillac Group in hole KW08-155. To the east, in the stratigraphic extension of the O'Brien mine, hole KW08-155A cut a wide low-grade gold zone. Seven (7) holes were also drilled on the old Kewagama mine site. Hole KW08-164, drilled nearly 160 m below the operating levels of the Kewagama mine, intersected a wide highly altered zone.

2011: Thirteen (13) holes were drilled on the Kewagama property.

The diamond drilling program led to the discovery of new gold mineralization on the property. This discovery was in the eastern part of the property that had never been drilled and demonstrated the property's potential for additional gold discoveries. Based on drilling, near-surface discovery remained open along strike and at depth.

6.3 Recent Studies Completed by Radisson on the O'Brien Project

2015: InnovExplo completed a mineral resource estimate on the 36 East and Kewagama areas. The resources provided below (Table 6.3) were completed by Pierre-Luc Richard, P.Geo., M.Sc., and Alain Carrier. P.Geo., M.Sc., and the effective date of the estimate is April 10, 2015. It was estimated using a block model in GEMCOM software, a minimum true thickness of 1.5 m, a cut-off grade of 3.5g/t Au (based on a gold price of 1,200$US/oz, a USD:CAD exchange rate of1.20, a processing recovery of 92.5% and a mining dilution of 15%), a fixed density of 2.67 and high grade capping of 65 g/t Au for zones in the Western sector, 30 g/t Au for the Eastern sector, 3.5 g/t Au for the Western dilution zone and 4.0 g/t Au for the Eastern dilution zone.

Table 6.3 - 2015 O'Brien Project Mineral Resource Estimate at a 3.50 g/t Au cut-off (O'Brien and Kewagama claim blocks) and sensitivity at other cut-off scenarios

Indicated					Inferred				
Zone	Cut-off	Tonnage	Grade	Ounces	Zone	Cut-off	Tonnage	Grade	Ounces
All Zones	2.00	1,384,700	4.22	188,049	All Zones	2.00	3,388,500	3.64	396,601
	2.50	991,200	5.01	159,770		2.50	2,254,100	4.36	315,725
	3.00	748,800	5.75	138,456		3.00	1,525,300	5.12	251,293
	3.50	570,800	6.53	119,819		3.50	918,300	6.38	188,466
	4.00	444,300	7.33	104,676		4.00	663,500	7.42	158,273
	5.00	320,800	8.43	86,939		5.00	486,200	8.52	133,245

- The Independent and Qualified Persons for the Mineral Resource Estimate, as defined by NI 43-101, are Pierre-Luc Richard, P.Geo., M.Sc. and Alain Carrier. P.Geo., M.Sc., of InnovExplo Inc., and the effective date of the estimate is April 10, 2015.
- Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- The resource model includes the previously named 36E Zone and Kewagama mine areas. The historical O'Brien mine area is not included in this resource as it had not been compiled or validated at the time this estimate is being prepared. The model includes 55 gold-bearing zones, not all of which include resources at the official cut-off grade. A dilution envelope was also modelled, but no resource at the official cut-off grade is being reported for the envelope.
- Results are presented in situ and undiluted.
- Sensitivity was assessed using cut-off grades of 2.00, 2.50, 3.00, 3.50, 4.00 and 5.00 g/t Au. The official resource is reported at a cut-off of 3.50 g/t Au. The reader is cautioned that the figures presented herein, apart from the official scenario at 3.50 g/t Au, should not be misinterpreted as a mineral resource statement. The reported quantities and grade estimates at different cut-off grades are only presented to demonstrate the sensitivity of the resource model to the selection of a reporting cut-off grade.
- Cut-off grades must be re-evaluated in light of prevailing market conditions (gold price, exchange rate and mining cost).
- A fixed density of 2.67g/cm^3 was used for all zones.
- A minimum true thickness of 1.5 m was applied, using the grade of the adjacent material when assayed, or a value of zero when not assayed.
- High grade capping (Au) was done on raw assay data and established on a sector basis (Western zones: 65g/t, Eastern zones: 30g/t, Western dilution zone: 3.5 g/t Eastern dilution zone: 4.0g/t).
- Compositing was done on drill hole intercepts falling within the mineralized zones (composite = 0.80 m).
- Resources were evaluated from drill holes using a 2-pass ID2 interpolation method in a block model (block size = 3 m x 3 m x 3 m).
- The inferred category is only defined within the areas where blocks were interpolated during pass 1 or pass 2.
- The indicated category is only defined in areas where the maximum distance to the closest drill hole composite is less than 20m for blocks interpolated in pass 1.
- Ounce (troy) = metric tons x grade / 31.10348. Calculations used metric units (metres, tonnes and g/t).
- The number of metric tons was rounded to the nearest hundred. Any discrepancies in the totals are due to rounding effects. Rounding followed the recommendations in NI 43-101.
- InnovExplo is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issue that could materially affect the Mineral Resource Estimate.

2016: InnovExplo completed a PEA based on the 2015 MRE. This PEA was also based on the use of the Westwood Mill. The proximity of the Project helped reduce transportation costs. In addition, at the time, the mill had no restrictions regarding environmental treatment.

The 2016 PEA was based on an underground mine with access by decline to a vertical depth of 550 m in the 36 East area and 250 m in the Kewagama area. Mining recovery was established at 85% to take into account pillar requirements. A 30% dilution was also taken into account for stope excavation. Finally, a 95% recovery was applied to account for mining operating losses.

Table 6.4 and Table 6.5 summarize the annual tonnage distribution according to the mine plan and the cash flow analysis.

Table 6.4 - Mine plan tonnage distribution

	Pre-production		Production				Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Production (t)		33,194	126,494	129,593	134,524	127,259	551,064
Grade (g/t)		7.20	7.05	7.39	5.66	6.53	6.68
Development (t)	3,196	33,474	32,080	40,298	52,409		161,457
Grade (g/t)	7.05	5.74	6.19	5.95	5.11		5.70
Total tonnage milled (t)	3,196	66,668	158,574	169,891	186,933	127,259	712,521
Grade (g/t)	7.05	6.47	6.87	7.04	5.50	6.53	6.46

Table 6.5 - Cash flow analysis summary

Parameters	Results
Current mineral resources included (indicated and inferred)	712,521 tonnes @ 6.46 g/t Au
Mill recovery	91.5%
Life of mine ("LOM") (including 24 months of pre-production)	6 years
Daily mine production	440 tpd
Gold recovered over LOM	135,308 oz
Gold price (USD)	$1,180
Exchange rate (CAD/USD)	1.25
Gold price (CAD)	$1,475
Total gross revenue	$199.5M
Pre-production capital cost	$36.8M
Average operating cost per tonne	$178/tonne
Average operating cost per ounce in US$	US$752/ounce

2017: From December 2015 to the end of September 2017, Radisson drilled 76 surface diamond drill holes for 30,049.9 m. Three of these are wedges on holes OB-17-23, OB-17-25 and OB-17-54. Ten holes were aborted due to wrong alignments and/or high deviations while drilling in overburden. Details of the drilling programs are summarized in Table 6.6.

Table 6.6 - Drill hole summary, by year

Program	Number	Metres
2015	1	415
2016	20	9,632
2017	55	20,003
Total	76	30,050

Some holes tested geophysical anomalies identified by the 2016 OreVision® survey in the Pontiac Group, south of the existing resources.

Exploration drilling in 2015 to September 2017 aimed to better define the mineralized zones between surface to 550 m below surface and in the area of Zone F, Zone 36 and Kewagama.

2018: InnovExplo completed a mineral resource estimate on the O'Brien project, which covered the 36 East, Vintage and Kewagama areas (Beausoleil, 2018). The 2018 mineral resource estimate was completed by Christine Beausoleil, P.Geo, with an effective date of March 20, 2018.

The main objective of the mandate was to use the 2015-2017 drilling programs to update the 2015 Mineral Resource Estimate prepared by Richard et al., 2015.

34 gold-bearing zones and two low-grade dilution envelopes were interpreted and the estimate included indicated and inferred resources for an underground scenario. Table 6.7 displays the results of the 2018 Mineral Resource Estimate for the O'Brien Project at the official 3.50 g/t Au cut-off grade, as well as the sensitivity at other cut-off grades. Table 6.8 presents the Input parameters used for the underground cut-off grade estimation.

Although not completed, Radisson also initiated some environmental studies, that were still in progress at the time of writing thins report, expected to be completed by the fall of 2019. A groundwater sampling is planned in the Shaft #3 to characterize the water quality and see if the arsenic contamination is similar or higher than the average of the concentration found in the fall of 2018 into the shaft #2.

Table 6.7 - 2018 O'Brien Project Mineral Resource Estimate at a 3.50 g/t Au cut-off, sensitivity at other cut-off scenarios

Indicated Resources				
Zones	Cut-off	Tonnages	Grade (g/t Au)	Ounces
All Zones	2.50	1,800,104	5.14	297,466
	3.00	1,409,734	5.81	263,108
	3.50	1,125,447	6.45	233,491
	4.00	910,885	7.09	207,696
	4.50	751,753	7.70	186,019
	5.00	624,734	8.30	166,671

Inferred Resources				
Zones	Cut-off	Tonnages	Grade (g/t Au)	Ounces
All Zones	2.50	2,054,524	4.22	278,644
	3.00	1,519,190	4.74	231,612
	3.50	1,157,021	5.22	194,084
	4.00	830,615	5.80	154,833
	4.50	538,938	6.65	115,140
	5.00	416,123	7.21	96,508

Notes to Accompany Mineral Resource Table:

1. The independent qualified person for the 2018 MRE, as defined by NI 43-101, is Christine Beausoleil, P.Geo of InnovExplo Inc. The effective date of the estimate is March 10, 2018.
2. The Mineral Resources are classified as Indicated and Inferred Mineral Resources and are based on the 2014 CIM Definition Standards.
3. These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability.
4. Results are presented *in-situ* and undiluted.
5. Sensitivity was assessed using cut-off grades from 2.5 g/t Au to 5.0 g/t Au. The official *in-situ* resource is reported at a cut-off grade of 3.5 g/t Au. Cut-off grades must be re-evaluated in light of prevailing market conditions (gold price, exchange rate and mining cost).
6. A top cut of 30 g/t gold (5.0 g/t gold for the dilution envelope) was applied to assay grades prior to compositing grades for interpolation into model blocks using an inverse distance squared (ID2) method and was based on 0.75 m composites within a block model made of 3 m long x 3 m wide x 3 m high blocks.
7. Density data (g/cm3) was established at 2.75 g/cm3.
8. A minimum true thickness of 1.5 m was applied, using the grade of the adjacent material when assayed or a value of zero when not assayed for 17 different mineralised zones.
9. The number of metric tons and ounces was rounded to the nearest hundred. Any discrepancies in the totals are due to rounding effects; rounding followed the recommendations in Form 43-101F1.
10. InnovExplo is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially affect the mineral resource estimate.

The reader should be cautioned that the figures presented in Table 6.7 should not be misinterpreted as a mineral resource statement apart from the official scenario at 3.50 g/t Au. The reported quantities and grade estimates at different cut-off grades are only presented to demonstrate the sensitivity of the resource model to the selection of a reporting cut-off grade (Beausoleil, 2018).

Table 6.8 - 2018 Input parameters used for the underground cut-off grade estimation

Input parameter	Value
Gold price (US$/oz)	1,300.00
Exchange rate (USD:CAD)	1.30
Recovery (%)	87.40
Gold Price (C$/oz)	1,690.00
Gold selling costs (C$/oz)	5.00
Net gold price (C$/oz)	**1,685.00**
Global mining costs (C$/t)	67.50
Processing costs (C$/t)	65.00
G&A + Environmental cost (C$/t)	32.50
Total cost (C$/t)	**165.00**

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geological Setting

This section is modified version of the regional geology description provided in the technical report by Beausoleil (2018) and references therein. The author has reviewed and compared Beausoleil's geological description to other such accounts in publicly available documents and consider it accurate to the best of its knowledge.

7.1.1 Archean Superior Province

The Archean Superior Province (Figure 7.1) forms the core of the North American continent and is surrounded by provinces of Paleoproterozoic age to the west, north and east, and the Grenville Province of Mesoproterozoic age to the southeast. Tectonic stability has prevailed since approximately 2.6 Ga in large parts of the Superior Province. Proterozoic and younger activity is limited to rifting of the margins, emplacement of numerous mafic dyke swarms (Buchan and Ernst, 2004), compressional reactivation, large-scale rotation at approximately 1.9 Ga, and failed rifting at approximately 1.1 Ga. With the exception of the northwest and northeast Superior margins that were pervasively deformed and metamorphosed at 1.9 to 1.8 Ga, the craton has escaped ductile deformation.

A first-order feature of the Superior Province is its linear subprovinces, or "terranes", of distinctive lithological and structural character, accentuated by subparallel boundary faults (e.g., Card and Ciesielski, 1986). Trends are generally east-west in the south, west-northwest in the northwest, and northwest in the northeast. In Figure 7.1, the term "terrane" is used in the sense of a geological domain with a distinct geological history prior to its amalgamation into the Superior Province during the 2.72 Ga to 2.68 Ga assembly events, and a "superterrane" shows evidence for internal amalgamation of terranes prior to the Neoarchean assembly. "Domains" are defined as distinct regions within a terrane or superterrane.

7.1.2 Abitibi Subprovince

The Abitibi Subprovince, commonly designated as the Abitibi Greenstone Belt, is located in the southern portion of the Superior Province (Figure 7.1). It is bounded to the west by the Kapuskasing Structural Zone and to the east, by the Grenville Province (Figure 7.2). To the north, the Abitibi Subprovince is in structural contact with the plutonic Opatica Subprovince. The southern boundary of the Abitibi greenstone belt is marked by the Cadillac-Larder Lake Deformation Zone (CLLDZ), a major structural break marking the contact with the younger metasedimentary rocks of the Pontiac Subprovince (figure 7.2).

Thurston et al. (2008) presented the first geochronologically constrained stratigraphic and/or lithotectonic map (Figure 7.2). According to Thurston et al. (2008), Superior Province greenstone belts consist of mainly volcanic units unconformably overlain by largely sedimentary Timiskaming-style assemblages, and field and geochronological data indicate that the Abitibi Greenstone Belt developed autochthonously.

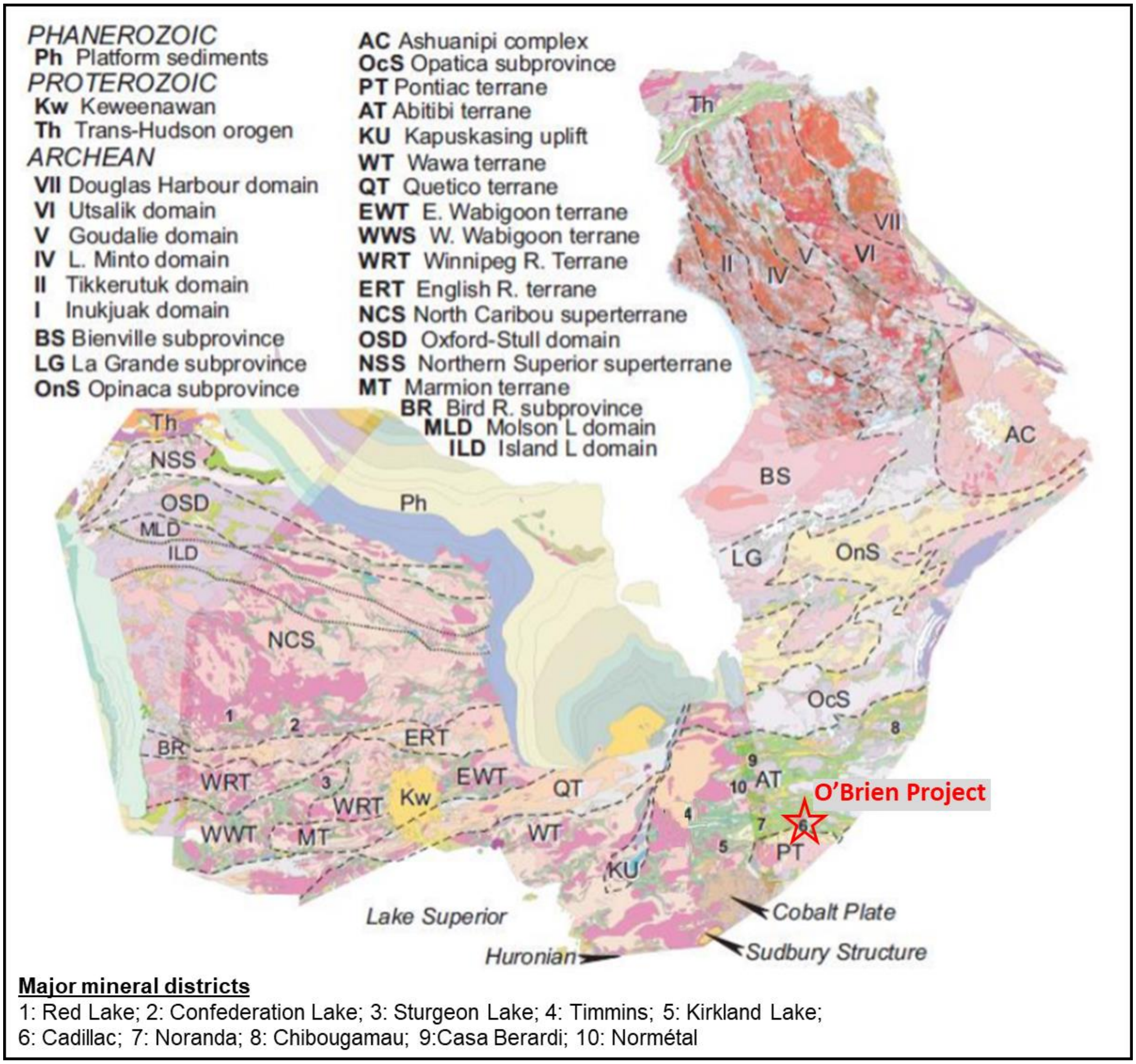

Figure 7.1 - Mosaic map of the Superior Province showing major tectonic elements.

Adapted from Percival (2007)

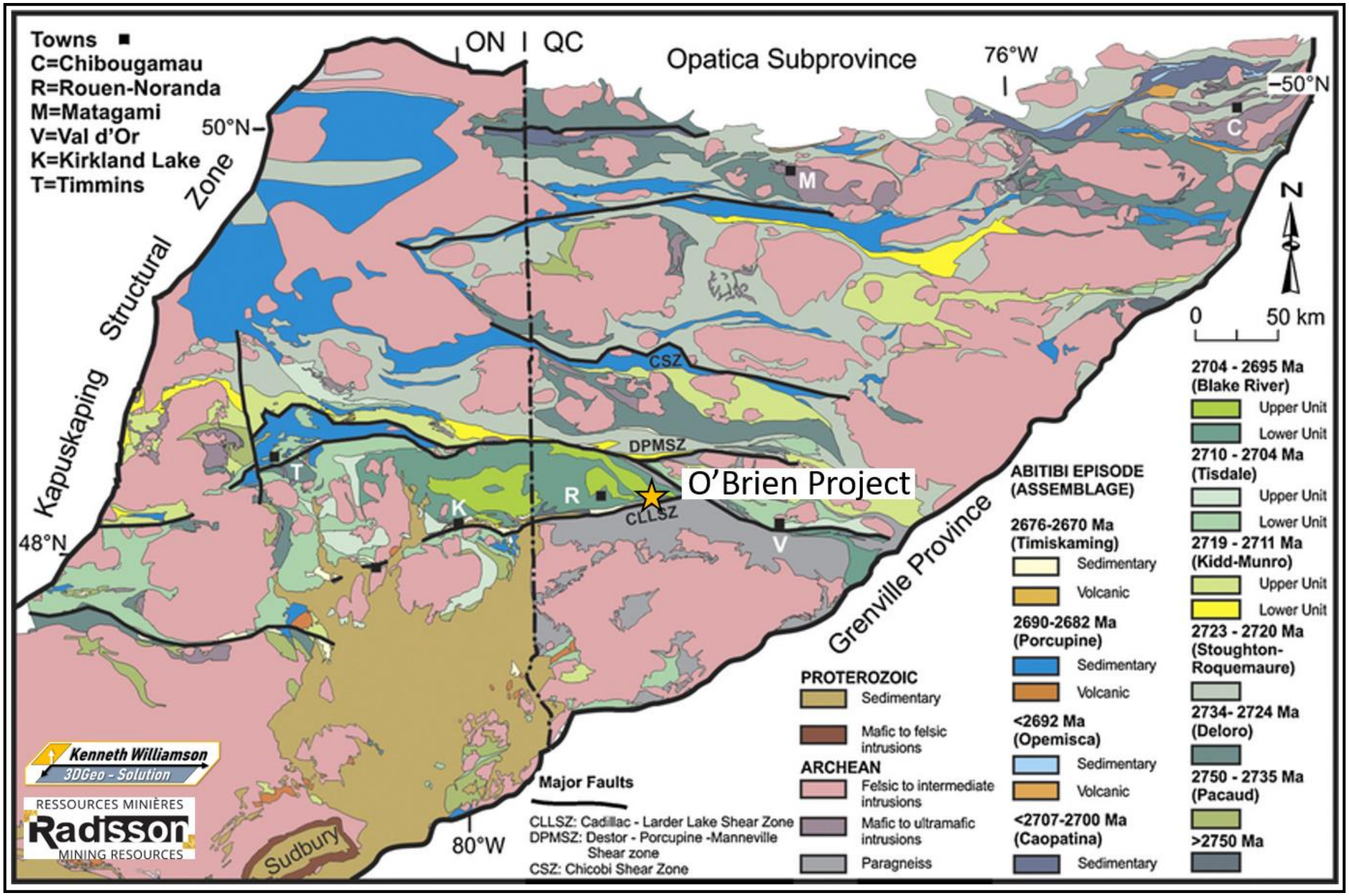

Figure 7.2 - Stratigraphic map of the Abitibi Greenstone Belt.

The geology of the southern Abitibi Greenstone Belt is based on *Thurston et al. (2008)* *and adapted from Bédard et al. (2013).*

As suggested by Thurston et al. (2008), the Abitibi Greenstone Belt can be subdivided into seven discrete volcanic stratigraphic episodes on the basis of groupings of numerous U-Pb zircon ages. These seven volcanic episodes are listed from oldest to youngest:

1. Pre-2750 Ma volcanic episode;
2. Pacaud Assemblage (2750-2735 Ma);
3. Deloro Assemblage (2734-2724 Ma);
4. Stoughton-Roquemaure Assemblage (2723-2720 Ma);
5. Kidd-Munro Assemblage (2719-2711 Ma);
6. Tisdale Assemblage (2710-2704 Ma);
7. Blake River Assemblage (2704-2695 Ma).

The Abitibi Subprovince (or Abitibi Greenstone Belt) is composed of east-trending synclines largely composed of volcanic rocks and intervening domes cored by synvolcanic and/or syntectonic plutonic rocks (gabbro-diorite, tonalite and granite) alternating with east-trending bands of turbiditic wackes (MERQ-OGS, 1984; Ayer et al., 2002a; Daigneault et al., 2004; Goutier and Melançon, 2007). Most of the volcanic and sedimentary strata dip vertically and are generally separated by abrupt, east-trending and SE-trending faults with variable dip. Some of these faults display evidence for overprinting deformation events including early thrusting, later strike-slip and extension events (Goutier, 1997; Benn and Peschler, 2005; Bateman et al., 2008).

Two ages of unconformable successor basins occur: early, widely distributed Porcupine-style basins of fine-grained clastic rocks, followed by Timiskaming-style basins of coarser clastic and minor volcanic rocks which are largely proximal to major strike-slip faults, such as the Porcupine-Destor Fault Zone, the Cadillac–Larder Lake Fault Zone (“CLLFZ”) and other similar faults in the northern Abitibi Greenstone Belt (Ayer et al., 2002a; Goutier and Melançon, 2007)

In addition, the Abitibi Greenstone Belt is cut by numerous late-tectonic plutons from syenite and gabbro to granite with lesser dykes of lamprophyre and carbonatite. The metamorphic grade in the greenstone belt displays greenschist to sub-greenschist facies (Jolly, 1978; Powell et al., 1993; Dimroth et al., 1983; Benn et al., 1994) except around plutons where amphibolite grade prevails (Joly, 1978).

The Abitibi Greenstone Belt is known for hosting significant number of gold and base metal deposits, including the giant Kidd Creek massive sulphide deposit (Hannington et al., 1999) and the large gold camps of Ontario and Québec (Robert and Poulsen, 1997; Poulsen et al., 2000).

The O’Brien Project is located along the CLLDZ, and is one of the numerous gold deposits that are associated with this major structure and subsidiary faults.

7.1.3 Cadillac Mining Camp

The Cadillac Mining Camp covers a 25 km long stretch of the CLLFZ, from the former Mouska mine in the west to the former Lapa-Cadillac mine to the east. Within the CMC, the CLLFZ runs along an E-W axis and separates the Pontiac metasedimentary Subprovince to the south from the Abitibi volcano-sedimentary Subprovince to the north. The CMC is underlain by rocks of the Southern Volcanic Zone of the Abitibi Subprovince intruded by Proterozoic diabase dykes.

From north to south, the following six major lithological units (groups) are observed: Malartic, Kewagama, Blake River, Cadillac, Piché and Pontiac (Figure 7.3).

The Malartic Group is composed of ultramafic volcanic rocks (komatiites) and tholeiitic basalts (Trudel et al., 1992). The Kewagama Group contains wackes and pelitic rocks. The Blake River Group comprises the Hebecourt and Bousquet formations. The Hebecourt Formation is composed of massive and pillowed basalts, gabbro sills and rhyolites of tholeiitic affinity. According to Lafrance et al. (2003), the Bousquet Formation includes a lower member and an upper member. The lower member is composed of an intermediate scoriaceous tuff; mafic, intermediate and felsic volcanic rocks; and felsic and mafic subvolcanic intrusions. The upper member consists of massive felsic volcanic rocks and volcaniclastic units. Rocks of the lower member are tholeiitic to transitional, whereas those of the upper member show a transitional to calc-alkaline affinity (Lafrance et al., 2003). The Cadillac Group is composed of wackes, pelitic schists with bands of polymictic conglomerate and iron formation.

In the Cadillac area, the Piché Group is composed of volcanic rocks (tholeiitic basalts, porphyritic andesites and calc-alkaline block tuffs) interbedded with conglomerates, wackes, graphitic schists and pyritic cherts. Most of the orebodies in the southern part of the Cadillac mining camp are hosted in rocks of the Piché Group, which forms a thin band several tens of kilometres long that follows the trace of the CLLFZ (Figure 7.3).

Sedimentary rocks, mainly wackes, of the Pontiac Group lie south of the CLLFZ. Volcanic and sedimentary rocks in the Cadillac area form a series of E-W-trending steeply dipping monoclonal panels. Volcanic and sedimentary sequences are separated by longitudinal faults parallel to lithological contacts such as the CLLFZ and Lac Imau faults (Figure 7.3).

Intrusive rocks in the Cadillac area include mafic sills (gabbro and diorite) occurring in the Blake River and Piché groups, the synvolcanic Mooshla Pluton, composed of gabbro, quartz diorite, tonalite and trondhjemite, as well as N-S and NE-SW-trending Proterozoic diabase dykes.

North of the CLLFZ, regional metamorphism ranges from the greenschist facies to the upper greenschist facies, but the metamorphic grade increases south of the fault to reach the amphibolite facies.

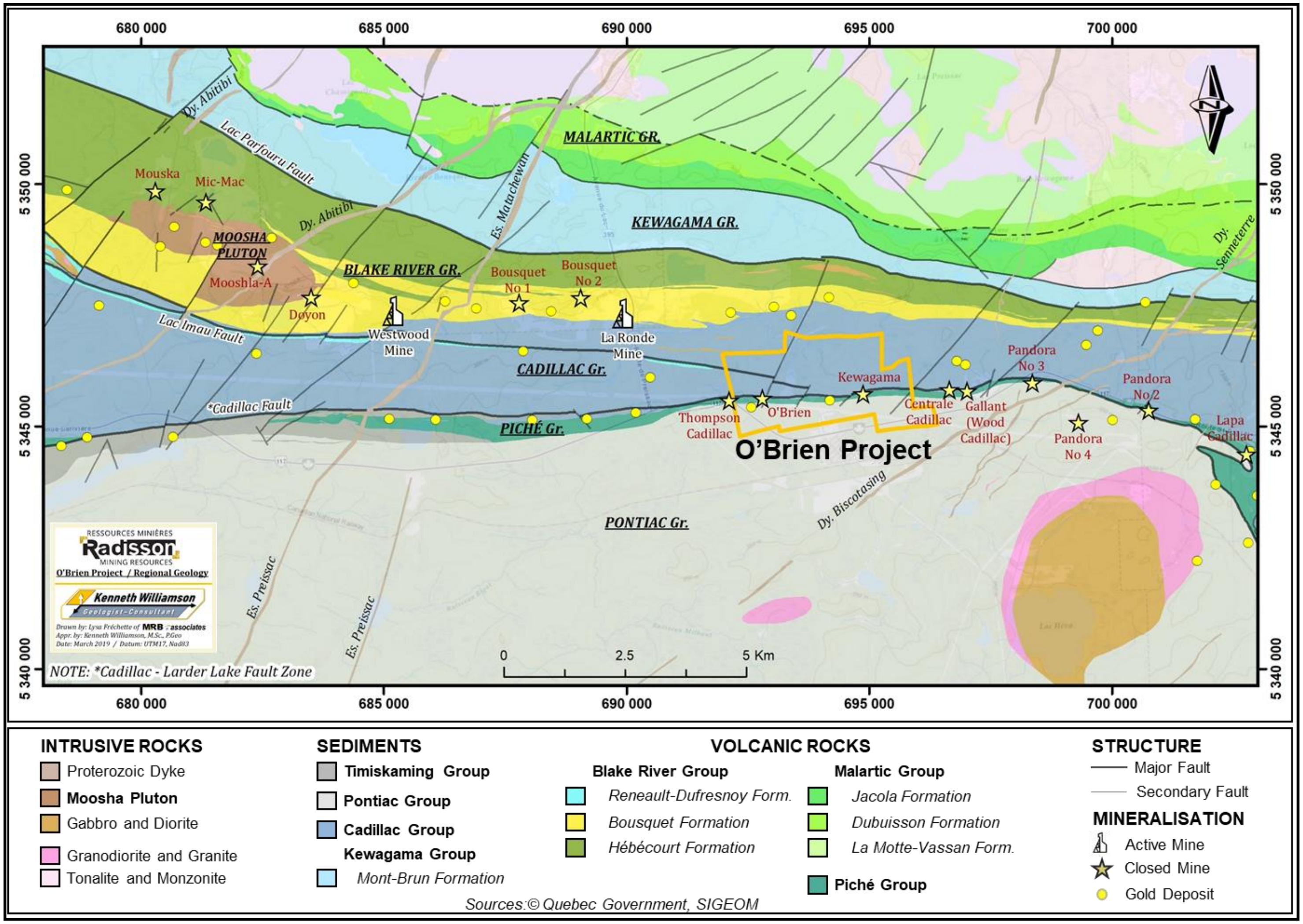

Figure 7.3 - Geological synthesis of the Cadillac mining camp

Modified from Lafrance et al. (2003a, 2003b)

7.2 Property Geology

This section is modified version of the regional geology description provided in the technical report by Beausoleil (2018) and references therein. The author has reviewed and compared Beausoleil's geological description to other such accounts in publicly available documents and consider it accurate to the best of its knowledge.

The Project straddles the Piché Group volcanic rocks and CLLFZ that separate Pontiac Group metasedimentary rocks to the south from Cadillac Group metasedimentary rocks to the north.

Across the Project, the CLLFZ shows a general east-west strike and dips steeply south at approximately 85°. On the property, the CLLFZ consists mainly of chlorite-talc-carbonate ultramafic schist, and ranges in thickness from 30 to 100 m in the mine area and narrows significantly to about 12 m wide to the east of Zone 36 East. The CLLFZ is in places closely associated to the Piché Group-Cadillac Group contact, but in most places, the fault is hosted by sedimentary rocks of the Cadillac Group (argillites, greywackes and, to a lesser extent, chert).

Most lithological contacts are sub-parallel to the CLLFZ. The main lithologies can be described as following:

7.2.1 Cadillac Group

Found to the north, the Cadillac Group metasedimentary rocks are in the footwall of the CLLFZ and of most of the mineralized zones, and hence the majority of the diamond drill holes did not intersect the Cadillac Group rocks. The limited drilling shows the presence of argillite, greywacke, some pebble conglomerate-like units, and some iron formation.

7.2.2 Piché Group

The Piché Group is a relatively thin band of interlayered mafic volcanic rocks and conglomerates, intruded by QFP dykes. From north to south, the Piché Group stratigraphy is divided into the following units:

- Northern volcanics: tuff and foliated basalts (with small quantities of argillite, greywacke, chert and massive to variably porphyritic basalt flows).
- Northern QFP dyke;
- Polygenic matrix supported conglomerate (“Mine Conglomerate”);
- Central volcanics: tuff and foliated basalt;
- Southern QFP dyke;
- Southern volcanics: massive to well foliated, locally pillowed basalts;

All the above lithologies generally strike east-west with more pronounced flexures locally. Schistosity is more developed in the central and northern volcanic units than the southern unit.

With a few significant exceptions like the Vintage Zone, the Piché Group is host of most of the gold mineralisation occurrences on the property (Section 7.3).

7.2.2.1 Quartz-feldspar porphyry

The southern and northern QFPs are much alike. They are characterized by generally sharp transposed contacts, abundant quartz and feldspar phenocrysts ranging in size from 0.1 to 0.5 cm, and range in colour from greyish to buff-beige, set in an aphanitic to fine-grained matrix of intermediate composition. In general, the QFPs are intensely sheared and show a more or less brownish biotite and chlorite alteration. The QFPs are continuous horizontally and vertically across the whole property and are useful stratigraphic marker horizons. The north and south QFP units are thicker in the vicinity of the O'Brien mine. It is unclear whether these units are duplicated by folding and faulting.

7.2.2.2 Conglomerate

The O'Brien mine conglomerate is represented in the 36 East area by well-bedded greywacke and argillite with the sporadic presence (2% to 5%) of greyish granitic pebbles, greenish volcanics elongated pebbles and other components. The pebbles tend to be somewhat flattened, consistent with north-south compression. The conglomerate unit is another useful marker horizon.

7.2.2.3 Volcanic rocks

The volcanic rocks consist mainly of mafic tuffs and flows. The volcanic rocks generally have tholeiitic signatures (Trudel et al., 1992). In general, the flows are fine grained and exhibit greenschist facies mineral assemblages. The tuffs are of mafic composition and are very abundant. The tuffs can be finely bedded to very schistose and may be the expression of deformed mafic flows. Locally present are massive to pillowed, fine-grained basalt or lesser amounts of gabbro and amphibolites.

7.2.2.4 Graphitic schist and argillite

In places, thin layers of graphitic schist and argillite are hosted within the volcanics. These are highly sheared and deformed, characterized by tight folding, and often display breccias or slickensides with graphite. Pyrite is abundant, finely laminated and deformed.

7.2.3 Pontiac Group

The metasedimentary rocks of the Pontiac Group consist mainly of greywacke and some argillite, which is sometimes graphitic. In general, the sediments are well stratified. Some zones display weak biotitic alteration or chloritization.

7.3 Mineralization

The following description of mineralization is mostly modified and summarized from Evans (2007) and Beausoleil (2018) and retains the references therein.

7.3.1 O'Brien mine

Gold production at the O'Brien mine came from a few quartz veins mostly hosted by the O'Brien Mine conglomerate and the northern QFP dyke. Approximately 95% of the O'Brien ore came from four veins (No. 1, No. 4, No. 9 or "F") in the eastern part of the mine. The veins contained high-grade shoots that occasionally yielded considerable amounts of visible gold. The main veins generally strike from 083° to 098°, and dip steeply to the south (-84° to -90°). The stopes averaged 0.75 to 0.90 m wide. Gold mineralization extends vertically down to at least the 3450' level.

7.3.1.1 No. 1 Vein

The No. 1 Vein was the most productive in terms of tonnage and occurs mainly in the conglomerate. This vein comprises No. 1 Vein NE-SW (080º to 090º Az.) and No. 1 Vein NW-SE (090º to 095º Az.).

No. 1 Vein NE-SW extends from surface to at least the 3000' level and is over 500 ft in strike length. The richest and most productive portion of this vein was from an ore shoot 15 to 60 m long that plunges about 85º to the east from about the 750' level down to at least the 3000' level, at its intersection with Vein No. 1 NW-SE, at the conglomerate hanging wall contact. A second moderate-grade shoot, about 15 to 45 m long, plunges about 60º to the east from about the 1000' level to the 2500' level.

Vein No. 1 NW-SE extends from about the 750' level to at least the 3450' level, and ranges in horizontal length from about 15 to 180 m. Higher grade shoots plunging about 85º to the east seem to be controlled by vein intersections and vein folds. Both of these veins average 30 cm thick (Mills, 1950).

7.3.1.2 No. 4 Vein

The No. 4 Vein is spatially associated with the North QFP dyke. It extends from surface down to at least the 3450' level and has a 1,000 ft strike length. It averaged 30 cm thick (Blais, 1954). Approximately 50% of the gold produced came from this vein. This was due to an exceptionally high-grade ore shoot, only 9 to 15 m horizontally, but which extended for 190 m from the 500' level down to the 1125' level.

7.3.1.3 No. 9 Vein

The No. 9 Vein is located in the northern greywacke and volcanic units. This brown vein is rich in biotite and arsenopyrite. It is also wider than the others. The stopes were rarely less than 1.2 m wide and could reach 6 m in certain folded zones where visible gold was common. It was mined out from the 1250' level down to the 1375' level along a horizontal length of about 50 m.

7.3.2 Zone 36 East area

Within the Zone 36 East area, the main mineralized structures ("veins") are generally narrow, ranging in true thickness from several centimetres to 6.7 m, but have good continuity both horizontally and vertically. Gold-bearing veins occur in different lithologies of the Piché Group and the Pontiac Group. The veins cross the stratigraphy at low angles and are occasionally folded, particularly in volcanic and argillic host rocks. Generally, the veins strike east-west, dip steeply to the south and contain higher-grade shoots that plunge steeply to the east.

Often, the veins occur as a group of quartz veinlets scattered in a very sheared and altered zone that has no obvious main vein. Only very competent lithologies, like the conglomerate and the QFPs, host large veins. In some drill core, the quartz veinlets exhibit small tight folds (Bisson, 1995).

Gold grades vary considerably. The gold occurs mainly as fine to coarse free grains that are heterogeneously distributed, mainly in the quartz veins, and to a lesser extent, in the wallrock. Higher gold grades occur in short, steeply plunging shoots with a similar style to those mined at the O'Brien mine (Bisson, 1996).

7.3.3 Kewagama area

In the Kewagama area, the gold mineralization occurs in rocks of the Piché Group to the south of the CLLFZ, which strikes east-west in this area and dips 80° to 85° to the south. North of the CLLFZ lies a considerable width of tuffs and agglomerates. In the vicinity of the mine workings, the highly sheared rocks of the Piché Group have an aggregate width of 100 to 130 m. The succession from north to the south is as follows: greenstone (15 to 25 m); North QFP (3 to 10 m); conglomerate (12 to 25 m); greenstone and tuffs (3 to 7 m); South QFP (3 to 9 m); and greenstone (about 60 m).

The only gold mineralization of particular interest disclosed by extensive underground workings is found in the winze, in a 25-ft raise above the winze and in the sublevels driven from the winze. These workings revealed an ore shoot with a vertical extent of 70 m and an east-west length of 4.5 to 25 m, in which irregular and discontinuous stringers of blue quartz carry free gold. The majority of these veins are parallel and are contained within the North QFP near its north margin, but some continue into the greenstone north of the porphyry. Individual veins are rarely more than 10 cm wide and 3 m long; occasionally, two or three are parallel to one another or overlap for part of their length. Some sections of these narrow veins are decidedly high grade, but in any stoping operation there would be considerable dilution.

The Kewagama ore shoot described above occurs in the same rocks as the high-grade shoot in the historical No. 4 Vein mined at the O'Brien mine, and resembles it for its short lateral extent compared to vertical, and for the fact that it contains the same type of blue quartz and associated minerals. It differs from the O'Brien shoot in that it does not follow one definite fracture, instead consisting of a series of irregular overlapping stringers, and for the fact that it is of much lower grade as a whole.

7.4 Hydrothermal Alteration

The following description of hydrothermal alteration is mostly modified and summarized from Evans (2007) and retains the references therein. The author has reviewed and compared Evans' description of the hydrothermal alteration to other such accounts in publicly available documents and consider it accurate to the best of its knowledge.

Wallrock alteration ranges from several centimetres to over a metre thick, equally pervasive on both sides of the veins. The mineralized zones are usually comprised of a greater proportion of altered wallrock than actual veins. In general, the wallrock is well foliated and has a distinctive dark brown to brownish grey colour due to intense biotite alteration. The brownish alteration is an easily recognizable indicator of potential gold-bearing mineralization. Biotite tends to occur as 1 to 2 mm thick layers of predominantly fine-grained biotite parallel to the foliation. On average the mineralized zones contain about 5% biotite but can contain over 20% biotite.

Generally, zones of biotite alteration accompanied by silicification and sulphidation will yield gold values. Of all the sulphides, arsenopyrite is the most abundant and characteristic of the O'Brien mine. Arsenopyrite occurs mainly in intensely altered wallrock where it can be abundant (2% to 10%). The finer grained and needle-like varieties of arsenopyrite are more likely to contain gold. Coarser grained, euhedral rhombic arsenopyrite is less likely to contain gold (Bisson, personal communication 1998).

Fine- to medium-grained, subhedral to euhedral pyrite is frequently observed generally overprinting the foliation (0.5% to 2%). Some pyrite is associated with gold-bearing zones (Hatch, 1998). Minor quantities of pyrrhotite and chalcopyrite are present in the mineralized zones (Bisson, 1995).

Carbonate alteration is mainly calcitic in micro-veinlets form, but it is also found frequently in all lithologies as more massive pervasive replacement. At times, iron carbonate veinlets are visible. Tourmaline is frequent but not always observed; it is generally found in small amounts in association with wallrock xenoliths.

7.5 3D litho-structural modelling and structural interpretation

The following section is based on 3D modelling work realised by KW3DGS from November 2018 to February 2019. The reader is referred to Radisson's press release dated March 4, 2019 for complementary information.

KW3DGS's litho-structural model addressed the geometry of the main lithological units and of the structures present on the property (Figure 7.4), leading to a reinterpretation of the structural characteristics of the property, and of the mineralised zones network.

The 3D litho-structural model was created using Paradigm GoCAD™. The model is derived from the initial 3D lithological model developed by Radisson and was based on the information retrieved and adapted from multiple data sources as drillhole descriptions, historical surface and underground mapping, and geophysical studies amongst others.

KW3DGS' interpretation (Figure 7.5A) confirms the east-west tabular nature of most of the lithological units. The model suggests the presence of a significant dextral ESE-trending deformation corridor cutting across the 36 East Zone, and the existence of a series of sinistral ENE-trending deformation zones, both considered to be part of a conjugated fault system cutting across the lithologies of the Piché Group.

Gold grade continuity in relationship with the 3D litho-structural model and with the knowledge acquired from the multiple data sources compilation, suggests a close spatial relationship between the conjugated fault network, the lithological contacts and gold mineralisation trends (Figure 7.5B).

KW3DGS interpreted that gold mineralized hydrothermal fluids circulation through such fault network has resulted in the development of gold-bearing quartz(-carbonate-sulphides) veins and veinlets. In places, competency contrast between rocks of different composition has likely also favoured the creation of the mineralized veins along lithological contacts. Syn- to post-veining deformation has resulted into the flattening, folding and faulting of the veins, has allowed for the development of high-grade shoots in low relative pressure areas such as fold hinges, or open-space jogs.

KW3DGS considers that the new litho-structural model provides the necessary foundation to building a mineralized veins network model honoring the geological context in which veins are developed.

The new mineralized zones model will be discussed in detail in Item 14.3.

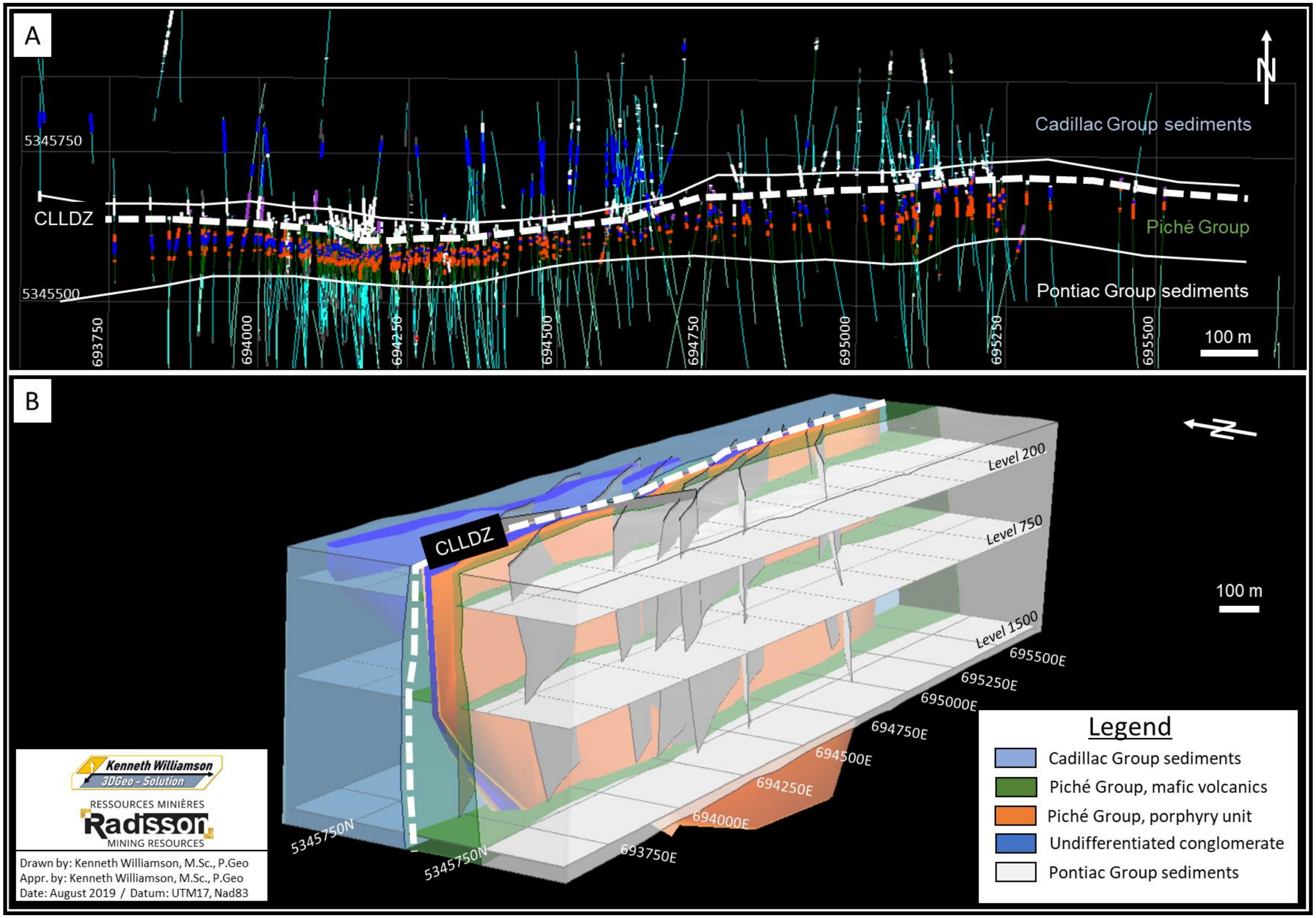

Figure 7.4 - 3D litho-structural model interpretation

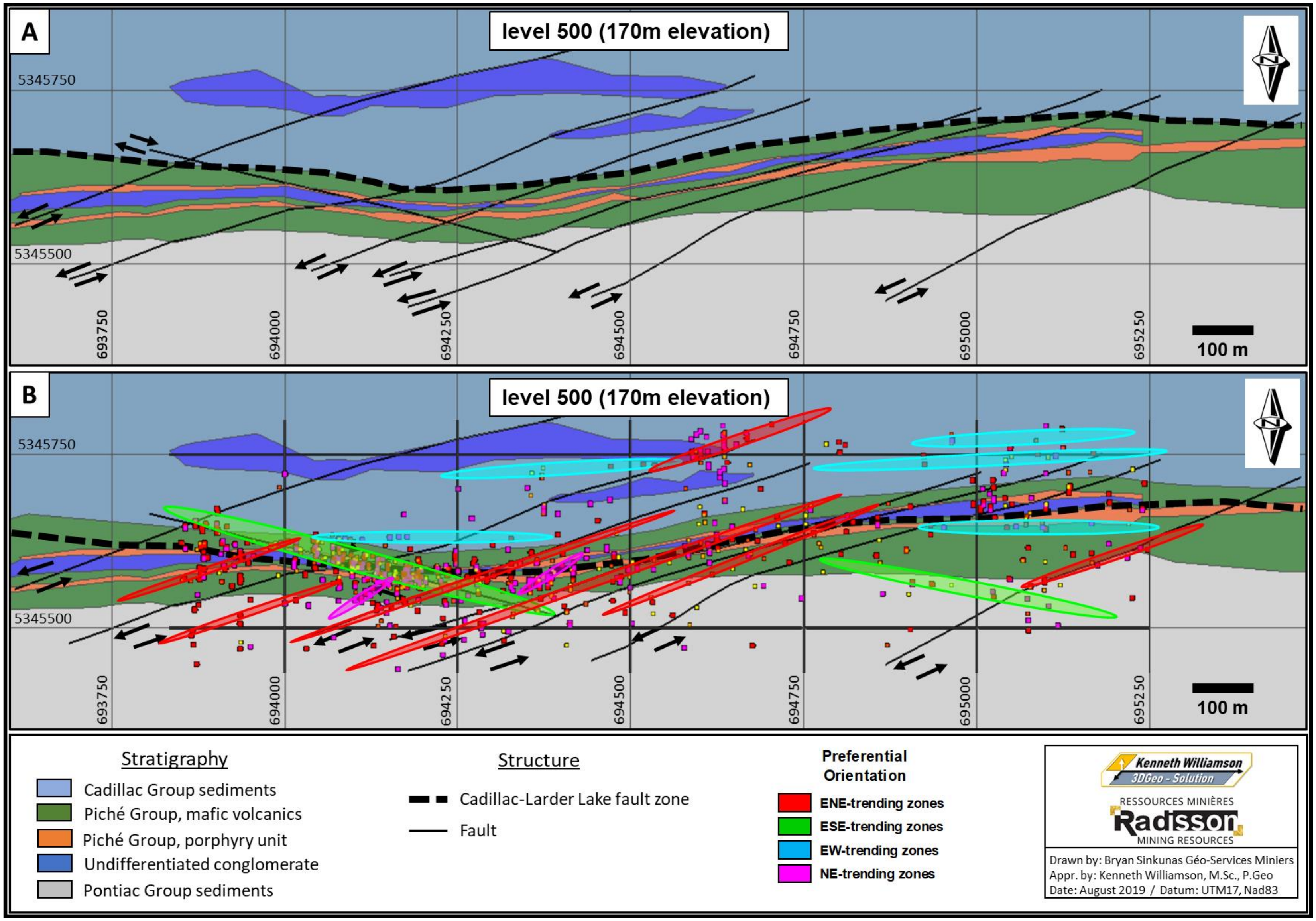

Figure 7.5 - 2D plan view illustrating the current litho-structural interpretation

8. MINERAL DEPOSIT TYPES

This section is a slightly modified version of the mineral deposit type description provided in the technical report by Beausoleil (2018) and references therein. The author has reviewed and compared Beausoleil's geological description to other such accounts in publicly available documents and consider it accurate to the best of its knowledge.

Greenstone-hosted quartz-carbonate vein deposits occur as quartz and quartz-carbonate veins, with valuable amounts of gold and silver, in faults and shear zones located within deformed terranes of ancient to recent greenstone belts commonly metamorphosed at greenschist facies (Dubé and Gosselin, 2007). Greenstone-hosted quartz-carbonate vein deposits are a subtype of lode gold deposits (Poulsen et al., 2000) (Figure 8.1). They are also known as mesothermal, orogenic. They consist of simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults, with locally associated extensional veins and hydrothermal breccias. They can coexist regionally with iron formation-hosted vein and disseminated deposits, as well as with turbidite-hosted quartz-carbonate vein deposits (Figure 8.2). They are typically distributed along reverse-oblique crustal-scale major fault zones, commonly marking the convergent margins between major lithological boundaries such as volcano-plutonic and sedimentary domains. These major structures are characterized by different increments of strain, and consequently several generations of steeply dipping foliations and folds resulting in a fairly complex geological collisional setting.

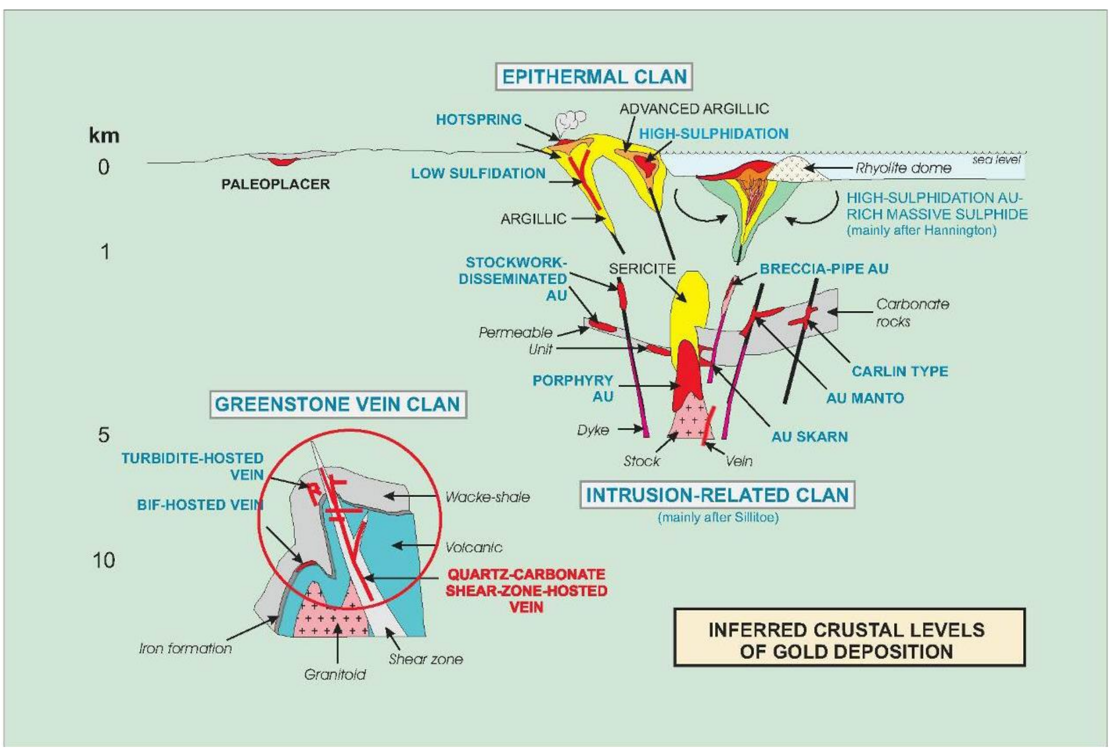

Figure 8.1 - Inferred crustal levels of gold deposition showing the different types of lode gold deposits and the inferred deposit clan

(from Dubé et al., 2001; Poulsen et al., 2000)

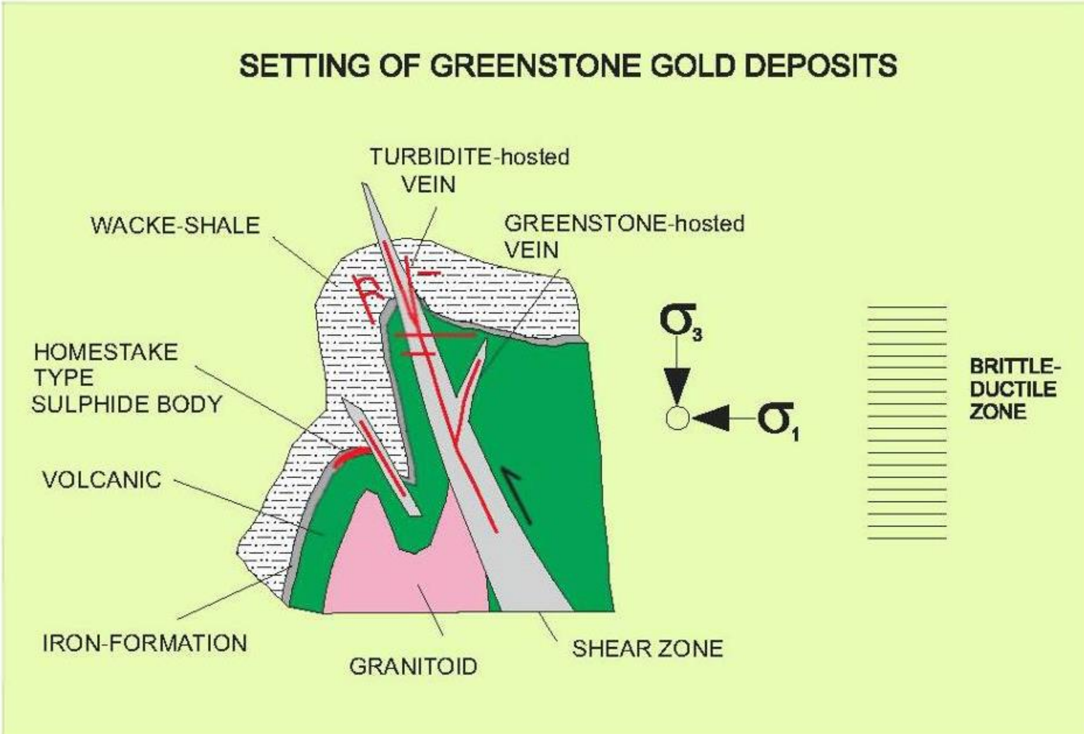

Figure 8.2 - Schematic diagram illustrating the setting of greenstone-hosted quartz-carbonate vein deposits

(from Poulsen et al., 2000)

The crustal-scale faults are thought to represent the main hydrothermal pathways towards higher crustal level. However, the deposits are spatially and genetically associated with higher order compressional reverse-oblique to oblique brittle-ductile high-angle shear zones commonly located less than 5 km away and best developed in the hanging wall of the major fault (Robert, 1990). Brittle faults may also be the main host to mineralization as illustrated by the Kirkland Lake Main Break; a brittle structure hosting the 25 Moz Au Kirkland Lake deposit. The deposits formed typically late in the tectonic-metamorphic history of the greenstone belts (Groves et al., 2000) and the mineralization is syn- to late-deformation and typically post-peak greenschist facies and syn-peak amphibolite facies metamorphism (cf. Kerrich and Cassidy, 1994; Hagemann and Cassidy, 2000).

Stockworks and hydrothermal breccias may represent the main host to the mineralization when developed in competent units such as granophyric facies of gabbroic sills. Due to the complexity of the geological and structural setting and the influence of strength anisotropy and competency contrasts, the geometry of the vein network varies from simple such as the Silidor deposit, Canada, to more commonly fairly complex with multiple orientations of anastomosing and/or conjugate sets of veins, breccias, stockworks and associated structures (Dubé et al., 1989; Hodgson, 1989, Robert et al., 1994, Robert and Poulsen, 2001).

Ore-grade mineralization also occurs as disseminated sulphides in altered (carbonatized) rocks along vein selvages. Ore shoots are commonly controlled by: 1) the intersections between different veins or host structures, or between auriferous structures and an especially reactive and/or competent rock type such as iron-rich gabbro (geometric ore shoot); or 2) the slip vector of the controlling structure(s) (kinematic ore shoot). For laminated fault-fill veins, the kinematic ore shoot will be oriented at a high angle to the slip vector (Robert et al., 1994; Robert and Poulsen, 2001).

At the district scale, the greenstone-hosted quartz-carbonate-vein deposits are associated with large-scale carbonate alteration commonly distributed along major fault zones and associated subsidiary structures (Dubé and Gosselin, 2007). At the deposit scale, the nature, distribution and intensity of the wall-rock alteration is largely controlled by the composition and competence of the host rocks and their metamorphic grade. Typically, the alteration haloes are zoned and characterized, at greenschist facies, by iron-carbonatization and sericitization with sulphidation of the immediate vein selvages (mainly pyrite, less commonly arsenopyrite).

The main gangue minerals are quartz and carbonate with variable amounts of white micas, chlorite, scheelite and tourmaline. The sulphide minerals typically constitute less than 10% of the ore. The main ore minerals are native gold with pyrite, pyrrhotite and chalcopyrite without significant vertical zoning. (Dubé and Gosselin, 2007)

9. EXPLORATION

9.1 Density determination

Following recommendations by Beausoleil (2018), Radisson initiated a density determination program to better estimate the density of the different lithologies, including the mineralized material. Some 200 samples were since processed for density measurements. The in-house measurements were done by Radisson's personnel directly at site in the coreshack facility.

The procedure established by Radisson can be summarized as following:

- The samples selection is done by the geologists, and is tied to the location, lithology, alteration and mineralisation characteristics of the sample.
- The selected samples are flagged using orange tape in the core boxes, and the final downhole interval is compiled into the drillhole database.
- Roughly 1 sample / 6 core boxes is selected for active drillholes.

- Dry samples are weighted.
- Samples are then put into a known volume of room temperature water, and water displacement is measured.

- Density is obtained from the ratio of the dry sample weight / volume of displaced water.

KW3DGS is of the opinion that such procedure, although not being the most accurate available, is adequate for the purpose of supporting work requiring density data and tonnage evaluation.

9.2 3D Modelling

In November 2018, Radisson gave KW3DGS the mandate to evaluate the structural components related to the ore distribution, at the O'Brien property. The outcome was a complete re-evaluation of the litho-structural model providing guidance for the re-interpretation of the mineralised veins network (see Item 7.5 and Item 14.3).

10. DRILLING

Information in this section was obtained from the Radisson exploration team and combined with KW3DGS's database compilation work.

From September 2017 to the end of January 2019, Radisson drilled 14,013.5 metres of surface diamond drill holes. Five (5) of these are wedges. Seven holes were abandoned due to strong deviations. This drilling was aimed on zone 36E and F.

In addition to this drilling, some 2,288.6 metres of historical drilling from Zone F, are included in this MRE 2019, that was left out of the previous MRE 2018.This area is located to the west of zone 36E (west of 693975E) and East of the former O'Brien mine, bringing a total of 16,302.1 metres of additional drilling to the new MRE 2019.

10.1 Drilling Methodology

Since 2017, all drilling on the O'Brien Project was performed by Rouillier Drilling Inc. from Amos, Quebec. All holes were drilled from surface, with NQ core caliber (47.6 mm core diameter). RQD (Rock Quality Designation) measurements was completed on most drilled core. Photos, using a digital camera, were taken on all the drilled core.

Diamond drill holes were planned using vertical cross section, plan and 3D views generated in Leapfrog GEO™ and/or Geotic Graph™ in order to intercept interpreted veins or structural features at the proper angle. In-house geologists and consultants were involved in the targeting and follow-up phases of the drilling program.

Radisson geologists and technicians used a handheld Garmin GPS (model 64s) to position the hole. The collar location of new drillholes are systematically surveyed by professional surveyors (Corriveau J.L. & Assoc. Inc.) approximately twice per year. Once obtained, the reviewed collar positions are uploaded into the drillhole database and take precedence over the initial GPS positions.

During drilling, deviation surveys consist of single shots starting slightly below the collar and at 30 metre intervals thereafter. The instrument was handled by the drilling contractor, and survey information was transcribed and provided in paper format to Radisson geologists.

Once the drillhole is done, a multishot survey is taken on the full length of the hole at three metre intervals. The REFLEX EZ-TRAC™ instrument was used to record azimuth and dip information. The multishot information is provided on USB key and then downloaded on the computer to be transferred on the drill log downhole survey table, where it takes precedence over the initial single shot survey information.

Casings are left in place, flagged and capped. A metal tag identifying the hole is installed on the cap for future reference.

10.2 Core Logging Procedures

At the rig, the driller helper places the core into core boxes, marking off every 3 m with wooden blocks. Once a core box is full, the helper wraps the box with fiber tape. At the start of each day, a Radisson technician brings the secured core boxes from the rig to the core shack facility.

In the core shack, Radisson employees remove the tape and place the boxes on the logging tables. The technicians rotate the core so that all the pieces slant one way, showing a cross-sectional view, along the strike of the main penetrative fabric observed in the core. They check that distances are correctly indicated on the wooden blocks placed every 3 m. The core is the measure in each box and the boxes are labelled. RQD is measured by either geologists or geological technicians. Any breakage under 10 cm is recorded. RQD data is then uploaded into the drillhole database.

The geologists use GeoticLog™ logging software. Lithological (principal and secondary lithologies), alteration, mineralization, veining and structural characteristics of the core are compiled in the database.

Samples are selected by the geologists. Sample length is typically 1 m, but may range from 0.2 (bare minimum) to 1.5 m in order to honor lithological contacts defined by the geologist. Once all samples are marked on the core, photographs of the wet core are taken by either geological technician or the geologist.

Once logged and/or labelled, the core is stored inside in racks until sawed. The core of each selected interval is sawed in half using a typical table-feed circular rock saw. One half of the core and a sample tag were placed in a plastic bag for shipment to the laboratory, and the other half return to the core box as a witness (reference) sample. A tag bearing the sample number are left in the box at the end of the sampled interval. The core box is then taken to roofed racks at the outdoor core storage area enclosed with secure fencing. The exact location of each hole in the outdoor core library is recorded in an Excel spreadsheet for future reference.

Complete core logging and sampling descriptions are exported into an Excel spreadsheet and sent to the geologist in charge of the project, in order to validate and sign the drillhole logs.

10.3 2017-2019 Drilling Program

From September 2017 to the end of January 2019, Radisson drilled 29 new holes, extended one (1) previously drilled hole and drilled five (5) wedges for a total of 14,013.5 metres of surface diamond drilling. This drilling was principally aimed on zone 36E and F. Table 10.1 provides detail about the drilling per year and by type. Figure 10.1 highlights the traces of the holes drilled during the 2017-2019 drilling program against the traces of all the drillholes used in the 2018 MRE.

10.4 2018-2019 relogging program

During the first half of 2019, Radisson deployed efforts at relogging some older holes in order to verify the presence of gold mineralization indications within specific intervals, and complemented the sampling of these holes over previously unsampled intervals.

At the time of closing the current database, over 520m metres of previously unsampled core corresponding to a total of 521 new samples had been added to the database.

Table 10.1 - Drilling summary by year, since the MRE 2018 database closure

Year	Hole type	Number of holes	Metres	Comment
2017*	New	6	1,604.0	OB-17-63 to OB-17-68
2018	New	22	10,345.0	OB-18-69 to OB-18-90
	Extension	1	204.0	OB-16-20EXT
	Wedge	5	1,475.5	OB-17-49W1 to W3; OB-18-86W1 and OB-18-87W1
2019	New	1	385.0	OB-19-91
TOTAL	**Hole type**	**Number of holes**	**Metres**	
	New	29	12,334.0	
	Extension	1	204.0	
	Wedge	5	1,475.5	
	G.TOTAL	35	14,013.5	New meterage added in current MRE 2019

*: Holes drilled after September 2017

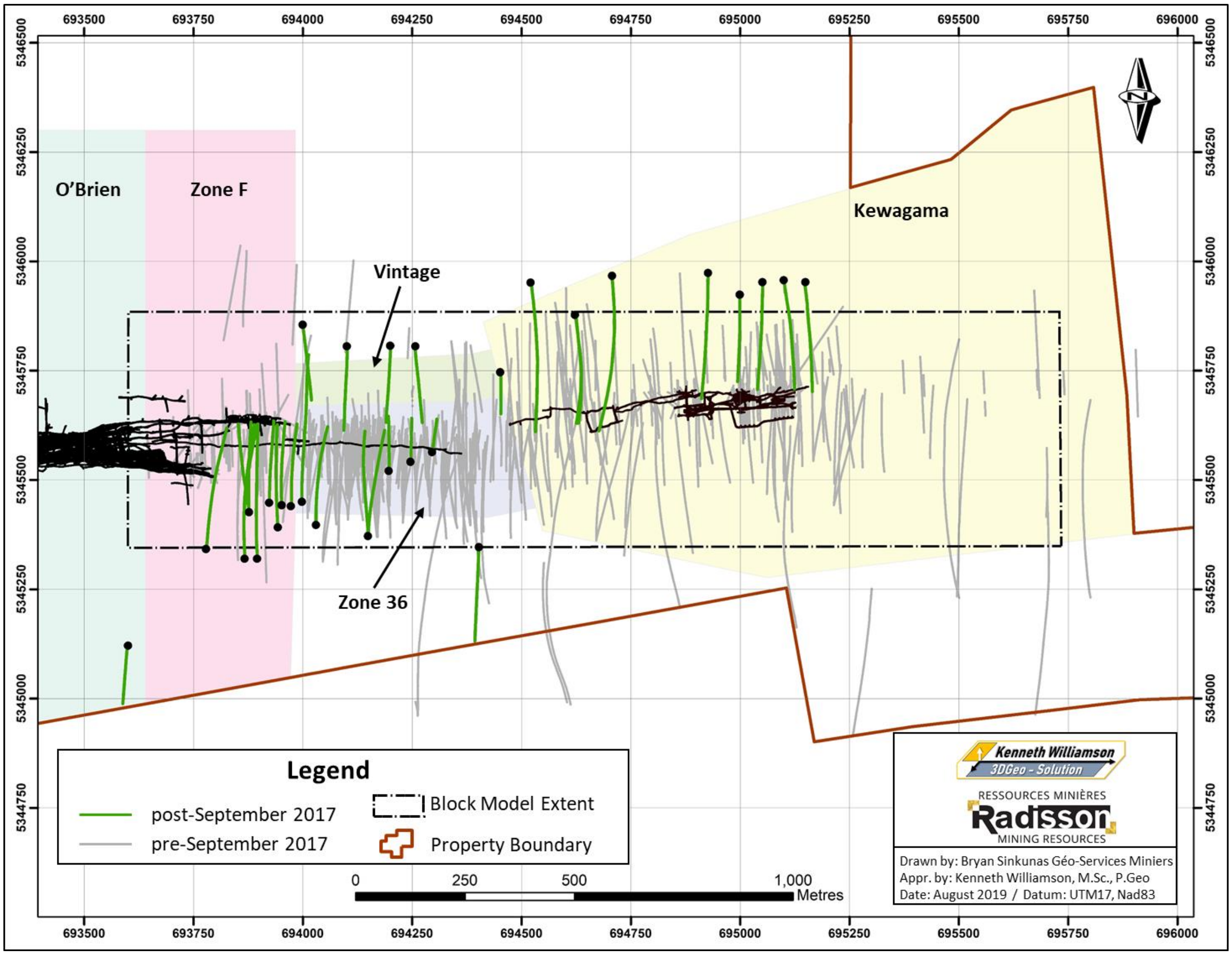

Figure 10.1 - 2017-2019 drilling used in addition to the 2018 MRE database

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

The following paragraphs describe the Radisson sample preparation, analysis and security procedures for the remaining of its 2017 drilling program (from drillhole OB-17-63, which was the last hole considered in MRE 2018), and the complete 2018 and 2019 diamond drilling programs.

The information in this section was provided by the Radisson exploration team. KW3DGS reviewed the QA/QC procedures and results for the September 2017 to 2019 drilling programs. The reader is referred to Beausoleil (2018) for details on the pre-September 2017 drilling programs.

11.1 Core handling, Sampling and Security

Core boxes are received on a daily basis at the core shack on the Project. Drill core is logged and sampled by experienced and qualified geologists or by a geologist-in-training under the supervision of a qualified geologist. Samples usually range from 0.5 m to 1.0 m in length and, whenever possible, sample contacts respect lithological contacts, the appearance of mineralization, and changes in alteration type, vein type or vein density. Sampled core intervals are identified by geologists with marks on the core and sample tags placed at the end of the interval. Core samples are sawed in half (NQ core diameter).

Sawing is carried out by an experienced technician who follows the geologist's markings using an electric core saw. One half of the core is placed in a plastic bag with the matching sample tag while the other half is replaced in the core box and stored for future reference. Individual sample bags are placed in rice bags along with the list of samples, and samples are usually shipped to the laboratory once a drill hole has been fully sampled. The laboratories usually offer their own transport service. In rare cases, a commercial carrier, such as RP Express or Manitoulin Transport, is used.

11.2 Laboratories Accreditation and Certification

The International Organization for Standardization ("ISO") and the International Electrotechnical Commission ("IEC") form the specialized system for worldwide standardization. ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories sets out the criteria for laboratories wishing to demonstrate that they are technically competent, operating an effective quality system, and able to generate technically valid calibration and test results. The standard forms the basis for the accreditation of competence of laboratories by accreditation bodies. ISO 9001 applies to management support, procedures, internal audits and corrective actions. It provides a framework for existing quality functions and procedures.

For the remaining of the 2017 drilling program, samples were prepared at the sample preparation facilities of Swastika Laboratories Ltd ("Swastika") in Swastika, Ontario. Swastika does sample preparation and assaying at the same facility. Swastika is a commercial laboratory independent of Radisson with no interest in the Project. Swastika received ISO/IEC 17025 accreditation through the Standards Council of Canada ("SCC").

For the 2018 and 2019 drilling program (up to OB-19-91; the last hole used in the current Mineral Resource Estimate), Radisson used ALS Minerals (ALS), an independent commercial laboratory located in Val D'Or, Québec for both the sample preparation and assaying. ALS is a commercial laboratory independent of Radisson with no interest in the

Project. ALS received ISO/IEC 17025 accreditation through the Standards Council of Canada (“SCC”).

In addition, Radisson selected a series of pulps and rejects from holes drilled in 2018 (from OB-18-69 to OB-18-83) and requested another laboratory, SGS, to run duplicate assays. SGS is a commercial laboratory located in Val-d’Or, QC and is independent of Radisson with no interest in the Project. SGS received ISO/IEC 17025 accreditation through the Standards Council of Canada (“SCC”).

11.3 Laboratory Preparation and Assays

11.3.1 Swastika

- Samples are weighed upon receipt (implemented during the 2017 drilling program when the issuer switched to Swastika).
- Samples are dried to 80°C and then crushed to >80% passing 1,700 microns and split to 250 g using a rotary split. The subsample is pulverized to >90% passing 107 microns.
- Core samples are analyzed by fire assay with atomic absorption spectroscopy (AA) from 30 g pulps. The lower detection limit is 0.01 g/t.
- When assay results are higher than 5 g/t Au, core sample pulps are re-assayed by fire assay with gravimetric finish.
- If visible gold is observed, the sample is sent for metallic sieve. In that case, the entire sample is pulverized and assayed;
- Assay results are provided as Excel spreadsheets.

11.3.2 ALS Minerals

- Samples are totally crushed at 90% smaller than 2mm then split at 500g and pulverised at 85% smaller than 75 microns.
- Core samples are analyzed by fire assay with atomic absorption. Nominal weight 30g.
- If visible gold is observed, the sample is sent for metallic sieve. In that case, the entire sample is pulverized and assayed.
- Assay results are provided as Excel and PDF spreadsheets. Internet «Webtreive» offers direct access to results.

11.3.3 SGS

- Pulps from samples prepared at ALS Minerals are sent to SGS for re-assay.
- Pulps are analyzed by fire assay with atomic absorption.
- Assay results are provided as Excel and PDF documents.

11.4 Quality Assurance and Quality Control (QA/QC)

All three (3) laboratories have their own internal QA/QC program, and results are internally validated and the certificates are signed prior to becoming available.

Radisson also has a QA/QC program for drill core that includes the insertion of blanks, standards (certified reference material; or CRM) and duplicates in the flow stream of core samples. For each group of 20 samples, the issuer inserted one blank, one standard and one pulp duplicate.

The discussion below details the results of the blanks, standards and duplicates inserted as part of the issuer's QA/QC program only.

11.4.1 Blank samples

The blank samples sent to both laboratories were derived from barren rock (crushed decorative marble). Each sample of the blank material was placed into a plastic sample bag and given a sample identification number.

A total of 297 blank samples were inserted in the batches from the 2017 to 2019 drilling programs (14 from Swastika and 283 from ALS Minerals). According to Radisson's quality control protocol, if any blank yields a gold value above 10x the detection limit (i.e. 0.1 ppm for both Swastika and ALS Minerals), the entire batch should be re-assayed. However, if no significant gold values were present in the certificate (no sample above 3.00 g/t Au), it is considered an exception and the batch was not re-assayed.

None of the 14 Swastika samples failed and one (1) blank from ALS Minerals (in a batch without significant values) exceeded the recommended threshold (Figure 11.1 and Figure 11.2).

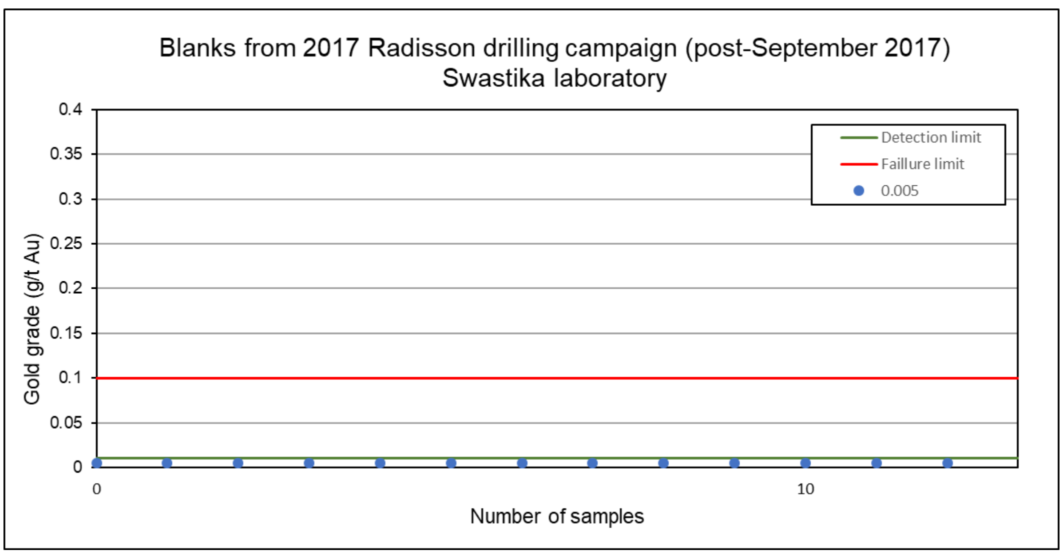

Figure 11.1 - Distribution graph showing results from assayed blanks from the September 2017 drilling programs (Swastika).

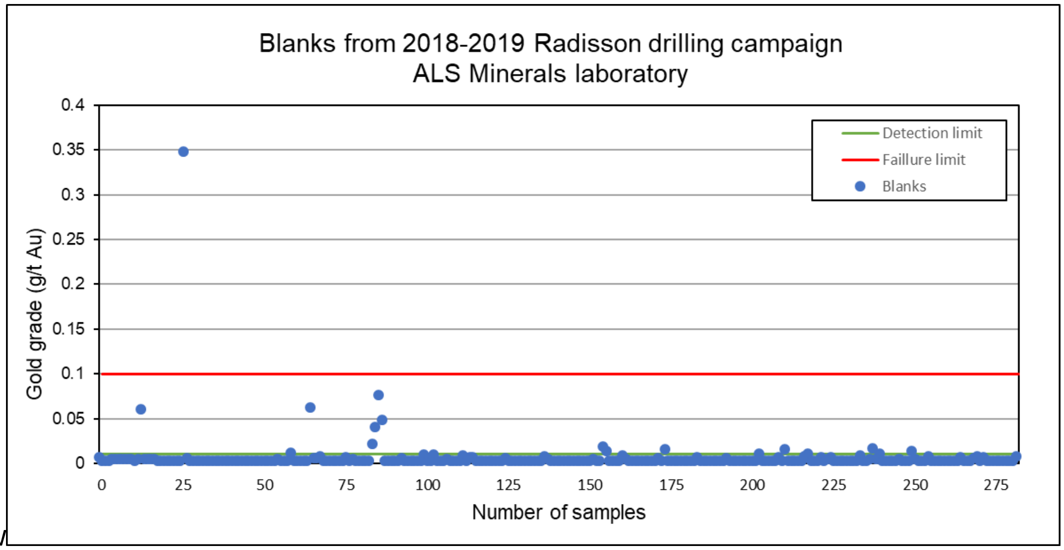

Figure 11.2 - Distribution graph showing results from assayed blanks from the 2018-2019 drilling program (ALS Minerals)

11.4.2 Standards

Accuracy was monitored by inserting standards. Four (4) different certified reference materials (CRMs) used as standards were sent to both Swastika and ALS Minerals Table 11.1 shows the theoretical grade and the standard deviation for each CRM; the table includes the calculated +/- 2 and +/- 3 standard deviations. The standard inserted in a given sample batch is randomly selected from these available CMRs.

Table 11.1 - Certified reference material used during the remaining of the 2017 and 2018-2019 drilling programs.

CRM	Theoretical Grade (g/t Au)	Standard deviation (SD) (g/t Au)	-3SD (g/t Au)	-2SD (g/t Au)	+2SD (g/t Au)	+3SD (g/t Au)
SG84	1.026	0.025	0.951	0.976	1.076	1.101
SL46	5.867	0.170	5.357	5.527	6.207	6.377
SL76	5.960	0.192	5.384	5.576	6.344	6.536
SP73	18.17	0.42	16.91	17.33	19.01	19.43

The definition of a quality control failure is when assays for a standard are outside three standard deviations (+/- 3SD). Additionally, if two consecutive standards are outside 2SD, it is also considered problematic.

According to Radisson's quality control protocols, a batch should be re-analyzed if its standard yields a gold value above or below 3SD of the standard's grade (Table 11.1) unless the certificate contains no significant value (no sample above 3.00 g/t Au).

Figures 11.3 to 11.5 present the results obtained by both Swastika and ALS Minerals laboratories for the different CRMs used.

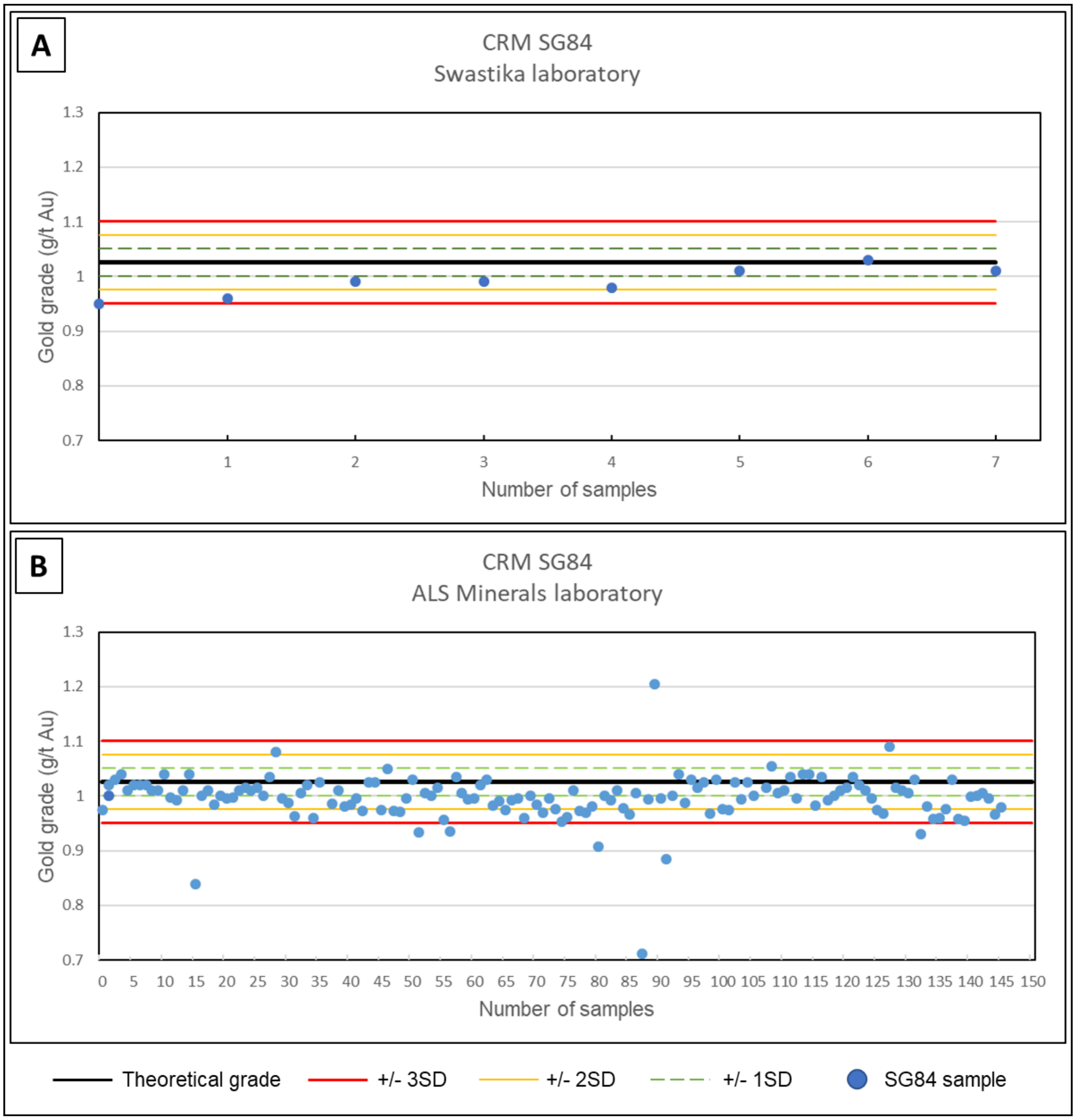

Figure 11.3 - Distribution graph showing results from assayed CRM SG84.

A) Results from the Swastika laboratories;

B) Results from the ALS Minerals laboratory.

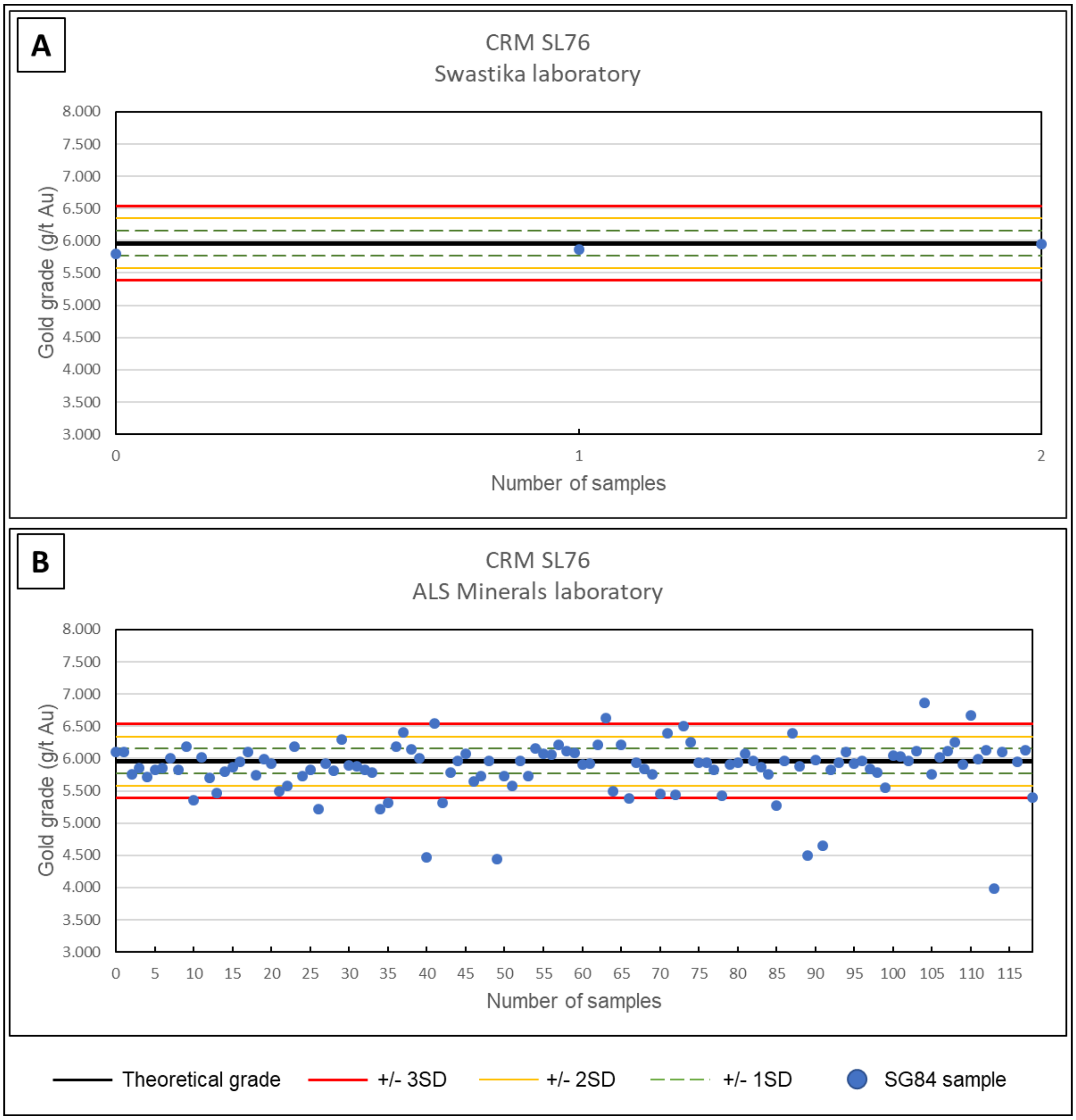

Figure 11.4 - Distribution graph showing results from assayed CRM SL76.

A) Results from the Swastika laboratories;

B) Results from the ALS Minerals laboratory.

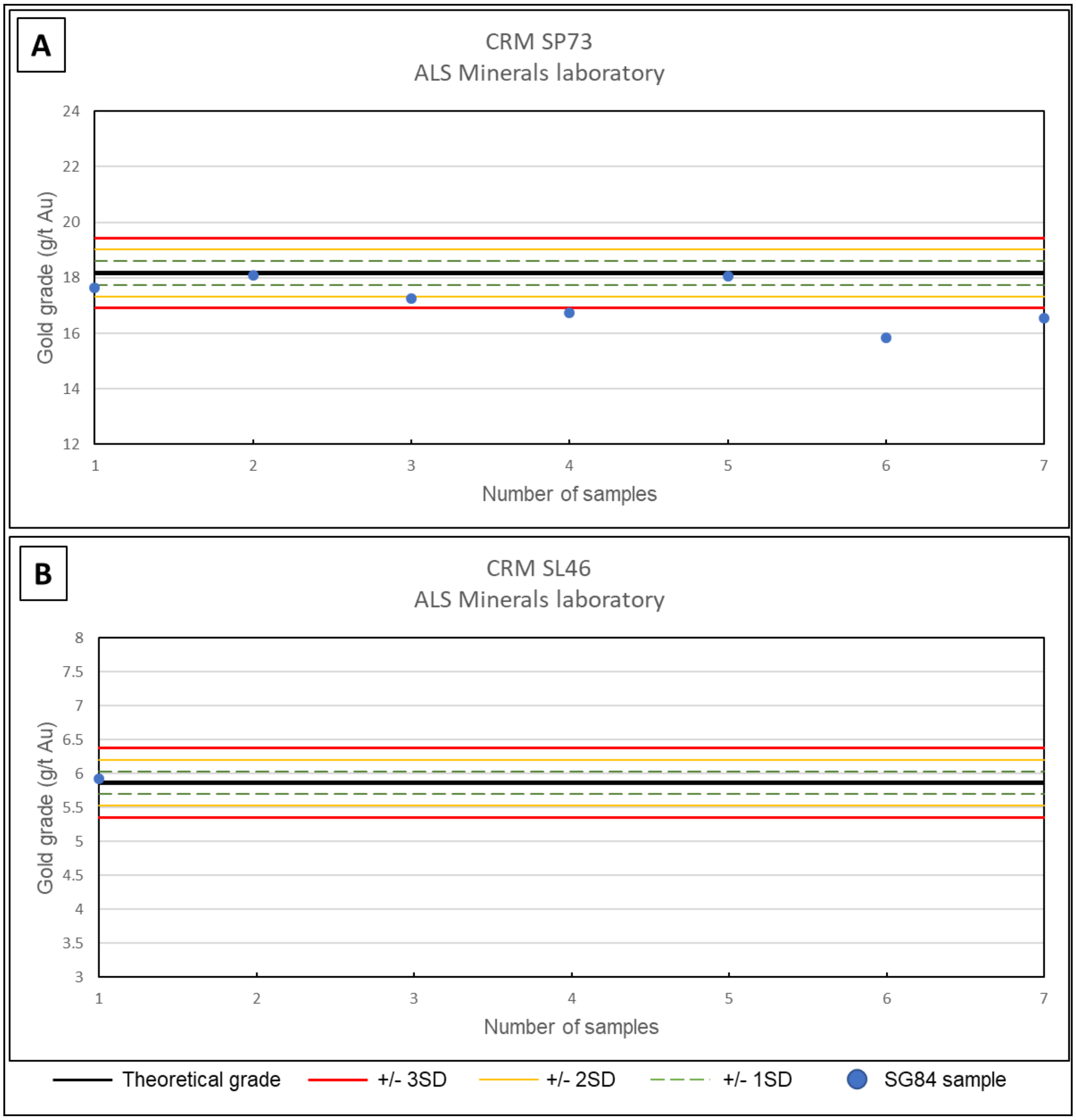

Figure 11.5 - Distribution graph showing results from assayed CRM SP73 and SL46 at the ALS Minerals laboratory

A total of 10 failures for CRM SG84 and a total of 16 failures for CRM SL76 have been reported from the results obtained from ALS Minerals laboratory. KW3DGS has investigated these failures and concluded that most are related to batches without any significant assay values. Six (6) out of the 26 failures would require further investigation.

11.4.3 Duplicates

Duplicate samples have only been introduced during the 2018-2019 drilling campaign. Figure 11.6 presents the comparison between pulp and reject duplicates analysed at SGS laboratory and the original sample values. The sample selection has been done by Radisson's geology team. Considering the nuggety nature of the deposit, no failure is reported from the sample duplicates analysis.

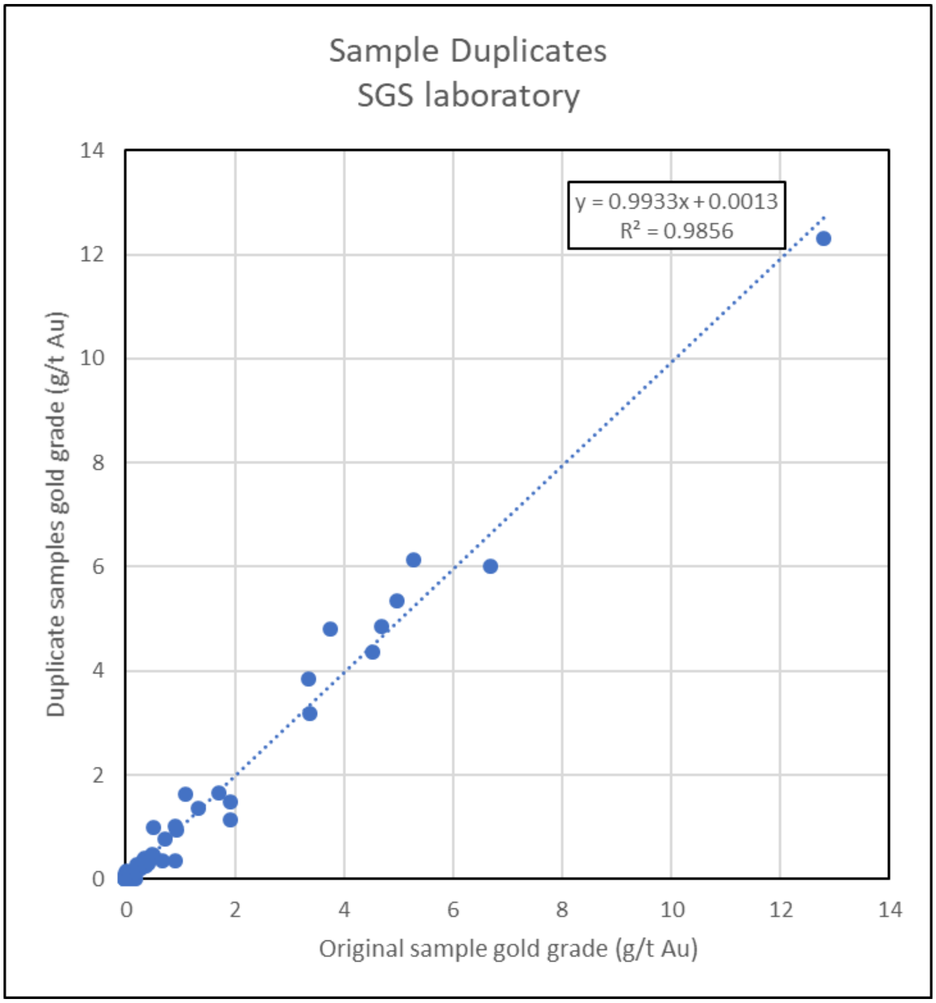

Figure 11.6 - Graph showing results obtained on pulp duplicates obtained from the SGS laboratory against the original samples

11.5 Conclusions on the QA/QC for the 2017 and 2018-2019 drilling campaigns

A statistical analysis of the QA/QC data provided by Radisson revealed some analytical issues.

Of the 297 results for blanks analysed, only one (1) returned value higher than the accepted threshold, and was contained in a batch without significant values. This suggests that there was no contamination during sample preparation at the laboratory.

A total of 10 failures for CRM SG84 and a total of 16 failures for CRM SL76 have been reported from the results obtained from ALS Minerals laboratory. KW3DGS has investigated these failures and concluded that most are related to batches without any significant assay values. Six (6) out of the 26 failures would require further investigation. Where the reason for such failure cannot be explained or if the explanation warrants it, the entire batch should be re-assayed.

For the 2018-2019 drilling program, a protocol for sending pulp and reject duplicates to SGS laboratory has been added to Radisson's QAQC protocols. These duplicates returned similar values compared to the original samples.

KW3DGS is of the opinion that the sample preparation, analysis and security procedures and QA/QC protocols used by Radisson for the O'Brien Project are appropriate for an advanced exploration program.

12. DATA VERIFICATION

On April 30th ,2019, Kenneth Williamson, P.Geo., M. Sc., representing KW3DGS, visited the O'Brien Project, and most specifically the core shack facility.

KW3DGS' data verification included a review of a limited number of recent drillhole collar locations and selected core intervals to verify the concordance with the drillhole database. Attention was paid on the description of lithologies, alteration and structures to which gold bearing zones are related to and on the samples' position along the selected drill holes.

Discussions with Radisson geologists and coreshack technician provided insights on the core handling and gold assaying procedures, the density measurement procedure, the QA/QC program, and the downhole surveying procedure.

The data verification does not include the mined-out voids of the former Kewagama mine used for the current 2019 MRE. The mined-out voids from the former O'Brien mine have been compiled, and the final wireframes were provided by Radisson. KW3DGS has reviewed the position and scale of the wireframes with respect to a limited amount of information.

12.1 Drillhole Database

The final resource database contains 693 DDH (280 from underground and 413 from surface). This total includes 35 new drill holes (including drillhole extension and wedges) completed since the database close-out date for the 2018 MRE (Beausoleil, 2018), and 11 holes for which information was deemed of sufficient quality to be incorporated into the current resource database. The final database does not include the abandoned or geophysical diamond drill holes.

The final database is considered to be of good overall quality. KW3DGS considers the O'Brien Project drillhole database to be valid and reliable.

12.1.1 Historical Drillholes

Historical work subject to verification consisted of the 647 DDH included in the 2018 MRE (Beausoleil, 2018). Basic cross-check routines were performed between the Radisson database and the previously validated database for the 2018 MRE (i.e., collar, down-hole surveys, assay field "Au_Final"). Any discrepancies were corrected and incorporated into the current resource database.

All surface drill hole collars in the resource area on the Project were either professionally surveyed or surveyed using a GPS unit. The Project coordinates are in UTM NAD 83 Zone 17. A total of 21 from surface drillholes have seen their collar coordinates slightly modified based on either retrieved historical survey information (from Services Techniques UTM Inc. in 1994) or new surveys obtained from Corriveau J.L. & Assoc. Inc. in 2018. A total of 44 underground holes (within the F Zone area) have also been repositioned by Radisson accordingly to the new 3D workings model recently received. The collar surveys are considered adequate for the purpose of a resource estimate, although any collar surveyed using a GPS only should be professionally surveyed.

The following methods and instruments were used historically for the down-hole surveys: Tropari, Acid and Flexit for historical holes and REFLEX for more recent holes.

Systematic and routine checks were performed on the down-hole surveys and no major inconsistencies were detected.

About 5% of the historical holes were randomly selected and compared to their original logs and, when possible, assays were checked against the original assay certificates. No major discrepancies have been observed during this verification process. Minor errors were found in the Au Final calculated field and were corrected in the current resource database.

A series of 100 samples, taken from six (6) historical holes selected on the basis of their location within the O'Brien Project and covering different areas of drilling, were sawed in quarters. The samples were bagged and sent to Actlabs - Techni-Lab for re-assaying. Figure 12.1 presents the results obtained.

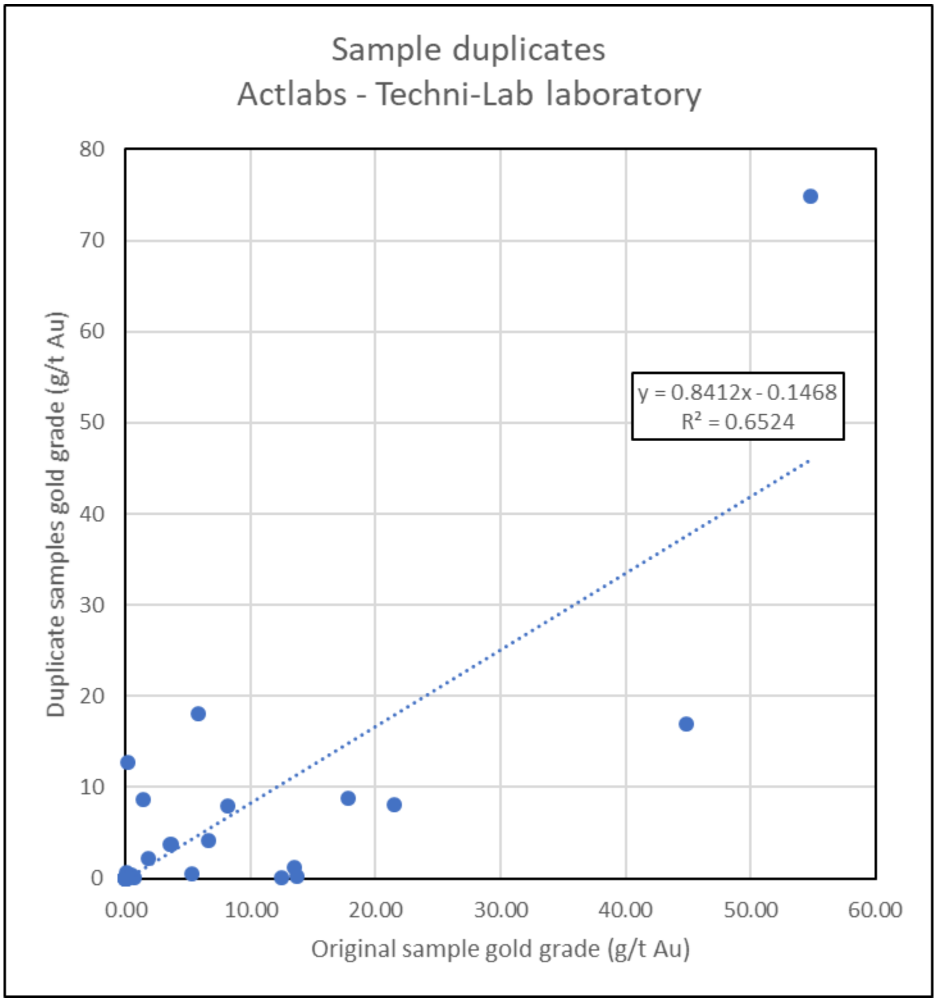

Figure 12.1 - Graph showing results obtained on pulp duplicates obtained from the Actlabs – Techni-Lab laboratory against the original samples.

12.1.2 2017-2019 Drillhole Database

The 2017-2019 database was verified for consistency between the drillhole logs and the information contained in the database. Identified errors were corrected accordingly.

12.1.2.1 Drill hole location

All 35 new drillholes added to the resource database have been professionally surveyed by Corriveau J.L. & Assoc. Inc. in 2018. Information retrieved from the survey certificates has been cross-checked against the database and no discrepancy was found.

12.1.2.2 Down-hole survey

For all 35 new drillholes, a multishot down-hole survey was taken on the full length of the hole using a REFLEX EZ-TRAC™ instrument. Routine checks have been performed on the down-hole survey data in order to verify the presence of any excessive or drastic variation in the hole deviation. Any discrepancies found were corrected and the current resource database was updated accordingly.

12.1.2.3 Assays

The author had access to the electronic assay certificates for all current holes. All certificates were recompiled and the current resource database has been updated accordingly. Special attention was paid on verifying that the final Au grade is calculated properly; in such way that a metallic sieve result precedes one obtained using a gravimetric finish, the latter preceding the regular AA values.

12.2 Radisson Logging, Sampling and Assaying Procedures

During the site visit in April 2019, the author was able to verify the drilling and logging procedures established by Radisson (see Item 10.2). The core logging facility is well adapted, showing large logging stations, running water and sufficient lighting (Figure 12.2A). Many racks allow an appropriate core boxes shuffling between the steps of the procedure (Figure 12.2B). The core cutting room is clean and designed to ensure working in a safe environment (Figure 12.2C).

In all core boxes reviewed, sample tags were still present in the boxes and it was possible to validate sample numbers and confirm the presence of mineralization in reference half-core samples from the mineralized zones. All core boxes are labelled and properly stored outside (Figure 12.3). Radisson maintains a surface plan providing the location of the holes within the core yard.

Radisson has established logging, sampling and assaying protocols, including complete QA/QC protocols, that are in line with the industry standards. KW3DGS is of opinion that the protocols in place are adequate.

Figure 12.2 - Logging facility visited in April 2019

Figure 12.3 - View of the old mill facility along with some of the well-maintained outside storage racks

12.3 Mined-out Voids

Underground workings were imported from recent modelling work supervised by Radisson. The underground voids include all shafts, drifts, raises and stopes. The location, scale and overall geometry of the mined-out voids 3D shapes were verified using available historical plan view information.

KW3DGS considers the level of detail in the void triangulation to be of good quality and reliable even though some uncertainties remain.

12.4 Conclusion

Overall, KW3DGS is of the opinion that the data verification process demonstrates the validity of the data and protocols for the O'Brien Project. KW3DGS considers the Radisson database to be valid and of sufficient quality to be used for the mineral resource estimate herein.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

Metallurgical testworks were last publicly reported in the PEA of Poirier et al., 2016 (Item 6 for a summary). This section describes the mineral processing and metallurgical testing work mandated by Radisson to different firms since 2017.

13.1 Dundee Sustainable Technologies (DST)

The following section is a summary of the work completed in 2017 for Radisson, and as reported by DST, in a technical report titled “Gold Concentration, Extraction and Arsenic Removal on Material from the O’Brien Deposit.”, DST, August 9, 2017.

DST carried out laboratory and piloting work on a 5-tonnes sample from the O’Brien deposit. The objectives were to conduct gold concentration tests, arsenic extraction tests, and gold extraction tests.

Gold concentration tests were performed using a combination of gravity concentration and flotation cells. Results show achievable gold grade of 34,300 g/t Au for 13.4% of the gold using the combination of two Knelson concentrators. Overall, the results show a gold recovery by gravity of 47% at a grade of 1,138 g/t Au using one Knelson concentrator, and gold recovery by cyanidation of 42%.at a grade of 109 g/t Au from the flotation circuit.

Arsenic extraction tests were successful with a 95% As removal at the laboratory scale. Arsenic content was reduced from 10.8% As down to 0.50% using a tube furnace. These results have shown to be time-dependant, and were achieved a residence time of 3 hours.

Pyrolysis is the method used by DST to remove that arsenic from the sulphide concentrate. This process allows for the removal of arsenic from a sulphide concentrate leaving a large portion of the sulphur as sulphides in the calcine. As described by DST, the arsenic, in the form of arsenopyrite, will decompose at temperatures above 480°C and released in vaporous form elemental arsenic under a neutral atmosphere leaving the sulphide as pyrrhotite.

DST has also developed a process to sequester arsenic using vitrification. This technology allows for arsenic in the form of arsenic trioxide to be intergraded in a silica matrix forming a glass containing 20% or more elemental arsenic. The product has shown to be very stable under the EPA. TCLP and SPLP leach tests.

Gold extraction tests were conducted using both cyanidation and chlorination on various samples. The standard bottle roll tests for cyanidation were performed using a leach time of 48 hours. Considering the recovery losses from the beneficiation circuit, total gold extraction of 85.6% was calculated for the untreated concentrated ore. Recoveries of 83.1% and 88.3% were obtained for concentrated ore treated by pyrolysis and after oxidation respectively. Gold extraction by chlorination on the oxidized concentrated ore reached 88.3%; the latter process benefits from a short reaction time and an environmentally friendly closed loop circuit.

13.2 Centre Technologique des Résidus Industriels (CTRI)

The following section is a summary of the work completed in 2018 for Radisson, and as reported by CTRI, in a report titled “Rapport Final Projet-107 – Caractérisation métallurgique et environementale”, CTRI, August 21, 2018.

CTRI carried out metallurgical and environmental characterisation on specific types of samples, including an oxidized pyrite concentrate, a non-oxidized pyrite concentrate, and a flotation reject.

Metallurgical work consisted in laboratory cyanide leaching tests, and aimed at documenting the leaching kinematics and the overall recovery by cyanidation. Results obtained over 24 hours of reaction time (ranging from 73%-76% for the pyrite concentrates to 91% on the flotation reject sample), suggest that an overall recovery of 92% could be anticipated over longer periods of cyanide leaching time.

Environmental work consisted in TCLP and static tests, which respectively aimed at characterizing the lixiviation rate and the acid generation potential of the samples. The tests were done on the oxidized pyrite concentrate, the non-oxidized pyrite concentrate, and the flotation reject.

Results for TCLP tests show that, from the concentrates and rejects, potential lixiviation hazards may originate from high concentration of As, Ca and Cu. Results for the static tests show that both pyrite concentrates show acid generation potential.

13.3 SGS Minerals Services

The following section is a summary of the work completed in 2018-2019 for Radisson, and as reported by SGS Minerals, in a report titled “The determination of the gold head grade and recovery from the O’Brien Project” (Project 16914-01 – Final Report), SGS Minerals Services, March 18, 2019.

SGS Lakefield carried out a metallurgical testwork program on the O’Brien Project with the main objective of determining the gold head grade of eight (8) composite samples, coming from 120 core samples. The composite samples were subjected to gravity gold separation followed by cyanide leaching of the gravity tailings. The calculated gold head grade was determined by back-calculating from the gravity and cyanidation tests.

Gravity recoverable gold in the composites was determined by first grinding the composites in a laboratory rod mill, and then passing the composites through a Knelson MD-3 Concentrator and a Mozley C800 laboratory separator. The Mozley concentrate was assayed in its entirety for gold, which led to calculated gold recoveries by Knelson/Mozley gravity separation ranging from 30% to 74%. Bulk cyanide leach tests were conducted on the eight composite gravity tailings. The results of the cyanide leach tests show gold extraction ranging from 46% to 95% after 72 hours of retention time. The overall gold recovery by gravity + cyanidation of the gravity tailings was then calculated and showed results ranging from 63% to 94%.

Low results obtained triggered the investigation of an alternative flowsheet consisting of a gravity-flotation-regrind-flotation concentrate cyanidation. This alternative approach was based on the presumption that finely grinding a concentrate would ultimately liberate/expose additional gold for cyanide leaching. The alternative flowsheet did not however improve the gold recovery, and further optimization of the conditions for flotation and cyanide leaching should be considered.

KW3DGS is under the opinion that the results presented above can be used for underground input parameters estimation.

14. MINERAL RESOURCE ESTIMATE

The mineral resource estimate for the O'Brien Project (the "2019 MRE) herein was prepared by Kenneth Williamson, P.Geo., M. Sc., using all available information. The main objective of the mandate assigned by the issuer was to use the additional 2017-2019 drilling programs and the new litho-structural interpretation of the deposit to prepare a new Mineral Resource Estimate for the O'Brien project.

The 2019 resource area measures 2,130 m along strike (E-W), 540 m across and is reaching depth of 1,530 m below surface. The resource estimate is based on a compilation of historical and recent diamond drill holes and a litho-structural model constructed by KW3DGS.

The resources in the current estimate are not mineral reserves as they do not have demonstrated economic viability. The result of this study is a single mineral resource estimate for 63 gold-bearing zones. The estimate includes indicated and inferred resources for an underground scenario.

The effective date of this mineral resource estimate is July 15, 2019.

The 2019 MRE was prepared using GEOVIA GEMS v.6.8 ("GEMS") and, to a lesser extent, Paradigm GoCAD™ ("GoCAD"). GoCAD was used for general modelling purposes and for providing adapted exports of the litho-structural model into the GEMS platform. GEMS was used for the construction of mineralized solids, as well as for the block model construction, grade estimation (ID3 interpolation method) and resource reporting. Sensitivities to different interpolation methods were also performed in GEMS.

Basic and spatial statistics, capping, several validations were established using a combination of Microsoft Access 2016, GEMS, and Microsoft Excel 2016. The 3D semi-variogram study and the visual validation of the grade block model were performed in GEMS.

The main steps in the methodology were as follows:

- Compilation and validation of the drillhole database used in the current 2019 MRE;
- Creation of the topography and bedrock contact surfaces;
- Mineralized zones interpretation and modelling based on grade continuity and respecting their respective litho-structural context;
- Generation of drill hole intercepts for each mineralized zone;
- Capping study on assay data;
- Composite length analysis and Grade compositing;
- Density determination;
- Creation of the block model;
- Spatial statistics;
- Interpolation;
- Categorization of the resource and voids depletion; and
- Reporting

14.1 Drillhole Database

The GEMS diamond drill hole database contains 693 DDH (280 from underground and 413 from surface), of which, inside the resource estimate area. All 693 holes, together representing 147,363 m of drilling, were compiled and validated at the time of the estimate. Figure 14.1 present the location and extent of the 693 drillholes used in the current 2019 MRE resource database. The database covers the strike-length of the project at variable drill spacings ranging from 10 m to 60 m. The majority of the 693 holes include lithological, alteration and structural descriptions taken from drill core logs.

608 holes include gold assays, whereas the other 85 holes do not show any sample in the current 2019 MRE resource database. Note that many unsampled holes are either short holes and/or were drilled in overburden. The 608 sampled resource drillholes contain a total of 51,619 sampled intervals representing 48,081 m of drill core.

In addition to the basic tables of raw data, the GEMS database includes several tables of the calculated drillhole composites and wireframe solid intersections required for the statistical evaluation and resource block modelling.

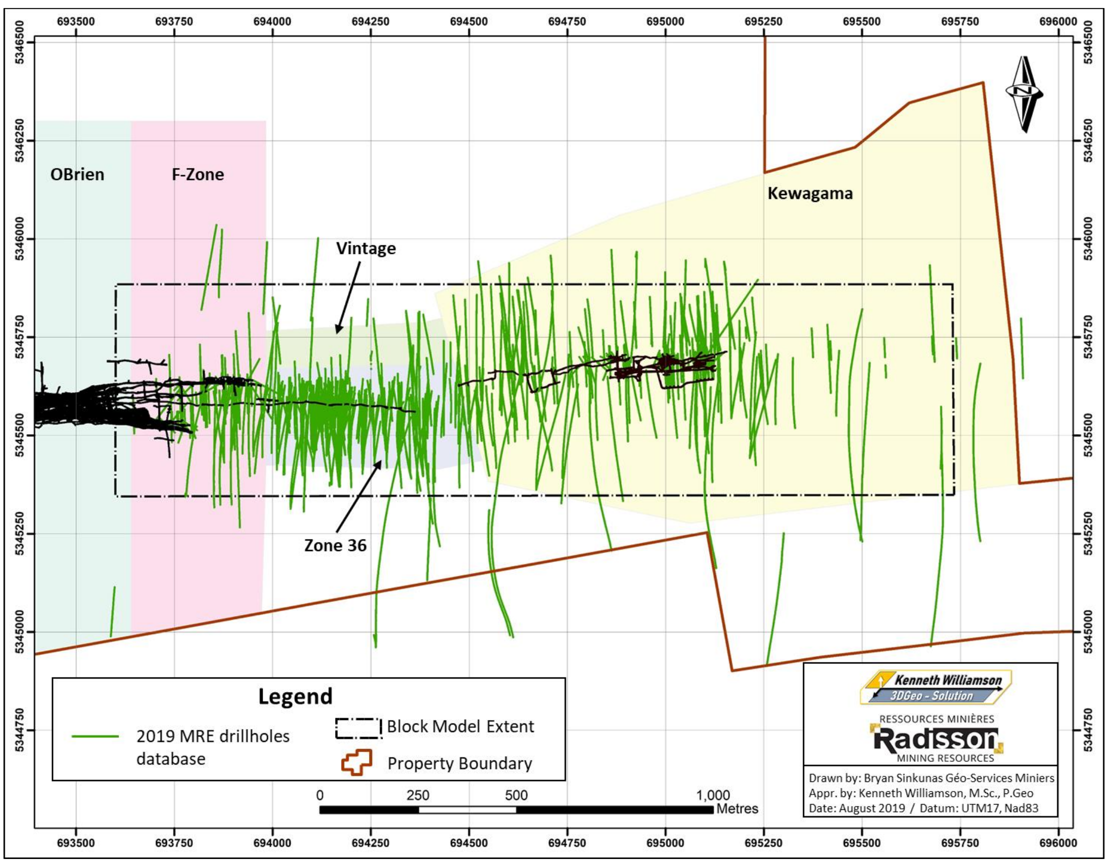

Figure 14.1 - Surface plan view of the validated diamond drillholes used for the 2019 MRE

14.2 Topography and bedrock contact model

The topography surface was created using a combination of drillhole collar positions. The modelling was done in GoCAD and ensured that collar positions were honored. The surface covers a much larger area than the MRE 2019 imprint to prevent modelling artifacts along the edges of the resource area. The final surface has been optimised and smoothed, and cleaned up of any remaining triangulation inconsistencies, either artificial or related to bad data.

The overburden contact was created using the position of the first occurrence of bedrock reported in the drillhole database. The modelling was done in GoCAD and ensured that collar positions were honored. The surface covers a much larger area than the MRE 2019 imprint to prevent modelling artifacts along the edges of the resource area. The final surface has been optimised and smoothed, and cleaned up of any remaining triangulation inconsistencies, either artificial or related to bad data.

A routine check was performed to ensure that there were no crossovers, and that a minimum distance of 0.1 m was preserved between the two surfaces.

A volume representing the unclassified overburden material was created from the topography and bedrock contact surfaces. Volumes representing the “air” and the “bedrock” were also created.

14.3 Interpretation of Mineralized Zones

The 2019 model is the result of a complete review of historical data combined with new holes from the 2015-2017 drilling programs. The 2019 mineralized zones model honors as best as possible all of the geometrical constraints, such as preferential orientation of structures and lithological contacts geometry, imposed by the new litho-structural interpretation (see Item 7.5). From the several mineralized trends interpreted, KW3DGS created a total of 63 mineralized solids that honour the drill hole database. The mineralized solids can be regrouped on the basis of their general orientation; four (4) groups are recognized: ENE-trending, ESE-trending, EW-trending and NE-trending zones. The overall geometry and distribution of the mineralized zones within the model reflects the specific structural style of the deposit as suggested by the new litho-structural interpretation. Figure 14.2 presents a 3D view of the 63 mineralized solids, colored in function of their mean orientation.

The first phase of interpretation of the mineralized zones, realized in GoCAD, was a first attempt at generating conceptual mineralized reference planes. These planes were preliminary and were not honoring the resource drillhole data. The conceptual planes were optimized as much as possible using the litho-structural model as well as structural information from drillhole logs. This created the skeleton of the litho-structurally controlled mineralized zone network model. The conceptual reference planes were then exported to GEMS.

The second phase of the interpretation required a non-linear approach where, because of a possible mutual crosscutting relationship, multiple possibilities had to be investigated before composites could be attributed a mineralized zone designation. Such a manual and intense interpretation allowed to optimize spatial and grade continuity of the mineralized zones, while respecting litho-structural constraints imposed by the latter model.

The 3D mineralized zones were created using GEMS, from the manual design of 3D rings on 25 metre-spaced sections and 3D tie lines. For a given zone, all of the required 3D rings were first designed on 2D sections and the overall shape of the zone was reviewed in 3D view. Adjustments to the global were made where appropriate and the 3D rings were then snapped to the drillholes, using the assays' intervals as controlling points.

Maintaining a minimum true thickness of 1.5 m was achieved by selecting the appropriate number of down-hole samples in function of the "attack angle" of the hole going through the zone. While modeled to maximize their spatial continuity, the solids extent was constrained by the presence of "dead holes", in which case the extent corresponds to mid-point between the closest mineralized intersect and that barren one. This rule has not been applied to cases where the presence of a barren area can be explained by its geological context. In the absence of drillhole information or other limiting factor (surface, underground voids amongst others), "unconstrained" boundaries were given a maximum of 50 m from the last closest mineralized intersect.

Tie lines were generated in 3D view, in a number of iterations, to ensure that the final solid had no bad triangulation. The final solid was then verified for errors, and its volume was retrieved and compiled for later validation purposes. The solids were then attributed a unique rock code; therefore, defining their respective color, density and block model code designation, amongst others.

Figure 14.2 presents a 3D view of the 63 mineralized solids, colored in function of their mean orientation. Figure 14.3 presents 2D plan views at A) 170 m and B) -153 m elevation showing the relationships between the litho-structural interpretation and the geometry and localisation of the mineralized zones.

Table 14.1 presents some of the general characteristics of the mineralized zones.

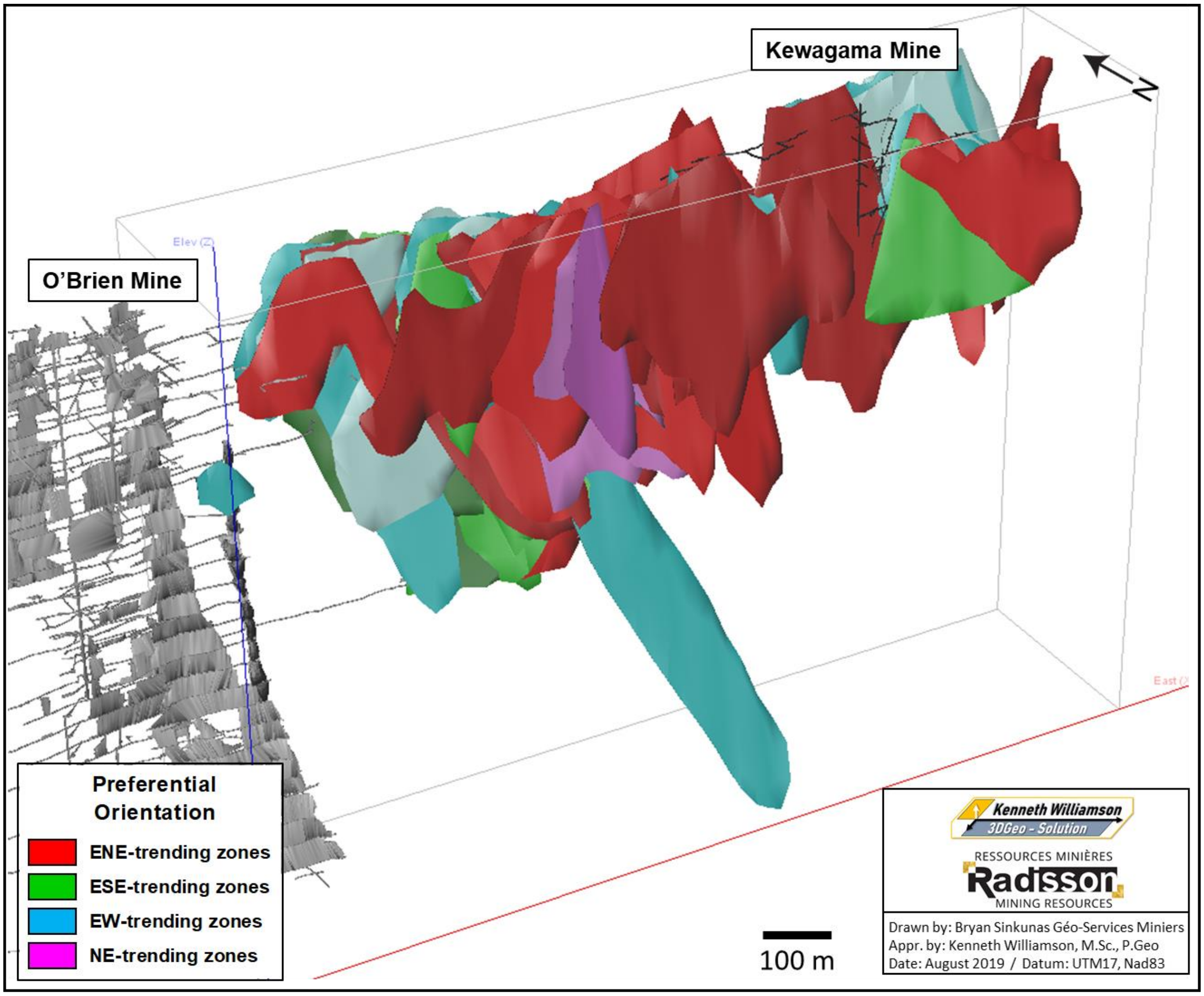

Figure 14.2 - 3D view of the 63 mineralized solids, looking northeast

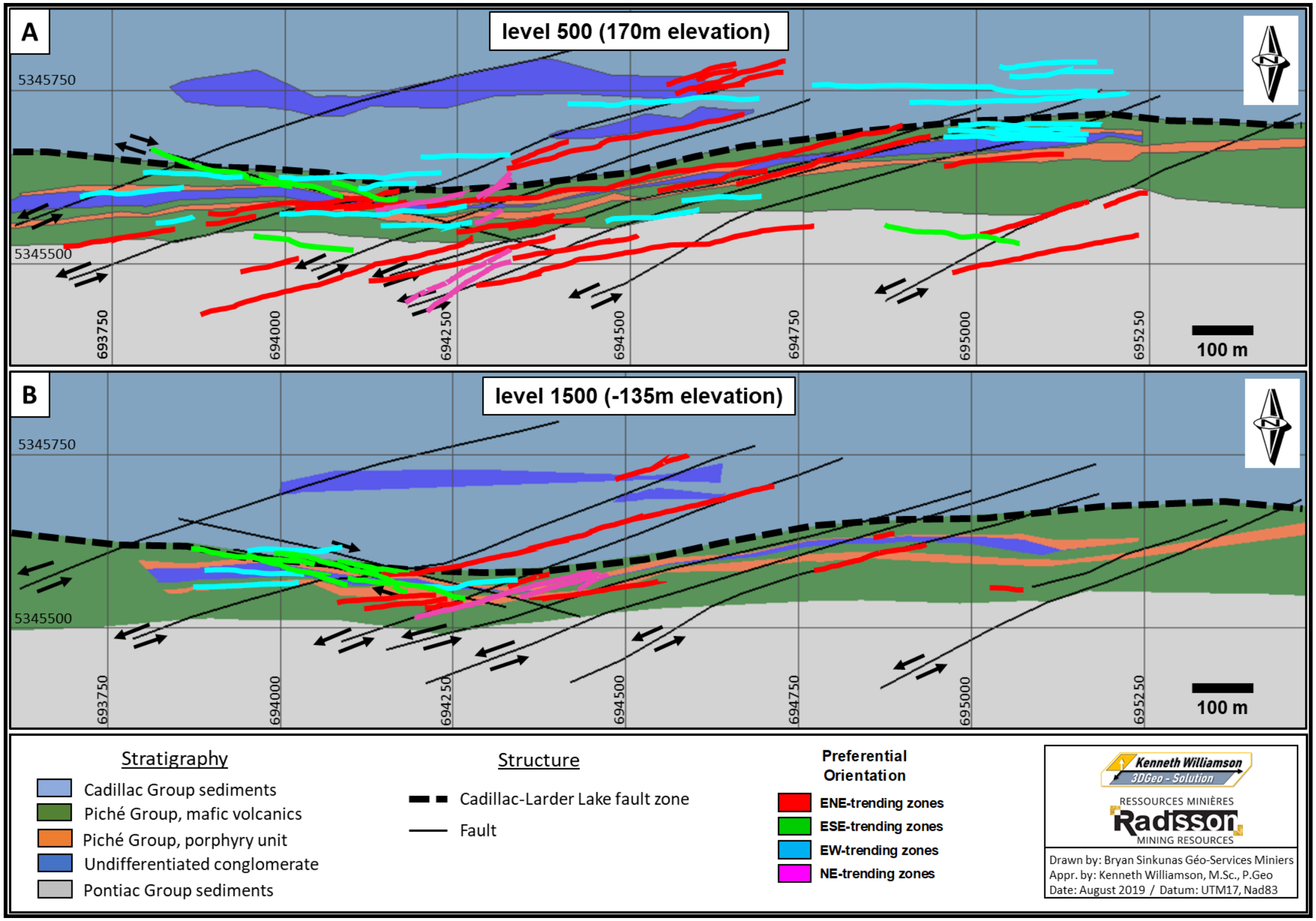

Figure 14.3 - 2D plan views illustrating the current mineralized zones interpretation

Table 14.1 - General characteristics of the mineralized zones

NAME	WORKSPACE	GEMS SOLID NAME			VOLUME	ROCKCODE	FOLDER	GEOMETRY	BLOCKCODE	PRECEDENCE
		NAME1	NAME2	NAME3	(m^3 X 1000)					
101	Min_Zones	ZONE	MRE2019	101	166.499	101	A	ENE	101	101
102	Min_Zones	ZONE	MRE2019	102	68.001	102	B	NE	102	102
103	Min_Zones	ZONE	MRE2019	103	91.882	103	B	NE	103	103
104	Min_Zones	ZONE	MRE2019	104	180.025	104	A	ENE	104	104
105	Min_Zones	ZONE	MRE2019	105	322.523	105	A	ENE	105	105
106	Min_Zones	ZONE	MRE2019	106	94.609	106	A	ENE	106	106
107	Min_Zones	ZONE	MRE2019	107	66.677	107	B	ESE	107	107
108	Min_Zones	ZONE	MRE2019	108	32.636	108	A	ENE	108	108
109	Min_Zones	ZONE	MRE2019	109	20.94	109	A	ENE	109	109
110	Min_Zones	ZONE	MRE2019	110	98.951	110	B	ENE	110	110
111	Min_Zones	ZONE	MRE2019	111	69.128	111	A	ENE	111	111
112	Min_Zones	ZONE	MRE2019	112	36.941	112	B	EW	112	112
113	Min_Zones	ZONE	MRE2019	113	92.781	113	A	ENE	113	113
114	Min_Zones	ZONE	MRE2019	114	62.868	114	A	EW	114	114
115	Min_Zones	ZONE	MRE2019	115	191.11	115	A	EW	115	115
116	Min_Zones	ZONE	MRE2019	116	10.088	116	A	EW	116	116
117	*Min_Zones*					*117*			*117*	*117*
118	Min_Zones	ZONE	MRE2019	118	49.88	118	A	EW	118	118
119	Min_Zones	ZONE	MRE2019	119	11.872	119	B	EW	119	119
120	Min_Zones	ZONE	MRE2019	120	31.977	120	C	NE	120	120
121	Min_Zones	ZONE	MRE2019	121	86.442	121	A	ENE	121	121
122	Min_Zones	ZONE	MRE2019	122	71.489	122	B	ESE	122	122
123	Min_Zones	ZONE	MRE2019	123	64.144	123	D	EW	123	123
124	Min_Zones	ZONE	MRE2019	124	184.495	124	A	EW	124	124
125	Min_Zones	ZONE	MRE2019	125	151.454	125	B	EW	125	125
126	Min_Zones	ZONE	MRE2019	126	71.685	126	A	EW	126	126
127	Min_Zones	ZONE	MRE2019	127	55.166	127	B	EW	127	127
128	Min_Zones	ZONE	MRE2019	128	112.599	128	A	EW	128	128
129	Min_Zones	ZONE	MRE2019	129	93.118	129	B	EW	129	129
130	Min_Zones	ZONE	MRE2019	130	62.011	130	B	ENE	130	130
131	Min_Zones	ZONE	MRE2019	131	160.808	131	C	EW	131	131
132	Min_Zones	ZONE	MRE2019	132	61.448	132	A	ENE	132	132
133	Min_Zones	ZONE	MRE2019	133	122.199	133	B	ENE	133	133
134	Min_Zones	ZONE	MRE2019	134	38.379	134	A	ENE	134	134
135	Min_Zones	ZONE	MRE2019	135	503.49	135	A	ENE	135	135
136	Min_Zones	ZONE	MRE2019	136	39.649	136	A	EW	136	136
137	Min_Zones	ZONE	MRE2019	137	47.014	137	B	ENE	137	137
138	Min_Zones	ZONE	MRE2019	138	17.522	138	A	EW	138	138
139	Min_Zones	ZONE	MRE2019	139	49.83	139	C	EW	139	139
140	Min_Zones	ZONE	MRE2019	140	99.758	140	A	EW	140	140
141	Min_Zones	ZONE	MRE2019	141	96.494	141	B	ENE	141	141
142	Min_Zones	ZONE	MRE2019	142	252.904	142	C	ENE	142	142
143	Min_Zones	ZONE	MRE2019	143	415.677	143	A	ENE	143	143
144	Min_Zones	ZONE	MRE2019	144	75.505	144	B	EW	144	144
145	Min_Zones	ZONE	MRE2019	145	134.759	145	C	EW	145	145
146	Min_Zones	ZONE	MRE2019	146	107.576	146	A	ENE	146	146
147	Min_Zones	ZONE	MRE2019	147	70.853	147	A	ENE	147	147
148	Min_Zones	ZONE	MRE2019	148	17.831	148	B	ENE	148	148
149	Min_Zones	ZONE	MRE2019	149	117.893	149	B	ESE	149	149
150	Min_Zones	ZONE	MRE2019	150	235.435	150	C	ESE	150	150
151	Min_Zones	ZONE	MRE2019	151	218.332	151	C	ESE	151	151
152	Min_Zones	ZONE	MRE2019	152	72.896	152	B	ESE	152	152
153	Min_Zones	ZONE	MRE2019	153	162.261	153	A	EW	153	153
154	Min_Zones	ZONE	MRE2019	154	109.425	154	D	ESE	154	154
155	*Min_Zones*					*155*			*155*	*155*
156	Min_Zones	ZONE	MRE2019	156	212.055	156	B	ENE	156	156
157	Min_Zones	ZONE	MRE2019	157	297.287	157	D	EW	157	157
158	Min_Zones	ZONE	MRE2019	158	147.534	158	B	NE	158	158
159	Min_Zones	ZONE	MRE2019	159	79.749	159	A	ENE	159	159
160	Min_Zones	ZONE	MRE2019	160	131.274	160	D	ENE	160	160
161	Min_Zones	ZONE	MRE2019	161	59.048	161	D	NE	161	161
162	Min_Zones	ZONE	MRE2019	162	57.834	162	C	NE	162	162
163	Min_Zones	ZONE	MRE2019	163	56.96	163	A	ENE	163	163
164	Min_Zones	ZONE	MRE2019	164	37.205	164	A	EW	164	164
165	Min_Zones	ZONE	MRE2019	165	63.183	165	B	EW	165	165

14.4 Drillhole Intersects and High Grade Capping

A table of intervals where drillholes are intersecting the mineralized solids was created using GEMS. A total of 5,271 intersects were created, from which 1,689 are mineralized intersects were created from the 63 mineralized solids. The mineralized intersects show an average length of 3.0 m. No intersect are shorter than 1.5 m, and a few exceed the 10 m mark reaching up to 14 m.

In case the of drillholes having wedges, the common portion of the mother hole was manually removed to avoid creation of 0.00 g/t Au grade artificial composites.

From the intersect table, a cross-reference transfer data was performed towards the assay table. Every assay contained within a given mineralized intersect were assigned the rock code of that specific mineralized zone. A total of 4,901 samples were thus flagged with the mineralized zone code.

Basic univariate statistics were then performed on the mineralized zones raw assay dataset. From this statistical analysis, and considering previous studies and the mineralization style of the historical O'Brien deposit, a capping grade of 60.0 g/t Au was selected.

A total of 45 samples from the mineralized zones were capped, which corresponds to 0.92% of all mineralized zone related samples within the block model.

Figure 14.4 present graphs supporting the capping values.

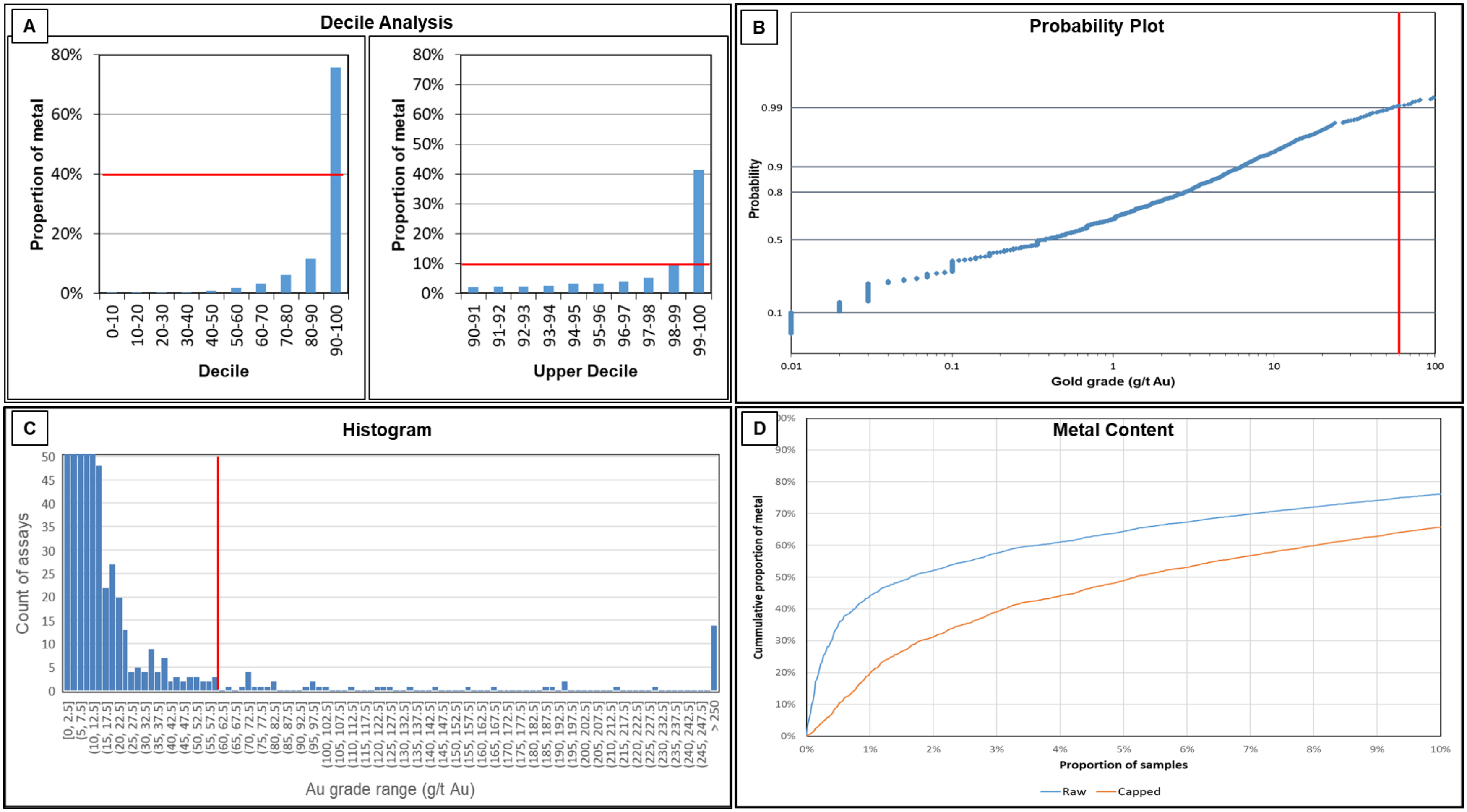

Figure 14.4 - Different graphs supporting a capping grade of 60 g/t Au for the mineralized zones

14.5 Compositing

In order to minimize any bias introduced by the variable sample lengths, the capped gold assays of the DDH data were composited to 1.50 m within all intervals that define each of the mineralized zones. Tails, composites shorter than 1.30 m were redistributed to the composites within a given interval. The total number of composites in the DDH dataset is 92,231; which includes 86,484 composites created within the bedrock volume, and 5,747 composites within the mineralized intervals. A grade of 0.00 g/t Au was assigned to uncalculated composites created when samples are missing within the intervals.

Table 14.2 presents the basic statistics for the gold composites.

Table 14.2 - Summary statistics for the composites

Zone	Number of Composites	Max Grade (g/t Au)	Mean Grade (g/t Au)	Standard Deviation	Zone	Number of Composites	Max Grade (g/t Au)	Mean Grade (g/t Au)	Standard Deviation
101	139	14.65	0.62	2.32	134	21	7.55	0.96	1.98
102	54	14.94	0.74	2.39	135	111	27.92	1.35	4.11
103	50	47.86	2.44	9.61	136	4	8.34	2.86	3.77
104	135	22.18	0.40	2.09	137	22	9.36	0.65	2.13
105	109	9.81	0.73	1.86	138	36	7.50	1.29	1.99
106	53	2.68	0.31	0.59	139	52	30.08	2.12	5.30
107	38	10.45	0.56	1.83	140	97	30.85	1.20	3.66
108	18	3.13	0.57	1.15	141	73	8.33	1.47	2.13
109	48	18.08	1.93	4.32	142	50	12.55	1.31	2.32
110	105	30.48	0.79	3.32	143	142	59.80	3.01	7.98
111	43	31.79	2.78	6.56	144	25	9.29	1.56	2.34
112	54	9.33	1.01	1.77	145	150	28.49	1.57	3.28
113	25	19.99	1.57	4.00	146	17	10.03	1.53	2.61
114	11	3.56	1.20	1.30	147	17	12.50	1.75	3.33
115	110	10.83	2.12	2.59	148	6	11.50	2.86	4.48
116	1	6.38	6.38		149	16	13.24	2.27	3.79
118	16	18.17	2.67	5.13	150	141	46.19	3.25	6.64
119	9	22.75	7.43	7.88	151	87	11.29	2.05	2.72
120	21	9.84	2.62	2.72	152	21	13.85	4.61	4.98
121	20	11.17	3.47	3.73	153	50	20.17	2.97	4.86
122	52	19.90	1.47	3.92	154	71	37.16	2.94	5.33
123	92	20.19	1.38	3.47	156	132	36.66	1.76	4.18
124	58	7.40	0.83	1.44	157	72	8.23	1.01	1.68
125	57	10.37	0.92	2.09	158	110	20.20	1.26	2.95
126	39	8.06	0.84	1.79	159	85	28.57	1.93	4.36
127	23	10.00	0.83	2.10	160	109	35.91	1.42	3.93
128	117	46.96	2.12	5.68	161	33	11.50	1.61	2.62
129	89	40.04	1.90	5.02	162	24	25.27	2.47	5.87
130	21	7.08	1.30	2.16	163	26	8.41	1.05	1.84
131	35	22.29	2.20	4.05	164	15	13.88	1.62	3.68
132	26	7.72	1.42	2.13	165	15	11.71	2.00	3.09
133	30	16.56	1.85	3.63	500	86484	60.00	0.10	0.70

14.6 Density

The drill hole database contains limited information on density.

2018 MRE used a density of 2.75 g/cm^3 (Beausoleil, 2018). The calculation was largely based on the proportion of different minerals found within the mineralized intervals, and a weighted-average was calculated. Radisson has compiled some 207 density measurements, realized "in-house" on selected pieces of core.

Table 14.3 presents the results obtained. In light of these results, an overall density of 2.82 g/cm^3 was selected and applied to all rock material in the current mineral resource estimate.

Table 14.3 - Density measured on different rock types.

DOMAIN	BLOCK CODE	LITHO_SIMPLE	COUNT	MIN	MAX	AVERAGE	STD DEV	VAR
MINERALIZED ZONE	104	SEDS	1	2.76	2.76	2.76	nc	nc
	115	MAFIC	3	2.80	2.90	2.84	0.06	0.00
	135	SEDS-CAD	1	2.82	2.82	2.82	nc	nc
	142	PORPHYRE	1	2.81	2.81	2.81	nc	nc
	144	PORPHYRE	1	2.78	2.78	2.78	nc	nc
	151	MAFIC	1	3.13	3.13	3.13	nc	nc
	152	PORPHYRE	1	2.75	2.75	2.75	nc	nc
	153	MAFIC	1	2.85	2.85	2.85	nc	nc
	156	MAFIC	1	2.79	2.79	2.79	nc	nc
	ALL	**ALL**	**11**	**2.75**	**3.13**	**2.84**	**0.10**	**0.01**
BEDROCK	500	BIF	3	2.77	2.92	2.86	0.08	0.01
		CHERT	4	2.72	3.10	2.82	0.19	0.03
		GABBRO	2	2.91	3.23	3.07	0.23	0.05
		MAFIC	47	2.69	3.30	2.87	0.12	0.02
		PORPHYRE	22	2.57	3.13	2.78	0.14	0.02
		SEDS	33	2.58	3.09	2.82	0.10	0.01
		SEDS-CAD	48	2.58	3.51	2.82	0.15	0.02
		SEDS-PON	13	2.70	2.96	2.78	0.07	0.00
		ULTRAMAFIC	11	2.74	2.89	2.83	0.05	0.00
		VNQZ	13	2.50	2.88	2.73	0.12	0.01
	ALL	**ALL**	**196**	**2.50**	**3.51**	**2.82**	**0.13**	**0.02**
GLOBAL	**ALL**	**ALL**	**207**	**2.50**	**3.51**	**2.82**	**0.13**	**0.02**

A density of 2.00 g/cm^3 was assigned to overburden, 1.00 g/cm^3 was assigned to underground workings, and 0.00 g/cm^3 was assigned to the air volume.

Bulk densities were used to calculate tonnes from the volumes estimated in the resource-grade block model.

14.7 Block Model

A block model was established for the mineralized zones and dilution envelopes. The block model covers an area sufficiently large to host an open-pit if necessary. The model has been pushed down to a depth of approximately 1,700 m below surface. The block model was not rotated (Y-axis oriented along a N000 azimuth). Block dimensions reflect the sizes of mineralized zones and plausible mining methods. Table 14.4 presents the physical properties of the block model.

Table 14.4 - Block model properties

Coordinates	X	Y	Z Max	Z Min
Corner SW	693,600	5,345,345	350	-1180
Corner NW	693,600	5,345,885	350	-1180
Corner NE	695,730	5,345,885	350	-1180
Corner SE (origin)	695,730	5,345,345	350	-1180
Rotation	**X**	**Y**	**Z**	
Rotation	N/A	N/A	N/A	
Block Model properties	**Columns**	**Rows**	**Levels**	**TOTAL**
Number of blocks	710	180	510	65,178,000
Block Size	3	3	3	
Dimension (m)	2,130	540	1,530	
Volume (m^3)				1,759,806,000

A multi-folder percent block model was generated, reflecting the proportion of each block inside every solid (all mineralized zones, bedrock volume, overburden volume, air volume). The block model was coded with the Rock Type and Percent attributes using these volumes. All blocks with more than 0.01% of their volume falling within a selected solid were assigned the corresponding solid block code and their percentage was calculated. The solid’s precedence was respected during the process.

Table 14.1 provides details about the naming convention of the corresponding GEMS solids, as well as the rock codes, block codes, the block model folder and the precedence assigned to each individual solid.

Several attributes were created within the block model in order to handle data generated during the interpolation process. Table 14.5 provides the description of each of the attributes found in the 2019 MRE block model.

Table 14.5 - Attributes created within the 2019 MRE block model

Attribute	Description
Rock Type	Corresponds to the solid's block code
Density	Density in g/cm^3
Percent	Percentage of volume
AU	Interpolated raw gold grade (g/t Au)
AUC	Interpolated capped gold grade (g/t Au)
CAT	Resource category
AVG_DIST	Average distance to composites used
CLST_DIST	Distance to the closest composite used
NB_COMP	Number of composites used
NB_DDH	Number of drillholes used
PASS	Interpolation pass
PCT_CHECK	Cummulative percentage from all folders
VOID	Binary flag for the underground voids

14.8 Variography and Search Ellipsoids

Due to the narrow-vein and planar nature of the interpreted mineralized zones, 3D semi-variograms analysis of a given zone was largely biased by the geometry of the zone itself. The mineralized zones were grouped into eight (8) groups, based on the azimuth and dip of their respective mid-plane (Table 14.6). Corresponding search ellipsoids were created in GEMS. A plunge of 80 degrees to the east as been attributed to all the ellipsoids in order to respect the structural control on high-grade mineralized shoots interpreted from the litho-structural model work.

Table 14.6 - Orientation and size of the search ellipsoids used in 2019 MRE.

Ellipsoid Name	Zone Mid-Plane		Ellipsoid Gometry					
	Azimuth	Dip	Z	X	Z	Major	Semi-Major	Minor
A	65	70	25	70	-80	150	100	20
B	65	85	25	85	-80	150	100	20
C	80	70	10	70	-80	150	100	20
D	80	80	10	80	-80	150	100	20
E	95	70	-5	70	-80	150	100	20
F	95	80	-5	80	-80	150	100	20
G	105	85	-15	85	-80	150	100	20
H	70	90	20	90	-80	150	100	20

The 3D semi-variogram analysis has been used to define the search ranges of the different ellipsoids. However, due to limited number of samples available in most of the zones (see Table 14.2), the statistical significance of the analysis is questionable. Search ranges should allow for the interpolation strategy to work properly; in such way that ranges are set to be large enough to capture the optimal number of samples during the search.

Because drillholes' distribution is uneven across the property, showing drillholes as close as 15 m to each other in Zone 36 East and as widely spaced as 75 m in other areas, a range of 150 m x 100 m x 20 m as been attributed to the major, semi-major and minor axis respectively to all search ellipsoids.

Table 14.7 presents the search ellipsoid used for each of the mineralized zones. Figure 14.5 presents a visual example of the search ellipsoid orientation and ranges with respect to mineralized zones and to the distribution of the drillhole pierce points.

Table 14.7 - Search ellipsoids for the different mineralized zones in 2019 MRE.

ZONE	Mid-plane		Ellipsoid Gometry			Ellipsoid Name	ZONE	Mid-plane		Ellipsoid Gometry			Ellipsoid Name
	Azimuth	Dip	Z	X	Z			Azimuth	Dip	Z	X	Z	
102	65	85	25	85	-80	P1_B	134	70	90	20	90	-80	P1_B
103	60	85	30	85	-80	P1_B	135	75	85	15	85	-80	P1_D
104	75	85	15	85	-80	P1_D	136	90	85	0	85	-80	P1_F
105	80	85	10	85	-80	P1_D	137	70	85	20	85	-80	P1_B
106	80	85	10	85	-80	P1_D	138	85	85	5	85	-80	P1_D
107	90	85	0	85	-80	P1_F	139	90	75	0	75	-80	P1_E
108	80	80	10	80	-80	P1_D	140	90	75	0	75	-80	P1_E
109	75	80	15	80	-80	P1_D	141	85	70	5	70	-80	P1_C
110	80	75	10	75	-80	P1_C	142	75	80	15	80	-80	P1_D
111	80	80	10	80	-80	P1_D	143	80	80	10	80	-80	P1_D
112	90	80	0	80	-80	P1_F	144	90	80	0	80	-80	P1_F
113	80	85	10	85	-80	P1_D	145	90	80	0	80	-80	P1_F
114	85	85	5	85	-80	P1_D	146	80	80	10	80	-80	P1_D
115	90	85	0	85	-80	P1_F	147	75	80	15	80	-80	P1_D
116	85	80	5	80	-80	P1_D	148	75	80	15	80	-80	P1_D
117							149	100	85	-10	85	-80	P1_F
118	85	80	5	80	-80	P1_D	150	105	85	-15	85	-80	P1_G
119	90	70	0	70	-80	P1_E	151	105	85	-15	85	-80	P1_G
120	65	70	25	70	-80	P1_A	152	100	85	-10	85	-80	P1_F
121	80	75	10	75	-80	P1_C	153	90	80	0	80	-80	P1_F
122	100	85	-10	85	-80	P1_F	154	105	85	-15	85	-80	P1_G
123	90	75	0	75	-80	P1_E	*155*						
124	85	80	5	80	-80	P1_D	156	85	80	5	80	-80	P1_D
125	90	85	0	85	-80	P1_F	157	85	80	5	80	-80	P1_D
126	85	85	5	85	-80	P1_D	158	75	75	15	75	-80	P1_C
127	90	85	0	85	-80	P1_F	159	80	75	10	75	-80	P1_C
128	90	80	0	80	-80	P1_F	160	85	80	5	80	-80	P1_D
129	90	75	0	75	-80	P1_E	161	65	70	25	70	-80	P1_A
130	160	90	-70	90	-80	P1_H	162	75	75	15	75	-80	P1_C
131	90	85	0	85	-80	P1_F	163	75	75	15	75	-80	P1_C
132	75	90	15	90	-80	P1_D	164	85	85	5	85	-80	P1_D
133	70	90	20	90	-80	P1_B	165	85	80	5	80	-80	P1_D

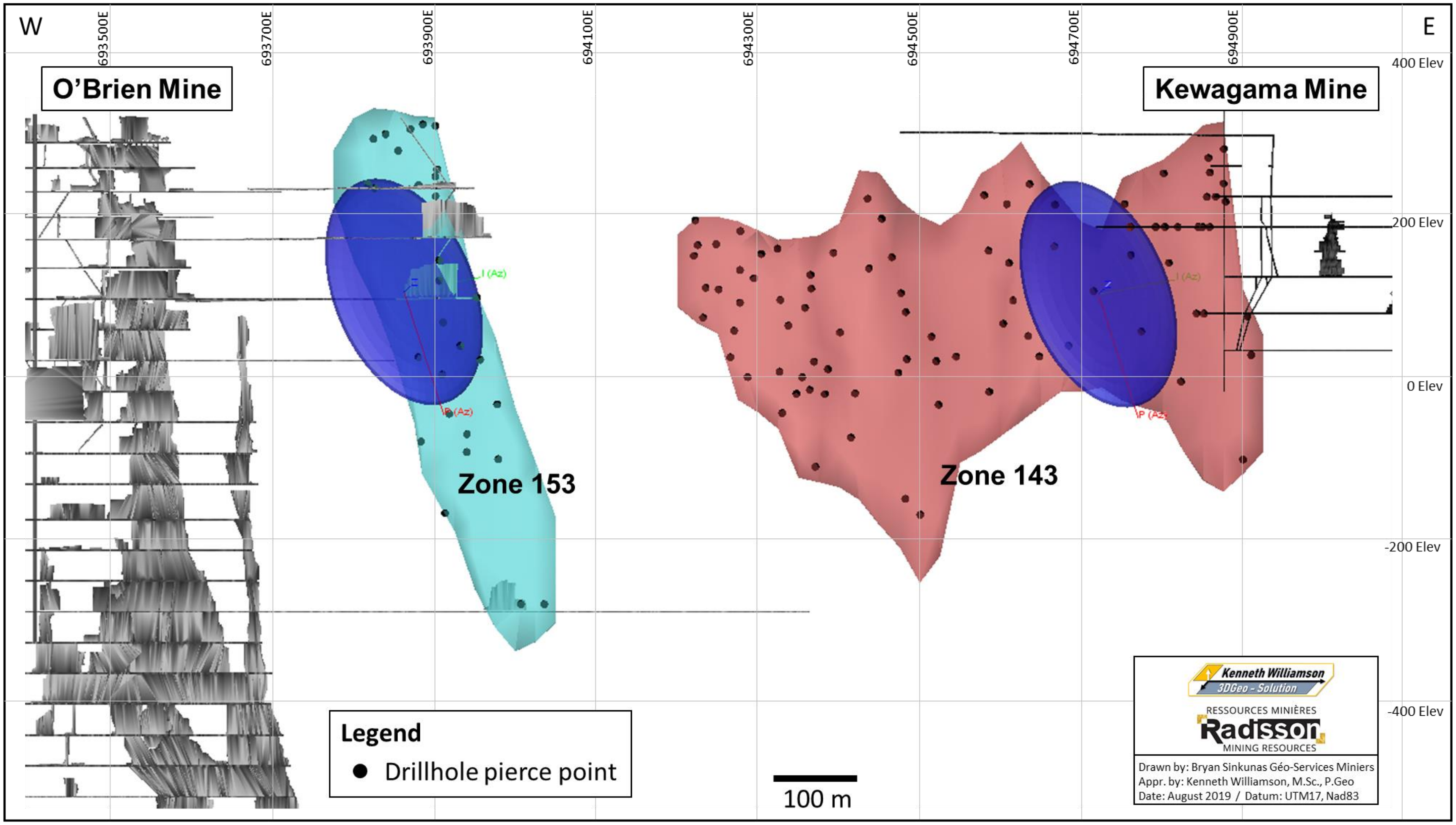

Figure 14.5 - Longitudinal view showing the search ellipsoid geometry and ranges with respect to the spacing between drillhole pierce points within mineralized zones.

14.9 Grade Interpolation

The interpolation of capped gold grade was run on a point area workspace extracted from the composite dataset.

The interpolation profiles were customized to estimate grades separately for each of the mineralized zones (hard boundaries). The interpolation profiles were prepared to include important attributes calculated during the process (see Table 14.5).

The mineralized zone blocks were estimated using an inverse distance cubed (ID3) method and an interpolation strategy utilizing a single pass approach. GEMS always use the maximum amount of data available during the estimate. Within the search ellipsoid, the interpolation strategy was querying for a minimum of 1 composite and up to a maximum of 6 composites, with a maximum of 2 composites allowed from a given hole.

The interpolation strategy selected aimed at obtaining the following results:

- In well drilled areas, the maximum number of composites is obtained after using 3 to 4 drillholes.
- Along the periphery of a zone, where the density of drillholes is low, the number of drillhole used can decrease to 1 hole with only 1 composite.
- Grade smearing is controlled by the mineralized zone wireframe model.
- Using a single pass interpolation will not flag blocks outside of the search ellipsoid;
- Other than generating some specific attributes, the approach does not have any impact of the final resource category.

Table 14.8 summarizes the parameters used for the grade estimation.

Table 14.8 - Resource model estimation parameters

Area	Pass	Search Radius (m)			Number of composites			Estimation Method
		Major	S-Major	Minor	Min	Max	Max/ Hole	
Mineralized zones	1	150	100	20	1	6	2	ID3

14.10 Mineral Resource Classification

14.10.1 Mineral resource classification definition

The resource classification definitions used for this report are those published by the Canadian Institute of Mining, Metallurgy and Petroleum in their document "CIM Definition Standards for Mineral Resources and Reserves".

Measured Mineral Resource: that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Indicated Mineral Resource: that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Inferred Mineral Resource: that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.

14.10.2 Mineral resource classification for the O'Brien Project

Measured resources (category 1) were not defined within the current 2019 MRE.

By default, all interpolated blocks were classified as Inferred resource category (category 3).

Reclassification of block to an Indicated Resource (category 2) has been based on the analysis of the different attributes generated during the interpolation process, and generally followed the following zone by zone approach:

- Clipping boundaries were first created in longitudinal views showing the Closest Distance to Composite attribute (Figure 14.6); a 25-30 m distance threshold was used, while keeping in mind that a significant cluster of blocks would be necessary to obtain an indicated resource, to outline the clipping boundary.
- The initial clipping boundary was then compared to the Average Distance of Composites used (Figure 14.7);
- The initial clipping boundary was then compared to the Number of Drillholes Used (Table 14.8), to ensure that the Indicated Resource classification relied on data from a minimum of two (3) distinct holes.
- Blocks contained within the clipping boundary were reclassified as Indicated Resource (Figure 14.9); and
- A final visual verification of the clipping boundary against gold grade distribution was finally performed (Figure 14.10).

In some areas, interpolated blocks remained unclassified due to the lack of confidence in grade and/or continuity. This mainly occurs where drill spacing is too wide or for blocks that are too close to the former O'Brien mine for which the compilation and validation work is incomplete.

Figure 14.11 presents an isometric view of all categorized blocks in the 2019 MRE.

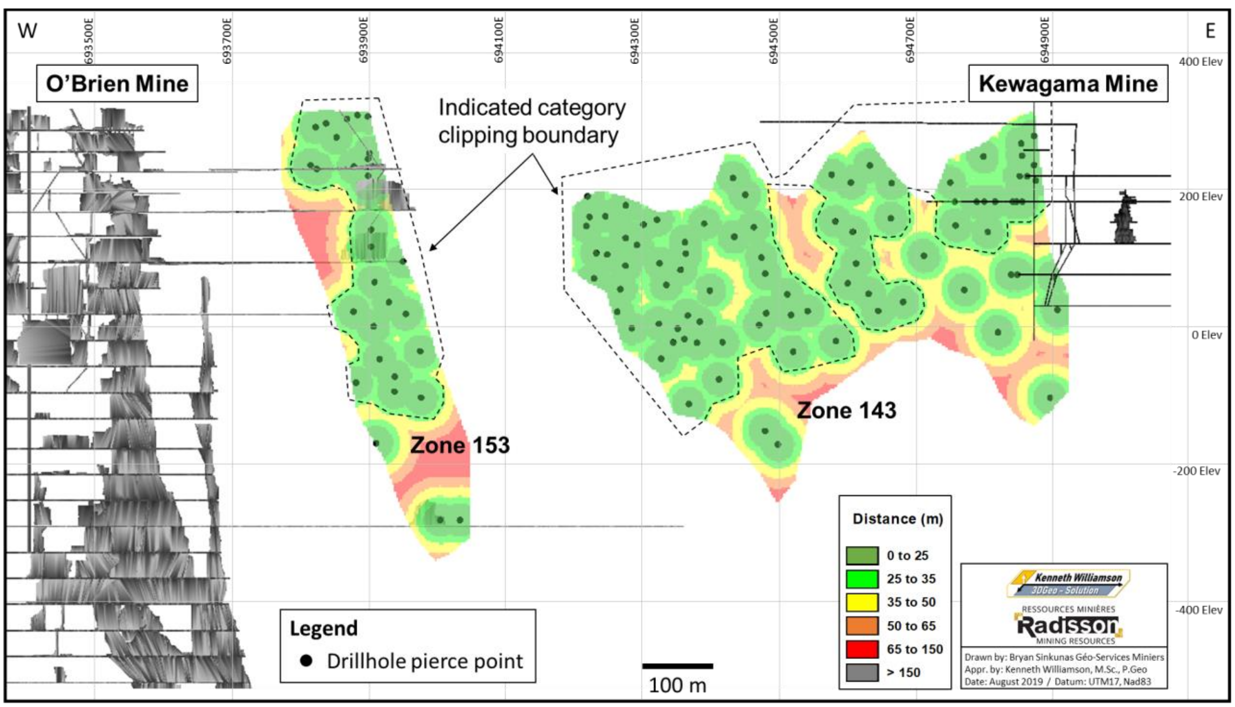

Figure 14.6 - Closest Distance to Composite

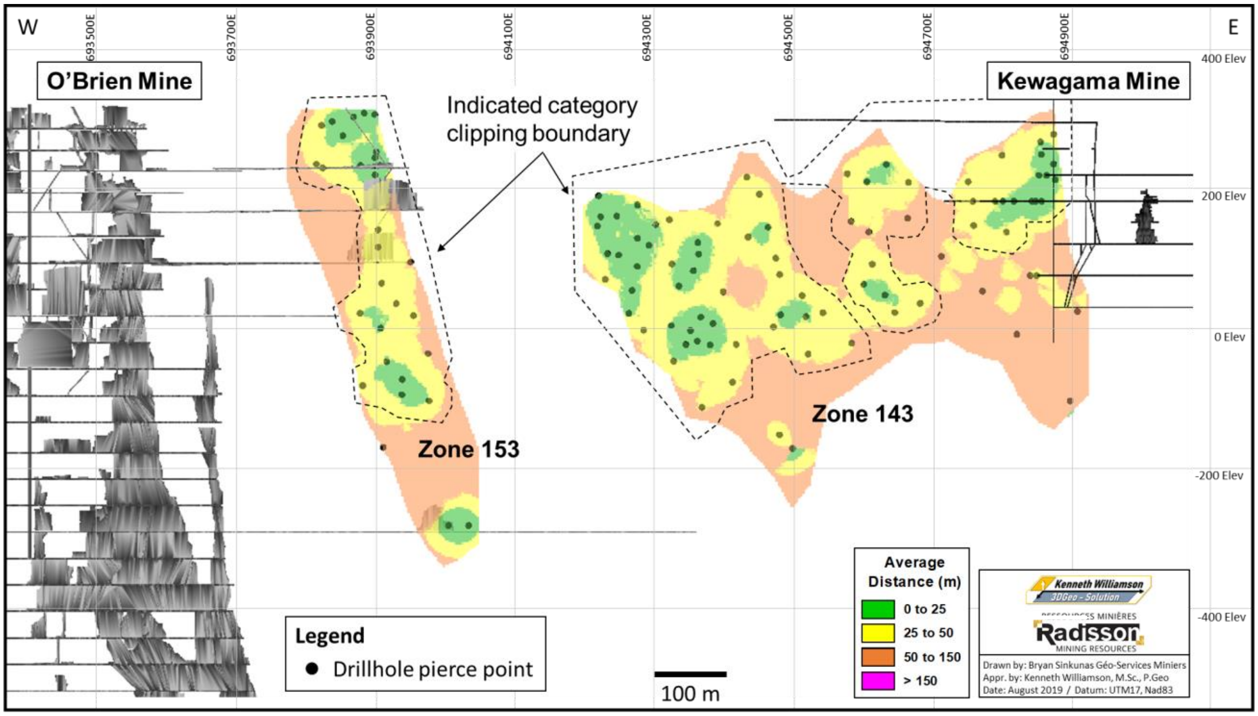

Figure 14.7 - Average Distance of Composites.

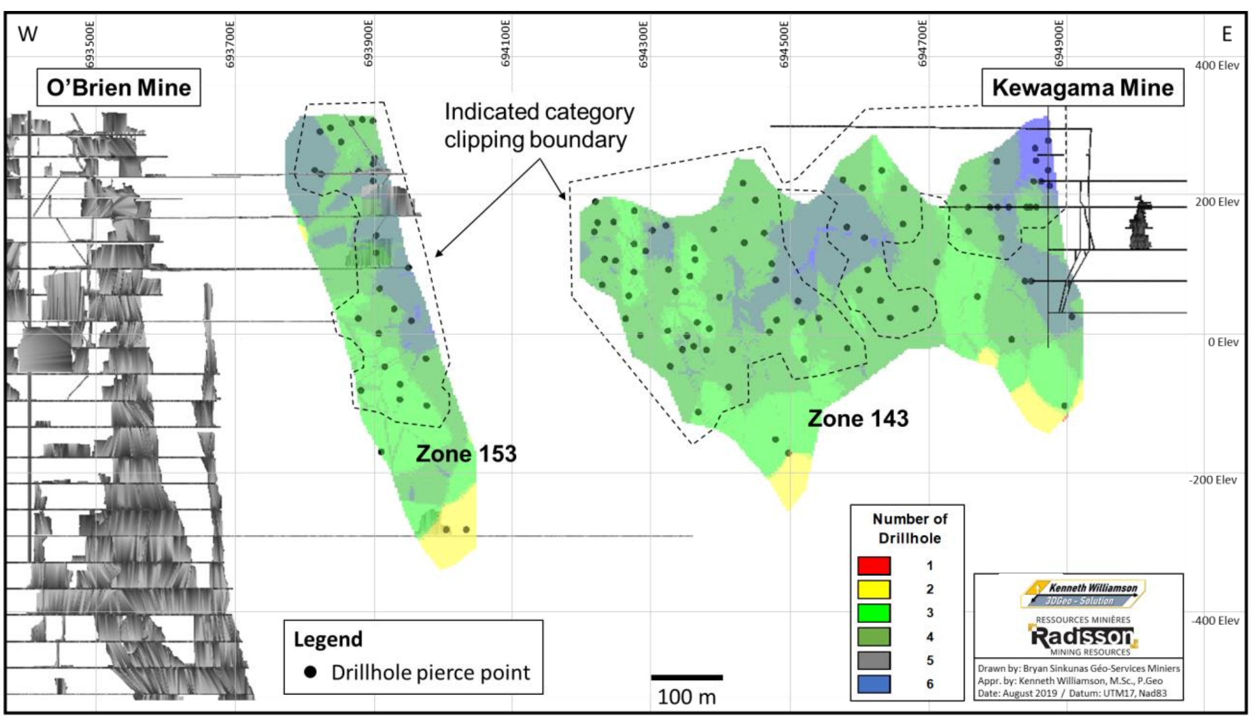

Figure 14.8 - Number of Drillholes Used

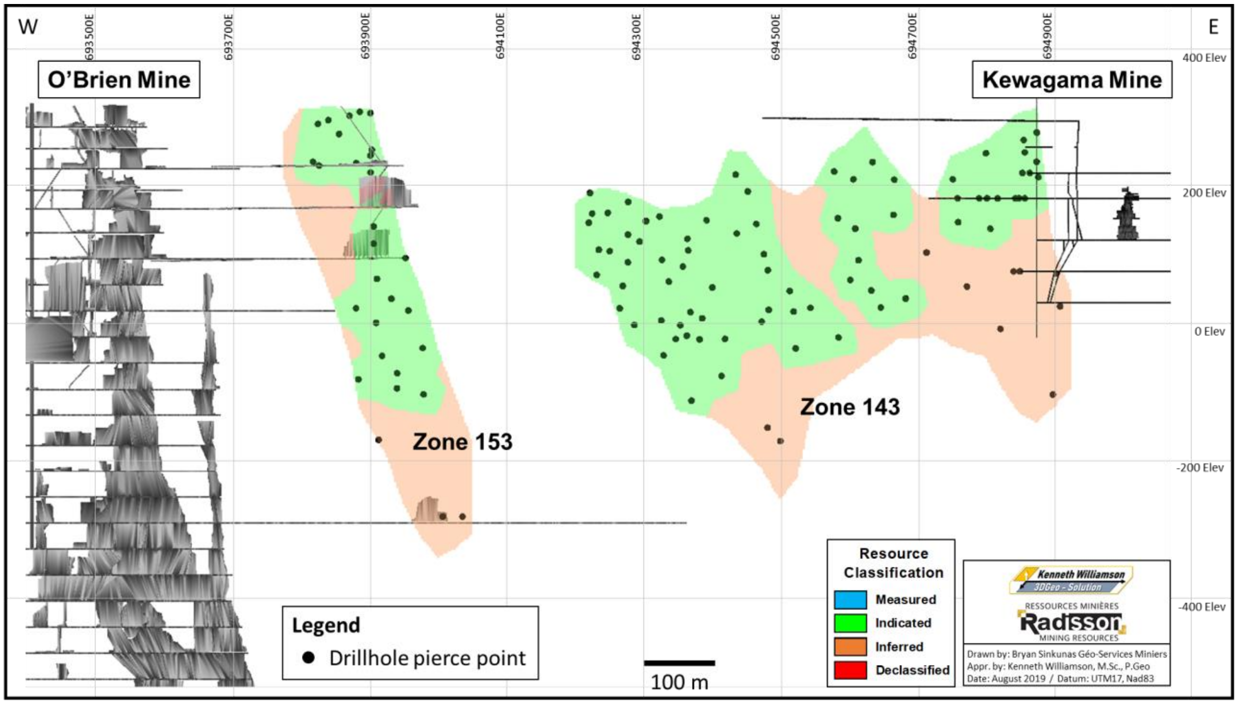

Figure 14.9 - Mineral Resource Classification

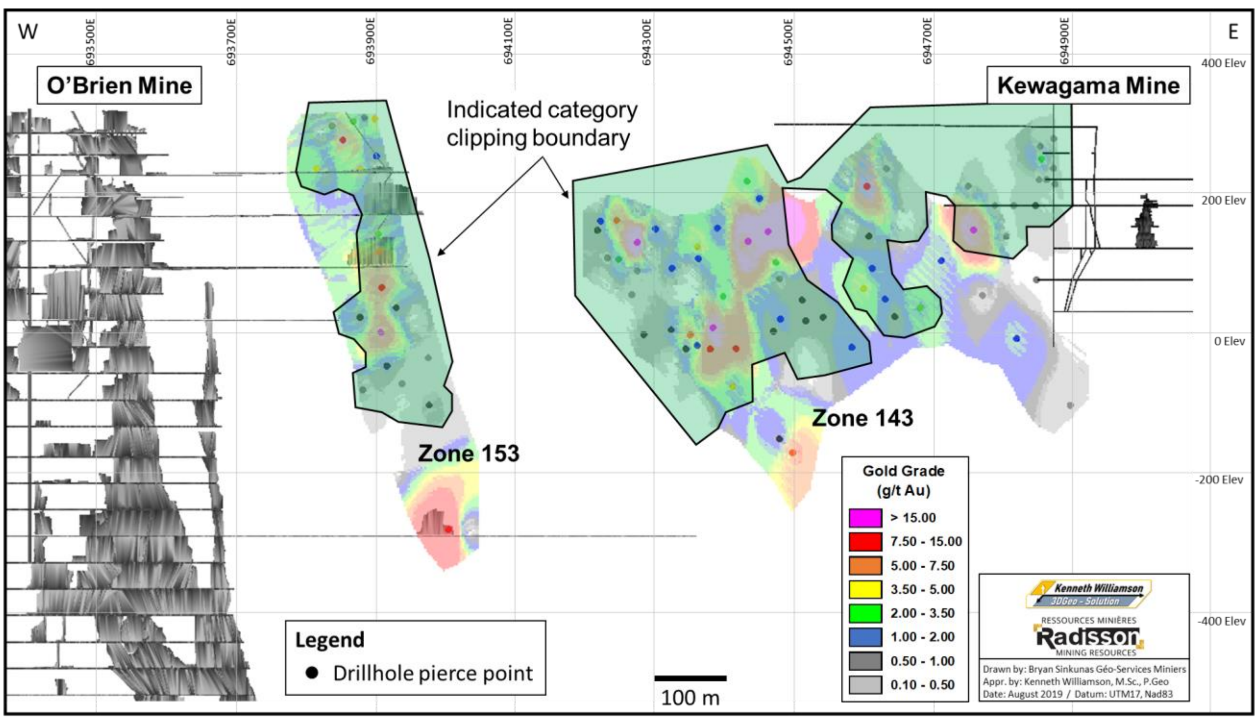

Figure 14.10 - Mineral Resource Classification against interpolated gold grade

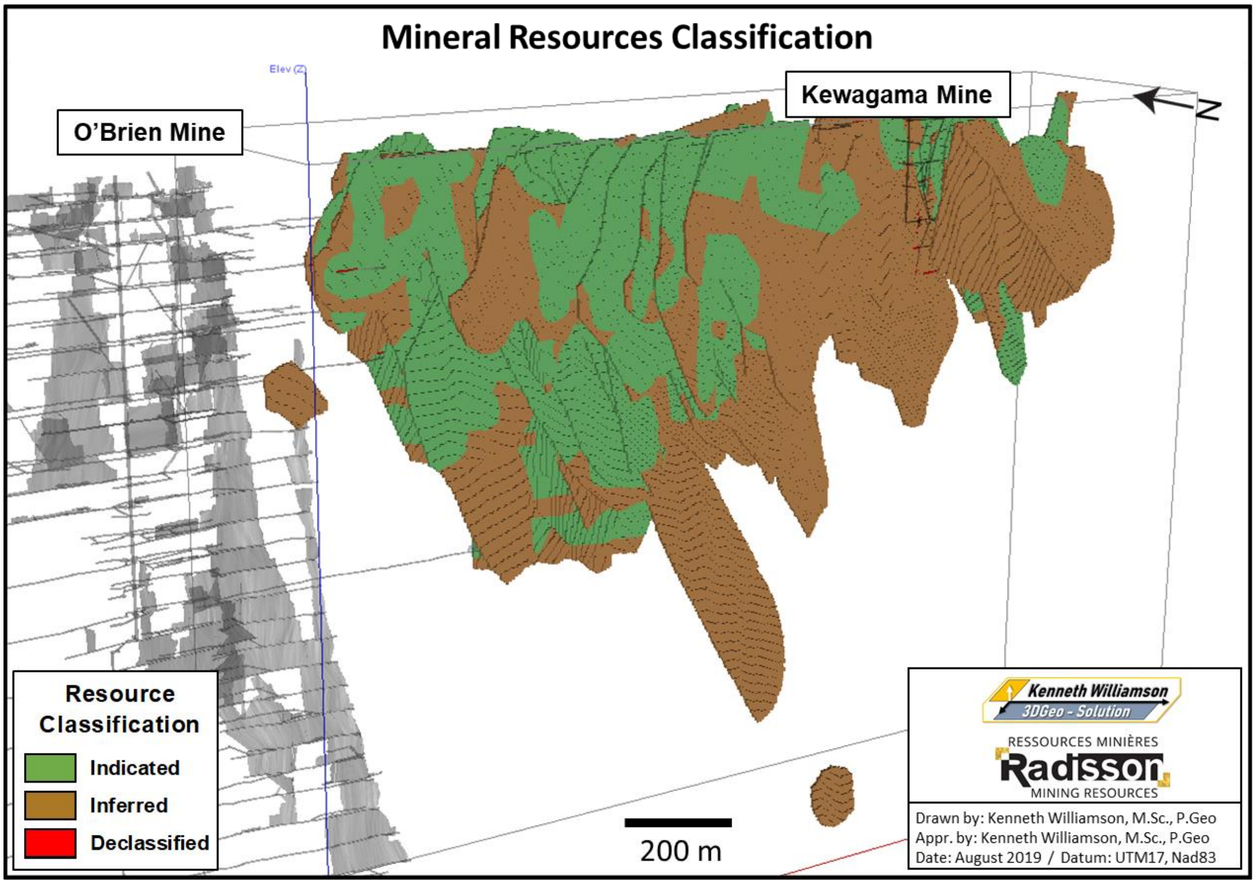

Figure 14.11 - Isometric view of the Mineral Resource Classification

14.11 Underground Voids Depletion

Underground voids remain the same as those used for the 2015 MRE for the Kewagama mine. They were validated for any discrepancies or construction errors. Underground voids for the former O'Brien mine have been reconstructed and updated; the new underground voids model was validated for any discrepancies or construction errors.

Comparison of the new O'Brien underground voids model with the position of the underground drillholes reveals that some work is now required to re-position some of them as they no longer are collared to an opening. These holes were not used in the current 2019 MRE.

The underground voids were used to declassify the resource category to a "mined out" category when given zones are either contained within or are in close proximity to the underground workings. Due to the uncertain exact position of the voids in space, for all blocks touching a void (i.e. all blocks containing more than 0.01% of voids volume), the default resource category was recoded accordingly (category 4).

Such conservative procedure was applied in order to ensure that no potentially mined out resource was reported within the current 2019 MRE.

Figure 14.12 presents a 3D view of the underground voids considered in the 2019 MRE and the selection of "declassified" blocks impacted by the procedure.

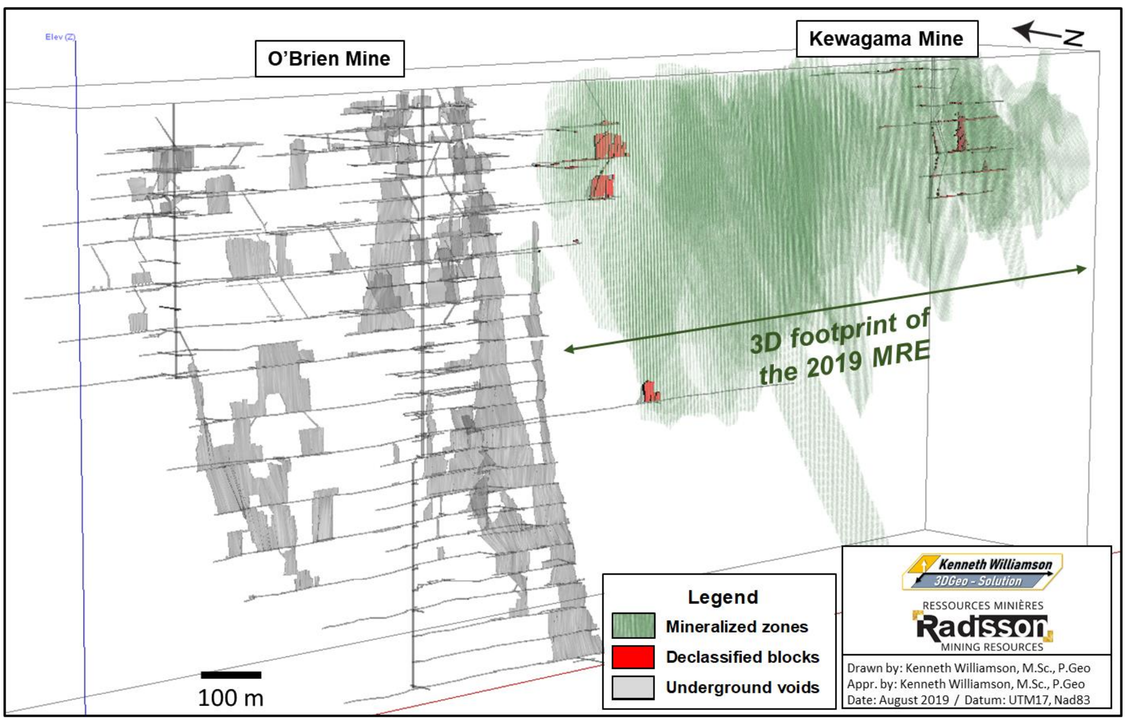

Figure 14.12 - Declassified blocks and underground voids used in the 2019 MRE

14.12 Cut-off parameters

A cut-off grade of 3.50 g/t Au would be supported using actual economic parameters. These parameters (Table 14.9) are largely inspired by parameters used in Beausoleil (2018) and have been reviewed and validated by Pierre-Jean Lafleur, P. Eng, of P.J. Lafleur Géo-Conseil Inc.

However, due to the narrow vein nature of the deposit, the base case cut-off grade base case has been established at 5.00 g/t Au.

In the author's opinion, the selected cut-off grade of 5.00 g/t Au provides an adequate estimate based on current knowledge and is instrumental in outlining the mineral potential of the deposit for an underground mining scenario.

Although the block model covers an area of reasonable size for an open pit mine, this option was not investigated as it was beyond the scope of the mandate.

Table 14.9 - Input parameters used for the underground cut-off grade estimation

Input parameter	Value
Gold price (US$/oz)	1,350.00
Exchange rate (USD:CAD)	1.30
Recovery (%)	87.40
Gold Price (C$/oz)	1,755.00
Gold selling costs (C$/oz)	5.00
Net gold price (C$/oz)	**1,685.00**
Global mining costs (C$/t)	67.50
Processing costs (C$/t)	65.00
G&A + Environmental costs (C$/t)	32.50
Total cost (C$/t)	**165.00**

14.13 Mineral Resource Estimate

KW3DGS is of the opinion that the current mineral resource estimate can be categorized as Indicated and Inferred mineral resources based on data density, search ellipse criteria, drill hole density, and interpolation parameters. KW3DGS considers the 2019 MRE to be reliable and based on quality data, reasonable hypotheses and parameters that follow CIM Definition Standards.

Table 14.10 displays the results of the 2019 In Situ Mineral Resource Estimate for the O'Brien Project (63 mineralized zones) at the official 5.00 g/t Au cut-off grade, as well as the sensitivity at other cut-off grades. The reader should be cautioned that the figures presented in should not be misinterpreted as a mineral resource statement apart from the official scenario at 5.00 g/t Au. The reported quantities and grade estimates at different cut-off grades are only presented to demonstrate the sensitivity of the resource model to the selection of a reporting cut-off grade.

Figure 14.13 presents an isometric view of all categorized blocks above the cut-off grade of 5.00 g/t Au. Figures 14.14 is an isometric view presenting the gold grade distribution within the Indicated Resource blocks, Figure 14.15 is an isometric view presenting the gold grade distribution within the Inferred Resource blocks. Table 14.10 breaks down the estimate by zone.

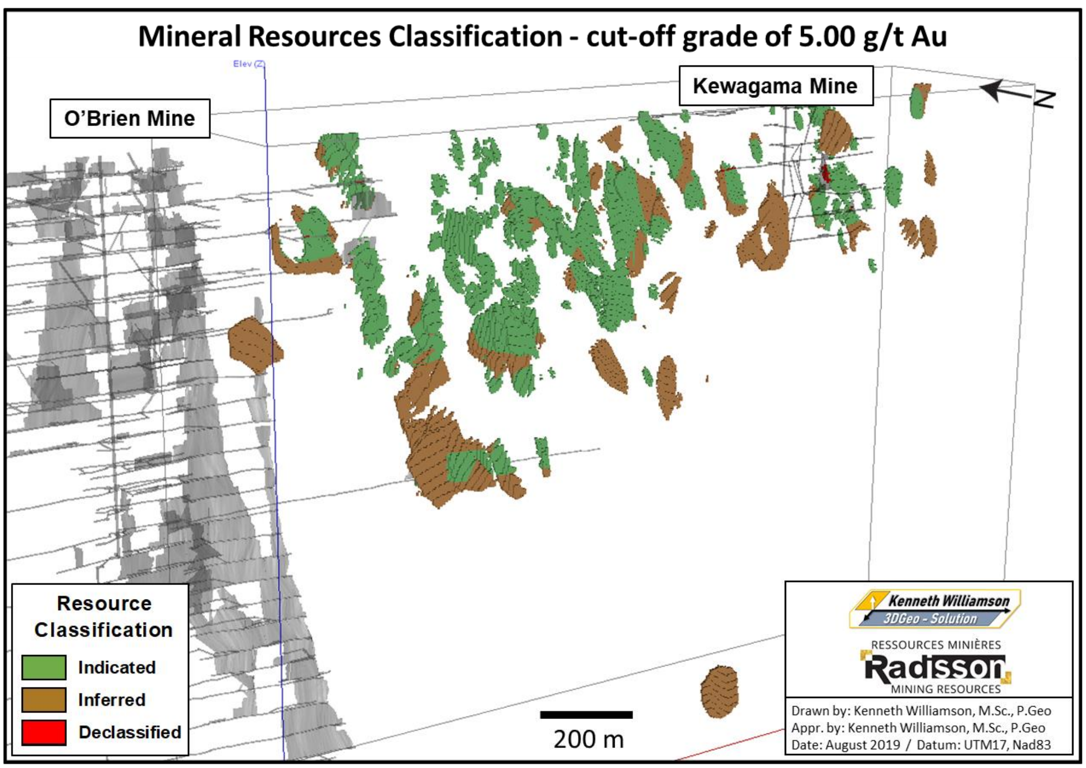

Figure 14.13 - Isometric view of all categorized blocks above the cut-off grade of 5.00 g/t Au

Table 14.10 - 2019 O'Brien Project Mineral Resource Estimate at a 5.00 g/t Au cut-off, sensitivity at other cut-off scenarios

		INDICATED RESOURCES			INFERRED RESOURCES		
	Cut-off grade (g/t Au)	**Tonnes (t)**	**Grade (g/t Au)**	**Ounces (oz)**	**Tonnes (t)**	**Grade (g/t Au)**	**Ounces (oz)**
ALL ZONES	**> 7.00 g/t Au**	544,600	12.16	212,800	243,600	9.69	75,900
	> 6.00 g/t Au	712,100	10.82	247,700	374,700	8.54	102,900
	> 5.00 g/t Au	**949,700**	**9.48**	**289,400**	**617,400**	**7.31**	**145,000**
	> 4.00 g/t Au	1,350,300	7.99	346,700	975,000	6.27	196,600
	> 3.50 g/t Au	1,599,900	7.32	376,800	1,208,100	5.78	224,700
	> 3.00 g/t Au	1,906,200	6.67	408,700	1,500,200	5.29	255,000

Notes to Accompany Mineral Resource Table:

1. The independent qualified person for the current 2019 MRE, as defined by NI 43-101, is Kenneth Williamson, P.Geo, M.Sc., of Kenneth Williamson 3DGeo-Solution. The effective date of the estimate is July 15th, 2019.
2. The Mineral Resources are classified as Indicated and Inferred Mineral Resources and are based on the 2014 CIM Definition Standards.
3. These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability.
4. Results are presented undiluted.
5. Sensitivity was assessed using cut-off grades from 3.00 g/t Au to 7.00 g/t Au. Cut-off grade is function of prevailing market condition (gold price, exchange rates, mining costs, etc.) and must therefore be re-evaluated accordingly.
6. Base case cut-off grade of 5.00 g/t Au was established considering the narrow nature of the mineralized zones, a gold price of 1,350.00 US$/oz or 1,755.00 C$/oz using a 1.30 exchange rate, a recovery of 87.4%, a gold selling cost of 5.00 C$/oz, an overall mining cost of 67.50 C$/t, a processing cost of 65.00 C$/t and a G&A / Environmental cost of 32.50 C$/t.
7. High grade capping of 60.00 g/t Au was applied to raw assay grades prior to compositing. Compositing length was established at 1.50 m. Interpolation was realized using an inverse distance cubed (ID^3) methodology within a 3m x 3m x 3m cell-size block model.
8. Density data (g/cm^3) was set to 2.82 g/cm^3 based on available density measurements.
9. A minimum true thickness of 1.5 m was applied for the construction of the mineralized zones model, which consist of 63 different mineralized zones.
10. Following recommendation of Form 43-101F1, the number of metric tons and ounces was rounded to the nearest hundredth. Any discrepancies in the totals are due to rounding effects.
11. Kenneth Williamson 3DGeo-Solution is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially impact the current Mineral Resource Estimate.

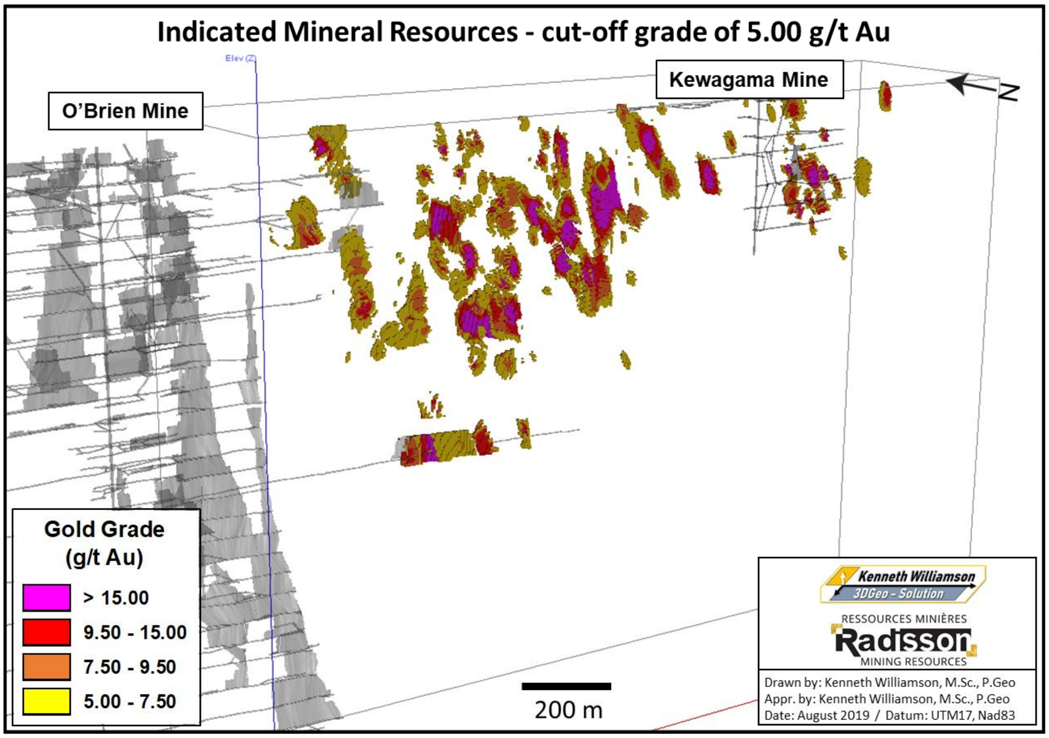

Figure 14.14 - Isometric view presenting the gold grade distribution within the Indicated Resource blocks

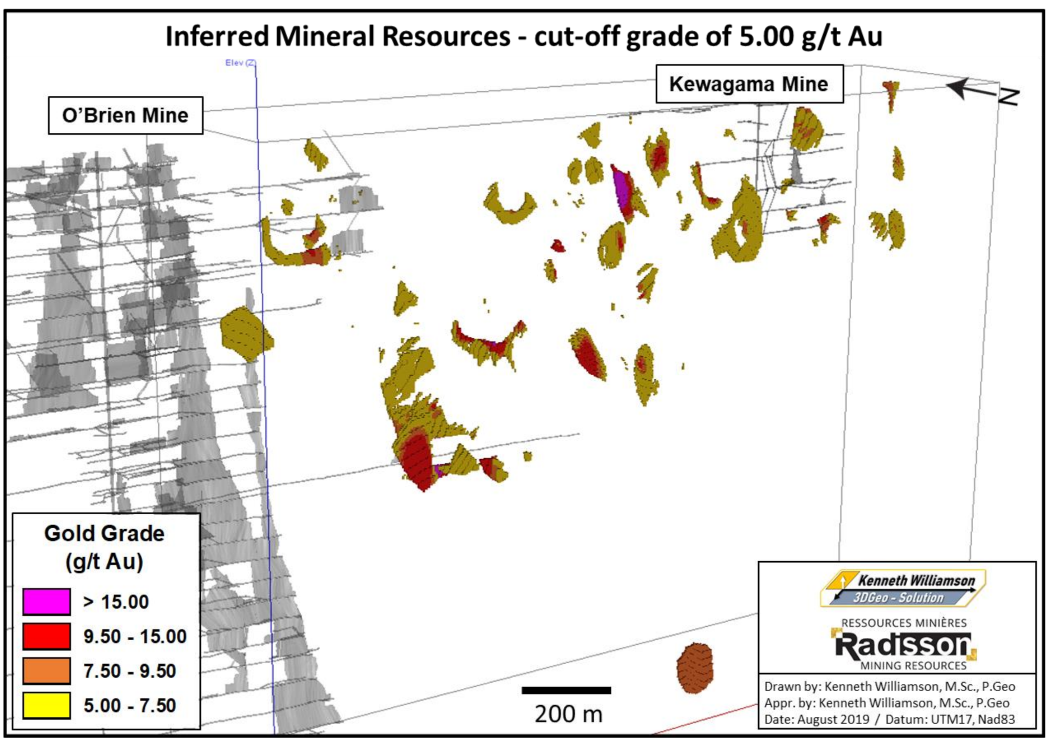

Figure 14.15 - Isometric view presenting the gold grade distribution within the Inferred Resource blocks

Table 14.11 - 2019 Mineral Resource Estimate for the O'Brien Project at the official 5.00 g/t Au cut-off grade, by mineralized zone

Cut-off grade of 5.00 g/t Au						
MINERALIZED ZONES	INDICATED RESOURCES			INFERRED RESOURCES		
	Tonnes (t)	Grade (g/t Au)	Ounces (oz)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)
101	10,500	8.69	2,900	-	-	-
102	3,500	6.54	700	-	-	-
103	16,800	13.11	7,100	200	5.37	-
104	2,000	7.75	500	-	5.74	-
105	1,600	6.19	300	64,400	5.65	11,700
106	-	-	-	-	-	-
107	1,900	6.49	400	-	-	-
108	-	-	-	-	-	-
109	6,000	6.86	1,300	-	-	-
110	4,900	7.93	1,200	-	-	-
111	30,800	11.92	11,800	2,600	11.48	1,000
112	2,000	5.76	400	-	-	-
113	21,500	8.34	5,800	19,700	6.69	4,200
114	-	-	-	-	-	-
115	29,400	5.98	5,600	33,200	5.26	5,600
116	-	-	-	28,600	6.38	5,900
117	-	-	-	-	-	-
118	27,000	10.53	9,100	5,400	7.80	1,400
119	13,800	8.81	3,900	-	-	-
120	18,800	5.76	3,500	-	-	-
121	27,700	7.36	6,600	8,200	6.07	1,600
122	28,800	9.54	8,800	12,800	7.90	3,300
123	4,900	8.38	1,300	-	-	-
124	-	5.49	-	1,100	5.61	200
125	8,300	5.95	1,600	-	-	-
126	2,900	5.83	500	-	-	-
127	9,300	8.42	2,500	4,000	6.42	800
128	11,400	10.93	4,000	500	5.29	100
129	37,600	7.37	8,900	-	-	-
130	4,700	5.37	800	-	-	-
131	300	5.49	100	22,200	5.57	4,000
132	4,300	6.35	900	-	-	-
133	900	5.76	200	24,600	6.06	4,800
134	-	-	-	-	-	-
135	40,600	8.43	11,000	5,600	5.50	1,000
136	13,800	7.11	3,200	17,300	6.26	3,500
137	200	5.49	-	-	-	-
138	300	5.57	100	-	-	-
139	7,900	10.69	2,700	5,200	7.95	1,300
140	15,300	13.13	6,500	-	-	-
141	1,900	5.70	300	-	-	-
142	3,300	6.29	700	500	5.35	100
143	144,700	12.46	58,000	49,100	9.64	15,200
144	10,400	7.05	2,400	100	5.04	-
145	20,700	6.91	4,600	-	-	-
146	-	-	-	11,800	5.61	2,100
147	13,500	8.83	3,800	6,600	7.54	1,600
148	-	-	-	4,400	5.87	800
149	-	-	-	26,700	6.50	5,600
150	98,800	11.69	37,100	55,100	8.88	15,700
151	36,800	6.02	7,100	6,800	5.79	1,300
152	33,400	7.03	7,600	57,300	6.46	11,900
153	37,800	7.92	9,600	40,000	9.91	12,700
154	22,600	13.56	9,900	3,700	5.44	600
155	-	-	-	-	-	-
156	28,700	8.82	8,100	-	-	-
157	700	5.39	100	45,000	8.23	11,900
158	15,600	9.42	4,700	-	-	-
159	13,600	8.27	3,600	-	-	-
160	23,500	9.00	6,800	-	-	-
161	9,300	6.97	2,100	-	-	-
162	10,700	15.88	5,500	26,400	8.98	7,600
163	1,400	6.81	300	-	-	-
164	8,600	9.63	2,700	4,700	7.15	1,100
165	-	-	-	17,400	7.74	4,300
TOTAL	**949,700**	**9.48**	**289,400**	**617,400**	**7.31**	**145,000**

Notes to Accompany Mineral Resource Table:

1. The independent qualified person for the current 2019 MRE, as defined by NI 43-101, is Kenneth Williamson, P.Geo, M.Sc., of Kenneth Williamson 3DGeo-Solution. The effective date of the estimate is July 15th, 2019.
2. The Mineral Resources are classified as Indicated and Inferred Mineral Resources and are based on the 2014 CIM Definition Standards.
3. These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability.
4. Results are presented undiluted.
5. Sensitivity was assessed using cut-off grades from 3.00 g/t Au to 7.00 g/t Au. Cut-off grade is function of prevailing market condition (gold price, exchange rates, mining costs, etc.) and must therefore be re-evaluated accordingly.
6. Base case cut-off grade of 5.00 g/t Au was established considering the narrow nature of the mineralized zones, a gold price of 1,350.00 US$/oz or 1,755.00 C$/oz using a 1.30 exchange rate, a recovery of 87.4%, a gold selling cost of 5.00 C$/oz, an overall mining cost of 67.50 C$/t, a processing cost of 65.00 C$/t and a G&A / Environmental cost of 32.50 C$/t.
7. High grade capping of 60.00 g/t Au was applied to raw assay grades prior to compositing. Compositing length was established at 1.50 m. Interpolation was realized using an inverse distance cubed (ID^3) methodology within a 3m x 3m x 3m cell-size block model.
8. Density data (g/cm^3) was set to 2.82 g/cm^3 based on available density measurements.
9. A minimum true thickness of 1.5 m was applied for the construction of the mineralized zones model, which consist of 63 different mineralized zones.
10. Following recommendation of Form 43-101F1, the number of metric tons and ounces was rounded to the nearest hundredth. Any discrepancies in the totals are due to rounding effects.
11. Kenneth Williamson 3DGeo-Solution is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially impact the current Mineral Resource Estimate.

15. MINERAL RESERVE ESTIMATE

Not applicable at the current stage of the Project.

16. MINING METHODS

Not applicable at the current stage of the Project.

17. RECOVERY METHOD

Not applicable at the current stage of the Project.

18. PROJECT INFRASTRUCTURE

Not applicable at the current stage of the Project.

19. MARKET STUDIES AND CONTRACTS

Not applicable at the current stage of the Project.

20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

Not applicable at the current stage of the Project.

21. CAPITAL AND OPERATING COSTS

Not applicable at the current stage of the Project.

22. ECONOMIC ANALYSIS

Not applicable at the current stage of the Project.

23. ADJACENT PROPERTIES

This section is a slightly modified version of the mineral deposit type description provided in the technical report by Beausoleil (2018) and references therein. The author has reviewed and compared Beausoleil's adjacent properties description to other such accounts in publicly available documents and consider it accurate to the best of its knowledge.

The vicinity of the O'Brien Project has seen a considerable amount of exploration and mining activities, some of which are ongoing. A number of producers and mineral occurrences are found within a few kilometres of the Project. The properties immediately adjacent to the O'Brien Project (Figure 23.1) are held by the following companies: Agnico Eagle Mines Ltd (to the north and south); Renforth Resources Inc. (to the west) and Globex Mining Enterprises (to the east).

23.1 Agnico Eagle Properties

Two major deposits, Bousquet-1 and Bousquet -2, are found on the properties held by Agnico Eagle Mines ("Agnico Eagle") along the northern boundary of the O'Brien Project. The Bousquet deposits are located about 7 km west-northwest of the resource area presented in this report. They were mined by Lac Minerals Ltd between 1979 and 1996. By 1996, production totalled 10.8 Mt at 5.96 g/t Au (Beaudoin et al, 2014).

Along the same stratigraphic horizon as the Bousquet deposits, and less than 2 km to the east, the LaRonde mine has been in operation since 1988, and has produced more than 5.0 Moz of gold as well as valuable by products (silver, zinc, copper and lead). The mine still has 3.1 Moz of gold in proven and probable reserves (18 Mt grading 5.4 g/t Au). The deep extension of the LaRonde mine achieved commercial production in November 2011 and is the focus of ongoing mining activities, with an estimated mine life that will last until 2028 with the LaRonde Zone 5 (Agnico Eagle website).

The stratigraphic horizon related to the Bousquet and LaRonde-Dumagami deposits is located within the bimodal volcanics of the Blake River Group.

These deposits are described as gold-rich VMS deposits and cannot be compared or associated with the deposits found on the O'Brien Project. They occur along a different stratigraphic horizon, about 2 km north of the resource estimate area presented in this report.

In April 2015, Agnico Eagle acquired the property adjacent to the southern boundary of the O'Brien Project. In 2015, the property was registered to 9265-9911 Québec Inc.

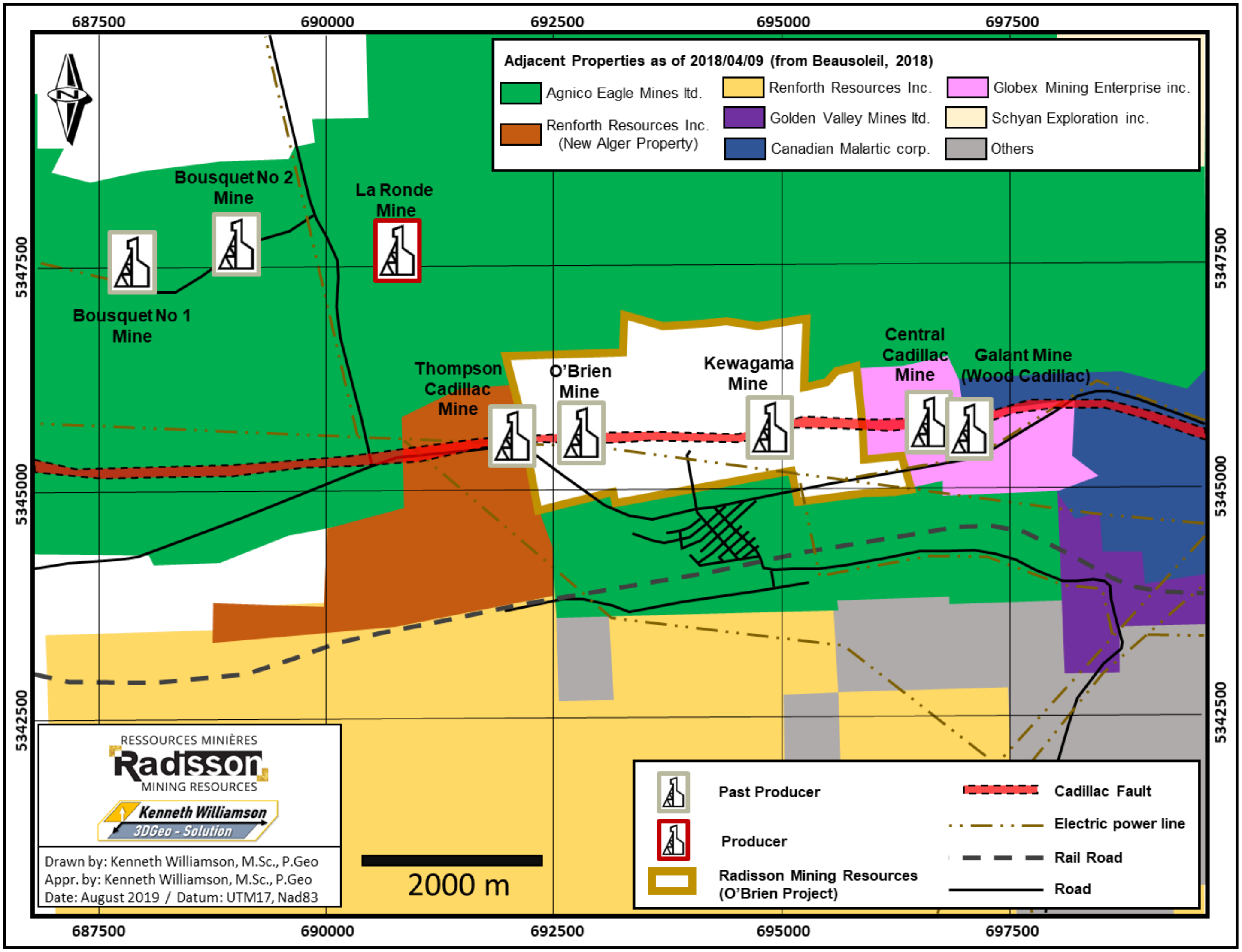

Figure 23.1 - Adjacent properties of the O'Brien Project, showing past and current producers

(Adapted from Beausoleil, 2018)

23.2 New Alger Property

In August 2016, Renforth Resources Inc. ("Renforth") announced the completion of the New Alger JV with Cadillac Ventures Inc., resulting in Renforth assuming 100% ownership of the New Alger mining concession, subject to a 2% NSR royalty that applies to the entire property. In February 2018, Renforth consolidated their position by almost doubling its area with to acquisition of 58 whole and fractionated mining claims.

The New Alger Property contains two areas of gold occurrences, the Thompson-Cadillac Mine Area and the Pontiac Vein System.

The Thompson-Cadillac mine was discovered in 1924. The mine property was first staked by E. J. Thompson during the same gold rush that discovered the O'Brien mine. The Thompson Cadillac mine is located just over 2 km west of the resource area presented in this report, and a few hundred metres west of the O'Brien Project boundary. It is located along the same stratigraphic horizon as the resource area presented in this report, and it shares the same orogenic-type geological setting. Gold mineralization is found in quartz veins associated with the Cadillac–Larder Lake Fault Zone ("CLLFZ"), within tension fractures located in a conglomerate unit and basalts from the Piché Group. The mineralization contains arsenopyrite, pyrrhotite and pyrite, with local occurrences of free gold. The latest resource estimate for the New Alger deposit from April 2014 states inferred resources of 3,007,000 t at a grade of 2.08 g/t Au for 201,000 ounces of gold (Wellstead and Newton, 2014).

The Pontiac Vein System is a recent discovery located south of the mine. It is also a surface occurrence of gold in quartz veins, traced on surface over 450 m.

23.3 Pandora Wood Property

According to Pressacco (2008), the Pandora Wood property, held equally by Globex Mining Enterprises Inc. ("Globex") and Canadian Malartic Corporation ("Canadian Malartic"), hosts two former gold producers: the Central Cadillac mine and the Wood-Cadillac mine. The Central Cadillac mine was discovered in 1933 and is 3 km east of the resource area presented in this report. From 1939 to 1943, production from the Central Cadillac mine was 185,541 t at 5.14 g/t Au for a total of 954 kg of gold and 115 kg of silver. From June 1947 to August 1949, production was reported as 233,329 t at 4.33 g/t Au for a total of 1,010 kg of gold and 130 kg of silver, apparently all or mostly from the Wood-Cadillac segment as the contribution from the Central Cadillac mine was not specified. The combined production for these two periods amounts to 418,870 t at 4.69 g/t Au for a total of 1,964 kg of gold.

Mineralization in these deposits is also orogenic, closely related to the CLLFZ. Most of the mineralization comes from horizontal quartz-tourmaline veins found in a 15-m interval between the CLLFZ and iron formations. The veins and their strongly tourmalinized wallrocks are slightly mineralized with pyrite, arsenopyrite and free gold. The veins also contain chalcopyrite and massive scheelite. Late quartz veinlets containing gold crosscut the older mineralized veins as well as silicified greywackes. Gold mineralization associated with arsenopyrite and pyrite was also found in talc-chlorite schists of the CLLFZ.

In 2004, a joint venture between Globex and Queenston Mining Inc. commenced their exploration on the property. The work concentrated on the Ironwood deposit where gold mineralization is associated with an alteration assemblage of pyrrhotite-arsenopyrite-pyrite (± calcite/quartz) that is hosted by an oxide iron formation. A mineral resource estimate completed in 2008 indicates that the Ironwood deposit contains 243,200 t of inferred resources grading 17.26 g/t Au.

This "resource" is historical in nature and should not be relied upon. It is unlikely it complies with NI 43-101 requirements or follows CIM Definition Standards, and it has not been verified to determine its relevance or reliability. It is included in this section for illustrative purposes only and should not be disclosed out of context. KW3DGS did not review the databases, key assumptions, parameters or methods used for this estimate.

In December 2012, Globex entered into a JV with Osisko Mining Inc. After the 2014 takeover of Osisko Mining, Canadian Malartic became the JV partner.

23.4 Comments on Item 23

KW3DGS has been unable to verify the above information for adjacent properties to the O'Brien Project. The presence of significant mineralization on these properties is not necessarily indicative of similar mineralization on the O'Brien Project. Moreover, KW3DGS did not review the technical and economic parameters used to produce the mineral resource estimates for these adjacent properties.

24. OTHER RELEVANT DATA AND INFORMATION

All relevant data and information regarding the issuer's Project have been disclosed under the relevant sections of this report.

25. INTERPRETATIONS AND CONCLUSIONS

The objective of Kenneth Williamson 3DGeo-Solution's mandate was to prepare a mineral resource estimate for the O'Brien Project using additional 2017-2019 drilling programs and the new litho-structural interpretation of the deposit. This Technical Report and the mineral resource estimate presented herein meet this objective.

Prior to this current mandate, KW3DGS had created a litho-structural model of the O'Brien Project, suggesting the existence of key structural parameters controlling the gold mineralization occurrence. In particular, the litho-structural model reveals several generations of structures, showing four (4) preferential orientations, to which gold mineralization appears to be genetically associated. Furthermore, the geometrical analysis of the litho-structural models suggests that intersection between the different structures creates dilatant areas where high grade gold mineralization has been preferentially deposited. At a regional scale, the O'Brien deposit's location coincides to where the Lac Imau fault intersects the Cadillac-Larder Lake Break. The Lac Imau fault is a major ESE-trending fault corridor, and faults of the same orientation interpreted in the O'Brien litho-structural model are considered to be related to the latter.

Resources

Using new geological and analytical information available, in particular the new litho-structural interpretation of the deposit, KW3DGS created a new mineralized-zone wireframe model of the O'Brien Project. KW3DGS concludes the following after conducting a detailed review of all pertinent information and completing the 2019 MRE:

- Geological and grade continuity were demonstrated for the 63 gold-bearing zones of the O'Brien Project.
- The geometrical and structural constraints imposed by the new litho-structural model provided valuable insights to create a completely new mineralized zones model, which reflects the nature and style of the old O'Brien mine.
- The interpolation of the mineralized zones was constrained by the new mineralized zones wireframe model.
- The estimated Indicated Resources now stand, using a base case cutt-off grade of 5.00 g/t Au, at 289,400 ounces of gold (949,700 t at 9.48 g/t Au) and Inferred Resources at 145,000 ounces of gold (617,400 t at 7.31 g/t Au).
- The 2019 Indicated Resources represent a 74% increase in ounces compared to the 2018 MRE. The 2019 Inferred Resources represent a 52% increase in total ounces compared to the 2018 MRE.
- Grade increased by 14% in the Indicated category, and by 1% in the Inferred category.
- It is likely that additional diamond drilling on multiple zones would increase the Indicated Resources and upgrade some of the Inferred Resources to Indicated Resources.
- There is also the potential for upgrading some of the Indicated Resources to Measured Resources through detailed geological mapping, infill drilling and systematic channel sampling from the underground workings.

KW3DGS concludes that the current 2019 MRE allows the O'Brien Project to advance towards the Feasibility Study (FS) stage. KW3DGS is of the opinion that advancing to a FS stage is conditional to that some more exploration work is carried out in advanced and in preparation for such feasibility study.

KW3DGS considers the present Mineral Resource Estimate to be reliable and thorough, and based on quality data, reasonable hypotheses and parameters compliant with NI 43-101 and CIM standards regarding mineral resource estimations.

Risks and Opportunities

Risks

The risks related to the estimation of the mineral resource of the O'Brien Project are mainly related to the heterogeneous and nuggety nature of the deposit, which could impact the estimated grade value and continuity within some given zones.

Table 25.1, slightly modified from Beausoleil (2018), identifies other significant internal risks, potential impacts and possible risk mitigation measures that could affect the economic outcome of the Project. The list does not include the external risks that apply to all mining projects (e.g., changes in metal prices, exchange rates, availability of investment capital, change in government regulations, etc.).

Opportunities

KW3DGS believes there are several opportunities to add additional resources to the O'Brien Project. The following list provides a description of the main target areas defined by KW3DGS:

- **Target 1**: Testing the steep SE-plunging trend of the mineralization in the F Zone. Area is open from around -650m below surface.

- **Target 2**: Testing both the steep SE- and SW-plunging mineralized trends below Zone 36 East area.

- **Target 3**: Testing the steep SE-plunging mineralized trends below some the Kewagama Mine stopes.

- **Target 4**: Testing the area between Zone 36 East and Kewagama Mine

- **Target 5**: Testing the down-plunge and the lateral extension components of the Vintage Zone area.

- **Target 6**: Testing for defining Inferred Resources at depth (down from 500m below surface).

Significant other opportunities that could improve the economics, timing and permitting of the Project are identified in Table 25.2. Further information and studying are be required before these opportunities can be included in the project economics.

Table 25.1 - Risks of the O'Brien Project

RISK	Potential Impact	Possible Risk Mitigation

Proximity of the historical O'Brien mine where environmental, economic, and/or technical potential issues could arise from the presence of 8,938 barrels of arsenic trioxide stored underground at level 1500'
 	
This underground storage site is classified as a class 1 dangerous waste material site by the GERLED group, a government entity with the mandate to catalogue and monitor all known dangerous waste material sites in the Province of Québec.
	• Although the current resources are located away from the storage facility, the act of pumping water (which would be necessary to bring the O'Brien Project to underground exploration program, including a bulk sample) could potentially disturb the groundwater and therefore affect the current situation, which is believed to be stable.
	• Historical precautions may have failed to contain the arsenic trioxide within the containment area over the last 30 years.
	• In 1985, the Québec Ministry of Environment authorized the installation of new waterproof and reinforced concrete plugs (2.3 m wide) at the entrance of each drift containing the barrels, and the subsequent flooding of the mine; however, the Ministry may be reluctant to now provide an authorization to disturb the area.
	• Although the current resources are located away from the storage facility, drilling from either surface or underground locations could breach in the confinement.
		• A buffer zone around the drifts where the barrels are stored should be modelled in 3D, and this buffer zone should be excluded from any future drilling program.
		• A sampling program could potentially determine whether the concrete plugs from 1985 and the surrounding lithologies have continued to contain the arsenic trioxide, by Applying the recommendations from the basic hydrogeological study (Fournier et Leblanc, 2018):
		  ◦ Monitoring of the water level in the shaft
		  ◦ Monitoring minimum twice a year: Dissolved metals as arsenic, copper, nickel, lead, zinc and cyanide; Hydrocarbon; pH and electric conductivity (in-situ); Majors Ions.
		  ◦ Static and kinetic tests on acid generating potential;
		  ◦ Update the numerical model when dewatering will start.
		• Discussions with the Québec Ministry of Environment could be initiated to determine what can be done to adequately address a number of scenarios.

Poor social acceptability	• Possibility that portions or the entirety of the O'Brien Project could not be explored or exploited.	• Develop a pro-active and transparent strategy to identify all stakeholders and develop a communication plan. Organize information sessions, publish information on the mining project, and meet with host communities.
Metallurgical recoveries below expectation	• Recovery might differ from what is currently being assumed.	• Further variability testing of the deposit to confirm metallurgical conditions and efficiencies.
Limited testwork to determine whether waste rock would be potentially acid generating (PAG)	• Additional capital may be required to prepare a storage site for PAG waste.	• Further testing to confirm whether the waste is PAG or non-acid generating (NAG).
Surface and/or underground geotechnical evaluations not available	• The minimum mining width used for the resource estimate might need to be adjusted if assumptions differ from reality.	• Geotechnical assessments at a larger scale to confirm rock quality (underground and at surface) to validate assumptions.
Nuggety nature of the mineralization within the deposit.	• The estimated grade could be lower resulting in a potential decrease of the overall gold grade in places and thus decreasing the resource accordingly.	• Drilling at an appropriate spacing in areas of high grade gold mineralization to confirm the grade and extent of the min

Table 25.2 - Opportunities of the O'Brien Project

OPPORTUNITIES	Explanation	Potential benefit
Compilation and validation of all historical underground channel samples	Potential to upgrade some indicated resources to the measured category.	Adding measured resources increases the economic value of the mining project.
Surface definition diamond drilling (Targets 1 to 6)	Potential to upgrade some inferred resources to the indicated category.	Adding indicated resources increases the economic value of the mining project.
Positive PEA results on the current resources	Potential to upgrade confidence in the economic potential of the project.	Could potentially lead to a prefeasibility study.
Underground bulk sample	Test mining and metallurgical assumptions, validate the resource model	Could potentially lead to a prefeasibility study

26. RECOMMENDATIONS

Based on the results and conclusions of the 2019 Mineral Resource Estimate, KW3DGS recommends that the O'Brien Project be advanced to the next development phase, which would be a Feasibility Study (FS).

KW3DGS is of the opinion that prior to commencing such FS, more exploration and underground exploration work, in particular a bulk sample, and a subsequent MRE update, should be completed.

KW3DGS recommends further definition drilling to upgrade inferred resources to in indicated category. In particular, the down-plunge extension of several mineralized trends below Zone F, Zone 36 East and the Kewagama mine. In some cases, the inferred resources are defined with very limited information, as for example the high-grade portion of Zone 157 found at depth, and further drilling is required to better define the extent of the mineralized zones.

KW3DGS recommends further exploration drilling within the O'Brien Project to increase inferred resources. While efforts were put to construct the appropriate number of mineralized zone wireframes, some good drillhole intersects were not included in any of the actual zones. For the vast majority, not being included within the interpretation was a result of a lack of drilling information in the vicinity of the given intersects. Exploration drilling in those areas could lead to the interpretation of new mineralized zones.

KW3DGS recommends gathering more density and ICP data from selected portions, including mineralized portions, of drill core. Density data has a direct impact on the calculated tonnage of the resources, and therefore on the final resource ounces. With ICP information, some geo-metallurgical parameters can be estimated.

KW3DGS recommend carrying out an underground exploration program, including a bulk sampling program, as it would allow to mitigate the risks associated to the different geological, mining and metallurgical assumptions used. In particular, the nuggety nature of the deposit warrants the gold grade and geometrical continuity of the mineralized zones to be tested. An underground exploration program would provide opportunities to map and better model the mineralized zones. A Bulk Sampling program appears to be mandatory to advance to project to the next stage, as it would provide a way to assess the *in situ* geotechnical and metallurgical nature of the mineralization. Due to the nuggety nature of the mineralization, KW3DGS considers that stopes with a size of 50m x 30m x 2m would be representative, and that 5 to 6 wisely selected areas (function of grade, rock type, etc.) could be investigated. Altogether, that could represent a bulk sampling program of 35k to 40k tonnes.

KW3DGS recommends mechanical stripping in areas where mineralized zones are projected to reach surface. Exposing mineralization on surface is likely the most efficient way to better document the geometry and cross-cutting relationships of the mineralized zones network.

KW3DGS recommends finalizing the collar and position verification work for all the historical underground drill holes and channel samples. This work required a complete underground voids model, which has recently been updated by Radisson. The remaining historical data (drill holes, channel samples, etc.) should also be compiled. KW3DGS recommends prioritizing the eastern area of the former O'Brien Mine and use to upgrade the current model and resource estimate.

KW3DGS also recommends to include provisions for environmental and hydrogeological characterization studies in future O'Brien Project budget planning exercises.

If additional work proves has a positive impact on the project, **KW3DGS recommends that the current resource estimate should be updated**, which would include compiled and validated historical drill holes, future drill holes, underground channel samples and updated 3D models of voids and mineralized zones.

The stakeholder mapping and communication plan should be pursued. According to Radisson, environmental studies are in progress and will be completed by the fall of 2019. A groundwater sampling is planned in the Shaft #3 to characterize the water quality and see if the arsenic contamination is similar or higher than the average of the concentration found in the fall of 2018 into the shaft #2. Based on the results of these studies, appropriate actions (to be determined) should be carried out.

In summary, KW3DGS recommends a two-phase work program as follows:

- **Phase 1:**
  - Underground drillhole collars verification on the eastern part of the former O'Brien Mine
  - Continue surface conversion drilling
  - Continue surface exploration drilling
  - Density and ICP programs
  - Social Licence Management
  - Environmental and hydrogeological characterization testing
  - Waste rock and old waste pad characterization
  - Underground bulk Sample planning
  - Update the Mineral Resource Estimation

- **Phase 2**
  - Bulk Sample execution
  - Mechanical stripping
  - FS on Phase 1 updated Mineral Resource Estimation
  - Continue surface conversion drilling
  - Continue density and ICP programs

KW3DGS has prepared a cost estimate for the recommended two-phase work program to serve as a guideline for the project. The budget for the proposed program is presented in Table 26.1 and does not include the costs related to the Bulk Sample execution.

Expenditures for Phase 1 are estimated at C$7,271,450 (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at C$1,750,000 (incl. 15% for contingencies). The grand total is C$9,021,450 (incl. 15% for contingencies). Phase 2 is contingent upon the success of Phase 1.

KW3DGS is of the opinion that the recommended two-phase work program and proposed expenditures are appropriate and well thought out, and that the character of the Project is of sufficient merit to justify the recommended program. KW3DGS believes that the proposed budget reasonably reflects the type and amount of the contemplated activities.

Table 26.1 - Estimated costs for the recommended work program

Phase 1 - Work Program		Budget	
		Units	Cost ($)
1a	Underground drillhole collars verification on the eastern part of the former O'Brien Mine		35,000
1b	Surface exploration drilling (all inclusive)	40,000 m	4,400,000
1c	Surface conversion drilling (all inclusive)	10,000 m	1,100,000
1d	Density and ICP programs		50,000
1e	Social Licence Management		50,000
1f	Environmental and hydrogeological assessment		215,000
1g	Geochemical characterization of waste rock, ore and tailings		85,000
1h	Waste rock engineering and crown pillars study		135,500
1i	Underground bulk sample planning		
	- Metallurgical testing		100,000
	- Geotechnical testing		20,000
	- Restauration plan		33,000
1j	Update the Mineral Resource Estimation		100,000
	Contingency (15%)		**948,450**
	Total		**7,271,450**

Phase 2 - Work Program		Budget	
		Units	Cost ($)
2a	Bulk Sample execution		n/a
2b	Mechanical stripping		50,000
2c	FS on Phase 1 Mineral Resource Estimation		300,000
2d	Surface conversion drilling (all inclusive)	10,000 m	1,100,000
2e	Density and ICP programs		50,000
	Contingency (15%)		**225,000**
	Total		**1,750,000**

Total Phase 1 and Phase 2	**9,021,450**

27. REFERENCES

Ayer, J., Amelin, Y., Corfu, F., Kamo, S., Ketchum, J.F., Kwok, K., and Trowell, N.F., 2002a, Evolution of the Abitibi greenstone belt based on U-Pb geochronology: Autochthonous volcanic construction followed by plutonism, regional deformation and sedimentation: Precambrian Research, v. 115, p. 63–95.

Bateman, R., Ayer, J.A., and Dubé, B., 2008, The Timmins-Porcupine gold camp, Ontario: Anatomy of an Archean greenstone belt and ontogeny of gold mineralizations. Economic Geology, v. 103, p. 1285–1308.

Beaudoin, G., Mercier-Langevin, P., Dubé, B., Taylor, B. E., 2014, Low-Temperature Alteration at the World-Class LaRonde Penna Archean Au-Rich Volcanogetic Massive Sulfide Deposit, Abitibi Subprovince, Québec, Canada: Evidence from Whole-Rock Oxygen Isotopes, Economic Geology, v. 109, pp. 167-182.

Beausoleil, C., 2018, NI 43-101 Technical Report and Mineral Resource Estimate for the O'Brien Project, Abitibi, Québec. NI-43-101 Report prepared for Radisson Mining Resources Inc. by InnovExplo Inc. 125 pages.

Benn, K., and Peschler, A.P., 2005, A detachment fold model for fault zones in the Late Archean Abitibi greenstone belt: Tectonophysics, v. 400, p. 85–104.

Benn, K., Miles, W., Ghassemi, M. R., Gillet, J., 1994. Crustal structure and kinematic framework of the north-western Pontiac Subprovince, Québec: an integrated structural and geophysical study. Canadian Journal; of Earth Sciences, Vol. 31, pages 271-281.

Bisson, Y., 1996. Rapport de campagne 1995-1996, Propriété O'Brien, Canton Cadillac. Ressources Minières Radisson Inc. Internal Report. 36 pages.

Bisson, Y., 1995. 1994-1995 Winter Drilling Campaign Report. O'Brien Property Zone 36 East. Internal Report of Radisson Mining Resources Inc. 45 pages.

Daigneault, R., Mueller, W.U., Chown, E.H., 2004. Abitibi greenstone belt plate tectonics: the diachronous history of arc development, accretion and collision. In Eriksson, P.G., Altermann, W., Nelson, D.R., Mueller, W.U., Catuneanu, O. (Eds.). The Precambrian Earth: Tempos and Events, Series: Developments in Precambrian geology, vol. 12, Elsevier, pages. 88–103.

Darius Gold Mines Inc., 1979. DDH logs of holes GF-79-1 to GF-79-24. 288 pages. GM 35984.

Dimroth, E, Imrech, L., Rocheleau, M., Goulet, N., 1983. Evolution of the south-central part of the Archean Abitibi Belt, Quebec. Part III: plutonic and metamorphic evolution and geotectonic model. Canadian Journal of Earth Sciences, Vol. 20, pages 1374-1388.

Dresser, J. A., and Denis, T. C., 1949. O'Brien Gold Mines Limited and Kewagama Gold Mines Ltd. In Geology of Quebec, Vol III, Economic Geology, Department of Mines, Province of Quebec, Canada. Geological Report 20. Pages 197-200.

Dubé, B. and Gosselin, P. 2007, Greenstone-Hosted Quartz-Carbonate Vein Deposits. In Goodfellow, W. D., ed. Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration

Methods. Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5. p. 49-73.

Dubé, B., O'Brien, S., and Dunning, G. R., 2001. Gold deposits in deformed terranes: examples of epithermal and quartz-carbonate shear-zone-related gold systems in the Newfoundland Appalachians and their implications for exploration. In North Atlantic Symposium, St-John's, NF, Canada. Extended abstracts volume, May 27-30, 2001. p. 31-35.

Dubé, B., Poulsen K.H., and Guha, J., 1989. The effects of layer anisotropy on auriferous shear zones: The Norbeau mine, Quebec: Economic Geology, v. 84, p. 871-878.

Evans, L., 2007. Technical Report on the O'Brien mine Zone 36 East Mineral Resource Estimate, Cadillac, Quebec, Canada. NI-43-101 Report prepared for Radisson Mining Resources Inc. by Scott Wilson Roscoe Postle Associates Inc.94 pages.

Fournier, V. and Leblanc. Y., 2017. Projet d'exploitation d'une mine souterraine, étude hydrogéologique de base : Ressources Minière Radisson Inc. – Projet O'Brien. Richelieu Hydrogéologie Inc. 46 pages.

Goutier, J., and Melançon, M., 2007, Compilation géologique de la Sous-province de l'Abitibi (version préliminaire): Ministère des Ressources naturelles et de la Faune du Québec.

Goutier, J., 1997, Géologie de la région de Destor: Ministère des Ressources naturelles du Québec 37 pages. RG 96-13.

Groves, D.I., Goldfarb, R.J., Know-Robinson, C.M., Ojala, J., Gardoll, S., Yun, G., and Holyland, P., 2000, Late-kinematic timing of orogenic gold deposits and significance for computer-based exploration techniques with emphasis on the Yilgarn block, Western Australia: Ore Geology Reviews, v. 17, p. 1-38.

Hagemann, S.G., and Cassidy, K.F., 2000, Archean orogenic lode gold deposits, in Hagemann, S.G., and Brown, P.E., eds., Gold in 2000: Society of Economic Geologists, Reviews in Economic Geology, v. 13, p. 9-68.

Hodgson, C.J., 1989, The structure of shear-related, vein-type gold deposits: A review: Ore Geology Reviews, v. 4, p. 635-678.

Jolly, W. T., 1978. Metamorphic history of the Archean Abitibi Belt. In Metamorphism in the Canadian Shield. Geological Survey of Canada, Paper 78-10, pp. 63-78.

Kerrich, R., and Cassidy, K.F., 1994. Temporal relationships of lode gold mineralization to accretion, magmatism, metamorphism and deformation – Archean to present: A review: Ore Geology Reviews, v. 9, p. 263-310.

Lafleur, P. J., 1980. DDH logs of surface holes. Darius Gold Mines Inc. 22 pages. GM 38542.

Lafrance, B, Mercier-Langevin, P. Dubé. B., Galley, A.G., Hannington, M.D., Davis, D.W., Moorhead, J., Pilote, P., Mueller, W.U., 2003. Carte synthèse de la Formation de Bousquet: partie ouest. Ministère des Ressources naturelles, de la Faune et des Parcs, Québec; DV 2003-08, échelle 1 : 20 000.

MERQ-OGS, 1984, Lithostratigraphic map of the Abitibi subprovince: Ontario Geological Survey and Ministère de l'Énergie et des Ressources, Québec, Map 2484 and DV 83–16.

Poirier, S., Richard, P-L., Turcotte, B., Roy, L., Lavoie, A., Poirier, É., Dion-St-Pierre, M-C. and Lamontagne, A., 2016. Technical Report and Preliminary Assessment for the O'Brien Project, Abitibi, Québec (according to National Instrument 43-101 and Form 43-101F1). Report prepared for Radisson Mining Resources Inc. by InnovExplo Inc., 107 p.

Poulsen, K. H., Robert, F., and Dubé, B., 2000. Geological classification of Canadian cold deposits. Geological Survey of Canada, Bulletin 540, 106 pages.

Powell, W. D., Carmichael, D. M., and Hodgon, C. J., 1993. Thermobarometry in a subgreenschist to greenschist transition in metabasite of the Abitibi greenstone belt, Superior Province, Canada. Journal of Metamorphic Geology, Vol. 11, pages 165-178.Quan, W. Ng See, 1987. O'Brien property, 2130, Diamond Drilling. Novamin Ressources Inc. 31 pages. GM 45791.

Pressacco, R., 2008, Technical Report for the Mineral Resource Estimate, Ironwood Project, Cadillac Township, Québec, (NTS 32D/01), Globex Mining Enterprises Inc and Queenston Mining Inc., 93 p.

Richard, P.L., Turcotte, B., and Carrier, A., 2015. Technical Report for the O'Brien Project, Abitibi, Québec. NI-43-101 Report prepared for Radisson Mining Resources Inc. by InnovExplo Inc., 128 pages.

Robert, F., and Poulsen, K.H., 2001. Vein formation and deformation in greenstone gold deposits, in Richards, J.P., and Tosdal, R.M., eds., Structural Controls on Ore Genesis: Society of Economic Geologists, Reviews in Economic Geology, v. 14, p. 111-155.

Robert, F., Poulsen, K.H., and Dubé, B., 1994, Structural analysis of lode gold deposits in deformed terranes and its application: Geological Survey of Canada, Short course notes, Open File Report 2850, 140 p.

Robert, F., 1990, Structural setting and control of gold-quartz veins of the Val d'Or area, southeastern Abitibi subprovince, in Ho, S.E., Robert, F., and Groves, D.I., eds., Gold and Base-Metal Mineralization in the Abitibi subprovince, Canada, with Emphasis on the Quebec Segment: University of Western Australia, Short Course Notes, v. 24, p. 167-210

Thurston, P.C., Ayer, J.A., Goutier, J., and Hamilton, M.A., 2008, Depositional gaps in the Abitibi greenstone belt stratigraphy: A key to exploration for syngenetic mineralization. Economic Geology, v. 103, p. 1097−1134

Trudel, P., Sauvé, P., Tourigny, G., Hubert, C., and Roy, L., 1992. Synthèse des caractéristiques géologiques des gisements d'or de la région de Cadillac (Abitibi). Ministère des Ressources naturelles du Québec.106 pages. MM 91-01.

Wellstead, M., Newton, B.H., 2014, Technical Report on the 2014 ddh Program and Mineral Resource Estimate, New Alger Property, Abitibi-Temiscamingue, Québec, Renforth Resources Inc., Billiken Management Services, 133 p.