AMENDED AND RESTATED NI 43-101 TECHNICAL REPORT

Technical Report on the Seventymile Property, Alaska
Eagle D-2, D-3, D-4 and Charley River A-2, A-3, A-4 Quadrangles

Property Centre:
64°56’32” N 142° 08’13” W

prepared for:
Tectonic Metals Inc.

report prepared by:
Aurora Geosciences Ltd.

AURORA GEOSCIENCES

AMENDED AND RESTATED NI 43-101 TECHNICAL REPORT
TECHNICAL REPORT ON THE SEVENTYMILE PROPERTY, ALASKA
EAGLE DISTRICT, ALASKA
UNITED STATES of AMERICA

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Effective date: October 31, 2019

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1 SUMMARY

1.1 INTRODUCTION

In May 2019, Tectonic Metals Inc. (Tectonic) of Vancouver, British Columbia, Canada, commissioned Aurora Geosciences Ltd. (Aurora) to complete a Technical Report conforming to regulations within National Instrument 43-101, on the Seventymile property. The property is located somewhat west of Eagle, Alaska, and northeast of Delta Junction, east-central Alaska, USA. This is a "Property of Merit" based on several prospective auriferous zones occurring throughout the Seventymile property.

The Seventymile property is an approximately 60,654 Ha mining lease granted to Tectonic Metals Inc. by Doyon Ltd. on June 1, 2018. The lease is valid for 15 years and may be extended for an additional 5 years subject to the release of a feasibility report. Should commercial mineral production commence on the property, the lease will continue for as long as production continues on the property.

The property is currently accessible only by helicopter, based at Delta Junction, Alaska but may be staged from the Village of Eagle. An airstrip near Alder Creek has been recently brushed out, although further verification is necessary to determine whether it is fit to use. The terrain is fairly moderate with elevations ranging from 365 m to 1,800 m. Locally rugged terrain is associated mainly with deeply incised stream valleys, although is evident in some other areas. The climate is subarctic, influenced by local montane effects. The field season extends from early June to late September.

No environmental liabilities have resulted from modern exploration after 1986. The remains of an adit excavated at the Flume prospect in the early 1900s are visible along the west bank of Flume Creek. Several barrels in unknown condition remain along the east bank. Several cabins in varying states of disrepair occur along Alder Creek near the northern property boundary.

The Seventymile property is wholly located within Doyon Ltd. owned lands; therefore, approvals for various activities need to be obtained from Doyon Ltd., which has jurisdiction over activities. "Tectonic has received all permits required to undertake all exploration activities up to and including core drilling. These permit applications are currently being processed by the Department of Natural Resources, State of Alaska."

Prior to the third year of the lease Tectonic must obtain a performance bond or similar security of an amount necessary to ensure the completion of necessary remediation activities on the site.

1.2 HISTORY

Gold was originally discovered in the Seventymile district following the Klondike gold rush in the late 1890s. The Flume Creek showing was discovered in the early 1900s by the Hudson Brothers who excavated a short adit. Mr. Fred Jenkins of Eagle, Alaska restaked the area in the late 1940s and transferred the claims to the Alaska Nickel Company. Jenkins conducted exploration and development work and utilized a small mill in the early 1950s.

The Seventymile project area was chosen for its high mineral potential by Doyon Ltd. during the land selection process. Prior to land conveyance, WGM (Watts, Griffis, and McOuat) Inc. conducted regional exploration in the area as part of a joint venture with Doyon Ltd.

The American Copper and Nickel Company (ACNC), a subsidiary of Inco Ltd., optioned four townships on the eastern end of the Seventymile terrane from Doyon Ltd. from 1987 to 1989. During this period, ACNC discovered mineralization at the Ptarmigan Hill, Mogul Bluff, Ruby-Broken Neck Creek and Barney Creek areas.

Mapping and sampling at Ptarmigan Hill defined an extensive zone of Au-Ag mineralization with characteristic epithermal alteration and silicification within Tertiary conglomerates. Rock sampling returned values from <0.005 g/t gold to 16.7 g/t gold (Au). This rock sampling program outlined a >100 ppb Au geochemical anomaly covering a 1,160 m by 240 m area. Rock sampling at Mogul Bluff returned values from <0.005 g/t Au to 0.480 g/t Au and elevated values of mercury (Hg), arsenic (As), and antimony (Sb). Further follow-up work on this area was recommended (Hunter and Rush, 1988).

In 1988, ACNC conducted a drilling program at Ptarmigan Hill comprising 2,754 m in 25 holes, leading to delineation of a resource of 70,000 oz Au. This was determined prior to the development of modern resource standards under the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) or regulations under National Instrument 43-101 (NI 43-101), has not been independently verified by this author, and should not be relied upon. At the Mogul Bluff prospect, ACNC drilled 5 holes for a total of 349.6 m. One hole intersected clay-altered conglomerate that assayed 662 ppb Au over 2.99 m. The remaining holes did not intersect mineralization. ACNC returned to the property in 1989 and drilled an additional 12 holes at Ptarmigan Hill and four holes at Mogul Bluff; however, data and results were not available to this author.

The Central Alaska Gold Company (CAGC) optioned 320 square miles in the western part of the present Seventymile property from Doyon Ltd. in 1989 and conducted reconnaissance stream sediment sampling and geological mapping that year. In 1990 CAGC conducted both reconnaissance and target development programs focusing the Flume Creek area. The reconnaissance program was successful in discovering the Flanders prospect east of Alder Creek, the Deep Creek trend, and additional targets in the Alder Creek area.

At the Flanders prospect, rock sampling showed that anomalous Au, Ag, and Hg values are associated with structurally controlled silicification. Target development focused on detailed mapping, sampling, trenching and diamond drilling of the Flume Creek, Alder Creek, Bonanza Creek and Flanders prospects. The drilling program comprised 29 holes for 2,879.4 m, including 7 holes at the Flume prospect where values ranged from background Au to 29.3 g/t Au over 1.07 m. CAGC used the results from this drilling to outline a drill-inferred resource of 1,000,000 tons of 0.857 g/t Au. Note: This resource was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by the Canadian Institute of Mining, Metallurgy and Petroleum (CIMM). The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, and should not be relied upon. No subsequent resource estimates are known to this author. This author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve.

An additional seven holes were drilled at the Bonanza prospect. Results included values from background Au to 10.9 g/t Au over 2.28 m, and 1.30 g/t Au over 51.2 m. Based on these drilling results, CAGC calculated a resource of 24,400 tons grading 7.20 g/t Au. Note: This resource was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by CIMM. The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, and should not be relied upon. No subsequent resource estimates are known to this author.

This author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve.

Four drill holes were completed on the Alder prospect, returning results from background Au to 6.07 g/t Au over 0.3 m. A resource of 71,680 tons grading 20.57 g/t Au was calculated. Note: This resource was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by the Canadian Institute of Mining, Metallurgy and Petroleum (CIMM). The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, and should not be relied upon. No subsequent resource estimates are known to this author. This author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve.

At the Flanders prospect eleven holes were drilled, returning values ranging from background Au to 0.91 m of 49.71 g/t Au. Trenching on the Flanders prospect returned values to 112 g/t Au over 1.07 m. These results were used by CAGC to calculate a resource of 36,000 tons grading 27.57 g/t Au, and a "geologically inferred" resource of 275,000 tons at a similar grade. Note: These resources were developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by CIMM. The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, and should not be relied upon. No subsequent resource estimates are known to this author. This author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve.

Ventures Resources Corporation (Ventures) optioned the majority of the Seventymile gold belt from Doyon Ltd. in 1996. The 1996 program included ridge-top mapping and rock sampling, and soil, stream-silt and panned concentrate geochemical sampling.

In 1997, Ventures flew an airborne DIGHEM survey over the Flume Creek, Crooked Creek, and Deep Creek trends. The aeromagnetic results highlighted the trace of the ultramafic rocks and identified the basaltic units. Resistivity measurements identified major fault structures, granitic intrusive rocks, sedimentary strata, and silicic alteration. Soil sampling in 1997 focused on areas east of the Deep Creek grid, to differentiate between the geochemistry of the Flanders and Deep Creek trends.

In 2000, Ventures completed 6 diamond drill holes for a total of 1,045 m at the Flanders prospect and 2 holes totalling 256 m at the Deep Creek prospect. Drilling at Flanders returned values from background Au to 205.89 g/t Au over 1.10 m (FD 00-4), and confirmed mineralization extends across a 366 m by 122 m area. Further soil sampling that year successfully identified a 450-metre extension of the Deep Creek Trend. However, no significant Au values were encountered in the two drill holes at the Deep Creek prospect.

No further work is known to have taken place prior to acquisition by Tectonic.

1.3 GEOLOGICAL SETTING

The Seventymile property is located within the Yukon-Tanana terrane (YTT), an accreted terrane comprised mainly of Proterozoic to Triassic metaigneous and metasedimentary assemblages, largely of continental affinity. The YTT extends from east-central Alaska to south-central Yukon and comprises numerous pulses of arc magmatism accreted on to the Ancient North American Continent. The YTT is bounded by two major transpressional faults: the Tintina Fault Zone to the north and the Denali Fault to the south. Both have undergone dextral displacement of roughly 400 km since the late Cretaceous.

Conjugate to the Tintina and Denali fault zones are a series of district-scale northeast-trending faults, including the Shaw Creek fault near the Pogo deposit and the Mount Harper lineament extending to the southern Seventymile property boundary. These major faults are the most obvious members of a regional NE-SW trending structural fabric, marked by orientation of smaller drainages throughout the Seventymile area.

Three major pulses of continental arc magmatism occurred during the Late Devonian to Early Mississippian, Permian, and Late Triassic to Early Jurassic. Further subduction-related magmatism occurred into the mid-Cretaceous, resulting in emplacement of batholithic-scale intrusions. Related magmatism also resulted in the emplacement of a series of intrusive suites comprising the 110 – 70 Ma Tintina Gold Belt.

In the Seventymile area, the "Seventymile terrane", a narrow assemblage of Permian-aged submarine ophiolitic ultramafic rocks, non-ophiolithic mafic to felsic volcanics, and lesser limestones and quartz rich clastic rocks, extends WNW-ESE, roughly paralleling the Seventymile River to the north. This terrane is equivalent to the Slide Mountain terrane in southern Yukon and parts of British Columbia. In Alaska, it forms a discontinuous belt that trends northwest from the Yukon Territory through the property and to the Shaw Creek fault, where it has undergone sinistral offsetting. The Seventymile fault, a splay of the Tintina fault, defines the northern boundary of the Seventymile terrane, separating it from YTT rocks to the north. The Seventymile terrane has undergone thrust faulting that forms the lithological contacts between the major lithological units. The ultramafic units form the leading northern edge of the main thrust sheet, the greenstone and metasedimentary rocks were successively thrust over these. The south boundary of the Seventymile terrane abuts YTT rocks that are distinguishable from the northern YTT rocks by their pelitic composition. In the northern and eastern property area, Paleozoic stratigraphy is overlain by poorly consolidated Tertiary conglomerate, sandstone, and minor lignite. These sedimentary units host the Ptarmigan Hill and Mogul Bluff epithermal Au prospects.

Three episodes of folding have occurred within the Seventymile property. The earliest comprises small-scale folding within the schists of the YTT of the northern and southern property areas. The entire property was subjected to southwest to northeast ductile compression, the axial planes of which strike sub-parallel to the Seventymile fault. A second folding event has been interpreted to result in open folding indicated by a vertical northeast-trending axial planar fracture cleavage. The final folding event is related to strike-slip movement of the Tintina fault system, resulting in isoclinal folds with nearly vertical fold axes. The axial planes of these isoclinal folds are consistent with drag on the Tintina Fault during its offset.

Three generations of faulting have also been identified. The first comprises south-dipping thrust faults that form contacts between the serpentinite and basalt units. The second generation comprises NW-SE-trending transpressional faulting, represented by the Tintina Fault and forming the dominant structural features of the Seventymile terrane. Locally, the Seventymile fault is the largest, with an apparent dextral displacement of approximately 11.2 km. The smaller splays display lesser displacement of several hundred metres. The final episode of faulting resulted in a vertical, northeast trending fracture set with minor strike slip displacement (both sinistral and dextral). This fracture system resulted in a set of northeast-trending topographic lineaments in the Seventymile Terrane that control the northeast orientation of the creeks draining this area. This event may also represent conjugate faulting related to movement along the Tintina and Denali faults.

1.4 MINERALIZATION

The lode prospects on the Seventymile property have been divided into three distinct trends. These are: the Flume Creek trend which includes the Flume Creek, Alder Creek, Flanders and Bonanza Creek orogenic gold prospects; the Crooked Creek Trend which hosts the Ptarmigan Hill and Mogul Bluff epithermal gold prospects; and the Deep Creek trend which includes the Deep Creek and Kill Zone 2 epithermal gold prospects.

Mineralization in the Flume Creek trend occurs along a major thrust fault dividing footwall serpentinite from hanging wall volcanic packages to the south. Auriferous mineralization occurs in variably oriented quartz-carbonate-arsenopyrite-pyrite veins and vein breccias up to 0.61 m thick and hanging-wall stockwork vein zones up to 9.1 m thick. The four prospects are marked by a semi-continuous NW-SE-striking soil anomaly.

The Flanders prospect forms the eastern end of the Flume Creek trend and comprises two parallel WNW-striking quartz-arsenopyrite veins dipping moderately to the north. The Flanders prospect was drilled in 1990 by CAGC and again in 2000 by Ventures, returning intercepts to 205.89 g/t Au over 1.10 m (FD 00-4). Trenching on the Flanders prospect by CAGC produced values up to 112 g/t Au over 1.07 m.

The Alder Creek prospect, located WNW of the Flanders prospect, hosts quartz-arsenopyrite-pyrite veins primarily within stockwork zones and tension gash structures. Gold values from drilling range from background to 6.07 g/t Au over 0.3 m, with higher grades associated with intense silica-carbonate alteration. The Alder Creek prospect is located at the approximate upstream limit of placer operations along Alder Creek.

The Bonanza Creek prospect, located west of Alder Creek, comprises three types of mineralization associated with a fault controlled stockwork vein system. These are: sulfide-poor quartz stockwork veins with visible gold; arsenopyrite-quartz stockwork veins; and quartz veins with local pyrite. Diamond drilling by CAGC returned values from background Au to 10.9 g/t Au over 2.28 m and 1.30 g/t Au over 51.2 m.

The Flume Creek prospect marks the northwest end of the Flume trend. Mineralization consisting of arsenopyrite, pyrite and visible gold occurs in quartz-carbonate veins and altered wall rock. A series of dextral northeast-trending strike slip faults offsets the mineralization. Grab samples of outcrop at the Flume Creek prospect returned values to 178.286 g/t Au. Seven holes drilled on the Flume Creek Prospect returned Au values from background to 29.3 g/t over 1.07m.

The Crooked Creek trend comprises two epithermal Au prospects within the eastern part of the Seventymile property: the Ptarmigan Hill and Mogul Bluff prospects. These are hosted by poorly consolidated Tertiary conglomerates and sandstones. Mineralization at the Ptarmigan Hill prospect consists of epithermal veining controlled principally by a steeply dipping, north-trending fracture system within silicified coarse clastics. The prospect is associated with an Au-Ag soil geochemical anomaly approximately 1,065 m by 305 m in aerial extent. Drill results range from background Au to 5.83 g/t Au over 24.38 m. The Mogul Bluff prospect is geologically and mineralogically similar to Ptarmigan Hill. Mineralization is controlled by a north-trending steeply-dipping fracture system and has been classed as epithermal. The target was tested with nine drill holes by ACNC, but intercepts of altered material typically graded less than 1.0 g/t Au.

The Deep Creek trend is located approximately 610 m south of the Flanders prospect, within silicified dacitic volcaniclastic rocks of probable Tertiary age. This trend is thought to represent distinct volcanic-hosted epithermal mineralization that extends parallel to the Flume Creek and Crooked Creek trends.

Mineralization at the Deep Creek prospect consists of silicified volcanic rocks returning grades from background Au to 1.72 g/t Au. Mineralization is structurally controlled, occurring in quartz carbonate veins and black quartz stockwork zones. Soil sampling returned values to 0.480 g/t Au; however, drilling in 2000 failed to intersect significant mineralization.

1.5 DEPOSIT TYPES

Tectonic Metals Inc. is primarily exploring for orogenic gold mineralization on the Seventymile property; however, orogenic and epithermal gold mineralization have both been recognized on the property.

Orogenic gold deposits are epigenetic in origin and structurally controlled, with lode-style mineralization occurring in shear zones and faults without an obvious intrusive association. They are typically associated with large first-order crustal-scale faults which provide a fluid conduit, however the mineralization itself is typically hosted within second and third order structures. Fluid source may result from regional metamorphism generated during structural deformation associated with greenschist to amphibolite grade metamorphism. Gold mineralization is principally found within veins but may also be found within altered host rocks and vein selvages, and within silicified and arsenopyrite rich replacement zones.

The lode occurrences of the Flume Creek trend exhibit characteristics typical of orogenic gold deposits, including quartz-carbonate veins filling tectonically formed structures. To date, most of the high-grade mineralization along the Flume Creek trend has been found in shallowly dipping structures such as tension gashes. Larger vertically dipping shear structures may host more significant concentrations of gold.

Epithermal Au (±Ag), deposits are commonly formed in shallow-level hydrothermal systems, typically developed in volcanic arcs at convergent plate boundaries as well as in intra-arc, back-arc, and post-collisional rift settings. Mineralization occurs both as veins and disseminations forming from hydrothermal fluids, typically by replacement or by void-filling mechanisms. These deposits are usually young and form within the top 1.5 km of the earth's crust. Steeply dipping veins typically host the highest ore grades whereas mineralization within adjacent host rocks and/or disseminated mineralization tends to be of significantly lower grade.

The lode occurrences of the Crooked Creek and the Deep Creek trends exhibit characteristics associated with low-sulphidation epithermal systems. The dominant alteration types are silicification and sericitization. The presence of Hg and Sb sulphides is also characteristic of low-sulphidation epithermal deposits.

1.6 CURRENT EXPLORATION

Upon acquiring the lease on the Seventymile Property in 2018, Tectonic Minerals Inc. completed an exploration program comprising 1,762 line-km of high-resolution airborne magnetics, 380 soil samples and 106m of trenching with a helicopter-portable backhoe. The purpose of the high-resolution magnetic survey was to provide a control for accurately mapping different geological units, and the identification of geological structures potentially related to mineralization. The survey delineated the extent of the Seventymile terrane mafic to ultramafic rocks as a linear magnetic high trend.

Rock sampling in 2018 focused mainly on the Flanders prospect area, including the interpreted western extension. The majority of rock samples returned low to background values (<0.005 g/t Au), although anomalous values were returned from the core Flanders area. The highest value of 8.585 g/t Au was returned from a sample of multi-pulsed quartz breccia. Rock sampling also focused on the Flume prospect

area, where samples returned values from <0.005 g/t Au to 2.721 g/t Au. Two samples were taken at the Ptarmigan Hill prospect, returning values of 0.229 g/t Au with 11 g/t Ag, and 3.483 g/t Au with 814 g/t Ag respectively. The pathfinder mineralogy, including high Sb and low As and Bi values, suggests a lower temperature setting typical of epithermal mineralization.

The 2018 soil sampling utilized power augers to penetrate the permafrost that had hampered historic shovel sampling. Previous shovel sampling returned "false negative" values because the sample was unobtainable or was of unrepresentative surface material. Three target areas were sampled during the 2018 program: the Flume-Bonanza Link, Bonanza East, and the Flanders.

The Flanders area was the primary target, from which 2018 soil sampling along three parallel lines returned values from <0.005 to 1.080 g/t Au. Numerous values exceeding 0.100 g/t Au are coincident with the contact between crystal lithic tuffs and volcaniclastic rocks to the south. A fourth orientation line extending directly across the drilled portion of the Flanders prospect returned values from 0.117 g/t Au to 1.913 g/t Au, although outlying samples returned background Au values. Four additional auger soil lines were added to test for extension of the anomaly, returning values from <0.005 g/t Au to 0.670 g/t Au. An additional two short lines northwest of this grid returned values from <0.010 g/t Au to 0.388 g/t Au.

At the Flume-Bonanza link, a total of 78 auger samples were collected in 2018. Gold values ranged from <5 ppb Au to 258 ppb Au, with multiple values between 56 ppb and 69 ppb Au. At the Bonanza East prospect, a total of 78 samples were collected, returning values from <5 ppb Au to a peak result of 57 ppb Au. Extensive permafrost hampered sampling efforts was in this area.

A single 106-metre long trench was dug by a heli-portable "CanDig" excavator to follow up on the 1.014 g/t Au and 1.913 g/t Au-in-soil values at the Flanders prospect. The trench was laid out to cross an interpreted major shear zone, and intersected fault gouge at its southern terminus. This fault gauge was mineralized, returning a value of 278 ppb Au across 9 m within brecciated welded tuff exhibiting moderate silicification and chlorite alteration. A total of 26 samples returned values from 0.005 g/t Au across 5 m to 0.283 g/t across 5 m.

In May of 2019, three samples of proximal quartz float were taken from the Flanders prospect. These samples returned values from 2.021 g/t Au to 20.0 g/t Au, with anomalous As and weakly anomalous Sb values, and rare visible gold. The 2019 sampling confirmed the tenor of gold from surface sampling at the Flanders prospect.

In 2019, Tectonic conducted a Geoprobe survey across five target areas along the Flume trend: the Flume-Bonanza Link, Bonanza, Flanders, Deep Creek and East Flanders targets. These surveys were designed to collect representative rock samples from the soil-bedrock interface ("top of bedrock") along geoprobe lines at depths ranging from near-surface to 4.5 m. The program was conducted over a 37-day period from July 8 to August 13. A total of 788 samples were collected across 3,865 m of grid lines at a 5-metre sample spacing.

The Flanders target remains the most prospective on the property. This target comprises a high-angle shear zone that potentially hosts bonanza-style feeders veins to the known low angle veins and high-grade tension gash veins. Geoprobe sampling identified four sub-zones, FL-1 through FL-4, of which FL-1 and FL-4 are the most prospective. Sampling at FL-1 returned values from background to 2.47 g/t Au, including 14 samples exceeding 0.15 g/t Au. Sampling at FL-4 returned values from background to 2.194 g/t Au, including 11 exceeding 0.15 g/t Au.

The 2019 Geoprobe surveying across the Flume-Bonanza Link prospect targeted untested anomalous gold-in-soil results within pillow basalt and serpentinite units near a diorite dyke. Geoprobe results revealed moderately anomalous Au values at or near the basalt-ultramafic contact, with values ranging from background to 0.372 g/t Au. Samples taken farther south within the basalt package returned weakly to moderately anomalous Au values, ranging from background to 0.086 g/t Au. Closer to the contact within the basalts, two consecutive samples returned values of 0.118 g/t Au and 0.325 g/t Au, respectively.

The Bonanza prospect targeted a high-angle shear-hosted vein potentially occurring along the serpentinite-volcaniclastic contact. Two Geoprobe lines covered a distance of 0.485 km, from which 99 samples were taken. Along the western line, two consecutive samples directly along the serpentinite-volcanic contact returned values of 0.05 g/t Au and 0.102 g/t Au, respectively. Somewhat farther to the northeast within the serpentinite, two others returned consecutive values of 0.101 g/t Au and 0.046 g/t Au, and one additional sample farther north returned 0.107 g/t Au.

The East Flanders prospect tested the hypothesis that a high-angle shear zone hosting possible bonanza vein or veins exists east of the Flanders prospect and extends across Deep Creek. Geoprobe sampling revealed a highly anomalous gold value of 0.946 g/t Au from the basalt, and two strongly anomalous values of 0.239 g/t Au and 0.299 g/t Au overlying the crystal lithic tuff near its contact with the basalt unit. Sampling along the eastern line returned four consecutive values ranging from 0.045 g/t Au to 0.815 g/t Au across 15 m.

At the Deep Creek target, Geoprobe sampling targeted the “Deep Creek trend”, a zone of anomalous silver and gold values in altered silicic volcanic and subvolcanic rocks near a late Cretaceous monzonite. Sample results revealed weakly to moderately anomalous Au values within terrigenous clastic rocks located on the southern flank of the monzonite. Gold assay values ranged from 0.010 g/t to 0.106 g/t at this locality, with numerous samples exceeding 0.044 g/t Au.

Also, in 2019, gasoline-powered auger drilling program was completed, comprising 71 samples at a 25-metre line spacing along four lines with a combined length of 1,680 m. One line was completed across each of the Flanders, Alder, Flume, and Nugget targets. Gold values were typically lower than from Geoprobe “top-of-bedrock” sampling but still delineated anomalous zones. Values ranged from background to a maximum of 0.139 g/t Au at the Alder zone.

This author and Qualified Person can confirm that he has verified independently all data and reports prepared by Tectonic since the date of his visit and that no new material data has been received that would impact the analysis presented in his report since the date of his last visit. Although Geoprobe sampling has occurred, the Geoprobe work constitutes C-horizon soil sampling, the results of which do not require an additional visit to the project.

1.7 CONCLUSIONS

The Seventymile property covers a narrow assemblage of Seventymile terrane Permian ophiolitic ultramafic to mafic rocks, other non-ophiolitic mafic to felsic volcanic rocks, and lesser clastic sedimentary rocks and limestone. This assemblage is bounded to the north and south by Yukon-Tanana terrane stratigraphy.

Three major mineralized trends have been identified: the Flume trend, encompassing the Flume, Bonanza, Alder and Flanders prospects; the Deep Creek trend, comprising the Deep Creek and Kill Zone 2 prospects, and the Crooked Creek trend, hosting the Ptarmigan Hill and Mogul Bluff prospects. The Flume trend, and

likely the Deep Creek trend, host mesothermal gold-bearing vein-style mineralization interpreted to be of orogenic origin. The Crooked Creek trend comprises epithermal gold mineralization within Tertiary conglomerates and sandstones.

Two deposit settings are applicable: orogenic gold, comprising lode-style mineralization along splays of a district-scale crustal fault; and epithermal mineralization, marked by mineralization deposited in a lower temperature-pressure environment. Although the two main deposit models are quite distinct, they may have a common hydrothermal origin of early Tertiary age or younger. A common origin would suggest that hydrothermal mineralization originally with high pressure-temperature characteristics travelled SSE from the Flume/Deep Creek areas to the Crooked Creek trend. Fluid movement would occur along permeable horizons, such as shear zones, along the ultramafic-volcanic contact. During movement, fluids would have evolved to a lower temperature-pressure regime indicative of shallower emplacement environments. This would result in mesothermal-style veining in structurally constrained environments along the Flume trend, and epithermal-style mineralization emplaced in permeable, poorly consolidated coarse clastic sediments at the Ptarmigan and Mogul Bluff prospects.

Year-2018 trenching at the Flanders prospect returned anomalous gold values from sheared and brecciated chloritic mafic volcanic, indicating the presence of a significant structure. Soil sampling in 2018 also expanded the gold-in-soil anomaly west of Flanders. Rock sample values from Flanders taken in May 2019 confirm high-grade tenor of proximal float. These results indicate that the Seventymile property is a property of merit.

Geoprobe sampling results in 2019 expanded and delineated anomalous areas identified from previous sampling. Geoprobe top-of-bedrock sampling tended to return higher metal values than from power auger sampling, accentuating values from surface sampling. Although some downslope dispersion may still occur, Geoprobe sampling tended to identify the bedrock sources of surface soil geochemical results.

1.8 RECOMMENDATIONS

The 2020 exploration work is recommended to comprise a Rotary Air Blast (RAB) drilling program designed to test for bedrock mineralization at depth. The objective is to follow up on 2019 Geoprobe sampling along the Flume trend, specifically on the Flanders, Flanders East, Flume-Bonanza Link, Alder, Deep Creek, and Flume targets. The expected total meterage is 2,025 m, which can be expanded to a maximum of 3,000 m. The RAB holes are recommended to be drilled approximately normal to the orientation of the main Flume trend.

The program is recommended to take place over a period of 35 days of actual drilling, with an additional 6 days for mobilization and de-mobilization. The program would commence in early-June, following conclusion of the spring thaw. Drilling would be conducted utilizing a single 12-hour shift, and the camp would be heli-supported. A crew of 10 people, including a geologist, drill sample technician, helicopter pilot and cook, would comprise the camp.

All-in costs for the RAB drilling are estimated at about US$605,681, equivalent to CDN$799,500, depending on exchange rates at the time of operation.

2 INTRODUCTION AND TERMS OF REFERENCE

2.1 INTRODUCTION

This report, written in compliance with regulations under National Instrument 43-101 (NI 43-101), has been prepared for Tectonic Metals Inc. (Tectonic) of Vancouver, British Columbia, Canada. Tectonic is a junior gold exploration company based in Vancouver, British Columbia, Canada, with exploration projects in Alaska, USA, and Yukon, Canada. Acquisition of the Seventymile property resulted in a material change in Tectonic's asset base. The report has been prepared in due diligence for Tectonic to indicate the Seventymile property as a "Property of Merit". This report documents historic and recent exploration work completed at the Seventymile property.

2.2 TERMS OF REFERENCE

This report was commissioned by Tectonic Metals Inc. (Tectonic). The primary purpose is to provide a Technical Report to the standards of Form 43-101 F1 of NI 43-101 in order to qualify for listing as a public company. The author was asked to undertake a review of the available data as well as any relevant current exploration activity in the area, offer an opinion as to whether the property has merit, and if warranted, to recommend specific areas and means of further exploration. The identification of these areas was based on the author's observations and interpretations.

This is the first NI 43-101 report to be prepared for the Seventymile property. As such, the content of this report summarizes the historic exploration efforts that have been shared in the public domain and/or filed with Doyon Ltd., in addition to the work completed by Tectonic since acquisition of the lease to the property in 2018.

2.3 SOURCES OF INFORMATION

This technical report is based on the following sources of information:

- Personal inspection of the Seventymile property area;
- Review of the exploration data collected by Tectonic;
- Discussion with Tectonic personnel; and
- Additional information from public domain sources.

Internal reports provided by Tectonic are listed in Section 20: "References". This technical report is based on information that this author believes to be reliable. This author has no reason, other than any documented in this technical report, to doubt the reliability of the historical data contained herein.

This author and Qualified Person can confirm that he has verified independently all data and reports prepared by Tectonic since the date of his visit and that no new material data has been received that would impact the analysis presented in his report since the date of his last visit. Although Geoprobe sampling has occurred, the Geoprobe work constitutes C-horizon soil sampling, the results of which do not represent a material change to the project.

2.4 QUALIFICATIONS OF AUTHOR

This report has been prepared by Carl Schulze, P. Geo., Senior Project Manager – Geology for Aurora Geosciences Ltd. of Whitehorse. Carl Schulze (the author) is a Qualified Person (QP) as defined by the Canadian Securities Administrator's National Instrument 43-101.

The author is a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), the Association of Professional Geoscientists of Ontario (APGO) and the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG).

2.5 SITE VISIT

Carl Schulze, Qualified Person for the Seventymile property, was on site for one day on May 8, 2019. Mr. Schulze is responsible for all sections of this report.

2.6 TERMS, DEFINITIONS AND UNITS

All geographic locations in this report are relative to North American Datum 1983. Geological and structural measurements, and directional bearings, are expressed relative to true north unless otherwise stated. Non-geodetic coordinates are expressed in Universal Transverse Mercator Zone 7N metric coordinates. All measurements are expressed in the metric system unless they are measurements quoted from historic reports expressed in other units of measure. All metric units conform to the SI system using standard abbreviations codified in the United States National Institute of Standards and Technology (NIST) publication NIST SP 330. Chemical elements and compounds are abbreviated using standard International Union of Pure and Applied Chemistry abbreviations.

Unless otherwise indicated, the metric system of measure has been used throughout this report, including metric tonnes (t), kilograms (kg) or grams (g), kilometers (km) or meters (m), hectares (ha). Some historical distances are reported in feet (ft) or miles (mi). Imperial units of feet, acres and others have been used where they pertain to legal agreements.

Monetary figures are listed in Canadian dollars (CDN$) unless specifically stated in United States dollars (US$).

A "ton" refers to a short ton, or 2,000 lbs. A "tonne" refers to a metric tonne, or 2,204 lbs. The term "ppm" refers to parts per million, which is equivalent to grams per metric tonne (g/t); the term "ppb" refers to parts per billion. Gold grades are measured in grams per tonne (g/t Au) and occasionally in part per billion (ppb). Historic placer production values are reported in troy ounces (oz.) of Au. Where not explicitly documented in the relevant report, all historic metal quantities are assumed to be reported in the Imperial System (troy ounces per short ton). For the purpose of reporting historical gold grades, one troy ounce (oz.) per short ton (T) is converted to grams (g) per tonne (t) using a factor of 34.2857.

"Mag" and "EM" refer to "Magnetic" and "Electromagnetic" methods referencing geophysical surveying. "Residual Magnetic Field" and "Calculated Vertical Gradient" are expressions of airborne magnetic surveying. "Apparent Resistivity" is an expression of airborne electromagnetic surveying.

A "standard sample" is a sample of known concentration of specific metals, in this case gold, with the listed grades determined from an average of results from several independent laboratories. These are utilized to determine the accuracy of laboratory analysis. A "blank sample", of known very low, normally

sub-detection grade metal grades, tests for the degree of contamination, if any, occurring through the analytical process.

"Ma" refers to million years. The symbol "%" refers to weight percent unless otherwise stated. "QA/QC" refers to "Quality Assurance/ Quality Control". The term "tpd" stands for "tonnes per day".

ICP-AES stands for Inductively coupled plasma atomic emission spectroscopy. ICP-ES stands for "Inductively coupled plasma emission spectroscopy", and AA stands for "atomic absorption".

"NI 43-101" stands for National Instrument 43-101. "CIM" stands for Canadian Institute of Mining, Metallurgy and Petroleum". "NSR" stands for "Net Smelter Royalty". "PEA" stands for "Preliminary Economic Assessment".

"BLM" stands for the Bureau of Land Management. The term "EA" stands for "Environmental Assessment", and "EIS" stands for "Environmental Impact Statement". "APMA" is short for "Application for Permits to Mine in Alaska", and "MLUP" stands for "Miscellaneous Land Use Permit". "TWUA" stands for "Temporary Water Use Authorization" issued by the Alaska Department of Natural Resources (DNR). "WPCP" stands for "Water Pollution Control Permit".

Elemental abbreviations used in this report are:

Au: Gold
Ag: Silver
Al: Aluminum
As: Arsenic
B: Boron
Ba: Barium
Be: Beryllium
Bi: Bismuth
Ca: Calcium
Cd: Cadmium
Ce: Cerium
Co: Cobalt
Cr: Chromium
Cs: Cesium
Cu: Copper
Fe: Iron
Ga: Gallium
Ge: Germanium
Hf: Hafnium
Hg: Mercury
In: Indium
K: Potassium
La: Lanthanum
Li: Lithium
Mg: Magnesium
Y: Yttrium
Zr: Zirconium
Mn: Manganese
Mo: Molybdenum
Na: Sodium
Nb: Niobium
Ni: Nickel
P: Phosphorous
Pb: Lead
Pd: Palladium
Pt: Platinum
Rb: Rubidium
Re: Rhenium
S: Sulphur
Sb: Antimony
Sc: Scandium
Se: Selenium
Sn: Tin
Sr: Strontium
Ta: Tantalum
Te: Tellurium
Th: Thorium
Ti: Titanium
Tl: Thallium
U: Uranium
V: Vanadium
W: Tungsten
Zn: Zinc

3 RELIANCE ON OTHER EXPERTS

This author has relied on a report titled "Mining Lease between Doyon, Limited and Tectonic Resources, LLC", dated June 1, 2018. No specific authors are listed, although the signatories are Mr. James Mery, Senior Vice President, Land and Natural Resources for Doyon, Limited; and Mr. Tony Reda, President and CEO of Tectonic. The author has relied on the report for information on location and description of land tenure, for the considerations, length of term, mandatory expenditures, advance royalty and production royalty, among other tenets pertaining to the lease agreement. The sections of this Technical Report that this section applies to are: Section 4.1: "Location and Description"; Section 4.2: "Mineral Tenure and Underlying Agreements"; and Section 4.3: "Royalties and Encumbrances".

The author has also independently reviewed legal title to the property on the website "Alaska Mapper Light" to view claim status for the Seventymile property area. This applies to Section 4.1: "Location and Description".

4 PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION AND DESCRIPTION

The Seventymile property is centered at 64°56'32" N Latitude, 142° 08'13" W Longitude (UTM co-ordinates 446506, 7202491, Zone 7W), extending from 27 to 70 km northwest of the village of Eagle, Alaska. It is wholly contained within land owned by Doyon Ltd., an Alaska Native Regional Corporation. The area is within the Eagle Mining District. The property is approximately 270 air km east of Fairbanks and approximately 59 km west of Eagle, Alaska (Figure 1).

4.2 MINERAL TENURE AND UNDERLYING AGREEMENTS

The Seventymile property is an approximately 60,654 Ha mining lease granted to Tectonic Metals Inc. by Doyon Ltd. on June 1, 2018 (Figure 2). The township numbers of this lease are described in Table 1. The lease is valid for 15 years from that date and may be extended for an additional 5 years subject to the release of a feasibility report. Should commercial mineral production commence on the property, the lease will continue for as long as commercial production continues on the property. Subject to cessation of commercial production on the property, Tectonic may extend the lease for a further seven years following completion of commercial production by making a payment of USD$300,000 per annum. Tectonic may release portions of the leased property back to Doyon Ltd. that Tectonic determines are no longer of value to the operation. Prior to, or on, March 1, 2024, Tectonic must release 50% of the leased lands to Doyon Ltd. unless geological justification for their retention can be provided.

Table 1: Components of the Seventymile lease. All Townships and Ranges based on Fairbanks Meridian.

Township	Range	Sections
T. 2 N.	R. 26 E.	1-3, 10-15, 19-36, and portions of 4, 9, 16-18
T. 2 N.	R. 27 E.	1-36
T. 2 N.	R. 28 E.	7-10, 13-36
T. 2 N.	R. 29 E.	19-20, 27-36
T. 1 N.	R. 26 E.	1-24
T. 1 N.	R. 27 E.	1-24
T. 1 N.	R. 28 E.	1-26, 35-36
T. 1 N.	R. 29 E.	1-36
T. 1 S.	R. 29 E.	1-18

4.3 ROYALTIES AND ENCUMBRANCES

Tectonic Minerals Inc. will make the payments according to the schedule in Table 2 to Doyon, Ltd. in order to maintain its mining lease. Any annual payment after the seventh lease year, or delivery of a feasibility report, whichever is later, will be considered an advance royalty. The advance royalty can cover up to 50% of any production royalty incurred.

Table 2: Lease payment schedule

Lease Year	Payment due date	Annual Payment Amount (US$)
Year 1	June 1st, 2018	$30,000
Year 2	January 1st, 2019	$30,000
Year 3	January 1st, 2020	$30,000
Year 4	January 1st, 2021	$30,000
Year 5	January 1st, 2022	$60,000
Year 6	January 1st, 2023	$60,000
Year 7	January 1st, 2024	$60,000
Year 8	January 1st, 2025	$60,000
Year 9	January 1st, 2026	$60,000
Year 10	January 1st, 2027	$60,000
Year 11	January 1st, 2028	$200,000
Year 12	January 1st, 2029	$200,000
Year 13	January 1st, 2030	$200,000
Year 14	January 1st, 2031	$200,000
Year 15	January 1st, 2032	$200,000
Years 16 - 20	January 1st 2033 - 2037 (if lease is extended*)	$300,000 (each year)

In addition to these payments Tectonic Minerals Inc. is required to incur exploration expenditures according to the schedule in Table 3 to maintain their lease.

Table 3: Exploration work commitment schedule

Lease Years	Minimum Exploration Expenditures (US$)
2018	$400,000
2019	$600,000
2020 – 2023	$750,000
2024 – 2027	$1,500,000
2028 and each year thereafter	$2,000,000

Tectonic will pay Doyon Ltd. US$600,000 upon the completion of a feasibility report on any part of the leased properties. Prior to commercial production Tectonic will contribute US$25,000 per year into the Doyon Foundation, and upon commencement of commercial production Tectonic will contribute US$50,000 per year until the conclusion of the lease.

Should commercial production begin on the property the royalty schedule in Table 4 shall apply. Prior to January 1 of each year, Doyon Ltd. may choose to receive their royalty in the form of gold (Au) or silver (Ag), in amounts equivalent to what could be purchased at fair market value with the royalties for those metals upon completion of mining operations.

Table 4: Doyon Ltd. production royalty schedule

Production Year	Precious Minerals Production Royalty owed	Base Minerals Production Royalty owed
From the 1st year of production until the end of the 4th year	2% of "Net Smelter Returns" (as set out in the definition) from the precious minerals	1% of "Net Smelter Returns" from the base minerals
From the 5th year of production until the end of the 9th year	4% of "Net Smelter Returns" from the precious minerals	3% of "Net Smelter Returns" from the base minerals
From the 10th year of production onwards	Whichever is greater between 4% of "Net Smelter Returns" or 15% of "Net Proceeds" from the precious minerals	Whichever is greater between 3% of "Net Smelter Returns" or 15% of "Net Proceeds" from the base minerals

Additionally, Doyon Ltd. has the ability to compel Tectonic to purchase the absolute interest in all or portions of the leased land should those lands be identified by an independent mining consultant as necessary for milling, processing, or waste storage. If Doyon Ltd. requires the purchase of said lands, Tectonic will pay 125% of the fair market value.

Upon completion of mining activities, Tectonic will deliver a written cessation notice to Doyon Ltd. Doyon will retain possession of these lands until remediation obligations are complete. During this period Tectonic will pay monthly rent of $0.50 per acre of land held in possession of Tectonic until the entire lease is returned to Doyon Ltd. and remediation activities are completed (except for long term monitoring).

No further encumbrances are applicable to the Mining Lease and Option Agreement.

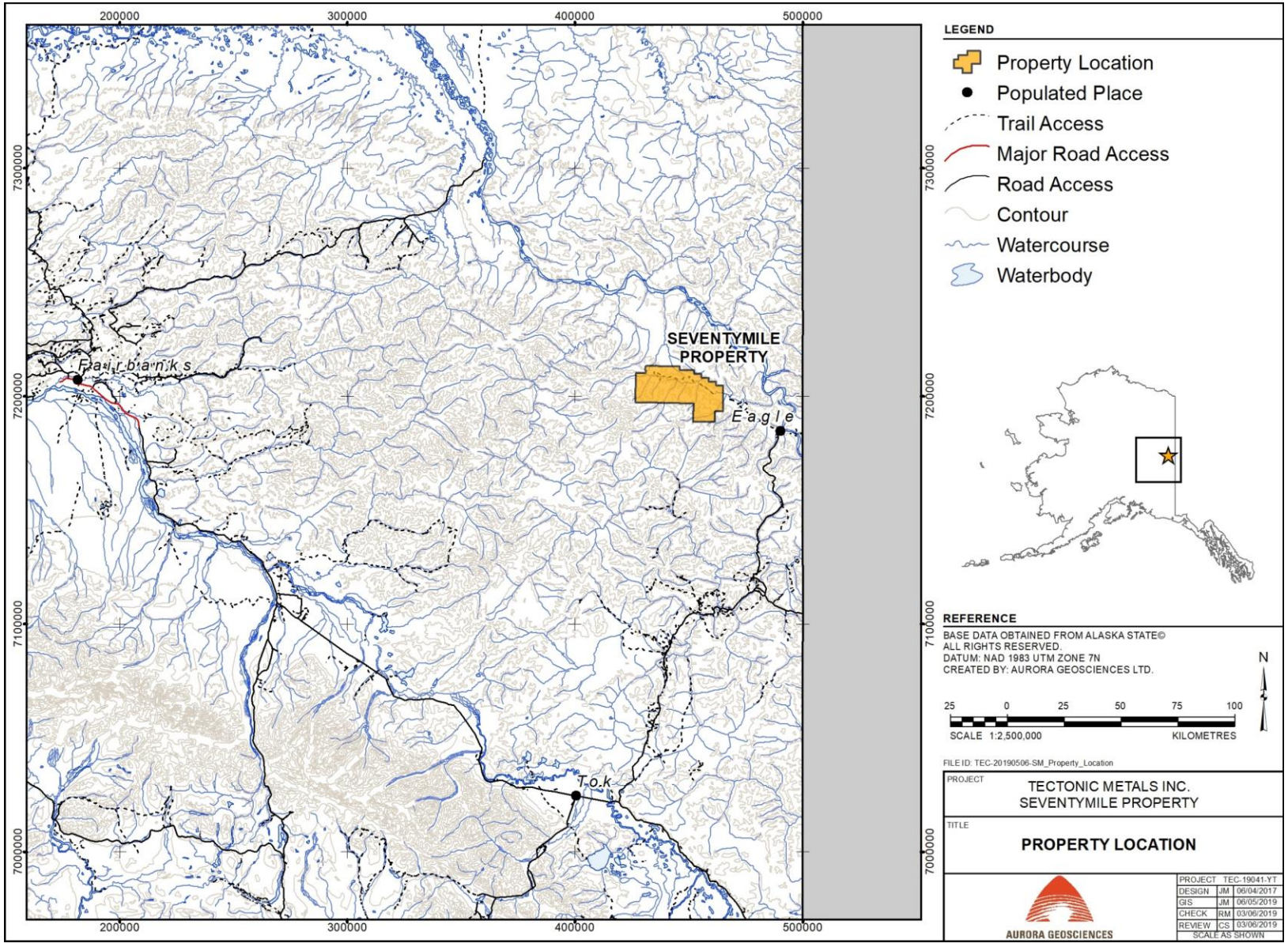

Figure 1: Location of the Seventymile property

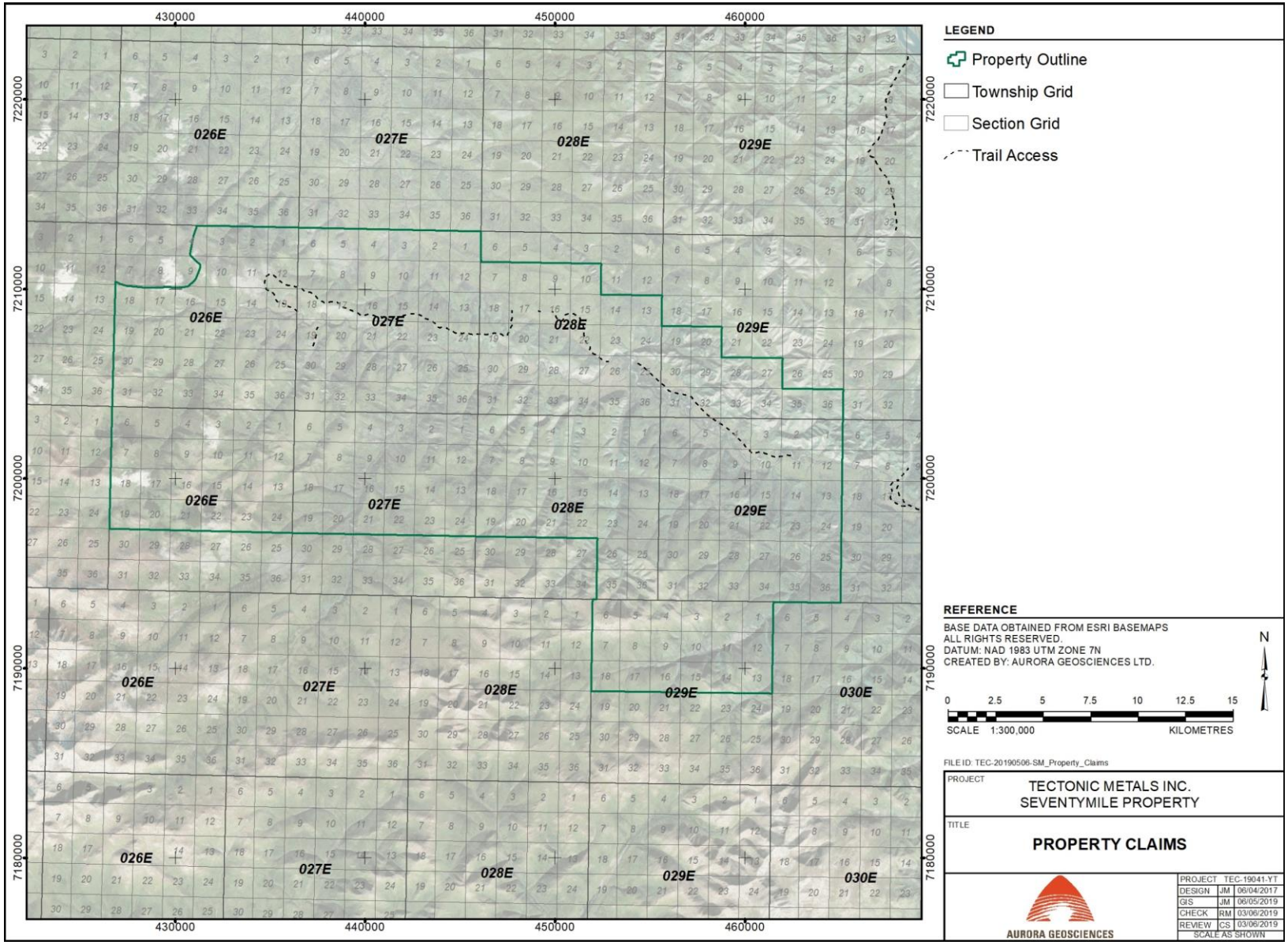

Figure 2: Portion of Doyon lands leased to Tectonic as the Seventymile property

4.4 ENVIRONMENTAL LIABILITIES

At Flume Creek, physical remnants of the exploration and development programs undertaken between the 1900s and the 1950s include ruins of an old adit and several fuel drums in unknown condition (Figure 3, drums not visible). Placer workings along Alder Creek, commencing at its confluence with the Seventymile River, extend upstream to within property boundaries, although no significant environmental liabilities are known within these.

Several cabins in various states of disrepair are located within fairly recent placer workings on Alder Creek (Figure 4). No barrels or other fuel containment facilities are visible from the air.

There are no other potential environmental liabilities known to this author.

As per the mining lease with Doyon Ltd., Tectonic will establish, prior to preparation for mining operations, an environmental remediation and reclamation fund for the leased properties. This fund must be maintained at 120% of the estimated costs for remediation and reclamation. This fund can be used only for remediation and reclamation. At least once every three years Tectonic must hire an environmental engineering firm to perform an on-site audit to determine environmental impacts of mining and/or exploration. If any are determined to exist, the reclamation fund must be adjusted accordingly.

Figure 3: Ruined adit along W bank, Flume Ck. Several barrels occur on east bank (not visible, condition unknown)

Figure 4: Upper (South) end of placer workings, Alder Creek

4.5 PERMITS

The Seventymile property is wholly located within Doyon Ltd. owned lands; therefore, approvals for various activities need to be obtained from Doyon Ltd., which has jurisdiction over activities. Prior to the harvest and storage of timber, Tectonic must obtain approval from Doyon Ltd. Additionally, prior to conducting ground disturbance activities Tectonic must conduct an archaeological study on the area of proposed disturbance. In addition to approval from Doyon Ltd. for certain activities, the permits outlined in Table 5 in may be required depending on the stage of the project.

Table 5: Permits required for exploration and mining operations on Doyon Ltd. lands.

Agency	Responsibility	Applicable During Exploration	Applicability During Production
Alaska Department of Fish & Game	Fish Habitat Permit or Special Area Permit	yes	yes
Alaska Department of Revenue	Tax Division Mining Licenses	no	yes
Department of Environmental Conservation	Wastewater Discharge, Compliance Inspections, & Technical Assistance	yes	yes
Department of Environmental Conservation	Alaska Pollution Discharge Elimination System permit	no	yes (maybe)
DNR, Division of Mining, Land & Water Mining Section	Miscellaneous Land Use Permit (On claim activity only, including surface use)	no	no
DNR, Division of Mining, Land & Water Mining Section	Miscellaneous Land Use Permit (Access across state land)	no, unless workplan includes access across state land	no, unless workplan includes access across state land
DNR, Division of Mining, Land & Water Mining Section	Temporary Water Use Authorizations, Permit to Appropriate Water, or a Certificate of Appropriation	yes	yes
DNR, Division of Mining, Land & Water Mining Section	APMA (Applications for Permits to Mine in Alaska)	yes	no, superseded by mine operations permits
DNR, Division of Parks	Special Park Use Permit or SHPO requirements	no	no
DNR, Division of Forestry	Timber Purchase may be required	no	yes, if mine access road is built
Bureau of Land Management	Approved Plan of Operation or Notice of Operation	no	no
U.S. Fish and Wildlife Service	Fish Habitat Permit or Special Area Permit	no	no
U.S. Forest Service	Approved Plan of Operation	no	no
U.S. Park Service	Approved Plan of Operation	no	no
U.S. Army Corps of Engineers (USACE)	Dredge and Fill Permit in Waters of the U.S.	yes	yes
U.S. Army Corps of Engineers (USACE)	Cultural Resource Assessment	yes	yes

Tectonic Metals Inc. has received all permits required to undertake all exploration activities up to and including core drilling.

Although the Seventymile property is on Doyon land, the State of Alaska's Department of Natural Resources (DNR) retains management authority over the mining-related reclamation of all lands of Alaska, including Native Corporation lands, pursuant to Alaska Statute 27.19. To satisfy the requirements in AS 27.19, an operator must file an appropriate Reclamation Plan for approval at least 45 days prior to commencement of the activity (H. Chalup, Natural Resource Specialist III, DNR).

On June 17th Tectonic received an Approved Reclamation Plan for activities specified in "Application for Permits to Mine in Alaska #3262" for the Seventymile property. This approval is valid until December 31, 2023. The approved works include only those within the application and changes to the scope of work are required to be submitted to the State of Alaska, Division of Mining, Land & Water in advance of additions or changes to work plans. A thorough review of any changes to proposed activities, both spatially and operationally, will be required annually to ensure the permit status is appropriate. The activities and thresholds within the application, and current approvals granted and requested for the Seventymile property, include the following exploration activities in six distinct areas identified within the application;

- Fuel storage and transport of less than 1,100 gallons;
- Trenching: 5 trenches, each 500 ft x3 ft x 5ft;
- Water intake for drill lubricant: 15 gallons/minute (gpm), 30 days/month; and
- Rotary air-blast drilling using 5-foot wide track-mounted vehicles and/or diamond core drilling using skid-mounted drill rigs: 50 drill holes, maximum depth of 1,500 feet, maximum core diameter of 3.5 inches.

On June 4th, 2019 Tectonic received a Fish Habitat Permit (FH19-111-0118 Tectonic Metals) from the Alaska Department of Fish and Game, to withdraw waters from streams that support resident species of fish. The water withdrawal is approved with the stipulation that the water intake structure prevent impingement and/or entrapment of fish and that the intake is screened to conform with specific guidance. The permit expires on December 31, 2023 and is specific to those waters indicated for withdrawal in the application. In the event that operations were moved from that described in the application, a subsequent review by the Department of Fish and Game, Division of Habitat would be required.

Tectonic has also received a Temporary Water Use Authorization (TWUA F2019-108) for the Seventymile property. This approval is valid until December 31, 2023. The permit allows for water use activities up to 24 hours per day (or otherwise limited by the maximum authorized gallons per day) from May 1st through October 31st of each authorized year (2019-2023). The TWUA allows for a combined maximum withdrawal of 21,600 gpd at a maximum pump withdrawal rate of 15 gpm (0.03 cfs) for up to 24 hours a day for no more than 184 days per season from four streams in the immediate property area.

Prior to the third year of the lease Tectonic must obtain a performance bond or similar security of an amount necessary to ensure the completion of necessary remediation activities on the site.

4.6 Reporting and Notification Requirements

Subject to the terms of the lease, Tectonic must meet with Doyon Ltd. to provide an update on the progress of planned activities including reclamation and environmental protection. Tectonic must also supply Doyon Ltd. with an annual report of exploration activities and their results.

4.6.1 Surface Rights

Doyon Ltd. is the sole owner of surface and subsurface rights for the Seventymile property. Under the terms of the mining lease signed between Tectonic and Doyon Ltd., Tectonic has full, non-exclusive rights to use the surface of the land to conduct exploration and mining activities subject to the following conditions:

- Tectonic has the right to use and reconstruct all existing roads on the property and has the right to construct new roads. Tectonic is responsible for the maintenance of all roads they use within the property.
- Tectonic has the right to use Doyon Ltd.'s water rights in the leased property for mining activities, provided Doyon Ltd. has no other firm plans for their use.
- Tectonic has the right to use timber, sand, gravel, rocks and other materials from the property to construct infrastructure, subject to first notifying Doyon Ltd. and receiving approval of a re-forestation or remediation plan as required.

4.7 Other Significant Factors and Risks

The author has independently reviewed legal title to the property and believes the statements contained within this report pertaining to the lease status to be true and complete. The reader should be cautioned that decisions made by Doyon Ltd. and departments of the federal and state governments may affect the tenure of the property, and the author has no way of predicting if or when such decisions may be forthcoming.

The author is not aware of any other significant factors and risks potentially affecting access, title, local environmental settings or the right to perform work on the Seventymile property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Topography, Elevation and Vegetation

The Seventymile property is located in the Yukon-Tanana uplands, a plateau bounded by the Yukon River to the north and the Tanana River to the south. The topography consists of rounded ridges and hills with local steep terrain and deeply incised stream valleys. Elevations range from about 1,800 m at the highest peaks to a low of about 365 m along valley bottoms. Local alpine glaciation has affected the higher peaks, resulting in cirques and moraines in these areas. Rock exposure at higher elevations is fairly abundant with outcrop and felsenmeer along ridgelines and talus on slopes (WGM Inc., 2001). Vegetation on south facing slopes is dominated by white spruce, birch and aspen. North facing slopes are covered mainly by black spruce. The valley bottoms are principally black spruce forests and tussock and scrub bogs. White spruce, balsam poplar, alder and willow dominate the floodplains of headwater streams. Vegetation above treeline is predominately low birch and evergreen shrubs with lichen (Nowacki et al., 2001).

5.2 Access and Site Infrastructure

Access to the property is by helicopter from Eagle, Alaska. There is an abandoned fixed-wing airstrip located above Alder Creek, which has recently been somewhat refurbished (Figure 5). The strip is now in fair condition, although further brushing and inspection would be required prior to use.

A historic, 97 km long, winter caterpillar trail, the Eagle-Alder Creek Trail, extends onto the property from Eagle. This is a Revised Statute 2477 (RS 2477) classified trail with a 100-foot-wide right of way. The status of this route is considered valid; therefore, it provides a potential route of surface access to the property. The condition of the trail is unknown.

Historic workings exist in the area of the Flanders prospect from exploration in the 1930s and 1950s. The status of any remaining infrastructure from these is unknown but unlikely to be serviceable. Fairly recent placer mining along Alder Creek was serviced by access trails, also of unknown condition.

The Seventymile property, including the prospective Flume trend area, is sufficiently large to host all necessary mining infrastructure, including processing plants, heap leach facilities, tailings storage, waste disposal areas, on-site housing, meal preparation and maintenance facilities, and all other facilities necessary for mine operation.

Figure 5: Airstrip near Alder creek (Flanders prospect), May, 2019

5.3 LOCAL RESOURCES AND INFRASTRUCTURE

Eagle, Alaska (population 86, 2010 census, Wikipedia, 2019) is the closest population centre to the property. It is connected to the North American highway system by a branch of the Taylor Highway, which extends from the Alaska Highway at Tetlin Junction to Dawson City, Yukon (the Canadian portion is called the Top of the World Highway). The Taylor Highway is open seasonally from April until mid-October. The first 97 km north from Tetlin Junction are paved, and the remaining 163 km are loose surface. During the winter the road can be travelled by snow machine. Services available in Eagle include lodging, groceries, fuel (gas, diesel, propane, Jet A, 100LL) and expediting services. Eagle is also served by the Eagle Airport which has a 3,600' gravel strip, and scheduled air service to Fairbanks on weekdays.

Electrical services for Eagle, Alaska, are provided by a local diesel-powered generator, with insufficient capacity to serve future mining facilities at the Seventymile property. Currently, there is no existing electric power infrastructure for the property to access.

The nearest larger community is Tok, Alaska, approximately 270 km by road to the south. Tok is a community of approximately 1,258 people (2010 census, Wikipedia, 2019) with full grocery, fuel, lodging and transport services. Fairbanks, Alaska, is a further 325 km northwest by road from Tok and represents the nearest major city. Fairbanks has a population of approximately 32,751 and is the centre of the North Star Borough, with a population of 97,121 (Wikipedia, 2019). The city is a full-service community, with scheduled air service, grocery, fuel, lodging, transport, heavy equipment, assaying and other services available. The city is also the headquarters of Doyon Ltd. and the Alaska Division of Geological and Geophysical Surveys.

An experienced mining and exploration workforce are based in Fairbanks, The Alaskan mining industry employs a significant number of people from remote communities (Lasley, 2018).

5.4 CLIMATE

The Seventymile property lies predominantly within the Yukon-Tanana Uplands ecoregion. The climate is continental with warm summers and very cold winters. The region is covered by discontinuous permafrost, particularly prominent on north-facing slopes and in valley bottoms (Nowacki et al., 2001). Climate data for Eagle, Alaska indicates that the area receives approximately 306 mm of precipitation per year. Average January highs are -19˚C and lows of -28 ˚C. Average July highs are 23 ˚C with lows of 9 ˚C. The area is prone to forest fires, and thunderstorms are common in the summer months (Nowacki et al., 2001).

The field season typically begins in May or June and continues until early October. However, drilling operations may continue later into the season, provided operations can be sustained.

6 EXPLORATION HISTORY

Gold was originally discovered in the Seventymile district following the Klondike gold rush in the late 1890s. Various placer mines operated in the area sporadically until the 1960s. Exploration for lode gold deposits occurred in the Flume Creek area from the early 1900s to the 1950s.

6.1 LODE EXPLORATION

6.1.1 1890s to 1986

Exploration for lode deposits occurred sporadically in the Flume Creek area between 1900 and the 1950s. The Flume Creek showing was discovered in the early 1900s by the Hudson Brothers who excavated a short adit. The claims lapsed and Fred Jenkins of Eagle, Alaska restaked the area in the late 1940s. The claims were transferred to the Alaska Nickel Company, of which Jenkins was a major shareholder. Jenkins conducted exploration and development work on the site in the early 1950s using a crawler-type loader and a small mill. His intent was to mine a talus pile which contained fragments of Au-bearing quartz veins (Saunders, 1956).

The Seventymile property area was chosen for its high mineral potential by Doyon Ltd. during the land selection process. Prior to land conveyance, WGM (Watts, Griffis, and McOuat) Inc. conducted regional exploration in the area as part of a joint venture with Doyon Ltd until 1986. This regional work included sampling, mapping and minor drilling activities and was focused on assessing the mineral potential of the area (WGM Inc., 2001).

6.1.2 American Copper and Nickel Company 1987-1989

The American Copper and Nickel Company (ACNC), a subsidiary of Inco Ltd., optioned four townships on the eastern end of the Seventymile terrane from Doyon Ltd. from 1987 to 1989. During this time, ACNC identified and explored the Ptarmigan Hill, Mogul Bluff, Ruby-Broken Neck Creek and Barney Creek areas. ACNC determined these four areas host epithermal mineralization.

In 1987, ACNC conducted primarily reconnaissance mapping and sampling on their optioned area. They discovered the Mogul Bluff and Ptarmigan Hill mineralized zones. Mapping and sampling at Ptarmigan Hill defined an extensive zone of Au-Ag mineralization with characteristic epithermal alteration and silicification, within Tertiary conglomerates. The Ptarmagin Hill prospect was discovered by prospecting in the Canyon Creek drainage, following up on discovery of a placer cinnabar occurrence in the creek. Two rock samples obtained approximately 400 m from the top of the hill and 1,200 m upstream from the Canyon Creek-Seventymile River confluence returned 670 ppb Au and 1,860 ppb Au, respectively, in addition to elevated Ag, As, Sb, and Hg values. A grid was established based on the location of these samples, and mapping and rock sampling were conducted on 200-foot centres. A total of 293 rock samples were collected. Most of these samples were felsenmeer obtained by digging through the soil. Of these, 17 returned between 1,000 ppb Au and 16,700 ppb (16.7 g/t) Au. This rock sampling program outlined a >100 ppb Au geochemical anomaly covering a 1,160 m by 240 m area. This anomaly has a well-defined Hg halo within the silicified and argillic altered Tertiary conglomerate. Follow-up soil sampling was conducted on the eastern part of the grid, results of which supported those from rock sampling. A total of 169 soil samples were collected, returning results from background Au to 3,500 ppb Au (Hunter and Rush, 1988).

Mineralization at Mogul Bluff was discovered in outcrop on the edge of Mogul Creek where rock samples containing up to 480 ppb Au and elevated Hg, As, and Sb. Detailed soil sampling was recommended as follow-up due to the extensive cover in the area. Additionally, a stream sediment sample in Hudson Gulch that assayed 320 ppb Au was collected. Further follow-up work on this area was recommended (Hunter and Rush, 1988).

Additional reconnaissance stream sediment work was conducted in the Ruby-Broken Neck Creek and Barney Creek drainages. ACNC did not consider these drainages to be as prospective (Hunter and Rush, 1988).

In 1988, ACNC returned to the property to follow up on the results of the previous seasons. Work on Ptarmigan Hill included drilling and several geophysical orientation surveys. At Mogul Bluff, a detailed soil survey was followed up with drilling. A follow-up soil survey in the Ruby-Broken Neck Creek area failed to produce anomalous results (Hunter et al., 1989a).

The 1988 diamond drilling program at Ptarmigan Hill commenced in May and continued through September. A total of 25 holes for 2,754 m was drilled during this time. Extensive barren silicification was encountered in the upper 90 m, typical of an epithermal system. However, this barren silicification was cross-cut by several Au-bearing shear zones. Interpretation of the drill results indicates that the primary controlling structures at Ptarmigan Hill are oriented roughly north-south, as opposed to east-west as had been originally presumed (an east-west orientation would roughly parallel the Seventymile fault). These northerly oriented structures are projected to intersect a contact between Tertiary and Paleozoic rocks in an area with significant silicification. This suggests that the contact may be an inter-graben fault structure that may have provided a conduit for fluids (Hunter et al., 1989a; Hunter et al., 1989b).

The 1988 geophysical program on Ptarmigan Hill included orientation surveys of Horizontal Loop Electromagnetics (HLEM), ground magnetometer, and induced polarization (IP) surveys. The HLEM survey was conducted with 100 and 200-foot coil separations but failed to delineate any anomalies. Ground magnetic surveying was successful at mapping changes in lithology but was not useful in identifying mineralization-controlling structures. Thirteen IP lines were completed across the northern part of the Ptarmigan Hill grid. The line spacing was 61 m (200 feet) and electrode spacing was 15 m (50 feet). Line 2800E was also surveyed at a 61-metre electrode spacing. Resistivity contrasts provide some level of differentiation between silicified conglomerate, argillaceous conglomerate, and unaltered conglomerate. Variations in chargeability were related to the degree of argillic alteration (Hunter et al., 1989a).

At the Mogul Bluff prospect, the 1988 program commenced with a detailed soil and prospecting survey during which 659 soil samples and 21 rock samples were collected. This survey outlined a 240 m by 240 m Au-As-Hg-Sb anomaly. The soil survey was followed up by a drilling program in August and September during which five holes for 349.6 m were drilled. One hole intersected argillic altered conglomerate which included a 2.99 m section that graded 662 ppb Au. The remaining holes were thought to be collared beneath the mineralized horizon and did not intersect mineralization (Hunter et al., 1989a; Hunter et al., 1989b).

ACNC returned to the property in 1989 and drilled an additional 12 holes at Ptarmigan Hill and four holes at Mogul Bluff (WGM Inc., 1997), in addition to rock chip sampling at Ptarmigan Hill. Unfortunately, the reports and data from this year of the project are unavailable and results are taken from subsequent reports.

Additional work was recommended but corporate changes at ACNC following the completion of the 1989 program resulted in ACNC dropping the option (WGM Inc., 1998).

6.1.3 Central Alaska Gold Company 1989-1990

The Central Alaska Gold Company (CAGC) optioned 320 square miles in the western part of the Seventymile property from Doyon Ltd. in 1989. That year they conducted reconnaissance stream sediment sampling and regional geological mapping. During the 1990 field season they conducted an

intensive exploration program focused on the Flume Creek area. This consisted of regional stream sediment sampling, geological mapping, rock sampling, grid-based soil sampling, trenching and diamond drilling. These exploration activities were split into two phases: a reconnaissance program aimed at extending zones of known mineralization; and a target-development program aimed at evaluating known prospects and new prospects generated during the reconnaissance phase (Cole et al., 1991).

The reconnaissance program comprised geological mapping, prospecting and soil sampling. Reconnaissance exploration was successful in discovering the Flanders prospect east of Alder Creek, the Deep Creek trend, and outlined additional anomalies in the Alder Creek area. The Flanders prospect was discovered by prospecting while following up on anomalous stream sediments. The prospect was identified when twelve large quartz vein boulders were discovered. Following this discovery, a detailed geological mapping, grid soil sampling, trenching, and drilling program was conducted. The reconnaissance program also discovered a series of silicified "rhyolite" intrusions in the area of Deep Creek associated with anomalous gold from stream sediment. Rock sampling showed anomalous Au, Ag, and Hg values are associated with structurally controlled silicification. Three soil grids were established in the surrounding area where extensive vegetation kill zones are associated with faults and acidic springs. Soil geochemical sampling across these returned anomalous Au, Ag and Hg values, particularly in the Deep Creek and "Kill Zone 2" areas. CAGC also conducted reconnaissance work in the northern placer creeks. However, no Au "pathfinder" element mineralization was found, suggesting that the Au source for these placer creeks may be separate from the Flanders prospect (Cole et al., 1991).

The target development program focussed on detailed mapping, sampling, trenching, and diamond drilling of the Flume Creek, Alder Creek, Bonanza Creek (located between Alder and Flume creeks), and Flanders prospects. The drilling program comprised 29 holes for 2,879.4 m. Seven holes were drilled at the Flume prospect where values ranged from background to 29.3 g/t Au over 1.07 m. The mineralization encountered is hosted in an extensive stockwork zone within pillow basalt. CAGC used the results from this drilling to outline a drill-inferred resource of 1,000,000 tons of 0.025 opt (0.857 g/t) Au. This estimate is presented in a report dated January 31, 1991 titled: "Central Alaska Gold Company, 1990 Minerals Exploration on Doyon Option Lands in the Seventymile Block" by Cole et al., 1991. The resource is based on only 7 diamond drill holes, results of which indicate a structure with a minimum strike length of 700 feet (213 m) and width of at least 100 feet (30.5 m). The zone is comprised of numerous veins within host rock assumed to carry no gold; the veins comprise a small percentage of the zone thickness. Cole et al stated that the "size and grade is clearly not attractive".

The resource category is not specified, but the resource was clearly developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by the Canadian Institute of Mining, Metallurgy and Petroleum (CIMM). The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, and should not be relied upon. No subsequent resource estimates are known to this author. This author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve. In order to satisfy modern CIMM resource category standards, considerably more drilling is required to establish a suitable drill spacing to reliably upgrade the resource base. Also, a qualified person specifically trained in calculating resource estimates will be required to re-calculate the resource estimate.

An additional seven holes were drilled at the Bonanza prospect. Results included values of 10.9 g/t Au over 2.28 m, 1.89 g/t Au over 9.7 m, and 2.43 g/t Au over 3.66 m. One hole intersected 51.2 m of 1.30 g/t Au. Based on these drilling results CAGC calculated a drill-inferred resource of 24,400 tons at 0.210 opt (7.20 g/t) Au (Cole et al., 1991; WGM Inc., 1997). The report by Cole et al is described above. The WGM

report, issued in March, 2001 for Doyon, Limited, on behalf of Ventures Resource Corporation without a specific author, is titled: “2000 Annual Report on the Seventymile Property, Alaska”.

The resource category is not specified, but was clearly was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by CIMM. The resource is based on results from a single drill hole (#FC90-1) and results from surface trench sampling along the surface projection of a zone “200 feet (61m) long by 7.8 feet (2.4m) wide”, extended to a down-dip of 100 feet (30.5m). The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, is likely to be low, and should not be relied upon. No subsequent resource estimates are known to this author. This author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve. In order to satisfy modern CIMM resource category standards, considerably more drilling is required to establish a suitable drill spacing to reliably upgrade the resource base. Also, a qualified person specifically trained in calculating resource estimates will be required to re-calculate the resource estimate.

Four drill holes in a single fence were drilled on the Alder prospect. Results included values up to 6.07 g/t Au over 0.3 m. The highest-grade intersections were associated with intense silica and carbonate alteration and breccia zones. From this drilling and trenching program, a “drill inferred resource” of 71,680 tons at 0.60 opt (20.57 g/t) Au was calculated, based on the results of two diamond drill holes (#FC90-21 and FC90-22) and a single trench (Cole et al., 1991). Cole stated three resource estimates: a “drill indicated resource” of 2.171 tons grading 0.060 opt (2.06 g/t); the aforementioned “drill inferred resource”, and a “geologic inferred resource” of 288,000 tons grading 0.060 opt (2.057 g/t).

This resource was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by the Canadian Institute of Mining, Metallurgy and Petroleum. The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, is likely to be low, and should not be relied upon. The resource categories are based on the results of two diamond drill holes (#FC90-21 and FC90-22) and a single trench. No subsequent resource estimates are known to this author. This author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve. In order to satisfy modern CIMM resource category standards, considerably more drilling is required to establish a suitable drill spacing to reliably upgrade the resource base. Also, a qualified person specifically trained in calculating resource estimates will be required to re-calculate the resource estimate.

At the Flanders prospect, eleven holes along four sections were drilled. Drilling intersected the north vein to a maximum of 60 m down-dip, and the south vein to 91 m down-dip. Mineralization was found to extend approximately 152 m along strike. CAGC calculated an average grade and size of all quartz vein intercepts on the Flanders prospect of 16.83 g/t Au over 0.76 m, comprising intercepts varying from barren to 0.91 m of 49.71 g/t Au. Trenching on the Flanders prospect returned values up to 112 g/t Au over 1.07 m. These results were used by CAGC to calculate a “drill-inferred (resource) total veins” resource of 66,000 tons grading 0.491 opt Au (16.83 g/t Au), including a “drill inferred (resource), best seven intercepts” of 36,000 tons grading 0.804 opt (27.57 g/t) Au. The report also stated a “geologic inferred (resource) total veins” of 500,000 tons grading 0.491 opt (16.83 g/t Au), including a “geologically inferred (resource), best seven intercepts” of 275,000 tons at 0.804 opt Au (27.57 g/t Au) (Cole et al, 1991). CAGC stated that “polygonal or cross-section methods” of calculation of “reserves” would have been misleading, resulting in adoption of a “global estimate” which assumed drill and trench samples comprised a “random population” and are representative of veins tested (Cole et al, 1991).

This resource was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by CIMM. The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained and should not be relied upon. The resource categories are based on the results of 11 diamond drill holes and 7 trenches. No subsequent resource estimates are known to this author. This author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve. In order to satisfy modern CIMM resource category standards, considerably more drilling is required to establish a suitable drill spacing to reliably upgrade the resource base. Also, a qualified person specifically trained in calculating resource estimates will be required to re-calculate the resource estimate.

CAGC recommended an additional 6,400 m of diamond drilling on the property (Cole et al., 1991) but ran out of funds and ceased operations (WGM Inc., 1998).

6.1.4 Coolbaugh Minerals Inc. 1992

Coolbaugh Minerals Inc. did some data interpretation and cross-section interpretation of the prior drilling at Ptarmigan Hill (Coolbaugh Minerals Inc., 1992).

6.1.5 Ventures Resources Corporation 1996-2000

Ventures Resources Corporation (Ventures) optioned the majority of the Seventymile gold belt from Doyon Ltd. in 1996. They contracted WGM Inc. to complete an exploration program on the property.

In 1996, Ventures conducted exploration across the property, focussing on ground-truthing and expanding on the work done by previous operators. The 1996 program included ridge-top mapping and sampling, soil sampling, stream silt sampling, and panned concentrate sampling (WGM Inc, 1997).

Ventures returned to the property in 1997 to expand the soil sampling grid in the Flanders and Deep Creek prospect areas. An airborne DIGHEM survey was flown over the Flume Creek, Crooked Creek, and Deep Creek trends. The aeromagnetic results highlighted the presence of the ultramafic rocks through a broken linear trend of high amplitude magnetic anomalies. The longer, weaker magnetic trends were interpreted as representing basaltic units. Resistivity measurements found long conductive trends interpreted as major fault structures. Additionally, granitic intrusive rocks, limestones, siliceous sediments and sedimentary rocks, and silicic alteration were indicated by high resistivity signatures. Soil sampling in 1997 comprised the collection of an additional 360 soil samples east of the Deep Creek grid. The goal of this work was to use relative Ag and Au abundancies to differentiate between the geochemistry of the Flanders prospect and that of the Deep Creek trend (WGM Inc, 1998).

In 2000, Ventures conducted target evaluation drilling on the Flanders and Deep Creek prospects. Six holes for a total of 1,045 m were drilled at the Flanders prospect, and two exploratory holes totalling 256 m were drilled on the Deep Creek prospect. An additional 232 soil samples were collected to the northwest of the Deep Creek prospect. The soil sampling program was successful in outlining a 450-metre extension of the Deep Creek trend, including a cluster of anomalies with values up to 140 ppb Au with a coincident Ag anomaly (WGM Inc., 2001).

The 2000 drilling program at Flanders focussed on stepping out from the most prospective hole drilled by CAGC. All holes encountered Au mineralization of varying widths, except for DDH FD 00-2 which was lost due to bad ground at 33 m. In DDH FD 00-4, gold mineralization was encountered to depths of 236 m.

The best intercept was 205.89 g/t Au over 1.10 m (FD 00-4). Additional notable intercepts, both in DDH FD 00-4, include 13.185 g/t Au over 1.31 m and 11.301 g/t Au over 0.52 m. The drilling at Flanders confirmed mineralization over an area of 366 m by 122 m. No significant Au values were encountered in the two drill holes at the Deep Creek prospect (WGM Inc., 2001).

6.2 PLACER PRODUCTION

Between 1898 and 1962, and estimated 45,000 ounces of gold were produced from several different creeks in the Seventymile District. Significant production occurred on Alder, Crooked, and Barney Creeks (Cole et al., 1991). Detailed records of placer production from the Seventymile District are not available (Twelker, 2019, pers. comm.); therefore, the exact amount of gold recovered and the production histories of each creek are unknown.

7 GEOLOGICAL SETTING

7.1 REGIONAL GEOLOGY

The Seventymile property is located within the Yukon-Tanana terrane (YTT), an accreted terrane comprised mainly of Proterozoic to Triassic metaigneous and metasedimentary assemblages mainly of continental affinity (Foster, 1994), and including Jurassic to Early Tertiary metaigneous rocks. The Paleozoic rocks have been metamorphosed to quartzites, phyllite, slate, schist and gneisses (WGM Inc., 2001).

The YTT is an allocthonous terrane extending from east-central Alaska to south-central Yukon. It comprises numerous pulses of arc magmatism (Mortensen, 1992), accreted on to the Ancient North American Continent. The YTT is bounded to the north by the Tintina Fault Zone and to the south by the Denali Fault. Both major fault zones have a lateral displacement of roughly 400 km, occurring since the late Cretaceous. Nelson and Colpron (2007) estimated an Eocene age of displacement. The Tintina fault has produced a broad topographic low known as the Tintina Trench which has been partially filled by Tertiary and Quaternary sediments (Nelson and Colpron, 2007).

Three major pulses of continental arc magmatism have been identified, occurring respectively during Late Devonian to Early Mississippian, Permian, and lastly Late Triassic to Early Jurassic time (Mortensen, 1992). The major, subhorizontal structural fabric marking much of the YTT was formed from the mid-Permian to the onset of magmatism in Late Triassic time, and likely represents a major continent-continent collision (Mortenson, 1992). Further subduction-related magmatism occurred into the mid-Cretaceous, resulting in emplacement of batholithic-scale intrusions such as the 112 – 105 Ma Dawson Range batholith that extends from the Northway area eastward to the Coffee Creek area of west-central Yukon. Related magmatism also resulted in the emplacement of a series of intrusive suites comprising the 110 – 70 Ma Tintina Gold Belt.

Conjugate to the Tintina and Denali fault zones are a series of district-scale northeast-trending faults and lineaments, including the Shaw Creek fault near the Pogo deposit, the Black Mountain tectonic zone east of this, and the Mount Harper lineament extending to the south property boundary. These major faults are the most obvious members of a regional NE-SW trending fault and fracture set, marked by smaller drainages throughout the Seventymile area. The YTT east of the Black Mountain fault has been intruded by Cretaceous to Tertiary plutonic rocks (Flanders, 2010).

In the Seventymile area, the "Seventymile terrane", a narrow assemblage of Permian-aged submarine mafic to felsic volcanic and ophiolitic ultramafic rocks, with lesser limestones and quartz rich clastic rocks extends WNW-ESE, roughly paralleling the Seventymile River to the north (Figure 6a, b). This terrane is equivalent to the Slide Mountain terrane in southern Yukon and parts of British Columbia. In Alaska, it forms a discontinuous belt that trends northwest from the Yukon Territory border to the northern section of the Eagle quadrangle, where it has undergone sinistral offsetting by the Shaw Creek fault. The western portion trends southwestward to the centre of the Fairbanks Quadrangle (Foster et al., 1987). Mafic and ultramafic units are referred to as "greenstones" in the property area.

The Seventymile terrane is recognized as an ocean basin assemblage that originally divided the YTT, but closed in the mid-Permian due to short-lived westward subduction under the YTT (Nelson et al, 2006). This package of rocks was thrust upon and imbricated with the rocks of the Yukon-Tanana Terrane during the Jurassic. The Seventymile fault, a splay of the Tintina fault, defines the northern boundary of the Seventymile terrane (WGM Inc. 2001). The Seventymile terrane has undergone thrust faulting that commonly separates the major lithological components. The ultramafic units form the leading edge of the main thrust sheet, with the greenstone and metasedimentary rocks successively thrust over these (Foster et al., 1987).

Much of the ultramafic stratigraphy of the Seventymile terrane has undergone pervasive serpentinization, as a result of its obduction onto the crust. The overall metamorphic grade of the Seventymile Terrane rocks is quite low, a maximum of lower greenschist metamorphism principally affects the volcanic tuffs and sedimentary units.

7.2 PROPERTY GEOLOGY

The Seventymile property covers a 42-km section of the Seventymile Terrane extending NW-SE across the property (Figure 7). The Seventymile fault defines the north boundary, separating it from Yukon-Tanana terrane (YTT) metamorphic rocks to the north. The south boundary of the Seventymile terrane abuts Yukon-Tanana rocks, which can be distinguished from the northern YTT rocks because they are significantly more pelitic in composition and contain a smaller number of intrusive units (Cole et al., 1991). In the northern and eastern property area, Paleozoic stratigraphy is overlain by poorly consolidated Tertiary sediments predominantly composed of conglomerate, sandstone, and minor lignite (Wilson et al., 2015). These sedimentary units host the Ptarmigan Hill and Mogul Bluff epithermal Au prospects.

The Seventymile terrane underlying the property has several key components (Figure 8). In the northwestern property corner, serpentinized peridotite forms a component of the Mount Sorenson ophiolitic suite. This unit is bound by the Seventymile fault on the northern side and by the informally named Flume Creek thrust fault on the southern side, separating it from the related "greenstone" rock units to the south. These greenstone units consist mainly of basalt, as well as associated hyaloclastic breccias, mafic tuffs, and minor interbeds of chert and gabbroic sills.

To the south of the greenstone unit, and presumably up section, a crystal lithic tuff unit of dacitic composition (Figures 7 and 8) occurs within the Seventymile terrane southeast of Bonanza Creek (Cole et al., 1991). This is bounded to the south by a complex of volcaniclastic and clastic rocks comprising arkose, arenite and wacke sandstone, as well as lapilli tuff, graphitic argillite, and siltstone. It stratigraphically overlies, and is intercalated with, the basalts and the crystal lithic tuff. A minor unit of micaceous dolomitic siltstone containing Permian brachiopods occurs above the volcaniclastic rocks (Cole et al., 1991).

West of Flume Creek and southeast of Deep Creek, a package of intermediate to felsic volcanic rocks including andesitic to dacitic tuffs, breccias, and dacitic to rhyolitic quartz-eye porphyries occurs. This unit appears to be up-section of the pillow basalts and may represent a coeval terrestrial volcanic system (Cole et al., 1991). A south-dipping tabular body of monzonite, less than 45 m thick, has intruded Seventymile Terrane rocks in the central part of the belt. An interpreted fault contact separates this unit from stratigraphy to the north. Diorite dykes which crosscut Seventymile stratigraphy to the west are interpreted as coeval with the monzonite. Unconformably overlying the monzonite is a thin unit of terrigenous clastic rocks, principally composed of a conglomerate with quartzite and quartz-eye rhyolite clasts. To the south of the terrigenous clastic unit is a thicker package of intermediate porphyritic volcanic rocks. This unit overlies both the rocks of the Seventymile Terrane and the Yukon Tanana Terrane rocks to the south. This intermediate volcanic and terrigenous clastic unit may be Tertiary in age (Cole et al., 1991).

There are three episodes of folding observed within the Seventymile property. The earliest comprises small-scale folding within the schists of the Yukon-Tanana terrane within the north and south property areas. These folds have undergone subsequent deformation and are poorly preserved. The entire property was subjected to southwest to northeast ductile compression directed along a NW-SE axis. The axial planes resulting from this deformation are sub-parallel to the strike of the Seventymile fault and the fold axes plunge approximately 10˚ to the southeast. A possible second set of folds related to this event has been identified within Seventymile terrane rocks, and consists of open folding indicated by a vertical northeast trending axial planar fracture cleavage. The final folding event is related to strike-slip movement of the Tintina fault system. The displacement on the Tintina fault produced isoclinal folds with nearly vertical fold axes. The axial planes of these isoclinal folds are consistent with drag on the Tintina fault during its offset (Cole et al., 1991).

Three generations of faulting have also been identified in the Seventymile terrane. The first comprises south-dipping thrust faults that form contacts between the serpentinite and basalt units, and also between the other greenstone lithologies. These contacts are particularly susceptible to faulting due to competency contrasts between lithological units. This stage of faulting probably occurred as flexural slip movement during the first deformation event. Presumably, there are older faults contained within the YTT rocks to the north and south of the Seventymile Terrane, but the structural setting remains poorly understood.

The second generation comprises NW-SE-trending transpressional faulting, represented by the Tintina Fault. These faults form the dominant structural features of the Seventymile Terrane and are identifiable in aerial photographs and satellite imagery as prominent linear topographic features (Cole et al., 1991). Locally, the largest of these faults is the Seventymile fault, with an apparent dextral displacement of approximately 11.2 km (Foster, 1976). The smaller splays display lesser displacement of several hundred metres, as interpreted by earlier workers. The temporal relationship between these faults and the Tintina fault zone is unclear.

The final episode of faulting resulted in a vertical northeast-trending fracture set with minor strike slip displacement (both sinistral and dextral) that appears to post-date the Tintina Fault system. This fracture system produced a set of northeast-trending topographic lineaments in the Seventymile Terrane and controls the northeast orientation of the creeks draining this area (Cole et al., 1991). This may also represent conjugate faulting related to movement along the Tintina and Denali faults.

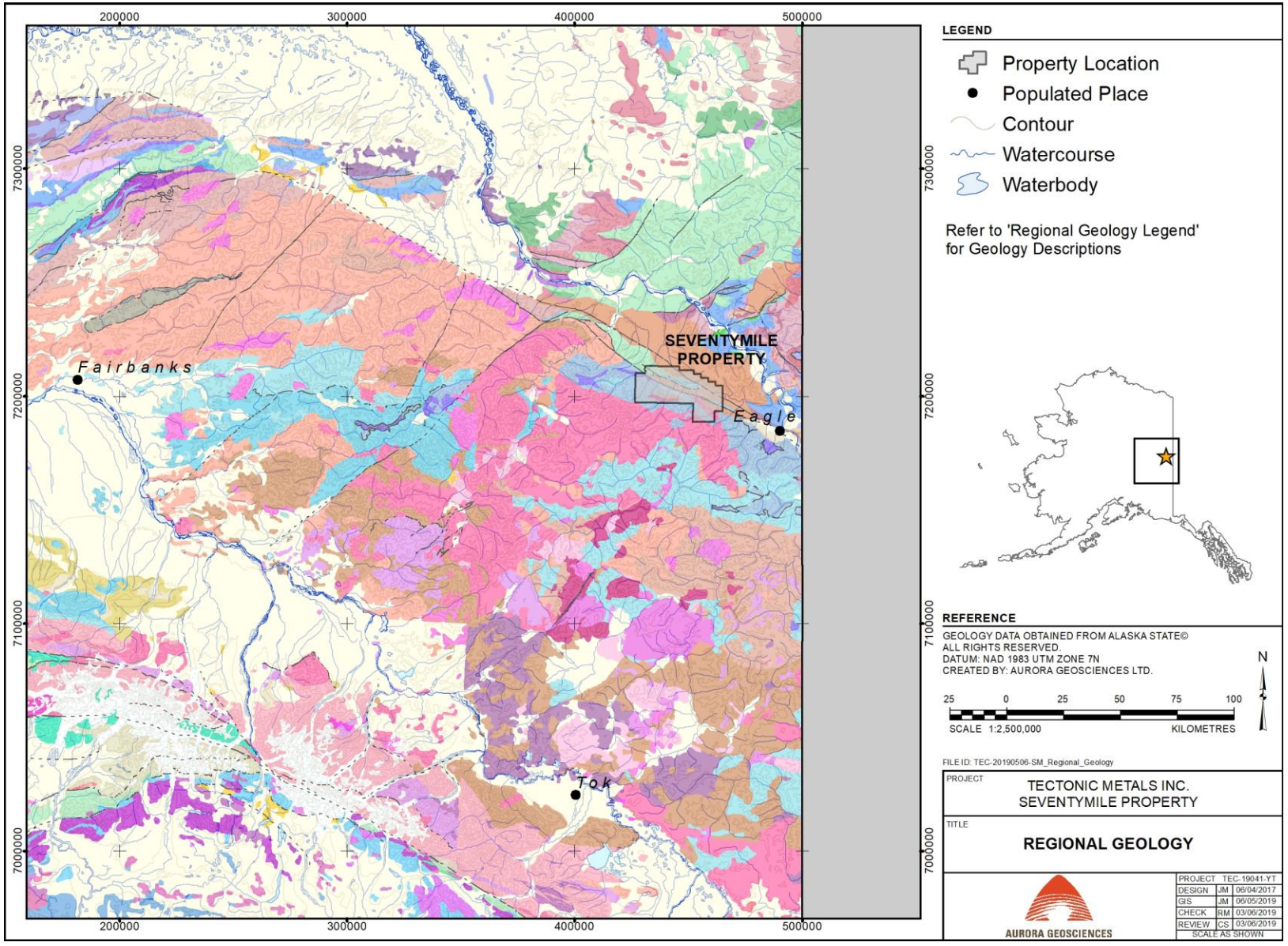

Figure 6: Regional geology of the Seventymile area.

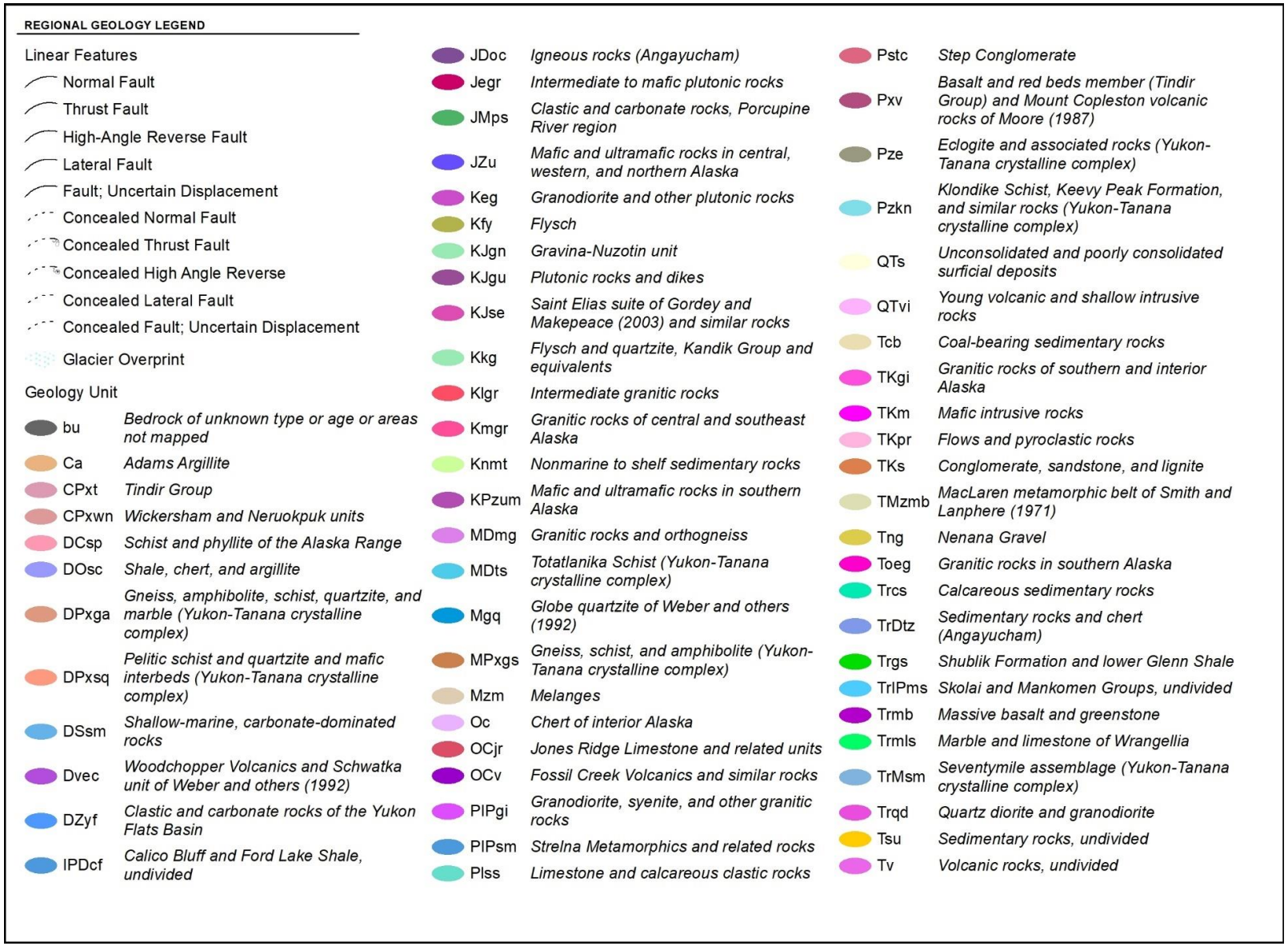

Figure 6b: Regional geology map legend.

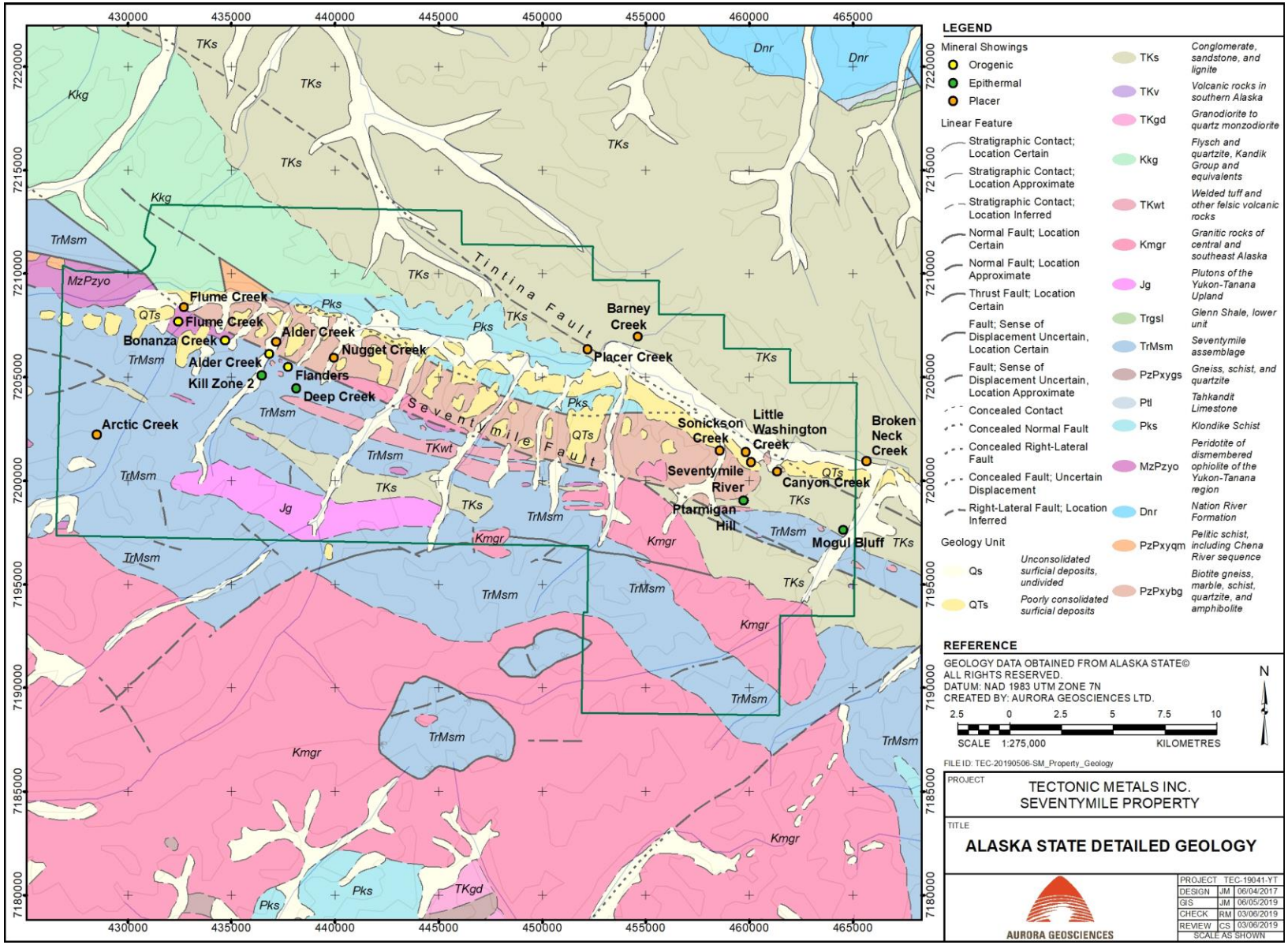

Figure 7: Geology of the Seventymile property.

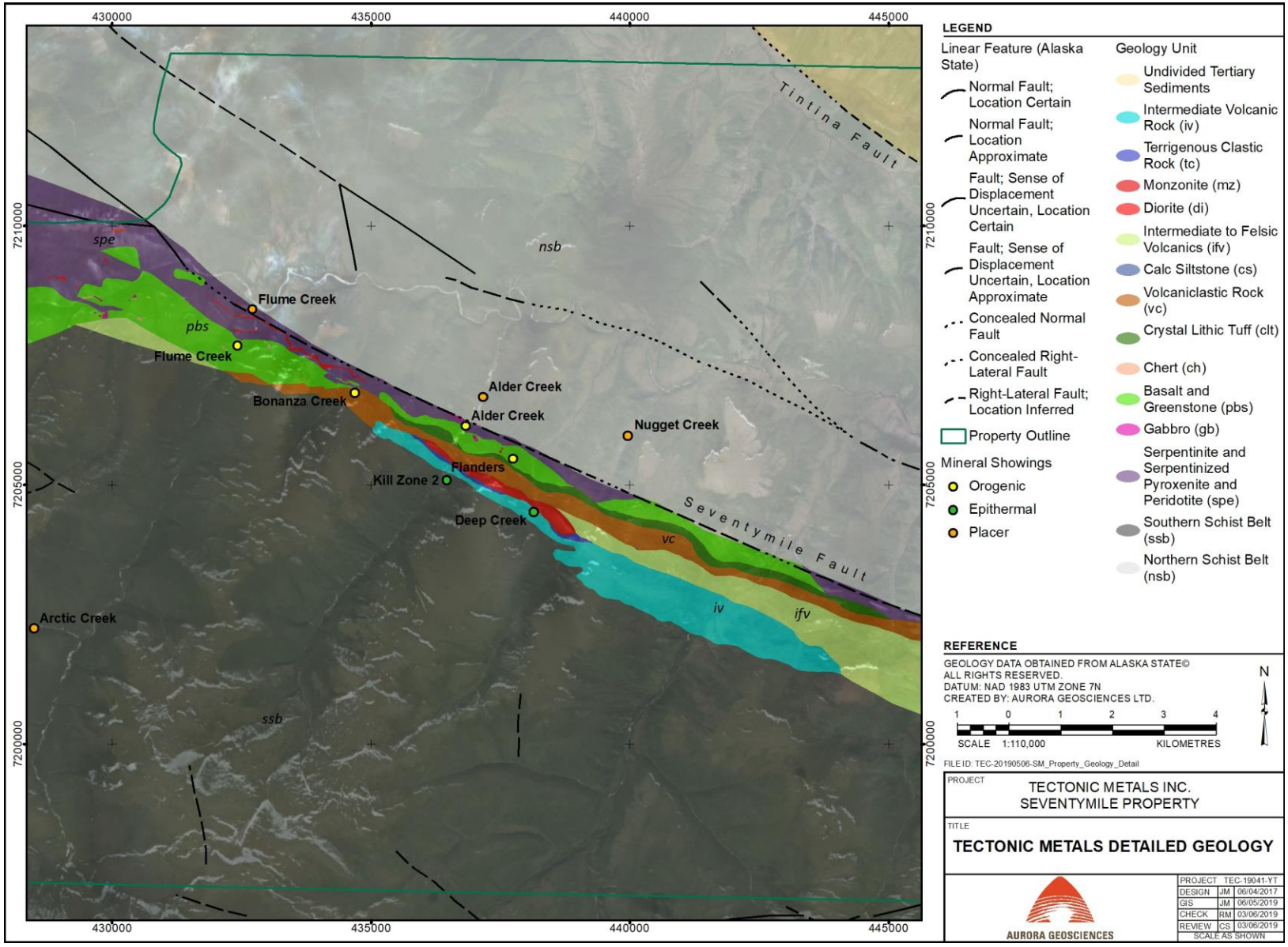

Figure 8: Detailed geology of the NW Seventymile area along the Flume Creek and Deep Creek Trends (Cole, Flanders, et al, 1991).

7.3 MINERALIZATION

Due to the numerous occurrences of both lode and placer gold, the area surrounding the Seventymile Terrane has been termed the Seventymile Gold Belt. Placer gold has been produced from creeks draining the Tertiary sediments north of the Seventymile River, and the Seventymile terrane rocks south of it (Cole et al., 1991).

The Seventymile property contains 19 defined mineral occurrences of various types. Eleven are placer gold deposits, four are orogenic gold occurrences and four are epithermal gold occurrences. These are summarized in Table 6 and their location is shown in Figures 7 and 8. Rock sample locations are shown in Figure 22. The most prominent exploration targets are discussed in detail below.

Table 6: Mineralization on the Seventymile Property (Alaska Resource Data File, 2018)

Name(s)	Commodities	Deposit Type	Status
Alder Creek	Au	Placer deposit	Inactive mine
Arctic Creek	Au	Placer deposit	Prospect
Barney Creek	Au	Placer deposit	Inactive mines
Ruby-Broken Neck Creek	Au	Placer deposit	Inactive mine
Canyon Creek; Gold Creek	Au, Hg	Placer deposit	Inactive mine
Flume Creek	Au	Placer deposit	Inactive mine
Little Washington Creek; Washington Creek	Au	Placer deposit	Inactive mine
Nugget Creek	Au	Placer deposit	Inactive mine
Placer Creek; Pleasant Creek	Au	Placer deposit	Inactive mine
Seventymile River	Au	Placer deposit	Inactive mines
Sonickson Creek	Au	Placer deposit	Inactive mine
Alder Creek (lode)	Au	Orogenic Gold	Prospect
Flume Creek (lode)	As, Au	Orogenic Gold	Prospect
Bonanza Creek (lode)	Au	Orogenic Gold	Prospect
Flanders	Au	Orogenic Gold	Prospect
Deep Creek	Ag, Au	Epithermal	Prospect
Kill Zone 2	Ag, Au	Epithermal	Prospect
Mogul Bluff	Ag, Au	Epithermal	Prospect
Ptarmigan Hill	Ag, Au	Epithermal	Prospect

The lode prospects on the Seventymile property have been divided into three distinct trends by previous workers (WGM Inc., 1997) that exhibit common mineralization characteristics, structural, and stratigraphic controls. The first of these is the Flume Creek trend, which includes the Flume Creek, Alder Creek, Flanders and Bonanza Creek orogenic gold prospects. The second is the Crooked Creek trend, which hosts the Ptarmigan Hill and Mogul Bluff epithermal gold prospects. The third is the Deep Creek trend, which includes the Deep Creek and Kill Zone 2 epithermal gold prospects (WGM Inc., 1997).

7.3.1 Flume Creek Trend

Mineralization in the Flume Creek trend is hosted by the weakly metamorphosed Seventymile terrane, along a key thrust fault dividing footwall serpentinite (ultramafic) to the north from hanging wall volcanic packages to the south (Figure 9). Tertiary mafic and felsic dykes intrude all lithologies.

Mineralization is accompanied by quartz-carbonate-mariposite (chromphengite) alteration at the Flume, Bonanza, Alder and Flanders prospects. Gold mineralization occurs in variably oriented quartz-carbonate-arsenopyrite-pyrite veins and vein breccias up to 0.61 m thick. Hanging wall stockwork vein zones of similar mineralogy are up to 9.1 m thick. These stockworks display a strongly developed quartz-dolomite-ankerite-mariposite-arsenopyrite-pyrite assemblage which grades outwards to barren calcite veining. While these prospects all display similar features, there is a degree of variability in Au-Ag-As content between the four prospects comprising the trend. The four prospects form a semi-continuous soil anomaly striking NW-SE (WGM Inc., 1997).

Figure 9: Flume Creek prospect. Thrust-faulted contact between serpentinite (ultramafic) footwall to right and overlying gossanous mafic volcanic rocks

7.3.2 Flanders

The Flanders prospect was discovered by CAGC in 1990. It forms the eastern end of the Flume Creek trend (Figure 13) and consists of two parallel gold-bearing quartz veins hosted in altered pillow basalts, the North Vein and the South Vein. These quartz veins occur in tabular tension fractures that dip to the north at angles of 30˚ to 45˚. Vein textures exhibit multiple generations of quartz growth. Mineralization at Flanders occurs within quartz veins and silica carbonate alteration zones and vein selvages. In addition to pyrite and arsenopyrite, trace galena, sphalerite and chalcopyrite are also present. Gold occurs as grains from 5 to 150 microns in size with sulphide inclusions. Typical wall rock alteration at the Flanders prospect comprises propylitic, silica-carbonate-mariposite, sericitic, argillic and albitic assemblages (WGM Inc., 1997). The Flanders prospect was drilled in 1990 by CAGC and again in 2000 by Ventures. The best intercept was 205.89 g/t Au over 1.10 m (FD 00-4). Additional notable intercepts including 13.185 g/t Au over 1.31 m, 11.301 g/t Au over 0.52 m (WGM Inc. 2001), and 49.71 g/t Au over 0.91 m. Trenching on the Flanders prospect by CAGC produced values to 112 g/t over 1.07 m (Cole et al., 1991).

Examination of 2000 WGM drill core from DDH FD 00-4 revealed zones of strongly developed quartz vein stockwork within silicified limonitic mafic volcanics adjacent to clay-altered fault gouge with fine grained disseminated pyrite. Figure 10 shows the interval of stockwork-hosted mineralization from 235.5 feet to 238.0 feet (71.8 m – 72.5 m) which returned 7.7 g/t Au. Figure 11 shows a mineralized interval in DDH FD 00-6 from 480 feet – 482 feet (146.3 m – 146.9 m) grading 0.964 oz/ton (33.05 g/t) Au. The mineralization in DDH FD 00-6 comprises quartz-pyrite vein breccia within basalt which has undergone early brecciation with limonitic alteration of clasts and chloritic matrix alteration.

Figure 10: DDH FD 00-4, 231 - 240'. Interval from 235.5-238' (71.8-72.5 m) assayed 7.7 g/t Au

Figure 11: DDH FD 00-6, 478-487'. Vein gouge interval from 480-482' (146.3-146.9 m) assayed 33.05 g/t Au

7.3.3 Alder Creek

The Alder Creek prospect is located approximately 2,400 m west-northwest of the Flanders prospect (Figure 14). Mineralization at Alder Creek occurs as quartz veins primarily within stockwork zones and tension gash structures with associated ribbon veins, breccia in-fills, and comb-textured veins. Arsenopyrite and pyrite are the principle sulfides and occur both in veins and the adjacent silica-carbonate alteration zones. At the Alder Creek prospect, the mineralized veins appear to be confined to pillow basalts on the south limb of a northwest-trending anticline. This basalt is propylitically altered and contains numerous zones of silica-carbonate alteration up to 18.3 m thick, hosting mineralized quartz veins (WGM Inc., 1997). Results of drilling include values to 6.07 g/t Au over 0.3 m. The highest-grade intersections are associated with intense silica-carbonate alteration and with breccia in-fill zones (Cole et al., 1991). The Alder Creek prospect has returned lower grade values than the Flanders prospect and may represent a distal extension of the Flanders prospect (WGM Inc. 1997).

The Alder Creek prospect is located at the approximate upstream limit of placer operations, suggesting the prospect may be the source of placer mineralization (Figure 4).

7.3.4 Bonanza Creek

The Bonanza Creek prospect is located approximately 3,200 m west of Alder Creek (Figures 8 and 15). There are three types of mineralization associated with a fault controlled stockwork vein system. The first is sulfide-poor quartz stockwork veins with visible gold cutting dolomitically altered serpentinite and gabbro. The second is arsenopyrite-quartz stockwork veins cutting sulfide-bearing silica-ankerite altered tuffs and tuffaceous siltstone. The third type is quartz veins with local pyrite with limited alteration in argillites (WGM Inc., 1997). Seven drill holes were completed on the prospect in 1990 by CAGC. Results included values from background Au to 10.9 g/t Au over 2.28 m, 1.89 g/t Au over 9.75 m, and 2.43 g/t Au over 3.66 m. One hole intercepted 51.2 m of 1.30 g/t Au (Cole et al., 1991; WGM Inc., 1997).

7.3.5 Flume Creek

The Flume Creek prospect is located approximately 1,600 m to the west-northwest of the Bonanza Creek prospect (Figure 16). Mineralization at Flume Creek occurs within a zone of silica-carbonate alteration of the serpentinite and greenstone rocks in the hanging wall of the Flume Creek thrust fault. The entire rock package in this area has been highly deformed by faulting, including imbricate northwest-striking reverse faults, apparently associated with both the larger Flume Creek fault and northwest-trending vertical faults possibly coeval with the Tintina fault. Mineralization consisting of arsenopyrite, pyrite, and gold occurs in quartz-carbonate veins and altered wall rock. Visible gold has been observed in the quartz-carbonate veins. The primary alteration assemblage is silica-carbonate-mariposite (WGM Inc., 1997). A series of dextral strike slip northeast-trending faults offset the mineralization.

Grab samples of outcrop at the Flume Creek prospect returned values up to 178.286 g/t Au. Seven holes drilled on the Flume Creek prospect returned Au values from core samples from background to 29.3 g/t over 1.07 m (Cole et al., 1991).

7.4 CROOKED CREEK TREND

The Crooked Creek trend comprises two epithermal Au prospects on the eastern side of the Seventymile property, the Ptarmigan Hill and Mogul Bluff prospects (Figure 17). These prospects are hosted in unmetamorphosed continental sediments that unconformably overlie rocks of the Yukon-Tanana terrane. These sediments are Tertiary in age, possibly as young as Pliocene, and are poorly consolidated. Previous

workers were attracted to the area by placer gold and cinnabar (HgS) occurrences. Both occurrences are associated with strong geochemical anomalies. (WGM Inc., 1997).

7.4.1 Ptarmigan Hill

The Ptarmigan Hill prospect is hosted by a thick sequence of poorly consolidated sediments that consist of predominately conglomerates with rounded quartz and chert clasts (Figure 12), and thinner interbeds of sandstones, siltstones, shales, and minor lignite. Tertiary felsic volcanic and intrusive rocks, including quartz-rhyolite and quartz-feldspar porphyries and minor serpentinite bodies, have been juxtaposed with the conglomerates by splays of the Tintina fault (WGM Inc., 1997). Mineralization at the prospect is overlain by approximately 90 m of barren coarse clastic rocks that have undergone pervasive silicification. Auriferous mineralization is concentrated within post-silicification fractures. Mineralization consists of concentrations of epithermal As, Sb, Hg, Ag, and Au. The mineralized vein system is controlled principally by a steeply-dipping north-trending fracture system. The prospect is associated with a significant Au - Ag soil geochemical anomaly approximately 1,065 m by 305 m in aerial extent, with anomalous Au values ranging from 20 ppb Au to >1,000 ppb, and Ag values in excess of 10 ppm. Drill results from Ptarmigan Hill included 5.83 g/t Au over 24.38 m, 4.46 g/t Au over 6.40 m, and 7.20 g/t Au over 6.10 m (WGM Inc., 1997).

Figure 12: Polylithic Tertiary conglomerate, Ptarmigan Hill prospect

7.4.2 Mogul Bluff

The Mogul Bluff prospect is geologically and mineralogically similar to Ptarmigan Hill. It is also hosted by a thick sequence of poorly consolidated sediments comprised mainly of conglomerates with mature clasts of quartz and chert, and includes thinner interbeds of sandstones, siltstones, shales, and minor lignite. Tertiary felsic volcanic and intrusive rocks have been juxtaposed with the conglomerates by splays of the Tintina fault. Mineralized zones within the conglomerate are strongly silicified with concentrations of As, Sb, Hg, Ag and Au. Mineralization is principally controlled by a north-trending, steeply dipping fracture system, and has been classed as epithermal. The geochemical anomaly was tested with nine drill holes by

ACNC, but intercepts of altered material typically graded less than 1,000 ppb (1.0 g/t) Au (WGM Inc., 1997).

7.5 DEEP CREEK TREND

The Deep Creek trend is located approximately 610 m south of the Flanders prospect, within silicified dacitic volcaniclastic rocks of probable Tertiary age. The Deep Creek trend consists of the Deep Creek and Kill Zone 2 prospects and the associated Au in soil anomalies along strike (WGM Inc., 1997). Bedrock exposure is limited and mostly occurs in stream cuts. This trend is thought to represent distinct volcanic-hosted epithermal mineralization that runs parallel to the Flume Creek and Crooked Creek trends. Due to the extensive soil cover, Au, Ag, and As soil geochemical anomalies were used to define targets in this area.

7.5.1 Deep Creek Prospect

Mineralization at the Deep Creek prospect consists of silicified volcanic rocks returning grades from background Au to 1.72 g/t Au. Mineralization is structurally controlled, occurring in quartz carbonate veins within silicified pale green dacite showing sericitic alteration and black quartz stockwork zones. Soil sampling results indicate areas of anomalous gold values to 480 ppb Au (WGM Inc., 1997). Drilling conducted in 2000 failed to intersect significant mineralization and no further drilling was recommended until a better understanding of the structural controls could be gained (WGM Inc., 2001).

7.5.2 Kill Zone 2

The Kill Zone 2 prospect is located approximately 800 m south of the Alder Creek prospect and has a similar geological setting. It is also associated with anomalies gold-in-soil values to 130 ppb Au (WGM Inc., 1997).

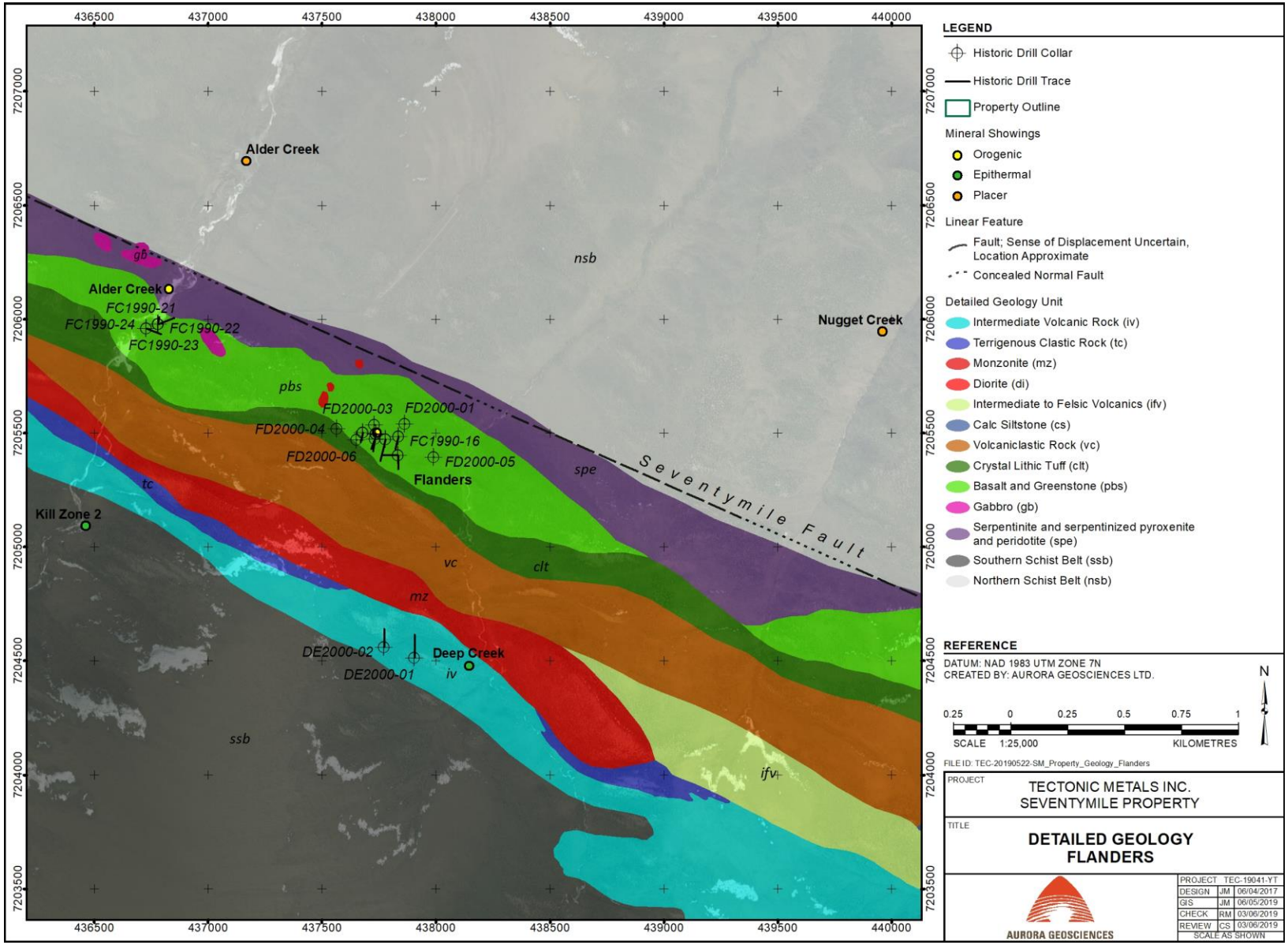

Figure 13: Detailed geology of the Flanders prospect.

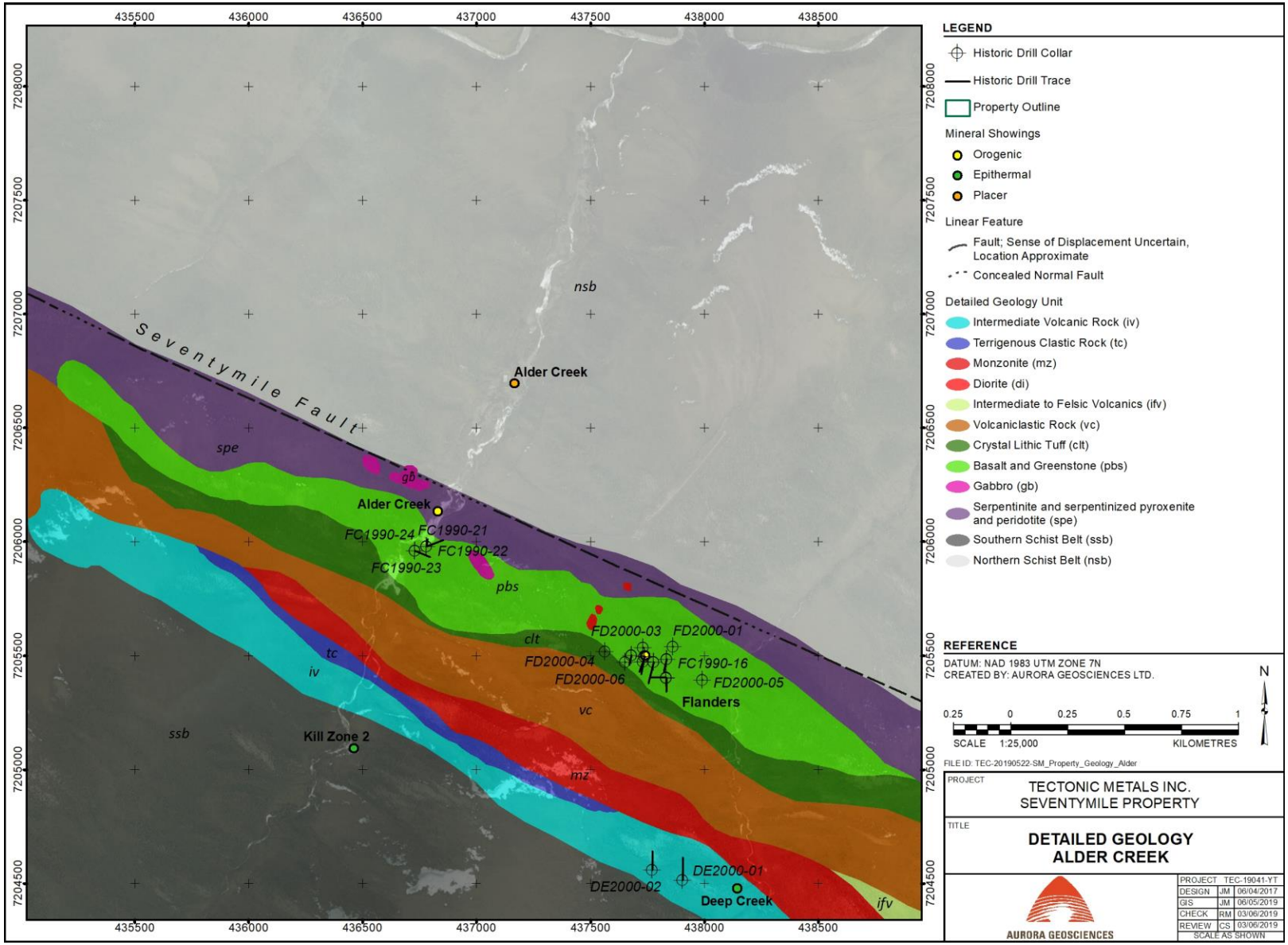

Figure 14: Detailed geology of the Alder Creek prospect.

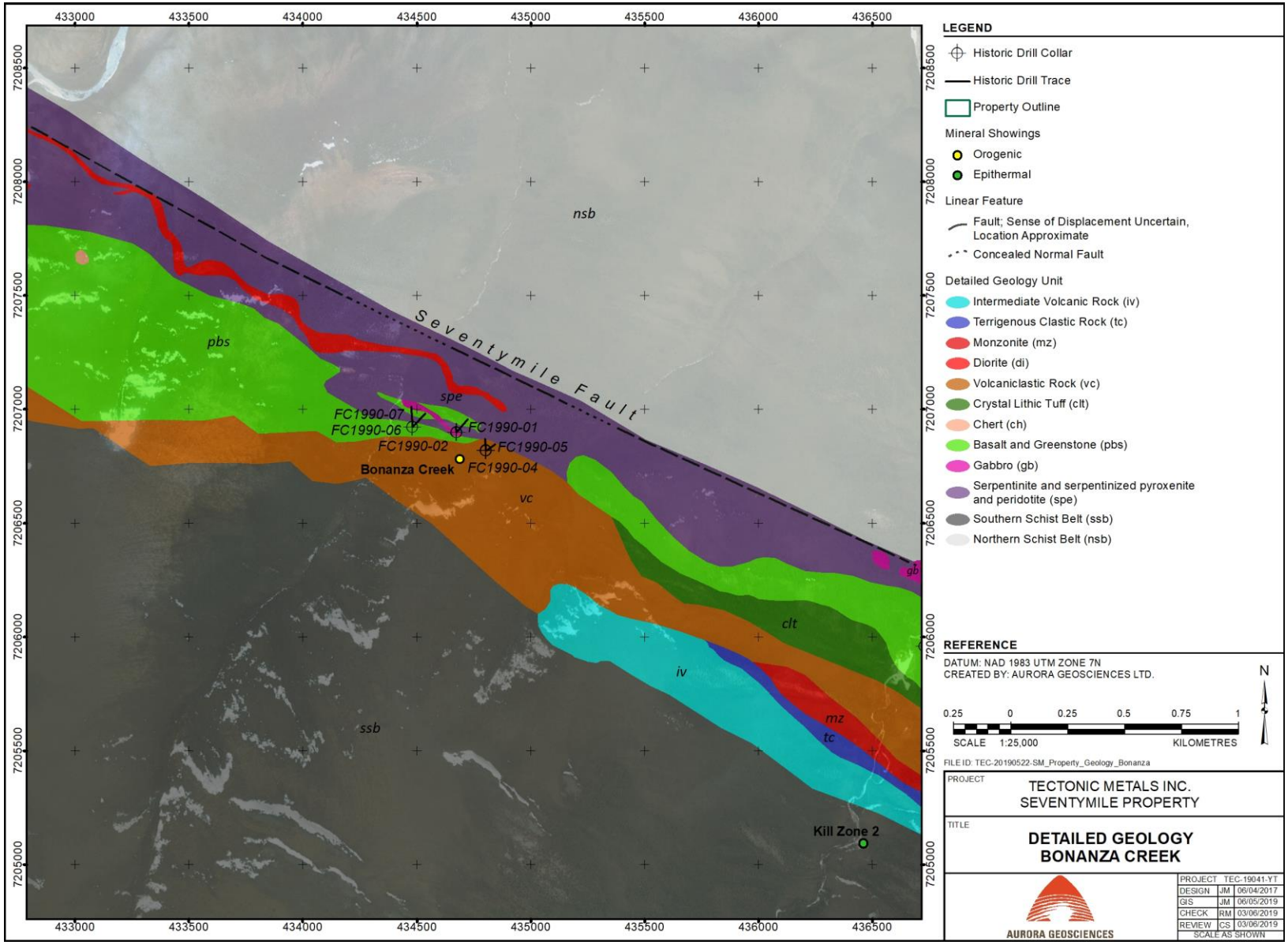

Figure 15: Detailed geology of the Bonanza Creek prospect.

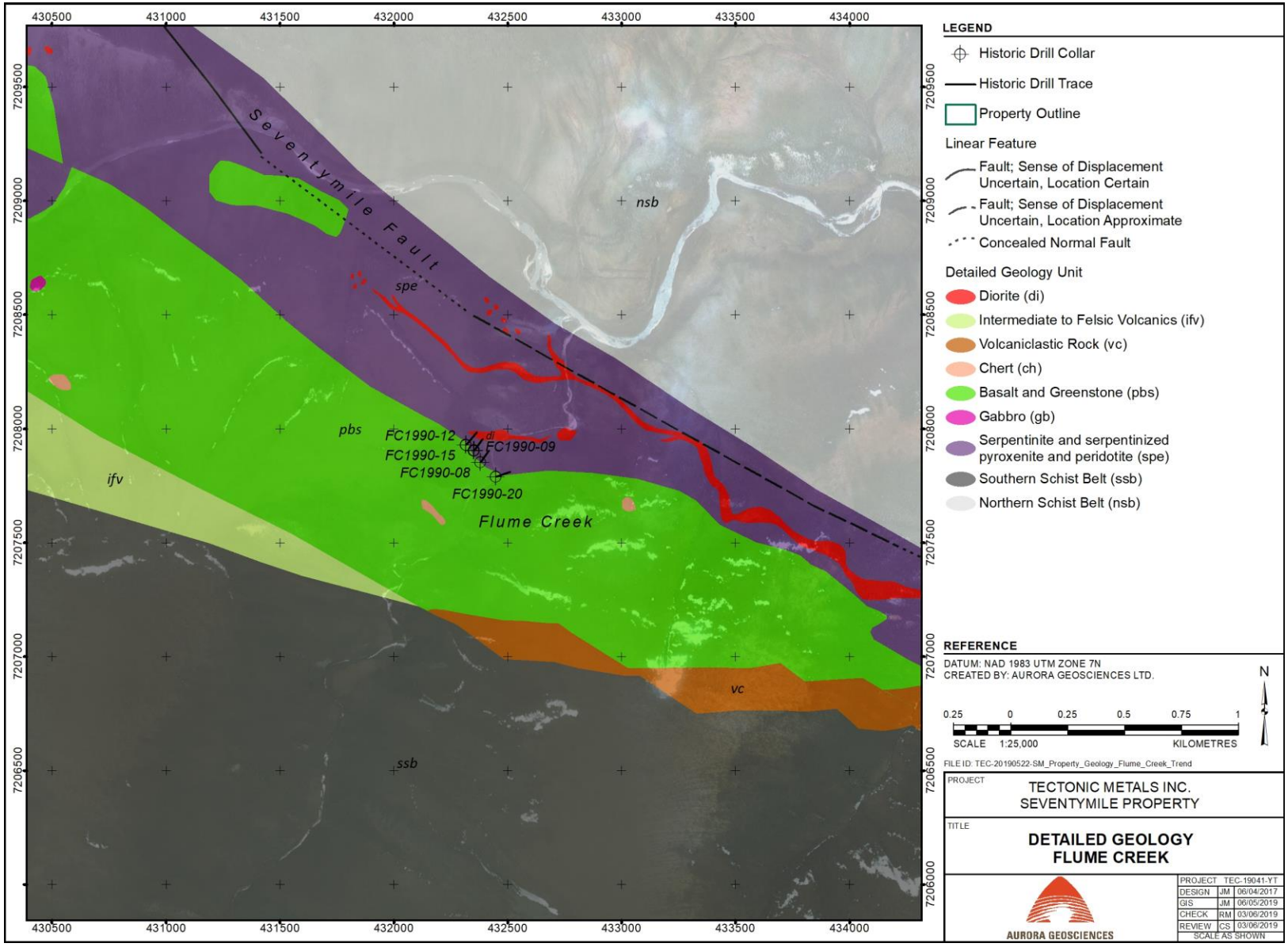

Figure 16: Detailed geology of the Flume Creek prospect.

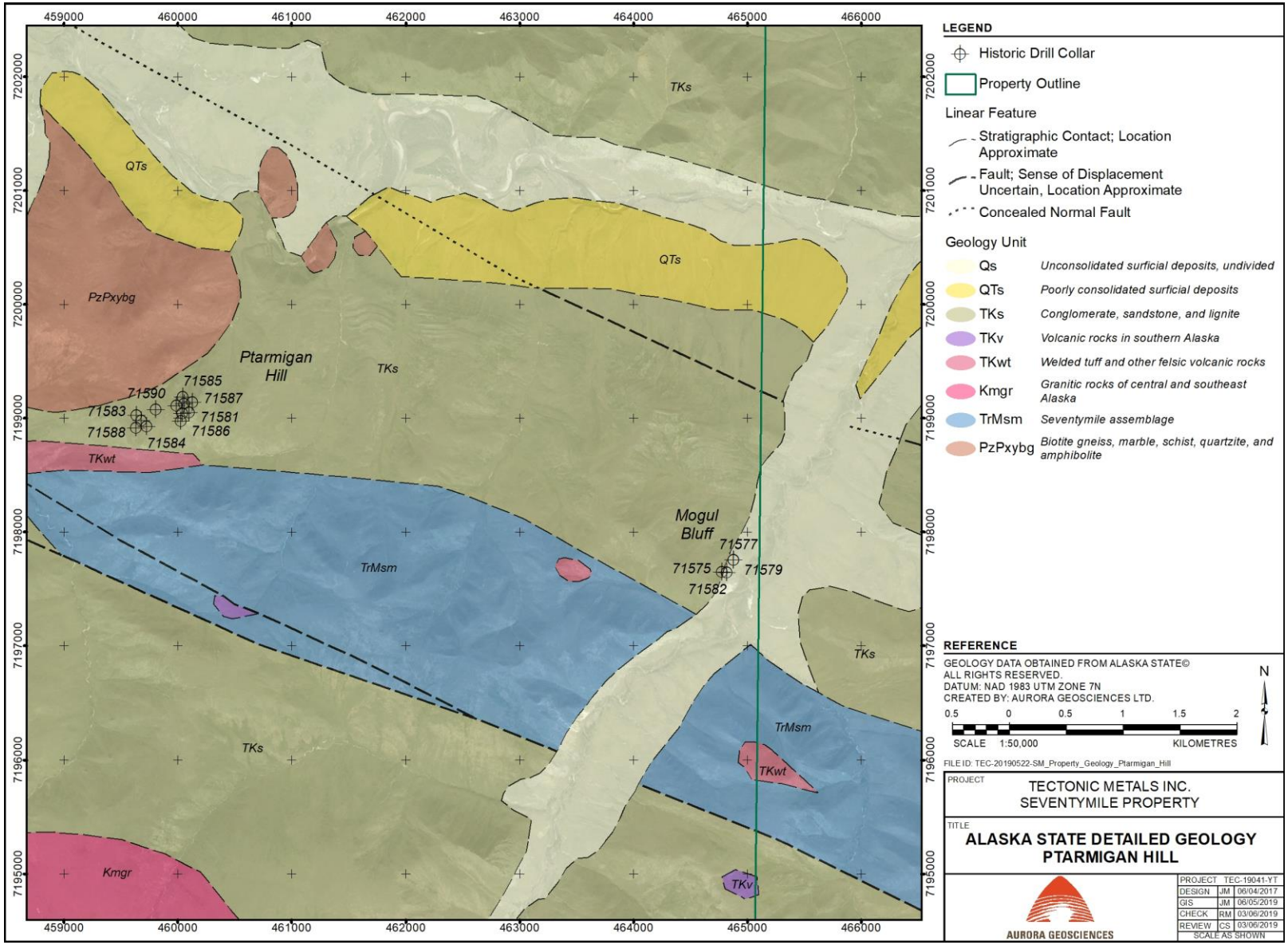

Figure 17: Detailed geology of the Crooked Creek Trend.

8 DEPOSIT TYPES

Tectonic Metals Inc. is primarily exploring for orogenic gold mineralization on the Seventymile property; however, both orogenic and epithermal gold mineralization has been recognized.

8.1 OROGENIC GOLD DEPOSITS

Orogenic gold deposits are epigenetic in origin and structurally controlled, with lode-style mineralization occurring in shear zones and faults (Goldfarb et al., 2005). They are typically associated with large first-order crustal scale faults which provide a fluid conduit, however, the mineralization itself is typically hosted within second and third order structures. Examples of structures that typically host the mineralized veins include moderate to steep-dipping compressional brittle-ductile shear zones, faults with associated shallow-dipping extensional veins, and hydrothermal breccias. These smaller features provide structural traps for mineralizing fluids. The fluid source may result from regional metamorphism generated during structural deformation and be associated with greenschist to amphibolite grade metamorphism. Gold mineralization is principally found within the veins, but may also be found within altered host rocks and vein selvages, and within silicified and arsenopyrite rich replacement zones (Dubé and Gosselin, 2007).

The lode occurrences of the Flume Creek trend (Section 9.1) exhibit characteristics typical of orogenic gold deposits. Mineralization is hosted by quartz-carbonate veins that fill tectonically formed structures, and associated with pyritic silica-carbonate-albite-ankerite alteration assemblages. Mineralization at the prospects of the Flume Creek trend shows some or all these characteristics, and the orogenic gold deposit model that Tectonic Metals Inc. is applying to these prospects is appropriate.

The orientation of the mineralized structures varies with the regional stress regime (Dubé and Gosselin, 2007). To date most of the high-grade mineralization along the Flume Creek trend has been found in shallowly dipping structures such as tension gashes. Tectonic Metals Inc. is utilizing this model to locate larger vertically-dipping shear structures that may host larger concentrations of gold.

8.2 EPITHERMAL GOLD DEPOSITS

Epithermal Au (±Ag), deposits commonly form in shallow-level hydrothermal systems, typically developed in volcanic arcs at convergent plate boundaries, as well as in intra-arc, back-arc, and post-collisional rift settings (Simmons et al, 2005). Mineralization occurs both as veins and disseminations (Taylor, 2007). These deposits form from hydrothermal fluids, typically by replacement (dissolution and re-precipitation of chemically dissolvable host rocks) or by void-filling (veins, pore space, breccias, etc.). Broadly speaking, these deposits are young (Tertiary or Quaternary in age) and form within the top 1.5 km of the earth's crust (Taylor, 2007). Steeply dipping veins typically host the highest ore grades whereas mineralization within adjacent host rocks and/or disseminated mineralization tends to be of significantly lower grade (Simmons et al., 2005). Epithermal deposits are typically classified into three different categories based on the sulphidation state of associated sulfide mineralogy: high, intermediate and low sulphidation. Each of these types has distinct associated mineral and alteration assemblages (Taylor, 2007).

The lode occurrences of the Crooked Creek trend (Section 9.2) and the Deep Creek trend (Section 9.3) exhibit characteristics associated with epithermal, particularly low sulphidation systems. The dominant alteration types are silicification and sericitization. The presence of Hg and Sb sulphides is another preferential characteristic of low-sulphidation epithermal deposits. Alteration and mineralization

assemblages at the Ptarmigan and Mogul Bluff prospects show a component of stratigraphic control preferential to the conglomerates.

9 CURRENT EXPLORATION

Upon acquiring the lease on the Seventymile Property in 2018, Tectonic Minerals Inc. completed an exploration program comprising 1,762 line-km of high-resolution airborne magnetics, 380 soil samples and 106 m of trenching with a helicopter-portable backhoe. Work was conducted by Avalon Development Corp under contract to Tectonic, from June 9 to July 5, 2018, from July 9 to 18, 2018, and from September 17 to 21, 2018.

9.1 AIRBORNE MAGNETIC SURVEY

From July 9 to July 18, 2018, an airborne CGG MIDAS high-definition magnetic survey was flown. The survey covered a total of 1,762 line-km, comprised of 1,552 km of grid lines flown at an orientation of 022˚/202˚ and 100 m line spacing, and an additional 210 km of tie lines flown at 112˚/292˚ and a line spacing of 845 m (CGG 2018). The survey covered the entire extent of the Seventymile greenstone belt that transects the property.

The MIDAS system consists of two Scintrex CS-3 Cesium Vapour magnetometers mounted on a transverse boom with a 13.3 m separation, a fluxgate magnetometer, and a GPS antenna for flight path recovery. In the tail boom an additional GPS antenna, altimeters (radar, laser, and barometric), a video camera, and data acquisition system are mounted. This system was mounted on an AS350 B3 helicopter operated by Questral Helicopters. The base magnetometer was a CGG CF1 with a Scintrex cesium vapour sensor with a GEM Systems GSM-19 as a secondary unit (CGG, 2018).

The purpose of the high-resolution magnetic survey was to provide a control for accurately mapping different geological units, and the identification of geological structures that may be related to mineralization.

A total magnetic intensity map is shown in Figure 19, and a correlation with geological structures and contacts is shown in Figure 20.

9.2 ROCK SAMPLING

Rock sampling in 2018 focused mainly on the Flanders prospect area, including the interpreted western extension, where a total of 48 samples were taken (Figure 22). The majority of rock samples returned low to background values (<0.005 g/t Au), although anomalous Au values were returned from the core Flanders area. The highest value of 8.585 g/t Au was returned from a sample of multi-pulsed quartz breccia collected from an old trench.

The program also focused on the Flume prospect area, where seven samples were taken, and returned values from <0.005 g/t Au to 2.721 g/t Au. The latter was a sample of strongly and pervasively oxidized basalt, showing sericite and clay alteration, and hosting quartz-carbonate veinlets.

A total of nine samples were taken from two sites southeast of the Bonanza showing. All values returned were at sub-detection level (<0.005 g/t Au).

Two samples were collected at the Ptarmigan Hill prospect. A sample of pervasively silicified and oxidized quartz pebble conglomerate that may have been collected near a historic showing returned 0.229 g/t Au with 11 g/t Ag and 49 ppb Sb. A second sample, taken about 25 m to the WSW, graded 3.483 g/t Au with 814 g/t Ag and 153 ppm Sb. No descriptions are available for the second sample. The pathfinder mineralogy, including the lack of elevated As and Bi values, suggest a lower temperature setting typical of epithermal mineralization.

9.3 SOIL SAMPLING

The 2018 soil sampling program was conducted in two phases. The initial phase of 280 soil samples was completed from June 9 to July 5, 2018. The second phase of 100 samples was conducted between September 17 and 21, 2018. The 2018 soil sampling program was conducted using power augers to penetrate beneath the tundra and permafrost on topographic plateaus that had hampered historic shovel sampling. The auger sampling focused on obtaining C-horizon soil samples in an effort to achieve more representative assay and analytical values. Previous shovel sampling returned "false negative" values because the sample was unobtainable or was of unrepresentative surface material.

North-south oriented soil lines were laid out at a 50 m to 100 m line spacing and 25-metre sample spacing. The lines were laid out to cross volcaniclastic-mafic contacts and mafic-ultramafic contacts identified from historic geological maps and from geophysical data. These lithological boundaries are interpreted as prospective for shear hosted gold mineralization. Additional lines were surveyed to cover historic shovel soil anomalies. Three target areas were sampled during the 2018 program: the Flume-Bonanza Link, Bonanza East, and the Flanders Area targets.

9.3.1 Flume-Bonanza Link

Three soil lines were laid out to cover a historic WNW-ESE trending 800 m long soil anomaly (Figure 23). The anomaly is located on a north-facing ridge with permafrost and tussock cover approximately 1,400 m east of the Flume prospect and 800 m west of the Bonanza prospect. The anomaly covers an interpreted mafic-ultramafic contact where historic shovel sampling returned values of up to 420 ppb Au with consistent values in excess of 100 ppb Au. A total of 78 auger samples was collected from this area in 2018. Gold values ranged from <5 ppb to 258 ppb, with multiple values between 56 ppb Au and 69 ppb Au. This anomaly is coincident with the historic results.

9.3.2 Bonanza East

Three sample lines were laid out approximately 800 m, 900 m, and 1,200 m east of the Bonanza prospect (Figure 24). These lines tested a prospective mafic-ultramafic contact uphill of a historic soil anomaly that returned values to 90 ppb Au. The lines also tested the southern extent of a mapped mafic-volcaniclastic contact. A total of 78 samples was collected on this target, returning values from <5 ppb Au to a peak result of 57 ppb Au, obtained along strike from the historic high gold-in-soil value. However, extensive permafrost, hampering sampling efforts, was encountered in this area, 2019).

9.3.3 Flanders Area

The Flanders area was the primary target for the auger soil sampling campaign (Figure 25). Three initial sample lines were laid out to test the mafic (crystal lithic tuff)-volcaniclastic contact interpreted as a shear zone along the ridgetop at the Flanders prospect. Analysis of these samples returned values from <0.005 g/t Au to 1.080 g/t Au, and included a value of 1.014 g/t Au. Numerous values exceeding 0.100 g/t Au are coincident with the lithic tuff-volcaniclastic contact. A fourth orientation line, extending directly across

the drilled portion of the Flanders prospect, returned values from 0.117 g/t Au to 1.913 g/t Au; outlying samples returned background Au values.

Based on these results, an additional four lines of auger soil samples were added to test the extension of the anomaly. Results from these samples returned values from <0.005 g/t Au to 0.670 g/t Au. An additional two short lines, totalling 23 samples, were sampled northwest of this grid and east of the Alder Creek zone. Results included values from <0.010 g/t Au to 0.388 g/t Au. Sampling to the west of the Flanders prospect was hampered by steep rocky terrain and, in locations where no suitable soil was found, rock samples were collected instead.

9.4 TRENCHING

A single 106-metre long, 1-metre deep trench was dug with a heli-portable "CanDig" excavator to sample subcrop (bedrock was too deep to attain). This trench was dug to follow up on the 1.014 g/t Au and 1.913 g/t Au-in-soil values at the Flanders prospect. The trench was laid out in a N-S orientation to cross the anomalous samples and interpreted major shear zone. The excavation was to commence at the north end in overburden overlying mafic rocks and terminate once it has successfully transected the shear zone; however, the excavator failed in fault gouge at its southern terminus. This fault gauge was mineralized, returning a value of 278 ppb Au across 9 m from the 97 m to 106 m interval at the southern limit of the trench (Figure 21). Brecciated welded tuff exhibits moderate silicification and chlorite alteration. A total of 26 samples ranging from 2.5 m to 5.0 m in length were collected from subcrop exposed along the length of the trench. These samples returned values from 0.005 g/t Au across 5 m to 0.283 g/t across 5 m.

9.5 2019 DUE DILIGENCE SAMPLING

Three samples of proximal quartz float were taken from the Flanders prospect in May, 2019, and assayed from 2.021 g/t Au to 20.0 g/t Au, with anomalous As and weakly anomalous Sb values (Figures 26 and 27). Quartz float boulders hosted clotty to fracture controlled arsenopyrite, as well as abundant limonitic fractures. This fabric is shown in Sample 1465509, which returned 20.0 g/t Au and hosted one speck of visible gold (Figure 18). The 2019 sampling confirmed the tenor of gold from surface sampling at the Flanders prospect.

Figure 18: Sample 1465509 (20.0 g/t Au), Flanders prospect

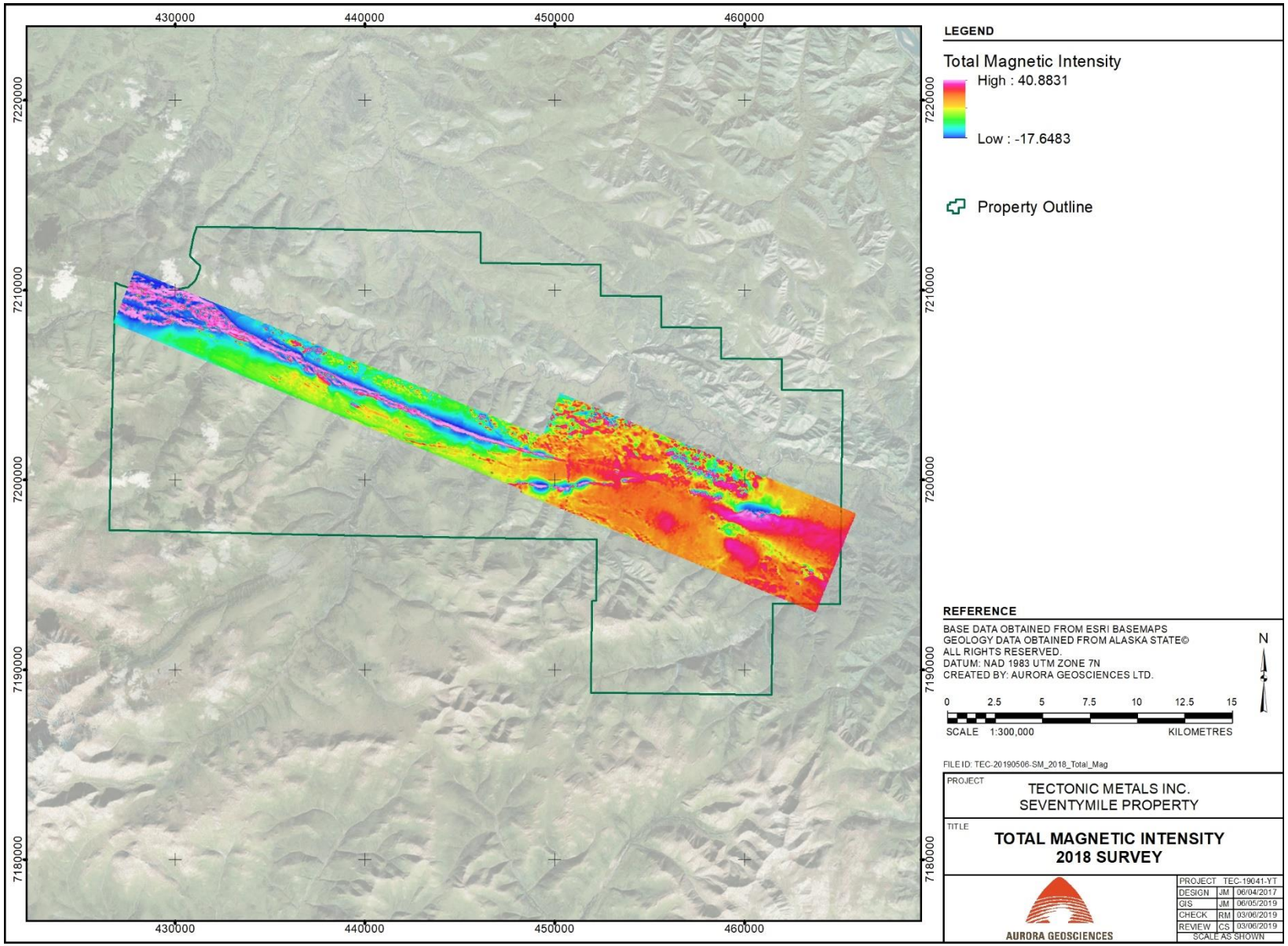

Figure 19: Total magnetic intensity from the 2018 MIDAS Airborne Survey.

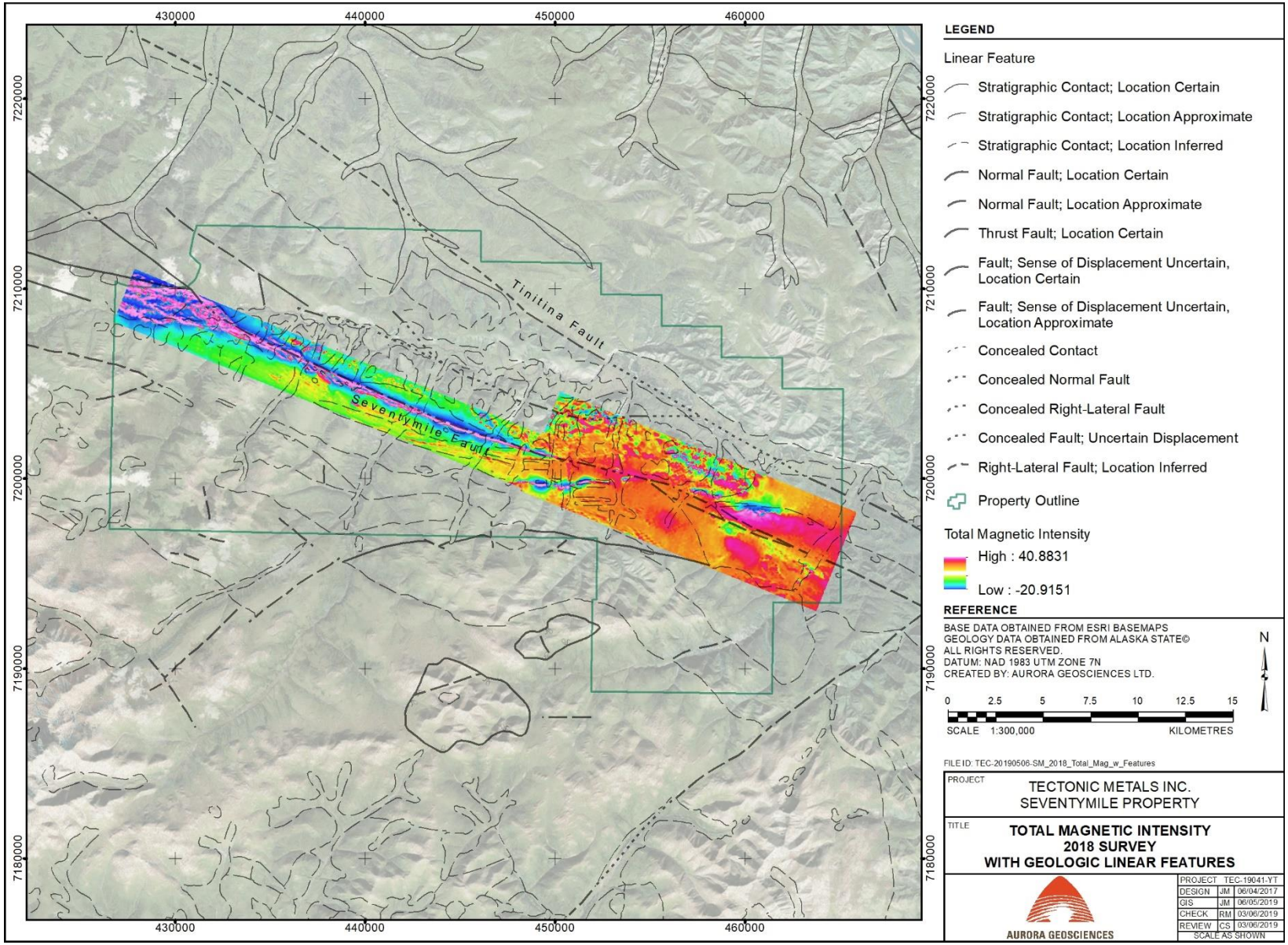

Figure 20: Total magnetic intensity from the 2018 MIDAS Airborne Survey with regional contacts and structures overlain.

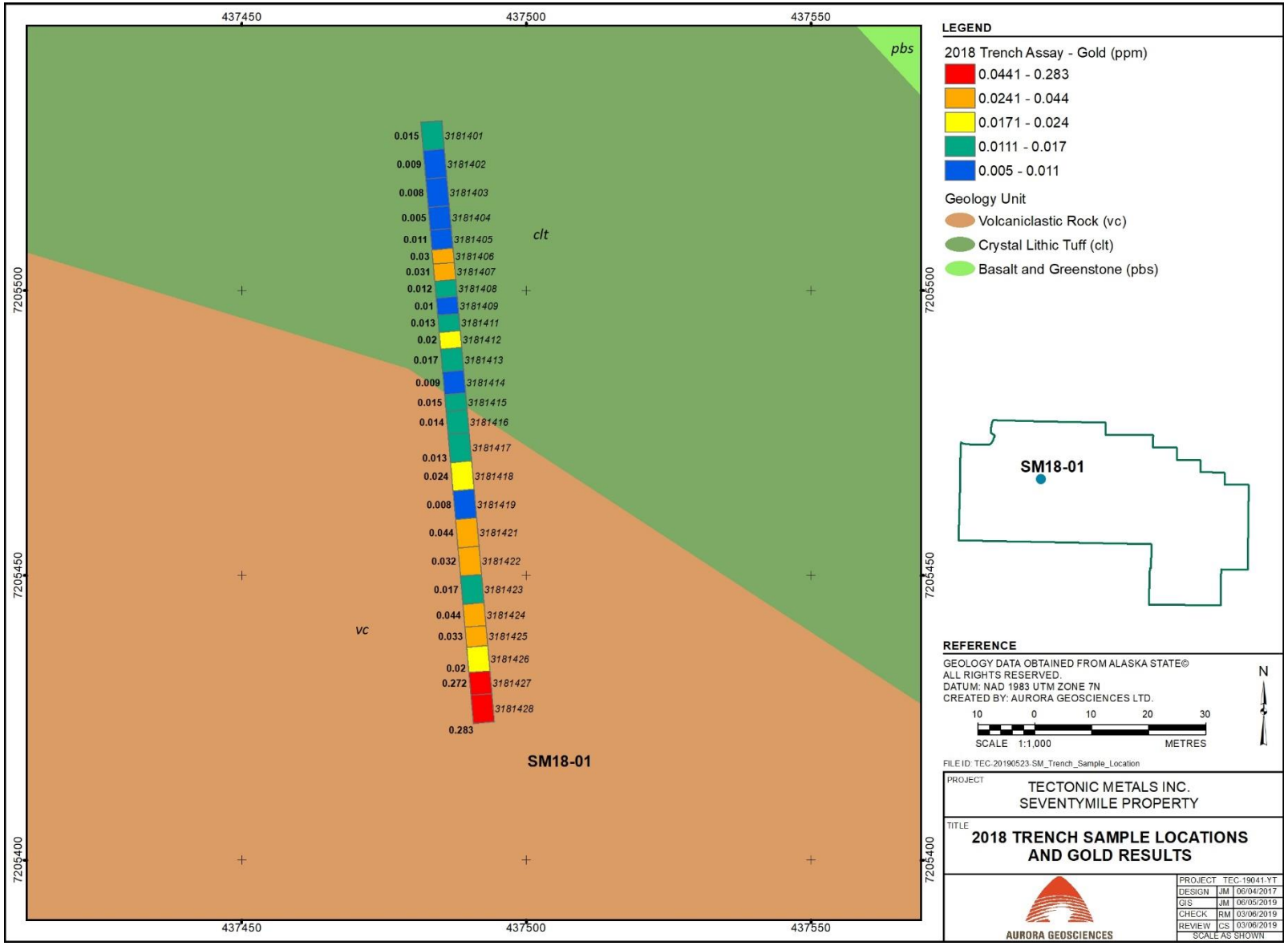

Figure 21: Results of the 2018 trench sampling at the Flanders prospect. Trench width exaggerated to show results.

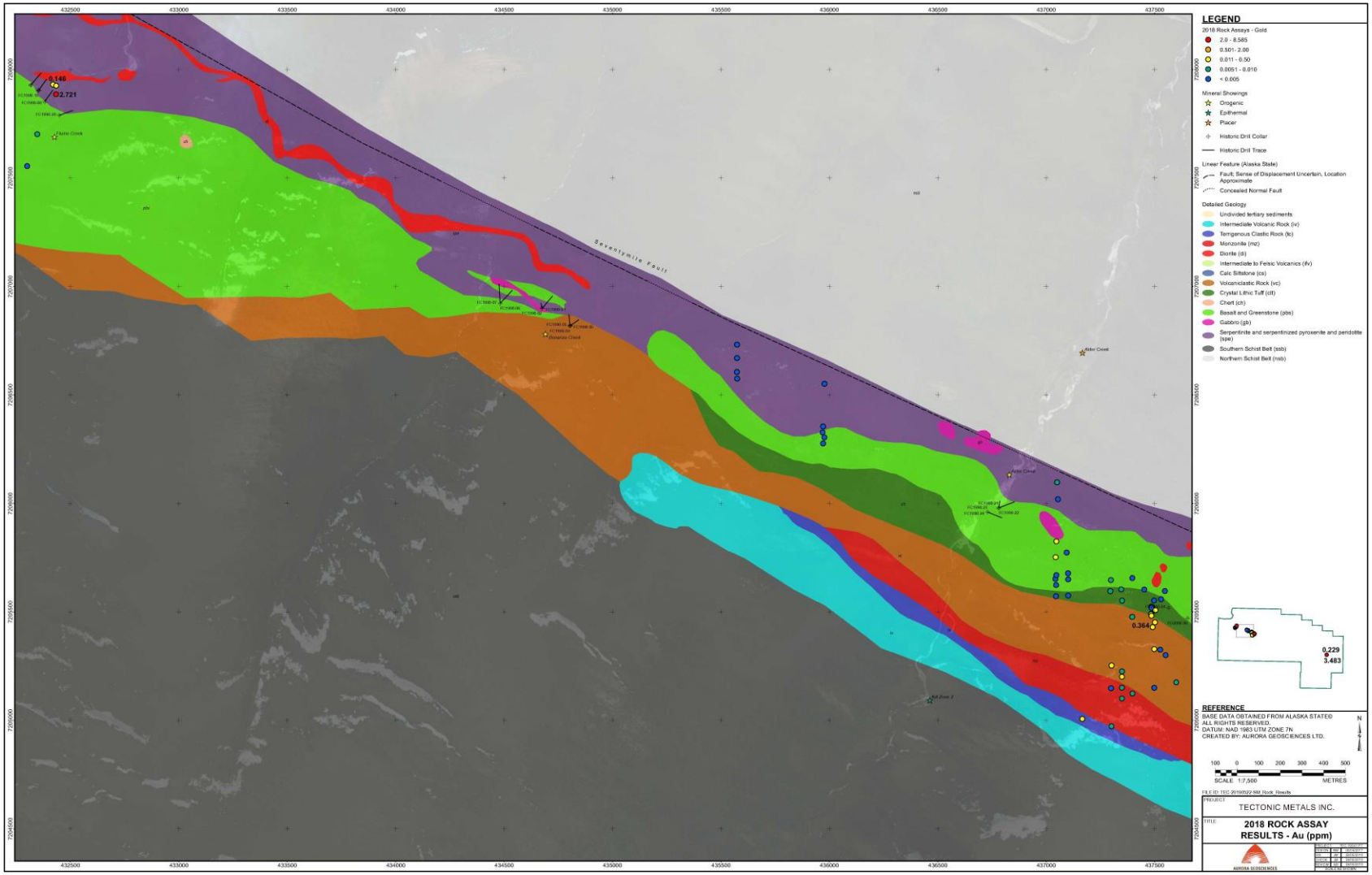

Figure 22: 2018 Rock Geochemical Map

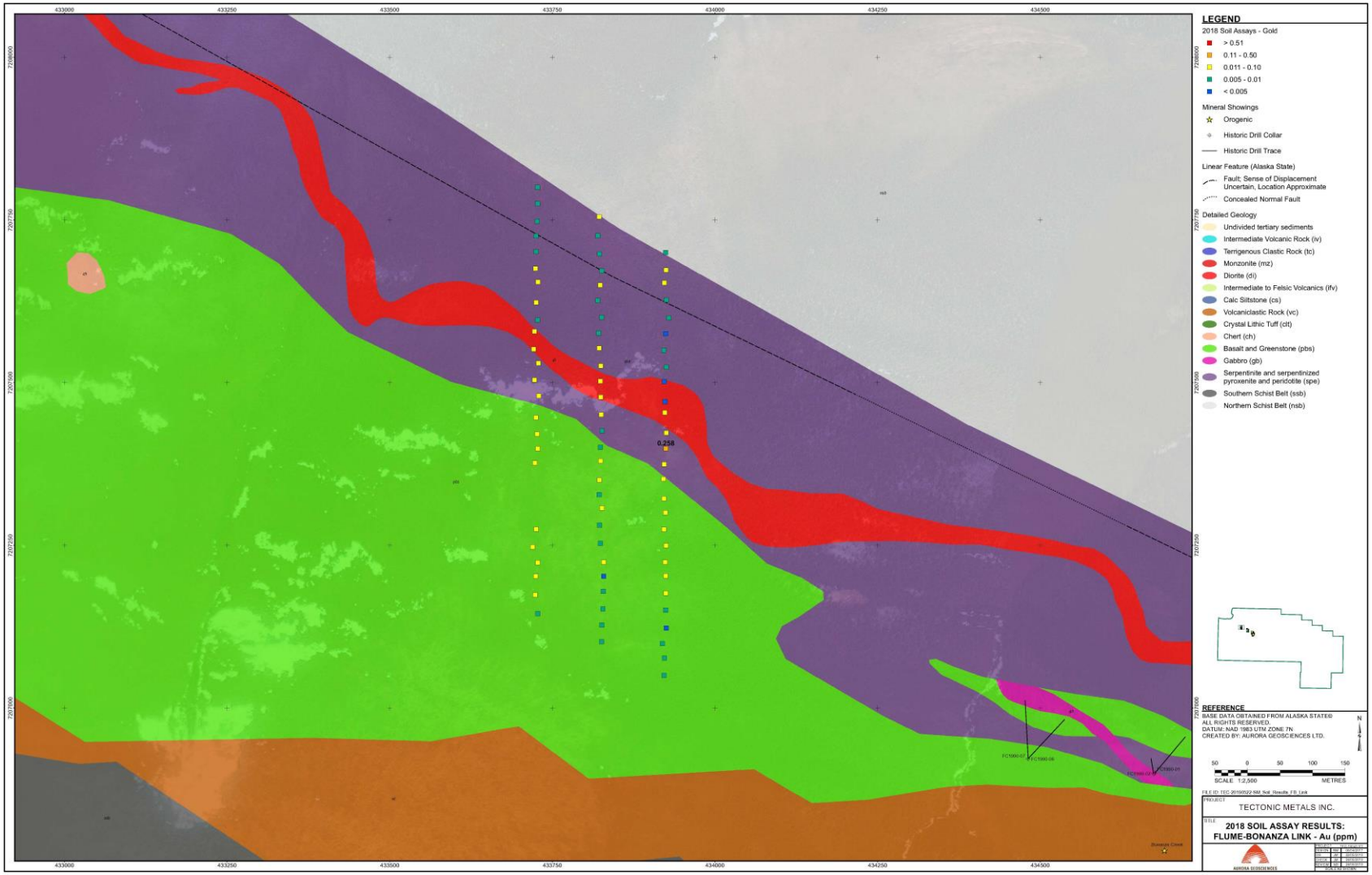

Figure 23: 2018 Soil Geochemical Map, Flume-Bonanza Connector

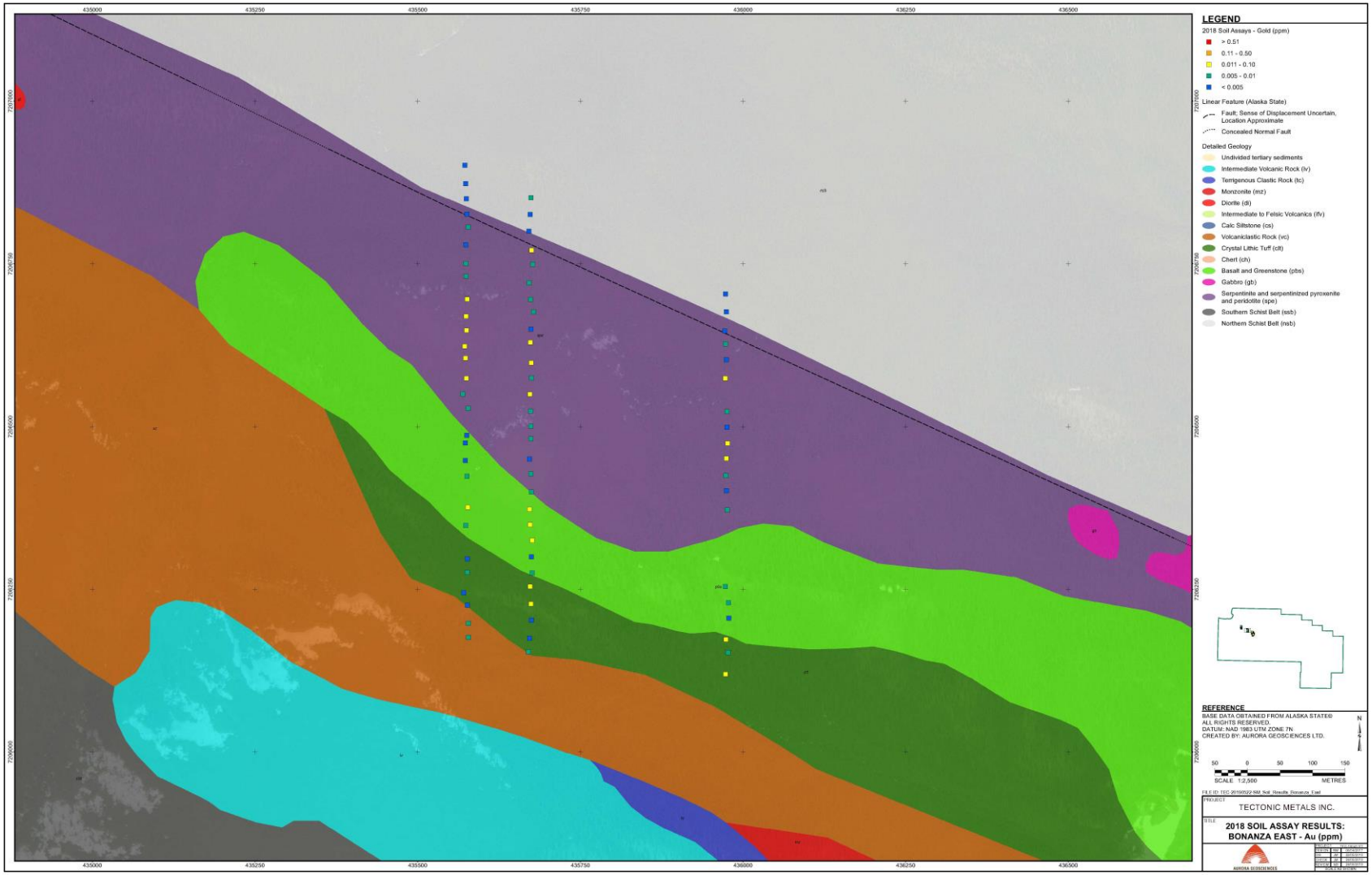

Figure 24: 2018 Soil Geochemical Map, Bonanza East Target

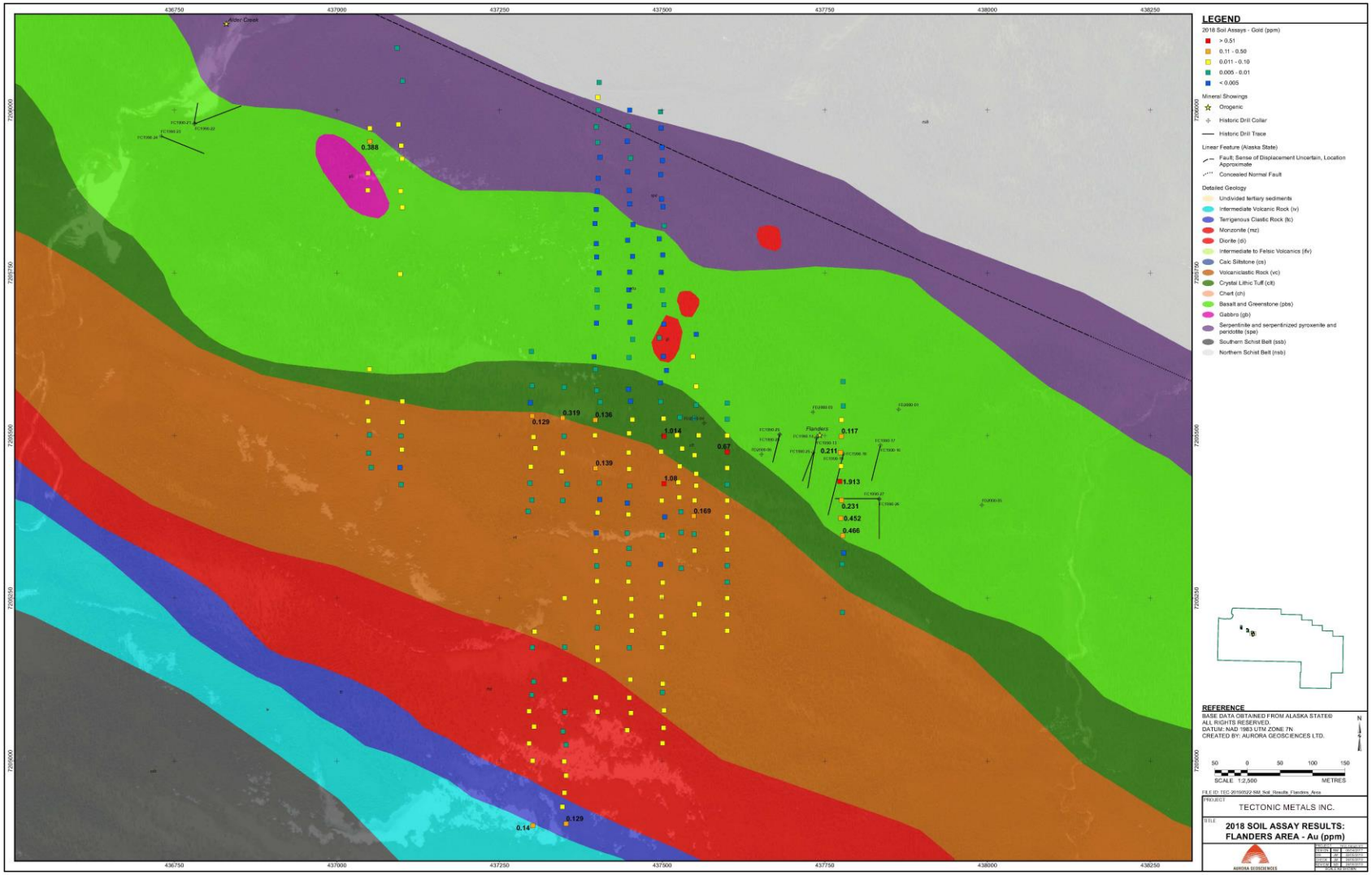

Figure 25: 2018 Soil Geochemical Map, Flanders Target

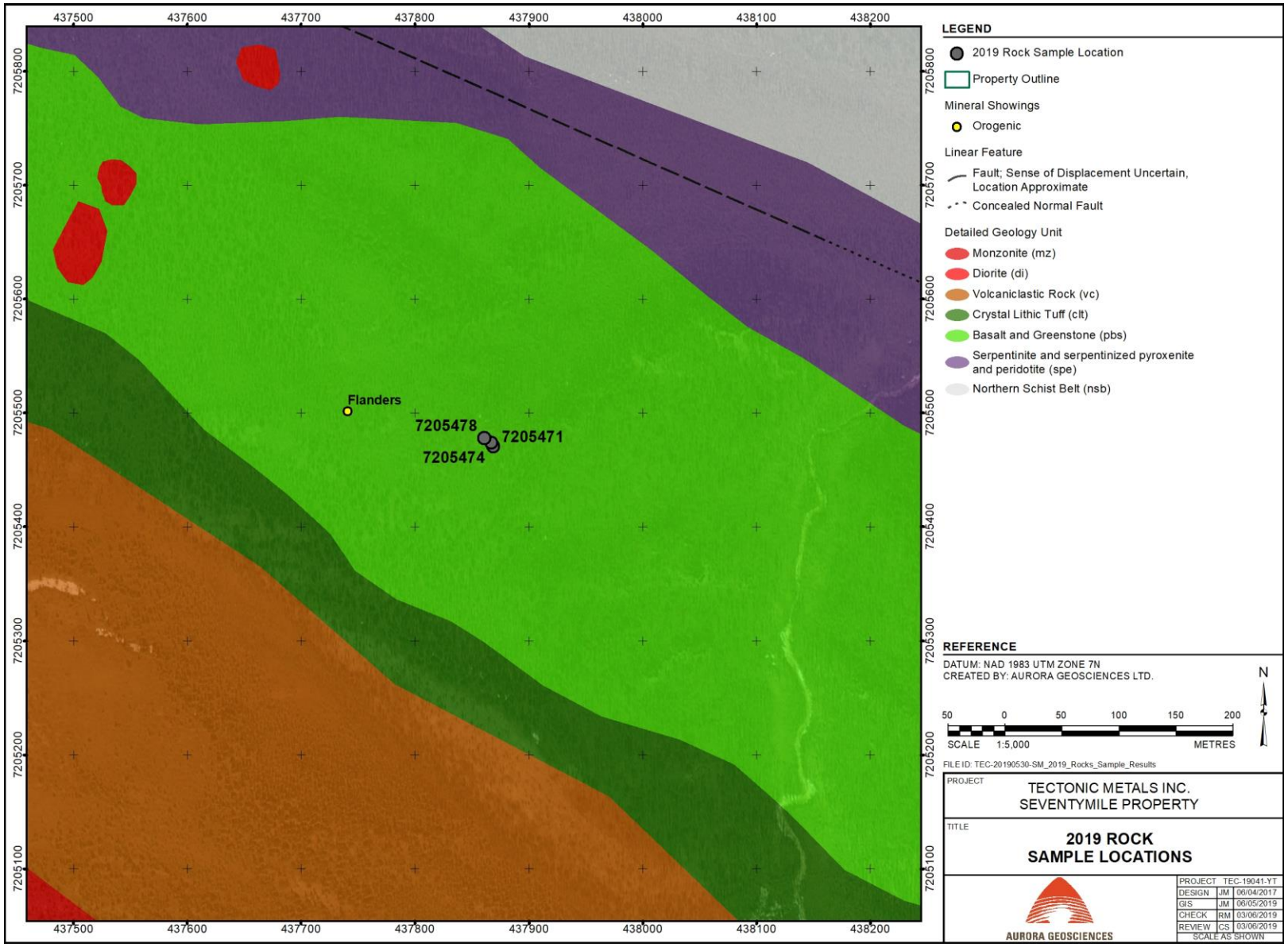

Figure 26: Location of 2019 rock samples

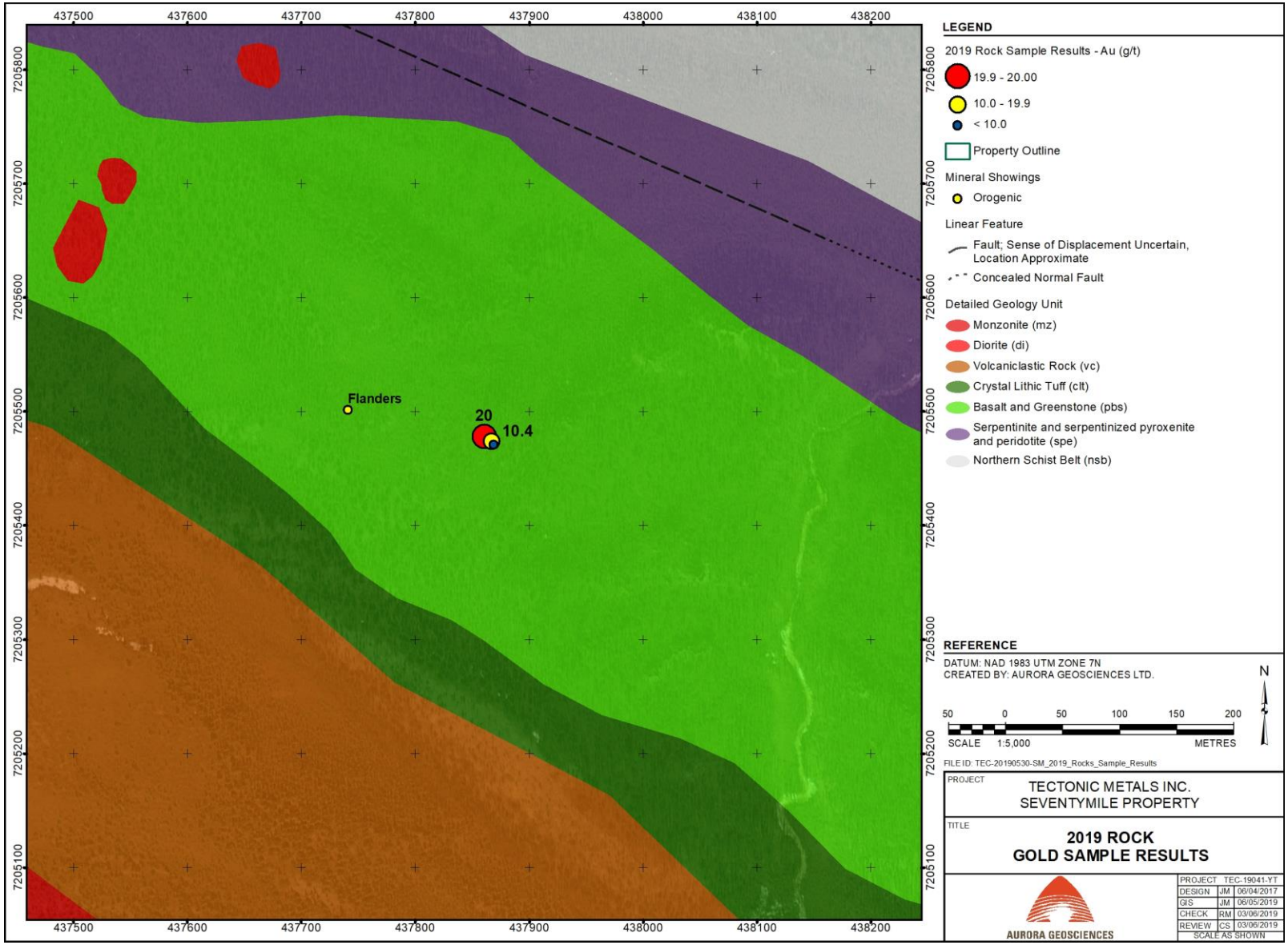

Figure 27: Gold value ranges, 2019 sampling

9.6 2019 GEOPROBE SAMPLING

In 2019, Tectonic conducted a Geoprobe survey across four target areas along the Flume trend: the Flume-Bonanza, Bonanza, Flanders, and East Flanders targets. Two lines were also completed across the "Deep Creek" target directly southwest of the Flanders target. These Geoprobe surveys were designed to collect representative rock samples from the soil-bedrock interface along parallel grid lines at depths ranging from near-surface to 4.5 m, in order to determine lithology and mineral potential. The program was conducted over a 37-day period from July 8 to August 13, with the geoprobe operating 12 hours/day.

A total of 788 samples were collected across 3,865 m of grid lines (Table 7). These comprise: 130 samples across 640 m in two grid lines at the Flume-Bonanza target; 151 samples across 485 m in three lines at the Bonanza target; 322 samples across 1,575 m in 7 lines at the Flanders target; 119 samples across 585 m in two lines at the Deep Creek target, and 118 samples across 580m in two lines at the East Flanders target. The sample spacing was 5 m. All rock samples obtained were analyzed in the field utilizing a portable XRF instrument (Section 11.7), and later analyzed for Au and 35-elements by Inductively Coupled Plasma Emission Spectrometer (ICP-ES) analysis.

Table 7: 2019 Summary of Geoprobe Sampling per Target, Flume trend

Zone	Line	NAD83 UTM Zone 7W				Line Length	Sample	# Samples	#	#	Sample Sequence #1		Sample Sequence #2	
		Start X	Start Y	End X	End Y	(m)	Interval	Collected	Blanks	Standards	Start	End	Start	End
Flume-Bonanza	SVMGTP19-005	433923	7207185	433925	7207566	380	5	77	4	4	1603436	1603520		
Flume-Bonanza	SVMGTP19-006	433812	7207306	433813	7207566	260	5	53	3	3	1603521	1603579		
Bonanza	SVMGTP19-004	435572	7206474	435576	7206729	255	5	52	3	3	1603378	1603435		
Bonanza	SVMGTP19-007	434860	7206741	434977	7206938	230	5	47	3	2	1603580	1603631		
East Flanders	SVMGTP19-008	438863	7204828	438803	7205070	250	5	51	3	3	1603632	1603688		
East Flanders	SVMGTP19-010	438887	7205078	438974	7204759	330	5	67	3	4	1603732	1603750	1603776	1603830
Flanders	SVMGTP19-001	437500	7205332	437502	7205582	250	5	51	2	3	1603207	1603262		
Flanders	SVMGTP19-002	437401	7205613	437401	7205358	255	5	52	3	3	1603263	1603320		
Flanders	SVMGTP19-003	437598	7205299	437609	7205550	250	5	51	3	3	1603321	1603377		
Flanders	SVMGTP19-009	437777	7205488	437779	7205298	190	5	39	2	2	1603689	1603731		
Flanders	SVMGTP19-012	437475	7205375	437475	7205535	160	5	33	2	2	1603943	1603979		
Flanders	SVMGTP19-013	437526	7205520	437522	7205360	160	5	33	1	2	1603980	1604000	1602676	1602690
Flanders	SVMGTP19-014	437691	7205515	437689	7205205	310	5	63	4	3	1602691	1602760		
Deep Creek	SVMGTP19-015	437301	7205030	437250	7204962	85	5	18	1	1	1602761	1602780		
Deep Creek	SVMGTP19-011	437549	7205232	437251	7204831	500	5	101	6	5	1603831	1603942		
					Totals	**3865**		**788**	**43**	**43**				

Figure 28 shows the location of the geoprobe lines along the Flume trend.

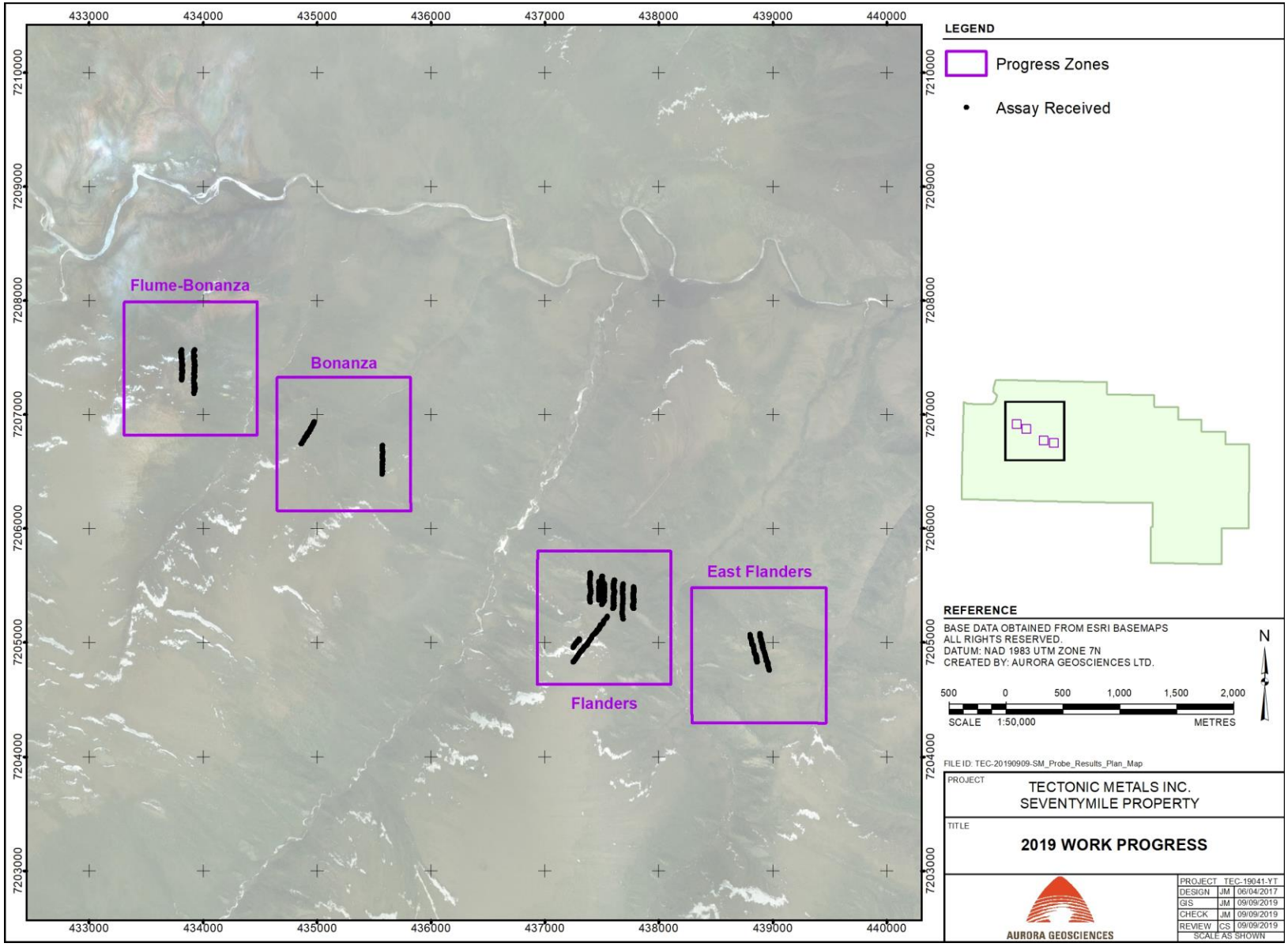

Figure 28: Location of 2019 Geoprobe lines

9.6.1 Flanders Target

The Flanders target is a high-angle shear zone that may host bonanza-style veins or other veins which feed the northeast-dipping low angle veins and high-grade tension gash veins. The geoprobe lines covering the target are: SVMGTP19-001, 002, 003, 009, 012, 013 and 014. Four zones, FL-1 through FL-4 were delineated within the target (Figure 25).

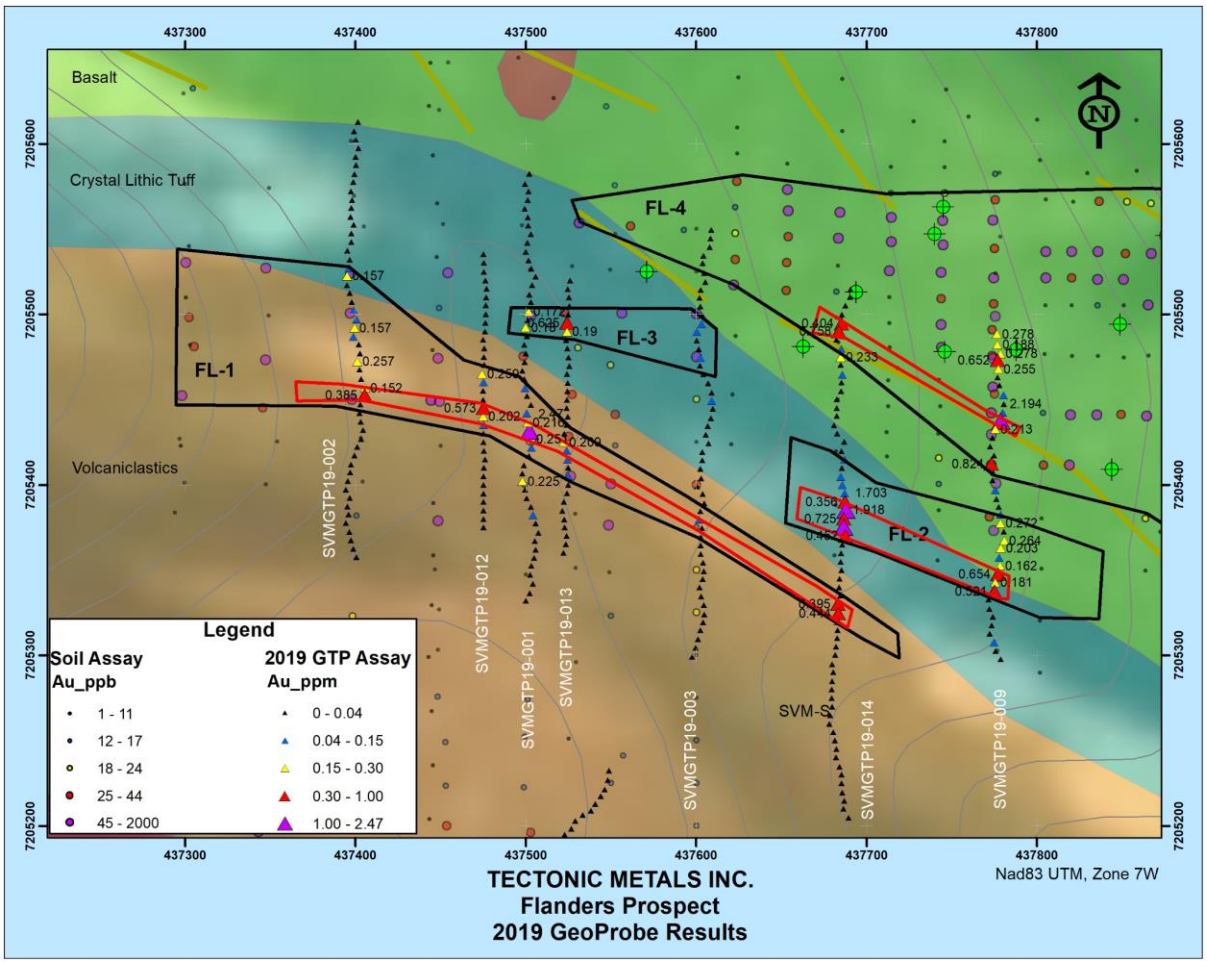

Figure 29: Location of FL-1 through FL-4 zones, Flanders target (Image by Tectonic Metals Inc.)

Zone FL-1, hosted within a package of volcaniclastic rocks, has a strike length of 465 m and ranges in with from 15 m in the east to possibly 90 m in the west. The zone, open to the east and west, contains fourteen Geoprobe assays exceeding 0.15 g/t Au, four exceeding 0.30 g/t Au, and a maximum of 2.47 g/t Au. The zone also includes a 5 to 10-metre wide, 350 m long high-grade corridor, supported by 2018 power auger sampling results in its western and extreme eastern areas.

Zone FL-2, measuring 200 m long and 40 m wide and open to the east, hosts the "historic" tension gash veins. This zone straddles the crystal lithic tuff-basalt contact. Geoprobe sampling returned twelve assays exceeding 0.15 g/t Au, seven greater than 0.30 g/t Au, and two peak assays of 1.703 and 1.918 ppm Au. Sample results identified a 20-metre wide high-grade corridor. The 2019 program indicates that the FL-2 zone may represent the surface expression of a tension gash vein.

Zone FL-3, mapped entirely within the crystal lithic tuff unit, returned four geoprobe assays exceeding 0.15 g/t Au and a maximum value of 0.625 g/t Au. The zone may be of limited strike extent and has approximate dimensions of 125 m x 20 m. The zone may also represent the surface expression of a tension gash vein.

Zone Fl-4 comprises a very broad area of high-grade Au values. Previous drilling intersected high-grade gold-bearing quartz veins, some of which returned the highest-grade intervals at the Flanders prospect. Gold-bearing quartz veins occur within shallowly-dipping en-echelon tension gashes, hosted entirely within the basalt and serpentinite units. A total of eleven samples returned Au values ≥ 0.15 g/t to a maximum of 2.194 g/t Au.

Figures 30 through 33 show the 2019 values for Cu, Mo, As and Au at the Flanders target.

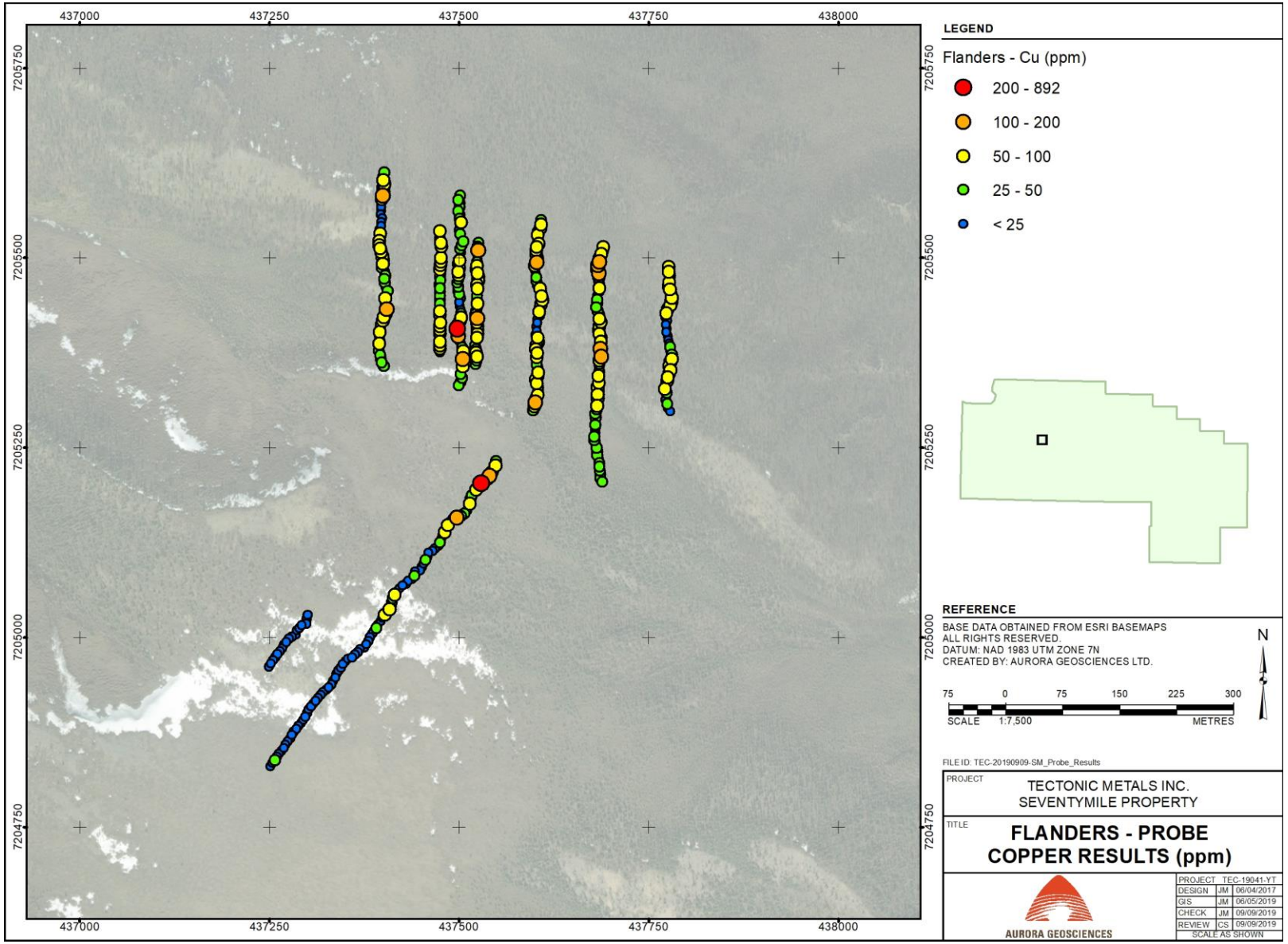

Figure 30: Cu ranges, Flanders target

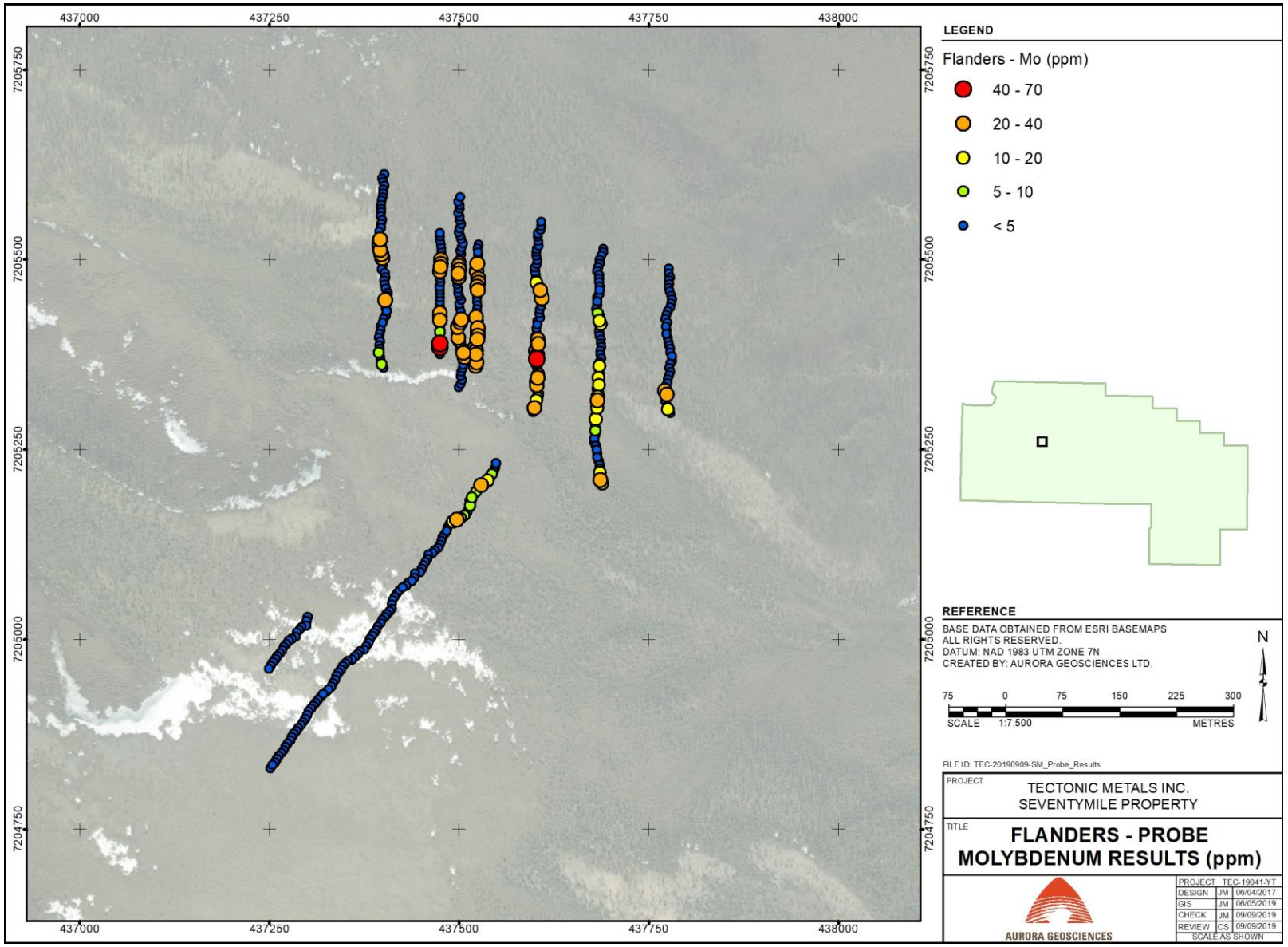

Figure 31: Mo ranges, Flanders target

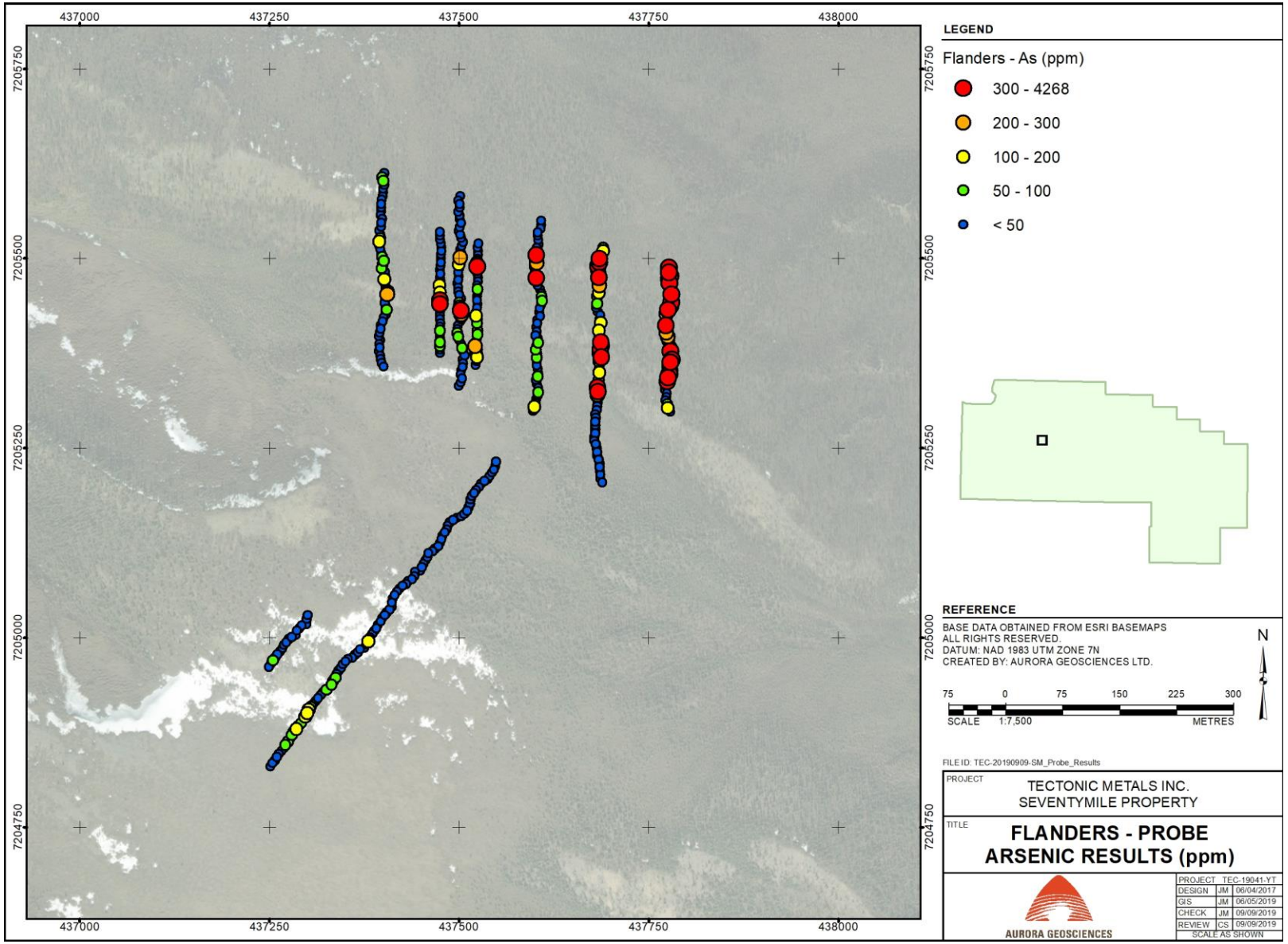

Figure 32: As ranges, Flanders target

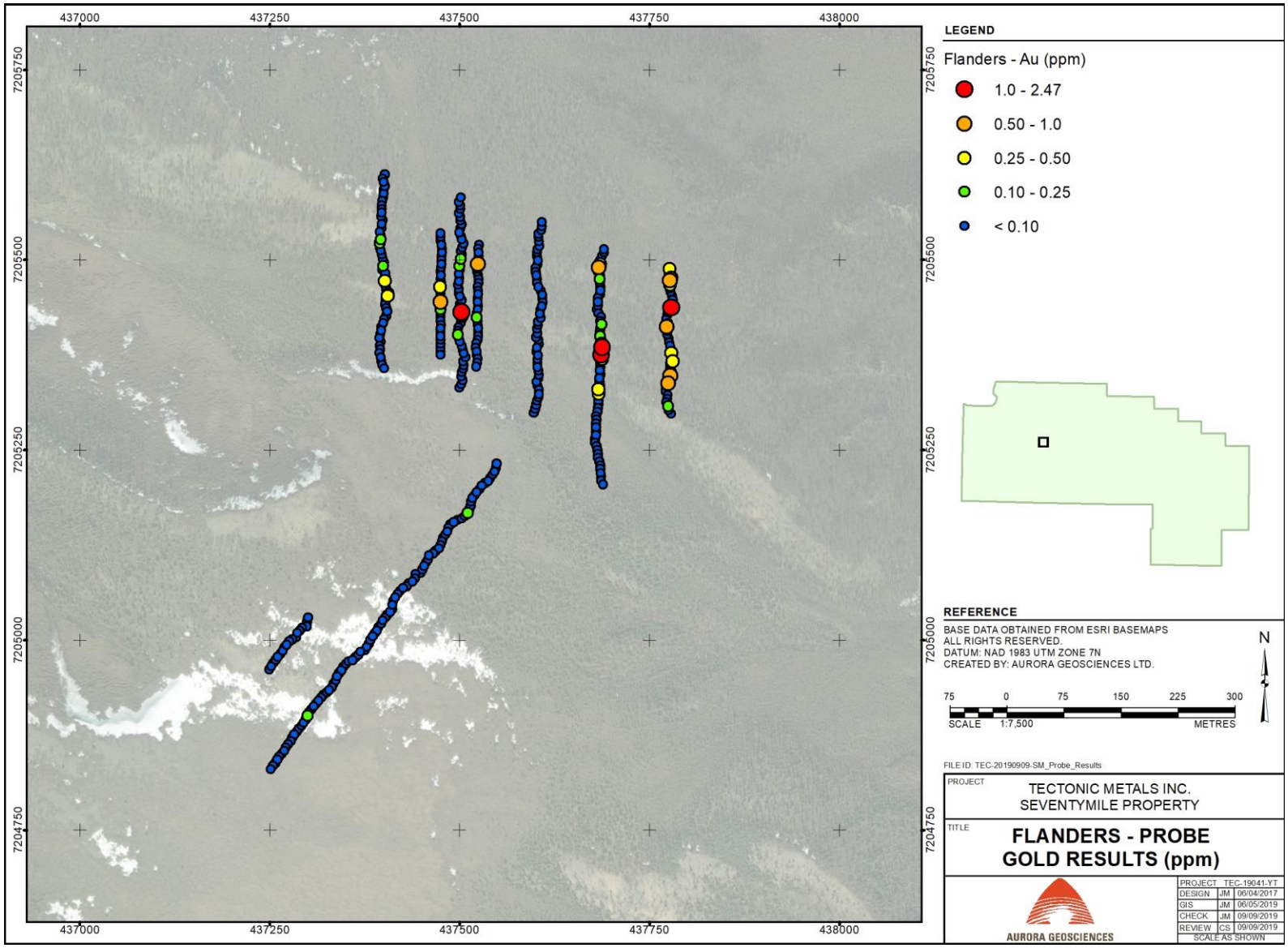

Figure 33: Au ranges, Flanders target

9.6.2 Flume-Bonanza Link Prospect

The 2019 Geoprobe surveying across the Flume-Bonanza prospect targeted untested gold-in-soil anomalism within pillow basalt and serpentinite (ultramafics) units near a diorite dyke that is possibly contemporaneous with the late Cretaceous monzonite intrusion at the Deep Creek target. Two geoprobe lines, Lines SVMGTP19-005 and 006 covering 0.640 line-km were completed across the target (Figure 34). A total of 130 samples were taken.

The Geoprobe assay values did not reproduce the historic shovel Au soil values, but correlate better with the 2018 power auger soil results. Geoprobe results encountered moderately anomalous Au values at or near the mafic-ultramafic contact. Results ranged from background to 0.372 g/t Au.Despite high Au values from shovel samples overlying the actual serpentinite unit, 2019 sampling returned background Au values.

Samples taken from the southern area, underlain by basalt, correlate more strongly with the 2018 power auger results. These returned weakly to moderately anomalous Au values, ranging from background to 0.086 g/t Au. Closer to the basalt-serpentinite contact along line SVMGTP19-005, two consecutive samples returned values of 0.118 g/t Au and 0.325 g/t Au. These are south of the mapped contact of the basalt with the serpentinite to the north, which may be explained by downslope soil creep.

Geochemical ranges for Cu, Mo, As and Au are shown in Figures 35-38.

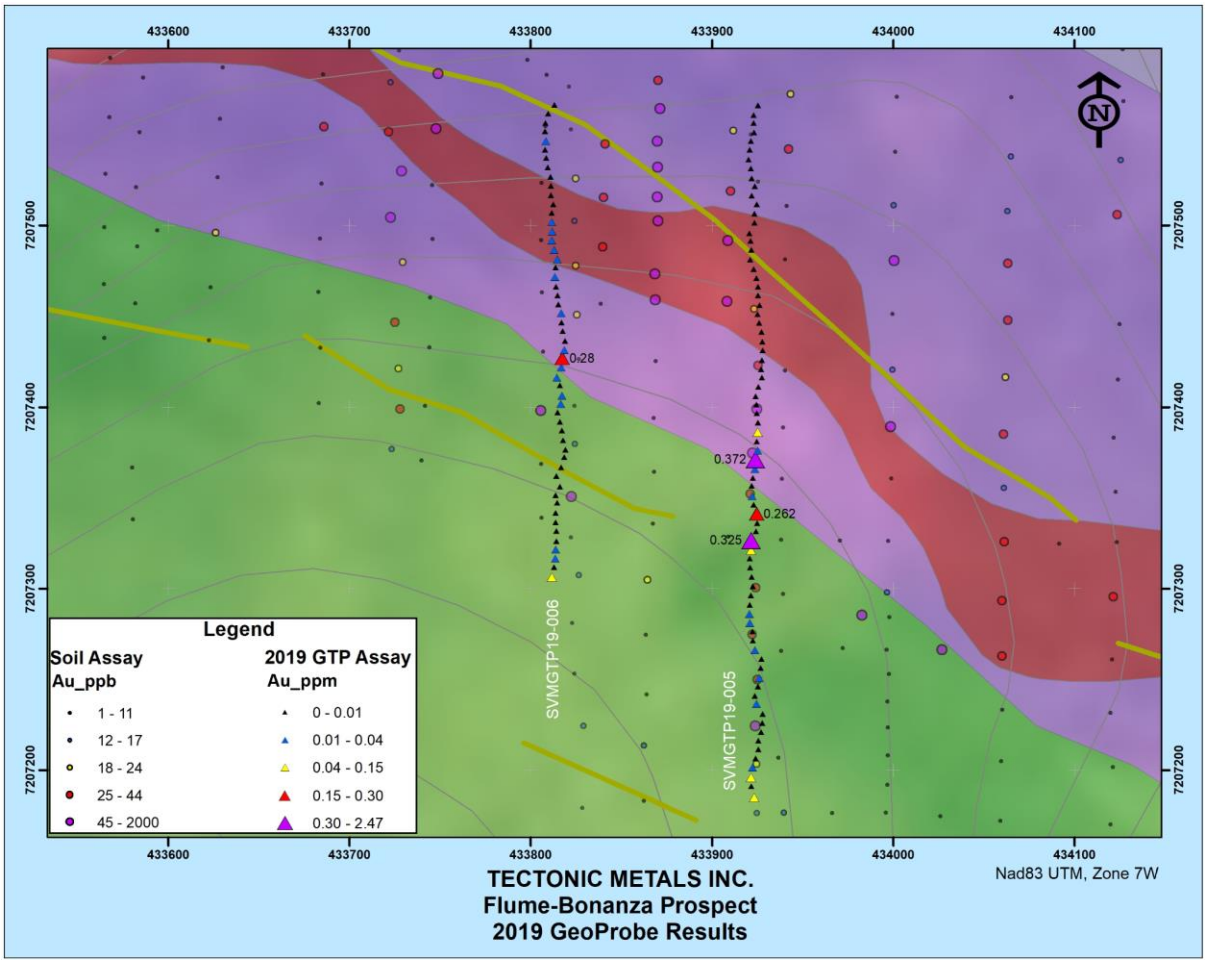

Figure 34: Geoprobe results, Flume-Bonanza Link prospect (Image by Tectonic Metals Inc.)

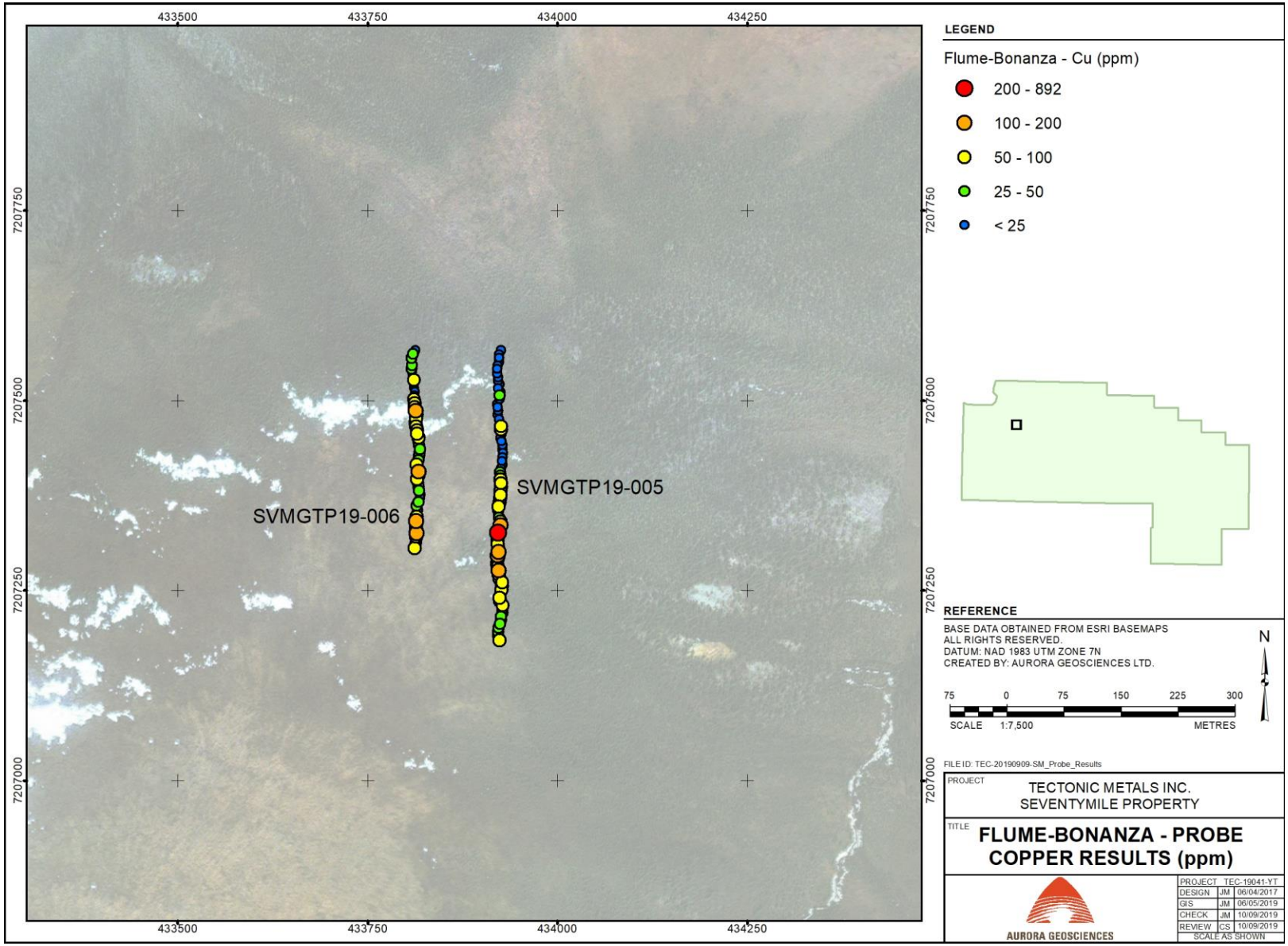

Figure 35: Cu ranges, Flume-Bonanza target

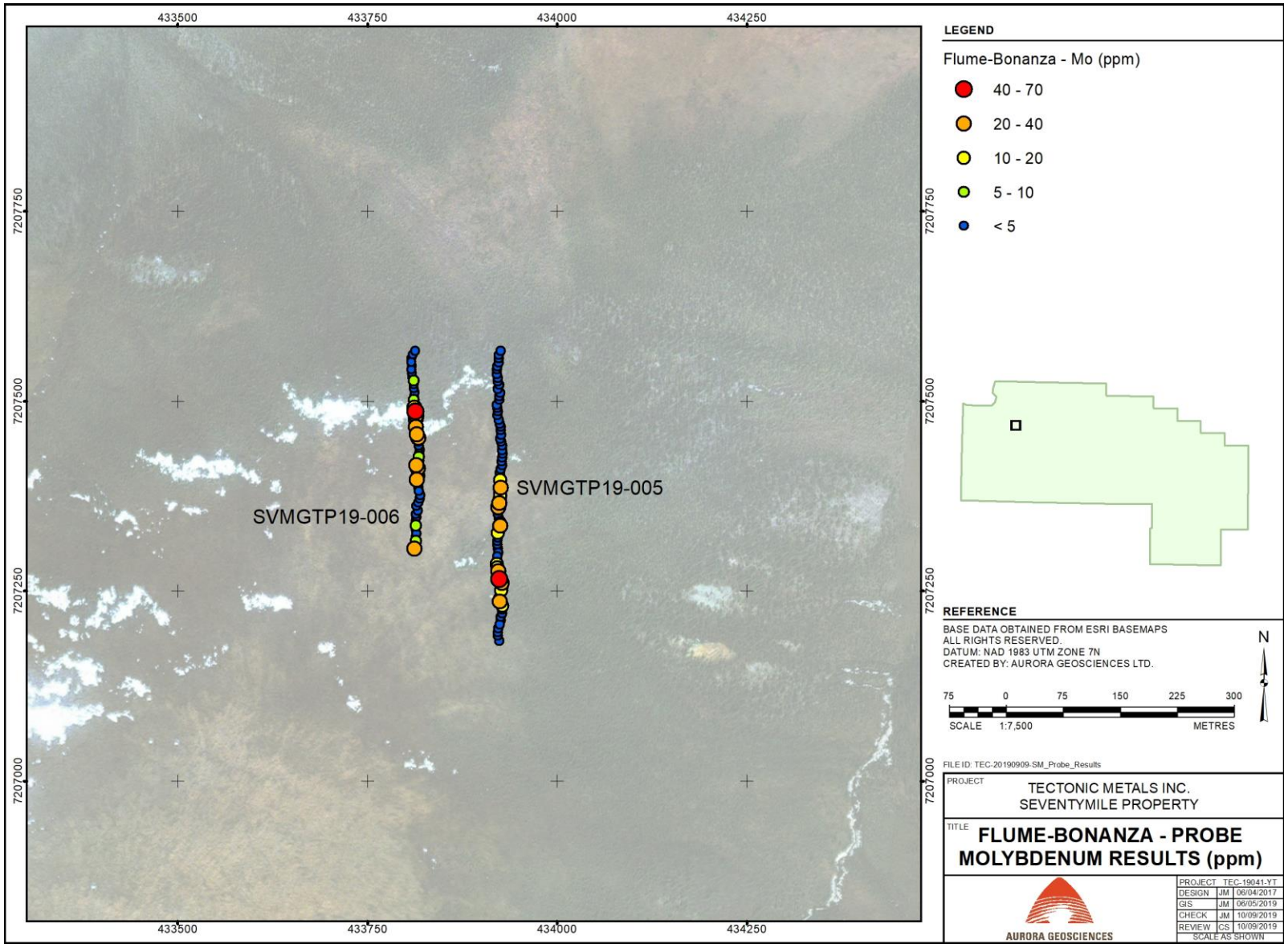

Figure 36: Mo ranges, Flume-Bonanza target

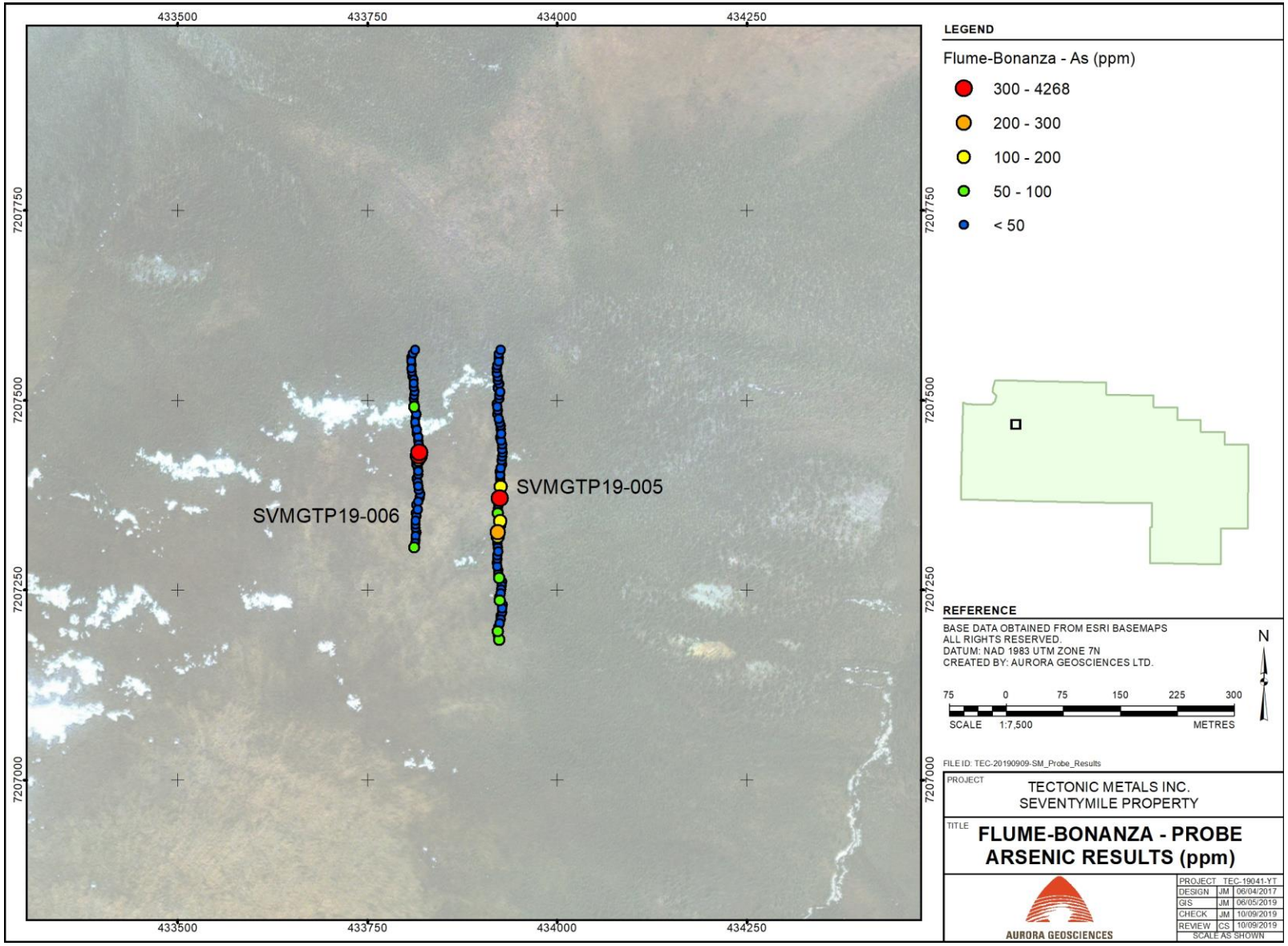

Figure 37: As ranges, Flume-Bonanza target

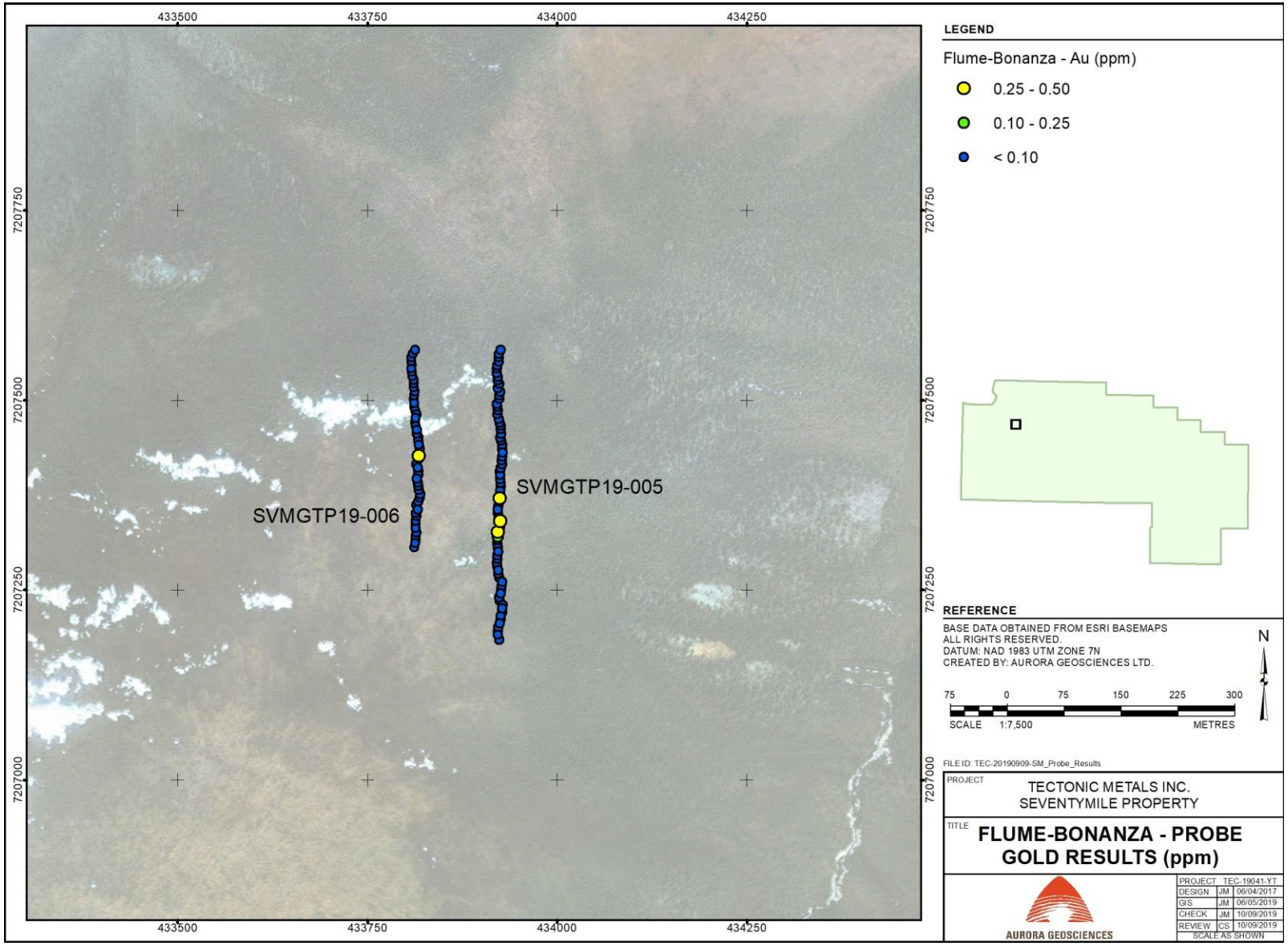

Figure 38: Au ranges, Flume-Bonanza target

9.6.3 Bonanza Prospect

The Bonanza prospect targeted a high-angle shear-hosted vein potentially occurring along the serpentinite-volcaniclastic contact. Limited historic drilling at Bonanza focused on the serpentinite unit and defined a "low-grade, bulk tonnage Au resource" (Section 6). No drilling targeted the area of the 2018 soil values which returned 0.230 ppm Au within the volcaniclastic unit south of the contact.

Two Geoprobe lines, SVMGTP19-004 and 007, covered a distance of 0.485 km, from which 99 samples were taken. Along line SVMGTP19-007, two consecutive samples directly along the serpentinite-volcanic contact returned values of 0.05 g/t Au and 0.102 g/t Au (Figure 39). Somewhat farther to the northeast within the serpentinite, two others returned consecutive values of 0.101 g/t Au and 0.046 g/t Au, and one additional sample farther north returned 0.107 g/t Au. Sampling along line SVMGTP19-004 returned background to weakly elevated Au values, to a maximum of 0.051 g/t Au.

Figures 40-43 show the geochemical ranges for Cu, Mo, As and Au.

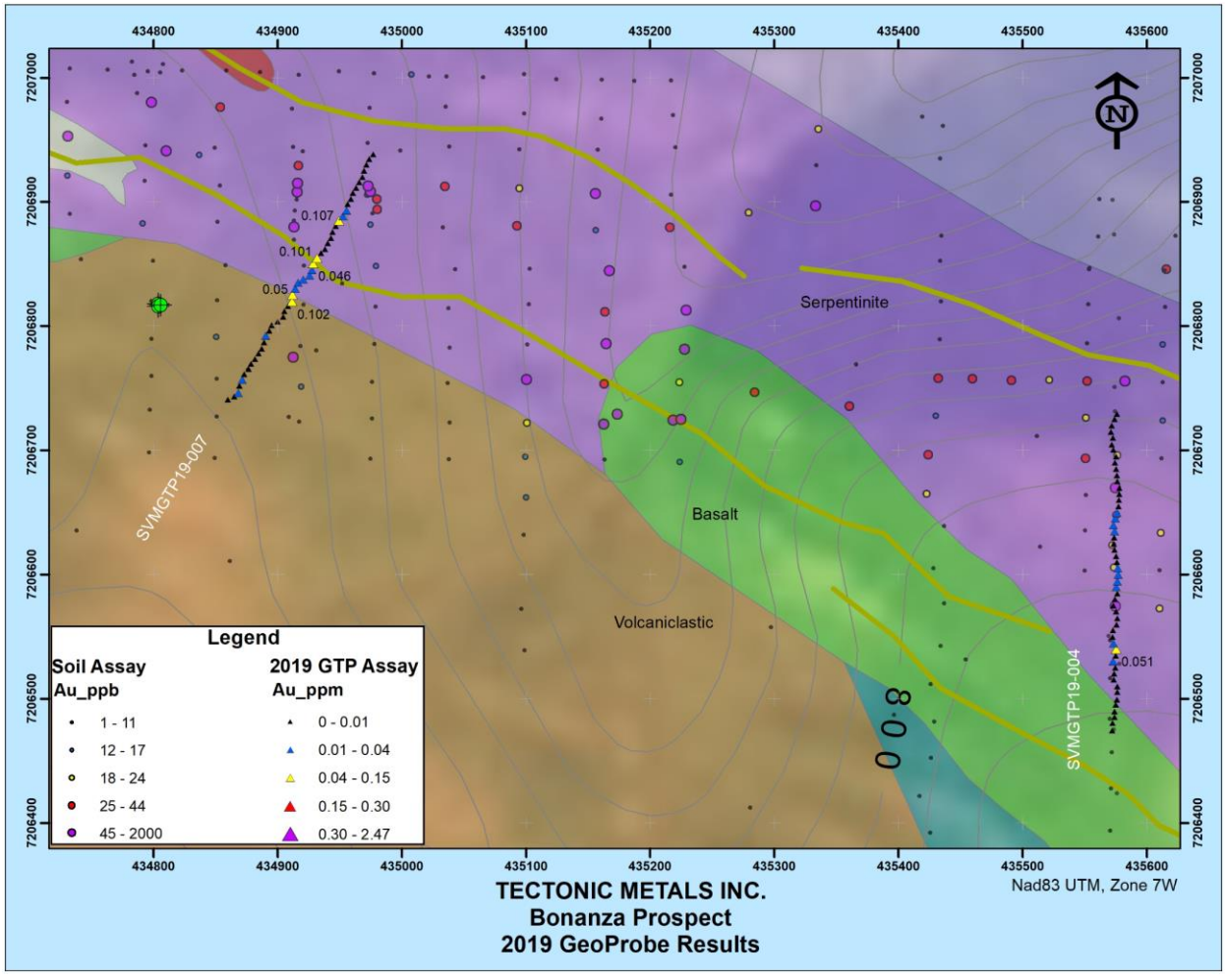

Figure 39: 2019 Geoprobe results along the Bonanza target (Image by Tectonic Metals Inc.)

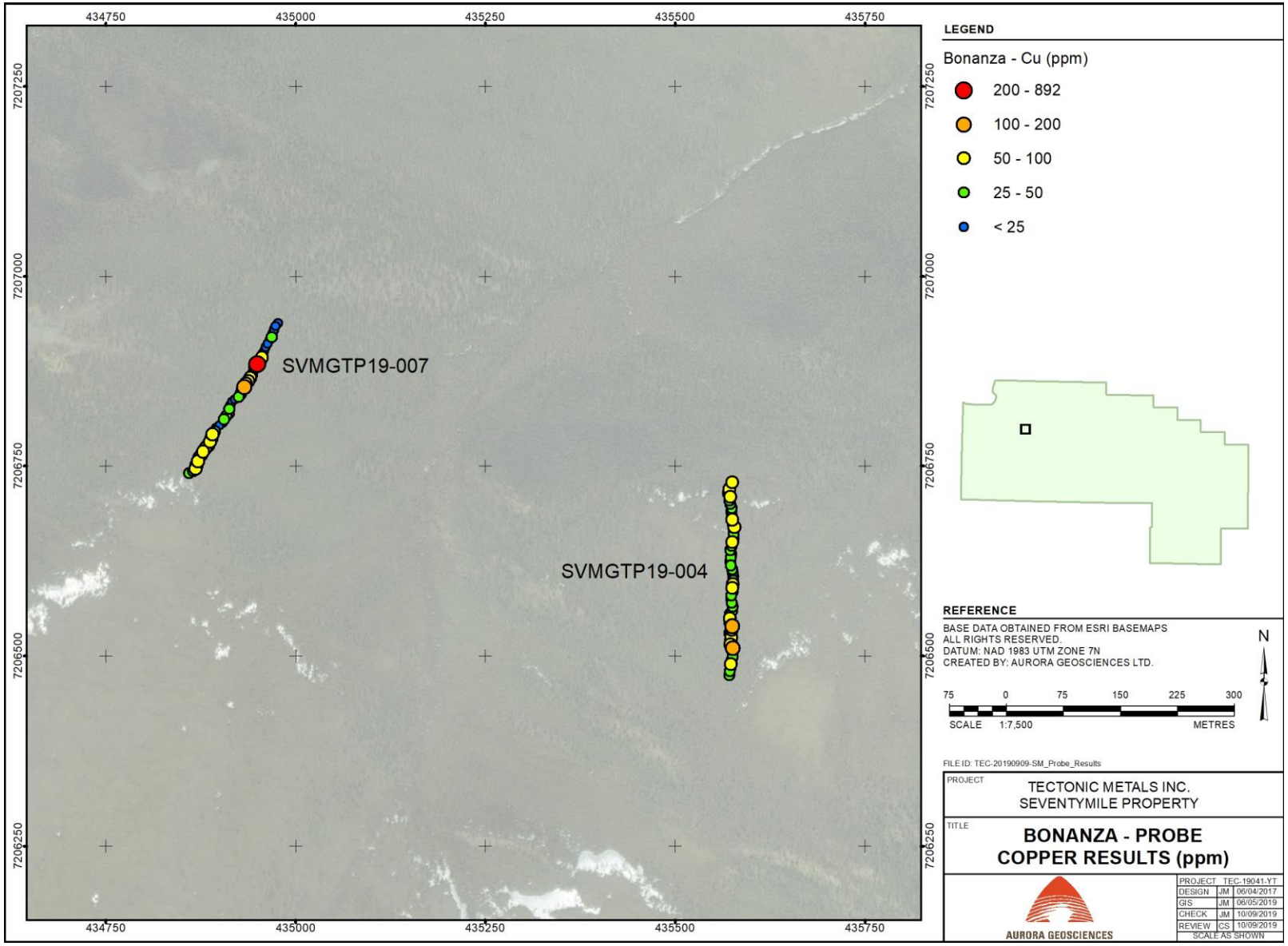

Figure 40: Cu ranges, Bonanza prospect, Seventymile property

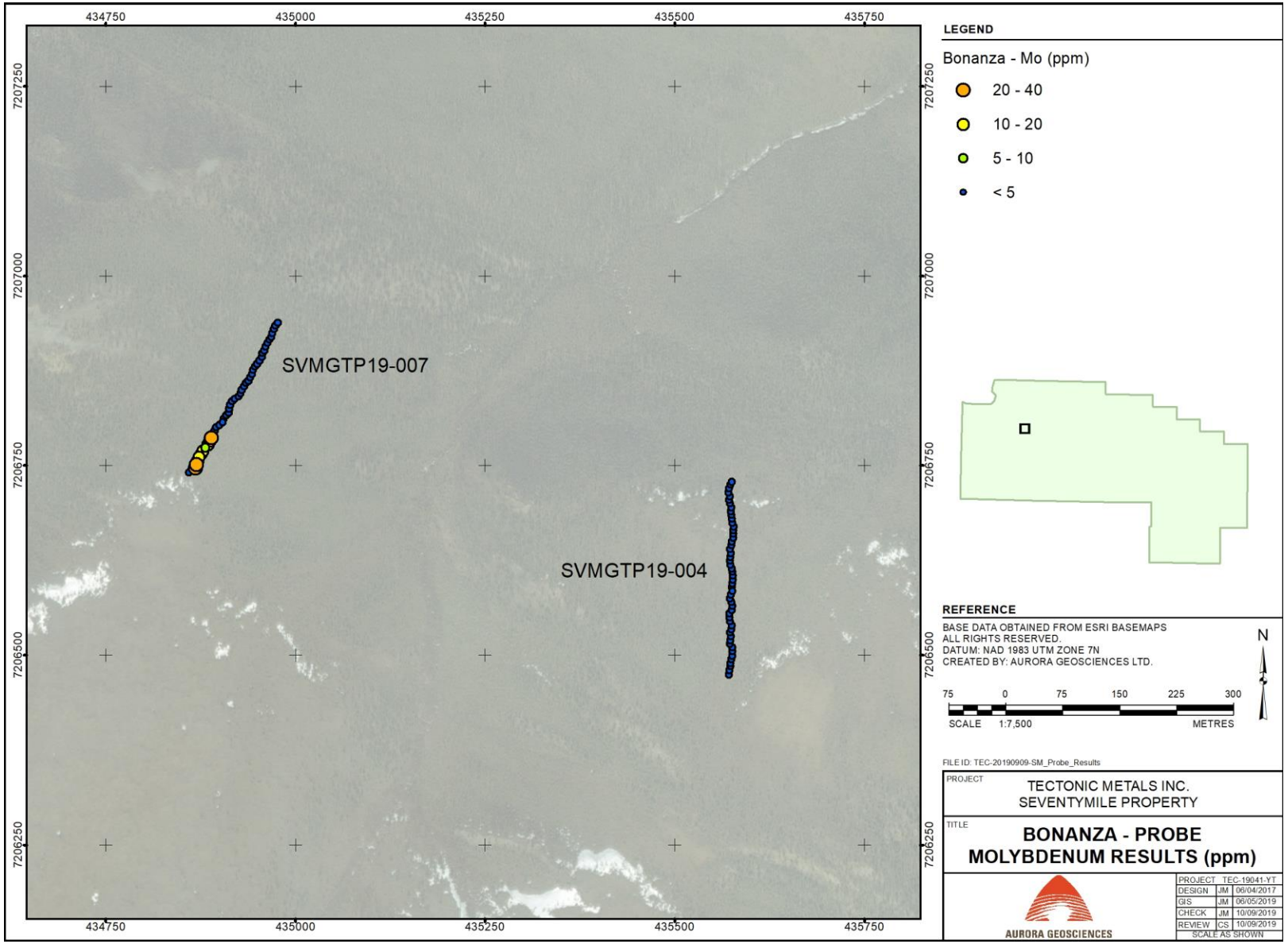

Figure 41: Mo ranges, Bonanza target, Seventymile property

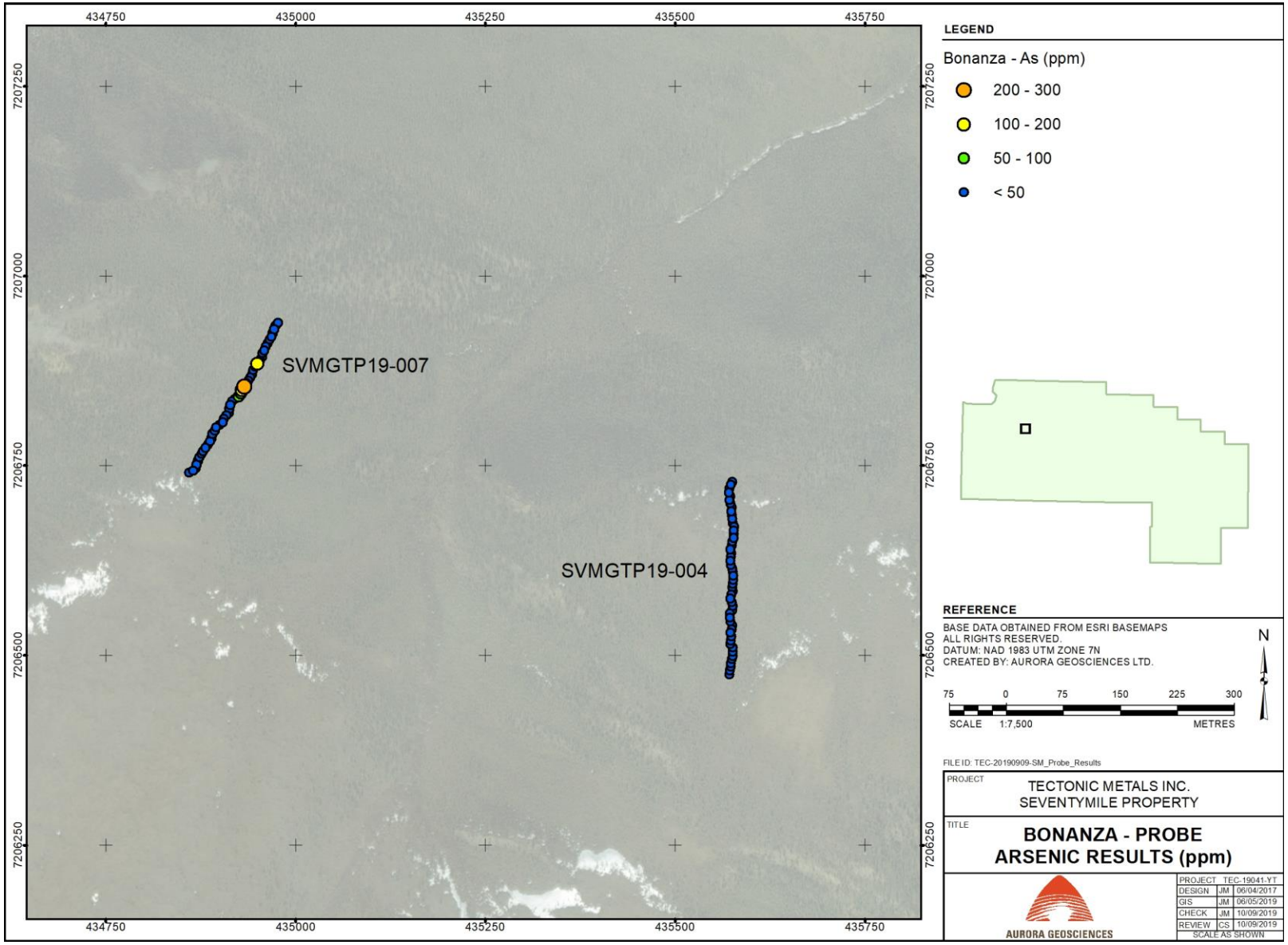

Figure 42: As ranges, Bonanza target, Seventymile property

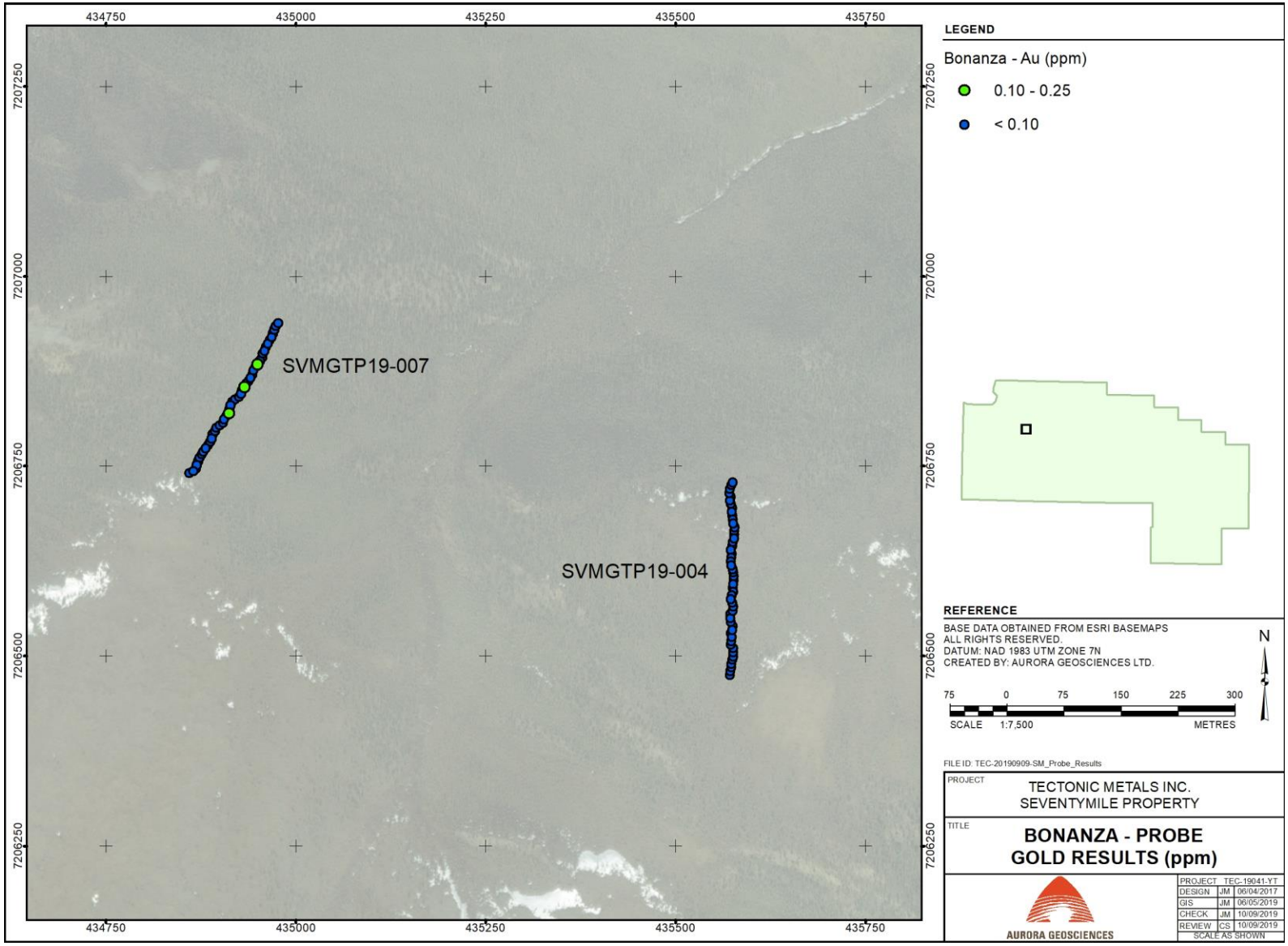

Figure 43: Au ranges, Bonanza target, Seventymile property

9.6.4 East Flanders Prospect

Exploration work at the East Flanders prospect followed up on historic shovel-sampled anomalous Au-in-soil values and tested the hypothesis that a high-angle shear zone hosting possible bonanza vein or veins exists east of the Flanders prospect and extends across Deep Creek. Two lines, SVMGTP19-008 and 010, were completed across this, and 118 samples were taken (Figure 44).

Geoprobe sampling revealed a highly anomalous gold value of 0.946 g/t Au from basalt underlying Line SVMGTP19-008, as well as two strongly anomalous values of 0.239 g/t Au and 0.299 g/t Au associated with the crystal lithic tuff but close to its contact with the basalt unit. Samples elsewhere along this line returned values from background to 0.036 g/t Au, except for a value of 0.096 g/t Au near the basalt-hosted value of 0.946 g/t.

Sampling along line SVMGTP19-010 returned four consecutive values across 15 m ranging from 0.045 g/t Au to 0.815 g/t Au. This anomalous zone also occurs within the crystal lithic tuff unit slightly south of its contact with basalt. Some downslope dispersion may have occurred, although the constrained nature of the anomalous zone indicates a proximal target within the tuffs. Samples elsewhere returned mainly background Au values, to a maximum of 0.025 g/t Au.

Geochemical ranges for Cu, Mo, As and Au are shown in Figures 45-48.

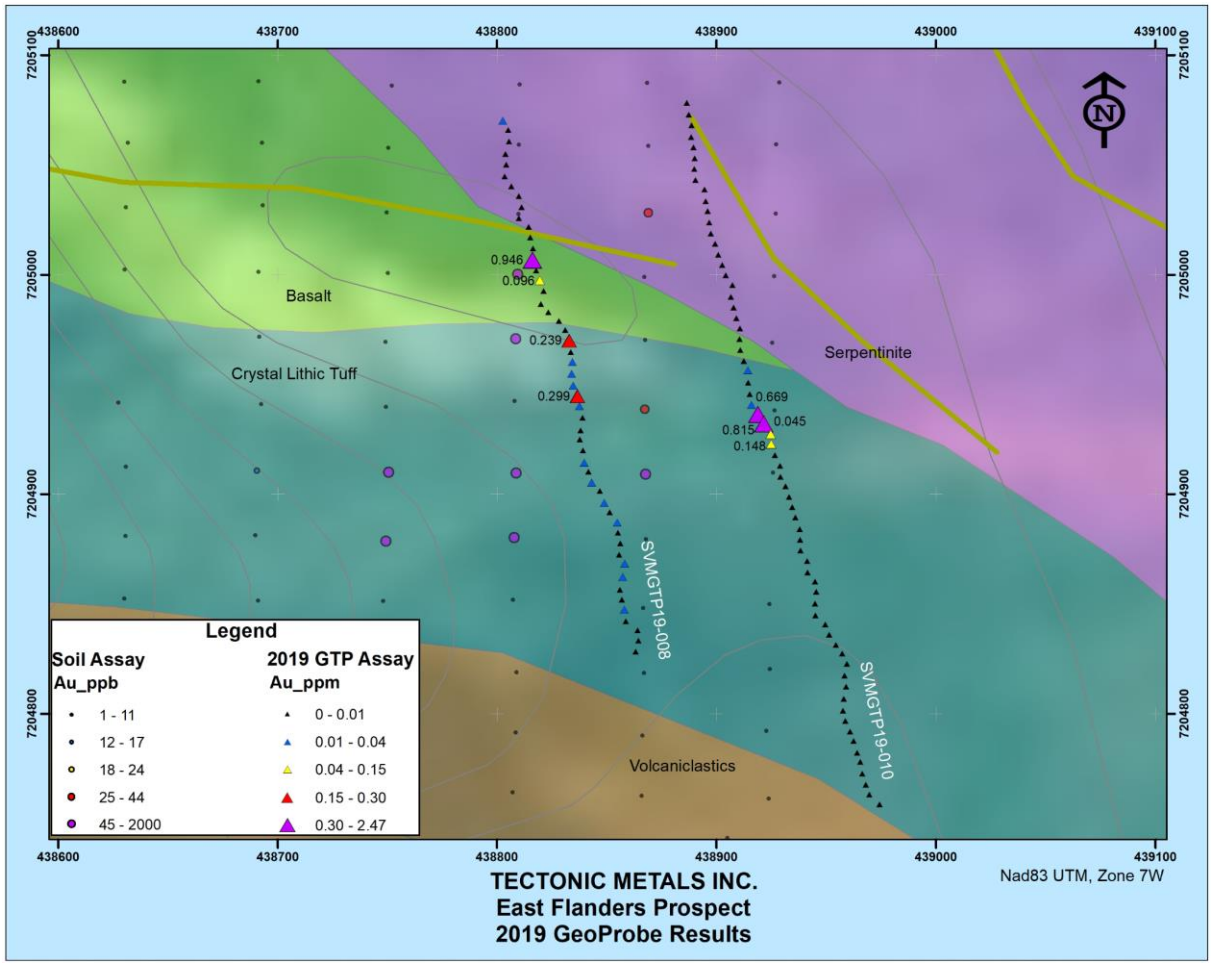

Figure 44: 2019 Geoprobe results, East Flanders target (Image by Tectonic Metals Inc.)

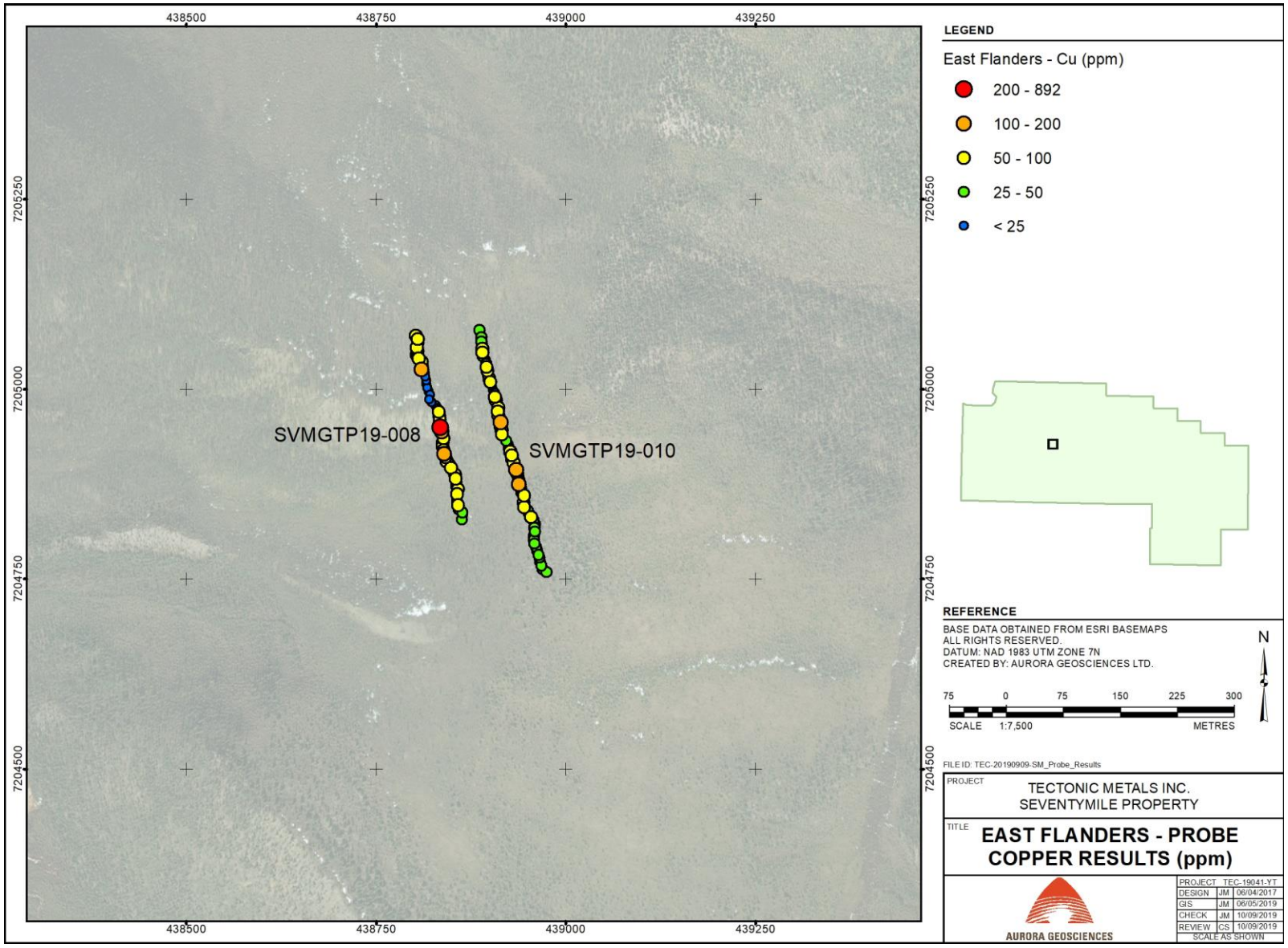

Figure 45: Cu ranges, East Flanders target, Seventymile property

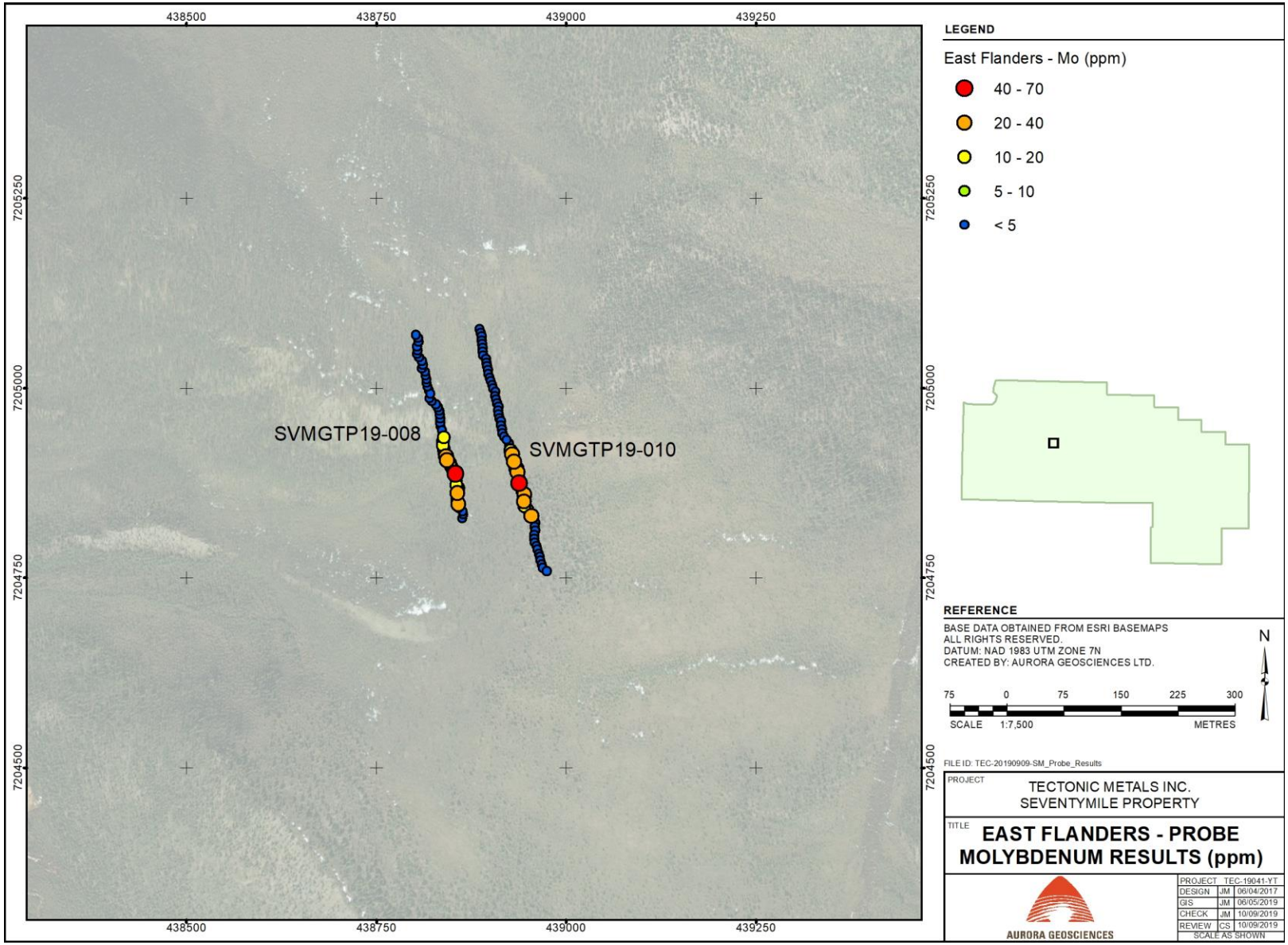

Figure 46: Mo ranges, East Flanders target, Seventymile property

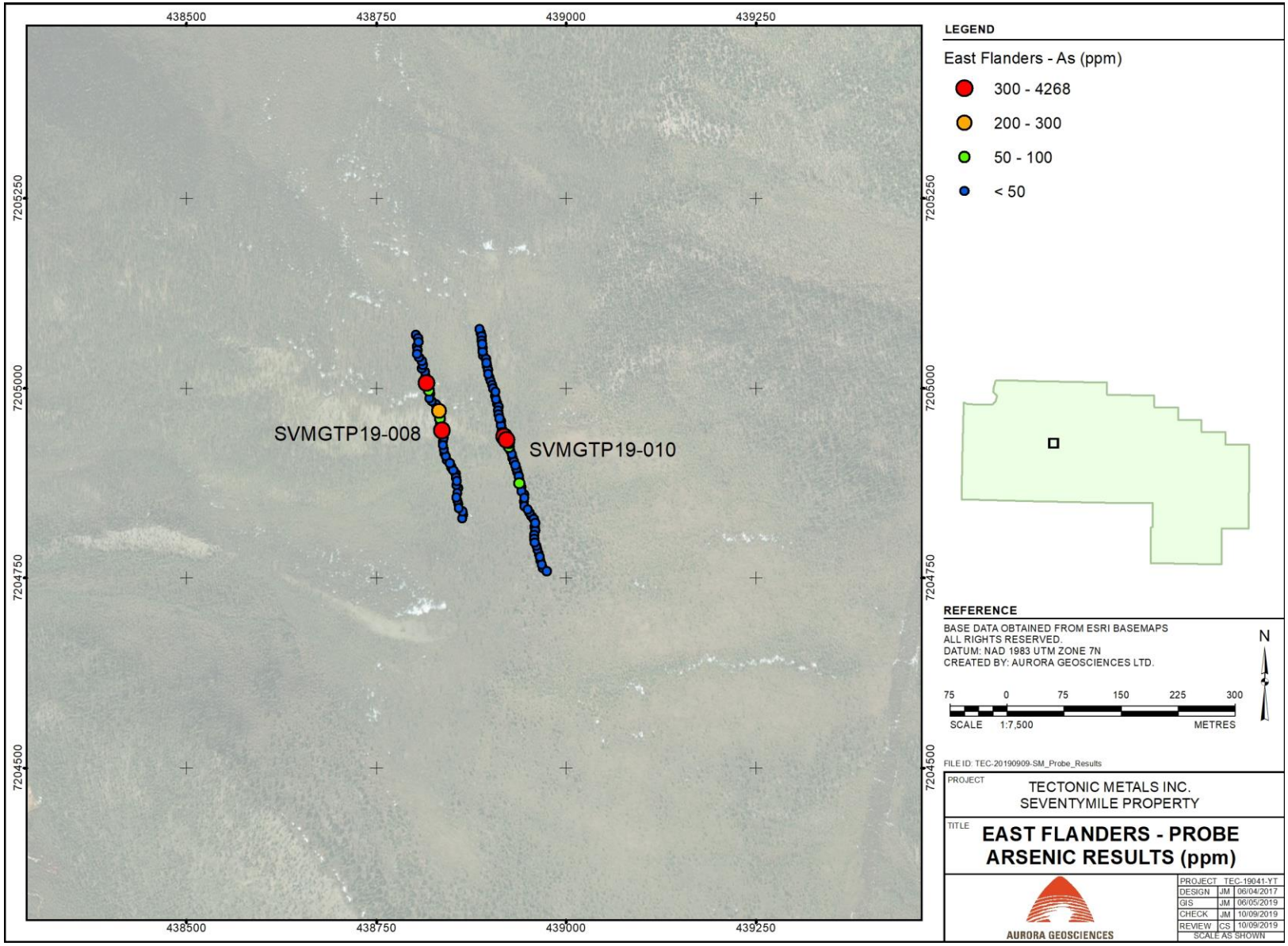

Figure 47: As ranges, East Flanders target, Seventymile property

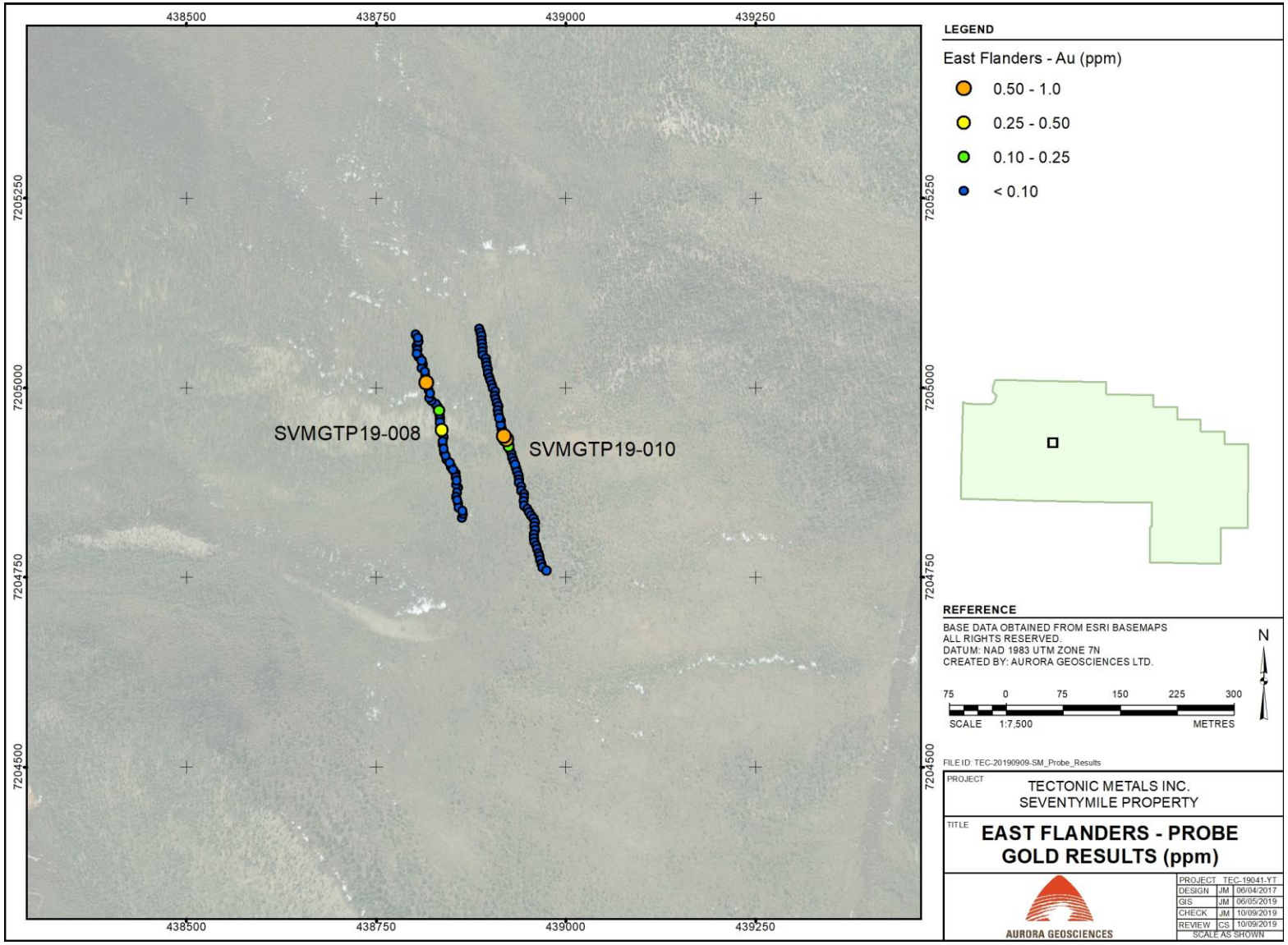

Figure 48: Au ranges, East Flanders target, Seventymile property

9.6.5 Deep Creek Prospect

Geoprobe sampling targeted the Deep Creek trend, which comprises a zone of anomalous silver and gold values in altered silicic volcanic and subvolcanic rocks. The specific target is the lithologic contacts and surrounding country rock of the late Cretaceous monzonite intrusion. Two lines, SVMGPT19-015 and 011 tested this target (Figure 49).

Sample results revealed weak to moderate Au anomalism within the terrigenous clastic rocks located on the southern flank of the monzonite intrusion. Gold assay values ranged from 0.010 g/t to 0.106 g/t at this locality, with numerous samples exceeding 0.044 g/t.

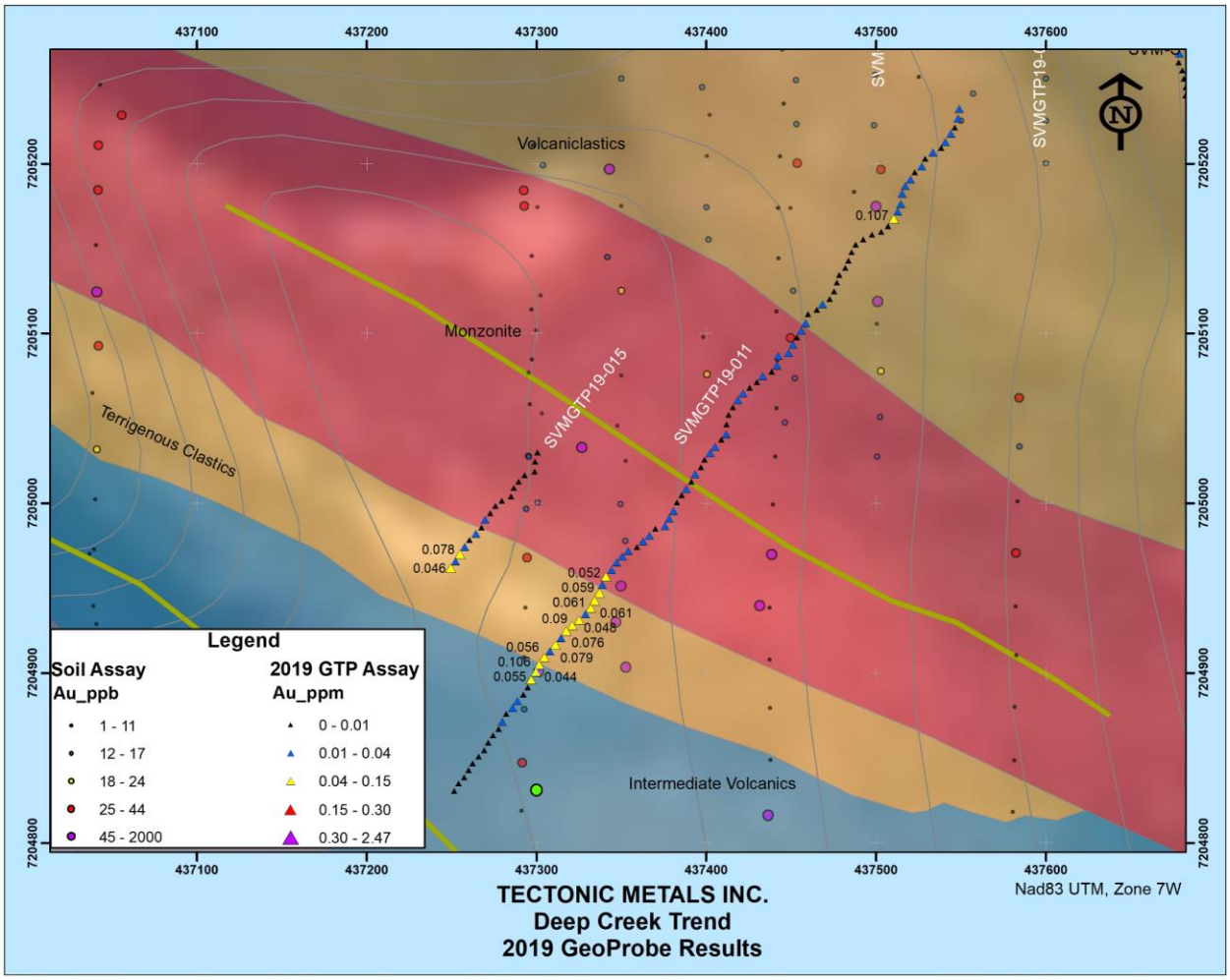

Figure 49: 2019 Geoprobe results, Deep Creek target (Image by Tectonic Metals Inc.)

9.7 2019 AUGER SAMPLING

The 2019 gasoline-powered auger drilling program comprised a total of 71 samples collected at a 25-metre line spacing along four lines for a cumulative total length of 1,680 m. One line was completed across each of the Flanders, Alder, Flume, and Nugget targets. Table 8 lists the parameters of this program.

Table 8: Summary of 2019 gas-powered auger lines across the Flume trend

Zone	Line	NAD83 UTM Zone 7W				Line	Sample	#	#	#	Sample Sequence #1	
		Start X	Start Y	End X	End Y	Length (m)	Interval (m)	Samples	Blanks	Standard	Start	End
Flanders	SVMPAS19-001	437200	7205403	437198	7205625	222	25	10	0	1	1626751	1626761
Alder	SVMPAS19-002	435950	7205899	435951	7206402	503	25	21	0	2	1626762	1626784
Flume	SVMPAS19-003	433209	7207589	433214	7208014	425	25	18	0	2	1626785	1626804
Nugget	SVMPAS19-004	440331	7204233	440374	7204763	530	25	22	0	2	1626805	1626828
					Totals	**1680**		**71**	**0**	**7**		

9.7.1 Flanders prospect

A single 222-metre power auger soil line, Line SVMPAS-001 comprising 10 samples was completed across the Flanders target. A peak Au assay of 74 ppb was obtained from the centre of the east-west linear topographic depression suggesting the FL-1 zone extends westward by another 100 m from previous soil sampling. Elevated Au values occur near the crystal lithic tuff-volcaniclastic contacts, indicating that the gold-bearing quartz veins have exploited lithologic contacts. Gold values elsewhere along the line ranged from background to 0.025 g/t Au (Figure 50).

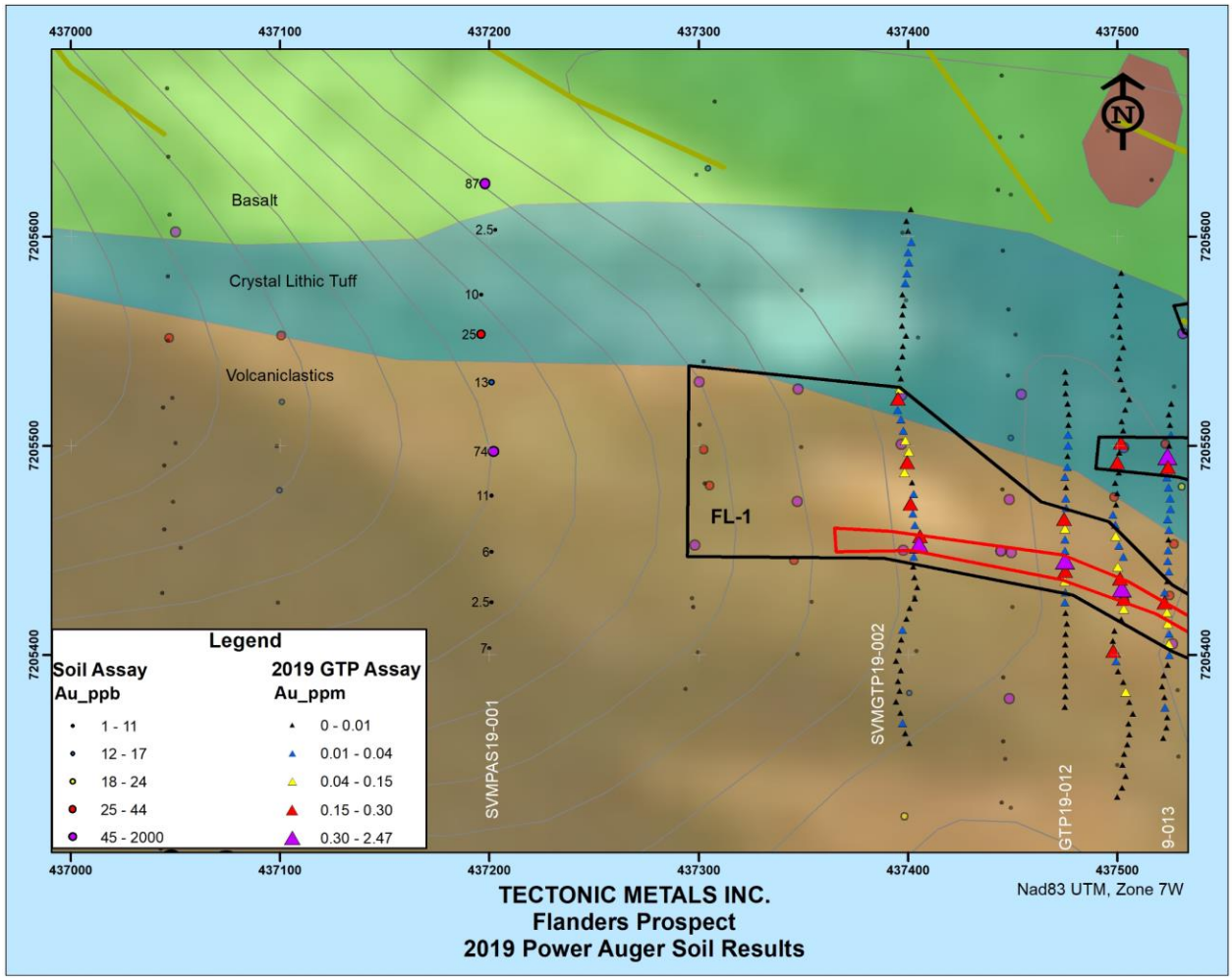

Figure 50: Au values, 2019 power auger soil samples, Seventymile property (Image by Tectonic Metals Inc.)

9.7.2 Alder Prospect

Power auger sampling along the Alder prospect was designed to test the various lithologic contacts immediately west of Alder Creek. One 503 m auger line, SVMPAS19-002, was completed, providing a total of 21 samples (Figure 51).

A peak assay of 139 ppb Au was obtained directly at the basalt-crystal lithic tuff contact. Weak Au anomalism was detected within the volcaniclastic unit, with values ranging from background to 0.020 g/t Au at its respective contacts. Very weak Au anomalism with values ranging from background to 0.017 g/t Au also occurs within the serpentinite rocks.

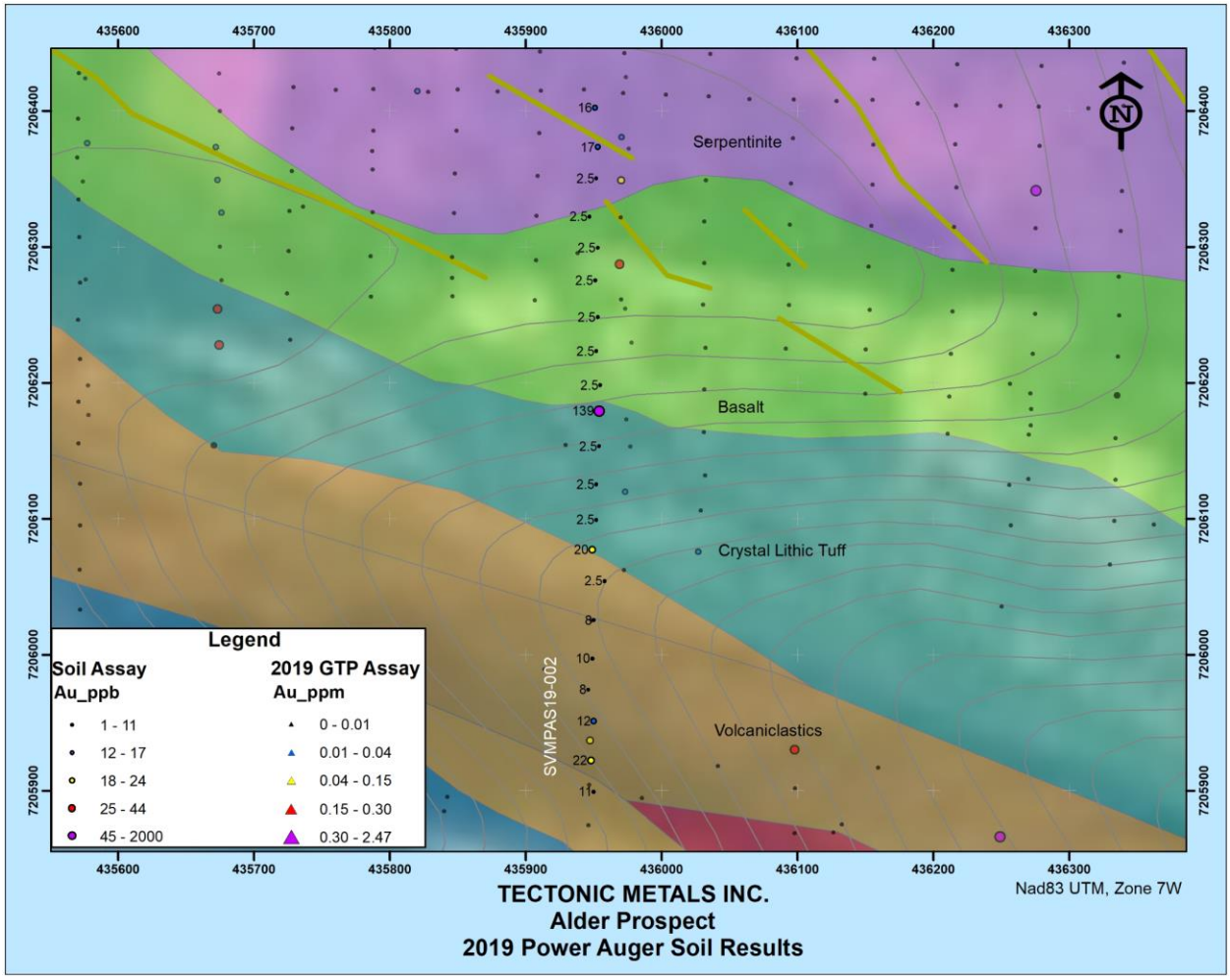

Figure 51: Au values from power auger sampling, Alder prospect (Image from Tectonic Metals Inc.)

9.7.3 Flume prospect

Power auger sampling at the Flume prospect targeted the area east of the historic Flume soil anomaly. A single line, SVMPAS19-003, with a linear distance of 425 m was completed, providing 21 samples (Figure 52).

Samples yielded seven values from 0.025 g/t Au and 0.038 g/t Au, with remaining values ranging from background to 0.018 g/t Au. Three consecutive values ranging from 0.025 g/t Au to 0.037 g/t Au are associated with a diorite dyke towards the north end of the line. The majority of remaining elevated values were returned from the southern basalt package, with the exception of anomalous values of 0.017 g/t Au and 0.027 g/t Au from the serpentinite unit. Historic shovel sampling failed to return values above a 0.005 g/t Au detection limit in this area.

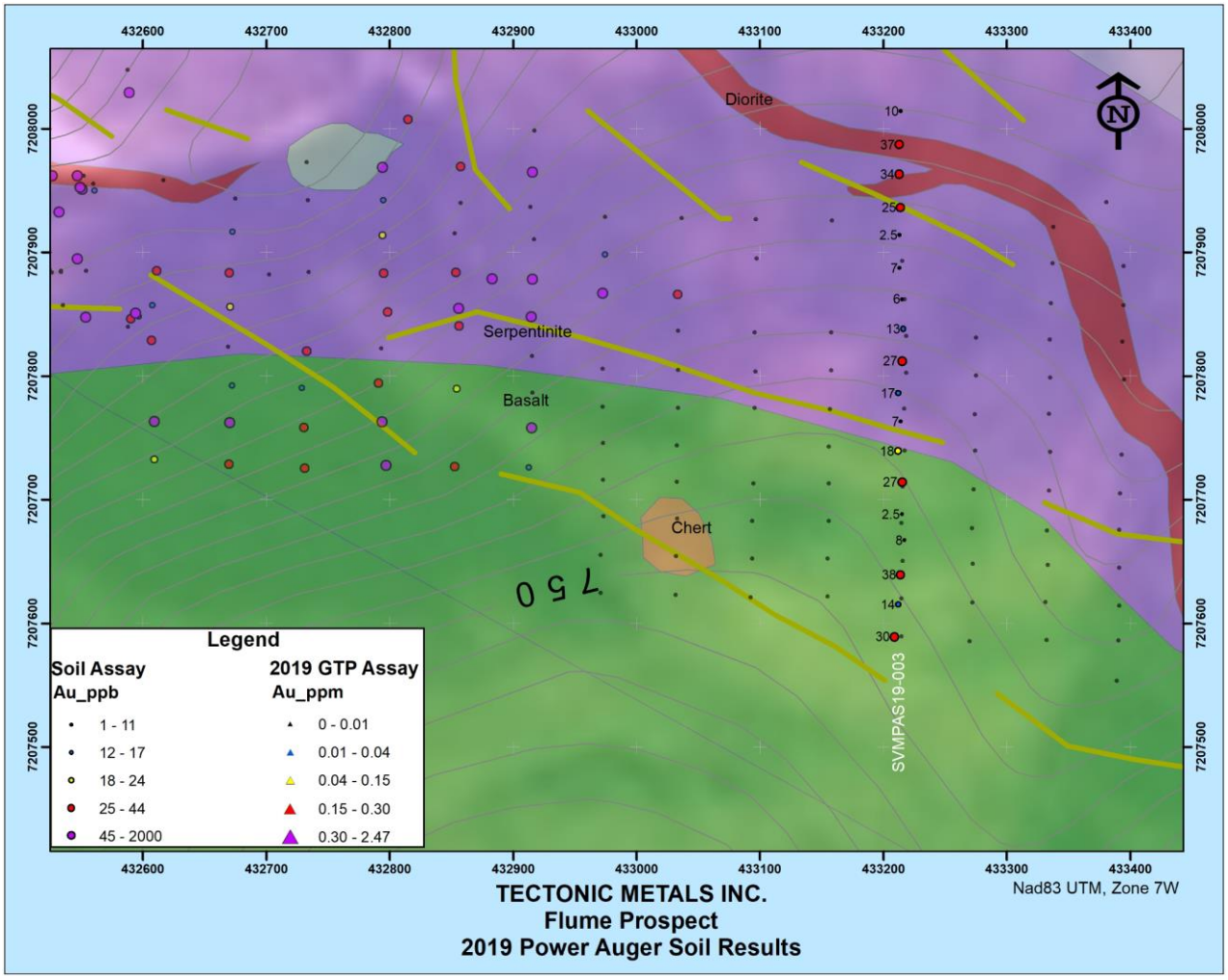

Figure 52: Au values, power auger sampling, Flume prospect

9.7.4 Nugget Prospect

Power auger sampling at the Nugget prospect was designed to follow up on a historic shovel soil anomaly of 0.120 g/t Au east of Deep Creek. One line, SVMPAS19-004, covering a linear distance of 530 m, provided 22 samples (Figure 53).

Power auger sampling at the site of the historical sample returned a value of 0.014 g/t Au. Farther south, two consecutive samples returned values of 0.027 and 0.041 g/t Au. All were taken from areas underlain by the basalt package, mainly in areas where historic shovel sampling returned sub-detection Au values. Farther south, within the crystal lithic tuff package, samples returned values ranging from background to 0.024 g/t Au.

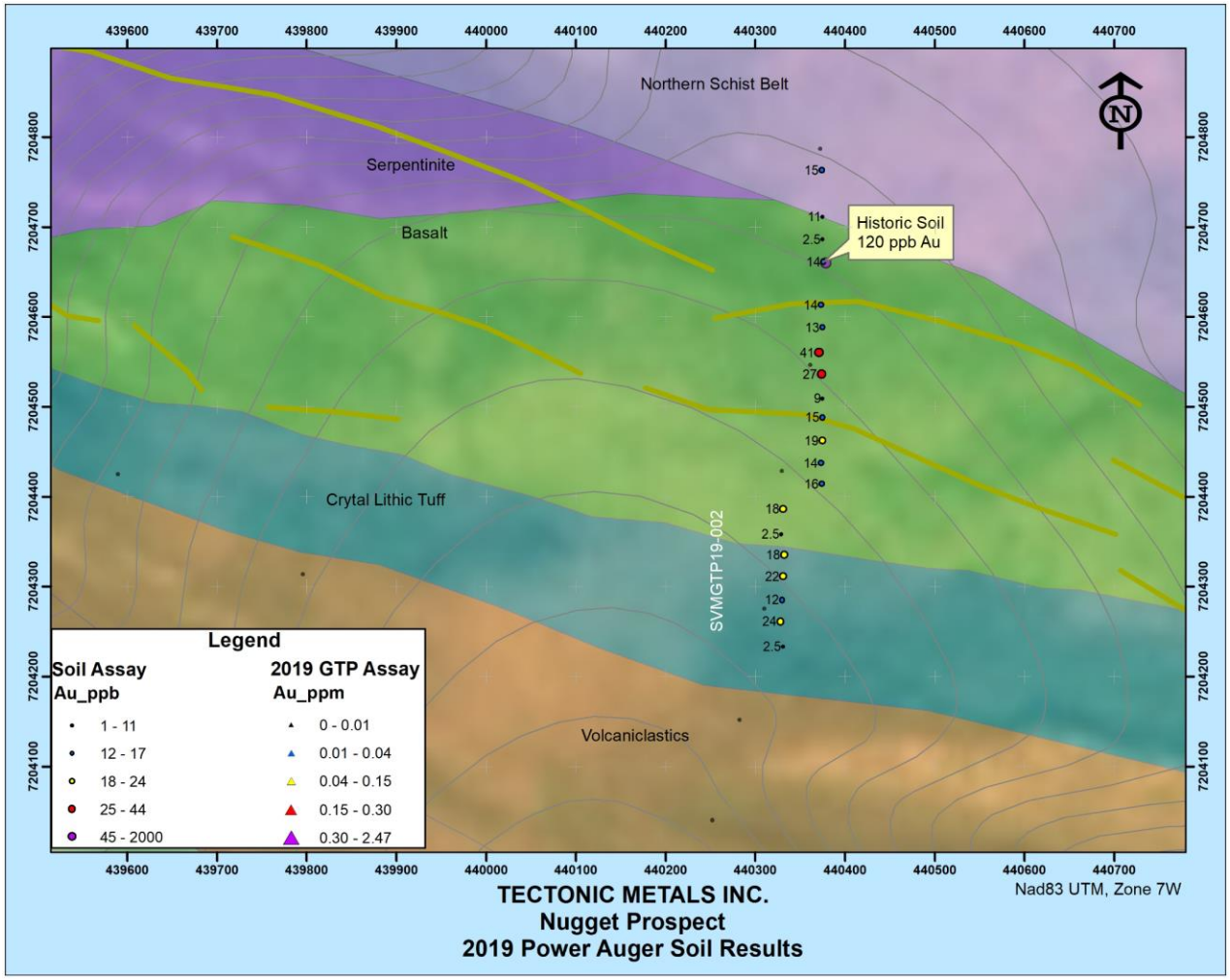

Figure 53: Au values, power auger sampling, Nugget prospect

10 DRILLING

No drilling has been conducted on the property by Tectonic Metals Inc. Results of historic drilling are discussed in Section 6.

11 SAMPLING METHOD AND APPROACH

A total of 380 soil samples, 71 rock grab samples, and 26 trench composite rock samples were collected during the 2018 exploration program on the Seventymile property.

11.1 2018 SOIL SAMPLING METHODOLOGY

Soil samples were primarily (372 samples) collected by two person crews using gasoline powered ice augers to drill through the overburden and permafrost to obtain a C-horizon sample that is more representative of bedrock values. Shovel samples (8 samples) were used to collect near-surface soil. Crews augered to the 'C' soil horizon and collected approximately 600 grams of material in breathable cloth bags. Sample depths ranged from surface to 2.4 m in depth. Samples were located using handheld non-differential GPS units. Parameters recorded comprise UTM co-ordinates (NAD 83, Zone 7W) including elevation, sample depth, colour, moisture, lithology, texture, and condition of the site at surface. Samples were typically but not always analyzed with a Niton hand-held XRF unit prior to shipment (Section 11.7). At locations where collecting a soil sample was impossible, such as on a talus slope, a rock grab sample was collected and recorded separately.

Soil samples were placed into cloth sample bags which are labelled, assigned a unique sample ID and assay tag, and the strings were tied for shipment. Samples were placed either in rice bags with the sample numbers written on the bag and sealed with a cable tie, or in sealed "Super Sacks" closed with wire ties. All samples were flown from the property by helicopter to Delta Junction, Alaska, then transported by road to Fairbanks, Alaska. All samples remained in the custody of the field personnel (Avalon and/or Tectonic) and were transported by Avalon's expediter either to secure facilities at the Avalon warehouse, or submitted directly to the prep lab of Bureau Veritas in Fairbanks, Alaska, USA.

Bureau Veritas Commodities is an analytical laboratory with ISO 14001 environmental certification and ISO 45001 certification for safety. Bureau Veritas is independent of Tectonic Metals Inc., Avalon Development Corp, Aurora Geosciences Ltd. and the author.

11.2 2018 ROCK SAMPLING METHODOLOGY

A total of 71 rock grab samples were collected on the Seventymile property during the 2018 field season. All samples were described in the field and located using handheld GPS units. Typical sample weights ranged between 0.9 kg and 2.7 kg. Samples were categorized based on the material sampled. Samples were collected from outcrop, float, and the 2018 trench. Samples were classified as float whenever they were not specifically sampled from outcrop. Rock samples were collected on soil grid locations where no soil could be obtained, and additional samples were collected wherever metallic mineralization, quartz veining, or diagnostic alteration was observed. Six of the grab samples were collected from the trench at the Flanders prospect and represent sub-samples of visible mineralization or alteration noted within larger trench channel samples.

Rock samples were placed in cloth sample bags which were labelled with a unique sample identification and assay tag and tied for shipment to the lab. Samples were placed either in rice bags with the sample numbers written on the bag and sealed with a cable tie, or in sealed "Super Sacks" closed with wire ties. All samples were flown from the property by helicopter to Delta Junction, Alaska, then transported by road to Fairbanks, Alaska. All samples remained in the custody of the field personnel (Avalon and/or Tectonic) and were transported by Avalon's expediter either to secure facilities at the Avalon warehouse or submitted directly to the prep lab of Bureau Veritas in Fairbanks, Alaska, USA.

11.3 2018 Trench Composite Sampling Methodology

The CanDig trench was excavated to target the overburden-bedrock interface, however, the ground conditions at the Flanders prospect prevented the trench from reaching bedrock. Organic material was removed and placed to the side of the trench for later reclamation purposes. Overburden material was placed on the right side, directly beside where it was removed from. Although bedrock was not reached, sampling was done on abundant rubblecrop exposed at the base of the trench.

Once the trench was excavated, it was inspected by a geologist to determine appropriate sample intervals based on observed material. The 106 m long trench was sampled continuously in 2.5 m to 5.0 m intervals along its length. Shorter increments were used in more prospective rocks and longer intervals used in unmineralized and unaltered sections. A rock sample bag was placed at the start of each interval; care was taken to ensure these were in sequence. A profile of trench samples was drawn in large "Rite in the Rain" trench mapping books. Samples were collected by hand using a mattock or a geotool to collect representative subcrop and proximal float samples exposed in the trench. Sample weights were typically greater than 6.8 kg depending on the width of the sampled channel.

For each sample, rock chips were extracted from the bottom of the trench, with equal representation across the entire interval. A representative sample was taken for each interval. The sample sequence was checked to ensure accuracy, and a photograph was taken of each interval, including the sample bag with the sample number. "High-grading" of mineralized portions was avoided in the main sample, although specific samples of mineralized and/or altered material were collected, utilizing a separate sample sequence.

The lithology, alteration, and mineralization for each sample were recorded in the field. The detail of logging was governed by quality of excavation, with well exposed sections potentially logged at intervals of <0.5 m, and more poorly excavated sections logged at intervals of 0.5 m – 1.0 m. All changes, including subtle changes in lithology or alteration were also recorded. All pages within the log notebook were scanned and recorded on field computers in camp.

Samples were placed in large rice bags, labelled and sealed for transport to camp and the lab. Samples also typically but not always underwent XRF/Niton analysis (Section 11.7). For each sample interval, the most prospective rock, containing the strongest and/or obvious mineralization, was removed to reduce potential for bias. A single spot of the remaining material was analyzed, and the sample was then returned to the bag and sealed for shipment. The resulting XRF was downloaded and saved on the field computer nightly.

The chain of custody to Bureau Veritas was identical to that for rock samples.

11.4 2019 Due Diligence Rock Sampling

In 2019, a total of three rock samples were collected and analyzed from the Seventymile property. All samples have a minimum weight of 0.25 kg and were placed in 8" x 13" clear poly bags. Each sample was placed in a bag with a unique sample tag. The corresponding sample number was also written in indelible ink on the outside of the bag A representative sample of each was also taken for reference. The sample bag was then wrapped tightly and bound using a "Zap Strap" cable tie. The rock samples were placed within a "rice bag", with the sample numbers written on the outside of the bag, and sealed with a cable tie. All sample locations were recorded by using a Global Positioning System (GPS), utilizing Universal Transverse Mercator (UTM) 1983 North American Datum (NAD-83), at the location of the sample. All samples were marked in the field, using a combination of blue and orange flagging tape, with the sample number written on the flagging tape and then wrapped numerous times around the sample to protect the identification of the sample. Notes on sample type, UTM locations, including elevation, sample type, sample description, geological formation, lithology, modifiers, colour, various types and intensity of alteration, types and amount of mineralization, date, sampler and comments were recorded in a field book. These were then transferred to an Excel spreadsheet, where they were digitized with the analytical results.

The samples were transported by the Qualified Person and delivered directly to the Whitehorse, Yukon, Canada prep lab of Bureau Veritas.

11.5 2019 Geoprobe Sampling

The Geoprobe is a track mounted, remote controlled, hydraulically powered direct-push drill designed by Ground Truth Exploration Inc. and operated by Ground Truth Americas, Ltd (Figure 54). The Geoprobe is designed to collect representative rock samples from the soil bedrock interface using a 2-inch internal diameter sampling rod. At Seventymile, a sample spacing of 5 m was employed along pre-set grid lines or "corridors" at depths ranging from near surface to 4.5 m depending ground conditions.

At each sample site approximately 30 cm of material from the bottom of each hole is collected. Representative rock chips are collected from the sampled material and each sample site is logged in a handheld Samsung smartphone. Each site is flagged, labelled, and surveyed using a differential GPS. Parameters logged comprise: UTM co-ordinates including elevation, sample depth, rock content, content of frozen material, oxidation level, amount of weathering, rock fragment angularity, lithology, alteration, whether bedrock was successfully reached, and any additional comments pertaining to the sample. All samples are analyzed with a Niton hand-held XRF unit prior to shipment (Section 11.7).

Geoprobe samples are placed into 12 x 18" 8 mil clear poly sample bags, each labelled with unique sample identification and assay tags, and sealed with a cable tie for shipment to the lab. Samples are placed in rice bags with the sample numbers written on the bag and sealed with a cable tie and individually numbered yellow security tags.

Samples were either flown directly from the Alder Airstrip by 40 Mile Air to Fairbanks, or by helicopter to Eagle, Alaska, where they were then transferred to an Everts Air Cargo fixed wing aircraft for delivery to Fairbanks. Samples were received in Fairbanks by Horst Expediting (Horst) and Remote Operations Inc. and delivered by Horst or Remote Operations employees to the prep lab of Bureau Veritas in Fairbanks, Alaska, USA.

11.6 2019 Soil Power Auger Sampling

The methodology of collection of the 2019 soil samples was identical to that of the 2018 auger sampling. Samples were collected by two person crews using gasoline powered ice augers to drill through the overburden and permafrost to obtain a C-horizon sample that is more representative of bedrock values. Crews augered to the 'C' soil horizon and collected approximately 600 grams of material in breathable cloth bags. Sample depths ranged from surface to 2.4 m in depth. Samples were located using handheld non-differential GPS units. Parameters recorded comprise UTM co-ordinates (NAD 83, Zone 7W) including elevation, sample depth, colour, moisture, lithology, texture, and condition of the site at surface. All samples were analyzed with a Niton hand-held XRF unit prior to shipment (Section 11.7). At locations where collecting a soil sample was impossible, such as on a talus slope, a rock grab sample was collected and recorded separately.

Soil samples were placed into cloth sample bags which are labelled, assigned a unique sample ID and assay tag, and the strings were tied for shipment. Samples were placed either in rice bags with the sample numbers written on the bag and sealed with a cable tie, or in sealed "Super Sacks" closed with wire ties. All samples were flown from the property by helicopter to Delta Junction, Alaska, then transported by road to Fairbanks, Alaska. All samples remained in the custody of the field personnel (Avalon and/or Tectonic) and were transported by Avalon's expediter either to secure facilities at the Avalon warehouse, or submitted directly to the prep lab of Bureau Veritas in Fairbanks, Alaska, USA.

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11.7 XRF Data Collection, 2018 and 2019

XRF data was selectively collected during exploration campaigns from 2018 to 2019 as part of a comprehensive service package. The XRF analysis was undertaken in an attempt to establish a relationship between in-field XRF results and Fire Assay data to determine the XRF's effectiveness and reliability in future exploration programs.

No standardized methodology, calibration, nor Quality Control procedures were implemented during the collection of the XRF data. Varying models of XRF analyzers, specifications of analysis, and analytical procedures and methodologies have been employed by the differing exploration service providers rendering direct comparison difficult. Soil samples, if analyzed, may not have been consistently dried prior to analysis in the field, and rock and geoprobe samples, if analyzed, received only surficial point analysis. Due to the early-stage nature of the Seventymile property, no relationship between XRF data and assay data has been established.

For the reasons mentioned above, the Qualified Person believes any XRF data to be unreliable and not significant at this time.

Figure 54: Geoprobe in operation (Tectonic Metals Inc. after Ground Truth Exploration Inc.)

12 SAMPLE PREPARATION, ANALYSES AND SECURITY

12.1 PREPARATION, ANALYSIS AND SECURITY

The 2018 field program was conducted by staff of Avalon Development Corporation under direction of Tectonic. Samples were transported from the field to camp or Eagle, AK each day. They were then stored in camp or accommodations until transport to the Bureau Veritas Commodities lab in Fairbanks, AK. Bureau Veritas Commodities is an analytical laboratory with ISO 14001 environmental certification and ISO 45001 certification for safety. Bureau Veritas is independent of Avalon Development Corp, Aurora Geosciences Ltd. and the author.

At the Bureau Veritas Fairbanks prep lab, all rock samples underwent crushing, splitting and pulverization to achieve a 250-gram pulp capable of passing through a 200-mesh screen (prep code PRP70-250). All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish (AAS) (analysis code FA430). A 30g lead collection fire assay was used to analyze for Au. The Ag dore bead is digested with aqua regia and then analyzed by Atomic

Absorption. "Overlimit" samples, exceeding 10 g/t Au, were re-analyzed by gravimetric finish (analysis code FA530-Au). Following this, a 0.25-gram split was sent to the Vancouver, British Columbia, Canada lab for four-acid digestion. The split was heated in HNO_3, $HClO_4$, and HF to fuming and taken to dryness. The residue was then dissolved in HCl. The product of the digestion was then analyzed using "Inductively Coupled Plasma Emission Spectrometer" (ICP-ES) analysis (analysis code MA300) for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn, Zr.

All soil samples underwent drying to 60°C (prep code DY060), then sieved to -180 micron (80 mesh) size (prep code SS80). All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish (AAS) (analysis code FA430). Following this, the 0.25-gram pulps were sent to the Vancouver, British Columbia, Canada lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" (ICP-ES) analysis (analysis code MA300) for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn, Zr.

Analytical results were continually checked to ensure the sample numbers in the results match those in the descriptions.

12.1.1 2019 Geoprobe Sampling

Geoprobe samples, mainly comprising rock chips, were treated as rock samples. At the Fairbanks Bureau Veritas prep lab, all samples underwent crushing, splitting and pulverization to achieve a 250-gram pulp capable of passing through a 200-mesh screen (prep code PRP70-250). All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish (AAS) (analysis code FA430). Following this, a 0.25-gram pulp was sent to the Vancouver, British Columbia, Canada lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" (ICP-ES) analysis (prep code MA300) for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn, Zr.

Analytical results were continually checked to ensure the sample numbers in the results match those in the descriptions.

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12.1.2 2019 Power Auger Soil Sampling

The 2019 preparation and analytical methodology for power auger soil sampling is identical to that for 2018. At the Fairbanks Bureau Veritas prep lab, soil samples underwent drying to 60°C (prep code DY060), then sieved to -180-micron (80 mesh) size (prep code SS80). All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish (AAS) (analysis code FA430). Following this, the 0.25-gram pulps were sent to the Vancouver, British Columbia, Canada lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" (ICP-ES) analysis (analysis code MA300) for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn, Zr.

Analytical results were continually checked to ensure the sample numbers in the results match those in the descriptions.

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12.2 QUALITY ASSURANCE AND QUALITY CONTROL

Approximately one QAQC sample was placed into the sample sequence for every 10 samples. Eight standards were inserted for every 100 samples and 2 blanks were inserted for every 100 samples. Ten different standards from OREAS and Rocklabs were used; the standards used are summarized in Table 9.

Table 9: Standards used during the 2018 exploration program on the Seventymile Property

Standard Name	Supplier	Materials used for	Certified Au Value (ppm)	Standard Deviation
OREAS 214	OREAS	Rock	3.03	0.082
OREAS 218	OREAS	Rock	0.531	0.017
OREAS 224	OREAS	Rock	2.15	0.053
OREAS 250	OREAS	Rock	0.309	0.013
OREAS 252	OREAS	Rock	0.674	0.022
OREAS 260	OREAS	Rock, soil	0.016	0.018
OREAS H1	OREAS	Soil	0.012	0.001
OxA 131	ROCKLABS	Soil	0.077	0.007
OxA 89	ROCKLABS	Soil	0.0836	0.0079
OxE 126	ROCKLABS	Soil	0.623	0.016

A total of 10 standards were inserted into the 2018 rock and trench sample streams, and 34 were inserted into the soil sample sequence.

A total of 5 standards entered into the rock/trench sample stream returned values within one standard deviation (1SD) of the certified value, 4 returned values within one to two SDs, and 1 (OREAS 260) returned a value approximately 5 SD higher. The OREAS 260 standard which returned the highest deviation had the lowest certified Au value.

Of the 34 standards inserted into the soil sequence, 26 returned values within 1SD of the certified Au value, 5 returned values from 1SD to 2SD higher than the certified Au values, and three samples returned values between 5SD and 7SD above the certified Au values. Notably, standard OREAS H1 returned values that were consistently 1SD to 2SD above the certified values, as well as the values from 5SD to 7SD above the certified value. In contrast, all the Rocklabs standards returned values within 1SD of the certified value. Greater deviations occur in results from standards with certified Au values closer to the lower detection limit of 0.005 g/t Au.

Blank material was taken from the Browns Hill Quarry basalt, an unmineralized Quaternary basalt flow from the Fairbanks Mining District, Alaska. Avalon Development Corp. has made extensive use of this as a blank material for Au analysis and maintains a large database of results for this material. During this program, a total of 6 of these blanks were inserted into the rock sample streams, and 11 were inserted into the soil stream. Most Au values from 2018 analyses were below the 0.005 g/t detection limit. However, three blanks within the soil stream returned values from 2 to 3 ppb above the Au detection

limit. Additionally, two blanks inserted into the rock stream returned values of 0.016 g/t Au and 0.017 g/t Au.

Additional lab standards, blanks and repeat samples were run by Bureau Veritas Commodities as part of their assaying procedures.

12.2.1 2018 Rock Sampling

In 2018, Avalon inserted a total of 8 standard samples of 5 varying concentrations, all supplied by OREAS labs, as well as 4 blank samples. All standards returned values within 2SD except one of OREAS 260, which has a low known gold value of 0.016 g/t Au. One blank sample returned a value of 0.017 g/t Au; the rest all returned values <0.005 g/t. Table 10 lists known versus achieved Au values.

Table 10: Variance between certified and achieved standard and blank values, 2018 rock sampling

Supplier	Reference Material	Certified Au value (ppm)	1SD	2SD Low	2SD High	Sample No	Au (ppm)	Within 2SD?
OREAS	OREAS 218	0.531	0.017	0.497	0.565	521770	0.546	Yes
OREAS	OREAS 224	2.150	0.053	2.050	2.260	564940	2.213	Yes
OREAS	OREAS 224	2.150	0.053	2.050	2.260	564980	2.177	Yes
OREAS	OREAS 224	2.150	0.053	2.050	2.260	564990	2.226	Yes
OREAS	OREAS 250	0.309	0.013	0.283	0.335	521830	0.330	Yes
OREAS	OREAS 250	0.309	0.013	0.283	0.335	216285	0.312	Yes
OREAS	OREAS 252	0.674	0.022	0.630	0.718	564910	0.698	Yes
OREAS	OREAS 260	0.016	0.0018	0.0124	0.0197	521890	0.025	No
Browns Quarry						521740	-0.017	
Browns Quarry						100506	-0.005	
Browns Quarry						521870	-0.005	
Browns Quarry						491494	-0.005	

12.2.2 2018 Trench Sampling

In 2018, Avalon inserted 2 standard samples and 1 blank sample into its trenching sample stream. Both standards returned values within 2SD of certified values, although the blank sample returned a value of 0.017 g/t Au. Table 11 lists known versus achieved Au values.

Table 11: Variance between certified versus achieved standard and blank values, 2018 trenching

Supplier	Reference Material	Certified Au value (ppm)	1SD	2SD Low	2SD High	Sample No	Au (ppm)	Within 2SD?
OREAS	OREAS 214	3.030	0.082	2.870	3.200	3181420	2.947	Yes
OREAS	OREAS 224	2.150	0.053	2.050	2.260	3181410	2.166	Yes
Browns Quarry						3181400	0.016	

12.2.3 2018 Soil sampling

In 2018, Avalon inserted 34 standard samples from OREAS Labs and Rocklabs, and 11 blank samples from the Browns Quarry. Three samples, all of OREAS H1, returned Au values above the upper 2SD limit. All others returned values within the 2SD range. The high values from OREAS H1 are partially caused by the

very low certified grade of the standard sample, where a slight variation in true values translates into a significant percentage variance. Three blank samples returned values slightly in excess of the 0.005 g/t Au analytical threshold. Table 12 lists known versus achieved Au values.

Table 12: Variance between certified versus achieved standard and blank values, 2018 soil sampling

Supplier	Reference Material	Certified Au value (ppm)	1SD	2SD Low	2SD High	Sample No	Au (ppm)	Within 2SD?
OREAS	OREAS H1	0.012	0.001	0.010	0.014	216630	0.014	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	216640	0.014	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	216700	0.014	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	216740	0.013	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	102396	0.012	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	216780	0.013	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	216800	0.013	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	216870	0.014	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	216920	0.013	Yes
OREAS	OREAS H1	0.012	0.001	0.010	0.014	3180760	0.018	No
OREAS	OREAS H1	0.012	0.001	0.010	0.014	3181460	0.017	No
OREAS	OREAS H1	0.012	0.001	0.010	0.014	3186410	0.019	No
OREAS	OREAS 260	0.016	0.0018	0.0124	0.0197	216660	0.018	Yes
OREAS	OREAS 260	0.016	0.0018	0.0124	0.0197	216690	0.018	Yes
OREAS	OREAS 260	0.016	0.0018	0.0124	0.0197	216730	0.018	Yes
OREAS	OREAS 260	0.016	0.0018	0.0124	0.0197	216750	0.019	Yes
ROCKLABS	OxA89	0.0836	0.0079	0.0678	0.0994	216890	0.080	Yes
ROCKLABS	OxA89	0.0836	0.0079	0.0678	0.0994	216900	0.081	Yes
ROCKLABS	OxA89	0.0836	0.0079	0.0678	0.0994	3180770	0.085	Yes
ROCKLABS	OxA89	0.0836	0.0079	0.0678	0.0994	3186470	0.084	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	216680	0.080	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	3181470	0.086	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	216720	0.079	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	216760	0.073	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	216810	0.071	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	216840	0.082	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	216880	0.080	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	216930	0.072	Yes
ROCKLABS	OxA131	0.077	0.007	0.063	0.091	216940	0.075	Yes
ROCKLABS	OxB130	0.125	0.006	0.113	0.137	216830	0.127	Yes
ROCKLABS	OxB130	0.125	0.006	0.113	0.137	216850	0.131	Yes
ROCKLABS	OxE126	0.623	0.016	0.591	0.655	3180750	0.618	Yes

Supplier	Reference Material	Certified Au value (ppm)	1SD	2SD Low	2SD High	Sample No	Au (ppm)	Within 2SD?
ROCKLABS	OxE126	0.623	0.016	0.591	0.655	3180780	0.632	Yes
ROCKLABS	OxE126	0.623	0.016	0.591	0.655	3186490	0.609	Yes
Browns Quarry						102394	-0.005	
Browns Quarry						102395	-0.005	
Browns Quarry						216710	-0.005	
Browns Quarry						216670	-0.005	
Browns Quarry						216790	0.008	
Browns Quarry						216770	0.008	
Browns Quarry						216860	-0.005	
Browns Quarry						216910	-0.005	
Browns Quarry						3186480	-0.005	
Browns Quarry						102248	0.007	
Browns Quarry						3181450	-0.005	

12.2.4 2019 Due Diligence sampling

A total of 2 Standard and 2 blank samples were inserted into the 2019 due diligence sampling stream. One standard of each of low grade and fairly high-grade certified gold content were inserted to test accuracy of low- and high-grade values returned from the sample stream. The two blank samples were 50-gram packets of material with a certified value of <0.010 g/t Au. All samples were supplied by CDN Resource Laboratories, of Vancouver, British Columbia.

Both standard samples returned values within 2SD, indicating a satisfactory level of accuracy took place in 2019. Both blanks returned values of 0.009 g/t Au, indicating a lack of contamination in the analytical procedure. Table 13 lists the variance between certified and achieved values.

Table 13: Variance between certified and achieved values, 2019 due diligence sampling

Supplier	Reference Material	Certified Au value (ppm)	1SD	2SD Low	2SD High	Sample No	Au (ppm)	Within 2SD?
CDN Resource	CDN-GS-10F	10.30	0.19	9.92	10.68	1465519	10.2	Yes
CDN Resource	CDN-GS-P2	0.214	0.010	0.194	0.234	1465518	0.211	Yes
CDN Resource	CDN-BL-10	<0.010					0.009	
CDN Resource	CDN-BL-10	<0.010					0.009	

Note: The property visit was done in conjunction with two other properties, involving collection of a total of 17 samples. These samples and the four QC samples were submitted as a single shipment.

12.2.5 2019 Geoprobe Sampling

During 2019, quality control (QC) “Standard” and “Blank” samples were inserted at a frequency of about 1 QC sample per 10 rock chip geoprobe samples. Two types of reference materials (“standard” samples) were employed by Tectonic in 2019, both provided by CDN Resource Laboratories Ltd. of Langley, British Columbia, Canada. One is Reference Material CDN-CM-38, which employs known values for gold, silver, copper and molybdenum, designed to test for porphyry-style mineralization. The other is Reference Material CDN-ME-1205, employing known values of Au, Ag, Cu, Pb and Zn, and designed to test for

polymetallic mineralization. Table 14 below lists the known values as well as the range of two standard deviations (2SD) for CDN-CM-38, and Table 15 sets out the same parameters for CDN-ME-1205. For both Cu and Mo, the 4-acid / ICP or AA reference material was utilized. A total of 23 standard samples of CDN-CM-38, 20 standard samples of CDN-ME-1205, and 43 blank samples, again from Brown's Quarry, were inserted into the sample stream.

Table 14: Certified values and 2SD ranges for CDN-CM-38

Element	Certified Value		2SD range	Analytical Procedure Used
Gold (Au)	0.942 g/t	±	0.072 g/t	30g FA/ICP or AA
Silver (Ag)	6.0 g/t	±	0.4 g/t	4-acid / ICP or AA
Silver (Ag)	6.0 g/t	±	0.4 g/t	Aqua Regia / ICP or AA
Copper (Cu)	0.686%	±	0.032%	4-acid / ICP or AA
Copper (Cu)	0.681%	±	0.032%	Aqua Regia / ICP or AA
Molybdenum (Mo)	0.0181%	±	0.0011%	4-acid / ICP or AA
Molybdenum (Mo)	0.0174%	±	0.0016%	Aqua Regia / ICP or AA

Table 15: Certified values and 2SD ranges for CDN-ME-1205*

Element	Certified Value		2SD range	
Gold (Au)	2.20 g/t	±	0.28 g/t	Certified Value
Silver (Ag)	25.6 g/t	±	2.4 g/t	Certified Value
Copper (Cu)	0.218%	±	0.01%	Certified Value
Lead (Pb)	0.130%	±	0.004%	Certified Value
Zinc (Zn)	0.37%	±	0.030%	Certified Value

* taken from official Certificates by CDN Resource Laboratories Ltd.

Analysis of standard reference material CDN-CM-38 revealed a "failure rate" (outside of the 2SD limits) of 17.4% (4 out of 23) for Au, 26.1% (6 out of 23) for Ag, 8.7% (2 out of 23) for Cu and 13.0% (3 out of 23) for Mo. Of four Au values outside of the 2SD range, two are above the upper limit, indicating actual geochem values may be less than returned values for their respective sample "batches"; and two are below the lower threshold, indicating actual gold grades may exceed returned values for their respective sample batches. All six Ag values outside the 2SD range were above the upper threshold, indicating rock values returned within respective batches may exceed true Ag values. All three of the Mo "fail" values exceeded the upper 2SD threshold by a slight amount, indicating likelihood that rock values returned exceed true values. Both Cu "fail" values fell below the lower 2SD threshold, indicating true Cu values likely exceed returned values within their respective batches.

Analysis of standard reference material CDN-ME-1205 returned a 0.0% failure rate for Au and Zn. A failure rate of 10% (2 out of 20) was returned for Ag, and 5% (1 out of 20) was returned for Cu. Again, a high failure rate of 40% (8 out of 20) was returned for Pb. Both of the Ag "fail" values exceeded the upper 2SD

threshold, indicating rock values returned within respective batches may exceed true Ag values. The single Cu fail value fell below the lower 2SD threshold, indicating values for the respective batch may be under-estimated. Six of the Pb values fell below the lower 2SD threshold, indicating values for their respective batches are under-estimating true values. The remaining two samples exceeded the upper 2SD threshold, indicating values for their respective batches are over-estimated.

All 43 blank samples returned sub-detection (<0.005 g/t) values for Au. Analysis for Ag returned nine values exceeding the detection level of 0.5 g/t, including five exceeding 1.0 g/t Ag to a maximum of 6.1 g/t Ag. All values returned for Mo are sub-detection (<2 ppm), and all values for Cu, Zn and Pb are roughly at crustal abundancies.

Table 16 shows the variance between expected and returned values for the reference materials.

Table 16: Returned versus expected values for reference materials

Sample ID	Description	Au expected (ppm)	Ag exp (ppm)	Cu exp (ppm)	Mo exp (ppm)	Pb exp (ppm)	Zn exp (ppm)	Au_ returned	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
1603213	CDN-CM-38	0.942	6	6860	181			0.886	6	6692	190		
1603233	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.204	25.4	2093		1260	3600
1603253	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.21	25.1	2036		1233	3519
1603274	CDN-CM-38	0.942	6	6860	181			0.976	6.5	6763	185		
1603294	CDN-CM-38	0.942	6	6860	181			0.994	6.4	6825	198		
1603314	CDN-CM-38	0.942	6	6860	181			0.985	6.4	6675	185		
1603334	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.253	27.9	2202		1383	3703
1603354	CDN-CM-38	0.942	6	6860	181			0.944	6.4	6834	188		
1603374	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.213	26	2096		1252	3599
1603394	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.381	28	2188		1276	3671
1603414	CDN-CM-38	0.942	6	6860	181			0.924	5.9	6628	176		
1603434	CDN-CM-38	0.942	6	6860	181			0.911	6.7	6881	194		
1603454	CDN-CM-38	0.942	6	6860	181			0.974	5.7	6384	175		

Sample ID	Description	Au expected (ppm)	Ag exp (ppm)	Cu exp (ppm)	Mo exp (ppm)	Pb exp (ppm)	Zn exp (ppm)	Au_ returned	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
1603474	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.097	26.3	2203		1330	3766
1603494	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.265	25.7	2147		1246	3615
1603514	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.302	26.1	2211		1288	3698
1603534	CDN-CM-38	0.942	6	6860	181			0.882	6.0	6772	176		
1603554	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.135	25.8	2131		1288	3602
1603574	CDN-CM-38	0.942	6	6860	181			0.977	6.6	6800	177		
1603594	CDN-ME-1205	2.2	25.6	2180		1300	3690	1.981	27.5	2141		1256	3719
1603614	CDN-CM-38	0.942	6	6860	181			0.913	5.7	6621	170		
1603634	CDN-CM-38	0.942	6	6860	181			0.91	6.4	6627	185		
1603654	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.153	29.1	2139		1283	3649
1603674	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.148	27.4	2118		1253	3652
1603694	CDN-CM-38	0.942	6	6860	181			0.959	6.2	6681	183		
1603714	CDN-CM-38	0.942	6	6860	181			0.941	6.3	6636	184		

Sample ID	Description	Au expected (ppm)	Ag exp (ppm)	Cu exp (ppm)	Mo exp (ppm)	Pb exp (ppm)	Zn exp (ppm)	Au_ returned	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
1603734	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.162	28.1	2135		1289	3689
1603784	CDN-CM-38	0.942	6	6860	181			0.963	6.3	6900	184		
1603804	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.119	25.6	2199		1293	3743
1603824	CDN-CM-38	0.942	6	6860	181			1.021	6.6	6735	192		
1603844	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.225	24.5	2137		1273	3671
1603864	CDN-CM-38	0.942	6	6860	181			1.062	6.3	6942	183		
1603884	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.201	26.9	2176		1245	3582
1603904	CDN-CM-38	0.942	6	6860	181			0.945	6.4	6711	181		
1603924	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.291	26.4	2177		1376	3598
1603944	CDN-CM-38	0.942	6	6860	181			0.917	5.6	6381	171		
1603964	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.271	27.2	2132		1303	3581
1603984	CDN-CM-38	0.942	6	6860	181			0.895	6.4	6752	195		
1602684	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.335	26.1	2083		1290	3476

Sample ID	Description	Au expected (ppm)	Ag exp (ppm)	Cu exp (ppm)	Mo exp (ppm)	Pb exp (ppm)	Zn exp (ppm)	Au_ returned	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
1602704	CDN-CM-38	0.942	6	6860	181			0.855	7.0	6655	191		
1602724	CDN-ME-1205	2.2	25.6	2180		1300	3690	2.204	26.8	2144		1263	3577
1602744	CDN-CM-38	0.942	6	6860	181			0.982	6.6	6712	184		
1602764	CDN-CM-38	0.942	6	6860	181			0.856	6.4	6716	185		
1603223	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	22	-2	5	92
1603243	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	24	-2	10	119
1603265	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	29	-2	7	100
1603284	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	26	-2	-5	99
1603304	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	23	-2	7	94
1603324	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	28	-2	8	95
1603344	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	26	-2	9	101
1603364	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	0.6	26	-2	6	100
1603384	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	25	-2	7	100
1603404	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	27	-2	6	111
1603424	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	29	-2	8	103

Sample ID	Description	Au expected (ppm)	Ag exp (ppm)	Cu exp (ppm)	Mo exp (ppm)	Pb exp (ppm)	Zn exp (ppm)	Au_ returned	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
1603444	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	2.6	20	-2	-5	97
1603464	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	23	-2	-5	99
1603484	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	23	-2	-5	97
1603504	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	18	-2	-5	94
1603524	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	22	-2	-5	91
1603544	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	24	-2	-5	100
1603564	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	6.1	24	-2	5	98
1603584	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	0.8	22	-2	-5	102
1603604	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	23	-2	-5	96
1603624	Basalt Blank	-0.005	-0.5	25.4	-2		101	0.005	-0.5	24	-2	-5	98
1603644	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	25	-2	7	101
1603664	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	1.4	23	-2	-5	102
1603684	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	1.4	23	-2	-5	103
1603704	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	0.7	24	-2	7	102
1603724	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	0.8	23	-2	-5	100
1603744	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	1.0	24	-2	-5	106

Sample ID	Description	Au expected (ppm)	Ag exp (ppm)	Cu exp (ppm)	Mo exp (ppm)	Pb exp (ppm)	Zn exp (ppm)	Au_ returned	Ag (ppm)	Cu (ppm)	Mo (ppm)	Pb (ppm)	Zn (ppm)
1603794	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	25	-2	-5	97
1603814	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	25	-2	6	101
1603834	Basalt Blank	-0.005	-0.5	25.4	-2		101	0.006	-0.5	24	-2	-5	97
1603854	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	24	-2	-5	98
1603874	Basalt Blank	-0.005	-0.5	25.4	-2		101	0.006	-0.5	23	-2	8	93
1603894	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	30	-2	6	88
1603914	Basalt Blank	-0.005	-0.5	25.4	-2		101	0.006	-0.5	22	-2	6	94
1603934	Basalt Blank	-0.005	-0.5	25.4	-2		101	0.008	-0.5	24	-2	-5	97
1603954	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	24	-2	6	99
1603974	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	27	-2	7	102
1603994	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	21	-2	8	97
1602694	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	25	-2	9	97
1602714	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	24	-2	10	100
1602734	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	25	-2	13	100
1602754	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	24	-2	6	96
1602774	Basalt Blank	-0.005	-0.5	25.4	-2		101	-0.005	-0.5	23	-2	7	96

12.3 STATEMENT OF OPINION

12.3.1 Quality Assurance (QA)

The rock sampling methodology is adequate for the conditions encountered, comprising grab sampling of float boulders. Grab sampling tends to return the least representative results, and commonly shows a bias towards "high grading" of the mineralized portions. However, grab sampling is likely the only option for many sample locations at Seventymile, due to lack of outcrop. Composite grab sampling, involving collection of several pieces of similar material, may be possible in some locations where rubblecrop or felsenmeer is encountered, and typically provide more representative gold values. Where feasible, composite grab sampling should be done. Chip sampling, involving an even amount of sampling across a known width, is recommended where mineralization occurs in situ.

The trench sampling methodology, comprising representative sampling across known widths, is also suitable for the conditions encountered. Trenching did not typically reach bedrock, requiring evenly distributed "chip-grab" sampling to be done instead. The collection of specific samples of mineralized material to test for higher grade gold values also assists understanding of the mineralogy, provided they are not confused with trench values over width. The results of trench sampling over width are likely to be fairly representative of true values, provided that an even distribution of material per each sample was taken. Specific samples of mineralized material of potentially higher-grade sections are not representative of true values over width.

The routine and repetitive methodology of soil sampling in 2018 should eliminate any chance of bias within each of the sampling methods. However, due to greater depth penetration, auger sampling tended to return higher gold values because the material sampled was taken at greater depths and is thus more representative of true values. Shovel sampling at shallow depths has a greater potential to return "false negative" values. Variability in results of soil sampling may be caused by depth of overburden, slope angle, vegetative cover, if any, and outcrop exposure, with lower values expected in flat areas with thick overburden. Soil anomalies may be transported, depending on slope and groundwater conditions; detailed records of slope, vegetation, soil conditions are used to determine probability of transportation.

The routine and repetitive methodology of 2019 Geoprobe sampling should also eliminate any chance of bias, and is more definitive than power auger sampling. The sampled material is treated as rock, comprising mainly rock chips, thus representing lithological rather than deep soil metal content. The material is also much less prone to downslope movement, and more accurately represents bedrock geochemistry. The 2019 power auger soil geochemical sampling has the same level of accuracy and quality assurance as the 2018 auger sampling.

This author did not perform any resampling of 2019 Geoprobe samples in the field, as the program post-dated the May 2019 property visit. No direct sample assay verification has therefore been done. However, this author has reviewed the 2019 data, including the QC sample data, and it is this author's opinion that the data provided by Tectonic is adequate for the purposes of this report.

12.3.2 Quality Control (QC)

A high standard of quality control was utilized by Avalon and Tectonic during the 2018 program. The insertion of 10 different types of standards, with varying known concentrations, was done to determine levels of accuracy from near-background values (OREAS 200, 0.012 ppm Au) to moderate ore grade values (OREAS 214, 3.03 ppm Au). Avalon and Tectonic also utilized low Au-value standards in soil geochemical

streams, and higher Au-value standards for rock and trench sample streams, in anticipation of expected values. The source of blank samples is well-chosen; actual rock samples are preferable to the usage of prepared blanks, assuming adequate additional testing of blank material. The basalt samples from the Browns Hill Quarry basalt are adequate for the QC process here.

All 2018 rock and soil sample data and results were provided in Excel spreadsheet from the Bureau Veritas laboratory in Reno, Nevada. These were then matched with sample locations (UTM-NAD 83) and descriptions, and all QC reference sample "standard" and "blank" sample results, and presented to this author in revised Excel spreadsheet format. The 2019 Geoprobe and power auger sample data was also presented in this manner, and also underwent analysis by an "XRF" unit on site. The results of these were matched with the laboratory results, although no relationship has been established at this time (Section 11.7). This author is of the opinion that the data has been generated with proper procedures, has been accurately transcribed from the original source (the Reno laboratory of Bureau Veritas) and is suitable for usage.

Within the 2018 rock sampling stream, only one standard sample, of OREAS H1, returned an Au value outside of the 2SD range. This has a very low certified value of 0.012 g/t Au; therefore, a slight variance in actual grade translates into a sizable percentage variance. The 2018 values obtained may be regarded as representative of true values. All blank samples returned values of <0.005 g/t Au, indicating the analytical process was free of contamination.

Standard samples within the 2018 trench sample stream returned Au values within 2SD, indicating reliability of results. The single blank sample returned a somewhat elevated Au value indicating the possibility of slight contamination and associated increase in Au grades. This would be a factor only at very low Au values.

This author is of the opinion that the security procedures employed during the chain of custody of samples from the property to the analytical laboratory are adequate. The author also believes the analytical procedures are suitable and adequate for the purposes of this report.

Standard samples inserted into the 2018 soil sampling stream returned values within 2SD, except for several samples of OREAS H1, which returned values slightly above the upper 2SD limit. Again, the very low certified value of OREAS H1 is prone to higher percentage deviations from known values. Achieved soil values under 0.020 g/t Au may vary somewhat from true values, although a similar difference in values at higher grades translates into a smaller percentage difference. Blank sample results indicate the process is free of significant contamination.

Typical ratios of insertion of standard samples is typically about 1:20. Although the 1:10 ratio employed here is certainly beneficial, it is not necessary for confirming accuracy of elemental analysis. A minimum insertion rate is one standard sample per sample batch. However, the ratio of 1:50 for blank sample insertion may be inadequate to ensure at least one sample per batch. The insertion rate should be increased to a minimum of one per batch to guarantee this.

This author has reviewed the 2018 rock and soil sampling data, combined with results, and has found them to be adequately tabulated. The author has also directly compared numerous individual rock and soil element values in the compiled 2018 data with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one comparison was made for each individual certificate. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and

complete. It is this author's opinion that the 2018 data provided by Tectonic is adequate for the purposes of this report.

A high standard of quality control was again utilized by Avalon and Tectonic during the 2019 Geoprobe program. Two sets of standard reference material with known base and precious metal values were utilized, as well as blanks from the same source (Brown's Quarry) as that utilized for previous programs. Of the two types of standard reference material, CDN-ME-1205 was shown to be more reliable for Au, largely due to the higher known values resulting in a 2SD range with a lesser percentage variance from the known value. Reference material CDN-ME-1205 also proved more reliable for Ag analysis than CDN-CM-38, again due to the former's higher known or "expected" value. For both sets of reference material, fail values for Ag all exceeded the upper 2SD limit. Avalon stated that Ag values returned from Bureau Veritas Labs commonly over-estimate true values, a statement supported by analytical results of standard samples. Blank samples also commonly return elevated to anomalous Ag values, indicating imprecision in the analytical technique, and over-estimation of actual values.

Values returned for Cu and Mo within reference material CDN-CM-38 typically fall within the 2SD range, with only occasional "fail" results. This indicates a high degree of reliability for these elements. Again, fail values indicate the respective batches may have either over-estimated or under-estimated values for the respective elements, and care should be used when compiling results from these batches. Analysis for Zn has been shown to be highly reliable for both sets of standard reference material. However, Pb values in both sets of reference material showed the highest variance from expected values, with the greatest number of "fail" values. Fortunately, Pb is of secondary importance at the Seventymile property, useful mainly as a pathfinder element for Au and Ag mineralization.

"Blank" sampling returned sub-detection values for Au for all samples, indicating gold analysis throughout the program was free of contamination. However, several blank samples returned elevated to anomalous values for Ag, indicating contamination. This has been reported as a consistent issue with the Bureau Veritas lab employed for analysis and should be investigated. Blanks sample values for Mo were all at sub-detection levels, free of contamination, and values for Cu, Pb and Zn were all at roughly crustal abundance, indicating no contamination issues for these elements.

The insertion rate for standard reference material, at a standard: rock sample ratio of about 1:18, is adequate for the program. The insertion rate for blanks is identical, and the alternating standard and blank insertion rate ensures one sample of standard and one of blank material will be enclosed in each sample batch. It is this author of the Seventymile Technical Report's opinion that the data provided by Tectonic is adequate for the purposes of this report, and that the QC regimen employed is adequate for the project.

The author has compared numerous 2019 Geoprobe and power auger soil element values in the compiled 2019 database with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one comparison was made for each individual certificate. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and complete. It is this author's opinion that the 2019 data provided by Tectonic is adequate for the purposes of this report.

13 DATA VERIFICATION

The data from the pre-Tectonic historic work has not been verified, and this author cannot verify whether results from historic work are representative of true values. For the 2018 work, Tectonic and Avalon Development reviewed sample collection records, the master data base and assay certificates. During each exploration program Avalon evaluated each sample batch when received, and ensured any spurious results were corrected by the laboratory prior to the data being incorporated into the master database. Tectonic and Avalon did not note any areas of concern regarding QA/QC procedures. The Tectonic personnel were of the opinion that the processes of data collection, sampling, chain of custody, sample preparation and analysis, and QA/QC protocol were done to a high degree of due care, utilizing methods that met or exceeded industry standards. The qualified person for the 2018 report confirmed the information in the 2018 report is, to the best of their knowledge, accurate and truthful.

The sampling conducted during the 2018 field season was carried out by Avalon Development Corporation personnel under direction from Tectonic Metals Inc. personnel and the author has no reason to believe that this work was conducted in a manner inconsistent with modern geological field practices. The author has reviewed the geochemical data from the 2018 samples including the certificates of analysis from the laboratory and believes the analytical results to be within an acceptable range of error.

This author has reviewed the 2018 rock and soil sampling data, combined with results, and has found them to be adequately tabulated. The author has also directly compared numerous individual rock and soil element values in the compiled 2018 data with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one comparison was made for each individual certificate. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and complete. It is this author's opinion that the 2018 data provided by Tectonic is adequate for the purposes of this report.

This author also conducted a due-diligence visit to the Flanders prospect area on May 7, 2019. Three rock samples, all from the Flanders prospect, were taken by this author who is the Qualified Person for the project during the 2019 due diligence visit. These samples are of proximal float boulders and are not exact re-samplings of previously sampled material. The 2019 samples returned values of 2.021 g/t Au, 10.4 g/t Au, and 20.0 g/t Au, similar to many of the gold values from mineralized drill intercepts and confirming the tenor of gold mineralization at the Flanders prospect. The qualified person for the 2019 Technical Report can confirm that the data for the 2019 due diligence sampling is accurate, and that the processes of data collection, sampling, chain of custody, sample preparation and analysis, and QA/QC protocol were done to a high degree of due care, utilizing methods that meet or exceed industry standards.

The 2019 Geoprobe survey can be partly considered as a due-diligence exercise. Values returned were typically higher than those from power auger surveying, due to media sampled and depth penetration, but mainly confirmed existing anomalism. The Geoprobe sampling much more closely identifies the in-situ source of mineralization, due to minimal transport of rock chips compared to soil transport

It is this author's opinion that the data provided by Tectonic is suitable to be used within this report. The results, combined with those from XRF analysis on site, were tabulated by Tectonic personnel into Excel spreadsheet form, and provided to this author. However, this author was unable to conduct data verification directly through duplicate sampling of summer, 2019 results, as the program post-dated the May, 2019 property visit.

The author has compared numerous 2019 Geoprobe and power auger soil element values in the compiled 2019 database with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one comparison was made for each individual certificate. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and complete. It is this author's opinion that the 2019 data provided by Tectonic is adequate for the purposes of this report.

14 ADJACENT PROPERTIES

There are no adjacent properties to the Seventymile Property with current resources or active large-scale mining operations.

15 MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical testing has been conducted on the Seventymile property.

16 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

No mineral resources or mineral reserves in compliance with definitions under the Canadian Institute of Mining and Metallurgy (CIMM) have been calculated for the Seventymile Property or any of its constituent prospects.

17 OTHER RELEVANT DATA AND INFORMATION

As of the date of this report, the author is not aware of any material fact or material change with respect to the subject matter of this technical report that is not presented in this report, which the omission to disclose would make this report misleading.

18 INTERPRETATION AND CONCLUSIONS

18.1 INTERPRETATIONS

The Seventymile property covers a WNW-ESE-trending portion of a narrow assemblage of Permian Seventymile terrane rocks, bounded to the north and south by Paleozoic rocks of the Yukon-Tanana terrane (YTT). The Seventymile terrane is coeval with Slide Mountain terrane rocks occurring in southern Yukon, northern British Columbia and southern British Columbia. In the property area, the Seventymile assemblage comprises ultramafic to mafic ophiolitic suites, mafic to felsic volcanics, and lesser terrigenous sediments and limestones. The 2018 high resolution MIDAS airborne magnetic survey clearly delineated the extent and narrow width of the Seventymile terrane, which extends WNW – ESE, roughly parallel to the Seventymile River. A second feature intersects the Seventymile terrain at a slight angle somewhat west of Ptarmigan Hill. Further ground-truthing is required to determine the bedrock source of this feature.

Three major mineralogic trends have been identified: the Flume trend in the northwestern property area; the Deep Creek trend paralleling this to the south; and the Crooked Creek trend in the southeastern property area. The Flume trend extends between Flume and Alder creeks, and encompasses the Flume, Bonanza, Alder and Flanders prospects. The Flume trend is marked by mesothermal auriferous quartz vein and gouge zones within Permian basalt and serpentinite. Auriferous targets occur along the thrust-fault contact between footwall serpentinites and hanging wall mafic volcanics. This setting hosts the majority of known prospects. The Deep Creek trend comprises zones of anomalous silver and gold mineralization within altered silicic volcanic and subvolcanic rocks (WGM, 2001). The Crooked Creek trend extends between the Ptarmigan Hill and Mogul Bluff prospects, and hosts epithermal gold mineralization in Tertiary conglomerate and sandstone.

Two deposit settings are viable within the Seventymile property: orogenic and epithermal gold settings. The orogenic setting is applicable to the Flume trend and potentially the Deep Creek trend. The 2018 trench revealed auriferous gouge and breccia zones within brecciated chloritic mafic volcanics along the serpentinite-volcanic contact. The minimum 6 km extent of the trend is marked by similar, locally high grade mesothermal lode occurrences with no obvious intrusion-related association, indicative of orogenic mineralization. This is the dominant deposit setting in the Seventymile area, and comprises the main exploration target.

The epithermal setting occurs within the Ptarmigan Hill prospect, where late quartz veining and silicification, marked by moderate to strong limonite staining, occurs within Tertiary conglomerates of unknown provenance. Drilling by WGM returned intercepts to 5.83 g/t Au over 24.38 m, indicating high mineral potential. Similarly altered Tertiary coarse clastics occur at the Mogul Bluff prospect. Although Ptarmigan Hill and Mogul Bluff carry similar pathfinder metallogenic signatures, peak gold values at Mogul Bluff are typically under 1.0 g/t Au.

Two 2018 rock samples collected at the Ptarmigan Hill prospect returned anomalous gold values associated with high silver and antimony values. This mineralogy supports an epithermal setting as previously determined. High silver values warrant further detailed sampling on surface.

The Seventymile terrane assemblage, including the shear-hosted Flume trend, are roughly parallel to the Tintina fault zone and Seventymile faults. This WNW-ESE trending fault setting may be coeval with early Tertiary dextral transpressional fault movement along the Tintina Fault zone. Mesothermal mineralization, which shows no metamorphic recrystallization in drill core, would therefore be syn- or post-tectonic and have a maximum early Tertiary age. The mesothermal Flume and Deep Creek trends and epithermal mineralization along the Crooked Creek trend may have a common origin. Hydrothermal fluids would have travelled east-southeast from the Flume/ Deep Creek areas along permeable horizons to the Crooked Creek trend area. Fluid temperature and pressure would have decreased with distance, particularly if the Crooked Creek mineralization represents a shallow emplacement environment. The permeable setting within coarse clastics is more amenable to lower-grade bulk-tonnage deposits, whereas the more structurally constrained environment along the Flume trend is more amenable to narrower, higher-grade vein deposits.

The 2018 power auger soil sampling program along the Flume trend targeted “C-horizon” soils above the soil-bedrock interface. This successfully identified a new Au-in-soil anomaly at the volcaniclastic and crystal lithic tuff contact 250 m west of the Flanders prospect. This soil anomaly is approximately 90 m x 500 m in extent, including the previously delineated Flanders gold-in-soil anomaly. In this area, historic shovel sampling was unsuccessful due to thick permafrost soil cover. Shovel soil sampling returned

numerous “false negative” values, and failed to detect deeper-seated anomalous values. Significantly higher values from auger sampling indicate the validity of this method of sampling.

The CanDig trench dug at Flanders exposed auriferous chloritic gouge in rubblecrop at the southern end of the trench. Samples from this trench returned values to 278 ppb Au across 9 m. The alteration and auriferous mineralization, combined with the known structural and stratigraphic setting, indicate the trench exposed part of a significant shear zone along the Flume trend. This is coincident with a 100 m wide, property-scale, NW-SE trending topographic depression. This structural setting indicates potential for further shear-hosted mineralization along the Flume Creek trend.

A second, more subdued soil anomaly 500 m to the south, with a peak value of 140 ppb Au, was expanded in 2018. This anomaly is coincident with a historic shovel sample anomaly, and is located approximately along the contact of a WNW-ESE trending unit of terrigenous clastic rocks with intermediate volcanic rocks to the south. Based on its location it is unclear whether this anomaly is associated with the Flume Creek or Deep Creek trend.

Geoprobe sampling results in 2019 expanded and delineated anomalous areas identified from previous sampling. Geoprobe top-of-bedrock sampling tended to return higher metal values than from power auger sampling, accentuating values from surface sampling. Although some downslope dispersion may still occur, Geoprobe sampling tended to identify the bedrock sources of surface soil geochemical anomalism.

The historic work and the results of the 2018 field program have confirmed the presence and tenor of gold on the property. Rock sample values from May, 2019 sampling confirm the high-grade tenor of proximal float at the Flanders prospect. These results indicate that the Seventymile property is a property of merit.

18.2 CONCLUSIONS

The following conclusions can be made, based on results of the 2018 and 2019 programs, the 2019 due-diligence visit, and earlier programs, particularly by WGM in 2000:

- The Seventymile property covers a narrow assemblage of Seventymile terrane Permian ophiolitic ultramafic to mafic rocks, other non-ophiolitic mafic to felsic volcanic rocks, and lesser clastic sedimentary rocks and limestone. This assemblage is clearly visible in 2018 airborne magnetic data, and is bounded to the north and south by Yukon-Tanana terrane stratigraphy.

- Three major mineralized trends have been identified: the Flume trend, encompassing the Flume, Bonanza, Alder and Flanders prospects; the Deep Creek trend, comprising the Deep Creek and Kill Zone 2 prospects; and the Crooked Creek trend, hosting the Ptarmigan Hill and Mogul Bluff prospects.

- The Flume trend, and likely the Deep Creek trend, host mesothermal gold-bearing vein-style mineralization interpreted to be of orogenic origin. The Crooked Creek trend comprises epithermal gold mineralization within Tertiary conglomerates and sandstones.

- Two deposit settings are applicable: orogenic gold, comprising lode-style mineralization along splays of a district-scale crustal fault; and epithermal mineralization, marked by mineralization

deposited in a lower temperature-pressure environment. Orogenic gold tends to be of higher tenor, whereas epithermal gold typically occurs as larger-tonnage, lower grade deposits.

- Anomalous to high silver, antimony and gold values from two samples at Ptarmigan Hill indicate an epithermal mineralizing environment within Tertiary coarse clastic sediments. Further surface sampling is warranted.

- Although the two main deposit models are quite distinct, they may have a common hydrothermal origin of early Tertiary age or younger. It is unlikely that two aerially extensive settings are of two separate provenances.

- A common origin would suggest that hydrothermal mineralization originally having high pressure-temperature characteristics travelled SSE from the Flume/Deep Creek areas to the Crooked Creek trend. Fluid movement would occur along permeable horizons, such as shear zones along the ultramafic-volcanic contact.

- During movement, fluids may have evolved to a lower temperature-pressure regime indicative of shallow emplacement environments. This would result in mesothermal-style veining in structurally constrained environments along the Flume trend, and epithermal-style mineralization emplaced in permeable, poorly consolidated coarse clastic sediments at the Ptarmigan and Mogul Bluff prospects.

- 2018 trenching at the Flanders prospect returned anomalous gold values from sheared, brecciated chloritic mafic volcanics, indicating the presence of a significant structure.

- 2018 soil sampling also expanded the gold-in-soil anomaly to the west at Flanders. Power auger sampling successfully obtained anomalous gold grades in C-horizon soil where shovel sampling was unable to do so.

- Results of the 2018 field program have confirmed the presence and tenor of Au on the property. Rock sample values from Flanders taken in May, 2019 confirm high-grade tenor of proximal float. These results indicate that the Seventymile Property is a property of merit.

- Geoprobe sampling results in 2019 expanded and delineated anomalous areas identified from previous sampling. Geoprobe top-of-bedrock sampling tended to return higher metal values than power auger sampling, accentuating values from surface sampling. Geoprobe sampling is an effective method for identifying the bedrock sources of surface soil geochemical anomalism.

19 RECOMMEDATIONS

19.1 RECOMMENDATIONS

Exploration work in 2020 is recommended to comprise a "Rotary Air Blast" (RAB) drilling program designed to test for bedrock mineralization at depths to 100 m, which may be extended to 200 m as required. The objective is to follow up on the soil sampling from 2018 and Geoprobe sampling from 2019 along the Flume trend, specifically on the Flanders, Flanders East, Flume-Bonanza Link, Alder, Deep Creek, and Flume targets. The expected total meterage is 2,025 m. The RAB holes are recommended to be drilled as roughly north-south oriented "fences", approximately normal to the orientation of the main shear zone within the Flume Trend.

The program is recommended to take place over a period of 27 days of actual drilling, with an additional 10 days for mobilization and de-mobilization, for a total of 37 days. The program would commence in early-June, following conclusion of the spring thaw. Drilling would be conducted utilizing a single 12-hour shift, and the camp would be heli-supported. A crew of 10 people, including a geologist, drill sample technician, helicopter pilot and cook, would comprise the camp.

All-in costs for the RAB drilling are estimated at about US$605,681, equivalent to CDN$799,500, assuming an exchange rates of CAD$1.32 – US$1.00 (Table 17).

19.2 RECOMMENDED BUDGET

Table 17: Proposed budget, 2020 Rotary Air Blast (RAB) program

Expense Type	No of Units	Type of Unit	Cost/unit ($USD)	Cost
RAB drilling*	27	Days	$3,440.00	$92,880.00
Assaying	1,462	Samples	$50.00	$73,100.00
XRF Analysis*	27	Days	$300.00	$8,100.00
Mobe, De-mobe*	10	Days	$2,580.00	$25,800.00
Set-up and take-down	200	Hours	$60.00	$12,000.00
Camp base rent, communications	27	Days	$525.00	$14,175.00
Helicopter support on site ("wet rate")	94.5	Hours	$2,250.00	$212,625.00
Drill consumables*	1	program total	$25,000.00	$25,000.00
Fuel (diesel)	1	program total	$10,210.00	$10,210.00
Personnel (Geologist and Technician)*	27	days	$995.00	$26,865.00
Personnel (Cook)	27	person-days	$450.00	$12,150.00
Groceries/day	270	person-days	$55.00	$14,850.00
Shipping	1	program total	$5,000.00	$5,000.00
			Sub-total	**$532,755.00**
			GTE Management Fee	
			-10%	$17,864.50
			Contingency (10%)	$55,061.95
			RAB drilling total (US$):	$605,681.45
			RAB total (CDN$):	***$799,499.51***

Effective Date: October 31, 2019

Respectfully submitted,
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Appendix I

CERTIFICATE OF QUALIFICATIONS, CONSENT, DATE AND SIGNATURES

I, Carl Schulze, with a business address at 34A Laberge Rd, Whitehorse, Yukon Y1A 5Y9, hereby certify that:

a) I am a Project Manager employed by:

Aurora Geosciences Ltd.
34A Laberge Rd, Whitehorse, Yukon Y1A 5Y9

b) This certificate applies to the technical report entitled: "NI 43-101 Technical Report, Seventymile Property, Alaska, United States of America." dated October 31, 2019 (the "Technical Report").

c) I am a graduate of Lakehead University, Bachelor of Science Degree in Geology, 1984. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (EGBC), Lic No. 25393. I have worked as a geologist for a total of 35 years since my graduation from Lakehead University. I have worked extensively and specifically on exploration for gold mineralization in Yukon, Alaska, and British Columbia, Nunavut, northern Ontario and northern Manitoba for a minimum aggregate time of 30 years, and on orogenic gold systems for a minimum of 6 years. I also served as the Resident Geologist for the Government of Nunavut from 2000 - 2002.

d) I was present for one day on May 7, 2019 on the Seventymile property that is the subject of this report;

e) I am responsible for all sections of the technical report;

f) I have had no involvement with Tectonic Metals Inc., its predecessors or subsidiaries. nor in the Seventymile property, and I am independent of the issuer applying the test in section 1.5 of National Instrument 43-101;

g) I have not received nor expect to receive any interest, direct or indirect, in Tectonic Metals Inc., its subsidiaries, affiliates and associates;

h) I have read "Standards of Disclosure for Mineral Projects", National Instrument 43-101 and Form 43-101F1, and the Report has been prepared in compliance with this Instrument and that Form;

i) As of the date of this certificate, to the best of my knowledge, information and belief, I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission or addition of which would make the Report misleading;

j) This certificate applies to the NI 43-101 compliant technical report titled "NI 43-101 Technical Report, Seventymile Property, United States of America." dated October 31, 2019.

Dated at Whitehorse this 31st day of October, 2019.

Carl Schulze

Carl Schulze, BSc, P. Geo.
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