

2019 Assessment Report
Mom & Son Grouped Claims
Keno Hill, Yukon

Property Comprising the Following Claims:

Mom 1- 8, Son 1- 6, K100 – 101, Galaxy, Barb One

PREPARED FOR:
Alexco Keno Hill Mining Corp.
Elsa Reclamation & Development Company Ltd.

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

NAD 83 Zone 8
Northing: 7088808.3
Easting: 487281.1

PREPARED BY:

Liana Stammers, Seymour Iles, and Alan McOnie

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

DATES WORK PERFORMED: August 23-28, 2019

DATE OF REPORT: December 3, 2019

TABLE OF CONTENTS

| | | |
|----|--------------------------------------|---|
| 1 | SUMMARY..... | 1 |
| 2 | INTRODUCTION..... | 1 |
| 3 | LOCATION AND ACCESS..... | 1 |
| 4 | CLAIM STATUS..... | 3 |
| 5 | REGIONAL GEOLOGY..... | 3 |
| 6 | PROPERTY GEOLOGY..... | 4 |
| 7 | EXPLORATION HISTORY..... | 5 |
| 8 | SOIL GEOCHEMICAL SURVEY..... | 6 |
| 9 | DISCUSSION..... | 7 |
| 10 | CONCLUSIONS AND RECOMMENDATIONS..... | 8 |
| 11 | List of References..... | 9 |

LIST OF FIGURES

| | | |
|----------|---|---|
| Figure 1 | General Location of the Group..... | 2 |
| Figure 2 | Location of the Mom & Son Grouping Claims..... | 3 |
| Figure 3 | Regional Geology of the Claim Group Showing the Location of 2019 Soil Samples and the Christal MinDat Occurrence (also see Legend, Figure 4). | 4 |
| Figure 4 | Keno District Stratigraphy (McOnie and Read, 2009)..... | 5 |
| Figure 5 | Location of 2019 Soil Geochemical Survey Samples..... | 6 |
| Figure 6 | - Soil Assays of Ag (ppm) over geology..... | 7 |
| Figure 7 | - Soil Assays of Zn and Pb (ppm) over geology..... | 8 |

LIST OF TABLES

| | | |
|---------|---------------------|---|
| Table 1 | Grouped Claims..... | 2 |
|---------|---------------------|---|

LIST OF APPENDICES

| | | |
|-------------|------------------------------------|----|
| Appendix 1: | Statement of Expenditures..... | 10 |
| Appendix 2: | 2019 Soil Sample Descriptions..... | 11 |
| Appendix 3: | 2019 Soil Sample Assays..... | 12 |
| Appendix 4: | Statement of Qualifications..... | 14 |

1 SUMMARY

Between August 27 and August 28, 2019, a series of geochemical soil samples were collected from the southern slopes of Ericson Gulch located on the southwestern side of Keno Hill. The area is held as a block of quartz claims held by Alexco Keno Hill Mining Company and Elsa Reclamation & Development Company Ltd.

The geochemical survey was designed to locate the projected trace of the silver – lead – zinc mineralized No. 6 Vein on its southwest extension, and weak silver anomalies were obtained on two of the soil lines where the vein was projected. Sample density would need to be increased to further define the trend.

2 INTRODUCTION

This report details the extent and results of a soil sampling program conducted on the Mom 6 – 8, Son 3, and Son 5 claims over the period between August 27 - 28, 2019.

Planning, field work, 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 Alexco Keno Hill Mining Company (Table 1).

The property is located on the southwestern slope of Keno Hill within the 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.

Access to the district is via the Silver Trail Highway connecting the villages of Mayo and Keno City, with the property accessible from the Keno Hill Signpost Road that runs northeast 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 Grouped Claims

| Grant | Name | Owner | Original Staking Date | Current Expiry |
|---------|----------|--|-----------------------|----------------|
| Y 69403 | Galaxy | Elsa Reclamation & Development Company Ltd. - 100% | 05/22/1973 | 12/31/2022 |
| YB43712 | Barb One | Elsa Reclamation & Development Company Ltd. - 100% | 10/12/1994 | 12/31/2020 |
| YC32218 | Son 1 | Alexco Keno Hill Mining Corp. - 100% | 08/17/2004 | 12/31/2023 |
| YC32219 | Son 2 | Alexco Keno Hill Mining Corp. - 100% | 08/17/2004 | 12/31/2023 |
| YC32220 | Son 3 | Alexco Keno Hill Mining Corp. - 100% | 08/17/2004 | 12/31/2023 |
| YC32221 | Mom 1 | Alexco Keno Hill Mining Corp. - 100% | 08/19/2004 | 12/31/2023 |
| YC32222 | Mom 2 | Alexco Keno Hill Mining Corp. - 100% | 08/19/2004 | 12/31/2023 |
| YC32223 | Mom 3 | Alexco Keno Hill Mining Corp. - 100% | 08/19/2004 | 12/31/2023 |
| YC32224 | Mom 4 | Alexco Keno Hill Mining Corp. - 100% | 08/19/2004 | 12/31/2023 |
| YC32225 | Mom 5 | Alexco Keno Hill Mining Corp. - 100% | 08/17/2004 | 12/31/2023 |
| YC32226 | Mom 6 | Alexco Keno Hill Mining Corp. - 100% | 08/17/2004 | 12/31/2023 |
| YC32227 | Mom 7 | Alexco Keno Hill Mining Corp. - 100% | 08/18/2004 | 12/31/2023 |
| YC32228 | Mom 8 | Alexco Keno Hill Mining Corp. - 100% | 08/18/2004 | 12/31/2023 |
| YC39586 | Son 5 | Alexco Keno Hill Mining Corp. - 100% | 09/08/2005 | 12/31/2019 |
| YC39587 | Son 6 | Alexco Keno Hill Mining Corp. - 100% | 09/08/2005 | 12/31/2019 |
| YC39676 | Son 4 | Alexco Keno Hill Mining Corp. - 100% | 08/26/2005 | 12/31/2019 |
| e | K 100 | Alexco Keno Hill Mining Corp. - 100% | 06/15/2007 | 12/31/2020 |
| YC56128 | K 101 | Alexco Keno Hill Mining Corp. - 100% | 06/15/2007 | 12/31/2020 |

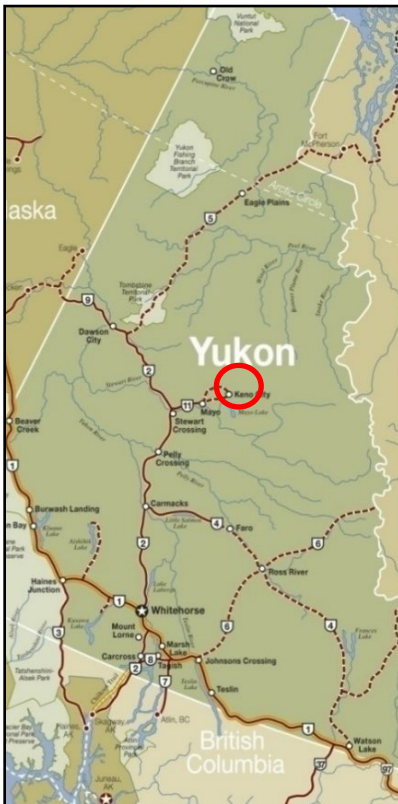


Figure 1 General Location of the Group

4 CLAIM STATUS

The Mom & Son Grouping claims comprise 18 quartz claims covering an area of approximately 2.381 km², with 2019 work conducted on the Mom 6 – 8, Son 3, and Son 5 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 for the Option is included in Appendix 1.

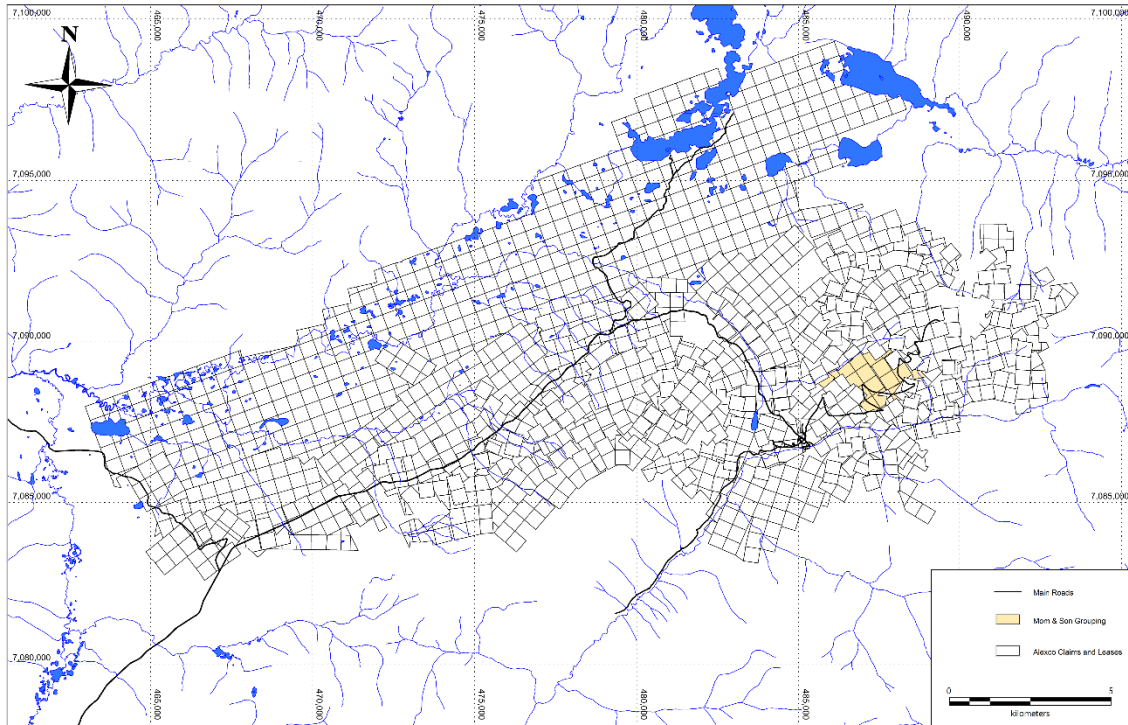


Figure 2 Location of the Mom & Son Grouping Claims

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 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.

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 only a minor amount of outcrop within the claim group with the southwest facing slopes largely covered by shallow soil, talus and permafrost. Surface mapping in the area shows that the claims essentially lie along the WSW trending lower contact of the Basal Quartzite Member of the Mississippian Keno Hill Quartzite, to the underlying upper part of the Devonian – Mississippian Earn Group that comprises interlayered graphitic schist and chlorite-sericite schist. Narrow bands of Triassic greenstone occur through the zone.

The southern extension of the NNE trending Black Cap transverse mineralized vein-fault is projected to pass through the Mom 5 and 7 claims, while the SW extension of the ENE trending Keno No. 6 longitudinal vein-fault is projected to extend across the northern part of the claim group. The northeast trending Comstock-Porcupine vein-fault is projected to extend across the K 100 claim.

The geochemical survey was designed to locate and trace the silver – lead – zinc mineralized No. 6 Vein on its southwest extension.

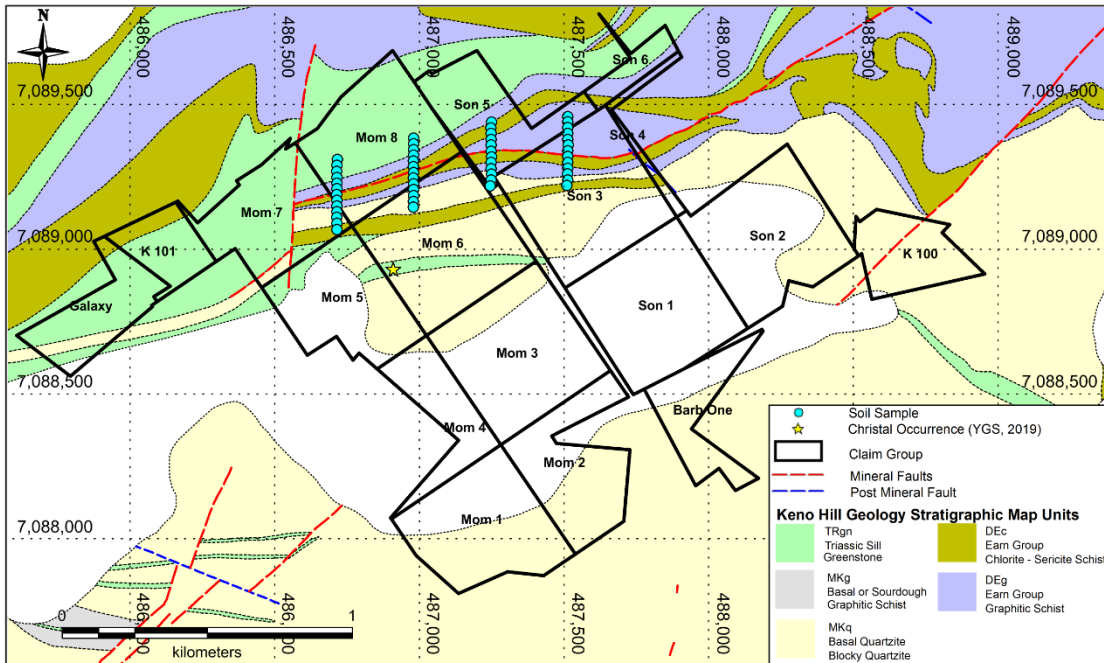


Figure 3 Regional Geology of the Claim Group Showing the Location of 2019 Soil Samples and the Christal MinDat Occurrence (also see Legend, Figure 4).

geochemical and VLF geophysical surveys conducted on the claim group (Moraal, D., 2005 and 2006). In 2010, Alexco Resource Corp completed a small soil gas hydrocarbon program on the claim group and it was determined that the sample grid needed to be more closely spaced in order to provide interpretable results (Lippoth, 2010). Two drill holes were drilled on Mom 5 by Alexco in 2012 targeting the southern extension of the mineralized Lucky Queen vein-fault structure (McOnie, 2012).

8 SOIL GEOCHEMICAL SURVEY

A total of 52 soil samples were collected comprising 4 sample lines spaced 265 m apart, with samples collected at 20 m intervals along these, as shown in Figure 6 and detailed in Appendix 2.

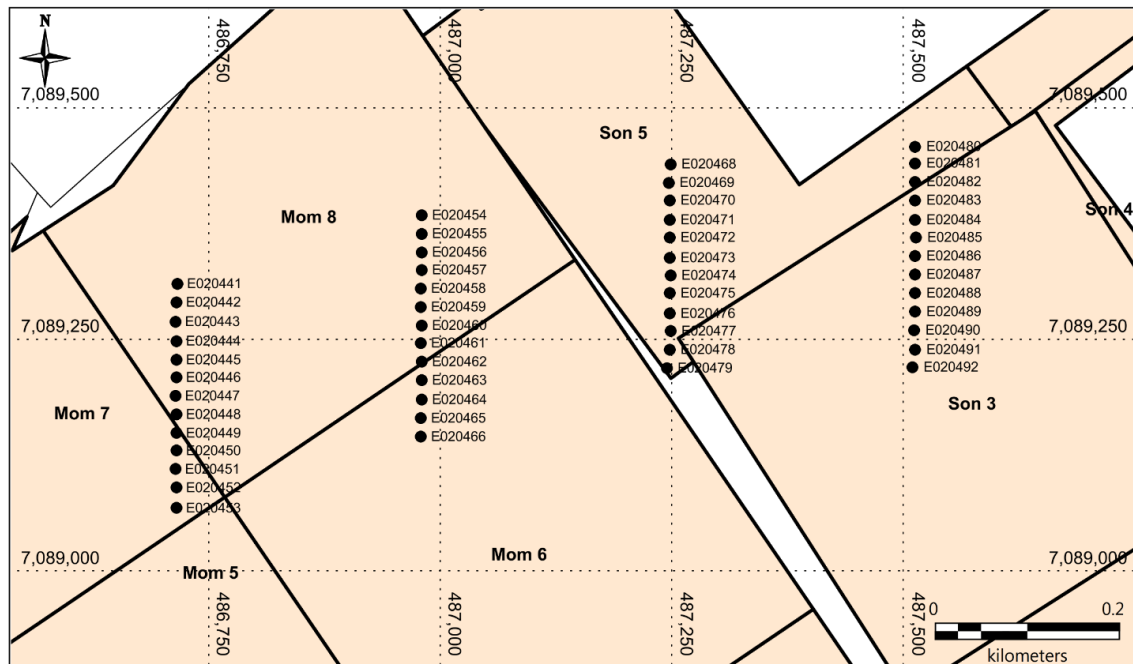


Figure 5 Location of 2019 Soil Geochemical Survey Samples

Samples were sent to ALS Canada for analysis with results reported September 27, 2019. The soils were analyzed for 53 elements by Method ME-MS41L (Super Trace Lowest Detection Level Aqua Regia by ICP-MS), as provided in Appendix 3.

The main Keno Hill style mineral associated elements are silver, lead and zinc. When the results for these are plotted for the survey area, there is no distinct trending. The Ag assays from the two most westerly lines corroborate the extension of the No. 6 Vein in trenching by UKHM and recent mapping done by P. Read and A. McOnie (Figure 6). The Ag anomalies are weak, less than 3ppm Ag between the soils, and the trend of the vein is not seen in the other two lines. These weak silver anomalies are not reflected by the Pb or Zn values, although their values are slightly anomalous along the western-most line where the vein is projected (Figure 7)

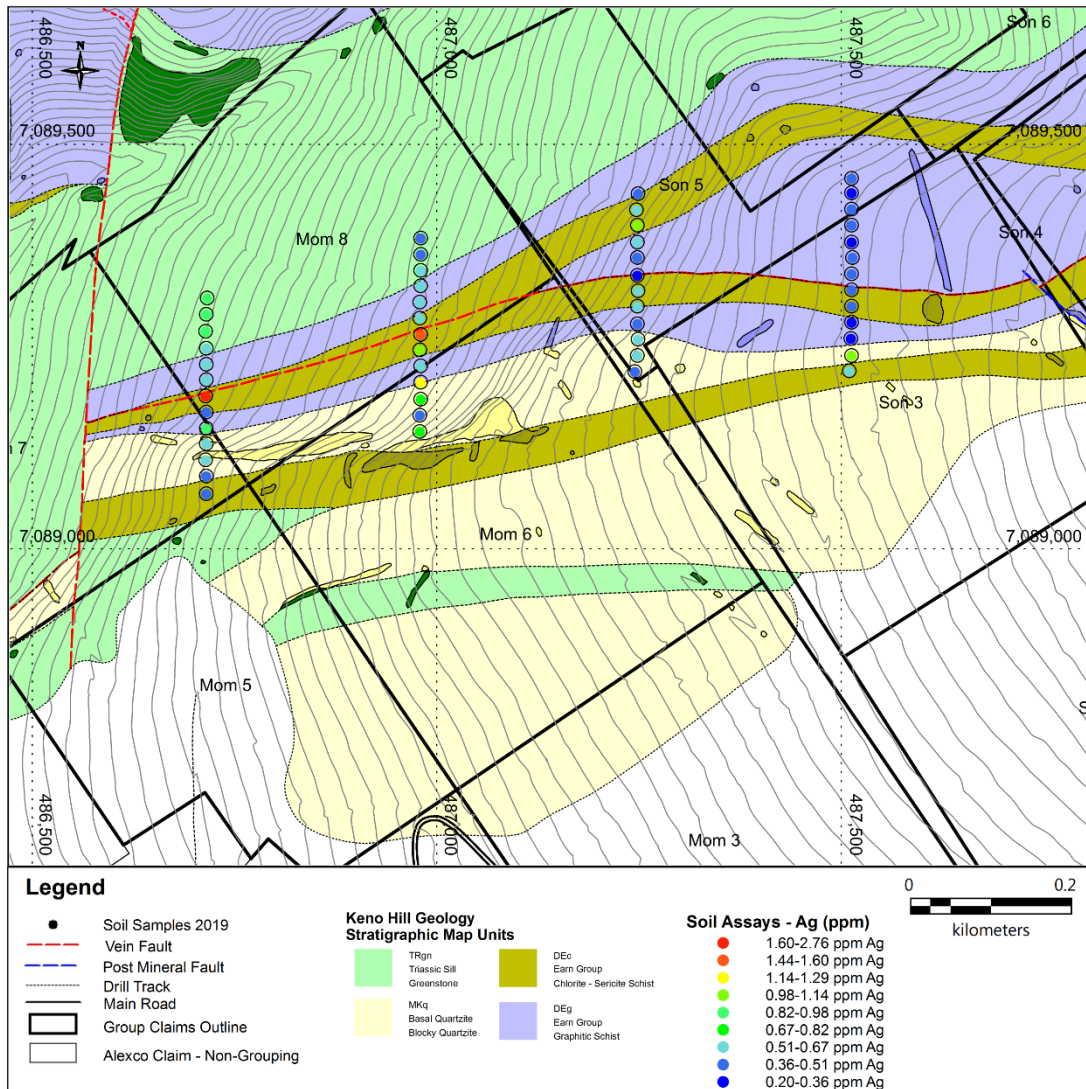


Figure 6 - Soil Assays of Ag (ppm) over geology.

9 DISCUSSION

The geochemical soil survey was designed to test the projected trace of the extended longitudinal Keno No. 6 Vein cut by historic trenches dug by UKHM. Ag, Pb, and Zn anomalies were weak. The survey was successful in part in confirming the projected trace of the Keno No. 6 Vein.

Line and sample spacing could be tightened to infill and further define any of the identified geochemical trends.

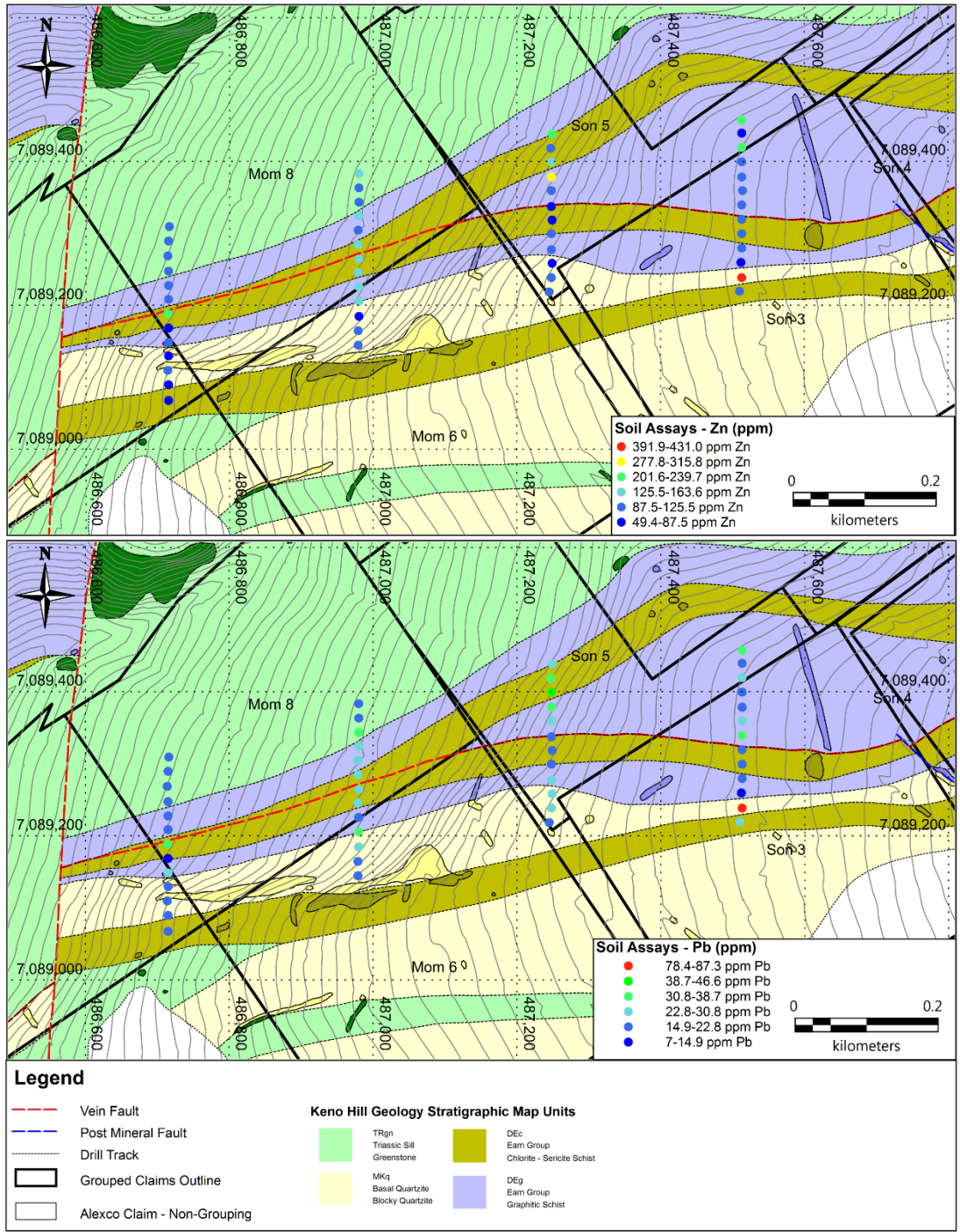


Figure 7 - Soil Assays of Zn and Pb (ppm) over geology

10 CONCLUSIONS AND RECOMMENDATIONS

No immediate follow up is required, and it is not deemed a priority target given the exploration success at other locations in the district.

11 List of References

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.

McOnie, A., (2012) 2012 Assessment Report – Property Comprising the Following Claims: Mom 1-8, Son 1-6, K100-101, Galaxy, Barb One. Keno Hill Area, Mayo Mining District, Yukon Territory.

Moraal, D.N., (2005) Assessment Report – Dirkeno Group Grant Nos. YC32218 to YC32228 (Son 1 to 3 and Mom 1 to 8 mineral claims), Mayo Mining Division, Yukon Territory.

Moraal, D.N., (2006) Assessment Report – Son 4, Son 5 and Son 6 Fractional mineral claims, Grant YC39676, YC39586 and YC39587, Mayo Mining Division, Yukon Territory.

Lippoth, R., (2010) 2010 Soil Geochemical and Geological Mapping Assessment Report for Alexco Resource Corp, Mayo Mining District, Yukon Territory.

Yukon Geological Survey, (2019) Minfile Occurrence Name: Christal, Occurrence Number 105M 061. Retrieved from <http://data.geology.gov.yk.ca/Occurrence/13689> November 8, 2019.

APPENDIX 1 STATEMENT OF EXPENDITURES

August 23-28, 2019

Staff

| | Senior Staff Planning and Reporting | Staff 1 | Staff 2 | Total |
|----------------------|-------------------------------------|----------|----------|-------------------|
| Total Hours | 30 | 25 | 22 | |
| Day Rate | \$350.00 | 350 | 281 | |
| Hour Rate | \$31.82 | \$31.82 | \$25.55 | |
| Cost | \$954.55 | \$795.45 | \$562.00 | \$2,312.00 |
| | | | | |
| Camp Days (2 people) | 1 | 2 | 2 | |
| Camp Rate | \$100 | \$100 | \$100 | |
| Camp Cost | \$100 | \$200 | \$200 | \$500.00 |
| Vehicle Days | 1.0 | 2.0 | | |
| Vehicle Rate | \$100 | \$100 | | |
| Vehicle Cost | \$100 | \$200 | | \$300.00 |

STAFF TOTAL

\$3,112.00

Equipment

| | Cost/item | Number items | \$ |
|----------------|-----------|--------------|------------|
| Sample bags | | | \$15.00 |
| Assay Expenses | \$42.15 | 52 | \$2,191.80 |

**EQUIPMENT
TOTAL**

\$ 2,206.80

**TOTAL
EXPENDITURE**

\$5,318.80

APPENDIX 2 2019 SOIL SAMPLE DESCRIPTIONS

| Surface Sample | Sampled By | Date Sampled | Slope Dip | Slope Face | Vegetation | Sample Depth cm | Soil Horizon | Colour | Soil Type Texture | Comments |
|----------------|------------|--------------|-----------|------------|---|-----------------|--------------|------------------|-------------------|---|
| E020441 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willows, dwarf birch | 40 | B | grey | loamy sand | Hit permafrost shortly |
| E020442 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willows, moss | 50 | B | dark brown | loamy sand | Ice Chunks, <20% rock frags |
| E020443 | AB/AaM | 8/27/2019 | mod | NW | black spruce, low brush, mosses | 105 | B | grey | loam | Water logged, sub-angular/angular frags |
| E020444 | AB/AaM | 8/27/2019 | mod | NW | black spruce, low brush, mosses | 38 | B | dark grey | loamy sand | Frozen ground, sub angular rock frags |
| E020445 | AB/AaM | 8/27/2019 | mod | WNW | black spruce, willow, dwarf birch, mosses | 45 | B | grey | loamy sand | V. lcy, angular flat rock frags |
| E020446 | AB/AaM | 8/27/2019 | mod | WNW | black spruce, willow, dwarf birch, mosses | 40 | B | grey | sany clay | Angular rock frags |
| E020447 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch, mosses | 37 | B | dark grey | loamy sand | Frozen, no rock frags |
| E020448 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch, mosses | 19 | A/B | black | loamy sand | sampling organics on ice, almost no soil |
| E020449 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch, mosses | 75 | C | dark grey | loamy sand | 25% rocks, subangular |
| E020450 | AB/AaM | 8/27/2019 | steep | NW | black spruce, willow, dwarf birch, mosses | 35 | B/C | brown-grey | loamy sand | 20% angular rock frags |
| E020451 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch, mosses | 40 | B/C | brown-grey | loamy sand | 25% flat angular rock fragments |
| E020452 | AB/AaM | 8/27/2019 | steep | NW | black spruce, willow, dwarf birch, mosses | 45 | B/C | brown-grey | sandy loam | 20% angular rock frags |
| E020453 | AB/AaM | 8/27/2019 | shallow | NW | black spruce, willow, dwarf birch, mosses | 50 | C | light brown-grey | loamy sand | Most coarse grained sample so far |
| E020454 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch, mosses | 73 | B | light brown | loam | 5% angular rocks |
| E020455 | AB/AaM | 8/27/2019 | gentle | NW | black spruce, willow, dwarf birch, mosses | 55 | B/C | brown | loamy sand | flat angular rocks 5% |
| E020456 | AB/AaM | 8/27/2019 | mod | WNW | black spruce, willow, dwarf birch, mosses | 63 | B/C | light brown | sandy loam | 20% flat angular frags. |
| E020457 | AB/AaM | 8/27/2019 | mod | WNW | willow, mosses | 45 | B | dark grey | sandy loam | Possible creek bed. 35% flat angular rocks. |
| E020458 | AB/AaM | 8/27/2019 | gentle | NW | willows, moss | 30 | B | grey-brown | sand | Subrounded rocks |
| E020459 | AB/AaM | 8/27/2019 | gentle | NW | willows, moss | 48 | B | grey-brown | sandy loam | Flat, angular rocks |
| E020460 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch, mosses | 33 | B | dark grey | sandy loam | Sub-angulr rocks. |
| E020461 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch, mosses | 30 | B | grey | sandy loam | Potential GSCH bedrock frag's. |
| E020462 | AB/AaM | 8/27/2019 | gentle | NW | black spruce, willow, dwarf birch, mosses | 35 | B | grey | Sand | Flat Sub-angular rocks (35%) |
| E020463 | AB/AaM | 8/27/2019 | gentle | NW | black spruce, willow, dwarf birch, | 24 | B | grey | sandy loam | 25% angular rock fragments. |
| E020464 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch | 25 | A/B | grey | sand | Lots of rocks, ssch common |
| E020465 | AB/AaM | 8/27/2019 | mod | NW | black spruce, willow, dwarf birch, mosses | 42 | A/B | dark grey | sand | 50% rocks. |
| E020466 | AB/AaM | 8/27/2019 | steep | NW | black spruce, willow, dwarf birch, mosses | 38 | B | grey | sand | 45% angular rock fragments. |
| E020468 | AB/AaM | 8/28/2019 | mod-steep | NW | Reindeer moss, black spruce | 70 | B/C | grey | sand | Poorly defined horizons, sub-angular frags 10%. |
| E020469 | AB/AaM | 8/28/2019 | mod-steep | NW | Reindeer moss, black spruce | 50 | B/C | grey | loamy sand | 10% angular rock fragments. |
| E020470 | AB/AaM | 8/28/2019 | mod-steep | NW | Reindeer moss, black spruce, moss | 40 | B/C | grey | loamy sand | 10% flat-sub-angular frags. |
| E020471 | AB/AaM | 8/28/2019 | mod | NW | Spruce, dwarf birch | 70 | B/C | grey | sand | 10% Sub angular, flat rocks |
| E020472 | AB/AaM | 8/28/2019 | mod-steep | NW | Dwarf Birch, moss | 45 | B/C | grey | loamy sand | 20% angular frags |
| E020473 | AB/AaM | 8/28/2019 | mod-steep | NW | Dwarf Birch, moss | 70 | B/C | light brown | sandy loam | 10% sub angular rock frags. |
| E020474 | AB/AaM | 8/28/2019 | mod-steep | NW | Moss | 25 | B/C | brown | sandy loam | Rocky, 30% flat sub angular. |
| E020475 | AB/AaM | 8/28/2019 | mod-steep | NW | Dwarf birch, moss | 60 | B/C | brown | loamy sand | 10% sub-angular frags. |
| E020476 | AB/AaM | 8/28/2019 | mod | NW | Spruce, dwarf birch, moss | 50 | B/C | brown | sandy loam | 15% sub-angular frags. |
| E020477 | AB/AaM | 8/28/2019 | mod | NW | Spruce, dwarf birch, moss | 35 | Org/A | brown | sandy loam | High in organics, Talus field. 20% sub-angular frags, 20% organics. |
| E020478 | AB/AaM | 8/28/2019 | gentle | NW | Spruce, dwarf birch, moss | 45 | B/C | brown | loamy sand | 5% sub-angular frags. |
| E020479 | AB/AaM | 8/28/2019 | gentle | NW | Moss, low spruce | 20 | B/C | brown | sandy loam | 15% sub-angular rocks v. near edge of historic trench. |
| E020480 | AB/AaM | 8/28/2019 | mod | NW | reindeer moss | 45 | B/C | brown-grey | Loamy sand | 15% angular chips. |
| E020481 | AB/AaM | 8/28/2019 | gentle | NW | reindeer moss, dwarf birch | 50 | B/C | brown-grey | loamy sand | sub-angular rock chips. |
| E020482 | AB/AaM | 8/28/2019 | gentle | NW | reindeer moss, dwarf birch, willow | 25 | C | grey-brown | sand | flat, angular rock chips. |
| E020483 | AB/AaM | 8/28/2019 | gentle | NW | reindeer moss dwarf birch, willows | 50 | B | grey | sandy loam | 20% rock fragments. |
| E020484 | AB/AaM | 8/28/2019 | gentle | NW | reindeer moss dwarf birch, willows | 50 | C | brown | silt loam | 5% rock fragments |
| E020485 | AB/AaM | 8/28/2019 | flat | NW | reindeer moss dwarf birch, willows | 35 | B/C | grey-brown | sandy loam | 30% subangular rock fragments. |
| E020486 | AB/AaM | 8/28/2019 | gentle | W | reindeer moss dwarf birch, willows | 55 | C | brown-grey | sandy loam | 5% rock fragments. |
| E020487 | AB/AaM | 8/28/2019 | gentle | W | reindeer moss dwarf birch, willows | 55 | B/C | brown | sandy loam | 5-10% flat, subangular chips. |
| E020488 | AB/AaM | 8/28/2019 | gentle | W | dwarf birch, moss | 50 | B/C | light brown | loamy sand | 3% rock fragments. |
| E020489 | AB/AaM | 8/28/2019 | gentle | W | reindeer moss dwarf birch, moss | 65 | B/C | red-brown | loamy sand | 3% rock fragments, |
| E020490 | AB/AaM | 8/28/2019 | flat | | reindeer moss dwarf birch, fir? | 50 | C | light brown | loamy sand | 3% tiny rock chips. |
| E020491 | AB/AaM | 8/28/2019 | gentle | W | Willows | 15 | N/A | grey | Sand | Bad sample site. Rock push at trench end. 60% rock fragments. |
| E020492 | AB/AaM | 8/28/2019 | gentle | W | dwarf birch, moss | 25 | B/C | brown | loamy sand | 15% angular rock chips. |

APPENDIX 3 2019 SOIL SAMPLE ASSAYS (Certificates Provided Separately)

| Surface Sample | NAT East | NAT North | NAT RL | Au Best ppm | Ag Best ppm | As Best ppm | Cd Best ppm | Cu Best ppm | Pb Best ppm | Zn Best ppm | Au ICP ppm | Ag ICP ppm | Pb ICP ppm | Zn ICP ppm | Al ICP pct | As ICP ppm | B ICP ppm | Ba ICP ppm | Be ICP ppm | Bi ICP ppm | Ca ICP pct | Cd ICP ppm | Ce ICP ppm | Co ICP ppm | Cr ICP ppm | Cs ICP ppm | Cu ICP ppm | Fe ICP pct | Ga ICP ppm | Ge ICP ppm | Hf ICP ppm | Hg ICP ppm | In ICP ppm | K ICP pct | La ICP ppm | Li ICP ppm |
|----------------|----------|-----------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|
| E020441 | 486716 | 7089310 | 1208 | 0.0026 | 0.708 | 10.95 | 0.586 | 21.6 | 22.8 | 90.5 | 0.0026 | 0.708 | 22.8 | 90.5 | 1.27 | 10.95 | -10 | 597.0 | 0.29 | 0.169 | 0.48 | 0.586 | 23.8 | 10.7 | 22.9 | 0.958 | 21.6 | 2.09 | 4.10 | 0.049 | 0.020 | 0.086 | 0.020 | 0.04 | 13.55 | 12.7 |
| E020442 | 486715 | 7089290 | 1211 | 0.0024 | 0.763 | 13.15 | 0.731 | 22.3 | 20.9 | 94.1 | 0.0024 | 0.763 | 20.9 | 94.1 | 1.41 | 13.15 | -10 | 654.0 | 0.29 | 0.171 | 0.47 | 0.731 | 23.9 | 12.1 | 23.1 | 1.035 | 22.3 | 2.43 | 4.27 | 0.049 | 0.027 | 0.105 | 0.022 | 0.04 | 12.95 | 13.5 |
| E020443 | 486714 | 7089269 | 1211 | 0.0038 | 0.795 | 12.80 | 0.334 | 21.9 | 17.5 | 105.0 | 0.0038 | 0.795 | 17.5 | 105.0 | 1.50 | 12.80 | -10 | 680.0 | 0.29 | 0.195 | 0.35 | 0.334 | 25.3 | 9.8 | 24.9 | 1.300 | 21.9 | 2.58 | 4.54 | 0.051 | 0.025 | 0.116 | 0.024 | 0.04 | 13.75 | 16.5 |
| E020444 | 486715 | 7089248 | 1214 | 0.0032 | 0.597 | 14.45 | 0.253 | 22.7 | 15.6 | 87.8 | 0.0032 | 0.597 | 15.6 | 87.8 | 1.38 | 14.45 | -10 | 473.0 | 0.23 | 0.189 | 0.23 | 0.253 | 24.7 | 10.5 | 25.1 | 1.195 | 22.7 | 2.54 | 4.46 | 0.048 | 0.018 | 0.092 | 0.024 | 0.04 | 13.60 | 15.7 |
| E020445 | 486715 | 7089228 | 1214 | 0.0038 | 0.645 | 38.80 | 0.296 | 30.8 | 20.2 | 94.4 | 0.0038 | 0.645 | 20.2 | 94.4 | 1.47 | 38.80 | -10 | 595.0 | 0.30 | 0.188 | 0.21 | 0.296 | 29.8 | 8.8 | 26.0 | 1.130 | 30.8 | 2.35 | 4.49 | 0.057 | 0.029 | 0.097 | 0.024 | 0.04 | 16.35 | 16.6 |
| E020446 | 486715 | 7089209 | 1214 | 0.0068 | 0.656 | 153.00 | 0.456 | 17.6 | 20.3 | 108.5 | 0.0068 | 0.656 | 20.3 | 108.5 | 1.32 | 153.00 | -10 | 691.0 | 0.25 | 0.183 | 0.40 | 0.456 | 23.6 | 9.5 | 22.4 | 1.070 | 17.6 | 2.34 | 4.15 | 0.047 | 0.024 | 0.108 | 0.021 | 0.04 | 13.25 | 15.3 |
| E020447 | 486714 | 7089189 | 1216 | 0.0034 | 1.755 | 446.00 | 2.220 | 41.0 | 33.9 | 197.0 | 0.0034 | 1.755 | 33.9 | 197.0 | 1.66 | 446.00 | -10 | 720.0 | 0.40 | 0.222 | 0.97 | 2.220 | 27.2 | 15.3 | 26.2 | 2.130 | 41.0 | 2.87 | 4.41 | 0.063 | 0.043 | 0.108 | 0.030 | 0.05 | 16.55 | 19.0 |
| E020448 | 486715 | 7089169 | 1217 | 0.0021 | 0.374 | 8.56 | 0.527 | 22.9 | 7.0 | 49.4 | 0.0021 | 0.374 | 7.0 | 49.4 | 0.62 | 8.56 | -10 | 404.0 | 0.22 | 0.090 | 1.96 | 0.527 | 12.1 | 4.3 | 10.7 | 0.495 | 22.9 | 1.05 | 1.81 | 0.038 | 0.031 | 0.116 | 0.012 | 0.02 | 7.47 | 5.4 |
| E020449 | 486715 | 7089149 | 1224 | 0.0023 | 0.820 | 31.40 | 0.472 | 27.6 | 26.0 | 95.0 | 0.0023 | 0.820 | 26.0 | 95.0 | 1.22 | 31.40 | -10 | 230.0 | 0.32 | 0.173 | 0.15 | 0.472 | 32.4 | 8.3 | 21.2 | 1.830 | 27.6 | 2.67 | 5.07 | 0.060 | 0.007 | 0.064 | 0.027 | 0.04 | 18.95 | 12.9 |
| E020450 | 486715 | 7089130 | 1234 | 0.0013 | 0.550 | 16.10 | 0.678 | 19.3 | 19.0 | 59.5 | 0.0013 | 0.550 | 19.0 | 59.5 | 1.19 | 16.10 | -10 | 190.0 | 0.33 | 0.219 | 0.13 | 0.678 | 24.7 | 8.4 | 18.8 | 1.540 | 19.3 | 2.30 | 5.01 | 0.045 | 0.003 | 0.067 | 0.022 | 0.04 | 14.45 | 11.7 |
| E020451 | 486714 | 7089110 | 1238 | 0.0025 | 0.531 | 28.10 | 0.533 | 29.7 | 20.4 | 100.5 | 0.0025 | 0.531 | 20.4 | 100.5 | 1.22 | 28.10 | -10 | 220.0 | 0.35 | 0.160 | 0.14 | 0.533 | 26.7 | 9.5 | 22.4 | 1.230 | 29.7 | 2.57 | 3.99 | 0.054 | 0.011 | 0.053 | 0.020 | 0.03 | 14.90 | 14.0 |
| E020452 | 486715 | 7089090 | 1242 | 0.0058 | 0.373 | 15.45 | 0.233 | 38.1 | 14.9 | 76.6 | 0.0058 | 0.373 | 14.9 | 76.6 | 1.34 | 15.45 | -10 | 276.0 | 0.31 | 0.155 | 0.11 | 0.233 | 29.9 | 8.9 | 23.0 | 0.890 | 38.1 | 2.58 | 4.10 | 0.055 | 0.014 | 0.053 | 0.021 | 0.04 | 16.10 | 14.5 |
| E020453 | 486715 | 7089068 | 1242 | 0.0038 | 0.380 | 15.50 | 0.236 | 31.7 | 18.7 | 75.2 | 0.0038 | 0.380 | 18.7 | 75.2 | 1.37 | 15.50 | -10 | 194.0 | 0.26 | 0.194 | 0.09 | 0.236 | 26.0 | 5.6 | 23.6 | 0.993 | 31.7 | 2.56 | 4.67 | 0.049 | 0.007 | 0.067 | 0.019 | 0.04 | 14.15 | 13.1 |
| E020454 | 486980 | 7089384 | 1264 | 0.0031 | 0.483 | 19.00 | 1.005 | 35.4 | 20.5 | 134.0 | 0.0031 | 0.483 | 20.5 | 134.0 | 1.37 | 19.00 | -10 | 290.0 | 0.37 | 0.183 | 0.19 | 1.005 | 32.3 | 9.8 | 22.7 | 0.994 | 35.4 | 2.89 | 4.19 | 0.060 | 0.018 | 0.052 | 0.027 | 0.04 | 17.90 | 15.0 |
| E020455 | 486980 | 7089364 | 1263 | 0.0030 | 0.451 | 19.85 | 0.505 | 34.1 | 21.2 | 108.5 | 0.0030 | 0.451 | 21.2 | 108.5 | 1.43 | 19.85 | -10 | 259.0 | 0.36 | 0.189 | 0.21 | 0.505 | 29.7 | 8.8 | 23.6 | 0.977 | 34.1 | 2.84 | 4.49 | 0.058 | 0.013 | 0.049 | 0.023 | 0.04 | 15.90 | 15.2 |
| E020456 | 486980 | 7089344 | 1264 | 0.0035 | 0.454 | 22.80 | 0.345 | 29.5 | 35.3 | 102.0 | 0.0035 | 0.454 | 35.3 | 102.0 | 1.28 | 22.80 | -10 | 169.5 | 0.28 | 0.200 | 0.27 | 0.345 | 26.9 | 6.8 | 24.3 | 1.150 | 29.5 | 2.74 | 4.59 | 0.051 | 0.004 | 0.054 | 0.020 | 0.04 | 14.70 | 14.0 |
| E020457 | 486980 | 7089325 | 1264 | 0.0033 | 0.538 | 19.00 | 0.666 | 35.1 | 24.8 | 127.0 | 0.0033 | 0.538 | 24.8 | 127.0 | 1.16 | 19.00 | -10 | 160.0 | 0.31 | 0.175 | 0.33 | 0.666 | 28.3 | 9.5 | 22.7 | 1.060 | 35.1 | 3.06 | 3.75 | 0.060 | 0.005 | 0.055 | 0.027 | 0.04 | 15.80 | 18.3 |
| E020458 | 486979 | 7089305 | 1266 | 0.0034 | 0.617 | 16.95 | 0.469 | 26.0 | 27.9 | 113.0 | 0.0034 | 0.617 | 27.9 | 113.0 | 1.23 | 16.95 | -10 | 197.0 | 0.29 | 0.177 | 0.37 | 0.469 | 25.7 | 7.2 | 21.8 | 1.455 | 26.0 | 2.55 | 4.04 | 0.053 | 0.002 | 0.070 | 0.026 | 0.04 | 14.00 | 18.9 |
| E020459 | 486979 | 7089285 | 1267 | 0.0039 | 0.546 | 15.75 | 0.667 | 39.7 | 25.6 | 154.5 | 0.0039 | 0.546 | 25.6 | 154.5 | 1.16 | 15.75 | -10 | 232.0 | 0.32 | 0.224 | 0.34 | 0.667 | 29.0 | 10.8 | 24.2 | 1.590 | 39.7 | 3.29 | 4.14 | 0.059 | 0.006 | 0.062 | 0.029 | 0.04 | 15.90 | 17.5 |
| E020460 | 486980 | 7089265 | 1269 | 0.0057 | 1.475 | 18.50 | 0.500 | 44.3 | 25.3 | 155.0 | 0.0057 | 1.475 | 25.3 | 155.0 | 1.46 | 18.50 | -10 | 390.0 | 0.38 | 0.274 | 0.83 | 0.500 | 22.5 | 8.1 | 24.2 | 2.890 | 44.3 | 3.51 | 4.22 | 0.061 | 0.044 | 0.179 | 0.037 | 0.04 | 14.10 | 18.7 |
| E020461 | 486979 | 7089246 | 1271 | 0.0031 | 0.990 | 20.20 | 0.732 | 33.0 | 25.0 | 148.0 | 0.0031 | 0.990 | 25.0 | 148.0 | 1.37 | 20.20 | -10 | 258.0 | 0.42 | 0.234 | 0.34 | 0.732 | 33.0 | 13.7 | 23.8 | 2.480 | 33.0 | 3.33 | 3.71 | 0.068 | 0.014 | 0.107 | 0.030 | 0.04 | 20.20 | 16.4 |
| E020462 | 486980 | 7089226 | 1271 | 0.0021 | 0.541 | 16.10 | 0.812 | 30.5 | 21.1 | 137.5 | 0.0021 | 0.541 | 21.1 | 137.5 | 1.10 | 16.10 | -10 | 194.0 | 0.26 | 0.210 | 0.13 | 0.812 | 34.1 | 12.5 | 22.1 | 1.835 | 30.5 | 3.16 | 3.07 | 0.066 | 0.027 | 0.113 | 0.025 | 0.03 | 18.90 | 16.1 |
| E020463 | 486980 | 7089206 | 1272 | 0.0046 | 1.255 | 20.30 | 0.779 | 52.3 | 33.1 | 131.5 | 0.0046 | 1.255 | 33.1 | 131.5 | 1.53 | 20.30 | -10 | 816.0 | 0.37 | 0.265 | 0.51 | 0.779 | 25.8 | 9.0 | 24.1 | 2.720 | 52.3 | 3.11 | 4.62 | 0.056 | 0.009 | 0.130 | 0.026 | 0.05 | 15.80 | 17.7 |
| E020464 | 486980 | 7089185 | 1274 | 0.0040 | 0.951 | 18.05 | 0.424 | 49.4 | 23.6 | 78.6 | 0.0040 | 0.951 | 23.6 | 78.6 | 1.18 | 18.05 | -10 | 507.0 | 0.24 | 0.213 | 0.13 | 0.424 | 20.1 | 6.4 | 22.8 | 1.690 | 49.4 | 2.60 | 3.93 | 0.047 | 0.005 | 0.087 | 0.023 | 0.04 | 11.05 | 12.9 |
| E020465 | 486979 | 7089165 | 1278 | 0.0035 | 0.439 | 23.30 | 0.596 | 48.2 | 21.8 | 116.0 | 0.0035 | 0.439 | 21.8 | 116.0 | 0.91 | 23.30 | -10 | 91.6 | 0.22 | 0.231 | 0.08 | 0.596 | 26.4 | 9.2 | 23.4 | 2.380 | 48.2 | 3.34 | 3.96 | 0.057 | 0.005 | 0.058 | 0.032 | 0.03 | 14.05 | 11.7 |
| E020466 | 486979 | 7089145 | 1286 | 0.0126 | 0.946 | 70.00 | 0.364 | 70.6 | 20.9 | 105.5 | 0.0126 | 0.946 | 20.9 | 105.5 | 1.03 | 70.00 | -10 | 230.0 | 0.20 | 0.269 | 0.05 | 0.364 | 31.4 | 7.9 | 19.9 | 2.740 | 70.6 | 3.27 | 3.69 | 0.058 | 0.014 | 0.075 | 0.030 | 0.03 | 17.55 | 13.7 |
| E020468 | 487249 | 7089439 | 1312 | 0.0020 | 0.370 | 36.80 | 0.901 | 83.4 | 29.0 | 169.0 | 0.0020 | 0.370 | 29.0 | 169.0 | 1.36 | 36.80 | -10 | 104.0 | 0.31 | 0.345 | 0.21 | 0.901 | 41.6 | 24.6 | 18.4 | 2.590 | 83.4 | 5.71 | 3.24 | 0.085 | 0.090 | 0.096 | 0.022 | 0.03 | 22.30 | 25.5 |
| E020469 | 487247 | 7089419 | 1319 | 0.0027 | 0.641 | 33.00 | 0.463 | 31.5 | 31.9 | 102.0 | 0.0027 | 0.641 | 31.9 | 102.0 | 1.16 | 33.00 | -10 | 81.8 | 0.27 | 0.212 | 0.12 | 0.463 | 29.4 | 12.6 | 21.1 | 1.330 | 31.5 | 3.14 | 4.14 | 0.056 | 0.008 | 0.051 | 0.029 | 0.04 | 15.40 | 13.5 |
| E020470 | 487248 | 7089400 | 1322 | 0.0042 | 1.085 | 41.60 | 0.831 | 51.7 | 41.3 | 153.5 | 0.0042 | 1.085 | 41.3 | 153.5 | 1.27 | 41.60 | -10 | 101.0 | 0.39 | 0.250 | 0.13 | 0.831 | 36.9 | 13.1 | 20.4 | 1.220 | 51.7 | 4.08 | 3.62 | 0.067 | 0.011 | 0.076 | 0.028 | 0.03 | 20.00 | 15.1 |
| E020471 | 487248 | 7089379 | 1327 | 0.0020 | 0.650 | 53.90 | 1.590 | 84.7 | 34.7 | 280.0 | 0.0020 | 0.650 | 34.7 | 280.0 | 1.36 | 53.90 | -10 | 159.0 | 0.67 | 0.380 | 0.25 | 1.590 | 37.4 | 34.4 | 19.3 | 1.615 | 84.7 | 6.50 | 2.94 | 0.096 | 0.067 | 0.120 | 0.031 | 0.03 | 20.50 | 20.3 |
| E020472 | 487248 | 7089360 | 1332 | 0.0032 | 0.452 | 24.80 | 0.310 | 31.8 | 29.9 | 94.5 | 0.0032 | 0.452 | 29.9 | 94.5 | 1.32 | 24.80 | -10 | 89.0 | 0.26 | 0.195 | 0.08 | 0.310 | 29.3 | 9.2 | 21.2 | 1.300 | 31.8 | 3.55 | 4.49 | 0.057 | 0.007 | 0.042 | 0.023 | 0.03 | 15.05 | 13.1 |
| E020473 | 487248 | 7089338 | 1337 | 0.0044 | 0.330 | 18.65 | 0.245 | 44.6 | 19.9 | 82.3 | 0.0044 | 0.330 | 19.9 | 82.3 | 1.55 | 18.65 | -10 | 193.5 | 0.27 | 0.212 | 0.10 | 0.245 | 26.4 | 6.1 | 26.8 | 1.340 | 44.6 | 2.70 | 4.71 | 0.052 | 0.011 | 0.053 | 0.020 | 0.04 | 13.50 | 14.3 |
| E020474 | 487249 | 7089319 | 1342 | 0.0049 | 0.606 | 15.95 | 0.333 | 30.7 | 22.5 | 83.9 | 0.0049 | 0.606 | 22.5 | 83.9 | 1.28 | 15.95 | -10 | 307.0 | 0.19 | 0.235 | 0.07 | 0.333 | 20.2 | 5.3 | 23.1 | 1.470 | 30.7 | 2.60 | 4.68 | 0.045 | 0.006 | 0.075 | 0.021 | 0.04 | 10.30 | |

| Surface Sample | Mg ICP pct | Mn ICP ppm | Mo ICP ppm | Na ICP pct | Nb ICP ppm | Ni ICP ppm | P ICP ppm | Pd ICP ppm | Pt ICP ppm | Rb ICP ppm | Re ICP ppm | S ICP pct | Sb ICP ppm | Sc ICP ppm | Se ICP ppm | Sn ICP ppm | Sr ICP ppm | Ta ICP ppm | Te ICP ppm | Th ICP ppm | Ti ICP pct | Ti ICP ppm | U ICP ppm | V ICP ppm | W ICP ppm | Y ICP ppm | Zr ICP ppm | Lab | Certificate |
|----------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|------------|-----|-------------|
| E020441 | 0.33 | 1020.0 | 2.10 | 0.007 | 0.504 | 19.60 | 0.094 | -0.001 | -0.002 | 7.29 | 0.0006 | 0.06 | 1.030 | 2.90 | 0.918 | 0.29 | 29.10 | -0.005 | 0.035 | 1.775 | 0.024 | 0.096 | 1.160 | 36.0 | 0.204 | 7.45 | 0.82 | ALS | WH19225246 |
| E020442 | 0.35 | 2150.0 | 1.93 | 0.007 | 0.438 | 19.45 | 0.101 | 0.001 | -0.002 | 8.26 | 0.0006 | 0.06 | 0.929 | 3.00 | 0.949 | 0.31 | 25.90 | -0.005 | 0.032 | 1.685 | 0.022 | 0.109 | 1.205 | 34.4 | 0.200 | 7.05 | 0.77 | ALS | WH19225246 |
| E020443 | 0.39 | 674.0 | 2.50 | 0.008 | 0.433 | 21.10 | 0.101 | 0.001 | -0.002 | 8.25 | 0.0020 | 0.04 | 0.934 | 3.00 | 1.185 | 0.32 | 22.80 | -0.005 | 0.032 | 2.080 | 0.021 | 0.104 | 1.260 | 37.3 | 0.200 | 6.53 | 0.79 | ALS | WH19225246 |
| E020444 | 0.40 | 463.0 | 2.91 | 0.006 | 0.500 | 20.00 | 0.077 | 0.001 | -0.002 | 7.00 | 0.0005 | 0.02 | 0.904 | 2.66 | 0.883 | 0.34 | 18.80 | -0.005 | 0.037 | 2.450 | 0.027 | 0.096 | 0.973 | 38.3 | 0.262 | 4.17 | 0.59 | ALS | WH19225246 |
| E020445 | 0.40 | 311.0 | 3.28 | 0.007 | 0.513 | 20.80 | 0.083 | 0.001 | -0.002 | 7.32 | 0.0011 | 0.02 | 1.100 | 3.40 | 1.030 | 0.34 | 16.80 | -0.005 | 0.041 | 3.170 | 0.029 | 0.097 | 1.555 | 39.5 | 0.203 | 6.64 | 0.98 | ALS | WH19225246 |
| E020446 | 0.36 | 699.0 | 2.97 | 0.006 | 0.459 | 20.40 | 0.087 | 0.001 | -0.002 | 7.58 | 0.0019 | 0.03 | 0.823 | 2.74 | 1.075 | 0.32 | 29.90 | -0.005 | 0.029 | 2.140 | 0.022 | 0.098 | 1.270 | 36.6 | 0.327 | 6.00 | 0.79 | ALS | WH19225246 |
| E020447 | 0.38 | 1910.0 | 3.26 | 0.009 | 0.472 | 43.40 | 0.115 | 0.004 | -0.002 | 11.55 | 0.0017 | 0.07 | 2.080 | 3.31 | 2.870 | 0.37 | 73.00 | -0.005 | 0.051 | 1.720 | 0.018 | 0.153 | 1.630 | 36.2 | 0.300 | 15.45 | 1.58 | ALS | WH19225246 |
| E020448 | 0.16 | 190.5 | 0.89 | 0.008 | 0.317 | 14.00 | 0.098 | -0.001 | -0.002 | 2.24 | 0.0005 | 0.15 | 0.574 | 1.53 | 1.380 | 0.16 | 114.50 | -0.005 | 0.021 | 0.705 | 0.015 | 0.043 | 0.890 | 13.3 | 0.079 | 6.83 | 1.31 | ALS | WH19225246 |
| E020449 | 0.23 | 598.0 | 2.27 | 0.003 | 0.514 | 24.50 | 0.073 | -0.001 | -0.002 | 7.07 | 0.0002 | 0.01 | 1.270 | 1.91 | 0.670 | 0.38 | 16.70 | -0.005 | 0.055 | 1.125 | 0.027 | 0.087 | 1.160 | 41.3 | 0.284 | 7.06 | 0.22 | ALS | WH19225246 |
| E020450 | 0.20 | 617.0 | 1.59 | 0.005 | 0.518 | 15.75 | 0.058 | 0.001 | -0.002 | 8.04 | -0.0002 | 0.02 | 0.801 | 1.47 | 0.378 | 0.43 | 13.85 | -0.005 | 0.038 | 0.511 | 0.026 | 0.085 | 0.894 | 39.3 | 0.202 | 4.98 | 0.16 | ALS | WH19225246 |
| E020451 | 0.29 | 478.0 | 2.35 | 0.005 | 0.506 | 24.90 | 0.064 | -0.001 | -0.002 | 6.95 | -0.0002 | 0.01 | 1.230 | 1.93 | 0.607 | 0.34 | 14.55 | -0.005 | 0.040 | 1.395 | 0.030 | 0.070 | 0.972 | 38.4 | 0.187 | 5.25 | 0.44 | ALS | WH19225246 |
| E020452 | 0.40 | 455.0 | 2.73 | 0.004 | 0.475 | 21.90 | 0.062 | 0.004 | -0.002 | 6.09 | -0.0002 | -0.01 | 0.951 | 2.92 | 0.399 | 0.31 | 12.55 | -0.005 | 0.044 | 1.735 | 0.033 | 0.071 | 1.110 | 39.2 | 0.419 | 6.98 | 0.54 | ALS | WH19225246 |
| E020453 | 0.39 | 267.0 | 3.60 | 0.004 | 0.314 | 18.30 | 0.064 | 0.003 | -0.002 | 7.05 | -0.0002 | 0.01 | 1.160 | 1.75 | 0.638 | 0.33 | 12.60 | -0.005 | 0.056 | 0.539 | 0.027 | 0.083 | 1.095 | 39.6 | 0.214 | 4.15 | 0.18 | ALS | WH19225246 |
| E020454 | 0.42 | 813.0 | 3.68 | 0.006 | 0.426 | 31.30 | 0.091 | 0.003 | -0.002 | 6.64 | 0.0003 | -0.01 | 1.545 | 3.19 | 0.483 | 0.33 | 17.40 | -0.005 | 0.039 | 2.090 | 0.039 | 0.089 | 1.555 | 39.8 | 0.258 | 9.72 | 0.67 | ALS | WH19225246 |
| E020455 | 0.44 | 548.0 | 3.04 | 0.006 | 0.475 | 25.10 | 0.087 | 0.002 | -0.002 | 7.18 | 0.0005 | 0.01 | 1.325 | 3.10 | 0.662 | 0.35 | 19.50 | -0.005 | 0.036 | 1.745 | 0.040 | 0.094 | 1.435 | 40.6 | 0.275 | 8.16 | 0.52 | ALS | WH19225246 |
| E020456 | 0.37 | 347.0 | 3.49 | 0.006 | 0.395 | 20.30 | 0.074 | 0.004 | -0.002 | 8.05 | 0.0015 | 0.01 | 1.700 | 1.77 | 1.380 | 0.40 | 19.75 | -0.005 | 0.046 | 0.723 | 0.034 | 0.102 | 1.130 | 41.8 | 0.260 | 4.68 | 0.19 | ALS | WH19225246 |
| E020457 | 0.38 | 630.0 | 4.09 | 0.006 | 0.302 | 25.50 | 0.098 | 0.002 | -0.002 | 5.78 | 0.0012 | 0.01 | 1.490 | 2.24 | 1.630 | 0.28 | 25.70 | -0.005 | 0.042 | 1.225 | 0.030 | 0.076 | 1.320 | 37.0 | 0.196 | 6.94 | 0.26 | ALS | WH19225246 |
| E020458 | 0.35 | 414.0 | 4.25 | 0.006 | 0.327 | 22.50 | 0.082 | -0.001 | -0.002 | 8.04 | 0.0022 | 0.02 | 1.315 | 1.92 | 1.265 | 0.36 | 27.50 | -0.005 | 0.036 | 0.677 | 0.027 | 0.103 | 1.110 | 37.2 | 0.218 | 5.76 | 0.16 | ALS | WH19225246 |
| E020459 | 0.30 | 776.0 | 7.06 | 0.006 | 0.315 | 31.60 | 0.086 | -0.001 | -0.002 | 6.63 | 0.0013 | 0.02 | 1.580 | 1.88 | 1.620 | 0.32 | 25.80 | -0.005 | 0.058 | 0.971 | 0.025 | 0.111 | 1.350 | 36.2 | 0.186 | 7.37 | 0.27 | ALS | WH19225246 |
| E020460 | 0.28 | 477.0 | 7.90 | 0.006 | 0.337 | 35.50 | 0.129 | 0.001 | -0.002 | 6.57 | 0.0059 | 0.07 | 1.730 | 2.24 | 3.620 | 0.33 | 42.70 | -0.005 | 0.067 | 1.355 | 0.013 | 0.131 | 2.040 | 33.1 | 0.162 | 10.60 | 1.46 | ALS | WH19225246 |
| E020461 | 0.29 | 938.0 | 4.44 | 0.005 | 0.239 | 37.20 | 0.117 | 0.001 | -0.002 | 6.42 | 0.0005 | 0.02 | 1.725 | 2.46 | 0.934 | 0.25 | 19.70 | -0.005 | 0.054 | 2.010 | 0.016 | 0.087 | 1.720 | 30.8 | 0.143 | 10.20 | 0.44 | ALS | WH19225246 |
| E020462 | 0.25 | 803.0 | 3.06 | 0.004 | 0.230 | 38.50 | 0.107 | 0.002 | -0.002 | 4.67 | 0.0002 | 0.01 | 1.440 | 2.10 | 0.899 | 0.19 | 12.20 | -0.005 | 0.049 | 2.830 | 0.014 | 0.075 | 1.485 | 24.9 | 0.107 | 8.58 | 0.88 | ALS | WH19225246 |
| E020463 | 0.35 | 720.0 | 2.84 | 0.007 | 0.290 | 28.50 | 0.114 | 0.004 | -0.002 | 9.04 | 0.0005 | 0.05 | 2.040 | 1.88 | 1.145 | 0.35 | 32.60 | -0.005 | 0.072 | 0.867 | 0.016 | 0.124 | 1.345 | 33.3 | 0.165 | 9.81 | 0.32 | ALS | WH19225246 |
| E020464 | 0.35 | 454.0 | 4.50 | 0.006 | 0.239 | 19.40 | 0.094 | 0.002 | -0.002 | 7.38 | 0.0002 | 0.04 | 1.595 | 1.21 | 0.873 | 0.25 | 16.45 | -0.005 | 0.071 | 0.359 | 0.016 | 0.088 | 1.275 | 32.5 | 0.136 | 4.08 | 0.18 | ALS | WH19225246 |
| E020465 | 0.19 | 543.0 | 4.24 | 0.004 | 0.256 | 28.10 | 0.107 | 0.001 | -0.002 | 5.71 | -0.0002 | 0.03 | 2.010 | 1.03 | 1.360 | 0.27 | 11.95 | -0.005 | 0.086 | 0.694 | 0.018 | 0.077 | 1.285 | 32.4 | 0.161 | 3.59 | 0.25 | ALS | WH19225246 |
| E020466 | 0.28 | 966.0 | 7.07 | 0.005 | 0.220 | 26.00 | 0.086 | 0.003 | -0.002 | 5.28 | 0.0002 | 0.03 | 2.670 | 1.34 | 1.565 | 0.22 | 12.20 | -0.005 | 0.126 | 0.902 | 0.015 | 0.112 | 1.245 | 27.9 | 0.117 | 3.43 | 0.37 | ALS | WH19225246 |
| E020468 | 0.65 | 1080.0 | 12.85 | 0.006 | 0.042 | 66.80 | 0.176 | -0.001 | -0.002 | 2.49 | 0.0003 | 0.03 | 2.800 | 2.24 | 1.360 | 0.08 | 33.30 | -0.005 | 0.093 | 9.280 | 0.003 | 0.048 | 1.425 | 14.1 | 0.053 | 12.20 | 6.97 | ALS | WH19225246 |
| E020469 | 0.37 | 636.0 | 6.00 | 0.007 | 0.156 | 26.70 | 0.120 | 0.001 | -0.002 | 6.22 | 0.0002 | 0.03 | 1.860 | 0.85 | 0.909 | 0.28 | 14.20 | -0.005 | 0.040 | 0.420 | 0.018 | 0.085 | 1.325 | 32.7 | 0.154 | 5.50 | 0.34 | ALS | WH19225246 |
| E020470 | 0.40 | 620.0 | 9.29 | 0.004 | 0.218 | 39.60 | 0.134 | 0.001 | -0.002 | 4.82 | 0.0002 | 0.02 | 2.380 | 1.62 | 1.310 | 0.25 | 13.15 | -0.005 | 0.051 | 1.180 | 0.020 | 0.072 | 2.020 | 29.2 | 0.128 | 8.47 | 0.46 | ALS | WH19225246 |
| E020471 | 0.59 | 1720.0 | 18.35 | 0.003 | 0.060 | 96.20 | 0.228 | 0.002 | -0.002 | 2.40 | 0.0003 | 0.02 | 2.640 | 2.42 | 1.675 | 0.08 | 19.75 | -0.005 | 0.070 | 10.700 | 0.004 | 0.049 | 2.560 | 15.3 | 0.041 | 21.80 | 5.83 | ALS | WH19225246 |
| E020472 | 0.37 | 582.0 | 4.84 | 0.005 | 0.323 | 18.15 | 0.087 | 0.002 | -0.002 | 6.50 | 0.0002 | 0.02 | 2.100 | 1.37 | 0.979 | 0.30 | 13.10 | -0.005 | 0.053 | 0.794 | 0.026 | 0.097 | 1.160 | 37.3 | 0.323 | 3.20 | 0.34 | ALS | WH19225246 |
| E020473 | 0.42 | 284.0 | 3.74 | 0.004 | 0.503 | 19.50 | 0.063 | 0.004 | -0.002 | 8.21 | -0.0002 | 0.01 | 1.520 | 2.22 | 0.472 | 0.40 | 12.45 | -0.005 | 0.048 | 0.958 | 0.034 | 0.105 | 1.375 | 45.1 | 0.240 | 4.57 | 0.36 | ALS | WH19225246 |
| E020474 | 0.32 | 296.0 | 7.17 | 0.007 | 0.300 | 16.80 | 0.073 | 0.002 | -0.002 | 8.39 | -0.0002 | 0.03 | 1.710 | 1.10 | 0.674 | 0.41 | 11.75 | -0.005 | 0.053 | 0.247 | 0.025 | 0.102 | 1.200 | 42.7 | 0.194 | 3.02 | 0.22 | ALS | WH19225246 |
| E020475 | 0.37 | 263.0 | 6.27 | 0.007 | 0.407 | 25.50 | 0.075 | 0.004 | -0.002 | 7.07 | 0.0002 | 0.02 | 1.960 | 2.09 | 1.010 | 0.35 | 12.05 | -0.005 | 0.065 | 0.785 | 0.032 | 0.099 | 1.900 | 42.3 | 0.212 | 5.12 | 0.32 | ALS | WH19225246 |
| E020476 | 0.32 | 290.0 | 5.46 | 0.005 | 0.476 | 20.60 | 0.058 | 0.001 | -0.002 | 6.93 | -0.0002 | 0.01 | 1.860 | 1.99 | 0.571 | 0.35 | 11.15 | -0.005 | 0.043 | 1.085 | 0.033 | 0.089 | 1.210 | 39.1 | 0.215 | 4.66 | 0.40 | ALS | WH19225246 |
| E020477 | 0.23 | 376.0 | 3.12 | 0.006 | 0.448 | 13.50 | 0.067 | -0.001 | -0.002 | 10.20 | -0.0002 | 0.03 | 1.450 | 1.14 | 0.504 | 0.37 | 12.00 | -0.005 | 0.034 | 0.356 | 0.029 | 0.083 | 0.723 | 38.8 | 0.217 | 2.35 | 0.14 | ALS | WH19225246 |
| E020478 | 0.30 | 419.0 | 1.84 | 0.005 | 0.420 | 19.55 | 0.060 | -0.001 | -0.002 | 5.87 | -0.0002 | -0.01 | 1.710 | 2.31 | 0.748 | 0.27 | 18.55 | -0.005 | 0.033 | 1.785 | 0.030 | 0.068 | 1.230 | 34.2 | 0.198 | 5.49 | 0.33 | ALS | WH19225246 |
| E020479 | 0.32 | 384.0 | 1.69 | 0.005 | 0.431 | 20.20 | 0.061 | 0.001 | -0.002 | 7.30 | -0.0002 | 0.01 | 1.705 | 1.88 | 0.423 | 0.34 | 19.50 | -0.005 | 0.036 | 0.888 | 0.031 | 0.090 | 1.060 | 39.0 | 0.202 | 4.25 | 0.19 | ALS | WH19225246 |
| E020480 | 0.42 | 953.0 | 8.48 | 0.007 | 0.289 | 51.70 | 0.144 | -0.001 | -0.002 | 5.78 | -0.0002 | 0.02 | 3.390 | 1.99 | 1.185 | 0.23 | 15.85 | -0.005 | 0.047 | 2.720 | 0.019 | 0.091 | 1.265 | 28.0 | 0.123 | 11.50 | 1.36 | ALS | WH19225246 |
| E020481 | 0.35 | 185.0 | 4.70 | 0.007 | 0.205 | 20.70 | 0.115 | 0.001 | -0.002 | 5.92 | -0.0002 | 0.05 | 1.360 | 0.81 | 0.763 | 0.31 | 12.75 | -0.005 | 0.038 | 0.339 | 0.013 | 0.095 | 1.160 | 34.8 | 0.163 | 7.55 | 0.30 | ALS | WH19225246 |
| E020482 | 0.57 | 341.0 | 9.20 | 0.016 | 0.119 | 55.30 | 0.162 | -0.001 | -0.002 | 3.9 | | | | | | | | | | | | | | | | | | | |

APPENDIX 4 STATEMENTS 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 13th day of November, 2019.



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 13th day of November 2019.

A handwritten signature in black ink, appearing to read 'L Stammers', with a long horizontal flourish extending to the right.

Liana Stammers