

#### SUMMARY OF THE UPDATED RESOURCES FOR THE EMPIRE MINE PROJECT

To:	Konnex Resource, Inc.
FROM:	Zachary J. Black, SME-RM
DATE:	November 11, 2017
SUBJECT:	Empire Mine Resource

### Introduction

This memo summarizes Hard Rock Consulting's ("HRC") update of the copper, zinc, silver, and gold mineral resource estimates at the Empire Mine. Konnex Resources, Inc. ("Konnex") commissioned HRC to update the resources for the Empire Mine (the "Project") with the drilling completed in 2017.

Zachary J. Black, SME-RM, a Resource Geologist with HRC is responsible for the mineral resource estimate presented herein. Mr. Black is a Qualified Person as defined by NI 43-101, and is independent of Konnex. HRC estimated the mineral resource for the Project based on drillhole data constrained by geologic boundaries with an Ordinary Krige ("OK") algorithm. Datamine Studio 3® V3.24.73 ("Datamine") software was used to complete the resource estimate. The metals of interest at the Project are copper, zinc, gold and silver. All units are imperial, and all costs are reported in US Dollars unless otherwise specified.

The mineral resources for the Project have been estimated in a manner consistent with the Committee of Mineral Reserves International Reporting Standards ("CRIRSCO") of which both the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") and Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code") are members.

The mineral resources reported herein are classified as Measured, Indicated and Inferred in accordance with standards defined by the CIM, "CIM Definition Standards - For Mineral Resources and Mineral Reserves", prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on May 10, 2014.

It is intended that the Mineral Resources stated in this report will be converted to Mineral Reserves through the application of modifying factors and supported by a Preliminary Feasibility Study ("PFS"). The PFS is underway and will be completed according to the standards of disclosure for mineral projects as defined by the National Instrument ("NI") 43-101.

# Methodology

Nine distinct lithologic units (Table 1) were modeled based on the historic geologic documents (Farwell and Full, 1944), the 2017 SRK CPR report (An Independent Competent Person's Report on the Empire Mine, Idaho, USA) dated May 11, 2017, and geological logging and interpretation by Konnex geological staff.

Table 1 – Model Lithology Codes								
Age	Model Lithology Code	Lithology						
Oldest	51	Limestone						
	60	Mackay Granite						
	12	Quartz Feldspar Porphyry (QFP)						
	32	Pyroxene Skarn						
	34	Garnet Skarn						
	34	Magnetite Skarn						
	20	FeOx Breccia						
	61	Late Barren Dikes						
Youngest	10	Alluvium/Overburden						

HRC modeled the project geology using Leapfrog Geo v4.1.1 and PolyMap from drillhole information and sectional interpretations completed by Konnex. The sections cover the geology from 806,540 north through 811,300 north on centers varying from 50 to 200 ft. The following process was used to generate the geologic model:

- Create an alluvium boundary from drillhole contacts with a minimum depth of 10 feet below the topographic surface;
- Develop a 3-dimensional structural model from USGS (Farwell and Full, 1944) level interpretation and surface geologic maps;
- Select contacts for the limestone and Mackay granite formations;
- Generate geologic surfaces for the limestone and granite formations using a linear interpolant based on the contact points;
- Select drillhole points representing skarn (FeOx Breccia, Pyroxene Skarn, Garnet Skarn, and Magnetite Skarn) and QFP.
- Create shapes representing the skarn and QFP;
- Adjust Leapfrog shapes in areas that deviate from the USGS interpretations;
- Create geologic solids for each formation;
- Segregate the skarn into the four discrete skarn types FeOx Breccia, Pyroxene Skarn, Garnet Skarn, and Magnetite Skarn using the Konnex sectional interpretations.

Figure 1 is an oblique view of the final Project geologic model based on the updated data and observations from Konnex. Figure 2 is a sectional interpretation of the skarn on Section 807,820 North, as provided by Konnex. Figure 3 is an oblique view of the refined skarn interpretation.



Figure 1 – Oblique view of Generalized Geologic Model



Figure 2 - Sectional Interpretation of Skarn Material (FeOX – Orange, Garnet Skarn – Blue, Pyroxene Skarn – Cyan, Magnetite Skarn – Red)



Figure 3 - Oblique View of Segregated Skarn Material (FeOX – Orange, Garnet Skarn – Blue, Pyroxene Skarn – Cyan, Magnetite Skarn – Red)

# **Estimation Domains**

In order to accommodate statistical search parameters appropriate for individual mineralization styles and structural orientations, the block model was divided into 6 domains. Domains were delineated based on distinguishing characteristics of one or several target areas grouped together. The 6 domains of the project area are the Mackay Granite, Quartz Feldspar Porphyry, Skarn, Late Barren Dikes, Limestone, and Alluvium. These domains were based on the individual characteristics of the lithology. The 3 logged skarn types and the FeOx are considered to be a part of the same statistical population for the purpose of this estimation as demonstrated by the box plots in Figure 4.



Figure 4 - Lithology Box Plots

# Database

HRC limited the audit to the Lithology, Assay, Collar, and Survey data contained within the database. A mechanical audit of the database was completed using Leapfrog Geo Version 4.1.1. The database was checked for overlaps, gaps, total drill hole length inconsistencies, non-numeric assay values, and negative numbers. Samples below detection limit and un-sampled intervals were assigned values of 0.001. Zero values are assumed to be un-mineralized and are set to 0.001 for the purpose of mineral resource estimation.

Drillholes which are missing lithology data are generally so because complete geologic logs were not available at the time of modeling. These holes are not used for geologic modelling, but the assay values are used for mineral resource estimation.

HRC concludes that the data is adequate for the purposes of preparing a report on mineral resources.

# Compositing

Twenty-foot downhole composites were created from the drillhole database. The composites were then used for grade capping analysis and variography for each domain solid. Table 2 presents the composite data for each domain.

Element	Domain	Count	Minimum	Maximum	Mean	Std. Dev.	CV
	All	3,958	0.00	7.74	0.20	0.44	2.15
	10	99	0.00	1.88	0.35	0.36	1.02
	12	1,135	0.00	4.60	0.08	0.25	3.09
Cu %	30	2,115	0.00	7.74	0.31	0.54	1.75
	51	443	0.00	1.23	0.06	0.15	2.28
	60	139	0.00	0.04	0.00	0.00	1.27
	61	24	0.00	1.94	0.12	0.39	3.35
	All	3,958	0.00	3.62	0.09	0.19	2.20
	10	99	0.00	0.82	0.07	0.14	1.93
	12	1,135	0.00	1.41	0.06	0.13	2.30
Zn %	30	2,115	0.00	3.62	0.11	0.23	2.03
	51	443	0.00	1.17	0.06	0.10	1.73
	60	139	0.00	0.15	0.02	0.02	1.12
	61	24	0.00	0.20	0.03	0.06	1.85
	All	3,958	0.0	274.0	4.1	11.95	2.93
	10	99	0.0	122.8	5.6	15.27	2.73
	12	1,135	0.0	274.0	2.4	11.35	4.73
Ag (g/T)	30	2,115	0.0	174.8	5.7	13.01	2.30
	51	443	0.0	141.2	1.7	7.47	4.27
	60	139	0.0	6.1	0.4	0.67	1.51
	61	24	0.1	12.6	1.6	3.09	1.93
	All	3,958	0.00	54.10	0.14	1.08	7.69
	10	99	0.00	0.77	0.07	0.15	2.03
	12	1,135	0.00	3.15	0.06	0.24	4.26
Au (g/T)	30	2,115	0.00	54.10	0.20	1.27	6.40
	51	443	0.00	26.01	0.14	1.60	11.24
	60	139	0.00	0.20	0.01	0.02	3.33
	61	24	0.00	1.32	0.09	0.26	2.82

Table 2 - Composite Descriptive Statistics

# Capping

Grade capping is the practice of replacing any statistical outliers with a maximum value from the assumed sampled distribution. This is done statistically to better understand the true mean of the sample population. The estimation of highly skewed grade distribution can be sensitive to the presence of even a few extreme values. HRC utilized a log scale Cumulative Frequency Plot ("CFP") of the composited assay data for each element to identify the presence of statistical outliers (Figure 5). Capping for each element within the estimation domains was determined from these plots. The final dataset for grade estimation in the block model consists of composites capped as presented in Table 3 with descriptive statistics.

Element	Domain	Count	Minimum	Maximum	Mean	Std. Dev.	CV
	All	3,958	0.00	2.50	0.19	0.36	1.90
	10	99	0.00	0.50	0.26	0.19	0.72
	12	1,135	0.00	1.10	0.07	0.16	2.29
Cu %	30	2,115	0.00	2.50	0.30	0.45	1.53
	51	443	0.00	0.50	0.06	0.11	1.85
	60	139	0.00	0.02	0.00	0.00	1.03
	61	24	0.00	0.10	0.02	0.04	1.69
	All	3,958	0.00	1.30	0.08	0.16	1.97
	10	99	0.00	0.10	0.04	0.04	1.07
	12	1,135	0.00	0.50	0.05	0.09	1.81
Zn %	30	2,115	0.00	1.30	0.11	0.20	1.81
	51	443	0.00	0.27	0.05	0.07	1.34
	60	139	0.00	0.04	0.02	0.01	0.73
	61	24	0.00	0.02	0.01	0.01	0.90
	All	3,958	0.0	95.0	3.7	9.02	2.45
	10	63	0.2	5.5	3.7	1.95	0.53
	12	978	0.0	25.0	2.1	3.92	1.89
Ag (g/T)	30	1,681	0.0	95.0	6.9	12.72	1.83
	51	387	0.0	9.0	1.4	1.96	1.40
	60	136	0.0	1.8	0.4	0.45	1.10
	61	24	0.1	1.4	0.6	0.55	0.97
	All	3,958	0.00	5.00	0.11	0.36	3.29
	10	99	0.00	0.13	0.04	0.05	1.27
	12	1,135	0.00	2.00	0.05	0.19	3.74
Au (g/T)	30	2,115	0.00	5.00	0.17	0.46	2.70
	51	443	0.00	0.15	0.02	0.03	1.77
	60	139	0.00	0.01	0.00	0.00	1.08
	61	24	0.00	0.06	0.03	0.03	0.98

Table 3 - Capped Gold Composite Statistics



Figure 5 – Skarn Domain Copper Cumulative Frequency Plot

# Variography

A variography analysis was completed to establish spatial variability of the estimated elements for the Project. Variography establishes the appropriate contribution that any specific composite should have when estimating a block volume value within a model. This is performed by comparing the orientation and distance used in the estimation to the variability of other samples of similar relative direction and distance.

Variography was analyzed using Snowden Supervisor Version 8.7. The continuity is established by analyzing variogram contour fans in the horizontal, across-strike, and dip planes to determine the direction of maximum continuity within each plane. The subsequent variograms defining the maximum continuity were

modeled with a spherical variogram. Figure 6 presents the results from the modeled skarn domain. Table 4 summarizes the variogram parameters used for the estimation.



Figure 6 - Skarn Domain Copper Variogram Models

Empire Pairwise Relative Variogram Parameters									
	Copper		Zinc						
Nugget (CO)	C1	C2	Nugget (C0)	C1	C2				
0.22	0.38	0.40	0.05	0.54	0.41				
Axis	Rotation		Axis	Rotation					
Z	100		Z	80					
Х	30		Х	50					
Z	-10		Z	90					
Axis	Range1	Range2	Axis	Range1	Range2				
Х	137	520	Х	161	279				
Y	135	529	Y	100	118				
Z	83	362	Z	118	234				
	Silver		Gold						
Nugget (CO)	C1	C2	Nugget (C0)	C1	C2				
0.038	0.370	0.592	0.100	0.440	0.460				
Axis	Rotation		Axis	Rotation					
Z	80		Z	90					
Х	60		Х	40					
Z	90		Z	-155					
Axis	Range1	Range2	Axis	Range1	Range2				
Х	75	421	Х	82	167				
Υ	133	419	Y	105	398				
Z	50	163	Z	42	225				

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# **Estimation Methodology**

Because of the density of drilling in the higher-grade zones and the complex interaction between skarn mineralization and the structural zones, an Ordinary Kriging (OK) algorithm using dynamic search ellipses was selected to estimate the gold grades. With this method, the orientation of the search ellipse changes on a block by block basis utilizing wireframe interpretations of the primary orientations as defined for in the MIP method. In these models, 18 separate surfaces were created and utilized to model the structural fabric of the geometry associated with the mineralization (Figure 7). These wireframes were created based on Konnex geologic interpretations, faulted areas, and visual grade trends.



Figure 7 - Dynamic Anisotropy Trends and Ellipses

The copper, zinc, gold and silver grades were estimated from 20-foot down-hole composites using Ordinary Kriging. Composites were coded according to the estimation domain. The search volumes were established based on practitioner's experience with similar style deposits and are summarized in Table 5. The estimation was completed in 3 passes with the maximum search volume set to 450 feet and using an anisotropic ratio of 2:1:1. The same search volume was used to select samples for the mineral resource estimation for all domains. Estimation parameters are provided in Table 5.

Estimation Dass	Search Ell	Number of Composites					
Estimation Pass	Rotation	Search Distance (ft)			Max/Drillhole	Min	Max
First	Dynamic Anisotropy Estimation	150	75	75	2	4	9
Second	Dynamic Anisotropy Estimation	300	150	150	2	3	16
Third	Dynamic Anisotropy Estimation	450	225	225	2	1	16

Table 5 - Estimation Parameters

## Density

The following discussion of the density specific to the Project is largely modified from, and in some cases, is excerpted directly from the 2017 SRK report.

Density measurements of unaltered material were applied from literature research (Berkman, 1989). Oxidized densities were derived from a combination of data from metallurgical reports of in-pit bulk samples completed by Kappes, Cassidy & Associates ("KCA") in 2013 and from a 2017 campaign of density determinations directed by SRK and carried out by Konnex (n = 83). Konnex used ASTM C914 – Standard Test Method for Rock Density and Volume of Solid Refractories by Wax Immersion. This method was adopted by Konnex from KCA for consistency.

The resultant density database consists of 99 measurements, with an average SG of 2.95. A total of 18-20 samples were averaged for each of the mineralized rock types (Table 6). There was a strong correlation between 2017 density determination by Konnex and densities from KCA.

Table 0 - Modeled Density Factors								
		Sult	fide	Weakly	Oxidized	Strongly	Strongly Oxidized	
	Rock Code	ton/ft <sup>3</sup>	ft³/ton	ton/ft <sup>3</sup>	ft³/ton	ton/ft <sup>3</sup>	ft³/ton	
Qal	10	0.062	16.18	0.062	16.18	0.062	16.18	
QFP	12	0.086	11.69	0.081	12.32	0.077	12.97	
FeOxBx	20	0.076	13.13	0.076	13.13	0.076	13.13	
Endo Skarn	30	0.117	8.54	0.111	9.00	0.101	9.95	
Exo Skarn	32	0.103	9.71	0.102	9.80	0.101	9.89	
Mt Skarn	34	0.162	6.18	0.144	6.96	0.125	7.97	
Limestone	51	0.084	11.91	0.084	11.91	0.076	13.24	
Granite	60	0.085	11.78	0.078	12.81	0.076	13.08	
Dike	61	0.089	11.24	0.078	12.87	0.078	12.87	

Table 6	- Modeled	Densitu	Factors
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As stated in the 2017 SRK report, the oxidation state is a critical component to modeling because it affects both the acid-leach recovery and the density of the material. The oxidation state is not uniformly addressed in the geologic data collected for the Project. HRC utilized the surface created by SRK to model the base of the oxidized zone. Above this surface, material was modeled as either strongly or weakly oxidized based on the ratio of total copper to soluble copper for the modeled area. Strongly oxidized material required the soluble copper to be greater than 85% of the total copper. Weak and strong oxide were used as factors applied to each of the modeled lithologies as shown in Table 6. HRC continues to work with Konnex geologists to refine this interpretation prior to completion of the Preliminary Feasibility Study.

# Validation

Overall, HRC utilized several methods to validate the results of the estimation method. The combined evidence from these validation methods verifies the OK estimation model results.

### Comparison with Inverse Distance and Nearest Neighbor Models

Inverse Distance (ID) and Nearest Neighbor (NN) models were run to serve as comparison with the estimated results from the OK method. Descriptive statistics for the OK method along with those for the ID, NN, and drill hole composites for the domains are shown in Table 7.

	·	Copper	%						
Estimate	Count	Minimum	Maximum	Mean	Std. Dev.	CV			
Capped Composites	3,958	0.00	2.50	0.19	0.36	1.90			
Nearest Neighbor	556,017	0.00	2.50	0.09	0.31	3.32			
Inverse Distance	503,618	0.00	2.48	0.06	0.15	2.40			
Ordinary Krige	503,618	0.00	2.22	0.06	0.14	2.26			
		Zinc (%	6)						
Estimate	Count	Minimum	Maximum	Mean	Std. Dev.	CV			
<b>Capped Composites</b>	3,958	0.00	1.30	0.08	0.16	1.97			
Nearest Neighbor	556,017	0.00	1.30	0.04	0.10	2.40			
Inverse Distance	503,618	0.00	1.30	0.04	0.07	1.70			
Ordinary Krige	503,618	0.00	1.22	0.04	0.07	1.62			
		Silver (g	/t)						
Estimate	Count	Minimum	Maximum	Mean	Std. Dev.	CV			
<b>Capped Composites</b>	3,958	0.0	95.0	3.7	9.02	2.45			
Nearest Neighbor	556,017	0.0	95.0	2.1	5.87	2.79			
Inverse Distance	503,618	0.0	93.5	1.7	3.63	2.11			
Ordinary Krige	503,618	0.0	83.4	1.7	3.55	2.05			
	Gold (g/t)								
Estimate	Count	Minimum	Maximum	Mean	Std. Dev.	CV			
<b>Capped Composites</b>	3,958	0.00	5.00	0.11	0.36	3.29			
Nearest Neighbor	556,017	0.00	5.00	0.08	0.33	4.17			
Inverse Distance	503,618	0.00	4.26	0.05	0.16	3.00			
Ordinary Krige	503,618	0.00	3.54	0.05	0.14	2.75			

Table 7 - Model Comparison Descriptive Statistics

The overall reduction of the maximum and standard deviation within the OK and ID models represent an appropriate amount of smoothing to account for the point to block volume variance relationship while maintaining similar means. This is confirmed in Figure 8, which compares the Cumulative Frequency Plots of each of the models and drill hole composites.



Figure 8 - Cumulative Frequency Plot – Model Comparison for Empire

## Swath Plots

Swath plots were generated to compare average estimated gold grade from the OK method to the two validation model methods (ID and NN). The results from the OK model, plus those for the validation ID model method are compared using the swath plot to the distribution derived from the NN model.

Three swath plots were generated for each element. Swath plots for copper are presented as an example of the results: Figure 9 shows average copper grade from west to east; Figure 10 shows average copper grade from south to north, and Figure 11 shows average copper grade from bottom to top.



Figure 9 - East/West Copper Swath Plot





Figure 10 - North/South Copper Swath Plot



Figure 11 - Elevation Copper Swath Plot

On a local scale, the nearest neighbor model does not provide a reliable estimate of grade, but on a much larger scale, it represents an unbiased estimation of the grade distribution based on the total data set. Therefore, if the OK model is unbiased, the grade trends may show local fluctuations on a swath plot, but the overall trend should be similar to the distribution of grade from the nearest neighbor.

Overall, there is good correlation between the grade models, although deviations occur near the edges of the deposit and in areas where the density of drilling is lesser, and material is classified as Inferred resource.

#### Section Inspection

Bench plans, cross-sections, and long sections comparing modeled grades to the 20-foot composites were evaluated. The example sections displaying estimated copper grades are shown in Figures 12 - 16. The figures show good agreement between modeled grades and the composite grades. In addition, the modeled blocks display continuity of grades along strike and down dip.



Figure 12 - N807,820 Cross-Section of Estimated Copper Grades with Composites



Figure 13 - N807,960 Cross-Section of Estimated Copper Grades with Composites



Figure 14 - N807,960 Cross-Section of Estimated Copper Grades with Composites

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Figure 15 - E1,726,020 Long-Section of Estimated Copper Grades with Composites

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Figure 16 - Long-Section Looking Northeast of Estimated Copper Grades with Composites in Northern Extent of Property

## **Mineral Resource Classification**

HRC classified the resources as Measured, Indicated or Inferred using the transformed distance to the nearest composite and the estimate pass. Blocks within 30% of the 1<sup>st</sup> pass search distance (Table 5) were classified as measured resources. The remaining blocks within the 1<sup>st</sup> pass search distance were classified as indicated resources. Blocks estimated in the 2<sup>nd</sup> and 3<sup>rd</sup> passes are classified as inferred. Table 8 summarizes the classification.

Classification	Pass	Distance		
Measured	1 <sup>st</sup>	< 45x22.5x22.5		
Indicated 1 <sup>st</sup>		> 45x22.5x22.5 and <150x75x75		
Inferred	2 <sup>nd</sup> and 3 <sup>rd</sup>	>150x75x75		

Table 8 - Classification Parameters (feet)

## **Mineral Resource Tabulation**

The "reasonable prospects for economic extraction" requirement referred to in NI 43-101 was tested by designing a series of conceptual open pit shells using Whittle software. After review of several scenarios considering different metal prices (Figure 17), HRC utilized a pit optimization with a longterm copper price of US\$3.25/lb for determining the limit of reasonable prospects for economic extraction.

The economic parameters used for this analysis are based upon estimated operating costs at the project scaled to reflect production rates, expected processing costs, and upon estimated copper recoveries from metallurgical tests completed to date. Table 9 summarizes the cost and recovery parameters used in the analysis. Blocks classified as Measured, Indicated, and Inferred were used to define the resource pit shell. HRC notes that mineral resources are not mineral reserves with demonstrated economic viability.

Pit Optimization Parameters								
Item	Cost/Rate	Units						
Base Case Cu Price	\$3.25	US\$ per lb Cu						
Mining Cost	\$1.80	US\$ per Total ton						
Processing Cost	\$6.00	US\$ per Ore ton						
G&A	\$1.00							
Process Recovery	61	%						
Mining Dilution	0	%						
Royalty	2.5	%						
Pit Slope	45	degrees						

Table 9 - Parameters used for Resource Pit Shell Generation

### Sensitivity

The block model tons and grades are shown in Figure 17 at variable copper prices within corresponding pits and at the economic cutoff (Table 10), as a sensitivity analysis.



Figure 17 - Pit Optimization Copper Sensitivity Chart

## Mineral Resource Statement

The mineral resource estimate for the Project is summarized in Table 11. Mineral Resources are reported within an optimized pit shell and meet the test of reasonable prospect for economic extraction. The cutoff used to report resources inside the optimized pit shell is based on a \$3.25/lb Cu price. The cutoff is calculated to be 0.184% total copper based on the operating costs, royalties, recoveries and metal prices as presented in Table 10. Note that the mining costs are not included in the cutoff calculation as an internal cutoff is used and the mining costs are considered a sunk cost. The block model colored by the estimated copper grade inside of the optimized pit shell is presented in Figure 18.

·····	-		
	\$ 3.25		
\$/ton	\$ 1.80		
\$/ore ton	\$ 6.00		
\$/ore ton	\$ 1.00 61%		
%			
gross	2.5%		
\$/ore ton	\$ 7.00		
lb	\$ 3.25		
	0.184%		
	\$/ton \$/ore ton \$/ore ton % gross \$/ore ton Ib		

Table 10 – Resource	Cutoff Parameters	

The mineral resource estimate is based on all data obtained as of November 7, 2017, and has been independently verified by HRC. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves. HRC does not know of any environmental, permitting, legal, socio-economic, marketing, political, or other factors that may material affect the mineral resources.

Hard Rock Consulting, LLC, November 7, 2017												
Classification	Tons	Copper		Zinc		Gold		Silver				
	(x1000)	%	lb (x1000)	%	lb (x1000)	oz/t	oz (x1000)	oz/t	oz (x1000)			
Measured	3,633.80	0.53	38,736	0.11	7,994	0.006	21	0.257	935			
Indicated	7,851.70	0.51	79,773	0.15	23,555	0.007	58	0.334	2,625			
Measured + Indicated	11,485.50	0.52	118,510	0.14	31,470	0.007	79	0.310	3,560			
Inferred	9,880.10	0.41	80,622	0.13	25,688	0.009	86	0.289	2,859			

Table 11 - Mineral Resource Statement for the Copper Oxide Empire Mine, Custer County, Idaho, U.S.A.,

\*Notes:

<sup>(1)</sup> Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves.

<sup>(2)</sup> The Mineral Resources captured within optimized pit shell meet the test of reasonable prospect for economic extraction and can be declared a Mineral Resource. Open Pit Resources are reported at a 0.184% total copper cutoff based on a \$3.25/lb Cu price. No value was given to the gold, silver and zinc in determining the reasonable prospect for economic extraction of the resource.



Figure 18 - Block model colored by the estimated copper grade within the optimized pit shell

## **Conclusions and Recommendations**

### Conclusions:

### Geology and Deposit Type

The structural controls on the mineralization are well understood. Detailed descriptions are provided in historical reports, but the geologic interpretations compared to the mineralization should be reviewed periodically. The dynamic anisotropy used by HRC to guide the interpolation indicates that the mineralization in the resource area is hosted in gently dipping skarn material with local variations to the strike and dip related to higher angle trans-Challis structures. These zones may represent favorable limestone horizons that have been folded and displaced by faulting within the region. This is consistent with the descriptions provided in the historical reports, and efforts to confirm the structural orientations of the mineralization should be made in the field, where available.

Potential exists for each resource area to be expanded through targeted drilling programs. Infill drilling along the northern extent will likely result in the expansion of the mineral resources. Additionally, downdip targets should be considered as the extents of the historic mine extended nearly 1600 feet.

### Exploration, Drilling, and Analytical

Exploration drilling to date has consisted of both diamond core (DDH) and Reverse Circulation (RC) holes. The orientation of the drillholes is typically perpendicular to the targeted mineralization, however due to the changes in both strike and dip of the mineralized bodies, drillholes often intersected mineralization at oblique angles. A more thorough understanding of the structural controls will increase the probability of expanding the resource within the current optimized pit limits. Specifically, the structural trends that extend mineralization in a northeasterly direction.

#### Data Verification

As a result of the work completed by Konnex on digitizing the historical data, HRC has been able to complete validation work on the analytical database. HRC concludes that the historical and current QA/QC protocols in effect for the drilling, logging, sample generation, sample preparation and analytical procedures at the Empire Mine Project have been completed in a professional manner, and meet or exceed what HRC considers industry standard. Konnex is continuing to identify and digitize the historical geologic information; however, review of the geologic logs indicates that the data currently stored in the database is adequate to develop geologic models.

#### Resource Estimation

HRC finds that the density of data within the resource base is adequate for the use in more advanced studies of the project. The mineral resource estimation is appropriate for the geology. Additional modeling should be conducted to refine the geologic interpretations to better reflect the mineralization and to define the alteration/oxidation state of the host rocks to support further metallurgical characterization.

### Risks and Uncertainties

The oxidation state has not been systematically collected in the database from operator to operator and will need to be addressed. Konnex geologists are delineating the oxidation state in an effort to refine the model for use in more advanced studies.

#### Recommendations:

### Geology and Deposit Type

Detailed structural maps should be completed and checked in the field. HRC recommends working with a structural geologist with experience in mapping similar mineralized systems. The geologic model should be updated as this information becomes available. Additionally, drill targets designed to expand the resource base should be based on this interpretation.

Exploration, Drilling, and Analytical

Due to the complex nature of the mineralization HRC recommends that Konnex employ oriented coring methods in exploration. Utilizing the structural data collected from the core will reduce risk associated with geometries of the ore zones and assist in creating a geologic model consistent with the mineralization. Additionally, HRC recommends Konnex conduct infill drilling within the optimized pit limit to try and upgrade the classification of the inferred blocks into measured and indicated blocks during the bankable feasibility study period.

#### Resource Estimation

As the geologic understanding improves, the resource models should be updated to reflect the increase in confidence in the estimates. Estimates for the other constituents within the system should be added to the estimates to assist in metallurgical delineation of the ores.

## DATE AND SIGNATURE PAGE

This Report entitled Summary of the Updated Resources for the Empire Mine Project, Custer County, Idaho, USA, dated November 11, 2017, effective date November 7, 2017, was prepared and signed by the following qualified persons (as such term is defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects):

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