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# UPDATED TECHNICAL REPORT ON THE REVEL RIDGE PROPERTY (FORMERLY J&L PROPERTY)

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REVELSTOKE MINING DIVISION, BRITISH COLUMBIA, CANADA MAPSHEET NTS: 082M-030 UTM NAD83 11U 420,719 mE 5,681,811 mN 51° 16'56" N and 118° 08'12" W

# **FOR**

# ROKMASTER RESOURCES CORP.

NI 43-101 & 43-101F1 TECHNICAL REPORT

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**P&E Mining Consultants Inc.** Report 369

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# 1.0 SUMMARY

The following report was prepared to provide a National Instrument 43-101 (NI 43-101) Updated Resource Estimate and Technical Report on the Revel Ridge Property (the "Property"), formerly named the J&L property, for Rokmaster Resources Corp. ("Rokmaster" or the "Company"). The Technical Report has an effective date of January 29, 2020. Rokmaster is a British Columbia corporation trading on the TSX Venture Exchange with the symbol RKR.

The Property hosts two known and significant polymetallic precious and base metal deposits, the Main Zone and the Yellowjacket Zone, which are located 35 kilometres north of Revelstoke, British Columbia, Canada. The Property consists of 18 mineral tenure claims and 10 Crown Grant Lots for a total of 3,150.74 hectares.

Rokmaster has an option agreement dated December 23, 2019 to earn a 100% interest in the Property from Huakan International Mining Inc. ("Huakan"), formerly Merit Mining Corp. ("Merit"). The agreement provides for Rokmaster to earn a 100% interest in the Property and associated assets without any underlying royalties. The option agreement is subject to regulatory approval. Rokmaster has been advised that a legal action has arisen between Armex Mining Corp. ("Armex") and Huakan whereby Armex claims that it has a valid letter of intent with Huakan covering the Property. Huakan has notified Armex that it intends to defend the Armex action and has filed a counter claim against Armex. The legal action has not been resolved at the time of this Technical Report.

The Property lies within the Selkirk Mountains near the north end of the Kootenay Arc, a complex sequence of east dipping Neoproterozoic to Lower Paleozoic metasedimentary and metavolcanic miogeosynclinal rocks. The belt is characterized by tight to isoclinal folds and generally west verging thrust faults with greenschist grade regional metamorphism. The Revel Ridge Property is underlain by north to northwest striking, moderate to steeply east dipping metasediments and metavolcanic rocks of the Hamill and Lardeau Group and Badshot and Mohican Formation rocks.

The Main Zone is a structurally controlled stratiform polymetallic precious metal massive sulphide zinc-lead-silver-gold-iron-arsenic deposit overprinting a pre-existing silver-lead-zinc deposit (the Yellowjacket). The Main Zone is a sheet-like tabular sulphide vein system hosted in a large planer deformation zone composed of banded massive and stringer arsenopyrite-pyrite-sphalerite-galena mineralization with appreciable content of gold and silver. The Main Zone has been traced on surface by prospecting, trenching and soil sampling for a strike length of over 3 kilometres. Drilling has intersected the zone over a 1,500-metre strike length and 800 metres down dip. The Main Zone generally dips approximately 60 degrees to the northeast with an average true thickness of 2.5 metres, however, it can reach 15 metres in true thickness and has the potential to be expanded beyond the current drilled limits.

The silver-lead-zinc-rich Yellowjacket Zone is considered to be a structurally controlled carbonate hosted replacement deposit composed of multiple parallel siliceous sphalerite-galenabearing zones. The individual zones making up the Yellowjacket Zone occur as lenticular bodies each up to 8 metres thick at the contact between alternating units of volcanics and limestone. The Yellowjacket is not currently as laterally extensive as the Main Zone. The Yellowjacket Zone

sub parallels and is in the immediate hanging wall of the Main Zone. The Yellowjacket Zone has little notable gold, however, it has higher silver, lead and zinc values than the Main Zone.

Numerous exploration companies including several major mining companies have explored and advanced the Property since the Main Zone's discovery in 1912. At least 315 diamond drill holes have been completed on the Property from 1983 to present, totalling 41,075.9 metres of drilling. A total of 3.1 kilometres of underground workings are present on the Property. A 1.4-kilometrelong track drift (2.4 m x 2.4 m profile) at the 830 m level has exposed the Main Zone for approximately 800 metres in length. The 550 metre long (5 m x 5 m profile) 832 m level trackless drift installed by Merit in 2008, connects to the 830 m track drift and provides underground access to the 830 m drift. Five crosscuts totalling 1,150 metres provided access to drill stations that were utilized to drill-define the deposits. Several raises have aided in the extraction of several bulk samples. There is an adit and drift extending 152 metres along the Main Zone called the "986 m level" that is now inaccessible.

In late 2010, Merit/Huakan completed a 60-hole, 7,897 metre underground drill program focused on the Main Zone. This program had the objective of verifying historic drilling and sampling and infilling an 800-metre strike by 200 metre dip of the Main Zone with 30 metre drill centers. This program lead to P&E completing the first National Instrument ("NI") 43-101 Mineral Resource Estimate on the Property in September 2011 and a subsequent Preliminary Economic Assessment ("PEA") by Micon International Limited ("Micon") in May 2012 based on the 2011 Resource Estimate.

The 2010 exploration program was followed in 2012 by a 450-metre drifting and a 45-hole, 9,725 metre underground drill program to expand the Mineral Resource Estimate of the Main Zone. The 2012 program was successful in increasing the Mineral Resources. Results of an Updated Mineral Resource Estimate by P&E were reported in a news release by Huakan dated September 18, 2012. This estimate significantly increased Indicated Mineral Resources on the Main Zone and for the first time included a Mineral Resource Estimate on the Yellowjacket Zone. No subsequent material physical work has been done on the Property since the 2012 Updated Resource Estimate. In January 2013, Huakan reported updated metallurgical test work results from a bulk sample collected in the 2012 program.

In this report, P&E has updated the Revel Ridge Mineral Resource Estimate to include current trailing metal prices, mining costs, and exchange rates as well as updated metallurgical test results. (Table 1.1).

TABLE 1 REVEL RIDGE 2020 MINERAL RESOURCE ESTIMATE (1-7)											
Mineralized Zone Classification (k) (g/t) (koz) (g/t) (koz) (g/t) (koz) (boz) (c) (c) (c) (doz)											
	Measured	1,352	6.13	266	62.8	2,730	2.19	4.09	9.14	397	
Main Zone	Indicated	2,848	5.33	488	49	4,487	1.72	3.11	7.56	692	
Main Zone	Meas & Ind	4,200	5.59	755	53.4	7,216	1.87	3.43	8.07	1,089	
	Inferred	4,562	4.36	639	61.8	9,064	1.88	2.59	6.55	961	
HW Zone	Indicated	298	0.91	9	55.3	530	2.5	5.72	4.70	45	
II W Zone	Inferred	38	0.22	0	75	92	3.08	5.44	4.34	5	
FW Zone	Inferred	341	3.91	43	25.3	277	0.53	0.48	4.20	46	
Yellowjacket	Indicated	771	0.09	2	62.6	1,552	2.6	9.93	5.98	148	
Zone	Inferred	23	0.11	0	55.4	41	2.65	7.68	4.91	4	
	Measured	1,352	6.13	266	62.8	2,730	2.19	4.09	9.14	397	
All Zones	Indicated	3,917	3.96	499	52.2	6,568	1.95	4.65	7.03	885	
An Zones	Meas & Ind	5,269	4.52	765	54.9	9,298	2.01	4.51	7.57	1,283	
	Inferred	4,964	4.28	683	59.4	9,474	1.80	2.49	6.36	1,015	

**Note:** k = thousands, koz = thousands of ounces.

- 1) Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- 2) The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
- 3) The Mineral Resources in this estimate were calculated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
- 4) The following parameters were used to derive the NSR block model cut-off values used to define the Mineral Resource:

Dec 31, 2019 US\$ two-year trailing avg. metal prices:

- Pb \$0.96/lb, Zn \$1.24/lb, Au \$1,331/oz, Ag \$15.95/oz
- Exchange rate of US\$0.76 = CDN \$1.00
- Process recoveries of Pb 74%, Zn 75%, Au 91%, Ag 80%
- Smelter payables of Pb 95%, Zn 85%, Au 96%, Ag 91%
- Refining charges of Au US\$10/oz, Ag US\$0.50/oz
- Concentrate freight charges of C\$65/t and Smelter treatment charge of US185/t
- Mass pull of 5% and 8% concentrate moisture content.
- 5) NSR cut-off of CDN\$110 per tonne was derived from \$75/t mining, \$25/t processing, \$10/t G&A.
- 6)  $AuEq = Au g/t + (Ag g/t \times 0.011) + (Pb \% \times 0.422) + (Zn \% \times 0.455)$
- 7) Above parameters derived from 2012 PEA and other similar benchmarked projects.

Underground bulk samples have been taken from the Main Zone to conduct metallurgical testwork. The Main Zone is a complex polymetallic deposit high in arsenic values. Extensive metallurgical testing between the mid 1980s and 2014 have considered various options and have produced effective options for acceptable recoveries of gold ("Au"), silver ("Ag"), zinc ("Zn") and lead ("Pb") by making 3 separate concentrates, including using heavy media separation. Based on the current envisioned circuit and corresponding laboratory test response, the overall process recoveries for the Main Zone are expected to be approximately 93% Au, 70% Ag, 74% Pb, and 80% Zn. Limited metallurgical testwork from drill core has been performed on the

Yellowjacket Zone which has less complex metallurgy than the Main Zone. The expected process recoveries for the Yellowjacket Zone are 94% Ag, 88% Pb, and 93% Zn.

Both the Main Zone and the Yellowjacket Zone have potential for further expansion. The Main Zone, in particular, remains open in a number of directions. It has a tabular predictable geometry and grade distribution and is laterally extensive as defined by drilling to date. Its surface strike length has been established to be in excess of three kilometres, of which only a portion has been drill-tested.

A proposed budget for the recommended 2020 program is presented in Table 1.2. It is recommended that a PEA be completed as Phase I that incorporates the updated Mineral Resource Estimate with current metal prices and exchange rates. The cost of updating a PEA, including the completion of additional data compilation and permitting studies, is estimated at \$250,000.

Assuming the results of the updated PEA are favourable, a Phase 2 program to advance the Project through a Pre-Feasibility Study and continue diamond drilling (allow 4.000 metres) for ongoing resource expansion is recommended at an estimated cost of \$2,800,000. The Pre-Feasibility Study should include additional metallurgy, geotechnical site assessment drilling and environmental studies.

Table 1.2 Budget for Proposed 2020 Program						
Task Description	Cost (C\$)					
Phase 1 - Preliminary Economic Assessment	250,000					
Phase 2 - Metallurgical Testwork	150,000					
- Geotechnical Mine & Site Assessment Drilling	400,000					
- Environmental Study Initiation	250,000					
- Diamond drilling (4,000 m)	1,200,000					
- Pre-Feasibility Study	800,000					
Phase 2 Subtotal	2,800,000					
Phase 1 & 2 Contingency at 15%	457,500					
Phase 1 and 2 Total	3,507,500					

# 2.0 INTRODUCTION AND TERMS OF REFERENCE

Rokmaster engaged P&E Mining Consultants Inc. ("P&E") to complete a NI 43-101 Updated Mineral Resource Estimate and Technical Report for the Property

This Technical Report was prepared by P&E at the request of Mr. John Mirko, President and Chief Executive Officer of Rokmaster. Rokmaster is a public, TSX Venture Exchange listed junior exploration company trading under the symbol "RKR", with its head office located at:

625 Howe St., Suite 1150, Vancouver, B.C. V6C 2T6 Tel: 604-290-4647

Mr. Richard Routledge, P.Geo., a Qualified Person under the terms of NI 43-101, conducted a site visit of the Property for the current Technical Report on June 13 and 14, 2012. A data verification sampling program was conducted as part of the on-site review. Since there have been no material changes on the Revel Ridge Property since Mr. Routledge's June 2012 site visit, that site visit is considered to be current. The only non-material activity on the Revel Ridge Property since 2012 has been the closure of the site camp and the removal of mining and infrastructure equipment as confirmed in this report section by a signed statement from the site watchmen. Research indicates no additional material exploration work has been conducted on the Property since 2012. In addition, Mr. Puritch has come into possession of a BC Mines Inspector report dated July 9, 2019 that indicates there has been no activity at the site since 2012. The report goes on to discuss how the mine site was not properly secured from public access which confirms the inactive state of the mine and the associated site. See highlighted extracts from the inspector's report in Section 12.4.

This Technical Report has an effective date of January 29, 2020.

The present Technical Report is prepared in accordance with the requirements of National Instrument 43-101 ("NI 43-101") and in compliance with Form NI 43-101F1 of the Ontario Securities Commission ("OSC") and the Canadian Securities Administrators ("CSA").

The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in P&E's services and is based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended to be used by Rokmaster subject to the terms and conditions of its contract with P&E. This contract permits Rokmaster to file this report as a Technical Report with the Canadian Securities Regulatory Authorities pursuant to National Instrument 43-101, "Standards of Disclosure for Mineral Projects". Any other use of this report by a third party is at that party's sole risk.

#### 2.1 SOURCE OF INFORMATION

This Technical Report is based, in part, on internal company Technical Reports, maps and technical correspondence, published government reports, press releases and public information as listed in the References Section at the conclusion of this Technical Report. Sections from

reports authored by other consultants have been directly quoted or summarized in this Technical Report, and are so indicated where appropriate.

# 2.2 UNITS AND CURRENCY

All measurement units used in this report are metric and the currency is expressed in Canadian dollars unless stated otherwise. Gold ("Au") and silver ("Ag") assay values are reported in grams of metal per metric tonne ("g/t Au"), unless ounces per short ton ("oz/t Au") are specifically stated. Location coordinates are expressed in the Universal Transverse Mercator (UTM) grid coordinates using 1983 North American Datum (NAD83) Zone 17 unless otherwise noted.

# 2.3 GLOSSARY AND ABBREVIATION OF TERMS

The following list shows the meaning of the abbreviations for technical terms used throughout the text of this Technical Report.

Abbreviation	Meaning
((0))	Degree
"3-D"	Three dimensional
"AA"	Atomic Absorption
"ac"	Acre
"g/t Ag"	Grams per tonne of silver
"Ag"	Silver
"ARD"	Acid rock drainage
"AGAT"	Agat Laboratories
"Armex"	Armex Mining Corp.
"As"	Arsenic
"ASL"	Above sea level
"g/t Au"	Grams per tonne of gold
"Au"	Gold
"Au Eq"	Gold equivalent
"BacTech"	BacTech Mining Corporation
"BCSC"	British Columbia Securities Commission
"CA"	Certificate of Authorization
"CDN"	Canadian
"CDN\$"	Canadian dollars
"CIM"	Canadian Institute of Mining, Metallurgy and Petroleum
"cm"	Centimetre(s)
"Company"	Rokmaster Resources Corp.
"CRM"	Certified reference material
"CSA"	Canadian Securities Administrators
"Cu"	Copper
"Cum"	Cumulative
"DCF"	Discounted cash flow
"DDH"	Diamond drill hole
"DGPS"	Differential Global Positioning System
"E"	East
"EA"	Environmental assessment

"EIA" Environmental impact assessment "EIS" Environmental impact statement "G&A" General and Administration

"g/t" Grams per tonne

"GPS" Global Positioning System

"ha" Hectare(s)

"Huakan" Huakan International Mining Inc.

"IP" Induced Polarization
"IRR" Internal rate of return

"ISO" International Organization for Standardization

"Issuer" Rokmaster Resources Corp.
"Ind." Indicated Mineral Resources

"k" Thousands

"k\$" Thousands of dollars

"kg" Kilograms "km" Kilometre(s)

"km/h" Kilometres per hour "koz" Thousands of ounces "kt" Thousands of tonnes

"LOM" Life of mine
"M" Million
"m" Metre(s)

"\$M" Millions of dollars
"Ma" Millions of years
"MAG" Magnetometer survey

"Meas." Measured Mineral Resources

"MEM" Ministry of Mines
"Merit" Merit Mining Corp.
"Micon" Micon International Ltd.

"ML/ARD" Metal leaching/acid rock drainage

"mm" Millimetres "N" North

"N/A" Not applicable

"NAG" Non-potentially acid generating rock

"NE" Northeast

"NI 43-101" National Instrument 43-101

"NN" Nearest Neighbour
"NPV" Net Present Value
"NSR" Net Smelter Return
"OK" Ordinary kriging
"opt" Troy ounces per ton

"OSC" Ontario Securities Commission
"oz/t Au" Troy ounces gold per ton
"PAC" Portable Assessment Credit
"PAG" Potentially acid generating rock

"Pb" Lead

"PEA" Preliminary Economic Assessment Technical Report

"PFS" Pre-feasibility study

"Project" Revel Ridge Project
 "Property" Revel Ridge Property
 "RC" Reverse circulation drilling
 "QA/QC" Quality assurance/quality control

"QC" Quality control

"Qualified Person" Qualified Person as defined by Canadian National Instrument NI 43-101

"ROM" Run-of-mine material produced during mining

"S" South "Sb" Antimony

"SEDAR" Website developed by the CRA, that Provides Access to Public Securities

documents and information filed by public companies and investment

funds in Canada

"Standard" Certified reference material

"t" Metric tonne(s)

"t/m<sup>3</sup>" Tonnes per cubic metre

"tph" Tonnes per hour Tryll Tonnes per day

"TSF" Tailings storage facility

"UPEA" Updated preliminary economic assessment

"XRF" X-ray fluorescence spectrometer

"Zn" Zinc

P&E has assumed that all the information and technical documents listed in the Sources of Information section of this Technical Report are accurate and complete in all material aspects. While P&E carefully reviewed all the available information presented to us, P&E cannot guarantee its accuracy and completeness. P&E reserves the right, but will not be obligated to revise this Technical Report and conclusions if additional information becomes known to us subsequent to the date of this Technical Report.

Although copies of the licenses and work contract were reviewed, an independent verification of land title and tenure was not performed. P&E has not verified the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties.

The authors of this Technical report have relied largely on the documents listed in the Sources of Information and the site visit for the information in this Technical Report, however, the conclusions and recommendations are exclusively the authors. The results and opinions outlined in this Technical Report are dependent on the aforementioned information being current, accurate and complete as of the effective date of this Technical Report and it has been assumed that no information has been withheld which would impact the conclusions or recommendations made herein.

A draft copy of this Technical Report has been reviewed for factual errors by Rokmaster. Any changes made as a result of these reviews did not involve any alteration to the conclusions made. Hence, the statement and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the effective date of this Technical Report.

# 3.0 RELIANCE ON OTHER EXPERTS

Although selected copies of the tenure documents, operating licenses, permits, and work contracts were reviewed, an independent verification of land title and tenure was not performed. P&E has not reviewed or verified the legality of any underlying agreement(s) that exist concerning the claims, leases and licenses or other agreement(s) between third parties. Information on tenure and permits was obtained from John Mirko, CEO of Rokmaster.

# 4.0 PROPERTY DESCRIPTION AND LOCATION

# 4.1 PROPERTY LOCATION

The Property is located in the Revelstoke Mining Division in southeastern British Columbia, approximately 32 km northeast of Revelstoke, BC, 420 km northeast of Vancouver, BC, and 290 km west of Calgary, AB. The Property is within the 082M-030 NTS map sheet. The location of the portal, that is located near the center of the Property, is UTM NAD83 11U 420,719 m E, 5,681,811 m N (51° 16′ 56" N and 118° 08′ 12" W), see Figure 4.1.

Tall of Ullan cell Fuca

Image Landsat / Copernous
Data Sio, NoAA, U.S. Navy, NoA, GEBCO
Co 2019 Google

Google Earth

FIGURE 4.1 PROPERTY LOCATION MAP

Source: GoogleEarth (2020)

# 4.2 HUAKAN – ROKMASTER AGREEMENT TERMS

Mineral tenure ownership is currently registered to Huakan. Rokmaster has an exclusive option to earn a 100% interest in the Property by paying Huakan an aggregate of CDN\$44,200,000 in cash on the following schedule (the "**Option Period**"):

- 1. CDN\$200,000 within 5 business days of the date on which Rokmaster has obtained TSX Venture Exchange ("TSXV") acceptance of the Huakan-RKR Agreement (the "Effective Date");
- 2. an additional CDN\$1,000,000 within 5 business days of the first anniversary of the Effective Date;

- 3. an additional CDN\$4,000,000 within 5 business days of the second anniversary of the Effective Date:
- 4. an additional CDN\$6,000,000 within 5 business days of the third anniversary of the Effective Date;
- 5. an additional CDN\$13,000,000 within 5 business days of the fourth anniversary of the Effective Date; and
- 6. an additional CDN\$20,000,000 within 5 business days of the fifth anniversary of the Effective Date.

In addition, to maintain the Option, Rokmaster is to complete an updated Preliminary Economic Assessment (the "**Updated PEA**") on the Project on or before the first anniversary of the Effective Date. If and when Rokmaster has satisfied the aforementioned Option exercise conditions, Rokmaster would have the right and option, in lieu of acquiring the Project assets, to instead acquire all of Huakan's issued and outstanding shares from Huakan's shareholders.

In addition, Huakan has indemnified Rokmaster in the event of any failure to deliver title to the Property and if Huakan fails to do so, Huakan will refund all payments and expenditures made by Rokmaster during the Option period.

There are no underlying NSR Royalties on the Property.

# 4.3 PROPERTY DESCRIPTION

The Property is comprised of 18 mineral claims and 10 Crown Grant Lots covering a total area of 3,150.7 ha. The mineral claims cover approximately 2,986.69 ha and the Crown Grants cover an additional 164.05 ha.

Information relating to tenure was verified by Richard Sutcliffe, PhD, P.Geo. on January 29, 2020 by means of the public information is available through the Mineral Titles Online (MTO) system at https://www.mtonline.gov.bc.ca/mtov/home. P&E has relied upon this public information, as well as information from Huakan and has not undertaken an independent verification of title and ownership of the Property claims.

The mineral claims are listed in Table 4.1 and are illustrated in Figure 4.2. The Crown Grants are listed in Table 4.2 and are illustrated in Figure 4.2.

A legal land survey of the mineral claims has not been undertaken; however, the Crown Grant Lots are legally surveyed.

The mineral claims are in good standing until at least August 1, 2025.

The annually applied tax payment due date for Crown Grants is June 30 and is payable to the BC Government. Payment is required by the due date to ensure each Crown Grant Lot is held in good standing.

TABLE 4.1 REVEL RIDGE MINERAL CLAIMS									
Tenure	Mining								
Number	Name	Date	(ha)	Division					
398402	J1	01/08/2025	25.00	Revelstoke					
398403	J2	01/08/2025	25.00	Revelstoke					
398404	J3	01/08/2025	25.00	Revelstoke					
398405	J4	01/08/2025	25.00	Revelstoke					
398406	J5	01/08/2025	25.00	Revelstoke					
398407	J6	01/08/2025	25.00	Revelstoke					
398408	J7	01/08/2025	25.00	Revelstoke					
398409	J8	01/08/2025	25.00	Revelstoke					
398410	J9	01/08/2025	225.00	Revelstoke					
398411	J10	01/08/2025	300.00	Revelstoke					
398412	J11	01/08/2025	25.00	Revelstoke					
398413	J12	01/08/2025	25.00	Revelstoke					
399179	Sage	01/08/2025	375.00	Revelstoke					
399180	J13	01/07/2026	500.00	Revelstoke					
399181	J14	01/07/2026	500.00	Revelstoke					
399182	J15	01/08/2026	375.00	Revelstoke					
401774	Brush	01/08/2025	300.00	Revelstoke					
606405	Yellow Jacket	01/08/2025	161.69	Revelstoke					

Note: Claim status as of January 29, 2020.

TABLE 4.2 REVEL RIDGE CROWN GRANT LOTS									
Claim Number	Claim Name	Mining Division							
L 14821	Goat Fraction	Revelstoke							
L 14822	Goat No. 2 Fraction	Revelstoke							
L14823	Goat No. 3 Fraction	Revelstoke							
L 14824	Goat No. 4 Fraction	Revelstoke							
L 14825	Goat No. 5 Fraction	Revelstoke							
L 14826	Goat No. 6 Fraction	Revelstoke							
L 14827	View Fraction	Revelstoke							
L 14828	View No.2 Fraction	Revelstoke							
L 14829	Creek Fraction	Revelstoke							
L7408	Aberdeen	Revelstoke							

FIGURE 4.2 REGIONAL LOCATION MAP

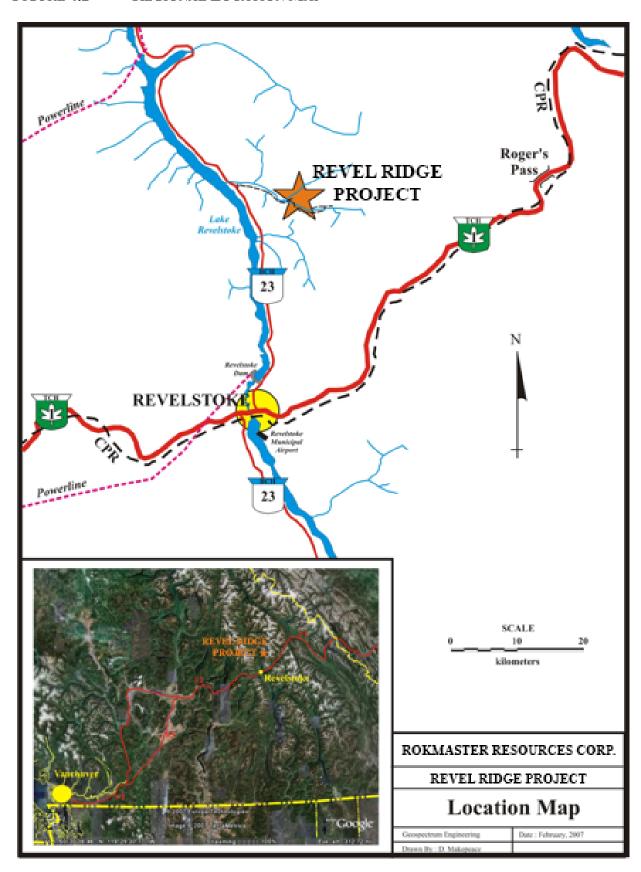
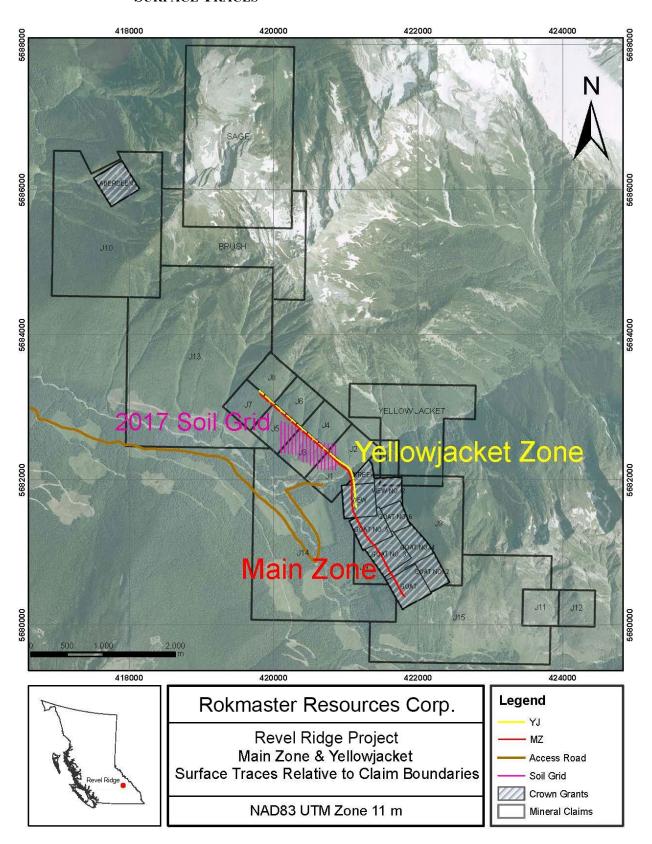


FIGURE 4.3 PROPERTY CLAIM MAP WITH MAIN AND YELLOWJACKET ZONE SURFACE TRACES



# 4.4 GENERAL REQUIREMENTS FOR MINERAL CLAIMS

To keep British Columbia mineral claims in good standing, assessment or development work is required on a claim, on or before the set expiry date. Effective July 1, 2012, all mineral claims in the province were set back to a Year 1 requirement, regardless of how many years had elapsed since their original staking. As of that date, annual work commitments were set on a four-tier schedule, as follows:

- \$5.00 per hectare for anniversary years 1 and 2;
- \$10.00 per hectare for anniversary years 3 and 4;
- \$15.00 per hectare for anniversary years 5 and 6; and
- \$20.00 per hectare for subsequent anniversary years.

Assessment work in excess of the annual requirement may be credited towards future years. Companies are permitted to pay cash in lieu of work expenditures; however, the cost is double the schedule rate above. Before their expiry, the mineral claims will require assessment work at a rate of \$20.00 per hectare.

# 4.5 PERMITTING

The Revel Ridge Property is currently covered by exploration permit MX-4-500, with an \$80,000 bond (placed by Huakan) in place with the Ministry of Energy, Mines and Petroleum Resources, BC, to facilitate any required reclamation. The reclamation liabilities that fall under the bond include removing the camp and workshop, covering the PAG pile with soil and seed, scarifying and seeding the campsite, portal laydown areas and access roads, and barricade the two portals.

# 4.6 ARMEX STATEMENT OF CLAIM

On January 17, 2018 Armex Mining Corp. ("Armex") filed a statement of claim with the British Columbia Supreme Court (Vancouver Registry). Armex claims that it has a valid letter of intent with Huakan covering Huakan's J&L property, now named the Revel Ridge Property. Huakan also filed a Counterclaim against Armex on March 13, 2018. Huakan has notified the Company that it intends to defend the Armex action. The lawsuits have not been resolved at the time of this Technical Report. Rokmaster and the TSX Venture Exchange have both been informed by Armex of their statement of claim.

# 4.7 FIRST NATIONS WITH POTENTIAL INTERESTS IN THE REVELSTOKE REGION

According to the First Nations Consultative Boundaries Map (2005), the claim areas of five First Nations overlap the Revel Ridge Property. As the map demonstrates, the Little Shuswap Indian Band, Neskonilth Indian Band, Adams Lake Indian Band, Okanagan Indian Band and the Ktunaxa Kinbasket Tribal Council assert interests in the region embracing the Revel Ridge Property. The Property is on the periphery of all five claim areas.

In 2010, the Province of British Columbia introduced a new web application to assist with the identification of First Nation claim areas. This web tool is called the Consultative Areas Database (Public), and by accessing it users can generate a list of First Nations with potential interests in lands within the province. In this instance, the Consultative Areas Database (Public) generates a report indicating that two political organizations and twelve First Nations have potential interests in the Revel Ridge Property. In the list below, the First Nations have been grouped according to their affiliations with political organizations:

Consultative Areas Database Report on the Revel Ridge Project Area.

Shuswap Nation Tribal Council (political organization not returned by CAD).

- 1. Shuswap Indian Band (Teit's Kinbasket band on Windermere Lake).
- 2. Little Shuswap Indian Band (Teit's Lake Shuswap band at Salmon Arm aka Squilax).
- 3. Splats'in First Nation (Spallumcheen).
- 4. Neskonlith Indian Band.
- 5. Adams Lake Indian Band.
- 6. Okanagan Nation Alliance.
- 7. Okanagan Indian Band (Northern Okanagan).
- 8. Penticton Indian Band (Northern Okanagan).
- 9. Lower Similkameen Indian Band (Northern Okanagan).
- 10. Ktunaxa Nation Council.
- 11. Akisqnuk First Nation (Upper Kutenai on Windermere Lake).
- 12. Lower Kootenay Band (Lower Kutenai at Creston, BC).
- 13. St. Mary's Indian Band (Upper Kutenai aka Fort Steele band).
- 14. Tobacco Plains Indian Band (Upper Kutenai at Tobacco Plains, BC).

There is an additional First Nation with a potential interest in the Property identified in the ethnographic sources: the Lakes (Sinixt) First Nation. The reason this First Nation is not returned by Consultative Areas Database as having potential interests in the Property is because this aboriginal group is considered "extinct" by Canadian governments. There are, however, Lakes people living on the Colville Reservation in Washington State.

Exploration requiring a Notice of Work requires that the government of British Columbia to consult with all of these groups. It is the practise of Rokmaster to conduct its own First Nations consultations prior to and during its work program on the Property. As the Project advances, more in-depth discussions and expectations should be expected. It can be expected that each group will have a different strength of claim in relation to any economic benefits discussions.

# 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

# 5.1 ACCESSIBILITY

Vehicle access to the Property is via Provincial Highway 23, north of the city of Revelstoke and Trans-Canada Highway 1. At 32 km north of Revelstoke, Highway 23 intercepts the Carnes Creek Forest Service Road. The Property is then reached by travelling eastward 13 km along the Carnes Creek Forest Service Road to the Revel Ridge Mine camp. Road travel time to the camp is approximately 45 minutes from Revelstoke. The Forest Service Road is sometimes radio controlled, but currently is not being used for logging activities. Due to lack of activity by logging companies, road maintenance has been undertaken by Huakan. Helicopter access from Revelstoke takes approximately 15 minutes. There are two helicopter bases in Revelstoke that can be chartered.

On the Property access is via four-wheel drive or tracked vehicle. The road to the camp and 832 m level portal and shop are in good condition. Several overgrown trails access the majority of the workings on the Property. The original bridges over Carnes Creek and over McKinnon Creek were destroyed by a flood in 2008. In 2008 a detour was built to another bridge over Carnes Creek providing access to the camp. The detour starting at kilometre 10, has a locked gate controlled by the Company. The road to the original 830 m level portal is not drivable at this time due to road slumping and erosion.

#### 5.2 CLIMATE

Revelstoke has a humid continental climate with the Koppen-Geiger classification Dfb. The average annual temperature is 6°C (https://en.climate-data.org/north-america/canada/british-columbia/revelstoke-714868/). The summer weather is considered moderate with July average temperatures of 18.7°C. The average annual precipitation is 103 cm/year. Winters are long and are characterized by heavy snowfalls (1 to 4 metres) with cool temperatures. Average January temperatures are -6.5°C. Snowfall typically occurs between October and May at higher elevations and between November and April at lower elevations such as at the camp and portals elevation. Exploration, development and production activities can be carried out on a year round basis.

### 5.3 LOCAL RESOURCES

Revelstoke is a city with a census population of 7,547 (2016) that is located on the Trans-Canada Highway and the Canadian Pacific Railway ("CP"). The economy of Revelstoke is forestry, construction, tourism, hydro electrical operations, transportation (mainly CP Rail) and public services. There is a large, skilled workforce of trades and technical professionals, as well as equipment suppliers available throughout the region.

The Revelstoke Hydroelectric Dam, located on the Columbia River, is 2 km north of Revelstoke and produces power for a large portion of British Columbia. There are no power lines running along Highway 23, although there is an underground telephone line.

# 5.4 INFRASTRUCTURE

Revelstoke and the surrounding area are well serviced by the Trans Canada Highway 1 and the CP rail line. Highway1 provides access to Calgary, located 407 km east, and Kamloops, 212 km to the west. Revelstoke has a commercial airport. The nearest airports with scheduled flights are Kelowna, BC, and Calgary, AB.

The Project assets include a rail siding and load-out facility for CP Rail in Revelstoke, a fleet of formerly utilized underground mining equipment is stored in the Company yard north of Revelstoke with a locked warehouse full of mining equipment, supplies, parts and spares that serviced the underground drifting and drilling programs of 2008–2012.

The Property has a fully functional 40-man camp with an effective snow roof near the 832 m level portal. A water treatment plant was installed in the camp but was removed in 2014 and stored in a yard north of Revelstoke. There is a large maintenance shop, dry, lunch room, first aid and office facility, all in excellent shape, located in the immediate vicinity of the 832 m level portal. Electric power was produced by on-site diesel generators, able to operate a satellite phone and internet system, all of which have been removed to the storage yard north of Revelstoke. The generator shed is still intact. A 40,000 litre Enviro-tank is currently located next to the generator shed.

The Property hosts several portals and drifts. Only two (2) portals are able to be accessed but are currently locked due to safety requirements (830 m level portal and 832 m level portal). A total of 3.1 kilometres of operational underground workings are present on the Property, although access is restricted without ventilation and due to local flooding. The 1,400-metre long 830 m level track drift (2.4 m x 2.4 m profile) has exposed the Main Zone for approximately 800 metres in length. This track drift was started in 1965 and has been extended on numerous occasions by subsequent owners.

Huakan extended the track system in 2011/2012 by 450 m. The 830 m level track drift has not deteriorated over time and was inspected in 2012. The 830 m level track drift was driven on the Main Zone, exposing the Main Zone for approximately 800 metres. Approximately 50 metres from the 830 m level portal, this drift has a dip in the track which has accumulated about 30 centimetres of water for a 25-metre stretch. The drift is not ventilated but is potentially accessible with proper equipment and supervision. Five tracked crosscuts totalling 1,150 metres run northeast from the main 830 m level track drift (into the hanging wall) provided drill stations for diamond drilling that define the deposits. Several raises off the 830 m level track drift have aided in the extraction of several bulk samples since the 1990s. Side dumping mining cars, used in drifting in 2008-2012, are parked outside the 832 m level portal area.

The 550-metre long (5 m x 5 m profile) 832 m level trackless drift was installed by Merit in 2008 and connects to the track drift, thereby providing year-round underground access to the 830 drift. Approximately 350 metres from the 832 portal the decline ramps up to connect to the track drift. Due to this configuration, the 832 drift is currently flooded and would require to be de-watered and ventilation reinstalled to reactivate and gain access to the workings. The 832 m level trackless drift also extended about 50 metres further as a decline from the point of the up ramp. One could extend this decline a further 100 metre to drift through the Yellowjacket Zone. Water drains from the 832 m level portal into a two-compartment settling pond outside of the portal.

The flow rate from the 832 m level portal is approximately 10 gallons a minute. The overflow from the seeping ponds is piped to a vegetated area some 400 metres from Carnes Creek. The flow is absorbed into the ground within 15 metres of the pipe. The discharge from the 832 m drift has elevated arsenic, however, as Carnes and McKinnon Creeks has flows in excess of thousands of gallons per minute, water quality testing has shown that the receiving environments are not affected by the 832 discharge.

FIGURE 5.1 3-D VIEW OF UNDERGROUND WORKINGS

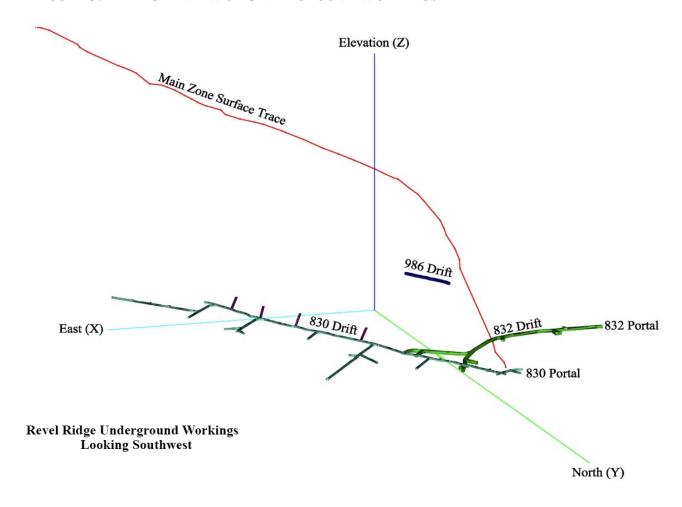


FIGURE 5.2 PLAN VIEW OF ROADS, CAMP, SHOP, PAG PILE AND PROJECTION OF 832 M AND 830 M LEVEL UNDERGROUND WORKINGS

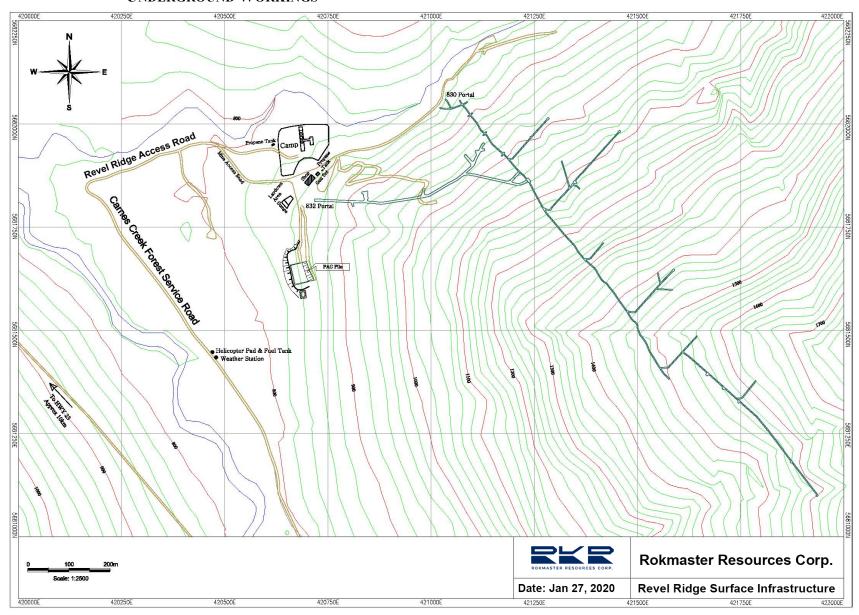
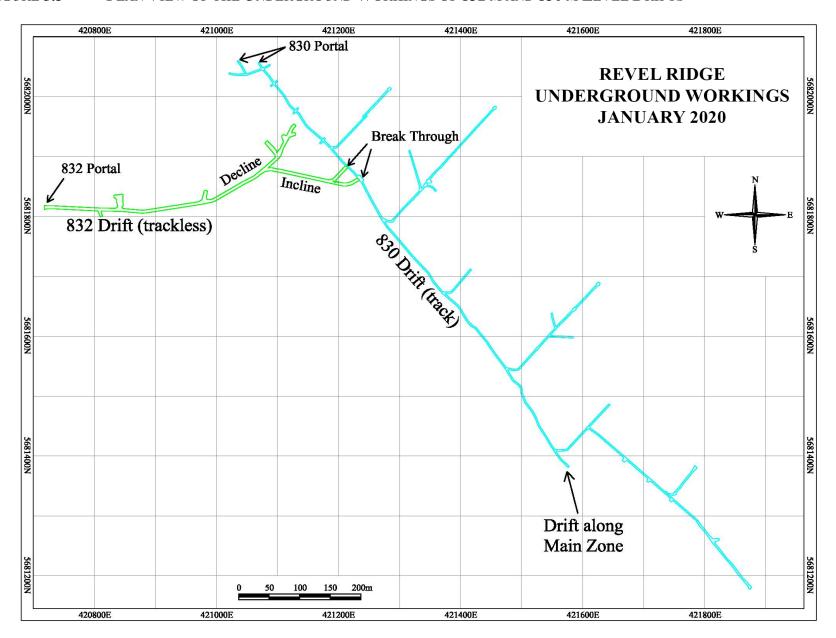


FIGURE 5.3 PLAN VIEW OF THE UNDERGROUND WORKINGS OF 832 M AND 830 M LEVEL DRIFTS



Approximately 200 metres south from the 832 m level portal is a lined Potentially Acid Generating ("PAG") waste rock storage area that was created by Huakan in 2011. The PAG pile is covered by tarps and was built to drain to one corner and piped out into a seepage pond. Generally, the outflow pipe from the lined PAG pad is dry throughout the year but after some rains there was a trickle of outflow that allows the collection of a sample. Water quality testing of this flow shows below acceptable levels for BCWQ Criteria for Freshwater Aquatic Life, except for cadmium.

Selkirk Helicopters occasionally uses the Property as a re-fuelling station for their operations. A skid mounted fuel tank is located about 300 metres from the 832 m level portal on the Forest Service Road.

There is a helicopter-accessible ski chalet located 5 kilometres east of the Property at the lower portion of the Durrand Glacier which is used for heli-skiing in the winter and alpine hiking in the summer.

# 5.5 Physiography

The topography is characteristic of the Selkirk Mountains. The elevation ranges from 700 to 3,050 metres above mean sea level. The topographic relief is a result of recent alpine glaciation. Incised creeks, such as McKinnon Creek, created narrow valley floors, while major creeks, like Carnes Creek, exhibit a broader U-shaped appearance with the potential for deep valley-bottom overburden. The talus covered slopes are steep, ranging from 28° to 40° while bedrock slopes grade up to near vertical, depending on lithology.

All of these conditions make traversing the Property somewhat hazardous and time consuming. Numerous avalanche chutes occur in the area. An avalanche chute occurred beside the original 830 portal and prompted the driving of the 832 m level trackless drift which allows safe year-round access to the underground workings. Flat ground is limited on the Property, however, there appears to be enough for a process plant site and waste rock storage piles both north and south of McKinnon Creek, should the Project advance to production. There is a tributary valley 3 km upstream on Carnes Creek that might be serviceable as a tailings facility, however, would require further study prior to permitting.

The main watercourse on the Property is Carnes Creek, which transects the area. Carnes Creek is around 10-25 m across and fast moving. Its main source is the Durrand Glacier, which is east of the Property. McKinnon Creek is a tributary of Carnes Creek and is a more juvenile watercourse that is between 10 to 15 m wide and can change its flow volume rapidly. These watercourses enter the Columbia River that flows southwest through Washington State to the Pacific Ocean.

The area surrounding the intersection of McKinnon and Carnes Creeks has been the focus of the majority of the work over the life of the Property and is where the camp, shop and 832 m level portal are located.

Vegetation on the Property changes from alder, devil's club, stinging nettles and deadfalls in the valley floor, through stands of cedar, hemlock and minor fir on the mountainsides, to sub-alpine to alpine at approximately 1,980 metres elevation. The Carnes and Tumbledown Glaciers are immediately east of the Property boundary.

# 6.0 HISTORY

This section is primarily based on the Property history summarized in the Technical Report by Puritch et al. (2018). The Property area was first explored as early as 1865 when placer miners discovered gold in Carnes Creek. In 1896 prospectors, Jim Kelley and Lee George, staked the first claims at the junction of Carnes and McKinnon Creeks. The earliest work (1896-1900) carried out at the Roseberry mineral zone, 4.5 kilometres northwest of where the Main Zone was later discovered. The Property was formerly referred to as the J&L Property since its discovery by these two prospectors, Jim and Lee.

Development on the Revel Ridge Main Zone mineralization began in 1912 with the collaring of the 986 m level portal and 2 shallow shafts (each 46 metres deep). By 1924 metallurgical tests were attempting to resolve problems due to the high arsenic content of the mineralization. During 1924-27, Porcupine Goldfields Development and Finance Company completed 43 metres of underground drifting on two levels. In 1925, Mr. E. McBean excavated 30 trenches and pits along the surface trace of the Main Zone on Goat Mountain. In the following year, 26 kg of Main Zone mineralized rock were shipped to the Department of Mines in Ottawa for metallurgical testing. By 1927, the Big Bend road had reached the mouth of Carnes Creek, improving the access to the Property. The Geological Survey of Canada mapped the Property area in 1928, under the direction of Dr. H. Gunning.

Mr. T. Arnold acquired the Crown Grants and mineral claims in 1934. He, and subsequently his estate, had controlled these claims and Crown Grants until August 2010 when Merit exercised its option to own 100% interest in the Property. Between 1929 to 1933, significant development was completed on the A&E prospect, to the northwest of the Main Zone.

In 1935, Raindor Gold Mines optioned the Property and extended the 986 m level adit to 152 metres long on the Main Zone. In 1946, the two shafts were deepened, collectively to 117 metres. In 1952, Asarco optioned the Property and completed several trenches on the Main Zone. In 1962 Westairs Mines Ltd optioned the J&L, A&E and Roseberry prospects. In 1965, Westairs Ltd. collared a new portal, the 830 m level (tracked) adit to explore the Main Zone. Its total length was 297 metres. This has become one of the major underground assets on the Property. A road (12.4 km) was finally built into the Property from the Big Bend road (now Hwy 23) that same year.

In 1980, Pan American Minerals ("Pan American") leased the Property from T. Arnold. In 1981, the Property was optioned by BP Minerals Ltd., Selco Division ("BP-Selco") who commenced a large surface and underground exploration program. BP-Selco extended the 830 m level (tracked) adit an additional 1,333 metres of drift and crosscuts. They completed 64 underground drill holes (2,640 metres) over the next 4 years. In 1986 to 1987, Noranda Mines Ltd. optioned the Property and completed metallurgical studies on the Main Zone. In 1987-88 Pan American extended the 830 m level (tracked) adit an additional 250 metres of drift and crosscuts and completed 4 raises totalling 120 metres.

Equinox Resources Ltd. ("Equinox"), optioned the Property from Pan American in 1988 and completed 32 underground drill holes for a total of 2,985 metres between 1988 and 1989. A 270-ton bulk sample was mined from 3 TDBs ("Take-Down-Back") for metallurgical studies. Cheni Gold Mines Ltd. ("Cheni"), became part of the joint-venture group in 1991 with the discovery of

the Yellowjacket mineralization from 32 surface drill holes. The newly discovered mineralization is situated in the hanging wall of the Main Zone and was considered a blind deposit (i.e. there is no surface evidence of the Deposit, although boulders of the Yellowjacket mineralization are present in McKinnon Creek).

In 1991, Cheni also collared a new trackless 832 m level portal (3.0 m x 3.5 m) which adit ran 170 metres long, stopping short of linking to the 830 m track drift. In 1991, Equinox announced a Mineral Resource Estimate (historic resource estimate) for both the Main Zone and Yellowjacket Zone. The historic Mineral Resource Estimates are not reported here since they have not been relied upon.

Metallurgical testing continued on Main Zone material through the early 1990s.

In 1996, Weymin Mining Corporation ("Weymin") optioned the Property from Equinox Resources Ltd., a subsidiary of Hecla Mining Corporation. Three surface drill holes (503 metres) were completed (Table 6.1) and a 120-tonne underground bulk sample was retrieved from the 830 m level for metallurgical studies from six sample locations.

TABLE 6.1 1996 YELLOWJACKET ZONE DRILL HIGHLIGHTS										
Drill Hole No.From (m)To (m)Core Width 										
S-97-1	92.42	95.28	2.86	0.09	18.08	0.89	3.22			
	95.28	97.28	2.00	0.00	5.66	0.29	0.08			
	98.28	99.28	1.00	0.00	40.46	0.83	0.95			
S-97-2	67.15	68.22	1.07	0.07	64.46	3.05	11.94			
	75.72	80.50	4.78	0.24	63.06	2.38	14.92			
	84.05	86.05	2.00	0.15	33.09	1.98	5.68			
S-97-3	75.06	75.54	0.48	0.00	27.77	1.63	3.80			
	82.54	87.02	4.48	0.09	52.71	2.43	11.10			
	93.55	94.38	0.83	0.34	121.78	5.69	15.19			
	96.07	98.92	2.85	0.23	29.10	1.58	5.87			

In 1996, Weymin commissioned H.A. Simons of Vancouver to complete two detailed reports; "Technical Review of the J&L Property" and "Project Opportunities for the J&L Property". In March 1998, H. A. Simons completed the "McKinnon Creek Property Scoping Study". Simons provided analyses of six cases, exclusively on the Main Zone. The Yellowjacket Zone was not analyzed. The two favoured cases are not reported here as they are historical and are not relied upon.

BacTech Mining Corporation ("BacTech") optioned the Property in 2004. BacTech carried out further metallurgical tests, engineering and environmental studies. A minor drilling program was carried out that year. Due to the financial collapse of BacTech, the drilling details have never been made available.

On April 13, 1997, Merit entered into an option agreement with the Estate of T. Arnold to acquire a 100% interest in the Property. By December 2007, a 40-man camp was installed, construction of a shop/mine dry complex was completed, and mining equipment was procured. A late fall 2007 surface diamond drilling program of nine holes, totalling 1,363.37 metres, was completed, with the objective of verifying historic drilling over a portion of the Yellowjacket deposit. The program successfully achieved this objective by intercepting multiple zinc-lead-silver zones similar in grade and width to previous drilling, summarized in Table 6.1.

TABLE 6.2 2007 YELLOWJACKET ZONE DRILL HIGHLIGHTS									
Drill Hole No.	From (m)	To (m)	Length (m)	Ag (g/t)	Pb (%)	Zn (%)	Combined Pb-Zn (%)		
M07SJ-01	22.00	25.00	3.00	11.80	0.65	2.83	3.48		
	27.50	30.00	2.50	25.92	1.32	6.83	8.15		
	33.10	34.85	1.75	84.55	3.01	12.07	15.08		
	39.35	41.15	1.95	61.00	3.49	3.39	6.88		
	43.90	63.30	19.40	27.85	1.10	5.19	6.29		
Including	43.90	49.50	5.60	27.06	1.12	8.54	9.66		
	Incl. 50.90	57.55	6.65	22.01	0.93	4.40	5.33		
	Incl. 58.80	63.30	4.50	52.19	1.89	5.06	6.95		
	67.50	69.00	1.50	58.13	3.63	9.65	13.28		
M07SJ-02	23.15	28.00	4.85	44.58	1.75	7.22	8.97		
	31.30	36.10	4.80	47.31	1.97	4.77	6.74		
	40.90	43.00	2.10	22.72	1.13	3.91	5.04		
	50.15	58.00	7.85	9.98	0.38	4.11	4.49		
	68.60	73.00	4.40	55.40	2.47	9.65	12.12		
	98.00	99.00	1.00	66.20	1.64	9.54	11.18		
M07SJ-03	34.00	37.00	3.00	55.57	1.91	8.43	10.34		
	46.00	46.75	0.75	108.00	4.33	7.21	11.54		
	52.00	54.70	2.70	65.08	1.89	12.71	14.60		
	61.05	61.55	0.50	66.20	1.64	9.54	11.18		
	68.00	70.00	2.00	19.15	1.04	10.75	11.79		
	72.00	73.50	1.50	30.53	1.80	8.01	9.81		
M07SJ-04	48.30	49.65	1.35	104.36	4.97	7.75	12.72		
	109.75	111.15	1.40	0.80	0.03	4.83	4.86		
	116.00	120.00	4.00	156.88	0.56	1.09	1.65		
M07SJ-05	40.60	43.00	2.40	38.82	1.57	4.50	6.07		
	45.00	49.05	4.05	11.57	0.64	2.93	3.57		
	52.00	55.20	3.20	44.94	1.98	20.05	22.03		
	58.00	59.50	1.50	102.73	2.83	17.93	20.76		
	98.00	99.35	1.35	38.30	1.23	5.78	7.01		
M07SJ-06	31.00	47.00	15.52	56.08	2.28	6.11	8.39		
Including	31.00	36.00	5.00	74.14	2.70	8.66	11.36		
Including	38.90	47.00	8.10	62.85	2.73	6.61	9.34		

TABLE 6.2 2007 YELLOWJACKET ZONE DRILL HIGHLIGHTS									
Drill Hole No.	From To (m)		Length (m) Ag (g/t)		Pb Zn (%)		Combined Pb-Zn (%)		
	61.25	63.00	1.75	66.55	2.72	10.14	12.86		
M07SJ-08	95.75	98.40	2.65	41.30	1.69	4.14	5.83		
M07SJ-09	91.00	92.30	1.30	113.23	0.77	3.64	4.41		
	100.20	101.50	1.30	13.40	0.87	5.08	5.95		

The 2007 surface drilling program also intercepted Main Zone material; however, the Main Zone is not strongly developed adjacent to the Yellowjacket north area and ranges from between 0.25 and 3.75 metres wide with lower metal values.

Rehabilitation of the 832 m portal and underground development commenced in January 2008. The original 170-metre long Cheni 832 drift was slashed out to a 5 metre by 5 metre profile to allow for the passage of 30 tonne trucks. The 832 m level drift was extended a further 550 metres with the 5 metre by 5 metre profile, and connected to the 830 track drift approximately 310 metres from the original 830 m level portal. This allowed for easy underground access. This drifting was completed by September 2008, at which time the program was suspended, due to financial constraints and a major downturn in world metal prices.

Resumption of mineral exploration activity at the Property by Huakan began in November 2010, with the implementation of the 2010-2011 winter underground drill program aimed at verifying historic drilling and generating a NI 43-101 Mineral Resource Estimate.

Between November 15, 2010 and January 30, 2011, Huakan completed 60 underground diamond drill holes for a total of 7,873.74 metres of BQTW core. The program started as a 12 hole in-fill drill program but was extended to expand the edges of the Main Zone deposit at 30 metre centers. By May 16, 2011 Huakan announced an NI 43-101 Mineral Resource Estimate on the Main Zone with a Technical report prepared by P&E Mining Consultants Inc., filed June 23, 2011.

Huakan subsequently engaged Micon International Limited ("Micon") to prepare a Preliminary Economic Assessment ("PEA") report, utilizing the May 16, 2011 Mineral Resource Estimate. The results of the PEA were announced on April 24, 2012, with the PEA report filed on SEDAR on June 6, 2012.

In 2012 Huakan conducted a 450-metre drifting and a 45-hole, 9,725 metre underground drill program to expand the Mineral Resource Estimate of the Main Zone. The 2012 program was successful in increasing the resources and results of an Updated Mineral Resource Estimate by P&E were reported in a news release by Huakan dated September 18, 2012. This estimate significantly increased Indicated Mineral Resources on the Main Zone and for the first time included a Mineral Resource Estimate on the Yellowjacket Zone. No subsequent physical work has been done on the Property since the 2012 Updated Resource Estimate. In January 2013,

Huakan reported updated metallurgical test work results from a bulk sample collected in the 2012 program.

All Huakan 2012 drilling was done with wireline BQTW diamond core. True widths are approximately 75% of downhole intercept lengths. The mineralization dips NE at 50°. Core recovery was >90% and often >95%.

From the summer of 2010 until the spring of 2014, Huakan conducted an extensive campaign of metallurgical testwork on bulk sample material from Main Zone and some testwork on Yellowjacket Zone material, from core. Test work included comminution testing, heavy media separation, open cycle flotation on Main Zone with optimization and variability testing and open cycle flotation on Yellowjacket Zone, Lock cycle flotation on both Main Zone and Yellowjacket Zone, flotation tailing characterization, and treatment and cyanidation of gold concentrate by bioleaching and pressure oxidation.

# 6.1 PREVIOUS MINERAL RESOURCE ESTIMATES

A previous Mineral Resource Estimate for the Property with an effective date of May 16, 2011 was reported at an NSR cut-off grade of CDN\$110.00/tonne (Table 14.1).

TABLE 14.2 Previous 2011 Mineral Resource Estimate										
Classification	Tonnes	Au (g/t)	Au (ozs)	Ag (g/t)	Ag (ozs)	Pb (%)	Zn (%)			
Main Zone										
Measured	1,202,000	6.71	259,200	69	2,664,600	2.4	4.46			
Indicated	1,165,700	6.92	259,200	64.9	2,432,100	2.01	3.86			
Measured & Indicated	2,367,700	6.81	518,400	66.95	5,096,700	2.21	4.16			
Inferred	4,538,100	5.19	757,500	67.8	9,887,800	2.16	2.99			
Footwall Zone										
Inferred	292,800	4.54	42,700	49	461,900	0.91	0.73			

**Source:** Brown, F., Ewert, W., Armstrong, T. (2011), Technical Report and Resource Estimate J&L Property, Revelstoke BC Canada. Technical report prepared for Huakan International Mining Inc., with an effective date of May 16, 2011.

A Qualified Person has not done sufficient work to classify the above historical estimate as a current mineral resource. The Issuer is not treating the historic estimate as a current mineral resource and it should not be relied upon.

The May 16, 2011 Mineral Resource Estimate was updated and published by a press release on September 18, 2012 to include the results of the 2012 drilling program (Table 14.2).

TABLE 14.3 PREVIOUS 2012 MINERAL RESOURCE ESTIMATE										
Classification	Tonnes	Au (g/t)	Au (ozs)	Ag (g/t)	Ag (ozs)	Pb (%)	Zn (%)			
Main Zone										
Measured	1,313,000	6.37	268,800	65.1	2,747,000	2.26	4.22			
Indicated	2,640,000	5.34	453,200	52.2	4,432,000	1.78	3.23			
Measured & Indicated	3,953,000	5.68	7,222,000	56.5	7,179,000	1.94	3.56			
Inferred	4,337	4.16	580,200	57.8	8,057,000	1.82	2.72			
Footwall Zone										
Inferred	363,000	3.65	42,500	25.4	296,000	0.55	0.51			
Yellowjacket Zone										
Indicated	1,003,000	0.21	6,900	64.1	2,068,000	2.77	9.08			
Inferred	35,000	0.35	400	81.9	91,000	3.18	6.26			

A Qualified Person has not done sufficient work to classify the above historical estimate as a current mineral resource. The Issuer is not treating the historic estimate as a current mineral resource and it should not be relied upon.

The September 18, 2012 Mineral Resource Estimate was updated and published by a press release on January 23, 2018 (Table 14.3).

TABLE 14.4 PREVIOUS 2018 MINERAL RESOURCE ESTIMATE									
Total All Zones	Tonnes (k)	Au (g/t)	Au (koz)	Ag (g/t)	Ag (koz)	Pb (%)	Zn (%)	AuEq (g/t)	AuEq (koz)
Measured	1,337	6.19	266	63.3	2,721	2.21	4.12	9.69	417
Indicated	3,823	4.03	495	53.0	6,509	1.98	4.73	7.60	934
Meas & Ind	5,160	4.59	761	55.6	9,231	2.04	4.57	8.14	1,351
Inferred	4,808	4.35	672	60.6	9,367	1.84	2.55	6.95	1,075

**Note:** k = thousands, koz = thousands of ounces.

A Qualified Person has not done sufficient work to classify the above historical estimate as a current mineral resource. The Issuer is not treating the historic estimate as a current mineral resource and it should not be relied upon.

All historical Mineral Resource Estimates have been superseded by the updated Mineral Resource Estimate that is the subject of this Technical Report. This Technical Report updates the previous Mineral Resource Estimates by incorporating changes in the commodity prices. No additional drilling or sampling information was used.

# 7.0 GEOLOGICAL SETTING AND MINERALIZATION

This section is primarily based on the Property geology summarized in the Technical Report by Puritch et al. (2018).

### 7.1 REGIONAL GEOLOGY

The Property lies within the Selkirk Mountains near the north end of the Kootenay Arc, that is a complex sequence of northwest trending, east dipping Neoproterozoic to Lower Paleozoic metasedimentary and metavolcanic rocks of the North American craton (Logan et. al., 1996, 7 A & B). The belt is characterized by tight to isoclinal folds and generally west verging thrust faults. Greenschist grade regional metamorphism has affected most of the rocks in the map area. Recent mapping by provincial government geologists has outlined the regional geology of the area.

# 7.2 PROPERTY GEOLOGY

The Property is underlain by north to northwest striking, moderate to steeply east-dipping metasediments and metavolcanic rocks of the Neoproterozic/Lower Cambrian Hamill Group, overlying Lower Cambrian rocks of the Mohican and Badshot Formations, and Lower Paleozoic Lardeau Group rocks. These units consist, for the most part, of sheared to intensely folded impure quartzites, quartz sericite to sericite to chlorite schists and phyllites, and grey banded to carbonaceous limestones.

The following is a brief description of the main geological units that are present on the Property. A stratigraphic column displaying the age relationships of units is presented below and in Figure 7.1.

# **Stratigraphic Column**

(after Logan, et.al., 1996)

### Lower Paleozoic

Lardeau Group Jowett Formation Micaceous Quartzite Index Formation (greenstone and black phyllite)

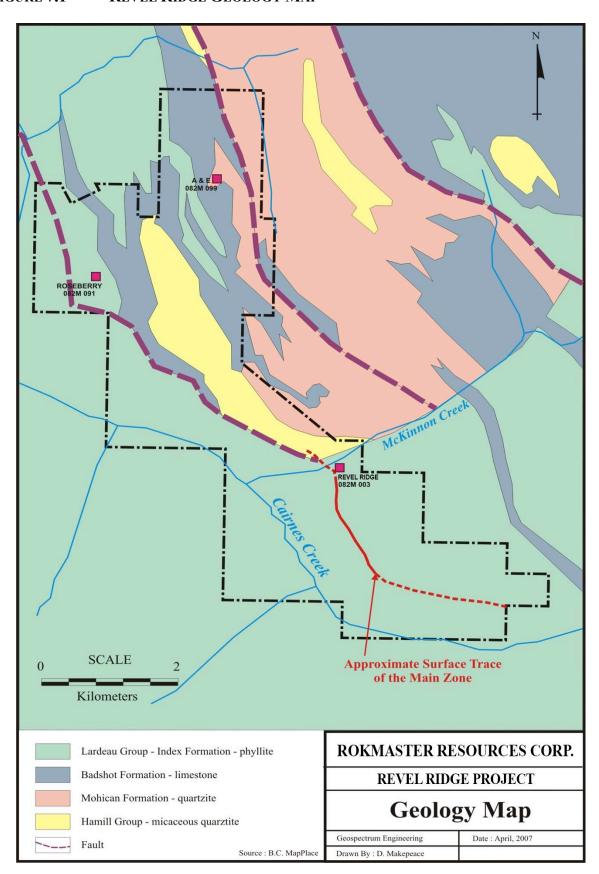
# Lower Cambrian

Badshot Formation (limestone/marble) Mohican Formation (quartzite, phyllite)

# **Neoproterozoic – Lower Cambrian**

Hamill Group (quartzite, micaceous quartzite, phyllite)

FIGURE 7.1 REVEL RIDGE GEOLOGY MAP



## 7.2.1 Hamill Group

The Hamill Group rocks are predominantly interbedded medium brown to green-black sericitic and/or chloritic quartzites and phyllites with minor layers of argillite and graphite. This unit appears as the upper Hamill unit described by Logan et.al., 1996, and is probably Lower Cambrian in age. Hamill group rocks form part of the footwall and hanging wall of the Main Zone deposit. The unit has a gradational upper contact with the Mohican and Badshot Formations

### 7.2.2 Mohican Formation

The Mohican Formation is Lower Cambrian in age (Fritz et. al., 1991). This unit is located at the eastern and southern boundary of the original J&L claims. The eastern unit is in the hanging wall of the Main Zone. It is characterized as limonite-rich, sericitic chloritic calcareous phyllite and quartzite interlayered with narrow layers of marble. Logan et al. (1997A) describe the Mohican Formation as a "transition between quartz-rich sediments of the Hamill Group and the carbonate-rich rocks of the Badshot Formation".

### 7.2.3 Badshot Formation

The Badshot Formation is the most visible and distinctive lithologic unit within the claims and is Lower Cambrian in age. This white to grey, fine to medium-grained limestone/dolomite/marble and varies in its silica content. The Yellowjacket Zone is contained within this Formation. The higher silica content of the Yellowjacket appears to be alteration specific to the Yellowjacket mineralizing system. The Main Zone crosscuts the Badshot Formation as observed in the 830 m level tracked drift. Several diamond drill holes display good grades and widths where the Main Zone crosscuts the Badshot Formation. Thin interlayers of black graphite are seen within the Badshot at the 832 m level portal.

### 7.3 LARDEAU GROUP

### 7.3.1 Index Formation

The Index Formation can be subdivided into at least four units (i.e. black phyllite, marble, greenstone and quartz breccia), however only two units have been identified on the Property.

The black phyllite unit is in the footwall of the Main Zone. Logan has also traced the unit in the northern portions of the claims around the A and E showings. The unit can be calcareous and graphitic and may contain minor marble and quartzite layers.

The greenstone unit within the Property is observed as a series of diorite sills. The diorite is composed predominantly of coarse-grained chlorite and plagioclase feldspar. The closest sill is approximately 600 metres northwest of the North Zone Pit (approximately 500 metres northwest of the intersection of the Main Zone with McKinnon Creek). Another diorite sill is immediately east of the Roseberry showing. A third sill is at the summit of Goat Mountain.

### 7.3.1 Micaceous Quartzite Unit

The Micaceous Quartzite Unit is predominantly at the western edge of the Property and is well exposed along the Carnes Creek Forest Service Road. The unit is composed predominantly of quartzites to siliceous phyllites to quartz muscovite schists and may be loosely correlated to the Broadview Formation (Brown, 1991).

### 7.3.2 **Jowett Formation**

This Jowett Formation is exposed in the first kilometre of the Carnes Creek Forest Service Road. It is an interlayered, green, metavolcanic and non-carbonaceous marble. This unit forms the hanging wall of the Columbia River Fault in the area of the claims.

### 7.4 LOCAL GEOLOGY

Proximal to the Main Zone, the lithological assemblage consists of phyllite and schist (87%), limestone (8%), quartzite (5%), and rare dykes as defined by core logging from the 2010/2011 and 2012 drill campaigns.

The phyllite and schist units are moderately to well foliated, consisting of variable amounts of sericite, chlorite, and quartz. Chlorite, though in minor amount, is considered the major contributor of the distinctive green hue in the units. Some banded sericite-chlorite-phyllite zones, ranging in width from 0.5 to 2.0 metres, have a distinctive brownish hue due to the presence of fine-grained biotite. Although the phyllite is highly sheared and strongly foliated, feldspar phenocrysts are noted in the core indicating a possible mixing of a volcanic and/or sedimentary protolith.

There are two types of limestone seen in core proximal to the Main Zone, namely carbonaceous limestone and banded limestone, varying in bands with widths from 1.0 to 20.0 metres. The carbonaceous limestone units are fine to medium grained, dark grey to black in color, weakly to moderately foliated, and intensely jointed. The banded limestone units are a light grey and medium grey, medium-grained, moderately to well interbanded, recrystallized limestone.

Quartzites are clean generally milky white in color, fine-grained and massive to weakly banded, with minor sericite and/or chlorite on foliation planes.

Rare dykes are present as late stage porphyritic intrusions. They are dark greyish green to brown in colour and medium-grained, composed of feldspar, quartz, and varying amounts of biotite. Only one dyke occurrence is observed in one drill hole from the 2010/2011 drill program. Its upper and lower contacts were sharp.

### 7.5 STRUCTURE

The dominant orientation of structure fabric and lithologic contacts on the Property strikes northwesterly (striking about 330°) and dips (about 50°) toward the northeast. Near the southern edge of the Crown Grants the lithology changes strike to a more east-west orientation (striking

about 290°) and dipping northeast (about 40°). This change may be part of the Carnes Creek anticline (Logan et. al., 1997A) or late stage deformation.

The rocks in the area are faulted and intensely folded. One penetrative foliation is developed in all rock types and is the most readily recognizable feature. An earlier stage foliation is observed in silicified phyllite or quartz schist. Early stage deformation features are rarely preserved due to intense folding and strong shearing.

The Badshot Formation in the vicinity of the known deposits is recumbently overturned (Logan et. al., 1996, 1997A). This unit evidently flowed during deformation and formed boudinage structures that cannot be easily correlated with each other. Some folding structures can be seen underground but is and usually confined to the Main Zone wall rocks, not affecting the Main Zone mineralization. Limestone is strongly folded, whereas argillite, quartzite and mineralization only locally exhibit folds where completely enclosed by folded limestone.

Two thrust sheets have been identified in the Project area striking northwesterly and dipping east (Logan et. al., 1997A). Otherwise, faulting is almost exclusively confined to the Main Zone. Barely visible thin slips surfaces, with a thin smear of gouge have been observed running along portions of the Main Zone. Locally these faults splay into either wall, carrying the mineralized zone with them. Displacement along the faults is generally minor.

The Main Zone is hosted in a large planer deformation zone as a shear hosted sheeted sulfide replacement deposit with exceptional lateral and down dip continuity and dimensions, that crosscuts lithologic boundaries at a low angle along strike. The shear zone is preferentially developed near the contact between the limestone and phyllite or between quartz-rich schist and phyllite. Limestone tends to occur on the footwall of the mineralized zone along about half of the exposed underground strike length.

For much of the Main Zone exposed along strike underground, the zone is quite tabular with parallel sheeted massive and stringer sulphide bands. There are segments along strike where the banded massive sulphide units within the zone exhibit complex deformation textures. There are a number of indicators of shear sense, such as stretching lineation, rotated clasts, sheath folds, and asymmetric micro-folds. The asymmetrical folds indicate a dextral rotation.

The silver-lead-zinc-rich Yellowjacket Zone is considered to be a structurally controlled carbonate replacement deposit composed of multiple parallel siliceous sphalerite-galena-bearing zones preferentially located at the contact between alternating units of volcanics and limestone. The Yellowjacket Zone is not currently known to be as laterally extensive as the Main Zone. The Yellowjacket Zone sub parallels and is in the immediate hanging wall of the Main Zone.

### 7.6 MINERALIZATION

### **7.6.1 Main Zone**

The Main Zone is a structurally controlled precious and polymetallic base metal sheeted sulphide (Au-Ag-Pb-Zn-As-Fe) deposit. The Deposit has a very predictable geometry. The zone is sheet-like or tabular with an average dip of 55° to the northeast. The zone of sheeted massive and

stringer sulphides having an average true width of 2.5 metres but can reach 15 metres in true thickness. The continuity of the zone is interrupted in a few places where it pinches out completely within narrow stretches. Exploration has confirmed persistent vertical and horizontal continuity of the Main Zone. On surface, a strike trace of at least 3.3 km has been defined. In addition, it is speculated that the Main Zone is linked to the Roseberry Prospect and also to the former Mastodon Mine, which would suggest a collective potential strike length of 9 kilometres. The deposit has been traced 1,500 metres along strike and 800 metres down dip by underground drilling. Within this, it is exposed for 850 metres along strike by underground drifting along the 830 Level. Extensive drilling has indicated a traceable continuous plane with virtually no fault offsets, cut-offs or fault drags zones, and there is possibly an element of improved grade in enechelon series of northwest plunging lenses that strengthen with depth.

There remains excellent potential for delineation of additional Mineral Resources on the Main Zone that remains open up and down dip, and along strike to the northwest and possibly to the southeast.

The Main Zone is composed of closely spaced bands of massive sulphides that frequently coalesce at its widest parts. Individual bands, that are generally tabular, may die out along strike over tens of metres but appear to resume in an adjacent band. Individual massive sulphide bands frequently range from 5 centimetres to 1 metre thick. Sulphide minerals include pyrite, pyrrhotite, gold-bearing arsenopyrite, iron-rich sphalerite (blackjack), galena, tetrahedrite and trace chalcopyrite. There are also traces of silver-lead-antimony (Ag-Pb-Sb) and lead-antimony sulphosalts. The banding ranges from predominantly arsenopyrite (high gold), to mixed arsenopyrite and massive sulphides, to massive sphalerite with no arsenic present. Where the mineralization narrows, it is almost completely composed of arsenopyrite. Mineralization widens and sulphide assemblage is more diverse where it is in contact with, or completely enclosed by, limestone. Between mineralized bands, the host rock has been altered (sericite-quartz) and contains disseminated mineralization or thin massive to stringer sulphide streaks.

Three distinct types of mineralization have been noted:

**Type I** mineralization is comprised of massive bands, lenses and stringers of sulphides in a sericitic shear zone. Sulphides consist of medium to coarse grained pyrite, variously grain sized arsenopyrite, and fine-grained fracture-filled sphalerite and galena. Some coarse-grained pyrite and arsenopyrite display a brecciated texture.

**Type II** mineralization is characterized by "milled" massive sulphide texture consisting of fine to coarse-grained, rounded to sub-rounded pyrite, arsenopyrite, quartz, and wall rock clasts in a very fine-grained sulphide matrix. The matrix is composed of fine-grained pyrite, arsenopyrite, sphalerite, galena and quartz. Clasts derived from the host rock such as phyllite and schist contain sulphide stringers, which in part may represent Type I form of mineralization. This milled feature is interpreted as a mylonite texture developed within a shear zone. Milled sulfides carry high values of gold, silver, lead and zinc, and elevated mercury and antimony ("Sb").

**Type III** mineralization consists of narrow stringers and fine to medium-grained disseminations of principally sphalerite, with lesser amounts of galena and pyrite and very little arsenopyrite. Sphalerite is red to honey yellow in color and appears to replace limestone. Although Type III

mineralization can reach widths of 6-10 metres, it appears to have limited extent both along the strike and vertically.

The Main Zone is sericite, carbonaceous and chlorite altered. The chloritic and sericitic phyllites of the wallrock are gradational in composition laterally and vertically making subdivision difficult.

Gangue minerals to the Main Zone include quartz, calcite, siderite, sericite, chlorite and graphite.

## 7.6.2 Hanging Wall and Footwall Zones

The wall rock in the hanging wall and footwall is mostly composed of sericite, chlorite, phyllite, quartz, schist, and limestone. Phyllite and schist contain 1-5% pyrrhotite in the form of micro lenses on the foliation. An increase in pyrite development, concurrent with a sharp decrease in pyrrhotite, occurs in close proximity to the mineralized zone. Phyllite and schist are bleached due to sericitic alteration and silicification, resulting in apparent colour contrast between altered and unaltered rocks. Pervasive sericitization is extensively developed within the shear zone and its immediate hanging wall and footwall. The sericitic selvage ranges from 2 to 30 metres wide. Marblization occurs immediately at the contact between limestone and the margins of the mineralized zone, varying in width from 0.1 to 1 metre.

Pyrrhotite is disseminated ubiquitously throughout much of the non-mineralized rock in minor amounts. Trace amounts of chalcopyrite and pyrite are observed.

Sub parallel intermittent footwall and hanging wall zones, similar to previously described mineralization Types I, II and III, occur proximal to the Main Zone. One hanging wall zone (HM1) (named HW Zone in the Mineral Resource Estimate) lies approximately 5 metres to the hanging wall of the Main Zone and has a degree of continuity in order that a Mineral Resource can be estimated. A footwall zone (FM1) (named FW Zone in the Mineral Resource Estimate) lies approximately 5 metres to the footwall of the Main Zone and also has sufficient continuity for a Mineral Resource to be estimated. Other zones include a second hanging wall zone (HM2) that lies approximately 20 metres to the hanging wall of the Main Zone, and a second footwall zone (FM2) that lies approximately 20 metres to the footwall of the Main Zone. Mineral Resources have not been defined on these secondary zones.

## 7.6.3 Yellowjacket Zone

The Yellowjacket Zone does not outcrop and as such was only discovered in 1991, late in the exploration history of the evaluation of the Main Zone. The Yellowjacket Zone is thought to be a stratabound carbonate hosted, lead-zinc-silver deposit but careful examination of the 2012 drill core of the Yellowjacket strongly supports a structurally controlled replacement model. Mineralization occurs at contacts between limestone and meta-volcanics and, because there are frequent alternations or interbedding of these two lithologies in this area, the Yellowjacket Zone is composed of multiple subzones.

The Yellowjacket Zone is generally sub-parallel to the Main Zone and is located approximately 30 metres into the hanging wall rock of the Main Zone. The lead-zinc-silver mineralization is

confined to multiple discrete zones hosted in siliceous carbonate units. The Yellowjacket Zone does not outcrop and is defined only by drilling. Limited drilling (42 holes) has traced the deposit along strike for 500 metres where the Yellowjacket Zone Mineral Resource is defined. The deposit appears to rake to the southeast at 30° (see the surface trace of these zones in Figure 4.2). The Yellowjacket Zone remains open beyond the limits of the Mineral Resource, both laterally to the northwest and at depth. Three drill holes from one collar set-up 300 metres northwest, picked up Yellowjacket Zone mineralization (Table 6.1). A 2014 soil geochemical survey indicated elevated Zn-Pb-Ag values along trend of the zone for 800 metres further northwest of the Mineral Resource area (see Figure 4.2).

The Yellowjacket Zone has no arsenic content and little gold. The mineralization is composed of disseminated and patchy massive zinc-rich honey-coloured (yellowjack) and red coloured sphalerite with minor medium-grained disseminated and hairline stringers of galena with elevated silver values. Other minerals include calcite, silica and minor sericite and siderite. Texturally, the mineralization can be foliated and/or laminated with sphalerite and galena running along cleavage surfaces. Other textures include brecciated or lacework patterns. Dolomite sections show discontinuous banding and are usually lower in grade.

The carbonate units hosting the Yellowjacket Zone may be occurring in the hinge of a recumbent isoclinal fold, fringed by phyllite and quartzite. The mineralization appears to thicken in the apparent fold hinge where darker coloured sphalerite and coarser and more abundant galena occurs. The Yellowjacket Zone is intensely silicified. Sericite has also been observed in core samples. Silicification also appears to intensify towards the apparent fold hinge. Fluorite is common in most mineralized sections, particularly near higher grade sections. Pyrite and pyrrhotite are present in low amounts.

## 7.6.4 Other Showings

The Roseberry showing lies on the Property (MinFile number 082M 091), 4.5 kilometres to the northwest of the Main Zone. The precious and polymetallic (Cu-Zn-Pb-Ag-Au) vein-type showing lies just below the contact of Lardeau graphitic schists and Badshot Formation limestones. The showing's existance has been known for over a century, however, it has received only minor surface exploration due to its remote location. The mineralization is composed of coarse, disseminated to semi-massive arsenopyrite in discontinuous quartz carbonate veins hosted by intensely sheared graphitic schist. The mineralization resembles the Main Zone mineralization. Chip sampling of the Roseberry Showing returned values such as 15.03 g/t Au and 37.4 g/t Ag across 0.3 metres.

The A&E showing lies on the Property (MinFile number 082M 099), 5 km north of the Main Zone and 2 km northeast of the Roseberry Showing. Mineralization is related to sheared schistose zones with intense deformation and complex folding, interlayered with or in contact with limestone. This precious and polymetallic (Ag-Pb-Zn-As) showing represents a series of three parallel mineralized zones that appear similar to the Main Zone. One of the zones averaged 11.01 g/t Au, 356.7 g/t Ag, 10.75% Zn and 5.48% Pb from four muck samples. It is a narrow arsenical zone of massive sulphides. There are several hand-tooled short adits and surface showings that have traced the zone for 400 metres along strike and 160 metres vertically. The A&E showing has not been drill tested at depth. The A&E showing lies on a different horizon

than the Main Zone and as such indicates potential for parallel zones of mineralization at multiple horizons.

The Copper Zone is located 100 metres to 150 metres into the footwall of the Main Zone. It is a narrow stringer sulphide zone hosted by quartzites and chloritic phyllites and schists, and has been traced for 320 metres horizontally and 90 metres vertically. Although it does not appear to return economic grades at surface, the showings are leached and weathered. A chip sample taken by Equinox returned 3.55 g/t Au, 21.7 g/t Ag and 0.19% Cu over 1.0 metre. The Copper Zone could be tested further by diamond drilling.

### 8.0 DEPOSIT TYPES

The Revel Ridge Property lies at the northern end of the Kootenay Arc which is known for its Irish-type carbonate hosted Zn-Pb, VMS (Gold stream) and Sedex deposits. The two deposits on the Property are the Main Zone and the Yellowjacket Zone.

BC Minfile No 082M 003(2012) reports that intense deformation of the J & L deposit has distorted or destroyed most original ore textures and ore-wallrock relationships. Most textures now observed result from an overprinted tectonic fabric, making interpretation of the timing and environment of deposition difficult, at best. There are two schools of thought on the deposit classification. Early interpretations classed the deposit as an epigenetic shear zone replacement, or vein deposit. Other proponents support a syngenetic sedimentary-exhalative origin. The deposit exhibits characteristics of both models and the debate is not resolved.

### 8.1 MAIN ZONE

Main Zone mineralization crosscuts lithologies at low angles and appears to follow a thrust fault, deformation or shear zone. The Zone is continuous and tabular. Surface exploration has traced the Main Zone for 3 kilometres. The drilling to date demonstrates that the Main Zone continues for a strike length of at least 1,500 metres and in the down dip direction for at least 800 metres. There remains good potential for additional Mineral Resources on the Main Zone, which remains open in the down dip direction and along strike to the northwest and possibly to the southeast. The Main Zone averages 2.5 metres true thickness of sheeted sulphide veining but the sheeting can reach up to 15 metres true thickness. It is a complex banded zinc-lead-silver-gold-arsenic-pyrite deposit, partly having a close spatial relationship with limestone. Massive to semi-massive bands and stringers parallel or subparallel the dominant lithologic foliation, reflecting a possible strong structural influence.

Previous workers considered the Main Zone to occur at the contact of footwall limestone with hanging wall phyllites. 2010/2011 and 2012 drill programs identified that the majority of Main Zone is more likely to occur at the base of the limestone unit in contact with footwall phyllites.

The close spatial relationship between mineralization and limestone can be interpreted to be due to four factors. Firstly, the contact between limestone and phyllite may be favourable for the development of a shear zone. Secondly the competency contrast between limestone and phyllite creates a favorable condition to allow dilation within a shear zone. Thirdly, limestone is a good hydraulic seal. Fourthly, carbonaceous limestone is a good reducing agent which may be chemically favourable to the process of gold precipitation.

Based on the detailed geological core logging, the mineralization is stronger when the shear zone cuts the phyllite unit rather than more schistose lithologies.

The Main Zone does not easily fit into a specific genetic model. Geologists who have worked on the Main Zone in the past have proposed a Sedimentary Exhalitite (Sedex) model, a Volcanogenic Massive Sulphide model (VMS), a replacement model and a shear hosted model.

The Main Zone mineralization lies in an inferred shear zone, characterized by sheeted massive to semi-massive sulphide bands and stringers, spatially associated with the Yellowjacket Zone.

Huakan geologists interpreted the Main Zone to be a shear hosted sheeted sulfide replacement deposit that lies in a thrust zone and post-dates the Yellowjacket Zone mineralizing episode.

### 8.2 YELLOWJACKET ZONE

It has been interpreted that the Yellowjacket Zone was formed as a carbonate hosted Zn-Pb deposit and shows affinity to Irish-type carbonate hosted Zn-Pb deposits.

Irish type deposits are characterized by:

- 1) Active tectonics during sedimentation and some of the mineralization.
- 2) Deposits are hosted by Carboniferous carbonates, basal section of the Waulsortian mud mound complex and Navan beds.
- 3) Strong structural control seen in the deposits.
- 4) Mineralization is stratabound with some local sections which crosscut stratigraphy.
- 5) Mineralization textures are generally replacive and brecciated but locally banding is evident.
- 6) Iron and Magnesium carbonates seen in and around the mineralization.
- 7) Zinc, Lead, Iron, Copper and Silver are known in the deposits and have some zoning laterally and vertically.
- 8) Isotopes point to two fluids being involved in the process, one hydrothermal and the other Carboniferous sea water.
- 9) Fluid inclusions indicate that the temperature ranges from 100°C to 300°C.

Recent core examinations suggest a replacement model with pervasive silica alteration. Generally, the Yellowjacket Zone is 20 to 50 metres into the hanging wall (northeast) from and sub parallels the Main Zone, however, locally there is Yellowjacket type mineralization in the immediate hanging wall of the Main Zone observed in the underground crosscuts. The Yellowjacket Zone is composed of multiple sub zone due to the alternating units of limestone and meta-volcanics. The mineralization and pervasive silica alteration are strongest in the core contact and gradually reduces into each lithology. The Yellowjacket Zone is composed of a disseminated to patchy massive red and honey-coloured (zinc-rich) sphalerite with minor disseminated and hairline veinlets of galena and elevated silver values. The mineralization appears to be confined to favourable carbonate rocks that have been folded into a recumbent overturned anticline straddled by phyllite. Grade and thickness increase towards the hinge of the fold. Fluorite is present and barite is absent in the Yellowjacket Zone. It is speculated that the

Yellowjacket Zone is an earlier structural episode of mineralization relative to the Main Zone because the Yellowjacket Zone is devoid of gold but contains the polymetallic minerals similar to the Main Zone.

## 9.0 EXPLORATION

No exploration other than soil sampling has been conducted on the Revel Ridge Property since 2012.

Huakan conducted underground drifting and drilling between 2010 and 2012. Details of the 2010 to 2012 drill programs undertaken by Huakan are provided in Section 10.1 and all other exploration is discussed in Section 6.

### 10.0 DRILLING

No drilling has been carried out by Rokmaster at the Property.

The following section describes drilling carried out by Huakan and is summarized from the Technical Report by Puritch et al. (2018).

The Table 10.1 provides a summary of all the drilling carried out at the Property, including the most recent work undertaken by Huakan. A total of 22,114 metres were drilled prior to Merit/Huakan taking control, who then drilled an additional 18,962 metres. All previous drilling and exploration is summarized in Section 6.

TABLE 10.1 DRILL PROGRAMS SUMMARY								
Year	Drillholes	<b>Total Metres</b>	Company					
1962-1967	UG DDHs	183.0	Westairs Mines Ltd.					
1983-1984	65 UG DDHs	2,640.0	BP Selco Ltd.					
1987-1988	20 UG DDHs 1,914.0 Pan American Minerals							
1988-1989	32 UG DDHs	2,985.0	Equinox Resources Ltd.					
1990-1991	50 UG DDHs	13,889.0	Equinox Resources Ltd/					
1990-1991	27 SurfaceDDHs		Cheni Gold Mines Ltd.*					
1997	3 UG DDHs	503.0	Weymin Mining Corp.					
2006	2-4? UG DDHs	undisclosed	BACTECH Mining Corp.					
2007	9 Surface DDHs	1,363.0	Merit Mining Corp.					
2010-2011	60 UG DDHs	7,874.0	Merit/Huakan International					
2011-2012	45 UG DDHs	9,724.9	Huakan International					
		41,075.9						

### 10.1 HUAKAN DIAMOND DRILLING

The 2010 to 2012 drilling undertaken by Huakan has aided in the verification of the pre-2000 drilling performed at the Property and has been summarized below.

In November 2010, Merit/Huakan commenced a Phase 1, 2,000 metre underground drill program with the aim to verify historic drilling and to broaden the known mineralization of the Main Zone and provide support for a National Instrument 43-101 Mineral Resource Estimate. The Phase 1 program, totalling 7,874 metres over 60 BQTW (thin wall) core holes, was focused only on the Main Zone and was completed by early February 2011.

From June to August 2012, Huakan completed a 9,725 metre, 45-hole, underground drill program. The program's objective was to extend the 2011 Mineral Resource area and include infill drilling on the Yellowjacket Zone.

In the winter of 2011 and spring of 2012, Huakan completed 450 metres of track drifting, extending the length of the workings to the southwest and provide drill bays to drill the southeastern edge of the Main Zone.

In May 2012, Huakan commenced, and by mid-June 2012 had completed a 45-hole, 9,725 metre, underground diamond drill hole program to expand the Main Zone Indicated Mineral Resource and to infill the Yellowjacket Zone. The program was successful in intersecting similar grade and thickness of mineralization as previous nearby holes. The entire 2012 program tested six target areas, A through F, which are identified on a longitudinal section in Figure 10.1. Hole density or spacing in this campaign averaged 60 metre centres.

Eleven holes in Area A covered a 200-metre long by 130-metre down dip area of the Main Zone. Intercepts ranged between 0.56 metres and 8.48 metres of typical Main Zone mineralization. The length weighted average gold grade for all intercepts in this area was 5.55 g/t Au. Multiple zones were encountered in some drill holes with highlights tabulated in Tables 10.2 and 10.3.

TABLE 10.2 Drill Programs Summary Main Zone Drill Highlights in Area A									
Drill Hole ID	From	To (m)	Length	Au (g/t)	Ag	Pb (%)	Zn (%)		
	(m)	(m)	(m)	(g/t)	(g/t)	` /	/		
DDH12-08	171.75	174.74	2.99	2.88	73.29	3.63	9.35		
DDH12-09	192.38	193.61	1.23	4.13	71.88	3.03	2.68		
DDH12-09	206.55	208.11	1.56	1.94	20.94	0.21	0.06		
DDH12-10	207.70	216.18	8.48	9.41	101.39	2.17	4.31		
DDH12-11	207.58	211.85	4.27	3.61	89.77	2.00	1.66		
DDH12-26	212.35	214.27	1.92	7.36	191.31	6.58	3.97		
DDH12-27	225.54	226.34	0.80	4.44	72.16	2.77	5.32		
DDH12-27	227.75	228.31	0.56	2.18	24.30	1.19	8.06		
DDH12-27	238.90	239.57	0.67	3.01	22.10	1.25	0.42		
DDH12-29	221.52	222.49	0.97	4.64	93.32	2.91	8.81		
DDH12-29	225.80	227.37	1.57	8.32	90.61	2.82	5.89		
DDH12-32	232.08	233.96	1.88	1.47	26.28	1.06	3.47		
DDH12-32	246.31	248.11	1.80	2.93	35.74	0.38	1.12		
DDH12-32	250.39	251.52	1.13	1.48	92.88	1.73	3.89		
DDH12-35	222.29	224.70	2.41	8.51	54.02	2.12	2.69		
DDH12-39	240.67	242.60	1.93	7.03	70.92	3.32	6.32		
DDH12-43	262.10	265.42	3.32	7.88	65.20	2.17	2.84		
DDH12-43	273.40	274.00	0.60	4.98	113.00	2.56	2.88		

FIGURE 10.1 LONGITUDINAL SECTION SHOWING ALL DRILL HOLE PIERCE POINTS AND 2012 DRILLING AREAS

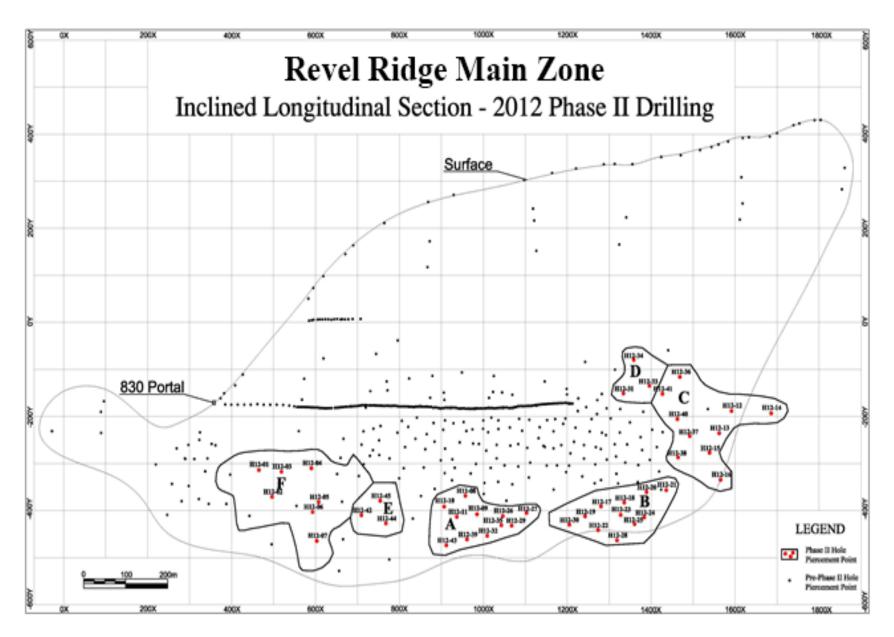


TABLE 10.3 MAIN ZONE DRILL HIGHLIGHTS IN AREA B									
Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)		
DDH12-17	199.04	200.53	1.49	2.12	65.19	3.78	7.19		
DDH12-18	184.83	187.39	2.56	4.74	42.98	1.53	2.18		
DDH12-18	196.15	197.82	1.67	28.20	27.15	0.43	0.36		
DDH12-19	226.27	226.77	0.50	0.96	122.00	5.04	3.69		
DDH12-20	180.22	181.93	1.71	3.28	26.39	0.99	1.85		
DDH12-21	194.48	195.65	1.17	3.26	18.16	0.61	1.29		
DDH12-21	199.01	199.62	0.61	3.63	6.80	0.03	0.03		
DDH12-22	235.74	237.96	2.22	1.13	22.20	0.81	2.41		
DDH12-22	244.95	245.64	0.69	11.30	71.30	1.38	1.13		
DDH12-23	204.20	206.89	2.69	7.66	82.58	3.44	6.30		
DDH12-24	211.44	213.55	2.11	9.79	22.96	0.78	1.81		
DDH12-24	217.83	218.70	0.87	6.25	41.68	0.87	0.39		
DDH12-25	218.69	220.68	1.99	6.84	36.46	1.51	2.20		
DDH12-28	245.06	247.65	2.59	2.45	16.79	0.63	1.20		
DDH12-28	256.45	258.44	1.99	4.32	9.08	0.32	0.10		
DDH12-30	253.33	255.20	1.87	3.47	51.00	0.64	3.66		

Eleven holes in Area B covered a 250-metre long by 120 metre down dip area of the Main Zone. In this area, there were often one or two Main Zone intercepts per hole with intercept widths between 0.50 metres and 2.69 metres of typical Main Zone mineralization. The length weighted average gold grade for all intercepts in this area was 5.66 g/t Au. Highlights of Main Zone interceptions for this area are tabulated in Table 10.4.

Ten holes were completed in Area C covering an area 150 metres long by 250 metres down dip on the Main Zone, in the far southeast end of the deposit. The Main Zone continued throughout this area. Main Zone intercepts ranged from 0.42 metres to 5.82 metres of typical Main Zone mineralization. The length weighted average gold grade for all intercepts (excluding DDH12-14) was 4.67 g/t Au. Highlights of Main Zone interceptions for this area are tabulated in Table 10.4.

TABLE 10.4 Drill Programs Summary Main Zone Drill Highlights in Area C									
Drill Hole ID	From (m)         To (m)         Length (m)         Au (g/t)         Ag (g/t)         Pb (%)         Z								
DDH12-12	107.27	108.72	1.45	7.32	21.88	0.51	0.48		
DDH12-13	102.07	102.77	0.70	3.58	11.00	0.24	0.05		
DDH12-14	161.67	162.31	0.64	1.24	1.60	0.02	0.01		
DDH12-15	103.30	109.12	5.82	4.20	14.15	0.31	0.51		
DDH12-16	136.10	137.40	1.30	3.86	10.52	0.41	0.67		
DDH12-16	141.93	142.95	1.02	4.34	13.44	0.11	0.05		
DDH12-36	176.12	176.91	0.79	15.60	51.60	1.65	2.44		
DDH12-37	104.96	105.38	0.42	6.13	156.00	3.97	4.05		

TABLE 10.4 DRILL PROGRAMS SUMMARY MAIN ZONE DRILL HIGHLIGHTS IN AREA C								
Drill Hole	From To Length Au Ag Pb Zn							
ID	(m)	(m)	(m)	(g/t)	(g/t)	(%)	(%)	
DDH12-40	98.57	100.19	1.62	6.50	30.48	0.71	1.48	
DDH12-41	129.24	133.30	4.06	2.88	36.79	1.56	1.40	

Three holes were completed in Area D covering an area 80 metres long by 100 metres down dip on the Main Zone. Intercept widths ranged from 1.39 metres to 1.41 metres of typical Main Zone mineralization. The length weighted average gold grade for all intercepts was 4.69 g/t Au. Highlights of Main Zone interceptions for this area are tabulated in Table 10.5.

TABLE 10.5 DRILL PROGRAMS SUMMARY MAIN ZONE DRILL HIGHLIGHTS IN AREA D								
Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	
DDH12-31	121.57	122.96	1.39	8.52	78.02	2.89	3.01	
DDH12-33	125.88	127.29	1.41	3.65	41.91	2.59	2.53	
DDH12-34	180.15	181.55	1.40	1.92	16.63	0.61	1.00	

Three holes were completed in Area E covering an area 100 metres long by 80 metres down dip on the Main Zone. This area fills in the gap between Area F and the area of the previous Mineral Resource Estimate. The length weighted average gold grade for all intercepts in this area was 5.78 g/t Au. Highlights of Main Zone interceptions for this area are tabulated in Table 10.6.

TABLE 10.6 Drill Programs Summary Main Zone Drill Highlights in Area E									
Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)		
DDH12-42	237.13	240.33	3.20	6.00	26.24	1.12	8.00		
DDH12-44	260.87	262.48	1.61	6.17	14.68	1.04	4.86		
DDH12-45	222.63	223.03	0.40	2.00	51.80	0.25	0.68		
DDH12-45	233.99	234.35	0.36	7.26	35.70	0.30	0.07		
DDH12-45	238.66	239.15	0.49	0.34	23.80	1.68	10.65		
DDH12-45	242.98	245.08	2.10	3.68	31.40	1.74	2.31		
DDH12-45	254.25	255.17	0.92	8.29	31.49	1.56	0.46		
DDH12-45	262.36	262.63	0.27	28.90	80.10	2.34	2.50		
DDH12-45	271.17	271.94	0.77	3.34	26.90	0.56	0.22		

Seven holes were completed in Area F covering an area 180 metres long by 180 metres downdip on the Main Zone. Main Zone intercept widths ranged from 0.93 metres to 6.65 metres of typical Main Zone mineralization. The length weighted average gold grade for all intercepts in this area was 5.59 g/t Au. These same seven holes intercepted multiple Yellowjacket (silver-lead-zinc)

zones further up in the holes with intercept widths ranging from 1.04 metres to 3.25 metres (Table 10.8). Highlights of Main Zone interceptions for this area are tabulated in Table 10.7.

TABLE 10.7 DRILL PROGRAMS SUMMARY MAIN ZONE DRILL HIGHLIGHTS IN AREA F									
Drill Hole ID	From (m)         To (m)         Length (m)         Au (g/t)         Ag (g/t)         Pb (%)								
DDH12-01	149.58	151.22	1.64	2.94	28.3	1.46	1.94		
DDH12-02	182.57	183.95	1.38	2.69	41.7	1.84	1.82		
DDH12-03	75.56	76.89	1.30	6.17	23.6	1.20	3.08		
DDH12-04	139.90	146.55	6.65	5.23	34.6	0.90	2.18		
DDH12-05	187.49	189.62	2.13	11.73	85.6	2.87	2.92		
DDH12-06	198.68	199.61	0.93	5.28	62.1	3.08	2.77		
DDH12-07	246.25	247.95	1.70	3.90	23.4	1.23	3.27		

Table 10.8 Drill Programs Summary Yellowjacket Zone Drill Highlights in Area F											
Drill Hole	From										
ID	(m)	(m)	(m)	(g/t)	(%)	(%)					
DDH12-01	103.81	105.50	1.69	92.0	3.40	13.50					
DDH12-01	115.86	117.46	1.60	98.0	4.90	8.80					
DDH12-02	116.41	117.5	1.09	52.2	3.07	16.91					
DDH12-02	129.16	132.28	3.12	99.4	4.75	14.51					
DDH12-03	93.68	95.19	1.51	51.7	1.88	13.79					
DDH12-03	103.89	105.92	2.03	75.9	3.91	14.53					
DDH12-04	120.83	121.92	1.09	59.9	3.28	4.66					
DDH12-05	97.83	100.43	2.60	58.0	2.20	3.50					
DDH12-05	131.94	134.28	2.34	31.3	1.20	10.44					
DDH12-06	103.91	105.93	2.02	106.7	2.90	10.57					
DDH12-06	130.16	133.62	3.46	33	1.80	4.80					
DDH12-06	143.35	146.4	3.05	43.3	2.75	9.40					
DDH12-06	158.05	159.09	1.04	78.3	3.05	3.29					
DDH12-07	179.78	181.05	1.27	119.0	7.90	7.70					
DDH12-07	197.2	200.45	3.25	100.0	5.50	2.60					

Results from the 45-hole, 2012 drilling program were used to prepare an updated Mineral Resource Estimate by P&E (announced September 18, 2012) on the Main Zone and Yellowjacket Zone.

## 10.1.1 Collar Surveying

At the completion of the 2007 surface and the 2010/2011 and 2012 underground drill programs, drill hole collar locations of all holes were marked and surveyed by B.C. professional land surveyors.

## 10.1.2 Downhole Surveying

During the 2007 surface diamond drill program downhole surveys were carried out using an Easy-Shot tool, taking measurements at the bottom and midway for the first three holes. Due to a defective tool, the final three drill holes were tested by acid tests at the bottom of each hole.

Downhole surveying in the 2010/2011 and 2012 underground drill programs utilized the FLEXIT SmartTool Drill Hole Survey system. Measurements were taken every 30 metres down the hole, usually including a near to collar test as well as a near to bottom hole test. All azimuth readings taken during the downhole surveys had a magnetic declination factor of 17° added to them to give true azimuth readings for this region of British Columbia. Other data collected were dip angles recorded at the various downhole reading sites as well as magnetic susceptibility. Any strongly erroneous magnetic results put a small number of the azimuth readings in question, as to their reliability so were subsequently eliminated.

## 10.1.3 Core Recovery and Storage

Core recoveries throughout the 2010/2011 and 2012 underground J&L (now Revel Ridge) drill programs were normally >90% and often >95%. All drill core from both the 2007 and the 2010/2011 drill programs are securely stored on the Property, near the camp facility. All non-mineralized drill core from the 2012 drill program is securely stored on the Property, near the camp facility. All drill core that had mineralized intercepts from the 2012 drill program is securely stored in the warehouse just north of Revelstoke.

### 10.1.4 Drill Core Size and Orientation

All Huakan drilling discussed in this Technical Report section was done with wireline BQTW diamond core. True widths are approximately 75% of downhole intercept lengths. The mineralization dips NE at 50°

## 10.1.5 Contractor

The 2007 diamond drill program was carried out by Elite Drilling Ltd. of Revelstoke, B.C. over the period October 23 to November 13, 2007.

DMAC Drilling of Aldergrove, BC was the drilling contractor for the 2010/2011 and 2012 program. For the 2010/2011 campaign, drilling took place between November 11, 2010 to January 31, 2011. For the 2012 campaign, drilling took place between May 6, 2012 and June 16, 2012. Drilling was carried out on two ten-hour shifts using two Hydracore drill rigs mounted on steel wheels, thus providing drill access to the tracked 830 main drift and crosscuts.

## 10.1.6 Comments

This Technical Report author is of the opinion that procedures undertaken by Huakan during the 2010 to 2012 drilling programs conform to standard industry practice and that there are no drilling, sampling or recovery factors that materially impact the reliability of the drill core data.

## 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

No sampling has been undertaken by Rokmaster. The following section is based on the Technical Report on the Property by Puritch et al. (2018).

### 11.1 SAMPLING METHOD AND APPROACH BY HUAKAN

A total of 956 split core samples from the Huakan 2010/2011 diamond drill program were collected by and analyzed for Huakan and a total of 895 split core samples from the 2012 diamond drill program. Sampling was carried out where visual sulphide concentrations were observed beyond non-mineralized host-rocks.

Sample intervals were generally less than 0.5 metres where stronger sulphide concentrations were observed and ranged between 0.5 to 1.0 m intervals. Occasional, narrower sample intervals ranged between 0.25 to 0.5 metres where intervals with massive veins were observed.

A total of 427 bulk density measurements (by wet immersion technique) were taken on site on the 2010/2011 drill core by competent company geological staff and a total of 86 on the 2012 core. The bulk density measurements utilized the wet immersion technique.

The following summary details the sampling procedures and steps taken during the 2010/2011 and 2012 drill programs by Huakan.

- Core was first cleaned, organized and photographed;
- Geotechnical logging was undertaken by a trained technician;
- Core boxes were labelled using scribed aluminum tags;
- Core logging and sample selection was performed by the site geologists;
- In areas of Main Zone mineralization, sampling intervals were determined by similar sulphide abundance;
- Sampling was carried out beyond the limits of the Main Zone sulphides both into barren hanging wall and footwall rocks;
- Every 18<sup>th</sup>, 19<sup>th</sup> and 20<sup>th</sup> sample was designated as a duplicate, standard and blank, respectively. The duplicate sample was a fifty percent split of the sample preceding it;
- Core was logged, sampled and stored on site. The logging geologist would place a
  colour crayon line along the desired sample cut to provide an even bisection of the
  core;
- The core was cut in half, bisecting fabric or vein material evenly; and

• Technicians were instructed to place the same side of core back into the box for every sample and the other side into a labelled clean plastic sample bag that was then sealed using a zap-strap.

### 11.2 CHAIN OF CUSTODY

Sample bags were placed in address-labelled rice bags, sealed with plastic zap-straps and shipped from Revelstoke, B.C., by Greyhound Bus to Eco Tech Laboratory Ltd., ("Eco Tech") of Kamloops, BC. (later acquired and managed by ALS Minerals).

Sample shipment records were maintained. Records were also kept of sample preparation, analysis requested, and the person intended to receive the results.

Core sampling was carried out by use of a diamond blade core saw. The core sampler was highly experienced and sampling work was closely monitored by on-site core logging geologists.

No core samples were taken by an employee, officer, director or associate of Huakan.

### 11.3 SAMPLE PREPARATION AND ANALYSES

Analytical work for the 2010/2011 and 2012 drill programs was carried out by Eco Tech. Huakan has archived all of the original assay certificates for the 2007, 2010/2011 and 2012 drill programs.

Eco Tech's sample preparation and analysis procedures were as follows:

- At the time of analysis, Eco Tech was registered for ISO 9001:2008 by KIWA International (TGA-ZM-13-96-00) for the provision of assay, geochemical and environmental analytical services. Eco Tech also participated in the annual Canadian Certified Reference Materials Project (CCRMP) and Geostats Pty., bi-annual round robin testing programs. Eco Tech operated an extensive quality assurance/quality control program, which covers all stages of the analytical process from sample preparation through to sample digestion and instrumental finish and reporting.
- Samples (minimum sample size 250 g) are catalogued and logged into the sample-tracking database, once received by the lab, and checked for spillage, general sample integrity and that samples matched the sample shipment requisition. The samples are transferred into a drying oven and dried. Rock samples are crushed by a Terminator jaw crusher to -10 mesh ensuring that 70% passes through a Tyler 10 mesh screen. This is verified each batch.
- Re-split are taken every 35 samples using a riffle splitter and tested to ensure the homogeneity of the crushed material. A 250-gram sub sample of the crushed material is pulverized on a ring mill pulverizer, each batch ensuring that 85% passes through a 200 mesh screen. The sub sample is rolled, homogenized and bagged in a prenumbered bag. A barren gravel blank is prepared before each job in the sample prep to be analyzed for trace contamination along with the actual samples.

- Samples analyzed for gold (30 gram sample size) are fire assayed along with certified reference materials ("CRMs" or "standards") using appropriate fluxes. The flux used is pre-mixed, purchased from Anachemia and contains Cookson Granular Litharge (Silver and Gold Free). The ratios are 66% Litharge, 24% Sodium Carbonate, 2.7% Borax, 7.3% Silica. (These charges may be adjusted with borax or silica based on the sample). Flux weight per fusion is 120 g. Purified Silver Nitrate is used for inquartation. The resultant doré bead is parted and digested with aqua regia and then analyzed on an atomic absorption instrument (Perkin Elmer/Thermo S-Series AA instrument). Gold detection limit on AA is 0.03-100 g/t. Any gold samples over 100 g/t are run using a gravimetric analysis protocol. Each batch submitted is fire assayed as a batch.
- Appropriate standards and repeat/re-split samples (Quality Control Components) accompany the samples on the data sheet for quality control assessment. For 30 element ICP, a 0.5 gram sample is digested with a 3:1:2 (HCl:HNO<sub>3</sub>:H<sub>2</sub>O) for 90 minutes in a water bath at 95°C. The sample is then diluted to 10 ml with water. All solutions used during the digestion process contain beryllium, which acts as an internal standard for the ICP run. The sample is analyzed on a Thermo Scientific IRIS Intrepid II XSP/ICAP 6000 Series ICP unit. CRMs are used to check the performance of the machine and to ensure that proper digestion occurred in the wet lab. QC samples are run along with the client samples to ensure no machine drift or instrumentation issues occurred during the run procedure. Repeat samples (every batch of 10 or less) and re-splits (every batch of 35 or less) are also run to ensure proper weighing and digestion occurred. Results are printed along with accompanying quality control data (repeats, re-splits and standards). Any of the base metal elements that are over limit, Ag >30 g/t, Cu, Pb, Zn >1.0%) are run as an assay.

It is the P&E's opinion that the sampling preparation, security and analytical procedures employed by Huakan were satisfactory to support a Mineral Resource Estimate.

## 11.4 HUAKAN QUALITY ASSURANCE/QUALITY CONTROL

### 11.4.1 Certified Reference Material

Huakan geologists routinely inserted Certified Reference Material ("CRM") and blanks into the sample stream during the 2010/2011 and 2012 drill programs. The CRMs and blanks were obtained from CDN Resource Laboratories of Langley, B.C.

The CDN standards were CDN-ME-7 and CDN-ME-11 in the 2010/2011 program and CDN-ME-8 and CDN-ME-11 in the 2012 program. Standards were inserted into the sample stream at a rate of 1 in 20 by the project geologists. CRMs are inserted regularly into batches of samples sent to the lab for analysis in order to monitor the accuracy (lack of bias) of the lab results.

A total of 36 data points was available for the CDN-ME-7 standard and 29 for the CDN-ME-11 standard, for the 2010/2011 program. Both standards were certified for gold, silver, lead and zinc and both performed very well, with all data points falling within +/- two standard deviations from the mean certified value.

A total of 15 data points was available for the CDN-ME-8 standard and 22 for the CDN-ME-11 standard, for the 2012 program. Both the CDN-ME-8 and CDN-ME-11 standards were certified for gold, silver, lead and zinc. Both standards performed well, with the majority of data points falling within +/- two standard deviations from the mean certified value.

The majority of data points for the CDN-ME-8 standard fell within +/- two standard deviations from the mean certified value. All data points for zinc fell within + two standard deviations from the mean, displaying a slight high bias. All data for lead fell within – three standard deviations from the mean, displaying a slight low bias. For both gold and silver, one data point fell above + three standard deviations from the mean, and the remaining data points fell within three standard deviations from the mean certified value. A slight high bias was also noted for gold and silver for this CRM.

The majority of data points for the CDN-ME-11 standard fell within +/- two standard deviations from the mean certified value. All data points for zinc fell within + two standard deviations from the mean, displaying a slight high bias. All data points for lead fell within – three standard deviations from the mean, displaying a slight low bias. For both gold and silver, one data point fell above + three standard deviations from the mean, and the remaining data points fell within three standard deviations from the mean certified value. A slight high bias was also noted for gold and silver for this CRM.

### 11.4.1.1 Blanks

Huakan purchased blanks consisting of pulverized river rock (predominantly granite) from CDN Resource Laboratories Ltd., of Langley, BC, for use in the 2010 to 2012 drilling programs. CDN Resource Laboratories Ltd.'s, assaying of the blank material found it to contain <0.01 g/t Au. It is not a common practice to use pulverized blank material since it will not pass through the crushers and splitters where most thereby limiting contamination detection. Blanks were inserted into the sample stream at a rate of 1 in 20.

All data points for gold, for 2010/2011 and 2012, and silver, for 2010/2011, were below the upper threshold of three times the detection for the element in question, which was the upper threshold set for monitoring blank results. There were four outliers (out of a total of 40 data points) observed for silver for the 2012 data. For the 2010/2011 drilling program, lead returned an average value of 0.002% with a standard deviation of 0.0006. Zinc returned an average value of 0.005% with a standard deviation of 0.0005. For the 2012 drilling program, lead returned an average value of 0.001% with a standard deviation of 0.0008. Zinc returned an average value of 0.006% with a standard deviation of 0.0014. All results indicate no contamination present at the analytical level.

### 11.4.1.2 **Duplicate Sampling Program**

Field duplicates were implemented as part of the QA/QC sampling protocol for both the 2010/11 and 2012 drilling programs, in order to quantify precision (reproducibility) of analytical results at the field level.

Drill core duplicates were inserted into the sample stream at a rate of 1 in 20. A duplicate sample consisted of a 50% split of the numbered sample interval immediately preceding the duplicate sample.

In addition, P&E examined the laboratory coarse reject duplicates and pulp duplicates for gold, silver, lead and zinc for the 2010/2011 program. The coarse reject data set contained on average 27 pairs, and the pulp data set contained 239 pairs for gold, 95 pairs for silver, 100 pairs for lead and 104 pairs for zinc.

Simple scatter graphs for all elements were plotted for all available data. Precision was observed to improve steadily from the core duplicates through to the pulp duplicates. The precision at the pulp duplicate level for all four metals was excellent, with a 1:1 ratio.

The author considers the data to be of good quality and satisfactory for use in a Mineral Resource Estimate.

### 12.0 DATA VERIFICATION

The following section is based on the Technical Report on the Property by Puritch et al. (2018).

### 12.1 2010/2011 SITE VISIT AND INDEPENDENT SAMPLING

The Revel Ridge Property was visited by Mr. Fred Brown, P.Geo., of P&E on December 17, 2010. Data verification sampling was done on diamond drill core, with 18 samples distributed in 18 holes collected for assay. These samples were collected from both the current drill program as well as from a number of the historic (1991 and earlier) drill holes. An attempt was made to sample intervals from a variety of low and high-grade material. The chosen sample intervals were then sampled by taking complete sections of the remaining half-split core. The samples were then documented, bagged, and sealed with packing tape and were delivered by Mr. Brown to ALS Minerals (formerly referred to as ALS Chemex), 2103 Dollarton Highway in North Vancouver for analysis.

ALS Minerals has developed and implemented strategically designed processes and a global quality management system at each of its locations that meets all requirements of International Standards ISO/IEC 17025:2017 and ISO 9001:2015. All ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

The ALS quality program includes quality control steps through sample preparation and analysis, inter-laboratory test programs, and regular internal audits. It is an integral part of day-to-day activities, involves all levels of ALS staff and is monitored at top management levels.

At no time, prior to the time of sampling, were any employees or other associates of Huakan advised as to the location or identification of any of the samples to be collected. A comparison of the P&E independent sample verification results versus the original assay results for gold, silver, lead and zinc can be seen in Figure 12.1 to Figure 12.4.

FIGURE 12.1 2010/2011 P&E VERIFICATION SAMPLES FOR GOLD

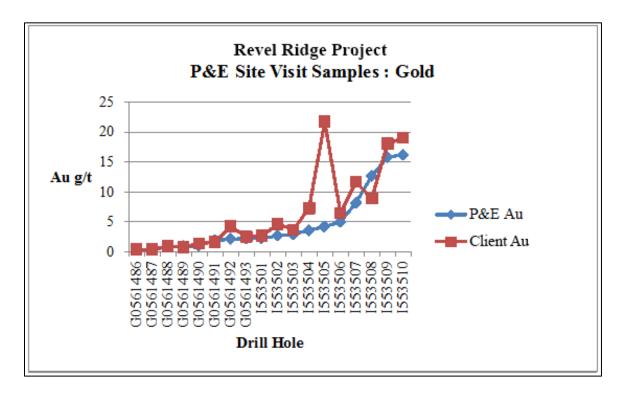


FIGURE 12.2 2010/2011 P&E VERIFICATION SAMPLES FOR SILVER

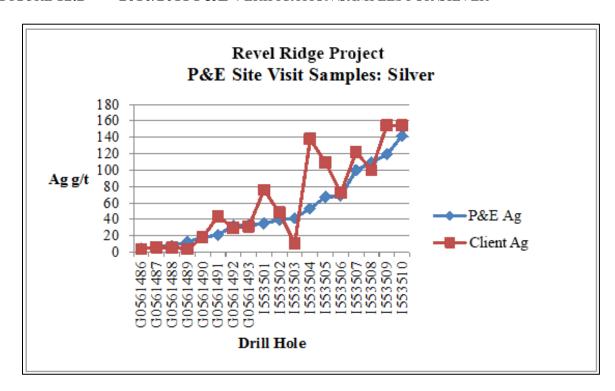


FIGURE 12.3 2010/2011 P&E VERIFICATION SAMPLES FOR LEAD

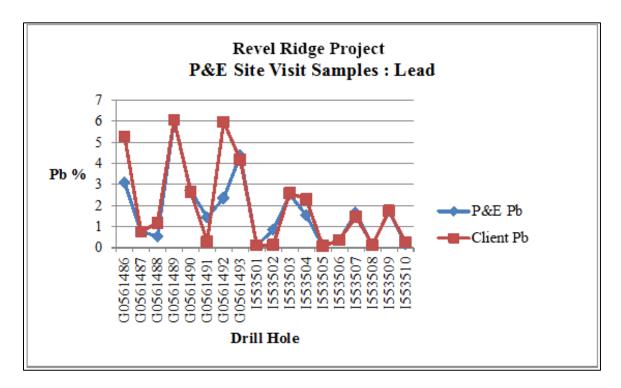
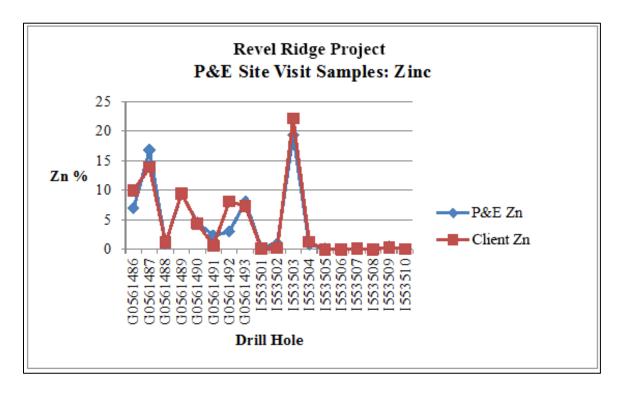


FIGURE 12.4 2010/2011 P&E VERIFICATION SAMPLES FOR ZINC



### 12.2 2012 SITE VISIT AND INDEPENDENT SAMPLING

The Property was visited by Mr. Richard Routledge, P.Geo., of P&E from June 13 to 14, 2012. Data verification sampling was done on diamond drill core, with 26 samples from 10 drill holes collected for assay. An attempt was made to sample intervals from a variety of low and high-grade material. The chosen sample intervals were then sampled by taking complete sections of the remaining half-split core. The samples were then documented, bagged, and sealed with packing tape and were delivered by Mr. Routledge to AGAT Laboratories ("AGAT") in Mississauga, ON, for analysis.

Samples at AGAT were analyzed for gold by fire assay with ICP-OES or gravimetric finish; silver, lead and zinc by aqua regia digest with ICP-OES finish; and lead and zinc samples exceeding 10,000 ppm were further analyzed using a Sodium Peroxide Fusion method with ICP-OES finish. Specific gravities were also determined on all 26 of the samples.

AGAT has developed and implemented at each of its locations a Quality Management System (QMS) designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards.

AGAT maintains ISO registrations and accreditations. ISO registration and accreditation provide independent verification that a QMS is in operation at the location in question. Most AGAT laboratories are registered or are pending registration to ISO 9001:2000.

At no time, prior to the time of sampling, were any employees or other associates of Huakan advised as to the location or identification of any of the samples to be collected. A comparison of the P&E independent sample verification results versus the original assay results for gold, silver, lead and zinc can be seen in Figure 12.5 to Figure 12.8.

FIGURE 12.5 2012 P&E VERIFICATION SAMPLES FOR GOLD

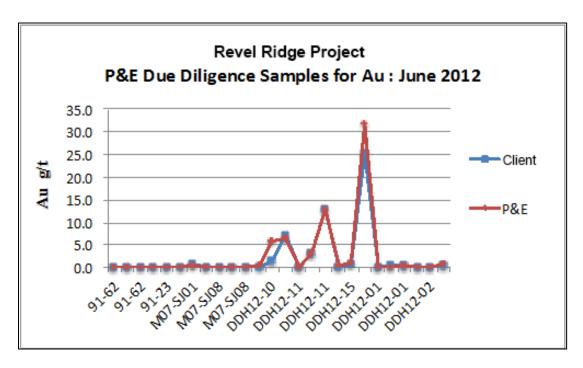


FIGURE 12.6 2012 P&E VERIFICATION SAMPLES FOR SILVER

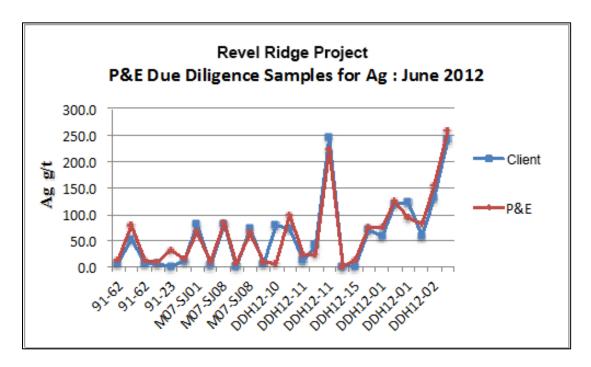


FIGURE 12.7 2012 P&E VERIFICATION SAMPLES FOR LEAD

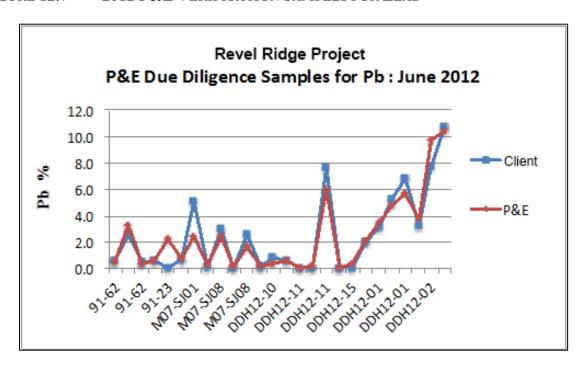
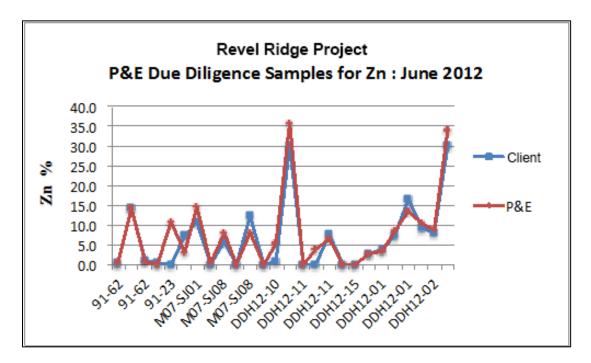


FIGURE 12.8 2012 P&E VERIFICATION SAMPLES FOR ZINC



Based upon the evaluation of the QA/QC program undertaken by Huakan, as well as P&E's due diligence sampling, it is P&E's opinion that the results are suitable for use in the current Mineral Resource Estimate.

## 12.3 DATABASE VERIFICATION

P&E undertook a verification review of the supplied database whereby independently acquired laboratory assay certificates were compared to constrained assays within the Mineral Resource wireframes. 100% of all constrained assays from 2010 onwards were checked and seven errors were found and corrected. Prior to 2010 selected assays were checked and 25 corrections were made. There were no limitations on P&E's ability to conduct satisfactory data verification.

### 12.4 OTHER SITE VISIT COMMENTS

The only non-material activity on the Revel Ridge Property since 2012 has been the closure of the site camp and the removal of mining and infrastructure as confirmed in this report section by a signed statement from the site watchmen. Research indicates no additional material exploration work has been conducted on the Property since 2012. In Addition, Mr. Puritch has come into possession of a BC Mines Inspector report dated July 9, 2019 that indicates there has been no activity at the site since 2012. The report goes on to discuss how the mine site was not properly secured from public access which confirms the inactive state of the mine and the associated site. See highlighted extracts from the report in Section 12.4.

See highlighted extracts from the report as follows:



Inspection Number:

132805

File Number: Permit Number:

MX-4-366

Total Orders:

Report of Inspector of Mines - Health and Safety

Issued pursuant to Section 15 of the Mines Act

Mine Name/Number J & L 0400022 Type of Mining EU. EXPLORATION -

UNDERGROUND

**Latitude/Longitude** 51.3, -118.13333

Manager Lee Heichert

**Phone Numbers** (604) 694 2344

Visit Date 2019-07-09

Location

Northing/Easting/Zone 420990, 5683797, 11U

Address 550-

**Permittee** Huakan International Mining Inc 580 Hornby St

Vancouver

BC

V6C 3B6

Email

**Inspector** Jerrold Jewsbury, INSPECTOR

**Accompanying Inspector** Caroline

Nakatsuka.

MSc. BMLSc, BEd, Inspector; Barry

Tracey, Inspector;

Address 202-100 Cranbrook Street North

Cranbrook, B.C. V1C 3P9

In Attendance

Copies to Barry Tracey and Caroline Nakatsuka

The Mine Manager is required to provide a written response within 15 days of receiving the inspection report. The Manager's response must outline the remedial steps taken by a specified date and the work still outstanding. A copy must be provided to the inspector, and in the case of health and safety matters, the occupational health and safety committee and the local union. In this document, Code means Health, Safety and Reclamation Code for Mines in British Columbia.

### Introduction

This inspection report is a general Health & Safety compliance verification inspection conducted July 9th, 2019 at the J & L underground mining operation currently in care and maintenance status. During this inspection I, Jerrold Jewsbury, Inspector of Mines Health & Safety was accompanied by Caroline Nakatsuka, Health and Safety specialist and Barry Tracey, Provincial Mechanical Inspector.

#### **Preamble**

This inspection was a result of a planned visit to the J & L site north of Revelstoke, BC to ensure the care and maintenance responsibilities are being maintained and the site is secure. During this visit a couple items were observed and noted. • Prior to visiting the J & L site, multiple phone calls were made to contact the manager with no reply. Upon arrival at the site it was observed no one has attended the site for some time. Paper work found on desks in log books suggest May 2012 was the last time management has been to site to monitor or verify secure status.

Status: Open

Report of Inspector of Mines - Health and Safety J & L 0400022

### **Order 1 (Inspection Mines):**

Issued Pursuant To: Mines Act Section 15(4)

Section 10.6.4, Health, Safety and Reclamation Code for Mines in BC (MA), Securing of Openings

Observation of Contravention:

The Main portal was found to be unlocked allowing public to access the underground workings. The access needs to be secured from inadvertent access.

Remedial Action/Results To Be Obtained:

The manager shall have the main portal gate secured and locked to prevent access to the underground workings.

Report of Inspector of Mines - Health and Safety J & L 0400022





Left - The latch to the main portal is open has been left unsecured/locked. Right – The main portal.

# Huakan International Mining Inc. 550-580 Hornby Street Vancouver, BC. V6C 3B6

February 14, 2020

Watchman name Mark Menhinick Watchman name Ron Menhinick

Re: J&L Mine site status

Dear sirs,

By signing in the space provided below, and returning a copy to us, you hereby acknowledge that during your various visits to inspect the J&L Mine site since the summer of 2012 to date, in your capacity as site watchmen, you have observed no material changes in the conditions of the road access, camp structures, mine buildings, underground access portals or other site improvements other than site cleanup and equipment removal by the Property owners.

Sincerely,

Huakan International Mining Inc.

Per: Wenhang ("Wilson") Jin

Agreed to this 14th day of February, 2020 by;

Per: Mark Menhinick

er: D MEN HI

P&E Mining Consultants Inc. Rokmaster Resources Corp., Revel Ridge Project, Report No. 369 Page 63 of 111

### 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The following section is based on the Technical Report on the Property by Puritch et al. (2018).

### 13.1 SUMMARY

There have been numerous and extensive metallurgical tests completed on the Main Zone mineralization. The Main Zone is a complex polymetallic deposit high in arsenic which creates a challenge in the production of saleable zinc and lead concentrates and the economic recovery of gold, however, over time an effective flowsheet has been developed to provide acceptable recoveries of gold, silver, lead and zinc for this high value material. Metallurgical work started in the early 1980s and by early 1990s had worked out a flowsheet that has since been refined, improved and optimized. There specific metallurgical reports are listed in Section 27.0.

The Property includes two principal underground mineralized zones, identified as the Main Zone and the Yellowjacket Zone. The Main Zone constitutes most of the tonnage and has a higher insitu value attributable to the gold content. The Yellowjacket Zone currently has lower tonnage and only minor gold credits, but higher silver, lead and zinc content and is easier to process than the Main Zone.

The Project has been challenged by the complex metallurgy of the Main Zone, which includes gold mineralization associated primarily with arsenopyrite and which is not amenable to conventional leaching. Further, there is an intimate association between galena and sphalerite mineralization, as well as the presence of massive sulfides (primarily arsenopyrite and pyrite) and minor complex sulfosalts including lead antimony minerals. Conversely, the Yellowjacket Zone produces good separation of galena and sphalerite, and has little deleterious elements of concern. With the Yellowjacket Zone, most of the silver, along with minor contained gold primarily reports to the lead concentrate.

Based on the laboratory results obtained from the Huakan testwork, a conceptual process has been modified and advanced from historic work on the Main Zone, which would also be suitable to separately treat Yellowjacket ore.

The plant concept design would consist of first using Dense Media Separation (DMS) at a 50 mm (2") crush size on the run of mine (ROM) mineralization to reject significant mass prior to sending to the mill and concentrator. The DMS float would consist of a low sulfide waste rejecting 20% to 40% of the mass of the mined material, but potentially less than 2% of the contained metal value. The DMS sinks would be forwarded to secondary crushing, followed by two stages of grinding targeting an 80% passing particle size (P80) of ~34 microns. The mineralization is relatively soft, with a Bond Ball Mill work index of 9-10 kWh/tonne. The ground product is subjected to differential flotation to produce separate lead and zinc concentrates, which would also contain by-product precious metal values.

For the Main Zone the remaining precious metals would be scavenged into a bulk sulfide (arsenopyrite / pyrite) flotation concentrate that would be sent to a pressure leaching (POX) autoclave. The leached POX residue would be neutralized and then cyanide leached. The *P&E Mining Consultants Inc.*Page 64 of 111

resulting pregnant leachate solution (PLS) is forwarded to gold/silver recovery. This final sequence for Main Zone material is envisioned to be by the Merrill Crowe process to produce gold-silver doré on site.

The Yellowjacket Zone mineralization could be fed into the same treatment circuit, including differential flotation, to produce separate lead and zinc concentrates. The float feed would also be at a coarser primary grind, expected to be approximately P80 of ~70 microns. No DMS or separate gold recovery circuits would be required for processing the Yellowjacket Zone mineralization.

Based on the current envisioned circuit and corresponding laboratory test response, the overall recoveries for the Main Zone are expected to be approximately 93% Au, 70% Ag, 74% Pb, and 80% Zn. Limited metallurgical testwork from core has been performed on the Yellowjacket Zone which appears to have a simpler metallurgy than the Main Zone. The expected recoveries for the Yellowjacket Zone are 94% Ag, 88% Pb, and 93% Zn.

### 13.2 PRE-HUAKAN TESTWORK DETAILS

As the body of metallurgical testwork is extensive and work builds off of previous studies, more details are provided from the mid-1990s onward.

In 1997-1999, Weymin Mining Corporation focused on metallurgical testwork that produced numerous effective options for acceptable recoveries of gold, zinc and lead by making 3 separate concentrates and including use of heavy media separation. Their work is summarized below (Nicholas, 1998):

A series of six bulk samples were extracted from 6 raises along the 830 Tracked Level. They were blended into an average composite and tested. Another two high-grade samples were used in variability tests.

The three samples were pre-concentrated by heavy liquid separation at a density of 2.90 g/cm<sup>3</sup>. The test was performed on the -2 inch +30 mesh material. The "float" product was rejected as waste rock. The "sink" product was combined with the -30 mesh material and formed the head sample for the metallurgical tests.

The gravity concentration test using a Knelson Concentrator indicated that at a concentration ratio of 760 the gold recovery was 2.5% and the gravity concentrate assayed 227 g/t Au.

A flotation procedure developed in earlier testwork by Bacon Donaldson Laboratory was employed to produce Pb, Zn, pyrite and arsenic ("As") concentrates. In this process, a Pb rougher concentrate was floated first, followed by pyrite and Zn/As. The Pb and pyrite rougher concentrates were reground and cleaned. The Zn/As rougher concentrate was reground and separated into a Zn concentrate and an As concentrate.

At a primary grind size of 60% passing 325 mesh, the Pb rougher concentrate typically recovered about 25% of the Au, 80% of the Ag, 80% of the Pb, 30% of the Zn and 10% of the As. After regrinding to 80% minus 18  $\mu$ m and 5-stage cleaning, the Pb recovery dropped to 55% and the grade increased to 56% Pb. When the cleaner tails were recycled, the Pb recovery increased. A

locked cycle test indicated that Pb recovery was 80.4% at a concentrate grade of 50.0% Pb. Corresponding Au and Ag recoveries in the Pb concentrate were 17.5% and 78.5%, respectively.

Two other locked cycle tests were conducted. One test showed that Pb recovery was 73.5% at a concentrate grade of 54.6% Pb and the corresponding Au and Ag recoveries in the Pb concentrate were 14.0% and 74.4%, respectively. The other test showed that Pb recovery was 64.9% at a grade of 57.3% Pb and the corresponding Au and Ag recoveries were 9.4% and 59.8%, respectively.

The variability samples had a higher Pb recovery. In batch tests, Pb recovery was 64.3% at a grade of 56.2% Pb, and 69.0% at a grade of 51.2% Pb.

The pyrite concentrate removed 10.8% of the mass and took away 6.3% of the Au, 6.3% of the Ag, 3.3% of the Pb and 3.1% of the Zn. Direct cyanidation of the pyrite concentrate could only extract 17.3% of the Au at a sodium cyanide consumption of 8.09 kg/t.

Zn and As were readily floatable after activation with copper sulphate. Although they were floated together into the bulk rougher concentrate, Zn was found to be more floatable than As and was floated first. The final Zn concentrate consisted of 7.0% of the mass, assayed 51.8% Zn and recovered 72% of the Zn. The Zn concentrate also contained 4.2% of the Au and 5.4% of the Ag.

The As concentrate was produced by separating the Zn/As bulk concentrate. It consisted of 31.2% of the mass, assayed 22.0% As and recovered 90.3% of the As and 69.7% of the Au. The concentrate also contained 8.3% of the Ag, 7.6% of the Pb and 7.2% of the Zn.

The As concentrate was pressure leached to oxidize the arsenopyrite and to release the associated Au. Nearly complete arsenopyrite oxidation was achieved when leached at 8% solids for 3 hours at 190°C with 100 psi O2 over-steam pressure, and with the addition of 5 g/L H2SO4, 1 g/L Fe2+ and 1 g/L Fe3+. The sulphide sulphur content in the As concentrate was reduced from 18.3% to 0.21% and 92.4% of the As and 97.4% of the Fe were fixed in the leach residue. Cyanidation of the residue extracted 96% of the Au at a sodium cyanide consumption of 3.77 kg per tonne of As concentrate.

A pressure leach test was also performed on a rougher tail generated from a conventional Pb-Zn rougher float circuit. The rougher tail contained both pyrite and arsenopyrite. The pressure leach was aimed at selectively oxidizing the arsenopyrite to release the gold. While the pressure leach seemed to have oxidized the arsenopyrite, cyanidation of the residue only extracted 29.2% of the Au at a sodium cyanide consumption of 8.76 kg/t.

The locked cycle flotation test results indicated that a small amount of Zn was lost into the As concentrate.

Further testwork was recommended to increase the recovery of zinc to the zinc concentrate.

In 2005, BacTech Mining Corporation continued metallurgical testing on the same six samples extracted by Weymin Mining Corporation, in 1997 (de Ruijter, 2005).

The samples were tested for bulk density and Bond Work Index. Flotation tests were initially done using the individual samples. The flotation procedure used was the four-product procedure developed in the 1998 metallurgical tests. The four flotation concentrates were a gold-bearing arsenopyrite concentrate, a lead concentrate, a zinc concentrate and a pyrite concentrate.

The flotation tests produced results generally in keeping with those obtained in the previous study. Overall recoveries for lead, zinc, gold and silver were very high, although the selective separation of lead and zinc for the final lead concentrate remained problematic.

In order to obtain more consistent results, a blended composite sample was used for the next phase of the flotation testwork. This minimized the variability of the results from different individual samples. Also, it was felt by management that the practical operability of the four-product flotation procedure was deemed to be difficult since this involved the heating up of the pulp to 50°C to 65°C and using sulphur dioxide gas as a reagent for the pyrite flotation stage. A simplified three-product flotation procedure, generating a gold-bearing arsenopyrite/pyrite concentrate, a lead concentrate and a zinc concentrate was proposed. This three-product procedure produced results equivalent to the four-product procedure.

A locked-cycle flotation test on three-product procedure returned acceptable recoveries and product grades. The results indicated that the total gold recovery obtained was 98.7%, of which 74.4% reported to the gold-bearing arsenopyrite/pyrite concentrate, 19.8% to the lead concentrate and 4.4% to the zinc concentrate. The grade of the arsenopyrite/pyrite concentrate was 18.9 g/t Au, 16.2 g/t Ag, 16.8% As and 37.5% Fe. The lead recovery was 79.7% in the lead concentrate. It had a grade of 45.1% Pb, 18.3% Zn, 2.2% As, 28.8 g/t Au and 1,028 g/t Ag. Approximately 80% of silver was recovered into the lead concentrate. The zinc concentrate recovered 73.6% Zn in a concentrate grade of 49.6% Zn, 5.1 g/t Au, 124.9 g/t Ag and 2.0% As. In addition, gold and silver recoveries in the Zn concentrate were 4.4% Au and 12.3% Ag.

Heavy liquid separation tests were done on each individual sample as a possible method of rejecting waste rock and pre-concentrating flotation feed material. These tests indicated that using a heavy medium separation process at a specific gravity of 2.96 g/cm<sup>3</sup>, significantly reduced the volume of material to be milled at a relatively low metal loss.

The modified Sobeck environmental test procedure was used to assess the acid generating potential of various products arising from the heavy liquid separation tests. Of the 12 samples tested, only two samples gave acid generating potential values. These two samples were the sink fraction produced at a liquid density between 2.75 to 2.85 g/cm<sup>3</sup>. Since these products would be treated for metal recovery in the commercial application, no environmental problems are expected to arise from the rejects from a heavy medium separation circuit.

The three-product flotation procedure was demonstrated to be a robust and a practical procedure, suitable for use in the pre-feasibility study. However, more testing would be required to optimize the procedure to reduce the zinc content in the final lead concentrate, the lead grade in the final zinc concentrate, and the arsenic content in both the lead and zinc concentrates.

#### 13.3 HUAKAN METALLURGICAL TESTWORK

From summer 2010 until spring 2014, Huakan conducted an extensive campaign of metallurgical testwork on bulk samples of Main Zone material and some testwork from core of Yellowjacket Zone material, to advance the process development of the precious metal and poly-metallic project. Principal metals of interest are gold, silver, lead and zinc. The Huakan work builds on historical testwork conducted for the Project primarily during the 1980s and 1990s, and focused on the Main Zone mineralization. The Huakan program used various mineral processing and hydro-metallurgical procedures consisting of comminution testing, heavy media separation (HMS), and differential froth flotation with open cycle flotation on Main Zone with optimization and variability testing and open cycle flotation on the Yellowjacket Zone, Lock cycle flotation on both Main Zone and Yellowjacket Zone and flotation tailing characterization. Gold bulk flotation concentrate was separately subjected to bioleaching and pressure oxidation (POX) procedures prior to cyanidation.

The majority of laboratory studies were performed by Inspectorate Exploration and Mining Services Ltd., (Inspectorate) of Richmond, BC, with specific procedures undertaken by other laboratories including Hazen Research in Golden CO., and SGS in Lakefield Ont., under direction of F. Wright Consulting Inc.

The Main Zone samples, collected in June 2011, consisted of six mineralized composites (Comp. 1 to 6) taken from specific locations in the underground workings and one sample of dilution material (Comp. 7) also obtained from underground. Initially the samples were used to blend a master composite (Comp. JL1) to represent the Main Zone Mineral Resource, particularly the average expected lead and zinc grade, which are most critical to response in differential flotation. The samples from the Yellowjacket Zone originated from split drill core, as well as from minus six mesh assay reject from the companies' earlier exploration programs. There were three composites made-up from the drill core samples.

Preliminary comminution testing was performed for the Main Zone material. This included crushing work index (CWi) by Hazen Research resulting in a CWi range of 9.7 to 12.7 kWh/t. The Main Zone master composite JL1 provided for an abrasion of 0.2402 g using the Pennsylvania Crusher Method. A rod mill work index of 12.9 kWh/t was reported for the same sample. Inspectorate undertook a Bond Ball Mill Work Index (BMWI) of each of the Main Zone composites using a closing sieve size of 105 microns. The mineralization is relatively soft with a Bond Ball Mill Work Index range of 9 -10 kWh/tonne. The Yellowjacket Zone underwent very limited comminution testing with only one BMWI performed on HMS sinks that yielded 9.8 kWh/tonne. The grinding energy requirements for both the Main Zone and Yellowjacket Zone materials are considered moderately soft.

Sink float testing was performed using the heavy liquid tetrabromoethane (TBE), with the concentration adjusted to achieve the desired specific gravity (SG) of the liquid media. The media SG was adjusted to 2.72, 2.82 and 2.95. Crushing of the HMS feed was operated at a nominal particle size 25 mm (1 inch) and at 50 mm (2 inch) to note any differences in response. Using a two-inch crush size at a media SG 2.82 resulted in all the metals of interest having greater than 95% recovery, and gold having greater than 98% recovery. At these conditions, approximately 64% of the mass was retained, although these results varied even for the same sample when repeated, likely due to variation in sulfide distribution and particle size. Dense

Media Separation (DMS) has been shown to have a positive pre-concentration benefit for the Main Zone material using a media SG of ~2.85.

Thirteen open cycle flotation optimization testwork (F1-F13) were performed on Main Zone material varying methods, procedures, reagents and grind sizes. This was followed by eighteen (F14-F-31) variability open cycle tests on multiple composites.

Nine open cycle flotation optimization testwork (F1-F9) were performed on Yellowjacket Zone material varying methods, procedures, reagents and grind sizes. The results indicate good total recoveries were achieved, as well as the lead zinc separation. Most of the silver (~85%) reported to the lead concentrate.

Initially 2 Lock cycle tests (FLC1 and FLC2) were performed on the Main Zone. The data indicated FLC1 provided better lead grade and recovery than with the FLC2 procedure. A decision to pursue the differential FLC1 flotation procedure was undertaken for continuing study. Variability studies were advanced on 3 composites which represented the range of expected head grades of lead and zinc for the Main Zone. Four subsequent Lock cycle tests were performed to determine lead and zinc circuit responses. Generally, separation and recovery of lead and zinc appeared reasonable. The total precious metal recovery during locked cycle flotation was excellent, although highly variable between the various float concentrates. Most of the remaining precious metals following base metal flotation were scavenged into the arsenopyrite / pyrite bulk concentrate, resulting in an overall 97% to 99% of the gold being floated.

According to the variability testwork undertaken on the Main Zone the differential flotation response of the Main Zone varies considerably based on samples tested. Differences in mineralized grade and mineralogy can significantly influence metal distribution. However, based on locked cycle flotation test results, the lead and zinc recovery and the final concentrate grades are considered encouraging over a wide range of head grades. This is summarized in Table 13.1.

TABLE 13.1  MAIN ZONE  FLOAT CONCENTRATE METAL GRADES AND RECOVERY								
Item         Au         Ag         Pb         Zn           (g/t)         (g/t)         (%)         (%)								
Head Grade	6 - 16	45 – 123	2.0 - 4.8	1.6 - 8.9				
Metal Recovery	Au (%)	Ag (%)	Pb (%)	Zn (%)				
to Pb Conc.	6-23	35-80	68 - 90	5-20				
to Zn Conc.	0.5-17	5-10	2-12	74-84				
Concentrate Grade	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)				
in Pb Conc.	5-20	650-725	44-59	3-14				
in Zn Conc.	0.5-9	5-250	1-9	50-59				

Samples were initially chosen to match the head grade range for lead and zinc since the corresponding galena and sphalerite mineralization is critical to grinding and differential flotation response, as well as DMS. On a head grade from the Main Zone of approximately 2.5% Pb, and 4.2% Zn, the current results indicate average metal recoveries can be expected to be 74%

for lead and 80% for zinc. There is also approximately 3.0% to 4.2% As, and 0.9% to 4.3% Sb expected in the lead concentrate. This may require onsite blending or selling product to concentrate brokers for blending in order to maximize returns. The base metal concentrates also contain significant silver and gold content, with the remainder reporting to the zinc rougher scavenger tailing.

The zinc rougher tailing generated from the Main Zone contains the majority of the gold and still has elevated silver values. It is assumed this tailing would be subjected to a bulk float (no cleaning) of the iron sulfides in order to reduce acid requirements during oxidation pre-treatment.

There was a single locked cycle flotation test (FLC1) performed for the Yellowjacket Zone composite Comp. The results provided 88% lead recovery into a concentrate containing 43% Pb and 1,090 g/t Ag. There may be a minor gold credit with the lead concentrate and overall silver recovery exceeded 94% between the Pb and Zn concentrates. Zinc concentrate grade was excellent at 62% Zn, with a recovery of 93%.

Gold mineralization at the Main Zone is associated primarily with arsenopyrite and from historical work it has been shown to be highly refractory to direct cyanidation, with gold recoveries consistently below 25%. Two principal cyanide pre-treatment steps were forwarded separately for the Main Zone material. These consisted of bio-oxidation (bioleach) and pressure oxidation (POX).

Bio-oxidation responded poorly. Retention time and pulp density required were well below standard bioleach conditions for arsenopyrite concentrate. Cyanide and lime consumptions were high.

Initial pressure oxidation (POX) tests were performed on gold concentrates produced from the various flotation procedures used for Comp. JL1. For the first six POX tests, principal adjustments were made to the retention time in the autoclave to note the effect on precious metal cyanide recovery. As compared to cyanide leaching without pre-treatment the gold recoveries all improved dramatically to over 95% following pressure leaching. Maximum gold dissolution in cyanide leaching of the POX residue appeared to be within 24 hours. Six additional POX tests employed lime boil and cyanidation.

The deportment of recovered precious metals is provided for the Main Zone in Table 13.2 that assumes a head grade of 9 g/t Au and 67 g/t Ag. Samples used had head grades based on earlier geological resource estimates, which had lower tonnage, but higher precious metal content. The detailed work suggests that precious metal recovery is not highly dependent on the gold and silver grade, but more related to the sulfide content and distribution.

Gold is the primary metal of value for the Main Zone. Its overall recovery is estimated at 93% using pressure oxidation.

# TABLE 13.2 MAIN ZONE GOLD AND SILVER RECOVERY DISTRIBUTION Item Au Ag %Distr. %Distr. eense Media Sep. (DMS) Sinks 99 98

WDistr.%Distr.Dense Media Sep. (DMS) Sinks9998Lead Concentrate1050Zinc Concentrate15Cyanide Leach (after POX\*)9535Estimated TOTAL Recovery =9370

The Yellowjacket Zone material had simplified process requirements and a more consistent metallurgical response than the Main Zone, so fewer samples were evaluated. Table 13.3 provides an overview of the average expected grade and recovery to flotation concentrate for the mill feed grade as indicated in the table.

TABLE 13.3 YELLOWJACKET CONCENTRATE GRADE AND RECOVERY										
Item	Au (g/t)			Zn (%)						
<b>Metal Grades</b>										
Head	0.11	55	2.04	7.97						
Lead Conc.	1.6	1090	43.3	10.4						
Zinc Conc.	0.25	56	1.1	61.9						
Bulk Tailing	0.02	3.0	0.12	0.11						
Metal Recovery	Au (%)	Ag (%)	Pb (%)	Zn (%)						
to Pb Conc.	58.3	81.9	87.5	5.4						
to Zn Conc.	27.5	12.3	6.7	93.1						

Laboratory results provided for an overall expected recovery of 93% for zinc, and 94% for silver, which are the highest value metals contained in the Yellowjacket Zone.

Preliminary characterization was performed on the final tailing generated from lock cycle flotation for both the Yellowjacket and Main Zones. This included both settling testwork and acid base accounting (ABA). Despite the relatively fine particle size of the Main Zone tailing (P80 ~40 microns), the material showed good settling characteristics and low observed turbidity in the supernatant after 24 hours. Sobek ABA performed on the Comp. 3 Main Zone tailing gave a net neutralization potential (NNP) of 123 kg CaCO3 equivalent. Yellowjacket Zone tailing were coarser at P80 ~70 microns, and showed further improvement to the settling characteristics, as compared to the Main Zone composite. Acid base accounting (ABA) using the Sobek method on the Yellowjacket Zone tailing gave a neutralization potential (NP) of 231 kg equivalent CaCO3, with a net neutralization potential (NNP) of 225 kg CaCO3 equivalent. Overall the preliminary characterizations that were performed showed a positive response to limit potential technical and environmental implications for tailing storage facility (TSF).

#### 14.0 P&E 2020 MINERAL RESOURCE ESTIMATE

#### 14.1 INTRODUCTION

The Mineral Resource Estimate presented herein is reported in accordance with the Canadian Securities Administrators' National Instrument 43-101 and has been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into Mineral Reserve. Confidence in the estimate of Inferred Mineral Resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Mineral Resources may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent Mineral Resource Estimates.

All Mineral Resource estimation work reported herein was carried out by F. H. Brown, P.Geo., an independent Qualified Person as defined by National Instrument 43-101 by reason of education, affiliation with a professional association and past relevant work experience. The effective date of this estimate is January 27, 2020. A draft copy of this Technical Report was reviewed by Rokmaster for factual errors.

Mineral Resource modeling and estimation were carried out using GEOVIA GEMS<sup>TM</sup> and Snowden Supervisor<sup>TM</sup> software programs.

#### 14.2 DATA SUPPLIED

All sampling data were supplied as a Microsoft Access format database containing collar, survey, assay, bulk density and lithology data. A topographic surface and AutoCAD format wireframes of the underground workings were also supplied. All spatial data are reported relative to UTM NAD 83, Zone 11.

As implemented by P&E, the database contains 582 unique collar records, encompassing surface trenches, underground chip sampling and drilling (Table 14.4). Of the 582 records, 29 records contained no associated assay data, were outside the Project limits, or were incomplete, and therefore were not used for Mineral Resource estimation.

TABLE 14.1 DATABASE SUMMARY							
Sample Type	Record Count	<b>Total Metres</b>					
Drilling	298	41,135.22					
Underground Chip Sampling	223	529.15					
Surface Trench Sampling	32	85.57					
Not used	29	140.41					

#### 14.3 DATABASE VALIDATION

Industry standard validation checks were completed on the supplied databases. P&E typically validates a Mineral Resource database by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, and missing interval and coordinate fields. Several minor out-of-sequence errors were detected and corrected. P&E independently acquired all 2010 and later assay results directly from the various laboratories and utilized that data for mineralized tenor validation of the pre-2010 assays. P&E believes that the supplied database is suitable for Mineral Resource estimation.

#### 14.4 BULK DENSITY

The supplied database contains a total of 396 bulk density measurements. Representative samples of dry halved drill core from within the Main Zone and the margins of the Main Zone were selected for measurement. The dry weight of the drill core sample was weighed, and then the volume of displaced water determined from submerged drill core. Bulk density was calculated from the ratio of the dry weight of the drill hole core to the weight of the displaced water. The supplied bulk density measurements were used to estimate block density values (Table 14.5).

In addition, P&E collected eighteen bulk density measurements from drill hole core for verification purposes, which are in agreement with values previously reported.

TABLE 14.2 BULK DENSITY VALUES							
Statistic Marginal Main Zone P&E							
Count	396	256	18				
Minimum	2.61	2.66	2.76				
Maximum	5.03	5.00	4.18				
Average	3.31	3.52	3.36				

#### 14.5 ECONOMIC PARAMETERS

Based on the economic parameters listed in Tables 14.6 and 14.7, a net smelter return (NSR) value was calculated for individual assay values, which were used to construct economic mineralization domains, as well as block NSR grades. NSR values were calculated as:

Main Zone NSR = 
$$(Pb\% x \$21.16) + (Zn\% x \$22.01) + (Ag g/t x \$0.52) + (Au g/t x \$49.36) - \$20.68$$

Yellowjacket Zone NSR = (Pb% x \$19.58) + (Zn% x \$22.93) + (Ag g/t x \$0.48) + (Au g/t x \$48.82) - \$20.68

An NSR cut-off of CDN\$110 per tonne was derived from \$75/t mining, \$25/t processing and \$10/t G&A costs.

TABLE 14.3
REVEL RIDGE ECONOMIC PARAMETERS – MAIN ZONE

Revel Ridge Project Main Zone - NSR Calculation									
Dec 31 2019 24 mo Trailing Average Prices	Metal Price	Concentrate	Smelter	Refining Chg.	Refining Chg.	Average Grad			
Element	\$US/Ib or oz	Recovery	Payable	\$US/Ib or oz	\$C/lb or oz	% or g/t			
Pb	\$0.96	80%	95%	\$0.00	\$0.00	1.00%			
Zn	\$1.24	72%	85%	\$0.00	\$0.00	1.00%			
Ag	\$15.95	88%	91%	\$0.50	\$0.66	1.0			
Au	\$1,331	92%	96%	\$10.00	\$13.16	1.00			
\$C/\$US		\$0.760							
Concentration Ratio (PB/Zn Blended)		20							
Smelter Treatment Charge \$US/dmt (Pb/Zn Blended Cost)		\$185							
Concentrate Shipping Charge \$C/tonne		<b>\$6</b> 5							
Moisture Content		8%							
	Payable Metal								
Element	\$C/tonne/g or %								
Pb	\$21.16								
Zn	\$22.01								
Ag	\$0.52								
Au	\$49.36								
	\$93.06								
Less Local Ore Haulage Cost to Mill	\$5.00								
Less Smelter Treatment Charges	\$12.17								
Less Concentrate Shipping Charges	\$3.51								
Penalties	\$20.68								

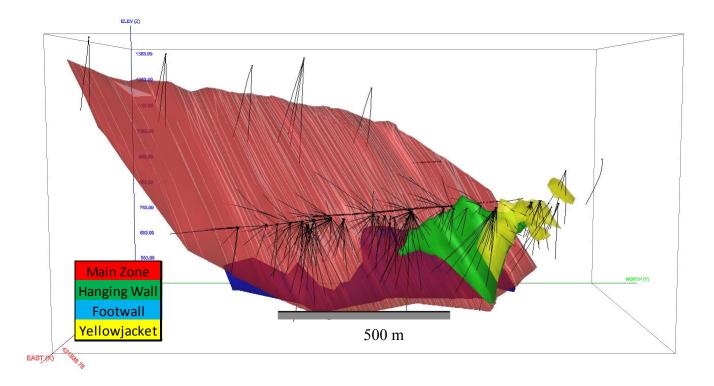
TABLE 14.4
REVEL RIDGE ECONOMIC PARAMETERS – YELLOWJACKET ZONE

Revei Riage	Project Yell	iow Jacket	Zone - N	ISK Calcula	uon	Jan 25/20
Dec 31 2019 24 mo Trailing Average Prices Element	Metal Price \$US/lb or oz	Concentrate Recovery	Smelter Payable	Refining Chg. \$US/Ib or oz	\$C/lb or oz	Average Grad % or g/t
Pb	\$0.96	74%	95%	\$0.00	\$0.00	1.00%
Zn	\$1.24	75%	85%	\$0.00	\$0.00	1.00%
Ag Au	\$15.95 \$1,331	80% 91%	91% 96%	\$0.50 \$10.00	\$0.66 \$13.16	1.0 1.00
\$C/\$US		\$0.760				
Concentration Ratio (PB/Zn Blended)		20				
Smelter Treatment Charge \$US/dmt (Pb/Zn Blended Cost)		\$185				
Concentrate Shipping Charge \$C/tonne		\$65				
Moisture Content		8%				
_	Payable Metal					
Element	\$C/tonne/g or %					
Pb	\$19.58					
Zn	\$22.93					
Ag	\$0.48					
Au	\$48.82 <b>\$91.80</b>					
	\$91.00					
Less Local Ore Haulage Cost to Process Plant	\$5.00					
Less Smelter Treatment Charges	\$12.17					
Less Concentrate Shipping Charges	\$3.51					

#### 14.6 DOMAIN MODELING

The Main Zone, Hanging Wall, Footwall and Yellowjacket Zones have been defined by geologists along the primary structure, based on underground sampling, drilling, geological mapping and grade continuity. Based on the supplied interpretations, domain models were generated by P&E from successive polylines spaced every ten metres and oriented perpendicular to the trend of the mineralization. The outlines of the polylines were determined by an NSR value of approximately C\$110.00/tonne based on the updated commodity prices, with demonstrated continuity along strike and down dip, and include low-grade material where necessary to maintain continuity between sections. All polyline vertices were snapped directly to drill hole assay intervals, in order to generate a true three-dimensional representation of the extent of the mineralization. Domain wireframes were then clipped above the topographic surface. The resulting domains were used for rock coding, statistical analysis and compositing limits (Figure 14.1).

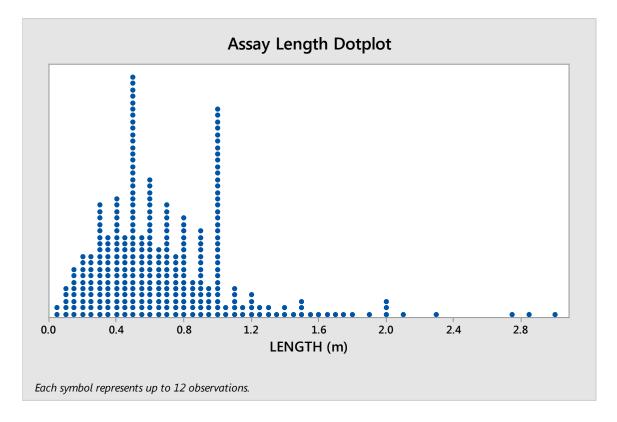
FIGURE 14.1 ISOMETRIC PROJECTION OF MINERAL RESOURCE DOMAINS (LOOKING WEST)



#### 14.7 COMPOSITING

Assay sample lengths for within the defined zones range from 0.03 m to 6.00 m, with an average sample length of 0.65 m. For the assay lengths two modes are apparent, with a primary mode occurring at 0.50 m and a secondary mode at 1.00 m (Figure 14.2). Due to the narrow widths of the mineralized structures a compositing length of 0.50 m was therefore selected for use for Mineral Resource estimation.

FIGURE 14.2 DOTPLOT OF CONSTRAINED ASSAY LENGTHS



Length-weighted composites were calculated within the Main, Footwall, Hanging Wall and Yellowjacket Zones domains. The compositing process started at the first point of intersection between the drill hole and the domain intersected, and halted upon exit from the domain wireframe. The wireframes that represented the interpreted domains were also used to back-tag a rock code field into the drill hole workspace. Assays and composites were assigned a domain rock code value based on the domain wireframe that the interval midpoint fell within. A nominal grade of 0.001 was used to populate a small number of un-sampled intervals. Composites that were less than one-half of the compositing interval in length were discarded so as to not introduce a short sample bias into the estimation process. The composite data were then exported to extraction files for grade estimation. Only assay values and underground channel samples were extracted for Mineral Resource estimation, and all trench samples were excluded.

#### 14.8 EXPLORATORY DATA ANALYSIS

P&E generated summary statistics for the composite data (Table 14.8). The correlation between grade elements was also examined for the Main Zone, indicating a high degree of correlation between Ag and Pb, and a moderate degree of correlation between Ag and Zn and Pb and Zn (Table 14.9).

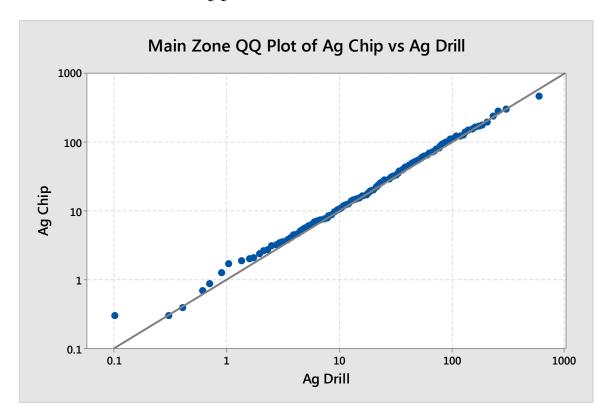
In addition, a comparison was made between underground chip sample values and drill hole assay values after compositing. The results indicate no significant bias between the two sample populations except for very low-grade Au values (Figure 14.3).

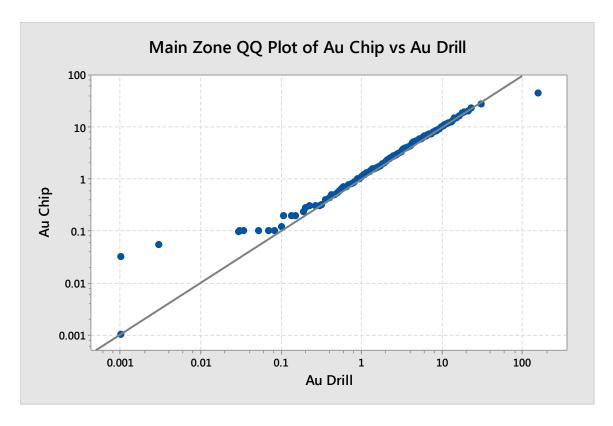
TABLE 14.5 COMPOSITE SUMMARY STATISTICS									
Ag	Mean (g/t)	St Dev	CV	Median (g/t)	Minimum (g/t)	Maximum (g/t)	Count		
Main Zone	48.3	66.8	1.4	20.1	0.001	598.6	2935		
Footwall	15.9	22.5	1.4	6.6	0.001	121.9	188		
Hanging Wall	37.1	45.8	1.2	19.1	0.001	235.6	301		
Yellowjacket	62.9	63.0	1.0	46.8	0.200	478.9	522		
Au	Mean (g/t)	St Dev	CV	Median (g/t)	Minimum (g/t)	Maximum (g/t)	Count		
Main Zone	4.73	7.13	1.51	2.26	0.001	157.19	2935		
Footwall	2.44	7.02	2.88	0.98	0.001	89.34	188		
Hanging Wall	0.78	1.89	2.43	0.10	0.001	13.57	301		
Yellowjacket	0.08	0.12	1.61	0.01	0.001	1.02	522		
Pb	Mean (%)	St Dev	CV	Median (%)	Minimum (%)	Maximum (%)	Count		
Main Zone	1.68	2.52	1.50	0.57	0.0008	18.56	2935		
Footwall	0.34	0.59	1.70	0.11	0.0006	3.27	188		
Hanging Wall	1.55	2.10	1.35	0.79	0.0010	11.98	301		
Yellowjacket	2.63	2.63	1.00	2.03	0.0100	23.40	522		
Zn	Mean (%)	St Dev	CV	Median (%)	Minimum (%)	Maximum (%)	Count		
Main Zone	3.13	4.45	1.42	0.98	0.0010	34.58	2935		
Footwall	0.38	0.71	1.89	0.06	0.0010	4.31	188		
Hanging Wall	3.91	5.30	1.36	1.49	0.0010	31.76	301		
Yellowjacket	8.42	6.27	0.74	7.21	0.0058	30.40	522		

**Note:** St Dev = standard deviation, CV = coefficient of variation.

TABLE 14.6 MAIN ZONE COMPOSITE CORRELATION MATRIX								
Element	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)				
Ag	1	0.375	0.856	0.531				
Au	0.375	1	0.287	0.145				
Pb	0.856	0.287	1	0.621				
Zn	0.531	0.145	0.621	1				

FIGURE 14.3 MAIN ZONE QQ PLOTS FOR DRILL HOLE Vs. CHIP COMPOSITES





#### 14.9 TREATMENT OF EXTREME VALUES

The presence of high-grade outliers for the composite data was evaluated by reviewing probability plots of the composite sample populations (Figure 14.4). Capping thresholds were selected by disintegration of the upper tail of the composite sample distribution. Composite grades were capped to the selected threshold values prior to estimation (Table 14.10).

FIGURE 14.4 CAPPING ANALYSIS PLOTS

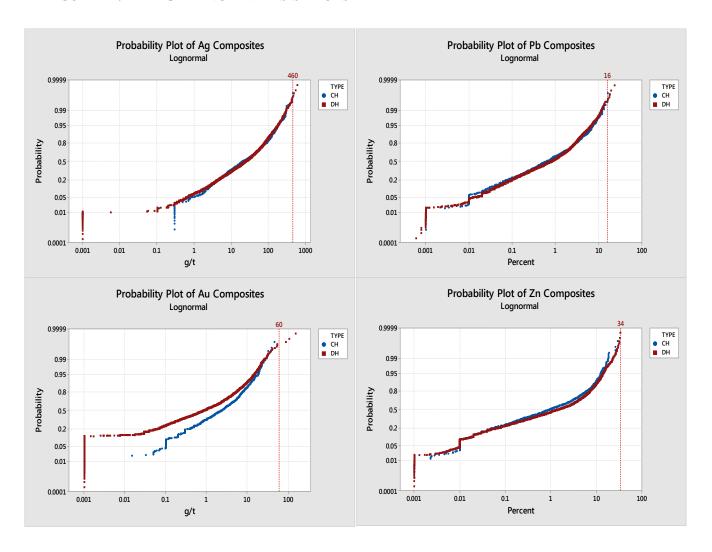


TABLE 14.7 CAPPING THRESHOLDS								
Item	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)				
Cap	50.00	460.00	18.00	34.00				
Number Capped	6	4	4	1				
Percent Capped	0.2%	0.1%	0.1%	0.0%				
Mean	3.70	47.81	1.73	3.76				
Capped Mean	3.65	47.75	1.73	3.76				
Percent Contribution	4%	1%	1%	0%				
Mean Above Cap	86.48	526.89	19.96	34.58				
Percentile	1.00	1.00	1.00	1.00				
Metal Loss	1.5%	0.1%	0.1%	0.0%				
CV	1.78	1.34	1.44	1.35				
Capped CV	1.61	1.33	1.43	1.35				

#### 14.10 CONTINUITY ANALYSIS

Domain-coded, composited sample data were used for continuity analysis. Strike orientations for the domains were modeled using the known geometry of the mineralization. Dip and dip plane orientations were modeled using orientations developed from variogram fans, which were assessed for geological reasonableness. Anisotropy was modeled with an average south-easterly strike and a north-easterly dip.

Based on the analysis of the resulting semi-variograms a strike distance of 60.0 m, a dip distance of 60.0 m, and a cross-dip distance of 20.0 m was selected as appropriate for Mineral Resource estimation. Continuity ellipses based on the observed ranges were then generated and used as the basis for estimation search ranges, distance calculations and Mineral Resource classification criteria.

#### 14.11 BLOCK MODEL

A rotated block model was established across the Property with the block model limits selected so as to cover the extent of the mineralized domains and the block size reflecting the generally narrow widths of the mineralized zones and the drill hole spacing (Table 14.11). The block model consists of separate models for estimated grades, rock code, percent, density and classification attributes and a calculated NSR block grade. A percent block model was used to accurately represent the volume and tonnage that was contained within the constraining grade domains. As a result, the Mineral Resource boundaries were properly represented by the percent model's capacity to measure infinitely variable inclusion percentages. The volume of the historical underground workings was deemed insignificant and was not depleted from the model.

TABLE 14.8 BLOCK MODEL SETUP							
Dimension	Minimum	Maximum	Number of Blocks	Block Size (m)			
X	421,800	423,300	150	10			
Y	5,680,100	5,683,100	300	10			
Z	2,100	4,000	190	10			
Rotation	-45°						

#### 14.12 ESTIMATION AND CLASSIFICATION

Block density values were calculated using a single pass. Anisotropic inverse distance squared ("ID<sup>2</sup>") linear weighting of between three and six bulk density values was used for the estimation of individual block density values.

Anisotropic inverse distance squared linear weighting of capped composite values was used for the estimation of block grades, with the anisotropy defined by the axes of the search ellipse.

A three-pass series of expanding ellipsoids with varying minimum sample requirements were used for sample selection, grade estimation and classification. Composite data used during grade estimation were restricted to samples located in their respective domains. Individual block grades were then used to calculate an NSR block model.

During the first pass, five to six composites from three or more drill holes or underground channel samples within a search ellipsoid defined by 50% of the observed continuity ranges were required for estimation.

During the second pass, three to six composites from two or more drill holes or underground channel samples within a search ellipsoid defined by 100% of the observed continuity ranges were required for estimation.

During the third pass, three to six composites from one or more drill holes or underground channel samples were required. The search ellipsoid was expanded to ensure that all blocks within the defined domains were estimated. Search parameters are summarized in Table 14.12.

TABLE 14.9 SEARCH PARAMETERS							
Pass	Search Radius	Minimum Number of Samples	Maximum Number of Samples				
1 <sup>st</sup>	30 m x 30 m x 10 m	5	6				
2 <sup>nd</sup>	60 m x 60 m x 20 m	3	6				
3 <sup>rd</sup>	240 m x 240 m x 80 m	3	6				

Mineral Resources were classified in accordance with guidelines established by the Canadian Institute of Mining, Metallurgy and Petroleum:

**Measured Mineral Resource:** "A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation."

**Indicated Mineral Resource:** "An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation."

**Inferred Mineral Resource:** "An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity."

Detailed summaries of underground chip sampling were supplied, and the information is of sufficient quality to justify the use of Measured Resources (personal communication Paul Cowley, P.Geo.). Based on the information supplied, P&E therefore considers that there is sufficient drilling and sampling information, and that this information is of a sufficient quality, to support a Measured, Indicated and Inferred classification for the Revel Ridge Deposit.

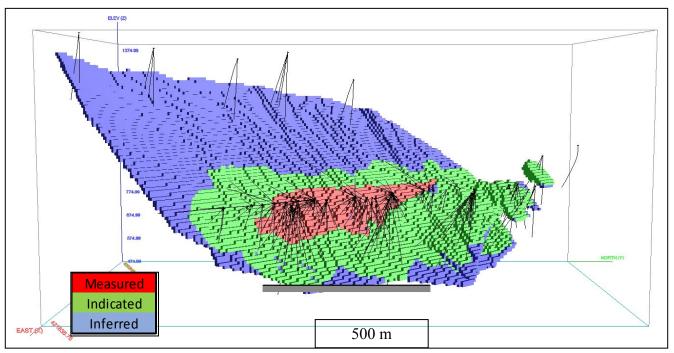
Mineral Resource classification was conducted by generating three-dimensional envelopes around those parts of the block model for which the drill hole data and grade estimates met certain criteria. The resulting classifications were iteratively refined to be geologically reasonable in order to prevent the generation of small, discontinuous areas of a higher confidence category being separated by a larger area of a lower confidence Mineral Resources.

Measured Mineral Resources were defined based on the results of the first pass, and then consolidated into an envelope digitized around the central area of blocks estimated during the first pass. This process downgraded isolated higher confidence blocks and combined the Measured Mineral Resources into a continuous unit.

Indicated Mineral Resources were defined based on the results of the second pass, and then consolidated into an envelope digitized around the central area of blocks estimated during the second pass. This process downgraded isolated higher confidence blocks and combined the Indicated Mineral Resources into a continuous unit.

All remaining Main Zone blocks estimated were classified as Inferred, including all blocks in the Footwall Zone (Figure 14.5).

FIGURE 14.5 ISOMETRIC PROJECTION OF BLOCK CLASSIFICATION (LOOKING WEST)



#### 14.13 MINERAL RESOURCE ESTIMATE

The updated Mineral Resource Estimate for the Revel Ridge Deposit is reported at an NSR cutoff value of CDN\$110/tonne, with an effective date of January 27, 2020. The updated Mineral Resource Estimate reports 5.27M Measured and Indicated tonnes containing 1.28M goldequivalent ounces and 4.96M Inferred tonnes containing 1.01M gold-equivalent ounces (Table 14.13).

TABLE 14.10 REVEL RIDGE 2020 MINERAL RESOURCE ESTIMATE ( <sup>1-7</sup> )										
Mineralized Zone	Classification	Tonnes (k)	Au (g/t)	Au (koz)	Ag (g/t)	Ag (koz)	Pb (%)	Zn (%)	Au Eq (g/t)	Au Eq (koz)
	Measured	1,352	6.13	266	62.8	2,730	2.19	4.09	9.14	397
Main Zone	Indicated	2,848	5.33	488	49	4,487	1.72	3.11	7.56	692
Main Zonc	Meas & Ind	4,200	5.59	755	53.4	7,216	1.87	3.43	8.07	1,089
	Inferred	4,562	4.36	639	61.8	9,064	1.88	2.59	6.55	961
HW Zone	Indicated	298	0.91	9	55.3	530	2.5	5.72	4.70	45
11 W Zone	Inferred	38	0.22	0	75	92	3.08	5.44	4.34	5
FW Zone	Inferred	341	3.91	43	25.3	277	0.53	0.48	4.20	46
Yellowjacket	Indicated	771	0.09	2	62.6	1,552	2.6	9.93	5.98	148
Zone	Inferred	23	0.11	0	55.4	41	2.65	7.68	4.91	4
	Measured	1,352	6.13	266	62.8	2,730	2.19	4.09	9.14	397
All Zones	Indicated	3,917	3.96	499	52.2	6,568	1.95	4.65	7.03	885
An Zones	Meas & Ind	5,269	4.52	765	54.9	9,298	2.01	4.51	7.57	1,283
	Inferred	4,964	4.28	683	59.4	9,474	1.80	2.49	6.36	1,015

**Note:** k = thousands, koz = thousands of ounces.

- 1) Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- 2) The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
- 3) The Mineral Resources in this estimate were calculated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
- 4) The following parameters were used to derive the NSR block model cut-off values used to define the Mineral Resource:

Dec 31, 2019 US\$ two-year trailing avg. metal prices:

- Pb \$0.96/lb, Zn \$1.24/lb, Au \$1,331/oz, Ag \$15.95/oz
- *Exchange rate of US\$0.76 = CDN \$1.00*
- Process recoveries of Pb 74%, Zn 75%, Au 91%, Ag 80%
- Smelter payables of Pb 95%, Zn 85%, Au 96%, Ag 91%
- Refining charges of Au US\$10/oz, Ag US\$0.50/oz
- Concentrate freight charges of C\$65/t and Smelter treatment charge of US185/t
- Mass pull of 5% and 8% concentrate moisture content.
- 5) NSR cut-off of CDN\$110 per tonne was derived from \$75/t mining, \$25/t processing, \$10/t G&A.
- 6) AuEq = Au g/t + (Ag g/t x 0.011) + (Pb % x 0.422) + (Zn % x 0.455)
- 7) Above parameters derived from 2012 PEA and other similar benchmarked projects.

P&E is of the opinion that the current Mineral Resource Estimate meets the reasonable prospect of economic extraction due to the approximate 7.0 g/t AuEq average grade and the \$110/t NSR cut-off (equal to approx. 3.5 g/t AuEq). P&E has experience with other similar projects and is of the opinion that the cut-off grade and cost assumptions are reasonable.

P&E is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors which may materially affect the Mineral Resource estimate. A material drop in metal prices below the Dec 31, 2019 two year trailing average prices used for the current Mineral Resource Estimate or a significant increase in operating costs could materially affect the cut-off and average grades and potentially result in a revised lower Mineral Resource Estimate tonnage

#### 14.14 VALIDATION

The block model was validated visually by the inspection of successive section lines in order to confirm that the block model correctly reflects the distribution of high-grade and low-grade samples (Appendix). As a further check on the model the average model block grades were compared to a Nearest Neighbour (NN) model and the uncapped mean of the composite data (Table 14.14). No significant bias between the block model and the input data was noted.

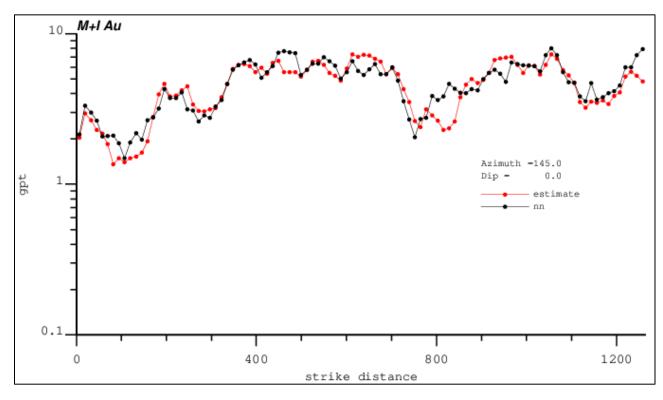
TABLE 14.11 MAIN ZONE VALIDATION STATISTICS			
Element	Model Mean	Uncapped Composite Mean	NN Mean
Ag g/t	44.73	48.3	44.06
Au g/t	4.60	4.73	4.46

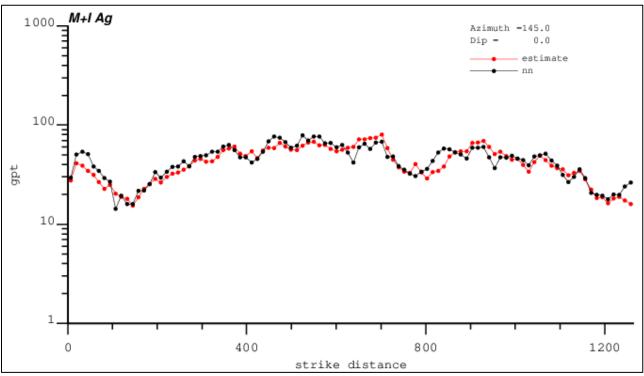
Pb %	1.58	1.68	1.57
Zn %	2.88	3.13	2.86

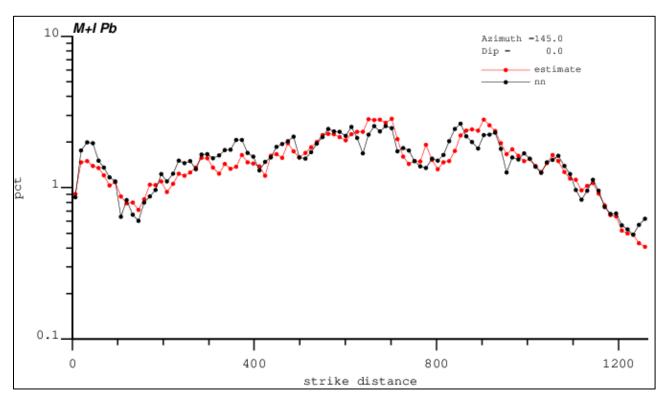
In addition, local trends were evaluated by comparing the  ${\rm ID}^2$  block estimates to a Nearest Neighbour estimate (NN) at zero cut-off along the strike of the Main Zone for Measured and Indicated Mineral Resource blocks (Figure 14.6). In general, the  ${\rm ID}^2$  block estimates are in good agreement with the NN estimates, and demonstrate no evidence of systematic bias in the model.

Figure 14.7 comprises a drill hole plan and five vertical cross-sections all showing the Main, Hanging Wall and Yellowjacket zones; the cross sections display the zone block models.

FIGURE 14.6 MAIN ZONE SWATH PLOTS







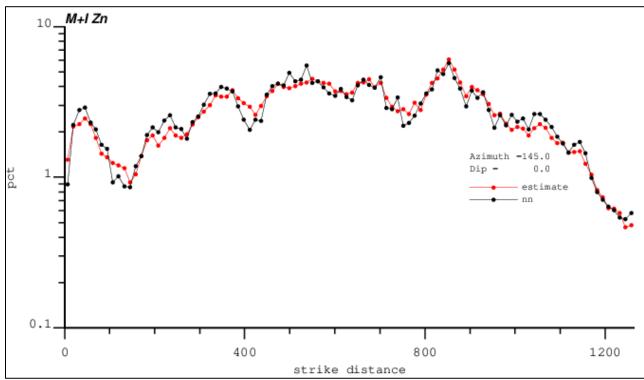
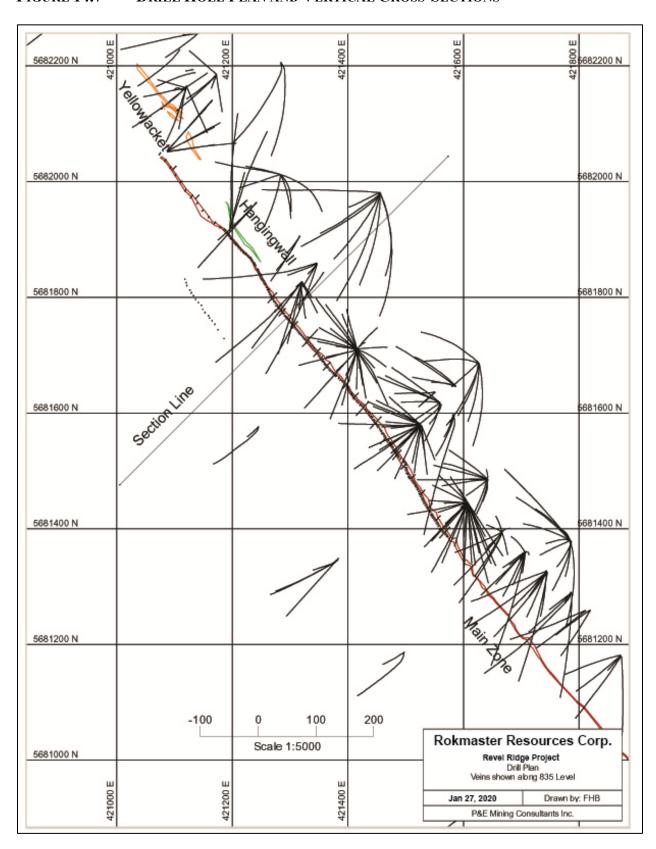
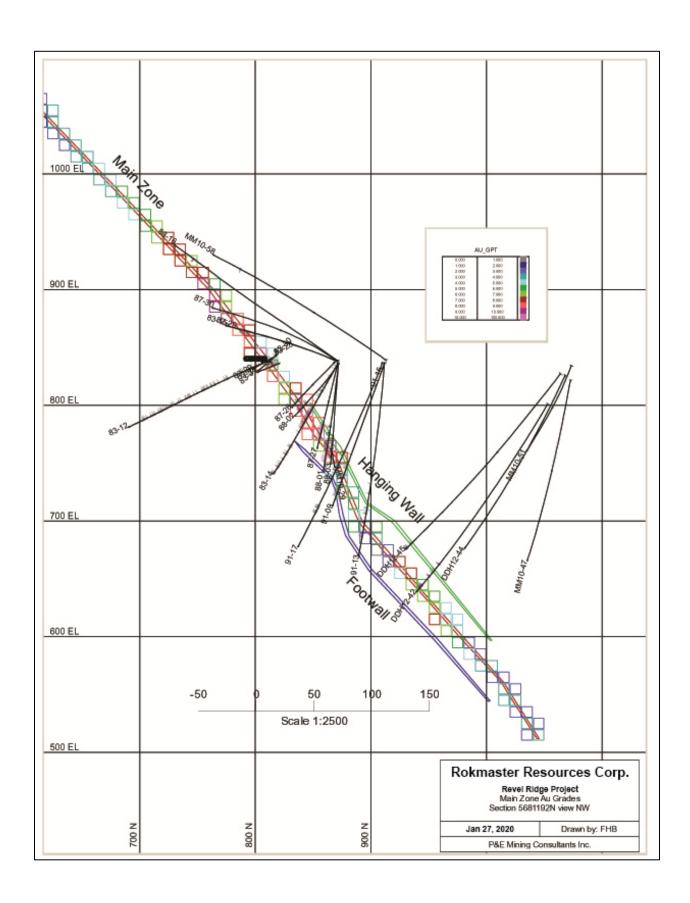
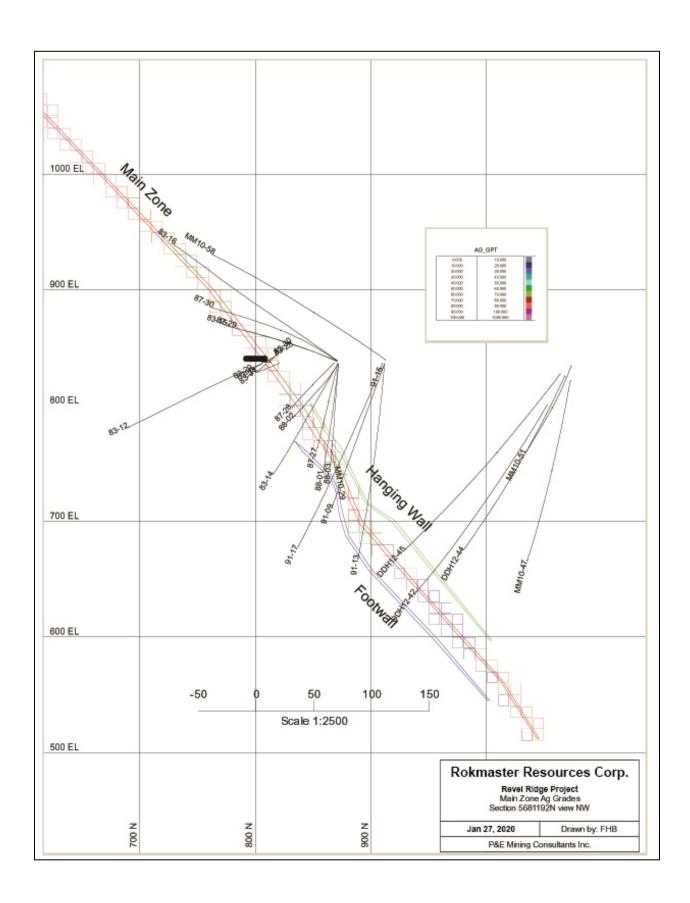
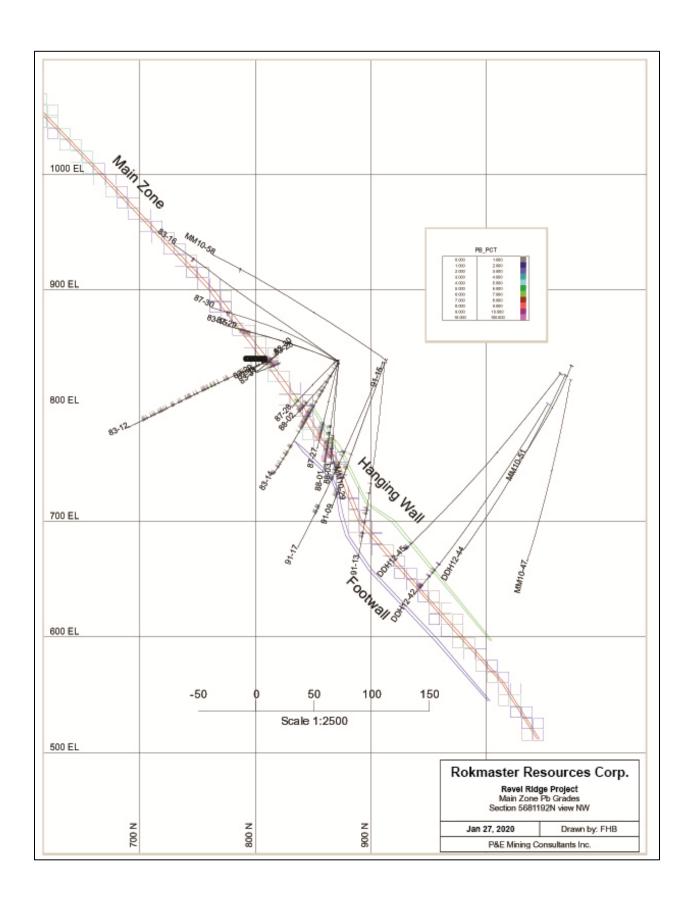


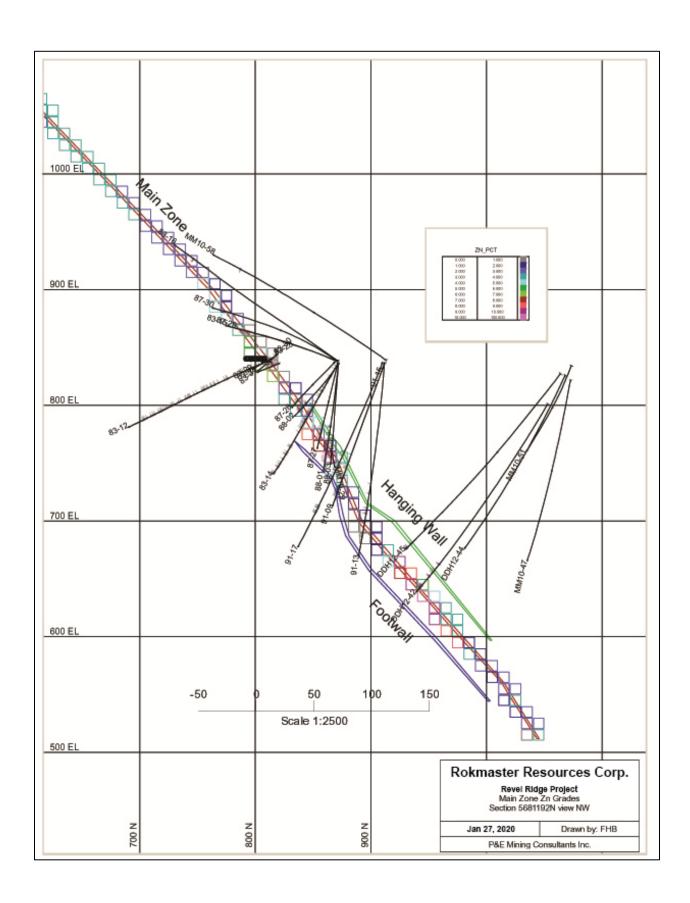
FIGURE 14.7 DRILL HOLE PLAN AND VERTICAL CROSS-SECTIONS

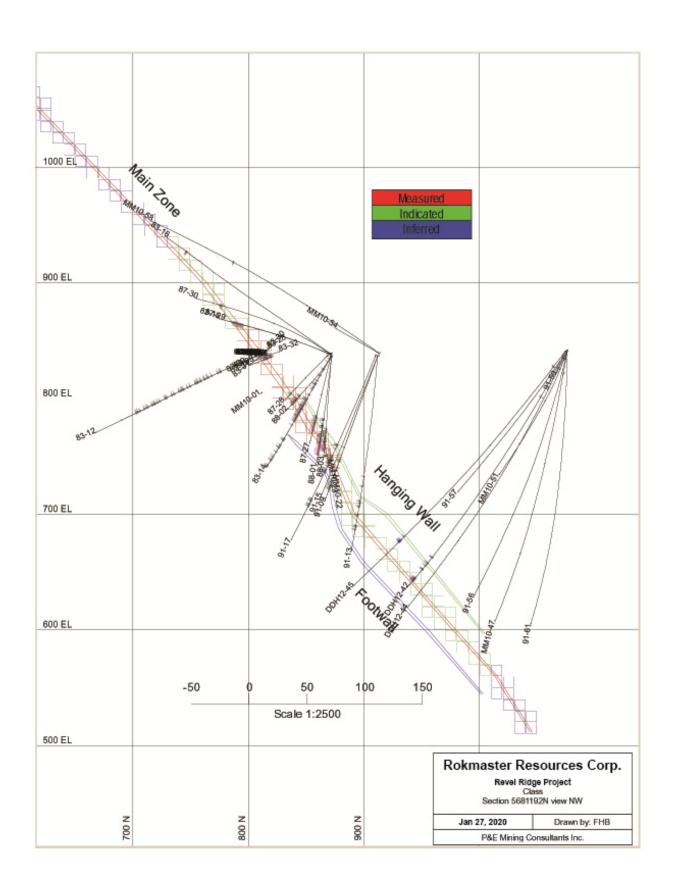












#### 15.0 MINERAL RESERVE ESTIMATES

There are no Mineral Reserve Estimates on the Revel Ridge Property.

#### 16.0 MINING METHODS

This section does not apply to this Technical Report.

#### 17.0 RECOVERY METHODS

This section does not apply to this Technical Report.

#### 18.0 PROJECT INFRASTRUCTURE

This section does not apply to this Technical Report.

#### 19.0 MARKET STUDIES AND CONTRACTS

This section does not apply to this Technical Report.

### 20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This section does not apply to this Technical Report.

#### 21.0 CAPITAL AND OPERATING COSTS

This section does not apply to this Technical Report.

#### 22.0 ECONOMIC ANALYSIS

This section does not apply to this Technical Report.

#### 23.0 ADJACENT PROPERTIES

The following section is based on the Technical Report on the Property by Puritch et al. (2108).

The Property is situated in a well mineralized area of British Columbia. It is surrounded by several different types of mineralized showings, all within 10 kilometres of the Main Zone portals.

The Mastodon Property is 5 kilometres to the southeast of the Main Zone. The Mastodon is a group of deposits and showings which include the Mastodon (082M 005), Mastodon North (082M 195), Lead King (082M 094), Little Slide (082M 006) and Little Slide No. 3 (082M 196). The area is a series of polymetallic (Zn, Pb, Cd, Ag, Au, Cu) breccia, replacement-type bodies that are tabular (Mastodon - 90 x 60 x 3 metres) in Badshot Limestone which may be structurally controlled. Teck Resources Ltd. ("Teck") owned the property up until 1992. It displays many of the same characteristics as the Main Zone and could be a parallel mineralized structure. Teck's programs failed to discover sufficient surface indications of mineralization. The entire Mastodon group has had several geochemical surveys completed, with several lead/zinc anomalies having been outlined to-date. Surface drilling of these anomalies has been discouraging.

The Copper Queen showing (082M 004) is 7 kilometres to the southwest of Property. This polymetallic (Cu, Zn, Ag) showing is considered a Kuroko massive sulphide-type deposit (G06). Little work has been done on this deposit to define its overall dimensions.

The Locojo showing (082M 264) is 5 kilometres to the east of the Main Zone. It is a new discovery that has recently been exposed from beneath a glacier. Weymin Mining Corporation was the original group to stake this showing. The showing is considered a Besshi-type massive sulphide (Cu-Zn-Pb) deposit (G04). Very little exploration has been carried out at this showing due to its remote location. The current owner is Imperial Metals Corp.

The authors of this Technical Report have been unable to verify the above information and the mineralization described may not necessarily be representative of the Revel Ridge Property.

#### 24.0 OTHER RELEVANT DATA AND INFORMATION

P&E is unaware of any other relevant material data and information that would result in misleading statements.

#### 25.0 INTERPRETATION AND CONCLUSIONS

The Property represents one of the largest undeveloped Mineral Resources in British Columbia.

The Property has two known and significant polymetallic precious and base metal deposits. The Main Zone is a structurally controlled gold rich polymetallic massive sulphide deposit overprinting a pre-existing silver-lead-zinc deposit (the Yellowjacket Zone). The sheeted massive sulphide Main Zone system is composed of banded massive and stringer arsenopyrite-pyrite-sphalerite-galena vein like tabular mineralization with appreciable content of gold and silver. The Main Zone has been traced on surface for a strike length of over 3 kilometres and traced by drilling for 1,500-metres of strike length and 800-metres down dip. The Main Zone generally dips about 60 degrees to the northeast with an average true thickness of 2.5 metres but can reach 15 metres true thickness.

The silver-lead-zinc-rich Yellowjacket Zone is considered to be a structurally controlled carbonate replacement deposit composed of multiple parallel siliceous sphalerite-galena-bearing zones. The individual zones making up the Yellowjacket Zone occur as lenticular bodies each up to 8 metres thick at the contact between alternating units of volcanics and limestone. The Yellowjacket Zone sub parallels and is in the immediate hanging wall of the Main Zone. The Yellowjacket Zone has no notable gold but has higher silver, lead and zinc values than the Main Zone. It is open along strike and down dip.

The Property has been explored by a number of mining companies by trenching, tunnelling and drilling. There is a total of at least 315 drill holes that have been completed on the Property from 1983 to present. This translates to 41,075.9 metres of drilling. The 830 m level drift and related crosscuts total 3.1 kilometres exposing the Main Zone for approximately 0.8 kilometres. The 550-metre long 832 trackless drift provides year-round underground access to the 830 drift.

Underground bulk samples have been taken from the Main Zone to conduct metallurgical testwork. The Main Zone is a complex polymetallic deposit high in arsenic values which create a challenge in the production of saleable zinc and lead concentrates and the economic recovery of gold. Extensive metallurgical testing between the mid 1980s and 2014 have considered various options and have produced numerous effective options for acceptable recoveries of gold, silver, zinc and lead by making 3 separate concentrates, including using heavy media separation. Based on the current envisioned circuit and corresponding laboratory test response, the overall process recoveries for the Main Zone are expected to be approximately 93% Au, 70% Ag, 74% Pb, and 80% Zn. Limited metallurgical testwork from drill core has been performed on the Yellowjacket Zone which has less complex metallurgy than the Main Zone. The expected process recoveries for the Yellowjacket Zone are 94% Ag, 88% Pb, and 93% Zn.

In late 2010, the Property underwent renewed exploration activity by Huakan with the completion of a 60 hole 7,897 metre underground drill program focused on the Main Zone with the objective of verifying historic drilling and sampling and infilling a 800 metre strike by 200 metre dip with 30 metre centers. This effort was for supporting an NI 43-101 Mineral Resource Estimate in September 2011 and a subsequent Preliminary Economic Assessment in May 2012. This was followed in 2012 by a further 450 m drifting and a 45-hole, 9,725 metre, underground drill program. An Updated Mineral Resource Estimate was completed in 2012. In the current

Technical Report, P&E has updated the Mineral Resource Estimate on the Property to include current trailing average metal prices, current operating costs and the 2012 drilling.

The Qualified Person is satisfied that the drill sample database and geological interpretations are sufficient to enable the estimation of Mineral Resources. Accepted estimation methods have been used in the generation of a 3-D block model of Au, Ag, Pb and Zn grades and assigned densities.

The Mineral Resource Estimates have been classified with respect to CIM Standards as Measured, Indicated and Inferred, according to the geological confidence and sample spacings that currently define the deposit. In the case of the Main Zone, Measured Mineral Resources require 30 metre drill centers. Indicated Mineral Resources require 60 metre drill centers and Inferred Mineral Resources require 120 metre drill centers.

P&E is of the opinion that the current Mineral Resource Estimate meets the reasonable prospect of economic extraction due to the approximate 7.0 g/t AuEq average grade and the \$110/t NSR cut-off (equal to approx. 3.5 g/t AuEq). P&E has experience with other similar projects and is of the opinion that the cut-off grade and cost assumptions are reasonable.

P&E is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors which may materially affect the Mineral Resource estimate. A material drop in metal prices below the Dec 31, 2019 two year trailing average prices used for the current Mineral Resource Estimate or a significant increase in operating costs could materially affect the cut-off and average grades and potentially result in a revised lower Mineral Resource Estimate tonnage

#### 26.0 RECOMMENDATIONS

The authors make the following recommendations for future work:

• There is potential to expand both the Main Zone and Yellowjacket beyond their currently dimensions as defined by drilling. The Main Zone, in particular, with its tabular predictable geometry and grade, has already a laterally extensive size defined by drilling and remains open in a number of directions. The down dip and strike towards the southeast on the Main Zone hold the best potential to build additional Mineral Resources

P&E recommends that as Phase I an updated Preliminary Economic Assessment (PEA) be completed for the Revel Ridge Property to guide the next stages of the Project development. The cost of updating a PEA is estimated at \$250,000.

- Assuming the results of the updated PEA are favourable, a Phase 2 program to advance the Revel Ridge Project through a Pre-Feasibility Study would be appropriate at an estimated cost of \$800,000. Associated with the Pre-Feasibility Study additional recommended work includes metallurgy, geotechnical site assessment drilling and environmental studies. These additional studies are estimated to cost an additional \$800,000. Additionally, a 4,000-metre diamond drill program should be conducted as part of an ongoing resource expansion program at a cost of \$1,200,000.
- The Phase 1 and 2 proposed budget for the 2020 program is presented in Table 26.1.

TABLE 26.1 BUDGET FOR PROPOSED 2020 PROGRAM		
Task Description	Cost (C\$)	
Phase 1 - Preliminary Economic Assessment	250,000	
Phase 2 - Metallurgical Testwork	150,000	
- Geotechnical Mine & Site Assessment Drilling	400,000	
- Environmental Study Completion	250,000	
- Diamond drilling (4,000 m)	1,200,000	
- Pre-Feasibility Study	800,000	
Phase 2 Subtotal	2,800,000	
Phase 1 & 2 Contingency at 15%	457,500	
Phase 1 and 2 Total	3,507,500	

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Bennett, C.A., Preliminary Metallurgical Evaluation of Six Ore Types from the J&L Property, (Technical Memorandum 134 731), *for* BP Selco.

Kim, Moon, Review of the Metallurgical Investigation on J&L Ores.

Lichty, L.J., Preliminary Report of Metallurgical Testwork on Lead-Zinc-Gold- Silver Ore from the J&L Property *for* Pan American Minerals Corp.

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Schedler, R.A., Johnston, D.C., J&L Property: Mineralogical Study of Crushed Samples of the Six Main Ore Types.

#### 1987

Stowe, K., Metallurgical Assistance – J&L – Report No.1 Centre de Recherche Noranda.

Lichty, L.J., Interim Report No.1, The Treatment of J&L Ore of Pan American Minerals Corp. by the Cashman Process (Mountain States Laboratory, Tuscon, Arizona).

Preliminary Bio-oxidation Tests on J&L Arsenopyrite Concentrates by R.C. Smith and Associates.

The Metallurgical Response of Pan American J&L Ore, Met Engineers Ltd.

Preliminary Metallurgical Testing of a Sample from J&L Polymetallic Deposit by Bacon, Donaldson and Associates *for* Pan American Minerals Corp.

#### 1988

Lichty, L.J., Interim Report No.2, The Treatment of J&L Ore of Pan American Minerals Corp. by the Cashman Process.

J&L Property – Metallurgy by R.C. Smith and Associates *for* Pan American Minerals Corp.

An Investigation of Samples of Bulk Concentrates submitted by Pan American Minerals Corp., Artech Recovery Systems Inc.

#### <u>1989</u>

Pilot Plant Program - J&L Property, Progress Report No.1 *for* Equinox Operations Group by Lakefield Research.

An Investigation of the Recovery of Gold from Flotation Products submitted by Equinox Resources Ltd., Progress Report No. 2 by Lakefield Research.

An Investigation of the Recovery of Lead-Zinc-Gold and Silver from J&L Drill Hole Composite Samples *for* Equinox Resources Ltd., Progress Report No.1 by Lakefield Research.

Preliminary Study Order of Magnitude Capital and Operating Cost estimate Pressure Oxidation Treatment of J&L Refractory Material *for* Equinox Resources Ltd., by Wright Engineers Limited.

#### <u>1990</u>

An Investigation of the Recovery of Lead-Zinc-Gold and Silver from J&L Composite Samples *for* Equinox Resources Ltd., Progress Report No.1 by Lakefield Research.

An Investigation of the Recovery of Lead-Zinc-Gold and Silver from J&L Composite Samples *for* Equinox Resources Ltd., Progress Report No.3 by Lakefield Research.

Hottin, G., Evaluation du Potentiel du Gite de J&L by BRGM.

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A Pilot Plant Investigation of the Recovery of Lead, Zinc, Gold and Silver from J&L Composite Samples submitted by Equinox Resources Ltd., by Lakefield Research.

#### <u>1991</u>

Zinc Recovery from a Redox Process Bleed Stream by Solvent or Ion Exchange Extraction for Cheni Gold Mines Ltd., by Bacon Donaldson and Associates.

An Investigation of the Separation of Arsenopyrite and Pyrite from J&L Project Samples, submitted by Cheni Gold Mines Ltd., Progress Report No.1, by Lakefield Research.

Results of Redox Process Testing of J&L Property Flotation Concentrates *for* Cheni Gold Mines by Bacon Donaldson and Associates.

Bio-oxidation of J&L Refractory Gold-Bearing Sulphide Concentrate *for* Cheni Gold Mines by Coastech Research Inc.

Gochin, R.J., Diaz, M.A., The Separation of Pyrite and Arsenopyrite by Flotation – Progress Report No.1, Department of Mineral Resources Engineering, Imperial College of Science, Technology and Medicine, London, England.

Durston, K, Review and Evaluation of the J&L Property by Cominco Engineering Services Ltd. (CESL).

The Flotation Concentration of J&L Complex Sulphide Ore *for* Cheni Gold Mines Ltd., by Bacon Donaldson and Associates.

Variability Testing of Samples from J&L Deposit for Cheni Gold Mines Ltd, by Bacon Donaldson and Associates

Heavy Medium Separation for J&L Yellowjacket Samples *for* Cheni Gold Mines Ltd., by Bacon Donaldson and Associates.

#### 1996

Project Opportunities for J&L Property for Weymin Resources Ltd. by H. A.Simons.

Technical Review of J&L Property for Weymin Resources Ltd. by H.A. Simons.

#### <u>1998</u>

J&L project – Heavy Media Separation Study *for* Weymin Mining Corp. by Process Research Associates Ltd.

Preliminary Flotation Testing of Yellowjacket Drill Core *for* Weymin Mining Corp. by Beattie Consulting Ltd.

Preliminary Report – Weymin Mining Corp. - McKinnon Creek Project, Hydrometallurgical Scoping by March Process Consulting Ltd.

J&L Project – Metallurgical Test Report *for* Weymin Mining Corp by Process Research Associates Ltd.

J&L Project Update – Progress on Metallurgical Testwork by Beattie Consulting Ltd.

McKinnon Creek Property – Scoping Study for Weymin Mining Corp. by H.A. Simons Ltd.

#### **2005**

McKinnon Creek Project – Metallurgical Test Program Results, *for* BACTECH Mining Corporation by Process Research Associates Ltd.

#### 2007

J&L Property, Preliminary Project Evaluation for Merit Mining Corp. by Dynatec Corp.

Gormley, L. (AMEC), Fatal Flaw Review of Metallurgical Testwork and Data *for* Merit Mining Corp.

#### <u>2011</u>

Lang, J., Review of Historical Metallurgical Results for J&L Project by SGS Canada Inc.

#### 2014

Wright, F., J&L Project Metallurgical Response *for* Huakan International Mining Inc. by F. Wright Consulting.

#### 28.0 **CERTIFICATES**

#### CERTIFICATE OF QUALIFIED PERSON

#### EUGENE PURITCH, P. ENG., FEC, CET

I, Eugene J. Puritch, P. Eng., FEC, CET, residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

- 1. I am an independent mining consultant and President of P&E Mining Consultants Inc.
- This certificate applies to the Technical Report titled "Updated Technical Report on The Revel Ridge Property", (The "Technical Report") with an effective date of January 29, 2020.
- 3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen's University. In addition I have also met the Professional Engineers of Ontario Academic Requirement Committee's Examination requirement for Bachelor's Degree in Engineering Equivalency. I am a mining consultant currently licensed by the: Professional Engineers and Geoscientists New Brunswick (License No. 4778); Professional Engineers, Geoscientists Newfoundland and Labrador (License No. 5998); Association of Professional Engineers and Geoscientists Saskatchewan (License No. 16216); Ontario Association of Certified Engineering Technicians and Technologists (License No. 45252); Professional Engineers of Ontario (License No. 100014010); Association of Professional Engineers and Geoscientists of British Columbia (License No. 42912); and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (No. L3877). I am also a member of the National Canadian Institute of Mining and Metallurgy.

I have read the definition of "Qualified Person" set out in National Instrument 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.

I have practiced my profession continuously since 1978. My summarized career experience is as follows:

Mining Technologist - H.B.M.& S. and Inco Ltd.,	1978-1980
Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd.,	1981-1983
Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine,	1984-1986
Self-Employed Mining Consultant – Timmins Area,	1987-1988
Mine Designer/Resource Estimator – Dynatec/CMD/Bharti,	1989-1995
Self-Employed Mining Consultant/Resource-Reserve Estimator,	1995-2004
President – P&E Mining Consultants Inc,	2004-Present

- 4. I have not visited the Property that is the subject of this Technical Report
- 5. I am responsible for authoring Sections 2, 3, 15 to 22 and co-authoring Sections 1, 14, 24, 25 and 26 of this Technical Report.
- 6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101. I am independent of the Vendor and the Property.
- 7. I have had prior involvement with the Project that is the subject of this Technical Report. I was a "Qualified Person" for a Technical Report titled "Technical Report and Updated Mineral Resource Estimate on the J&L Property, Revelstoke, British Columbia, Canada" with an effective date of January 23, 2018.
- 8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
- As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: January 29, 2020 Signed Date: February 25, 2020 {SIGNED AND SEALED} [Eugene Puritch]

Eugene Puritch, P.Eng., FEC, CET

## CERTIFICATE OF QUALIFIED PERSON FRED H. BROWN, P.GEO.

I, Fred H. Brown, of PO Box 332, Lynden, WA, USA, do hereby certify that:

- 1. I am an independent geological consultant and have worked as a geologist continuously since my graduation from university in 1987.
- 2. This certificate applies to the Technical Report titled "Updated Technical Report on The Revel Ridge Property", (The "Technical Report") with an effective date of January 29, 2020.
- 3. I graduated with a Bachelor of Science degree in Geology from New Mexico State University in 1987. I obtained a Graduate Diploma in Engineering (Mining) in 1997 from the University of the Witwatersrand and a Master of Science in Engineering (Civil) from the University of the Witwatersrand in 2005. I am registered with the South African Council for Natural Scientific Professions as a Professional Geological Scientist (registration number 400008/04), the Association of Professional Engineers and Geoscientists of British Columbia as a Professional Geoscientist (171602) and the Society for Mining, Metallurgy and Exploration as a Registered Member (#4152172).

I have read the definition of "Qualified Person" set out in National Instrument 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.

My relevant experience for the purpose of the Technical Report is:

Underground Mine Geologist, Freegold Mine, AAC

Mineral Resource Manager, Vaal Reefs Mine, Anglogold

Resident Geologist, Venetia Mine, De Beers

Chief Geologist, De Beers Consolidated Mines

Consulting Geologist

P&E Mining Consultants Inc. – Sr. Associate Geologist

1987-1995

1995-1997

1997-2000

2000-2004

2000-2004

2004-2008

2008-Present

- 4. I have visited the Property that is the subject of this Technical Report on December 17, 2010.
- 5. I am responsible for co-authoring Sections 1, 12, 14, 25 and 26 of this Technical Report.
- 6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101. I am independent of the Vendor and the Property.
- 7. I have had prior involvement with the Project that is the subject of this Technical Report. I was a "Qualified Person" for a Technical Report titled "Technical Report and Updated Mineral Resource Estimate on the J&L Property, Revelstoke, British Columbia, Canada" with an effective date of January 23, 2018.
- 8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
- 9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: January 29, 2020 Signed Date: February 25, 2020

{SIGNED AND SEALED} [Fred H. Brown]

Fred H. Brown, P.Geo.

#### CERTIFICATE OF QUALIFIED PERSON ALFRED S. HAYDEN, P. ENG

I, Alfred S. Hayden, P. Eng., residing at 284 Rushbrook Drive, Newmarket, Ontario, L3X 2C9, do hereby certify that:

 I am currently President of: EHA Engineering Ltd., Consulting Metallurgical Engineers Box 2711, Postal Stn. B. Richmond Hill, Ontario, L4E 1A7

- 2. This certificate applies to the Technical Report titled "Updated Technical Report on The Revel Ridge Property", (The "Technical Report") with an effective date of January 29, 2020.
- 3. I graduated from the University of British Columbia, Vancouver, B.C. in 1967 with a Bachelor of Applied Science in Metallurgical Engineering. I am a member of the Canadian Institute of Mining, Metallurgy and Petroleum and a Professional Engineer and Designated Consulting Engineer registered with Professional Engineers Ontario. I have worked as a metallurgical engineer for over 50 years since my graduation from university.

I have read the definition of "Qualified Person" set out in National Instrument 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.

My summarized career experience is as follows:

EHA Engineering Ltd: (President)

EH Associates: (Partner)

A.H. Ross & Associates Ltd. (Senior Associate)

Eldorado Nuclear Limited (Chief Metallurgist/Mill Engineer)

1990-Present
1985-1990
1976-1985

- 4. I have not visited the Property that is the subject of this Technical Report.
- 5. I am responsible for authoring Section 13 and co-authoring Sections 1, 25 and 26 of this Technical Report.
- 6. I am independent of the issuer applying the test in Section 1.5 of NI 43-101. I am independent of the Vendor and the Property.
- 7. I have had prior involvement with the Project that is the subject of this Technical Report. I was a "Qualified Person" for a Technical Report titled "Technical Report and Updated Mineral Resource Estimate on the J&L Property, Revelstoke, British Columbia, Canada" with an effective date of January 23, 2018.
- 8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
- 9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: January 29, 2020 Signed Date: February 25, 2020

{SIGNED AND SEALED}
[Alfred Hayden]

Alfred S. Hayden, P.Eng.

## CERTIFICATE OF QUALIFIED PERSON JARITA BARRY, P.GEO.

I, Jarita Barry, P.Geo., residing at 4 Creek View Close, Mount Clear, Victoria, Australia, 3350, do hereby certify that:

- 1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
- 2. This certificate applies to the Technical Report titled "Updated Technical Report on The Revel Ridge Property" (The "Technical Report") with an effective date of January 29, 2020.
- 3. I am a graduate of RMIT University of Melbourne, Victoria, Australia, with a B.Sc. in Applied Geology. I have worked as a geologist for a total of 13 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by Engineers and Geoscientists British Columbia (License No. 40875), Professional Engineers and Geoscientists Newfoundland & Labrador (License No. 08399) and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (License No. L3874). I am also a member of the Australasian Institute of Mining and Metallurgy of Australia (Member No. 305397);

I have read the definition of "Qualified Person" set out in National Instrument 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.

My relevant experience for the purpose of the Technical Report is:

Geologist, Foran Mining Corp.2004Geologist, Aurelian Resources Inc.2004Geologist, Linear Gold Corp.2005-2006Geologist, Búscore Consulting2006-2007Consulting Geologist (AusIMM)2008-2014Consulting Geologist, P.Geo. (APEGBC/AusIMM)2014-Present

- 4. I have not visited the Property that is the subject of this Technical Report.
- 5. I am responsible for authoring Sections 4 to 11, 23 and co-authoring Sections 1, 12, 25 and 26 of this Technical Report.
- 6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101. I am independent of the Vendor and the Property.
- 7. I have had prior involvement with the Project that is the subject of this Technical Report. I was a "Qualified Person" for a Technical Report titled "Technical Report and Updated Mineral Resource Estimate on the J&L Property, Revelstoke, British Columbia, Canada" with an effective date of January 23, 2018.
- 8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
- 9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: January 29, 2020	
Signed Date: February 25, 2020	
{SIGNED AND SEALED} [Jarita Barry]	
Jarita Barry, P.Geo.	

#### CERTIFICATE OF QUALIFIED PERSON RICHARD E. ROUTLEDGE, P.GEO.

I, Richard E. Routledge, P.Geo., residing at 1386 Queen's Line, PO Box 335, Minden, Ontario, K0M 2K0, do hereby certify that:

- 1. I am an independent Consulting Geologist who has been contracted by P&E Mining Consultants Inc.
- 2. This certificate applies to the Technical Report titled "Updated Technical Report on The Revel Ridge Property", (The "Technical Report") with an effective date of January 29, 2020.
- 3. I graduated with a Bachelor of Science degree, Major in Geology, from Sir George Williams (Concordia) University in 1971 and with a Masters degree in Applied Exploration Geology from McGill University in 1973. I have worked as a geologist for about 43 years since post-graduation. I am a Professional Geologist registered in the Province of Ontario (APGO No. 1354) and licensed by the Northwest Territories (NAPEGG No. L744).

I have read the definition of "qualified person" set out in National Instrument 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. My relevant experience for the purpose of the Technical Report is:

Independent Consulting Geologist.	2011 – Present
Roscoe Postle Associates Inc., Consulting Geologist	1998 - 2011
Independent Consulting Geologist	1994 – 1997
Vice President Exploration, Greater Lenora Resources Corp.	1993 – 1994
Teck Explorations Ltd, Evaluations and Mineral Commodities Geologist.	1985 - 1992
Derry, Michener, Booth & Wahl, Exploration and Consulting Geologist.	1973 - 1985

- 4. I have visited the property that is the subject of this Technical Report on June 13 and 14, 2012.
- 5. I am responsible for co-authoring Sections 1, 12, 25 and 26 of this Technical Report.
- 6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101. I am independent of the Vendor and the Property.
- 7. I have had prior involvement with the Project that is the subject of this Technical Report. I was a "Qualified Person" for a Technical Report titled "Technical Report and Updated Mineral Resource Estimate on the J&L Property, Revelstoke, British Columbia, Canada" with an effective date of January 23, 2018.
- 8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
- 9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report misleading.

Effective Date: January 29, 2020 Signed Date: February 25, 2020

*{SIGNED AND SEALED} [Richard E. Routledge]* 

Richard E. Routledge, P. Geo.