

2015 ASSESSMENT REPORT

Property Comprising the Following Claims :

K1 – K3 Claims.

Located in the:
Keno Hill Area
Mayo Mining District
Yukon Territory, Canada
N.T.S. 105M/14

UTM NAD 83 Z8: 484,600 East
UTM NAD 83 Z8: 7,091,400 North

PREPARED FOR:

Alexco Keno Hill Mining Corp.
1150-200 Granville Street
Vancouver, B.C. V6C 1S4

and

PREPARED BY:

Al McOnie

Alexco Resource Corp.
1150-200 Granville St.
Vancouver, B.C. V6C 1S4

DATE WORK PERFORMED : August 20, 2015

DATE OF REPORT: October 18, 2015

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1.0 SUMMARY

On August 20, 2015, surface geological mapping was undertaken on the K1, K2 and K3 claims. This confirmed the presence of outcropping Earn Group schist, Triassic greenstone and Cretaceous felsic intrusive dyke.

2.0 INTRODUCTION

This report summarizes surface geologic mapping conducted on the K1, K2 and K3 claims on 20 August 2015.

Planning, field work, and reporting of this work were performed by Alexco Resource Corp. staff.

The object was to confirm the nature of outcrop on the western slopes of Keno Hill below the access road to the Sadie Ladue adit.

The work was conducted as part of a broader program of re-mapping the Keno Hill district, an exercise that has developed a revised stratigraphy for the mineral hosting sequence.

3.0 LOCATION AND ACCESS

The three quartz claims on which assessment work has been undertaken are held under the name of Alexco Keno Hill Mining Corp 100%, and are located in the Keno Hill district, Mayo Mining District approximately 350 km north of Whitehorse (Figure 1). The area is covered by NTS map sheet 105M/14. The reference datum used is UTM NAD83 Zone 8, unless otherwise noted.

The claims are located between 940 m and 1,110 m elevation on the western flank of Keno Hill. The vegetation is generally relatively open spruce forest with patches of deciduous trees on the areas of outcrop.

Access to the claim is on foot from the four wheel drive track that runs from the Wernecke Road down to the Sadie Ladue adit, northwest of Keno City.

The base of operations for Alexco is the abandoned company town of Elsa which contains camp and office facilities.

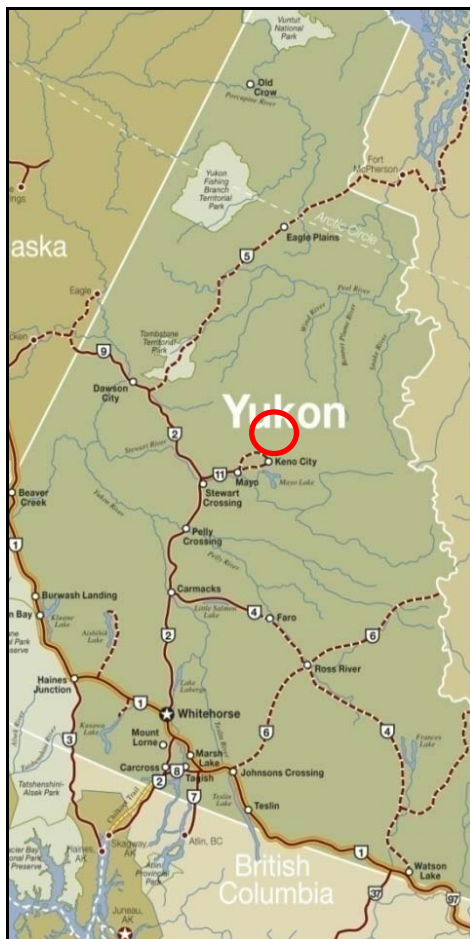


Figure 1 General Location of the Claim Block

4.0 CLAIM STATUS

The claims are active having been staked on 4 December 2005, and prior to the current work had an expiry date of 15 December 2020 (Appendix 1).

The location of the quartz claims is shown in Figure 2. A list of personnel and cost statement related to the application of Certificate of Work are included as Appendices 2 and 3.

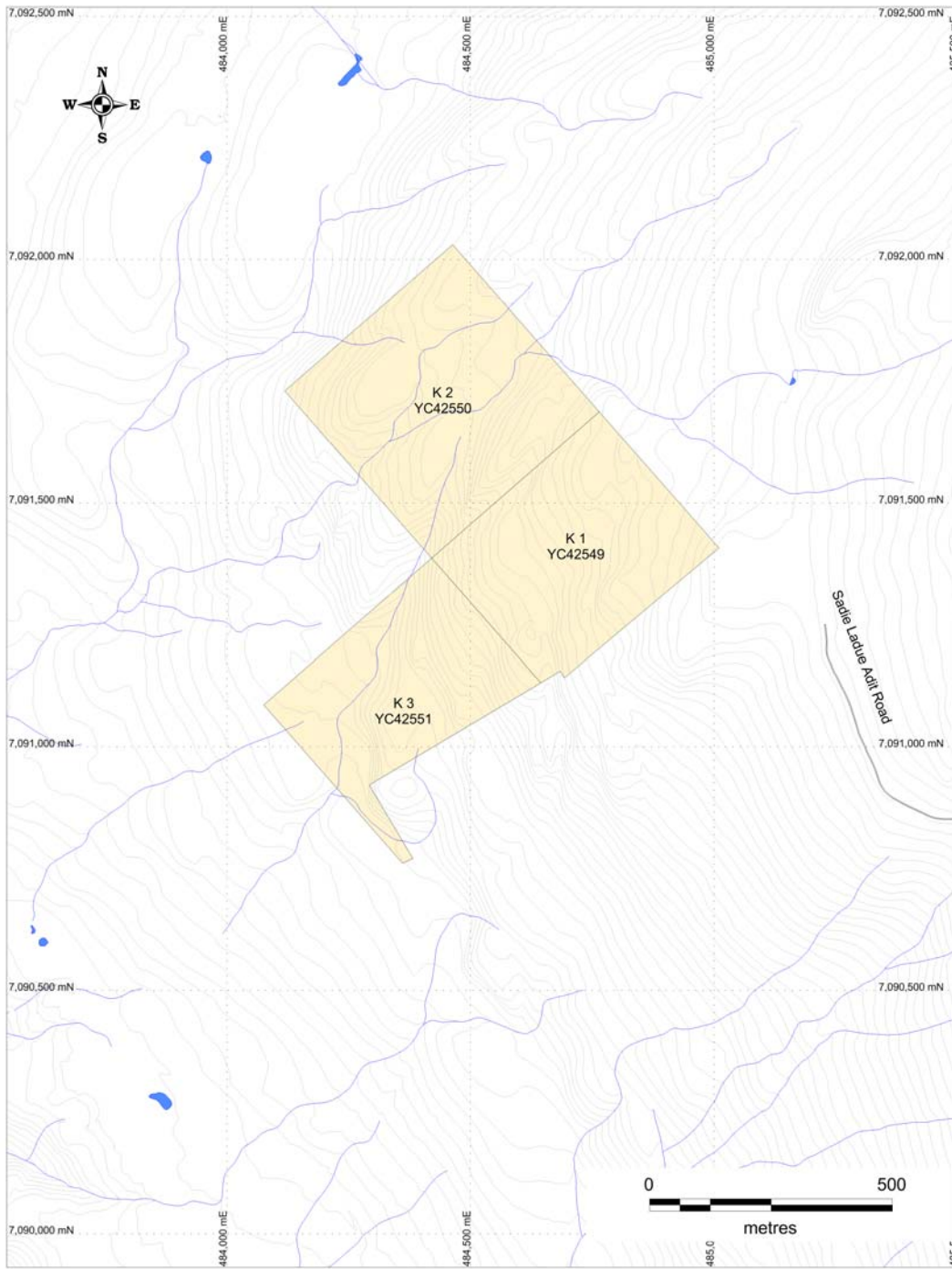


Figure 2 Location of the Claims

5.0 REGIONAL GEOLOGY

The claims are situated within the western part of the Selwyn Basin in an area dominated by deformed and metamorphosed sediments accumulated at the edge of the Neoproterozoic to Paleozoic continental margin. During the Jurassic and Cretaceous, the area was subjected to compressional tectonic forces producing imbricate thrust sheets and widespread folding. In the mid-Cretaceous, renewed tectonism resulted in extensive brittle deformation and the emplacement of intrusive plutons.

The stratigraphic unit underlying the claims is the Devonian Earn Group.

6.0 PROPERTY GEOLOGY

The claims are located on the lower northern slopes of Keno Hill and are underlain by the Devonian Earn Group that hosts a number of Triassic greenstone sills. The sequence underlies the Keno Hill Quartzite that hosts most of the silver-lead-zinc mineralization found in the district, although at the nearby Sadie Ladue occurrence, mineralization occurs adjacent to greenstone in this stratigraphic position.

A number of prominent outcrops were found to comprise predominantly medium grained Triassic greenstone, with minor graphitic schist of the Earn Group. An occurrence of light brown limonitically stained Cretaceous felsic intrusive that appears to be a dyke of over eight metres in thickness was also located in contact with light grey-tan schist (Figure 3).

The attitude of the dominant S1 foliation is generally northeasterly with a moderate dip to the southeast and is broadly consistent with the district trends.

The stratigraphic position of the claim area is shown highlighted in Figure 4.

An historic mine shaft was located on adjacent Quartz Leases held by Alexco in an area of greenstone outcrop just south of the claim block. This indicates the presence of pyrite bearing quartz vein material in the greenstone, but no historic information is known for the location.

7.0 ASSAY SAMPLE

A single assay sample (15094) of the felsic dyke was submitted for assay to ALS Laboratories (work order WH15149118) to determine if it carries any anomalous geochemistry. The sample is located approximately at grid reference 484,486 E, 7,091,491 N. No significantly anomalous elements were noted (Appendix 4).

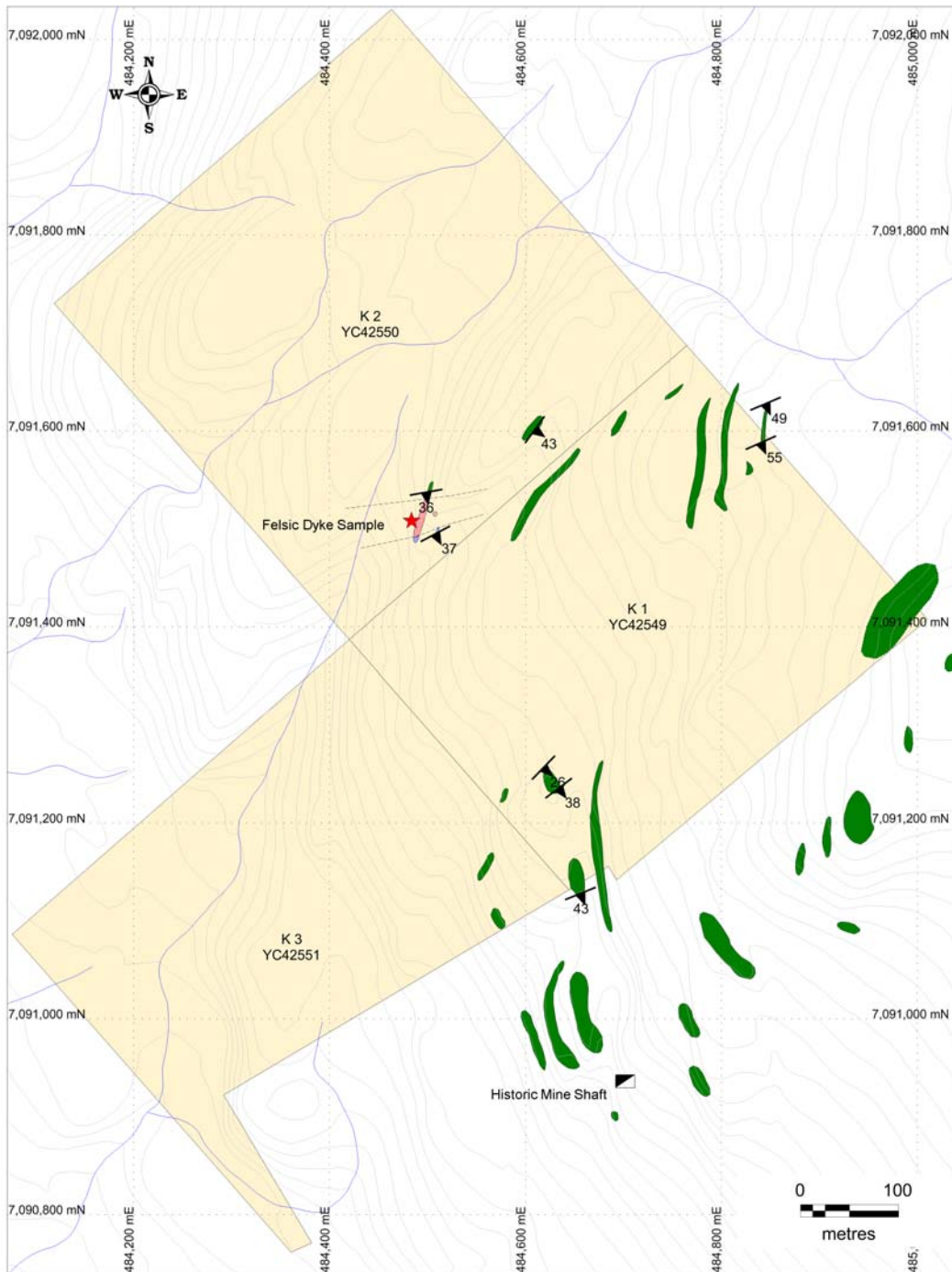


Figure 3 Outcrop Geology of the Claim Block and Location of Assay Sample

LEGEND

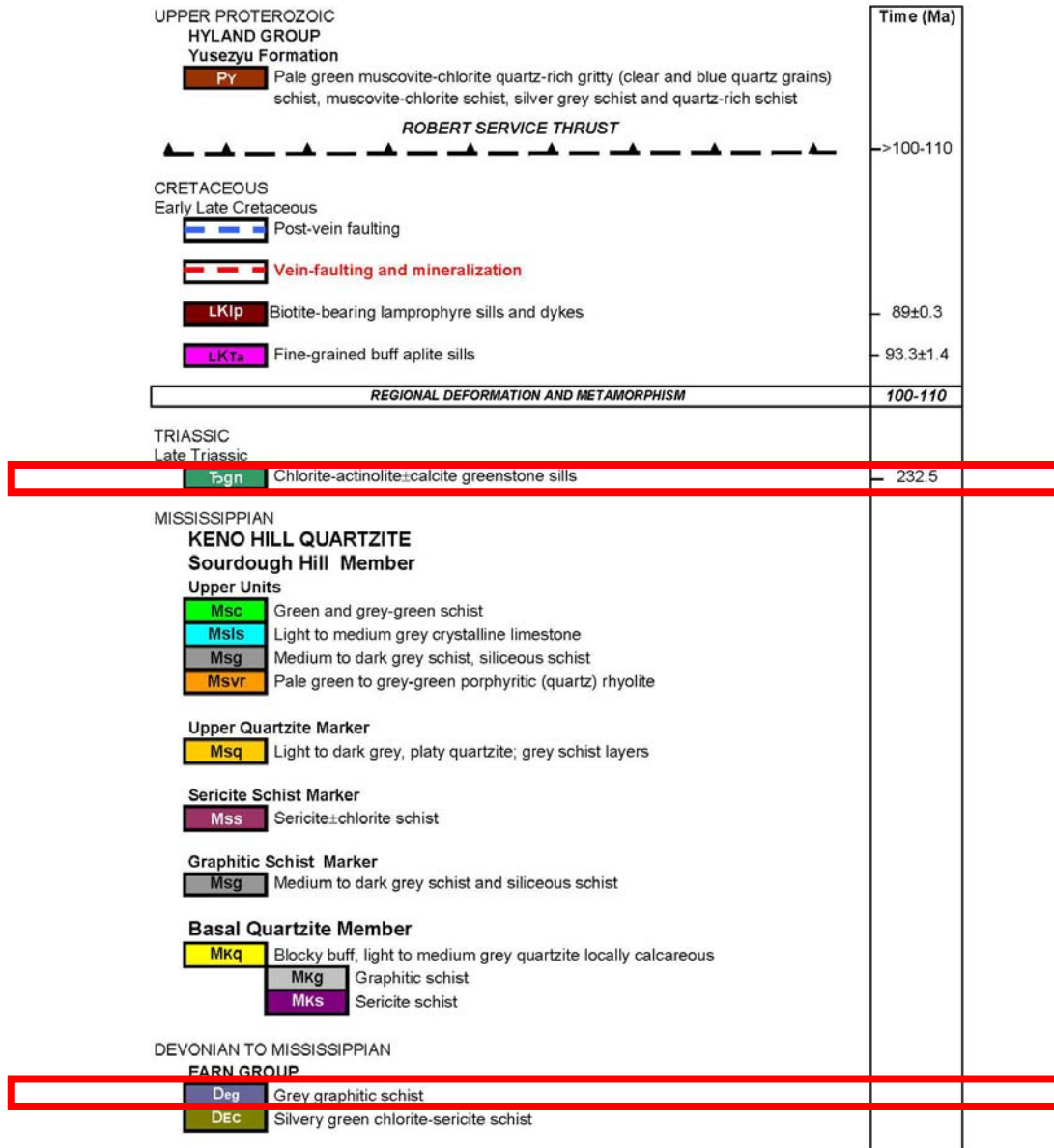


Figure 4 Stratigraphic Position of the Claim block (after McOnie & Read, 2010)

8.0 CONCLUSIONS

The results from the surface geological mapping confirms that these claims are underlain by the Earn Group that here contains a significant amount of greenstone, and which is also intruded by a later felsic dyke. The stratigraphy is similar to that seen at the Sadie Ladue mine and lies below the Keno Hill Quartzite Formation.

9.0 LIST OF REFERENCES

McOnie, A., and Read P.B., 2010.

Stratigraphy, Structure and Exploration Opportunities Sourdough, Galena and part of Keno Hills, Keno Hill Mining Camp, Central Yukon.

Internal Report Alexco Resource Corp.

APPENDIX 1

LIST OF CLAIMS

Quartz Claim	Grant	Owner	Staking Date	Recorded Date	Expiry Date
K 1	YC42549	Alexco Keno Hill Mining Corp. - 100%	04/12/2005	15/12/2005	15/12/2020
K 2	YC42550	Alexco Keno Hill Mining Corp. - 100%	04/12/2005	15/12/2005	15/12/2020
K 3	YC42551	Alexco Keno Hill Mining Corp. - 100%	04/12/2005	15/12/2005	15/12/2020

APPENDIX 2

LIST OF PERSONNEL

Jos Hantelmann
#96 – 11 Clover Bar Lane
Sherwood Park, AB T8H 0C4

Alicia Vainio
Box 291
Faro, YT, Y0B 1K0

Liana Stammers
941 Kennedy Ave
North Vancouver, BC
V7R 1L4

Al McOnie
694 SH 2, RD3
Katikati
New Zealand
3170

APPENDIX 3

STATEMENT OF EXPENDITURES

Cost Statement - Alexco Resource Corp. October 2015 "K1, K2, K3" Assessment Filing							
Claims	Grant	Owner	Field Staff and Reporting	Camp Overhe ad	Vehicles - Support	Analytical	Estimated Total
K1	YC42549	Alexco Keno Hill Mining Corp.					
K2	YC42550	Alexco Keno Hill Mining Corp.					
K3	YC42551	Alexco Keno Hill Mining Corp.					
			\$1,541	\$570	\$110	\$50	\$2,271
Work conducted 20 August 2015							

APPENDIX 4

Assay Results

Method	WEI-21	Au-AA25	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La
	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm
LOD	0.02	0.01	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10	0.01	10
15049	1.06	<0.01	<0.5	7.09	42	500	0.5	5	4.73	0.8	35	147	143	7.17	20	0.54	10

Method	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
Analyte	Recvd Wt.	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn
	kg	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
LOD	0.02	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10	10	1	10	2
15049	1.06	3.16	1185	6	1.57	89	520	9	0.02	8	30	182	<20	0.6	<10	<10	261	<10	97

APPENDIX 5

STATEMENT OF QUALIFICATIONS

Al McOnie

I, Alan McOnie of 694 SH2, RD3, Katikati, New Zealand
DO HEREBY CERTIFY:

- 1 THAT, I am a VP Exploration and Qualified Person with Alexco Resource Corp., 1150-200 Granville Street, Vancouver, BC, V6C 1S4.
- 2 THAT, I have practiced my profession with various mining companies in the Canada, New Zealand, Australia, United States, Mexico, and China for over 35 years.
- 3 THAT, I am graduate in geology holding a BSc (Hons) from the University of Otago, New Zealand and a MSc from the University of Toronto, Canada.
- 4 THAT, I am a member of the Society of Economic Geologists.
- 5 THAT, I am a Fellow of the Australasian Institute of Mining and Metallurgy.
- 6 THAT, this report is based on work which I personally managed during the year 2015.
- 7 THAT, I have no interest in the property described herein, nor do I expect to receive any such interest.

DATED at Vancouver, BC, this 18th day of October, 2015.



Al McOnie