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**ASSESSMENT REPORT**

describing

**EQUIPMENT BACKHAULING**

Field work performed from June 15 to 17, 2016

at the

**KEG PROPERTY**

An, BP, Fub, Hot, JRV, Keg, Ku, Reb, Snap, Tap, Tay and Vat claims.

NTS Map Sheets 105K/05, 06, 07, 08, 10, 11 & 12  
Latitude 62°35'N; Longitude 133°19'W

located in the

Whitehorse Mining District

prepared by

Archer, Cathro & Associates (1981) Limited

for

**SILVER RANGE RESOURCES LTD.**

by

J. Morton, B.Sc., GIT

March 2017

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## INTRODUCTION

The Keg property is situated in south-central Yukon and is wholly owned by Silver Range Resources Ltd. It covers two belts of epigenetic silver-rich mineralization, which are located north of the syngenetic sedimentary exhalite deposits of the Anvil District. The Keg property hosts a bulk tonnage silver-lead-zinc-copper±tin±indium deposit (the “Keg Deposit”), 23 other known mineralized zones and numerous multi-element soil geochemical anomalies.

This report describes three days of equipment backhauling on the property. The program was overseen by Archer, Cathro & Associates (1981) Limited in summer 2016 on behalf of Silver Range. Field work was performed between June 15 and 17, 2016. The author participated in the program, and his Statement of Qualifications is located in Appendix I. A Statement of Expenditures related to the program is included in Appendix II.

## PROPERTY DESCRIPTION AND LOCATION

The Keg property is located in the Whitehorse Mining District within south-central Yukon and is centred at latitude 62°35′ north and longitude 133°19′ west on NTS map sheets 105K/05, 06, 07, 08, 10, 11 and 12 (Figure 1).

The property comprises 4932 mineral claims that cover an area of about 991 km<sup>2</sup>. The claims are registered in the name of Archer Cathro, which holds them in trust for Silver Range. Specifics concerning claim registration are tabulated below, while the locations of individual claims are shown on Figure 2.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date</u>	
AN	1 - 3	YE53681 - YE53683	March 13, 2026
	8 - 13	YE53688 - YE53693	March 13, 2026
	44 - 105	YE53724 - YE53785	March 13, 2026
	110 - 113	YE53790 - YE53793	March 13, 2026
BP	4	YC65870	March 13, 2027
FUB	1 - 44	YC97745 - YC97788	March 13, 2033
HOT	1	YC19031	March 13, 2029
JRV	6	YC59923	March 13, 2027
	8	YC59925	March 13, 2027
	10	YC59927	March 13, 2027
	12	YC59929	March 13, 2027
	20 - 24	YC59937 - YC59941	March 13, 2027
	41 - 44	YC59958 - YC59961	March 13, 2027
KEG	1 - 15	YD11773 - YD11787	March 13, 2034
	16 - 53	YD33666 - YD33703	March 13, 2035
	54 - 267	YD62954 - YD63167	March 13, 2035
	268 - 363	YD63168 - YD63263	March 13, 2027
	364 - 369	YD63264 - YD63269	March 13, 2034
	370 - 375	YD27420 - YD27425	March 13, 2034

**SILVER RANGE RESOURCES LTD.**

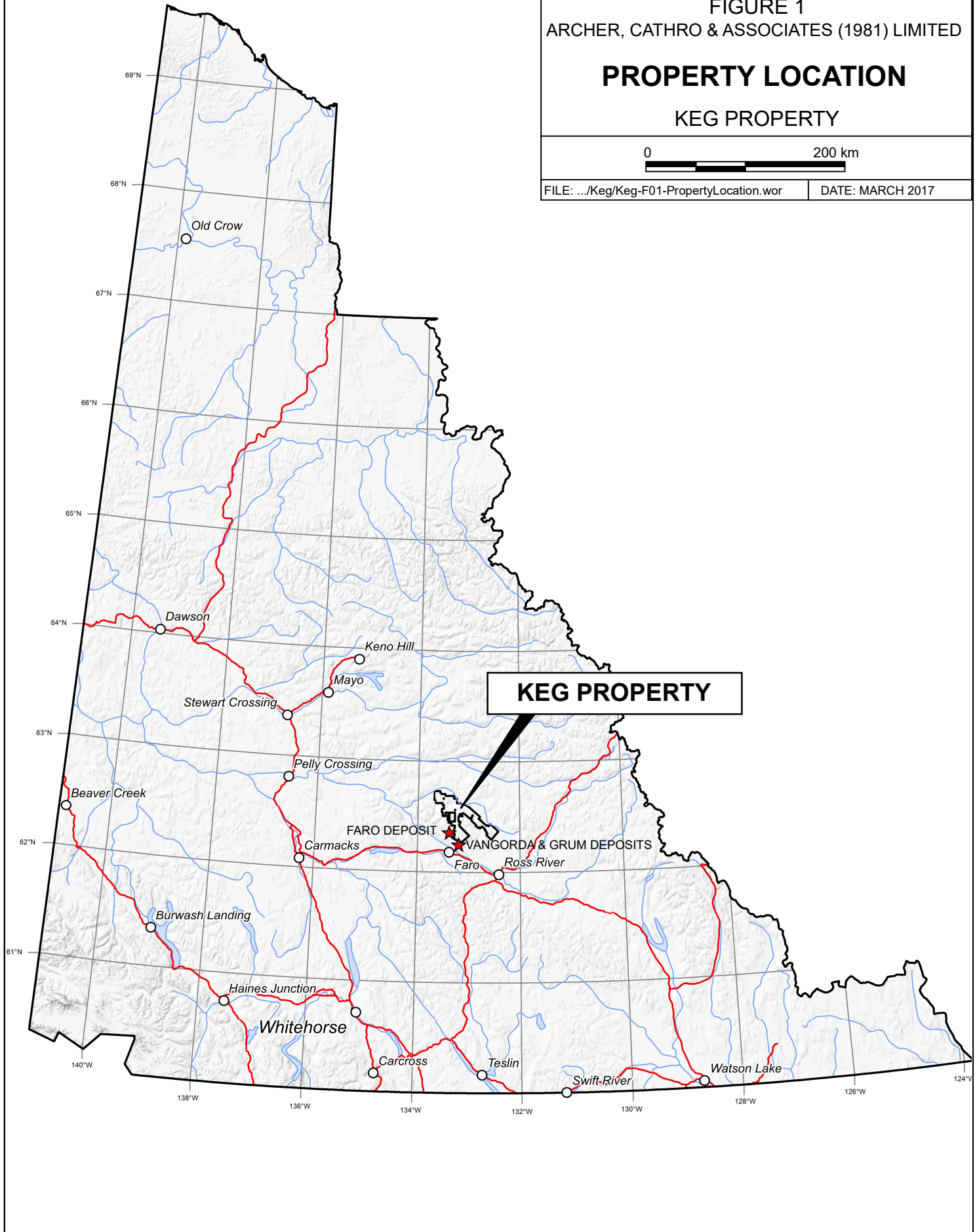
FIGURE 1  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**PROPERTY LOCATION**

KEG PROPERTY



FILE: ../Keg/Keg-F01-PropertyLocation.wor | DATE: MARCH 2017



	376 - 449	YD27426 - YD27499	March 13, 2027
	450 - 493	YD27500 - YD27543	March 13, 2031
	494 - 549	YD27544 - YD27599	March 13, 2027
	550 - 569	YD28051 - YD28070	March 13, 2027
	570 - 893	YD31870 - YD32193	March 13, 2031
	894 - 1017	YD32194 - YD32317	March 13, 2027
	1018 - 1300	YD32318 - YD32600	March 13, 2031
	1301 - 1332	YD90531 - YD90562	March 13, 2031
	1339 - 1340	YD90563 - YD90564	March 13, 2031
	1341 - 1548	YD00451 - YD00658	March 13, 2025
	1549 - 1560	YD122165 - YD122176	March 13, 2031
	1561 - 1804	YD00671 - YD00914	March 13, 2027
	1805 - 1930	YD00915 - YD01040	March 13, 2023
	1931 - 2044	YD01287 - YD01400	March 13, 2027
	2045 - 2268	YD117925 - YD118148	March 13, 2027
	2269 - 2270	YD118999 - YD119000	March 13, 2027
	2271 - 2403	YF36701 - YF36833	March 13, 2029
	2404	YF36834	March 13, 2021
KU	1 - 680	YE53001 - YE53680	March 13, 2020
	681 - 740	YF40521 - YF40580	March 13, 2021
	741 - 808	YF40581 - YF40648	March 13, 2029
	809 - 880	YF40649 - YF40720	March 13, 2021
REB	1 - 20	YD09253 - YD09272	March 13, 2027
	21 - 56	YD62918 - YD62953	March 13, 2029
	57 - 72	YD28035 - YD28050	March 13, 2029
	73 - 179	YD01179 - YD01285	March 13, 2025
SNAP	1 - 44	YD118149 - YD118192	March 13, 2027
	45 - 73	YD118327 - YD118355	March 13, 2027
	74 - 157	YD121704 - YD121787	March 13, 2027
TAP	1 - 120	YD118801 - YD118920	March 13, 2025
	121 - 160	YD118271 - YD118310	March 13, 2025
	161 - 194	YF40911 - YF40944	March 13, 2023
TAY	1 - 314	YD27721 - YD28034	March 13, 2031
VAT	1 - 81	YD31761 - YD31841	March 13, 2027
	82 - 91	YE14906 - YE14915	March 13, 2028
	92 - 93	YE14916 - YE14917	March 13, 2030
	94 - 107	YE14918 - YE14931	March 13, 2028
	108 - 109	YE14932 - YE14933	March 13, 2030
	110 - 141	YE14934 - YE14965	March 13, 2028
	142 - 143	YE14966 - YE14967	March 13, 2030
	144 - 176	YE14968 - YE15000	March 13, 2028
	177	YD155407	March 13, 2028
	178 - 179	YD155408 - YD155409	March 13, 2030

180 - 213	YD155410 - YD155443	March 13, 2028
214 - 215	YD155444 - YD155445	March 13, 2030
216 - 272	YD155446 - YD155502	March 13, 2028
273 - 309	YE14143 - YE14179	March 13, 2028
310 - 359	YF40730 - YF40779	March 13, 2027
360	YF40780	March 13, 2025
361	YF40781	March 13, 2027
362	YF40782	March 13, 2025
363	YF40783	March 13, 2027
364	YF40784	March 13, 2025
365	YF40785	March 13, 2027
366 - 377	YF40786 - YF40797	March 13, 2025
378 - 397	YF40798 - YF40817	March 13, 2027
398 - 409	YF40818 - YF40829	March 13, 2025
410 - 429	YF40830 - YF40849	March 13, 2027
430 - 441	YF40850 - YF40861	March 13, 2025
442 - 455	YF40862 - YF40875	March 13, 2027
456 - 465	YF40876 - YF40885	March 13, 2025
466 - 467	YF40886 - YF40887	March 13, 2027
468 - 477	YF40888 - YF40897	March 13, 2025
478 - 479	YF40898 - YF40899	March 13, 2027
480 - 482	YF40900 - YF40902	March 13, 2025
483	YF40903	March 13, 2027
484	YF40904	March 13, 2025
485 - 488	YD07297 - YD07300	March 13, 2021
489 - 676	YF42699 - YF42886	March 13, 2023

\* Expiry dates do not include 2016 work that has been filed for assessment credit, but not yet accepted.

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

The Keg property lies 40 km north of the town of Faro, which is the nearest supply centre. Faro can be reached in all seasons by two wheel drive vehicles using the Yukon highway system. Faro is located 356 km by road from Whitehorse, the territorial capital and main transportation hub.

Faro formerly serviced the mill and mines of the Anvil District. A heavy duty haulage road and a high voltage power line extend from the town site to the Faro mine and former mill site, which are located 25 km south of the Keg Deposit through low hilly terrain. Electricity for the power line comes from hydroelectric and LNG generators, that are part of the Yukon electrical grid. At present, there is no excess capacity on the Yukon electrical grid, but the Government of Yukon is studying the viability of new hydroelectric facilities.

In 2016, access to the property and equipment backhaul was performed by two Eurocopter A-Star B3 helicopters, owned by Trans North Turbo Air Limited from its base in Carmacks. Lots leased by Archer Cathro at the Faro airport served as a logistical staging area.

The property is situated in the Anvil Range of the Pelly Mountains and is drained by creeks that flow into the Tay River, Rose Creek or Blind Creek, all of which ultimately connect to the Pacific Ocean via the Pelly and Yukon rivers.

The property covers an area of mountains, ridges, upland plateaus and valley bottoms. Local elevations range between 820 and 2050 m above sea level. Mount Mye, the highest peak in the region, lies within the southern part of the property. Rounded peaks with open talus slopes and sparsely vegetated hillsides are typical of most alpine areas, but sharp rocky ridges are common in the Mount Mye area. Broad, buckbrush or tree covered, U-shaped valleys characterize lower elevations. Outcrop is generally limited to ridge crests, steep northern faces and deeply incised creek cuts. Hillsides and most valleys are well drained, but local swampy areas and ponds are present in some low-lying areas and along some flat-topped ridges.

Slopes near treeline are vegetated primarily with staghorn moss, thick brush and stunted spruce and poplar trees. The density and size of vegetation gradually increases at lower elevations. Mature spruce forests are only found along creeks or on south-facing slopes, where understory comprises dwarf birch and mountain alder, with a thick layer of sphagnum moss. Due to a combination of shade, locally poor drainage and a thick insulating blanket of sphagnum moss, permafrost is prevalent on north-facing slopes.

Much of the overburden in the region is associated with the most recent Cordilleran ice sheet, the McConnell glaciation, which is believed to have covered south and central Yukon between 26,500 and 10,000 years ago (Yukon Geological Survey, 2010a). Tay River map area was glaciated by ice sheets emanating from the Selwyn and Pelly mountains and by local glaciers from the Anvil Range. Ice was funneled into Tintina Trench and followed that topographic lineament northwest into central Yukon (Bond, 1999). McConnell deglaciation occurred rapidly when the equilibrium line rose significantly above the 1830 m elevation, resulting in starvation of the ice sheets. During a subsequent re-advance in the Anvil Range, local alpine glaciers did not form (Bond, 2001) and ice advanced outwards from the Tintina Trench and other deep valleys where glaciers had accumulated.

The climate at the Keg property is typical of northern continental regions with long, cold winters, truncated fall and spring seasons and short, mild summers. Although summers are relatively warm, snowfall can occur in any month at higher elevations. The property is mostly snow free from late May to late September. Historical records for the town of Faro show that summer temperatures average 18 to 21°C during the day and 6 to 9°C at night (Environment Canada, 2010). Winter temperatures average -17 to -10°C during the day. Total annual precipitation over the 1971 to 2000 period averaged 316 mm, with little over two-thirds falling as rain and about 110 cm as snow.

## **2016 WORK PROGRAM**

On July 16, 2016, a two person Archer Cathro crew and four Top Rank Diamond Drilling Ltd. contractors performed one day of equipment backhauling and drill pad reclamation from the Owl Zone to the Faro airport. Drilling equipment was loaded onto trucks and trailers by Top Rank and transported elsewhere.

## **INTERPRETATION AND CONCLUSIONS**

The Keg Main Zone is a bulk-tonnage silver-lead-zinc-copper±tin±indium deposit situated north of the formerly producing zinc-lead-silver mines of the Anvil District. The inferred mineral resource for the Keg Deposit is calculated as 39,760,000 t grading 30.25 g/t silver, 0.26% lead, 0.77% zinc, 0.15% copper, 265.7 ppm tin, 5.77 ppm indium and 138.06 ppm cadmium. This resource is stated above a 16.0 g/t silver cut-off grade (Giroux and Melis, 2013).

The deposit is distinguished from other large base metal showings and deposits elsewhere in Yukon by its uncommonly high silver contents relative to contained base metals and by its enrichments of tin, indium and other relatively rare metals. Metallurgical test work has demonstrated that flotation processing can effectively recover most of the silver, copper, zinc, lead and indium. Tin recovery is poor.

The Keg Deposit is favourably situated in an area where several regional structural elements occur close together. This cluster of large-scale structures likely played an important role in ground preparation for the deposit. The mineralization is hosted in strongly altered and folded siliceous siltstone and chert, which may have been deformed by a buried thrust fault that failed to break through these units. During folding of siliceous siltstone and chert, small-scale fracturing produced permeability in the otherwise relatively impermeable rocks.

In addition to the ground preparation described above other elements probably played roles in the development of mineralization within the Keg Deposit. The folded and fractured siliceous siltstone and chert host rocks are interbedded with silty limestone and calcareous siltstone, which are the most reactive rocks in the area. Fluids channeling through the fractured siliceous siltstone and chert likely flowed upwards or laterally into the reactive stratigraphy. A small intrusive plug located approximately two kilometres south of the deposit may have provided a local heat source that powered the mineralizing hydrothermal cell. Normal and dip-slip faults crosscut the folded siliceous siltstone and chert and may have acted as deep-seated fluid conduits that localized hydrothermal flow.

A number of other showings elsewhere on the Keg property exhibit geochemical signatures that resemble the Keg Main Zone. The Rebel Zone is the most advanced of these other showings and is similarly enriched in silver, lead, zinc, copper, indium and tin. Drilling to date at the Rebel Zone has been insufficient to adequately outline and characterize the mineralization; however, it is believed the potential exists for a significant bulk tonnage deposit.

Numerous high-grade epithermal silver veins have also been identified on the property within the northerly Tay Trend and southerly Mount Mye Trend. Veins and breccias at the Hammer, Cody,

Snap, Owl Southwest and Weld zones are all strongly enriched in silver, but also contain elevated tin and indium, both of which are uncommon in Yukon. The presence of tin and indium within both the vein and the bulk tonnage targets on the property suggest that the two styles are related. The silver-rich veins may be distal or higher level expressions of bulk tonnage zones.

Some of the mineralization in the southeastern part of the property is associated with contact metamorphism. At the Ku and Gauss zones, skarn mineralization replaces calcareous horizons adjacent to the Orchay Batholith. At the Marks Zone, skarn mineralization and hornfels alteration have been observed in areas where locally defined dyke float has been found. The soil geochemical signature is similar at the Ku and Marks zones.

The property is very well situated in regards to infrastructure and, considering the numerous discoveries, further work is warranted.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



J. Morton, B.Sc., GIT

## REFERENCES

Bond, J.D.

- 1999 The Quaternary History and Till Geochemistry of the Anvil District, East-Central Yukon; *in* Yukon Exploration and Geology 1998, C.F. Roots and D.S. Emond (eds.), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 105-116.
- 2001 Quaternary Geology and Till Geochemistry of the Anvil District (parts of 105K/2, 3, 5, 6 and 7), central Yukon Territory; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 11, 38 p.

Environment Canada

- 2010 Canadian Climate Normals 1971-2000 – Faro, Yukon; available at:  
[http://www.climate.weatheroffice.gc.ca/climate\\_normals/results\\_e.html?Province=YT%20%20&StationName=&SearchType=&LocateBy=Province&Proximity=25&ProximityFrom=City&StationNumber=&IDType=MSC&CityName=&ParkName=&LatitudeDegrees=&LatitudeMinutes=&LongitudeDegrees=&LongitudeMinutes=&NormalsClass=A&SelNormals=&StnId=1548&](http://www.climate.weatheroffice.gc.ca/climate_normals/results_e.html?Province=YT%20%20&StationName=&SearchType=&LocateBy=Province&Proximity=25&ProximityFrom=City&StationNumber=&IDType=MSC&CityName=&ParkName=&LatitudeDegrees=&LatitudeMinutes=&LongitudeDegrees=&LongitudeMinutes=&NormalsClass=A&SelNormals=&StnId=1548&)

Giroux, G.H. and Melis, L.A

- 2013 Technical Report using British Columbia Securities Commission National Instrument 43-101 Guidelines describing Geology, Mineralization, Geochemical Surveys, Diamond Drilling, Metallurgical Testing and Mineral Resources at the Keg Property. Report prepared for Silver Range Resources by Giroux Consultants Ltd. and Melis Engineering Ltd.

Yukon Geological Survey

- 2010a Geoprocess File Summary Report for Finlayson Lake Map Area N.T.S. 105G; available at:  
[http://ygsftp.gov.yk.ca/publications/openfile/2002/of2002\\_8d\\_geoprocess\\_file/documents/map\\_specific/105g.pdf](http://ygsftp.gov.yk.ca/publications/openfile/2002/of2002_8d_geoprocess_file/documents/map_specific/105g.pdf)

**APPENDIX I**  
**STATEMENT OF QUALIFICATIONS**

## **STATEMENT OF QUALIFICATIONS**

I, Jack Morton, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, hereby certify that:

1. I graduated from Simon Fraser University in 2013 with a B.Sc. in Earth Science.
2. From 2007 to present, I have been actively engaged in mineral exploration in Yukon Territory, British Columbia, and Northwest Territories
3. I am a Geoscientist in Training (G.I.T.) with the Association of Professional Engineers and Geoscientists of British Columbia.
4. I supervised the field program and have interpreted all data resulting from this work.



J. Morton, B.Sc., GIT

**APPENDIX II**  
**STATEMENT OF EXPENDITURES**

Statement of Expenditures  
Keg Group 6 (497) mineral claims  
March 3, 2017

Labour

H. Burrell geologist 37 hours April to March 3 at \$106/h	\$ 4,118.10
W. Schneider expedite 6 hours April to March 3 at \$92/hr	579.60
J. Mariacher office 30 hours April to March 3 at \$90/hr	2,835.00
J. Morton geologist 16 hours April to March 3 at \$82/hr	1,377.60
L. Corbett expedite 11 hours April to March 3 at \$81/hr	935.55
L. Smith expedite & office 11 hours April to March 3 at \$69/hr	<u>796.95</u>
	10,642.80

Expenses (incl. management)

Field room and board – mandays @ \$180/day	813.60
Top Rank Diamond Drilling	18,645.00
Trans North Helicopters .17 hours B3 @ 1935/hr plus fuel	35,889.03
Pacesetter Petroleum Limited	3,664.70
Faro Studio Hotel	1,572.61
Truck rental and fuel	<u>1,179.05</u>
	61,763.99

Total \$72,406.79

