ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016 - 510 West Hastings Street
Vancouver, B.C. V6B 1L8
Telephone: 604-688-2568 Fax: 604-688-2578

ASSESSMENT REPORT

describing

GEOLOGICAL MAPPING AND SAMPLE COLLECTION BY PHD CANDIDATE, DRILL PAD RECLAMATION AND EQUIPMENT BACKHAULING

Field work performed from June 20 to July 19, 2015

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

H. Burrell, B.Sc., P.Geo.

April 2016

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FIGURES

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 a multi-faceted program of: mapping and sampling conducted on the property by Laurence Pryer, a PhD candidate at University of Alberta; 10 days of drill pad reclamation; and, one day of equipment backhauling. The program was overseen by Archer, Cathro & Associates (1981) Limited in summer 2015 on behalf of Silver Range. Field work was performed between June 20 and July 19, 2015. The author supervised the program, and her 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^2. 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.

Claim Name		Grant Number	Expiry Date
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

SILVER RANGE RESOURCES LTD.

FIGURE 1

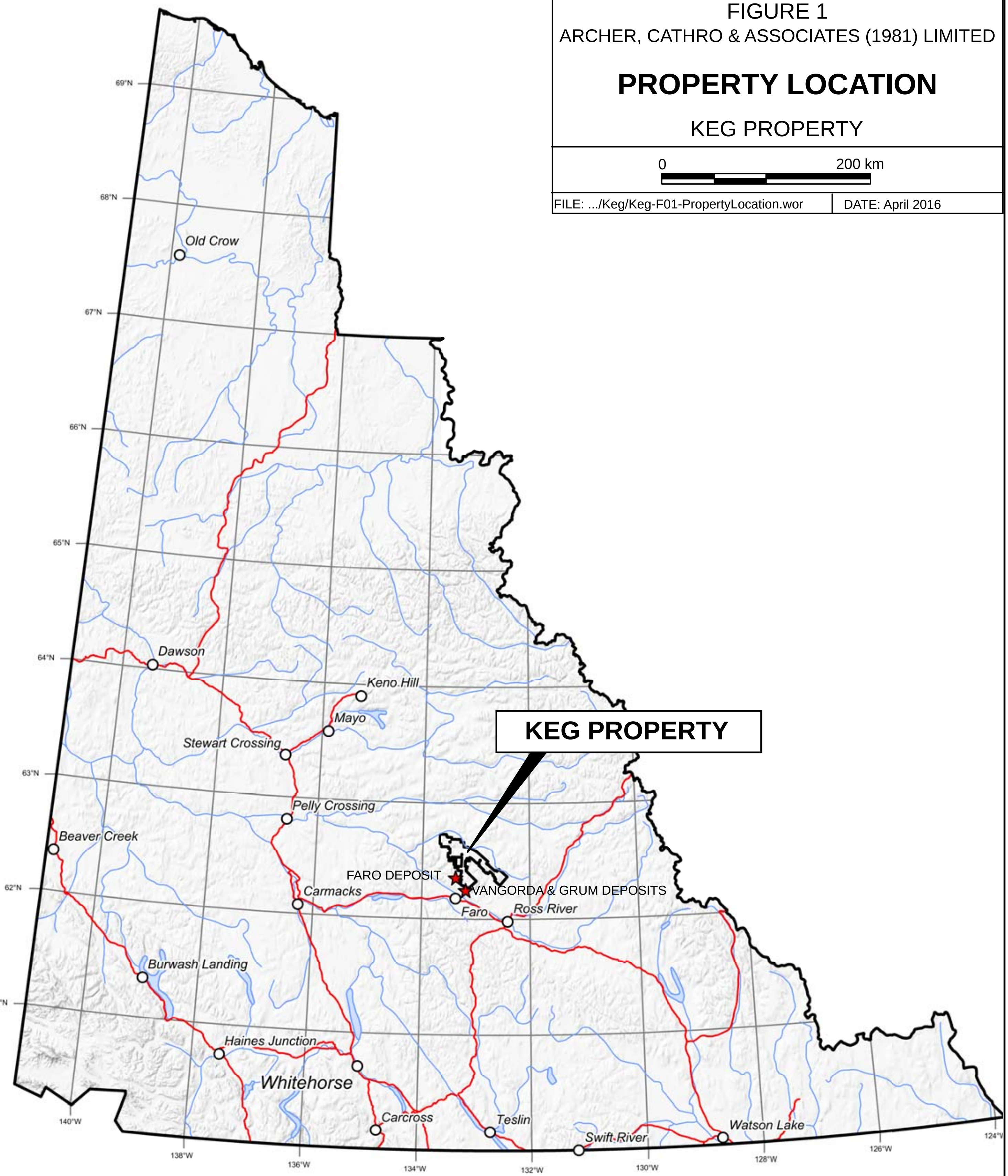
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PROPERTY LOCATION

KEG PROPERTY

0 200 km

FILE: .../Keg/Keg-F01-PropertyLocation.wor | DATE: April 2016



	364 - 369	YD63264 - YD63269	March 13, 2034
	370 - 375	YD27420 - YD27425	March 13, 2034
	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 include 2015 work that has been filed for assessment credit.

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 2015, access to the Keg property and semi-weekly logistical support were provided by a Bell 206B helicopter operated by Trans North Helicopters of Whitehorse from its base in Ross River. On June 20, an equipment backhaul was performed by a Eurocopter A-Star B3 helicopter owned by Trans North from its base in Carmacks. Leased lots at the Faro airport served as a logistical staging area. Most project administration was done in Archer Cathro's Whitehorse office.

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 21ºC during the day and 6 to 9ºC at night (Environment Canada, 2010). Winter temperatures average -17 to -10ºC 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.

2015 WORK PROGRAM

Field work done by PhD student

Laurence Pryer and his field assistant spent 10 days at the Keg base camp re-logging and sampling specific sections of diamond drill core for analysis as part of his PhD research at the University of Alberta. Once this work was complete, the pair worked from two fly camps located northwest of the base camp (Figure 2). Appendix III contains an update of Mr. Pryer's research and summary of his 2015 field work.

Equipment backhaul

On June 20, 2015, a three person Archer Cathro crew and the two University of Alberta students performed one day of equipment backhauling from the Keg main camp to the Faro airport where it was loaded onto trucks and trailers and ultimately transported to Archer Cathro's facility in Whitehorse. This work was timely because the helicopter was already onsite to position the students.

Diamond drill pad reclamation

One Archer Cathro employee spent 10 days reclaiming diamond drill pads in the Keg main drill area. All of the drill pads were accessed by foot off of the road network connecting the base camp and the main drill area.

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

Heather Burrell

H. Burrell, B.Sc., P.Geo.

REFERENCES

Bond, J.D.

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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

APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Heather Burrell, geologist, with business addresses in Vancouver and Squamish, British Columbia and Whitehorse, Yukon Territory and residential address in Squamish, British Columbia do hereby certify that:

1. I graduated from the University of British Columbia in 2006 with a B.Sc in Geological Sciences.

2. From 2004 to present, I have been actively engaged in mineral exploration in the Yukon Territory, British Columbia and Northwest Territories.

3. I am a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.

4. I am a partner in Archer, Cathro & Associates (1981) Limited.

5. I have personally supervised the fieldwork reported herein and have interpreted all data resulting from this work.

H. Burrell, B.Sc., P.Geo

APPENDIX II

STATEMENT OF EXPENDITURES

Statement of Expenditures
692 Keg Group 1 and 750 Keg Group 2 mineral claims
March 8, 2016

Labour

W.D. Eaton (geologist) 12 hours April to January at $120/hr	$ 1,512.00
H. Burrell (geologist) 81 hours April to January at $106/hr	9,015.30
A. Mitchell (geologist) 3 hours April to January $82/hr	258.30
A. Tuzlak (field assistant) 96 hours April to January at $49/hr + bonus	5,831.70
D. Huston (expedite) 8 hours April to January at $92/hr	772.80
W. Schneider (expedite) 16 hours April to January at $92/hr	1,545.60
J. Mariacher (office) 41 1/4 hours April to January at $90/hr	3,898.13
D. Arnold-Wallinger 1 hour April to January at $85/hr	89.25
L. Corbett (expedite) 24 hours April to January at $81/hr	2,041.20
L. Smith (expedite & office) 35 1/2 hours April to January at $69/hr	2,571.97
S. Newman (office) 21½ hours April to January at $64/hr	1,444.80
	28,981.05

Expenses (incl. management)

Field room and board – 38 mandays @ $180/day	7,729.20
Trans North Helicopters .3 hrs AStar 350 @ 1835/hr plus fuel and 6 hours Bell 206B at $990/hr plus fuel	19,783.29
University of Alberta – field season expenses for L. Prior	16,932.59
Laberge Environmental Services	28,926.08
Truck rental and fuel	2,058.09
	75,429.25

Total	$104,410.30

Keg Group 1 $52,205.15
Keg Group 2 $52,205.15

APPENDIX III

LAURENCE PRYER SUMMARY OF PHD: THE AGE AND GENESIS OF THE MINERALIZATION ON THE SILVER RANGE PROPERTY

March 2016

Laurence Pryer

Summary of PhD: The age and genesis of the mineralization on the Silver Range property

Introduction

The original NSERC grant outlined the following as the aims of the PhD project:

- To identify the general geological framework of the mineralization e.g. stratigraphic context, age of intrusions and volcanic units on the property.
- To constrain the mineralogy of the ore minerals of economic interest in showings of the Tay trend e.g. of the silver bearing phases and identify the host for the tin and indium.
- To constrain the nature and origin of some of the different mineralization styles on the property and their lithogeochemical signatures.

March 2016 marks two and a half years since I began my PhD on the age and genesis of the mineralization on the Silver Range property. In this short document I will try to summarize what I have done in that time and what I plan to do in the next year and a half to finish my studies. This report is brief and I would be happy to answer more detailed questions on any part of the project.

The report is laid out by year and will briefly outline the results.

Year 1 (Sept 2013 to Feb 2015)-

The aim of the first year of my study was to gain a detailed understanding of the mineralization at the Keg deposit including a paragenesis and age of mineralization as well as information on the fluid and metal sources.

Methods

- >700 field and core samples were collected in the summer of 2013.
- Over 150 polished thin sections from the Keg deposit were used to create a paragenesis for the mineralization.
- Cathodoluminescence on 10 thin sections added to the paragenesis.
- 13 days of microprobe analyses were used to determine the minor element chemistry of the garnet, carbonate, diopside and sulphides at the Keg deposit.
- 2 LA-ICP-MS days to determine the trace element chemistry of the sphalerite and garnet at the Keg deposit.
- Re-Os dating of arsenopyrite to give an age for the mineralization.
- Lead isotopes from 11 galena separates to identify a potential metal source.
- Sulphur isotopes from 36 sulphide separates to identify S source.
- Carbon isotopes from 40 carbonate separates to identify C source.
- 20 X-ray diffraction samples to identify the minerals involved in fine grained alteration.
- Fluid inclusion study on 10 thick sections from Keg mineralization aiming to characterize the fluid that formed the Keg mineralization (still ongoing).
- 3D modeling of the mineralization at the Keg deposit in Leapfrog to constrain the controls on mineralization.

Results

The detailed study of the mineralization at the Keg deposit led to the creation of the paragenesis seen in Figure 1. An initial prograde skarn forms either as a replacement of limestone beds or less commonly as brittle fracturing within siltstone beds. Silver and bismuth rich galena, pyrrhotite and arsenopyrite associated with andradite garnets and quartz are deposited in this stage at around 370±20°C.

The second stage of mineralization involves the formation of a retrograde skarn at around 270±32°C. This stage is associated with the majority of the sulphides at the Keg deposit, consisting of sphalerite, chalcopyrite and pyrrhotite associated with diopside, carbonate and quartz.

The final economic stage of mineralization involves phase separation of the fluid and brittle fracturing of the host rock forming epithermal/ mesothermal vein fills containing quartz, carbonate and sulphides including sphalerite, arsenopyrite and silver poor galena. Re-Os dating of the arsenopyrite associated with this stage gave a model age of 100.6±0.5Ma

The Keg deposit can therefore be described as a telescoped system with shallower, later, mineralization overprinting the deeper, earlier, mineralization. Lead, carbon and sulphur isotope studies support this model for mineralization.

3D modeling of the Keg deposit shows that the mineralization is strongly structurally controlled by a fault (Figure 2). This structure is proposed to be a reactivated Jurassic thrust fault. The structural model for the Keg deposit shown in Figure 3 shows a model for the tectonic evolution of the area.

Year 2-Feb 2015-August 2015-

During the first year of the study it was realized that aspects of the regional geology on the Silver Range property are unique within the Selwyn Basin. Firstly, the eight calderas (belonging to the South Fork Volcanic Suite 99-97Ma) in the area (Figure 4) are the only Cretaceous felsic extrusives seen in the Yukon. Secondly, the caldera rocks are on the same stratigraphic level as the Anvil Batholith (104-109Ma), a deep plutonic body, suggesting a significant period of uplift between the emplacement of the Anvil Batholith and the extrusive volcanism. Dating of the Keg deposit suggests the mineralization formed in the period between the emplacement of the Anvil Batholith and the calderas. Therefore, an accurate understanding of the Silver Range property and the regional igneous rocks between 110-90Ma is required to fully understand the Keg deposit. To gain this understanding a field season was planned from June-August 2015. The field season's goal was to collect samples of all of the regional intrusions and lithological units.

Methods

- 4 weeks was spent at 3 fly camps (at the Owl SW showing, the Keg camp and below Two Pete mountain) to sample in those areas.
- 1 week was spent car camping on the N Canol road to access the intrusions in that area.
- 1 week was spent camping in Faro to access the Anvil Batholith around the mine site.

Results

The field season was highly successful. 34 igneous samples (ranging from 2-3kg of unaltered rock) were collected from 10 regional igneous bodies. Unaltered samples from all lithologies in the region were also sampled. No significant incidents occurred.

Year 3- August 2015 to present-

The current aims of my study are to:
1. Accurately constrain the chemistry and age of the various Cretaceous igneous units in the Keg deposit region.
2. Constrain the thermal evolution of the region, via low temperature geothermochronology, and link this thermal evolution to the potential uplift in the region.

Methods

- Thin sections cut from 26 different igneous samples.
- Bulk rock assays on 11 igneous whole rocks.
- Zircon separation performed on 11 samples.
- U-Pb dating on zircons from 10 samples.
- U-Th/He analysis on zircons from 9 samples to determine low temperature (125-150°C) evolution of the region.
- Ar-Ar dating on mineral separates from 10 samples to determine high temperature (375-400°C) evolution of the region.
- Pb-Pb isotopes from 11 whole rock igneous samples to show source region signatures.
- Nd and Sr isotopes on 11 whole rock igneous rocks samples to show source region signatures.

Preliminary Results

Early data from the third year study shows an interesting evolution in igneous chemistry in the Silver Range property region. Accurate dating has been carried out on the first five samples. The bulk rock chemistry shows an evolution with time (Figure 5) from a 2 mica quartz monzogranite (108.14±0.97Ma) of the Anvil batholith to a hornblende bearing diorite of the Tay river suite. (98.00±0.62Ma). The Pb isotopes also show a more primitive source with time. These results are not what are expected in normal upper crustal magma evolution. More results will be available in the next few months to further study this problem.
At the moment the working hypothesis is that the changes in the igneous rocks with time are due to a Cretaceous delamination event.

Finishing the PhD-

Currently, all data are in hand with the exception of Ar-Ar and Sr and Nd isotopes. I hope to be in possession of all data in time to present at the 2016 GAC-MAC in Whitehorse in early- June. From there it should take me around a year to write up my findings into 3 papers, which I will submit to peer reviewed journals. I hope to be finished and defended **on-time** by September 2017 (latest)!

I would once again like to thank the Board Members at Silver Ranges for the amazing opportunity I was offered with this project. The Keg deposit is fascinating and I have really enjoyed studying and working in the area. I would be happy to visit the AC offices around the time of GAC-MAC and discuss the project in more detail.

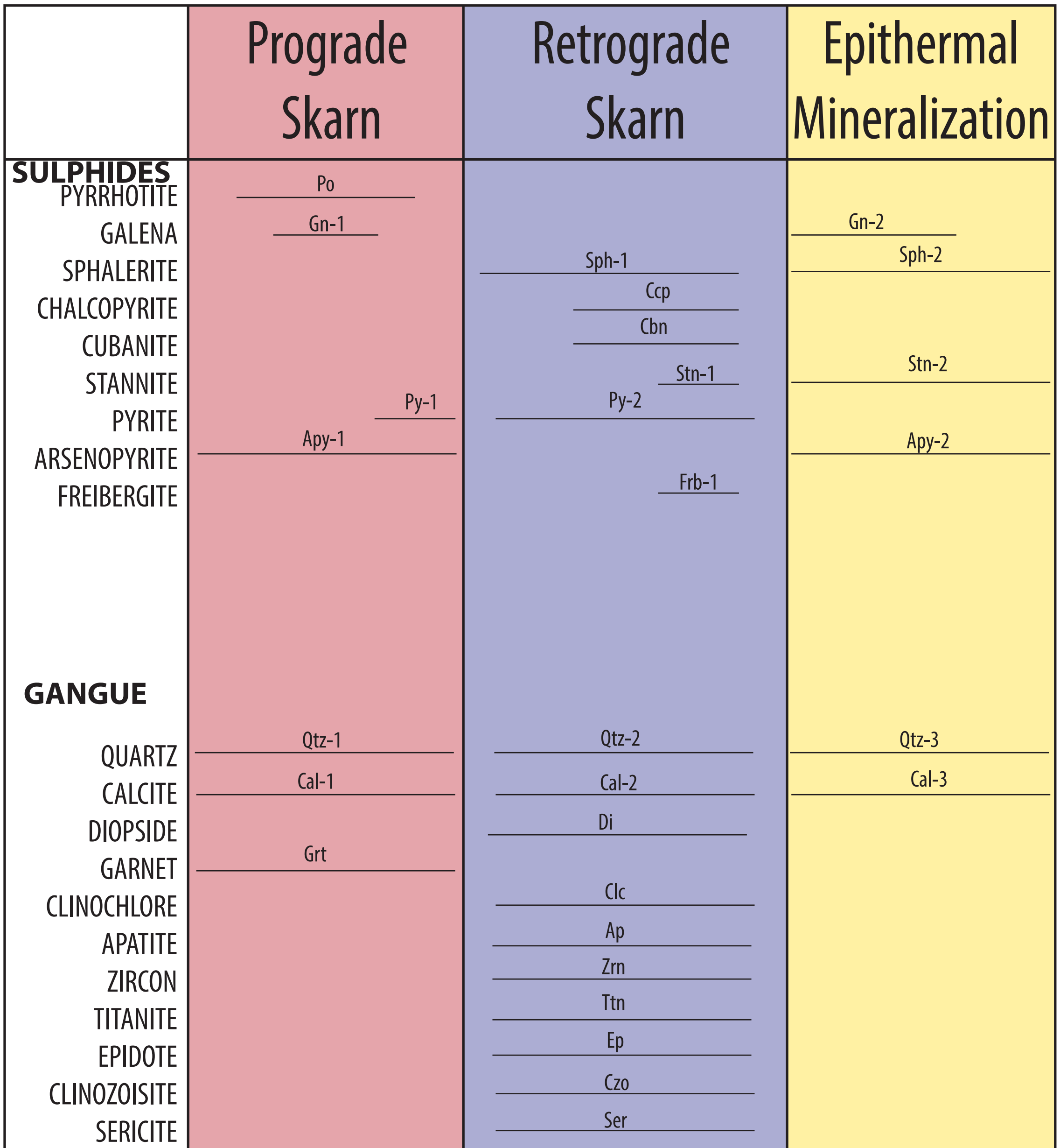

Figure 1: Simplified paragenesis for mineralization at the Keg deposit.

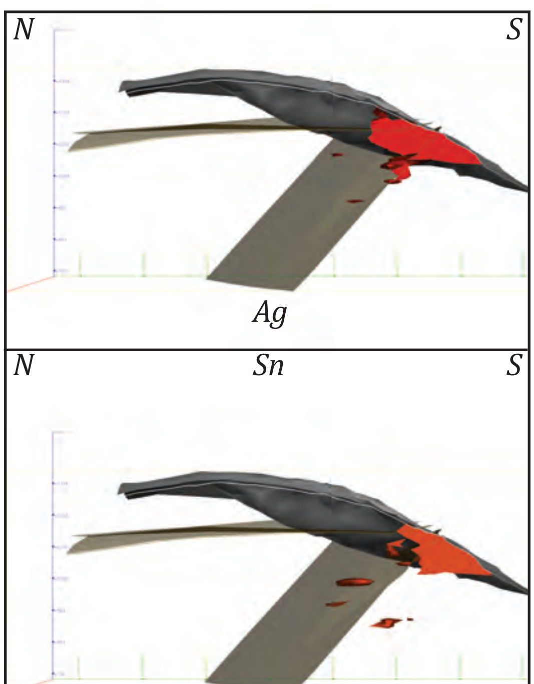

Figure 2: 3D modelling of the high grade regions at the Keg deposit. Top shows Ag>20ppm. Bottom shows Sn>200ppm.

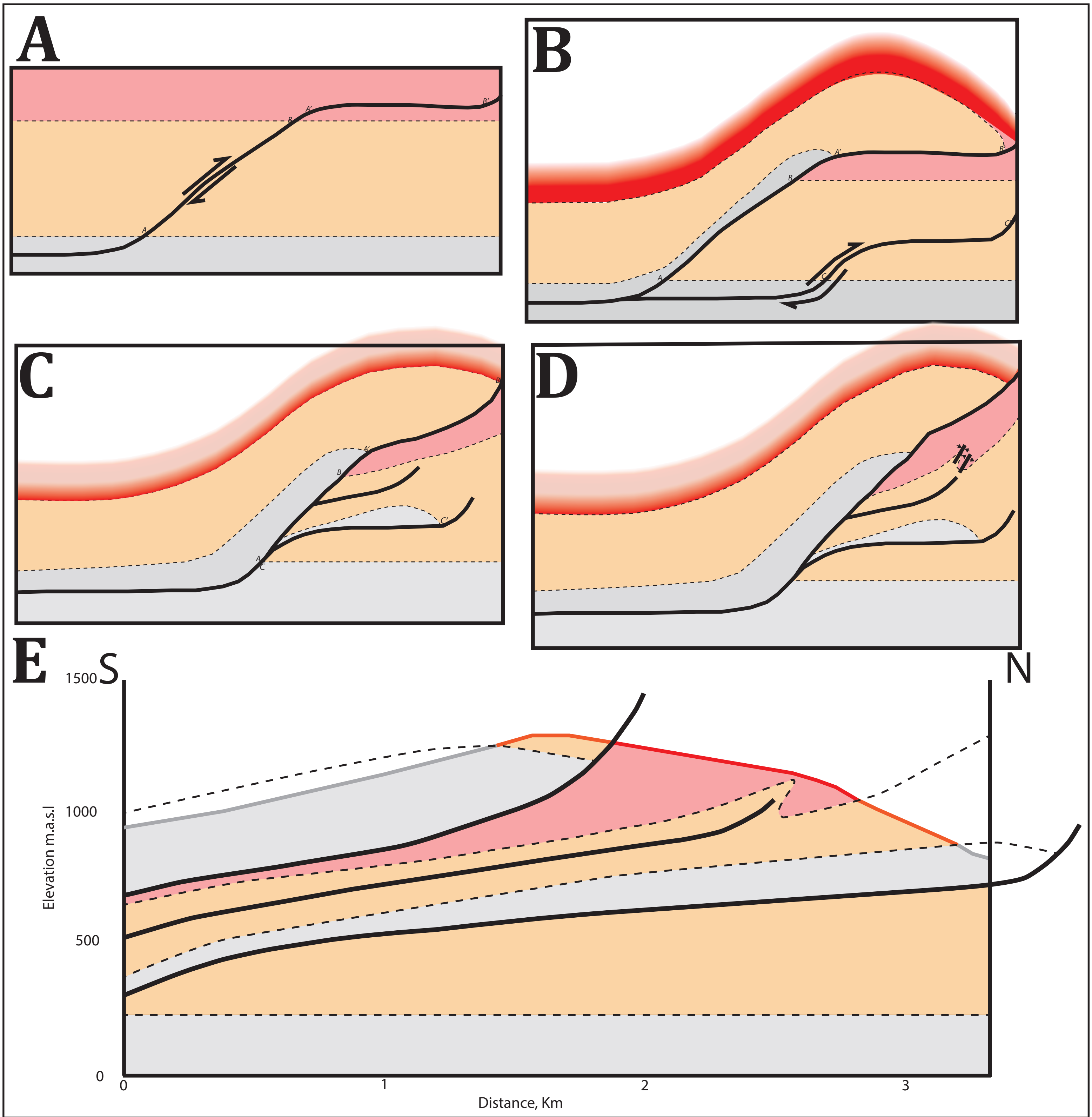

Figure 3: A-D: Simplified tectonic diagrams showing the formation of the Keg deposit structures.
E: To scale cross section across the Keg deposit showing modern topography.
Red= Mount Christe Cherts. Orange= Tay Formation. Grey= Earn Group.

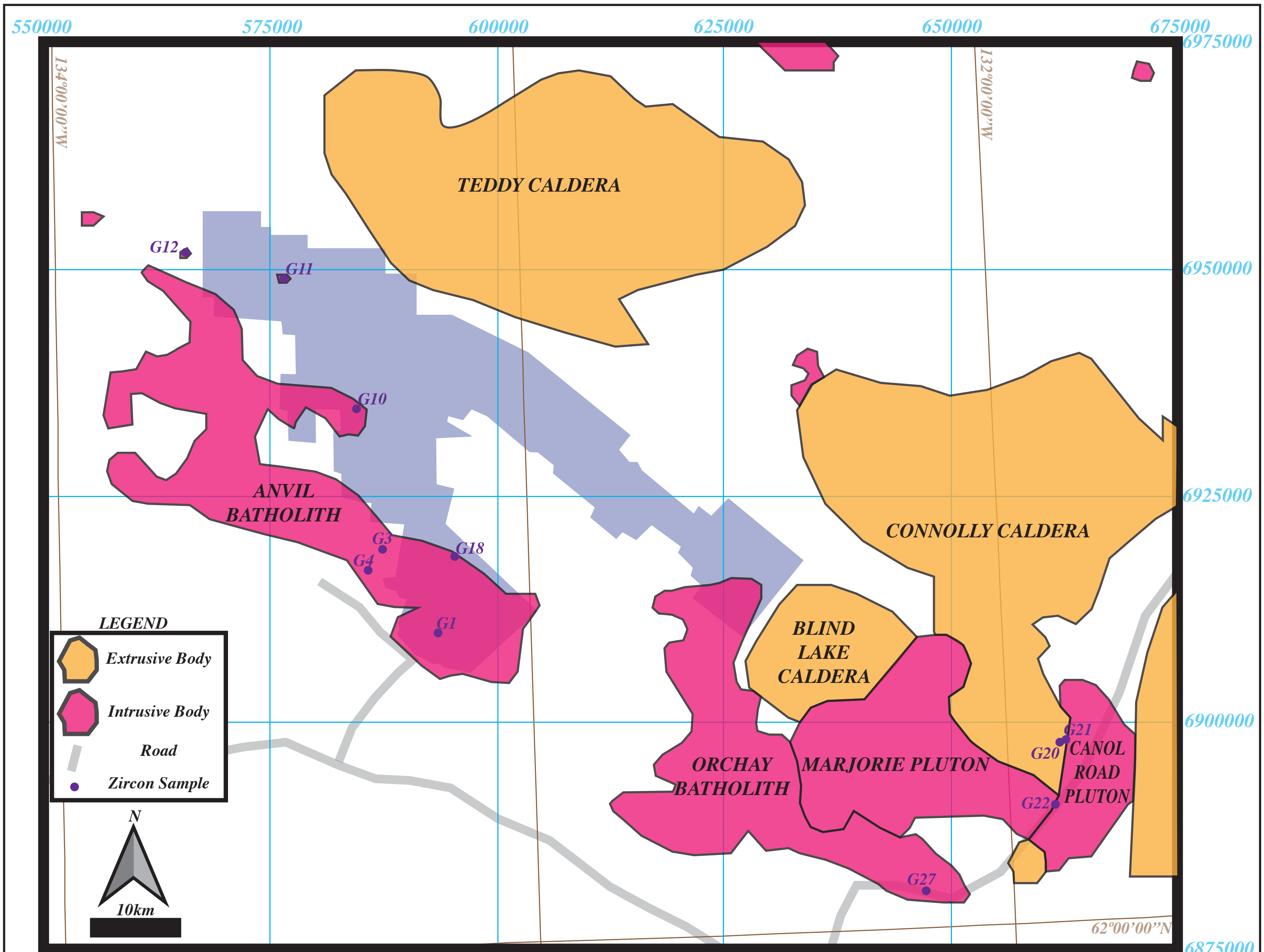

Figure 4: Cretaceous igneous activity around the Silver Range property (Blue). Adapted from Gordey 2013. Also shows spread of zircon samples collected and analysed.

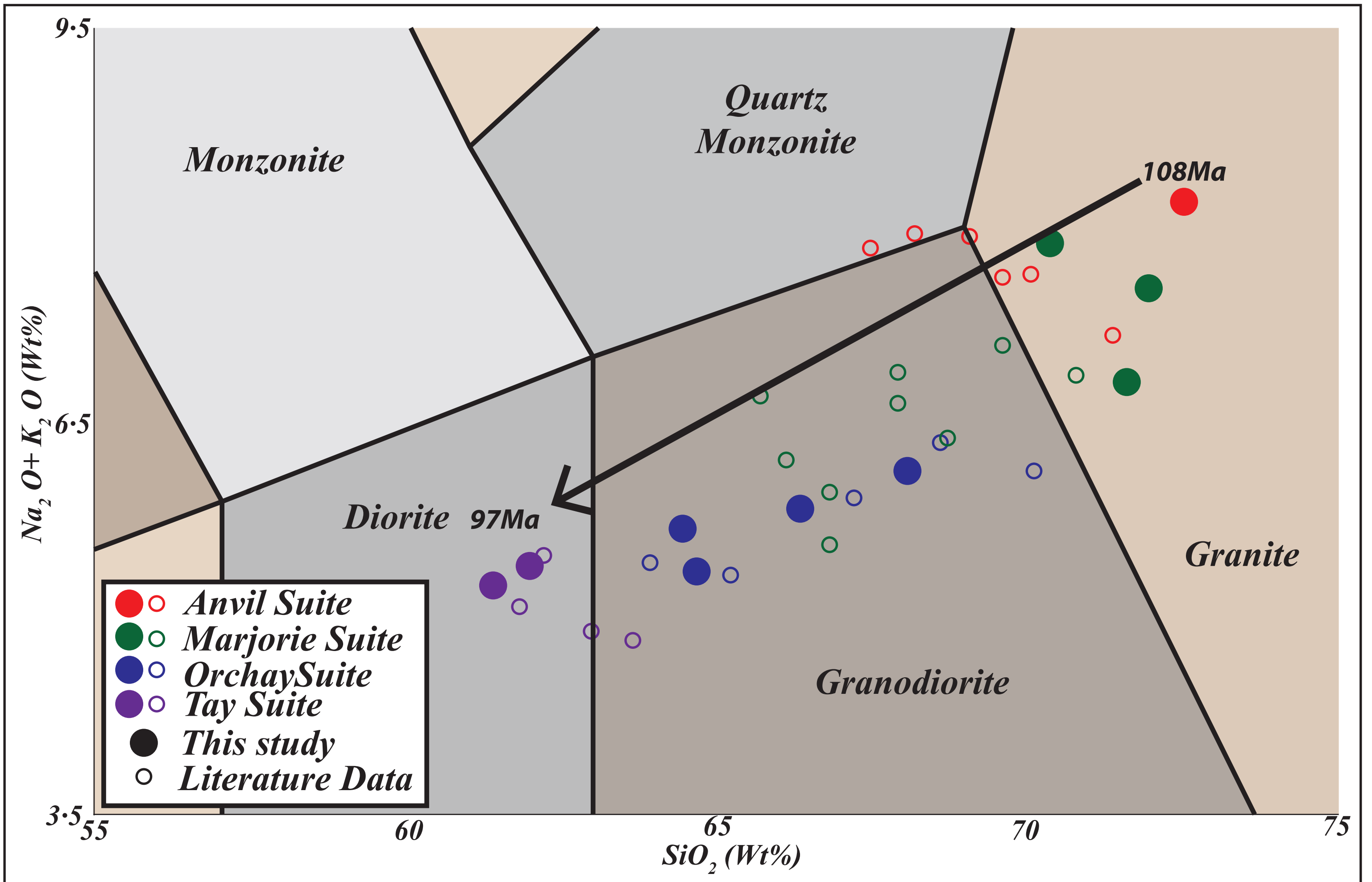

Figure 5: Geochemical evoltuion with time seen in the bulk rock chemistry of granite samples. Literature data from Pigage (2004), Pigagae & Anderson (1985), Gordey (2013) and Rogers (Pers Comm.)


KEG PROPERTY BOUNDARY
SILVER RANGE RESOURCES LTD.
FIGURE 2
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
CLAIM LOCATIONS
KEG PROPERTY
0
4.0 km
UTM ZONE 8, NAD 83, 105K/05,06,07,08,09,10,11,12 Contour Interval: 100 ft
FILE: .../Keg/Figures/Keg-F02-Claims.wor
DATE: APRIL 2016
T.N.
1°33'
23°55'
Grid north
Magnetic north
Annual change decreasing 25.6'
FIRST NATION LAND - WITHHELD FROM STAKING
PROPERTY BOUNDARY