

2019 Assessment Report for Reclamation of Drill Pads and Tracks
Grouped Claims HM03300
Sourdough Hill, Yukon

Property Comprising the Following Claims:

Bonny (YA75856), Boso 1 – 5 (Y 97224- Y 97228), Caroline 1 (83535), Caroline 2 (83536), Case 3 (YA38193), Casy 1 (83526), Casy 2 (83527), Chrissie G (83545), MO 1 – MO 8 (Y 06519 – Y 06526), Rex 1 (84416), Rex 2 (84417), Windy 1 (83525)

REGISTERED OWNERS:

Frank Tveter (40%) and Kris Pavlovich (60%)

And

Lem 4 – 11 (YA173898 – YA17405)

REGISTERED OWNER:

Alexco Keno Hill Mining Corp. (100%)

Located in the:
Keno Hill Area
Mayo Mining District
Yukon Territory, Canada
N.T.S. 105M/13, 14

NAD83 Zone 8
Northing: 7,084,960
Easting: 487,190

PREPARED BY:

Liana Stammers and Alan McOnie

Alexco Resource Corp.
1225-555 Burrard Street
Vancouver, B.C. V7X 1M9

DATES WORK PERFORMED: 24 - 25 August, 2019

DATE OF REPORT: March 18, 2020

TABLE OF CONTENTS

1 SUMMARY..... 1

2 INTRODUCTION..... 1

3 LOCATION AND ACCESS..... 1

4 CLAIM STATUS 3

5 REGIONAL GEOLOGY 4

6 PROPERTY GEOLOGY 5

7 EXPLORATION HISTORY..... 6

7.1 2019 Reclamation..... 7

8 List of References 9

LIST OF FIGURES

Figure 1 General Location of the Option Group..... 3

Figure 2 Location of the HM03300 Grouping Claims..... 4

Figure 3 Regional Geology of the Claim Block Showing the Location of 2018 Drill Holes (also see Legend, Figure 4)..... 5

Figure 4 Keno District Stratigraphy (McOnie and Read, 2009)..... 6

Figure 5 Drill Tracks and Site Reclaimed in Summer 2019 7

Figure 6 – Reclaimed Drill Site for K-18-0705 8

Figure 7 – Reclaimed Drill Track to K-18-0705 8

LIST OF TABLES

Table 1 Option Claims 2

LIST OF APPENDICES

Appendix 1: Statement of Expenditures..... 10

Appendix 2: Statement of Qualifications 11

1 SUMMARY

In 2018, four diamond drill holes, for a total of 1409.5 metres of HQ core, were completed over an area of potential silver-lead-zinc mineralization south of Alexco Resource Corp's (Alexco) Bellekeno Mine on the eastern flanks of Sourdough Hill in the Keno Hill district, Yukon. Of this, 1,034.5 metres were completed within the HM03300 Grouping Certificate in the assessment report for the renewal certificate for QM02168 on the Bonny, Case 3, Casy 1, Caroline 1, Chrissie G, and Windy 1 quartz claims.

In 2019, excavator work was completed to reclaim the 2018 drill pads and tracks on the Casy 1, Caroline, and Windy 1 claims.

2 INTRODUCTION

This report summarizes the reclamation completed by Alexco Resource Corp (Alexco) between August 24 - 25, 2019 on the HM03300 Grouping claims where drilling had been completed under an Option Agreement in 2018. Planning, supervision, implementation and reporting of this work were performed by Alexco Resource Corp staff.

3 LOCATION AND ACCESS

The quartz claims on which the work was conducted are held under the names of Frank Tveter - 40% and Kris Pavlovich - 60% (Table 1).

The property is located on the eastern slope of Sourdough Hill within the Mayo Mining District approximately 350 km north of Whitehorse (Figure 1). The area is covered by NTS map sheets 105M/14. The reference datum used is UTM NAD83 Zone 8, unless otherwise noted.

Access to the district is via the Silver Trail Highway connecting the villages of Mayo and Keno City, with the property accessible from the private Bellekeno Mine Haul road and from the public Mt. Hinton road that runs south from Keno City. The base of operations for Alexco is the abandoned company town of Elsa which contains camp, core logging and office facilities.

Table 1 HM03300 Grouped Claims

Label	Grant number	Owner	Expiry date
Bonny	YA75856	Frank Tveter - 50%, Kris Pavlovich - 50%	2022/09/07
Boso 1	Y 97224	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Boso 2	Y 97225	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Boso 3	Y 97226	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Boso 4	Y 97227	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Boso 5	Y 97228	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Caroline 1	83535	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Caroline 2	83536	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Case 3	YA38193	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Casy 1	83526	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Casy 2	83527	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Chrissie G	83545	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
MO 1	Y 06519	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
MO 2	Y 06520	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
MO 3	Y 06521	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
MO 4	Y 06522	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
MO 5	Y 06523	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
MO 6	Y 06524	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
MO 7	Y 06525	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
MO 8	Y 06526	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Rex 1	84416	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Rex 2	84417	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Windy 1	83525	Frank Tveter - 40%, Kris Pavlovich - 60%	2022/09/07
Lem 4	YA17398	Alexco Keno Hill Mining Corp. - 100%	2021/12/31
Lem 5	YA17399	Alexco Keno Hill Mining Corp. - 100%	2021/12/31
Lem 6	YA17400	Alexco Keno Hill Mining Corp. - 100%	2021/12/31
Lem 7	YA17401	Alexco Keno Hill Mining Corp. - 100%	2021/12/31
Lem 8	YA17402	Alexco Keno Hill Mining Corp. - 100%	2021/12/31
Lem 9	YA17403	Alexco Keno Hill Mining Corp. - 100%	2021/12/31
Lem 10	YA17404	Alexco Keno Hill Mining Corp. - 100%	2021/12/31
Lem 11	YA17405	Alexco Keno Hill Mining Corp. - 100%	2021/12/31

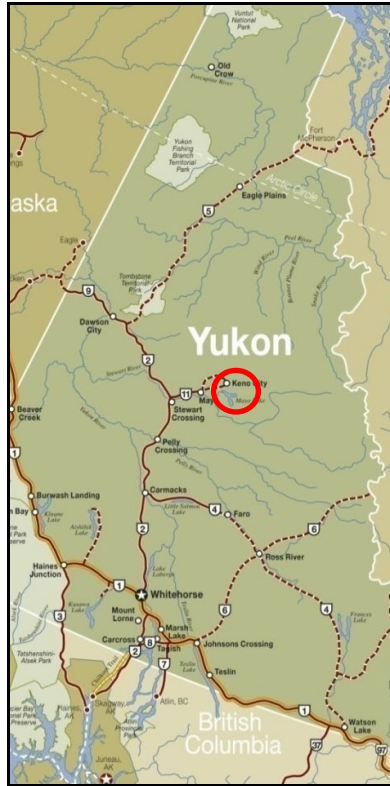


Figure 1 General Location of the Option Group

4 CLAIM STATUS

The HM03300 Grouping claims comprise 31 quartz claims (Table 1) covering an area of approximately 4.306 km², with 2019 work conducted on the Casy 1, Caroline 1, and Windy 1 claims. The ownership, original staking date, and expiry dates are shown in Table 1.

The location of the claims is shown in Figure 2.

A statement of expenditure for work completed is included in Appendix 1.

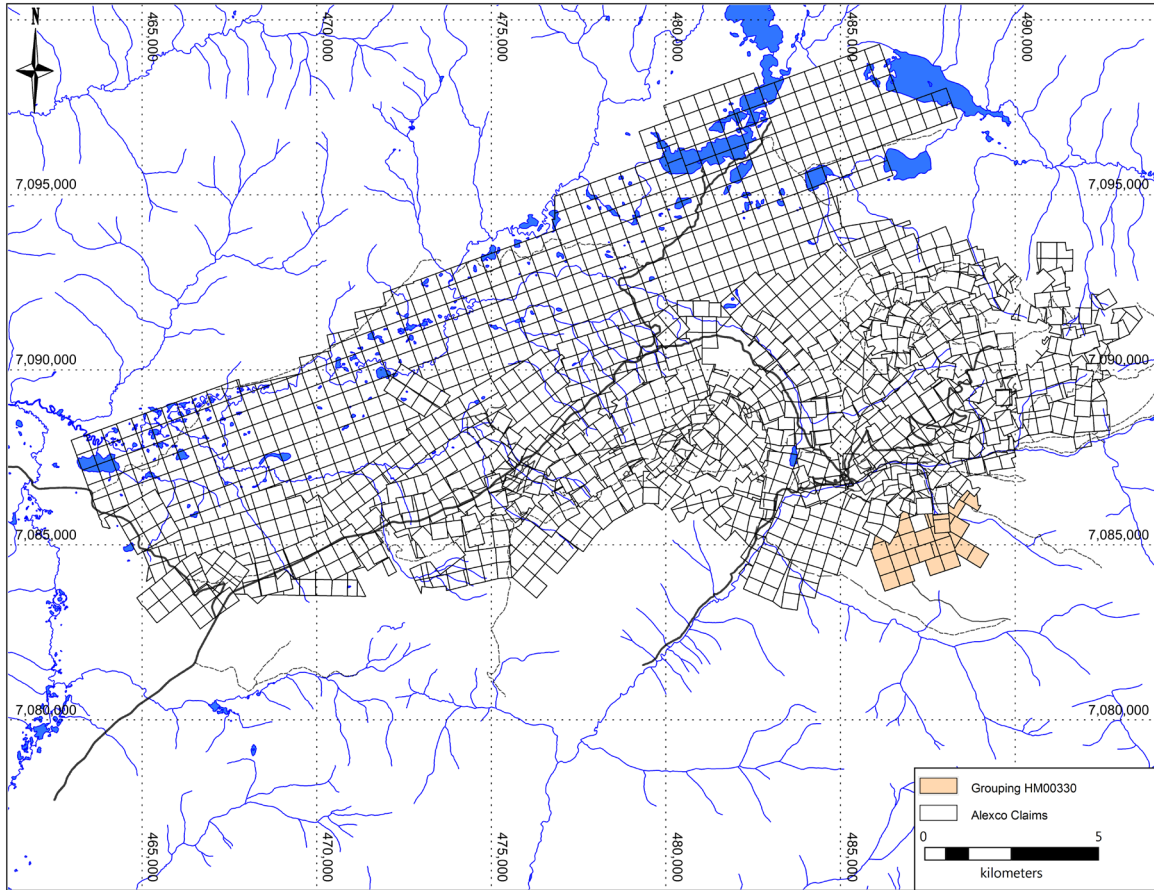


Figure 2 Location of the HM03300 Grouping Claims

5 REGIONAL GEOLOGY

The property is 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 claim area is predominantly overlain by deep recent fluvio-glacial cover above the Keno Hill Quartzite (Mississippian), host to most of the past producing ore bodies in the Keno Hill district and the underlying Devonian-Mississippian Earn Group. To the south of the Keno Hill Quartzite and the Robert Service Thrust fault the area is underlain by the Precambrian Yusezyu Formation of the Hyland Group.

6 PROPERTY GEOLOGY

The grouped area (Figure 3) is included within a wider geologic mapping initiative in the Keno District, from which Alexco has derived a revised stratigraphy (McOnie and Read, 2009) that is summarized in Figure 4.

There is minimal outcrop within the claim group, with the east facing slopes largely covered by shallow soil, talus and permafrost. Surface mapping in the area shows that the claims extend from the upper contact of the Basal Quartzite Member of the Mississippian Keno Hill Quartzite, into the overlying Sourdough Hill Member and over-thrust Proterozoic rocks of the Hyland Group. Triassic greenstone sills occur within the Basal Quartzite.

A weakly developed north-northeast trending silver – lead – zinc soil geochemical anomaly that passes through the area was identified in 2017 (McOnie, 2017). The southwest projection of a series of poorly defined subparallel mineralized veins located in the hanging wall of the Bellekeno 48 Vein, are also projected to transect the claim group.

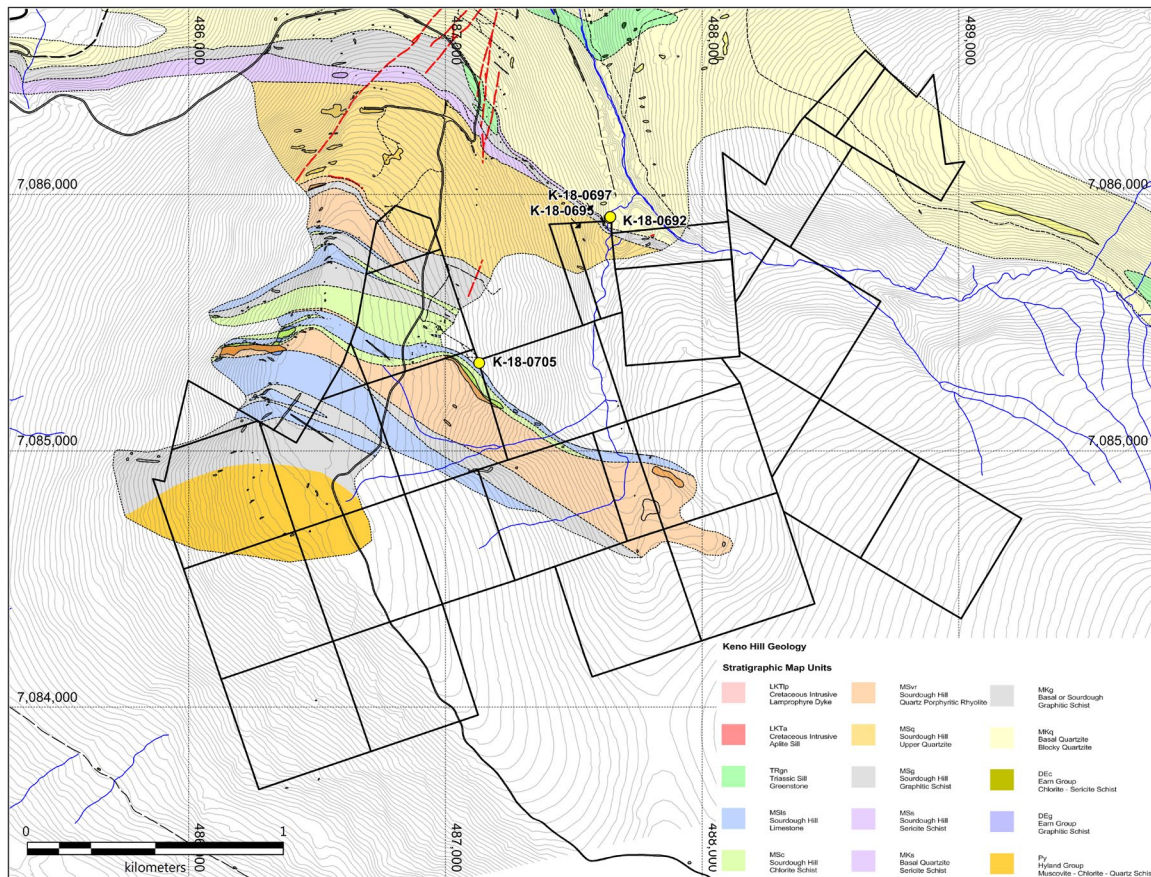


Figure 3 Regional Geology of the Claim Block Showing the Location of 2018 Drill Holes (also see Legend, Figure 4).

7.1 2019 Reclamation

On completion of the surface exploration drilling, the drill holes were plugged at the top of the bedrock surface to prevent ingress of surface water or egress of ground water. The collars were marked by post, the surface cleared of drill material and supplies, and sumps left to drain naturally. Due to the common occurrence of frozen ground this occurs slowly and, in the case of the drill site and track for K-18-0705, reclamation was completed in summer 2019. The reclaimed track is shown as green lines and pad as a green polygon in Figure 5 through claims Windy 1, Caroline 1, and Casy 1, while the tracks shown as magenta were previously existing.

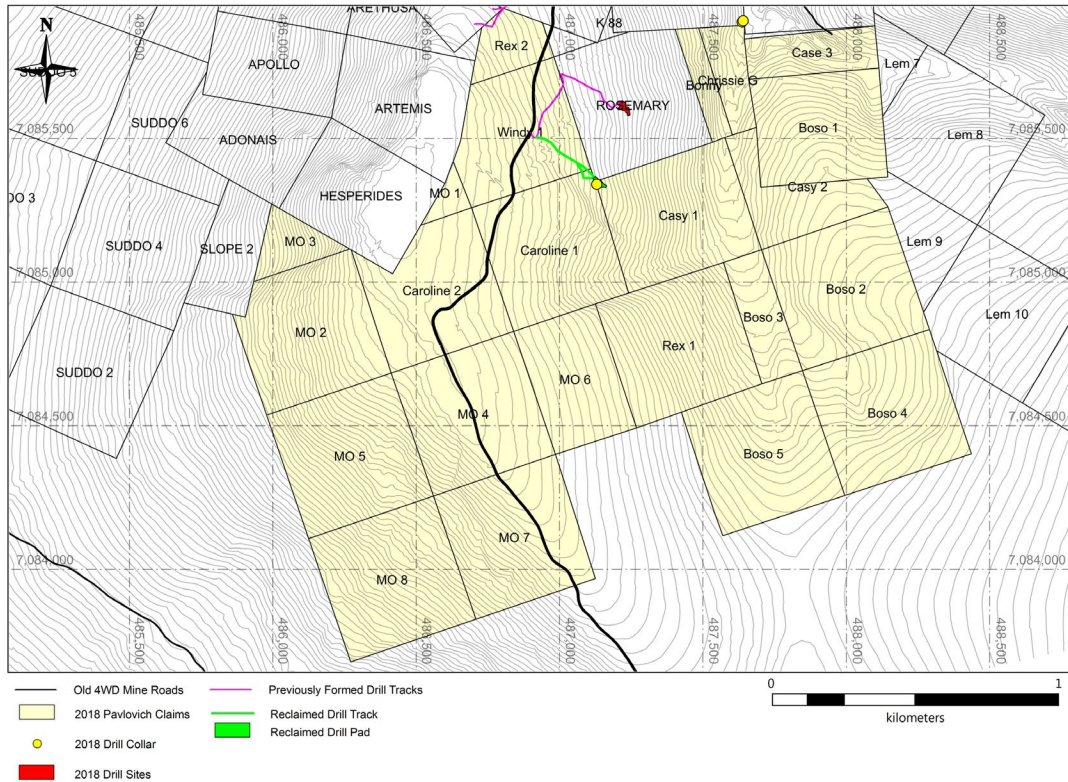


Figure 5 Drill Tracks and Site Reclaimed in Summer 2019

The basic reclamation procedures, with earthworks undertaken by backhoe, include:

- Slope contouring completed.
- Compacted areas stirred-up.
- Sumps back filled once drained.
- Stockpiled vegetative mat and timber dragged back over the sites.
- Water bars/drainage bars installed on tracks with steeper topography.

Reclamation of the pad and tracks completed are shown in Figures 6 and 7.



Figure 6 – Reclaimed Drill Site for K-18-0705



Figure 7 – Reclaimed Drill Track to K-18-0705

8 List of References

McOnie, A., (2017). 2017 Assessment Report – Property Comprising the Following Claims: Bonny, Boso 1 – 5, Caroline 1 – 2, Case 3, Casy 1 – 2, Chrissie G, MO 1 – 8, Rex 1 – 2, and Windy 1. Prepared for Frank Tveter and Kris Pavlovich, and Alexco Keno Hill Mining Corp.

McOnie, A and P.B. Read., (2009). Stratigraphy, Structure and Exploration Opportunities Sourdough, Galena and part of Keno Hills, Keno Hill Mining Camp, Central Yukon. Internal Report Alexco Resource Corp.

Stammers, L., Iles, S., McOnie, A., (2018). 2018 Assessment Report for Drilling Grouped Claims HM03300, Sourdough Hill, Yukon. Prepared for Frank Tveter, Kris Pavlovich, and Alexco Keno Hill Mining Corp.

Yukon Geological Survey, (2019) Minfile Occurrence Name: MO, Occurrence Number 105M 013. Retrieved from <http://data.geology.gov.yk.ca/Occurrence/13641> January 17, 2019.

APPENDIX 1 STATEMENT OF EXPENDITURES

Staff

	Senior Staff	Operator 1	Operator 2	Total
total hours	11	12	4.5	
Day Rate	\$350.00			
Hour rate	\$31.82	\$ 118.94	\$ 43.35	
Cost	\$350.00	\$ 1,427.28	\$195.08	\$1,972.36
Camp Days (2 people)	1	2		
Camp Rate	\$100	\$100		
Camp Cost	\$100	\$200		\$300.00
Vehicle Days (2 people)	1.0	2.0		
Vehicle Rate	\$100	\$100		
Vehicle Cost	\$100	\$200		\$300.00

STAFF TOTAL

\$2,572.36

Equipment

	hours	\$/h	\$
Hitachi 270 excavator	16.5	168	\$2,772.00
Fuel			\$369.94

EQUIPMENT TOTAL

\$ 3,141.94

TOTAL EXPENDITURE

\$ 5,714.30

APPENDIX 2 STATEMENT OF QUALIFICATIONS

Alan McOnie

I, Alan McOnie of 694B SH2, RD3, Katikati, New Zealand 3170
DO HEREBY CERTIFY:

THAT, I am a VP Exploration and Qualified Person with Alexco Resource Corp., 1225-555 Burrard Street, Vancouver, BC, V7X 1M9.

THAT, I have practiced my profession with various mining companies in Canada, New Zealand, Australia, United States, Mexico, and China for over 36 years.

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.

THAT, I am a member of the Society of Economic Geologists.

THAT, I am a Fellow of the Australasian Institute of Mining and Metallurgy.

THAT, this report is based on work which I participated in and co-managed during the year 2019.

DATED at Katikati, New Zealand this 18th day of March, 2020.



Al McOnie

Liana Stammers

I, Liana Stammers of 3110 Balaclava St, Vancouver, BC, Canada, V6K 4E9
DO HEREBY CERTIFY:

THAT, I am a Geologist with Alexco Resource Corp., 1225-555 Burrard Street,
Vancouver, BC, V7X 1M9.

THAT, I have practiced my profession in Canada for 5 years.

THAT, I am graduate in Earth Sciences holding a BSc (Hons) from the
University of Victoria, Canada, and a MSc from Western University, Canada.

THAT, I am a Certified Professional Geologist, #181593, Engineers &
Geoscientists British Columbia.

THAT, this report is based on work which I participated in and co-managed
during the year 2019.

DATED at Vancouver, Canada this 19th day of December 2019.

A handwritten signature in black ink, appearing to read 'L Stammers', with a stylized, cursive script.

Liana Stammers