

ASSESSMENT REPORT

describing

2017 SOIL SAMPLING and PROSPECTING

at the

**FA/ GLADMAN PROJECT
YMEP FOCUSED REGIONAL 17-048**

FA 1 – 48, YF30417 – YF30464

located at
NTS 116C/10

Latitude 64°34'N; Longitude 140°54'W
Dawson Mining District
Yukon, CANADA

prepared by claim owner
William D. Mann, M.Sc., P.Geo.
January, 2018

Field Work Performed September 2 - 8, 2017



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INTRODUCTION

The Gladman project was designed to evaluate a focused regional area known to host an extensive polymetallic silt and soil anomaly that is coincident with a magnetic high anomaly. The FA claims were staked to cover the favourable silver- lead- zinc- copper anomalies and probable extensions. The coincident multi-element anomaly was known to extend across more than 3 kilometres in soil and stream sediments, and this has been extended to about 5 kilometres. Most of the property is overburden covered, so the bedrock geology is just starting to be understood.

Work in 2017 was also successful in identifying a new target called Border Hill, located about 2km west of the FA claims adjacent to the Alaska border. This new target comprises a string of anomalous polymetallic soil anomalies underlain by felsic bomb tuffs cut by Cretaceous felsic dykes. Petrographic work indicates that volcanic rocks in the key target area not foliated or significantly metamorphosed, and are therefore likely related to the Cretaceous intrusion.

The project area is located in Yukon Tanana Terrane adjacent to the Fanning pluton, within the Tintina Gold Belt, just south of the Tintina Fault and Yukon River in westernmost Yukon Territory, adjacent to the Alaska border. The property comprises 48 FA claims staked in June 2017.

This report describes a program of soil sampling, prospecting, mapping and petrography performed by the author and crew between September 2nd and 8th, 2017. The author designed and supervised the program and participated in the work.

PROPERTY LOCATION, CLAIM DATA AND ACCESS

The FA claims consist of 48 contiguous Quartz claims located in western Yukon at latitude 64°34' north and longitude 140°51' west on NTS map sheets 116C/10 (Figure 2). The claims are registered in the name of William Mann who owns the claims. The claims are all registered with the Dawson Mining Recorder. Claim data are listed below while the locations of individual claims are shown in Figure 2.

Claim Name	Grant Number	Expiry Date	Number
FA 1 – 48	YF30417 – YF30464	2018 – 06 – 05	48

* Expiry date excludes 2017 work which will be filed for assessment credit.

The property lies about 87km northwest of Dawson City, south of the Yukon river and near the border with Alaska. The claims cover a north facing slope which drains into Fanning creek, which flows northeast into the Yukon River.

Access is by helicopter either from Dawson City or from the road to the past producing Clinton Creek asbestos mine located 15km south of the FA property. The Clinton Creek mine can be accessed in two wheel drive from the Fortymile road, which forks to the north from the Top of the World Highway from Dawson City to Alaska.

figures 1. & 2.

figures 1. & 2.

PREVIOUS WORK

1961 Regional geological mapping conducted at 1:250,000 scale by the Geological Survey of Canada (Green, 1972).

1966 Airborne magnetic survey flown by the Geological Survey of Canada.

1977 Regional stream sediment survey was conducted by the Geological Survey of Canada in the project area (RGS Open File 2365). This work did not identify significant anomalies in streams draining the property, however only a few samples were collected from the Fanning creek drainage, several kilometres downstream.

1979 Cominco performed confidential regional stream sediment geochemical surveys in the area. This program identified anomalies on Fanning creek that led to staking of the FAN claims in 1995.

1995 195 “FAN” claims were staked in the area. 192 contour and stream bank soil and silt samples were collected, and analyzed for Zn, Pb, Ag & Cu. Two significant geochemical anomalies were detected by Cominco during work on this occurrence. Anomaly ‘A’ is 900 metres long and comprises stream bank soil samples with maximum values up to 373 ppm Zn, 146 ppm Pb, 114 ppm Cu and 1.0 ppm Ag. Anomaly ‘B’ is 600 metres long and comprises stream silt and bank samples with maximum values up to 906 ppm Zn, 500 ppm Pb, 80 ppm Cu and 3.2 ppm Ag (Pride, 1996). It is reported by Ross that Cominco flew an airborne geophysical survey at this time but did not file the work for assessment.

1996 Surficial geological mapping at 1:250,000 scale by Geological Survey of Canada (Duk-Rodkin, 1996).

2004 16 Rhea claims staked by J.P. Ross. 7 float rock samples collected (Ross, 2004).

2007 32 additional Rhea claims staked by Ross. 76 soil samples and 4 float rock samples collected (Ross, 2007). Two soil lines were sampled to the west of anomaly B, and analyzed by multi-element ICP. Soil samples were collected by shovel.

2011 The Rhea claims were optioned by Zinccorp Resources Inc., and an additional 95 RH claims were staked. 259 soils, 2 silts and 7 rocks were collected for analysis (Mann, 2011). Soil samples were collected as deep as possible by auger. Work focused between and proximal to Cominco anomalies A & B.

2014 Airborne magnetic survey flown at 400m line spacing, 125m above terrain by Goldak Airborne Surveys for the Geological Survey of Canada (Kiss & Coyle, 2014). Much higher precision, accuracy and resolution was achieved compared to the 1966 survey. A prominent linear FVD magnetic high is seen to occur proximal to the polymetallic soil anomaly.

2016 Enhanced interpretation of existing RGS stream sediment geochemical data for NTS map sheet 116C. Yukon Geological Survey, Open File 2016-32, scale 1:250,000. Still no anomalies in project area due to distant sampling.

GEOMORPHOLOGY AND VEGETATION

The FA/ Gladman project is situated in the Yukon Plateau ecoregion, part of the Boreal Cordillera ecozone (Smith et al, 2004). The property lies about 7 km southwest of the Tintina Trench. The area features rounded ridges and low peaks which represent the top of an ancient peneplane that has been incised by dendritic drainages. Glaciation has not affected the property. The property is drained by Fanning creek that flows north- eastward into the Yukon River.

Local elevations range from about 2000 feet along Fanning creek to 3477 feet at a hilltop on the south side of the claims. Rock is rare in float and outcrop, and is mostly confined to steep slopes near creeks. Soil development is poor, and consists of a colluvium veneer of silt, sand and mixed fragments (Duk-Rodkin, 1996). The project lies within the zone of extensive discontinuous permafrost, with north and east facing slopes that are often moss covered and permanently frozen. This presents an obstacle to soil sampling, trenching and road construction. Soil sampling is most effective if conducted in late summer. A thin blanket of loess is present on the north-facing slope near treeline. Solifluction is apparent on slopes above treeline, and loess mixed with local soil extends downslope from high on the ridge. Loess is noted to dilute metal anomalies in some shallow soils.

Vegetation varies from mature spruce, poplar and birch forests on the lower slopes, thick stunted spruce and buckbrush near tree line, and open mossy grassland on the ridge top. Precipitation totals less than 400mm per year. Temperatures are extreme, with long very cold winters (-30C) and summers that can be hot (+30C).



Figure 3. Geomorphology of the FA claims. The claims are well forested with rare outcrop.

GEOLOGY

Geology in the vicinity of the project has not been recently mapped, and is based mostly on field work from 1961 (Green, 1972). The geological setting has been put into broader context by Dusel-Bacon et. al. (1998), Gordey and Makepeace (1999) and Colpron (2006).

The property lies in the Yukon Tanana Terrane, southwest of the Tintina Fault. The area lies within the Tintina Gold Belt. The Yukon-Tanana Terrane (YTT) is a terrane of pericratonic affinity which occupies an intermediate position between continental margin rocks of Ancestral North America (Cassiar Terrane, Selwyn Basin) to the east and arc and oceanic terranes accreted in Mesozoic time to the west (Quesnellia, Stikinia and Cache Creek). It consists of polydeformed and metamorphosed Paleozoic metasedimentary and meta-igneous rocks (Colpron, 2006). The Yukon-Tanana comprises thrust sheets that are overlain by klippen of weakly metamorphosed oceanic rocks of the Slide Mountain terrane (which hosts asbestos at Clinton Creek).

At the FA project these rocks are intruded by the Fanning Creek Pluton, a post-kinematic mid Cretaceous granitic unit of the Whitehorse suite. This pluton is described by Green as fine to coarse grained, uneven textured biotite granodiorite and biotite quartz monzonite.

A northeast trending fault along lower Fanning creek cuts the pluton and extends southwest across the west end of the claims. This fault appears to terminate or offset the soil geochemical anomaly and a linear magnetic high anomaly. If this fault is extended to the southwest it would pass adjacent to the Border Hill target area, and a newly discovered outcrop of granitic rock. At Border Hill Green mapped a "Tertiary" quartz porphyry described as sugary aplitic rock with grains of quartz, potash, and plagioclase feldspar to 0.5 mm and finer grained porphyry with scattered quartz phenocrysts. This unit is present in narrow dykes (less than 50 feet wide), and therefore not shown on more recent maps. Northeast trending faults are spatially related to mineralization at the Fortymile Pb-Zn-Ag district in nearby Alaska.

The YTT is host to significant base metal occurrences, including the Wolverine and Kudz Ze Kayah VMS deposits in the Finlayson Lake district, in the part of the terrane which lies northeast of Tintina Fault. Restoration of the offset of the Tintina Fault would place the FA property in proximity to the Finlayson district. Several minor VMS occurrences are found to the southeast of FA (eg. Mickey, Mort, Clip).

According to government mapping as recently interpreted, the FA property is underlain by Upper Devonian to Lower Mississippian Finlayson assemblage rocks of the YTT (Colpron, 2006). This assemblage consists of mafic to felsic metavolcanic rocks of arc and back-arc affinities; carbonaceous pelite, metachert, minor quartzite; metavolcaniclastic rocks and marble. Undivided metasediments are indicated for the property area. This assemblage was formerly known as the Nasina assemblage in Stewart River-Dawson area, which is dominated by carbonaceous quartzites, muscovite-quartz rich schist with interspersed marble.

Preliminary geological mapping by Cominco determined that the claims are underlain by the Nasina Assemblage, consisting of Devonian-Mississippian black meta-pelites, quartzites and thin felsic meta-tuffs. These lithologies have been hornfelsed by the Cretaceous Fanning Creek Pluton located to the north. Contour soil sampling detected two areas anomalous in Cu/Zn/Pb/Ag (anomalies A & B) underlain by black phyllite and carbonaceous siltstone (Pride, 1996).

Work by the author in 2011 and 2017 has led to a change in interpretation of the property geology. A significant amount of younger (non-foliated) felsic volcanic flow and pyroclastic rocks are present in the anomalous areas, along with rhyolite dykes. The intrusive pluton was found to extend further to the south than shown on the government maps. A revised description of the property geology is presented below in the 2017 Exploration section.

A government regional airborne magnetic survey was conducted in 2014 over the project area (Kiss & Coyle, 2014). Much higher precision, accuracy and resolution was achieved compared to the 1966 survey. A prominent linear FVD magnetic high is seen coincident with the polymetallic soil anomaly at the FA claims, however the Border Hill area lies within a magnetic low (see figure 9).

DEPOSIT TYPES

This area was explored by Cominco in the search for VMS mineralization after their discovery of the Kudz Ze Kayah VMS deposit. If the Tintina fault offset is restored, the project area lies proximal to the Finlayson VMS camp where the KZK, Fyre Lake and Wolverine deposits are located. Several minor VMS occurrences are found to the southeast of FA (eg. Mickey, Mort, Clip) and in nearby Alaska (Dusel-Bacon, 1998). VMS remains a possible target for the area, though Finlayson group metavolcanics are no longer thought to be present in the anomalous areas.

Two significant geochemical anomalies were detected by Cominco during work in the project area in 1995. Anomaly 'A' is 900 metres long and comprises contour soil samples with maximum values up to 373 ppm Zn, 146 ppm Pb, 114 ppm Cu and 1.0 ppm Ag (Fig. 5). Anomaly 'B' is 600 metres long and comprises stream silt and bank samples with maximum values up to 906 ppm Zn, 500 ppm Pb, 80 ppm Cu and 3.2 ppm Ag. These anomalies were considered worthy of followup, however Cominco let the FAN claims expire.

The possibility that the anomalies are related to high temperature carbonate replacement deposits (CRD) was considered by prospector J.P. Ross who staked the RHEA claims to cover the Cominco anomalies. The presence of this deposit type is known in the nearby 40 Mile district of Alaska (Dusel-Bacon et. al. 2015). This district has had a series of CRD discoveries, with elevated values for Zn, Ag, Pb, Cu and In. Some of the occurrences are noted to be skarns, while most are mantos. The occurrences are hosted in carbonates, and are spatially associated with intrusive rocks (often immediately adjacent to felsic dykes) and northeast trending faults. The nearest of these occurrences is Lead Creek, located approximately 25km to the west of FA in Alaska, which has returned drill intersections of 15.4m of 370 g/t Ag and 5.5% Pb and 9.6m of 725 g/t Ag and 6.4% Pb.

Work on the property has revealed small patches of subcrop and float that containing coarse epidote replacing limestone, with weak mineralization. Carbonate replacement appears to be the most likely deposit type on the FA claims. Following the limestone beds using outcrops and Ca in soils is thought to be an important exploration criteria. The best soil anomaly cluster occurs where the limestone unit is thought to overlie the magnetic high anomaly.

Prospecting at the Border Hill target in 2017 revealed narrow vuggy quartz veins bearing arsenopyrite and trace galena. These veins are highly anomalous in Ag, As, Pb, Zn, Mo, Cu and potential pathfinder elements. They cut felsic bomb tuff in proximity to rhyolite dykes, and are considered to be epithermal veins. These epithermal veins may be peripheral to a porphyry target, and further work is recommended.

2017 EXPLORATION PROGRAM

The 2017 field program was conducted by the author, senior field technician Max Mikhailytchev and assistant Robyn Warren. The field program was conducted between September 2nd to 8th, after the staking and recording of the FA claims in June. The property was accessed by truck to the Clinton Creek mine, then by helicopter to the property. A temporary tent camp was established, with sampling and prospecting traverses on foot. 171 soil samples were collected. 11 rocks samples were sent for assay. Eight rock specimens were selected by the author for thin section and polished thin section examination by Dr. Timothy Liverton. A hand-held XRF device was used to help focus soil sampling and evaluate rocks before assay.

2017 Soil Geochemistry

Soil sampling has been established as the best method for testing the ground near anomalies “A & B”, and for extending the anomalies along trend. A total of 171 soil samples were collected in 2017 on 5 north-south and 1 east-west oriented grid lines based on UTM NAD83 zone 7N. Two recce non-grid lines were also sampled to examine regional potential. Samples were generally spaced 50m apart, but extended to about 100m for reconnaissance lines. The lines were spotted based on proximity to the known geochemical anomalies, location along the magnetic high trend and the desire to extend sampling into unknown areas. The presence of a “Tertiary intrusion” shown on Green’s map but excluded from recent YGS maps was considered a favourable indicator and a line of wide spaced soils was collected in that area proximal to the Alaska border, herein called “Border Hill”.

The 2017 soil samples were located using handheld GPS units, with supplemental navigation by compass. The sites are marked by flagging tape marked with the sample number. Soil samples were collected using Dutch soil augers. They were placed into Kraft paper bags along with an analytical sample tag. Soil descriptions were recorded in a notebook. Samples were collected as deep as possible, typically between 40cm and 60cm deep, occasionally to 90cm, but sometimes much shallower where very rocky soil and permafrost limited sampling depth. Sample material and sample sites were documented with photographs.

Soil sample locations from 2017 and 2011 are shown in Figure 4, and maps with Pb, Ag, Zn & Cu values in ppm are shown in Figures 5, 6, 7 & 8 respectively (in pocket). Certificates of Analysis for soil samples are in Appendix III.

The 2017 geochemical sampling program was very successful, as the strong multi-element anomaly was shown to continue on trend beyond the known anomaly in both directions over a total distance of about 5km. In addition, the samples collected near “Border Hill” were significantly anomalous in multiple elements (Cu, Pb, Ag, Mo, Zn and local Bi, W & Au).

The most significant results were from a cluster of about 30 samples in an area roughly 500m diameter on claims FA 16, 18, 41 & 43. This area returned values up to 2571 ppm Zn (the highest value on the property), 963 ppm Cu, 4.6 ppm Ag and 77ppm Pb. Soils in this area are also high in Ca (above 0.5% and locally over 2%), suggesting the presence of limestone,

potentially a host rock. The anomalous soil cluster also overlies the magnetic high anomaly, which may indicate a feeder structure.

Lead, zinc, copper and silver are moderately correlated with one another in soil samples, and the general pattern of distribution is similar for all four elements. Lead values are strongest on the east side of the claims, and less abundant in the anomalous cluster discussed above. Gold correlates weakly with copper and mercury, however values are generally too low to be of interest with a maximum value of 107 ppb on the property.

Potassium in soils is thought to indicate the presence of granitic rocks. Values of K above approximately 0.3% (and locally over 0.6%) coincide with known granitic rocks, while most soils underlain by other lithologies contain less than 0.1% K.

One sample, #17571 was too small, with insufficient material sent to the laboratory for analysis. Too bad, as this sample location is near the centre of the best anomaly cluster.

2017 Prospecting and Mapping

Three days were dedicated by the author to prospecting and mapping, along with examination of rocks encountered during test pit and soil traverses. Assay samples, thin section locations, test pit locations and geological locations are shown in figure 9. One day was spent examining the cliffs adjacent to Cominco anomaly "A", one day spent at Border Hill, and one day on the rusty cliffs on claim FA 18.

Eleven rocks were submitted for assay (see Table 1 below). The highest Pb (3061 ppm) and Zn (1311 ppm) values were returned in sample 64695 from a cobble found in the creek near Anomaly A. This rock contained trace galena, calcite and epidote and is likely a skarn. Three samples of narrow epithermal vuggy quartz veins were collected at Border Hill. All contained over 1000 ppm As, up to 41.9 ppm Ag, 35.7 ppb Au, and anomalous Mo, Pb, Zn, Cu, Sb and Bi.

Locations of rock assays, thin sections, test pits and outcrops are presented in figure 9 (in pocket). This map also shows regional geological map unit outlines including the Fanning pluton and the major fault. A colour underlay of airborne First Vertical Derivative Magnetics is also shown in this figure. Rock assay certificates with complete analyses are presented in Appendix IV.

The author examined the rocky area on the north side of the western creek fork where Cominco's anomaly "A" is located, which is the largest area of outcrop and float rock on the property. This area is seen in the mid distance in figure 3. The pale rocks present include marble, felsic metatuff and rhyolite flows and dykes. Subcrops of microgranite were found on the northeast end of this trend. The cliff units tend to be massive, with a similar appearance at a distance. The felsic metatuff and limestone are found in contact, and both units are (bleached?) white, weakly thin-bedded and blocky to rubbly weathering with little actual outcrop. Rhyolite flows are both white to light grey and dark grey and are often cliff-forming. The dark grey rhyolites contain secondary

pyrrhotite and pyrite, and occur at the location of the first vertical derivative magnetic high. The grey pyrrhotite bearing rhyolites have a field appearance similar to a pyrrhotite hornfels: very hard, weakly magnetic and massive. The bedded rocks near anomaly "A" have an orientation of about 110° azimuth, with a 45° dip to the south.

Rocks at Border Hill are common as felsenmeer or subcrop, with no actual outcrop. The bulk of rock is a felsic bomb tuff with white bombs within a grey unfoliated matrix. Similar rocks are found on the FA claims near the soil anomaly. Felsic dykes are common, but thought mostly to be meter scale or smaller, and are located across the hill to approximately 5% of total rock. Dyke abundance increases within about 300m of the border. A recessive weathering zone of biotite granite gneiss is present on the flank just southeast of Border Hill. This granite lies approximately on the trend of the major northeast trending fault that cuts the Fanning pluton.

Metamorphic rocks of the Yukon Tanana Terrane are present on the ridge crest immediately south of the FA claims. Various phyllites and quartzites are seen in subcrop. Felsic flows and tuffs with interbedded limestone (figure 14) are present in outcrop in the central part of the FA claims. It is unclear what age these rocks are, however they do not have a foliation. The volcanics formed in a subaerial environment. The limestone is locally marbled, and therefore older than the mid Cretaceous Fanning pluton. A felsic bomb tuff (figure 12) is also seen in float in the central FA area, and this unit is the dominant rock type at Border Hill.

The bulk of the Fanning pluton north of the claims is indicated to be a biotite granodiorite or quartz monzonite, however the 1961 mapping noted strong weathering and sparse outcrop of the unit. Intrusive rocks seen in the project area extend south of the pluton boundary shown on the map, and are biotite granite (figure 10) and microgranite. The large feldspar phenocrysts in figure 10 display Rapakivi texture, indicating rapid change in pressure on the magma and relatively shallow depth of emplacement. Rapakivi texture is also associated with tin granites. It is not certain that these intrusive rocks are part of the greater Fanning pluton, now mapped as mid Cretaceous Whitehorse Suite (105 to 112ma). Rhyolite dykes (figures 11, 13) are seen at the central FA claim area as well as being abundant at Border Hill. The dyke in figure 11 is anomalous in ore metals, as indicated by XRF.

Table 1. 2017 Rock Assays FA/ Gladman project
Bureau Veritas Commodities Canada Ltd.

WHI17001018

Method AQ201

Sample	Location		Description	Cu	Pb	Zn	Ag	Au
				PPM	PPM	PPM	PPM	PPB
64693	505296	7159961	6m panel chip on cliff, black, siliceous rock w/ po.	89.3	21.0	62	0.4	4.1
64694	505429	7160182	30cm chip across rusty vein fault at contact between black shale and pale rhyolite	128.0	7.5	16	0.9	2.3
64695	505955	7160258	cobble in creek, tr. Galena & pits after sulphides, calcite, epidote (skarn?)	6.8	3061.0	1311	8.2	2.9
64696	500023	7159656	Grey & white vuggy Qtz vein float, 2 - 4cm width, minor arsenopyrite & scorodite	43.3	150.9	18	41.9	35.7
64697	500022	7159651	vuggy, rusty breccia subcrop	242.4	73.3	106	14.3	3.8
64698	500212	7159540	boulder rusty 3cm vuggy Qtz vein w/ 3cm bleached rusty wallrock, tr aspy.	133.5	592.2	300	7.4	21.0
64699	504369	7160182	10m grab rusty black siliceous pebbles at base of cliff, py & po.	79.0	35.1	195	0.5	<0.5
64700	507383	7158320	boulder quartz breccia vein w/ limonite & MnOx	104.9	38.1	14	<0.1	1.0
65951	507800	7159500	Pit #2, angular rusty pebbles, orange, red, black oxides coating	1228.7	1871.5	699	3.6	1.6
65952	505000	7160500	Pit #3, boulders of felsic bomb tuff	75.9	34.6	146	2.3	2.6
65953	507600	7159100	Pit #1, angular pebbles, polyolithic	105.6	149.8	206	1.6	0.8

UTM NAD 83 Zone 7N



Figure 10. Megacrystic granite with Rapakivi texture.

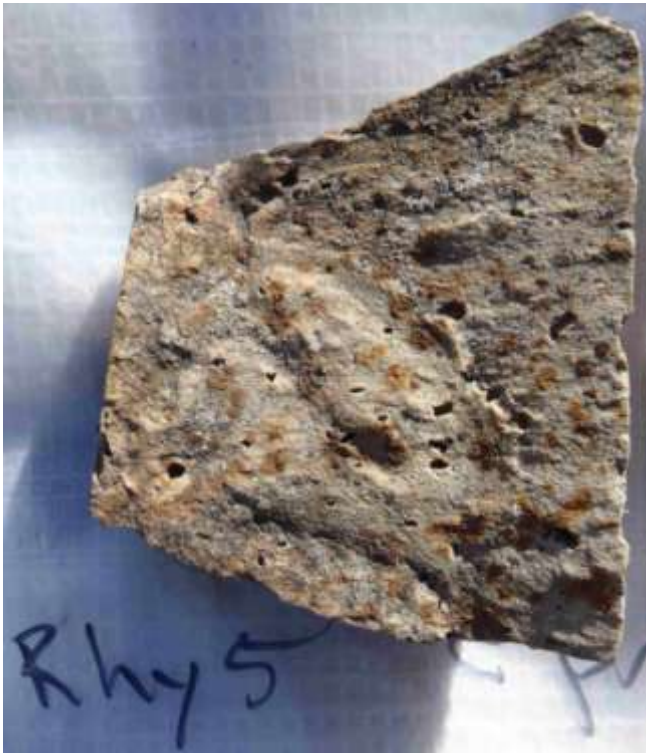


Figure 11. Rhyolite dyke with rusty pits after sulphide.



Figure 12. Undeformed felsic bomb tuff.



Figure 13. Felsic bomb tuff cut by rhyolite dyke.



Figure 14. Limestone outcrop, bleached, weak banding.

2017 Petrography

Eight samples were selected for thin section or polished thin section examination. Rock slabs were sent to Vancouver Petrographics Ltd. for section preparation. The completed sections were sent to Dr. Timothy Liverton for microscopic examination and description. Liverton's report is presented in Appendix V.

The results from petrographic microscopy were surprising. Rocks interpreted in the field to be hornfelsed Yukon Tanana metasediments or metavolcanics were found to be undeformed rhyolitic volcanics. Only one sample had any foliation evident under the microscope, and this foliation is most likely a primary volcanic texture. The geological environment was previously thought to be Finlayson group metavolcanics of the Yukon Tanana Terrane, however now most of the rocks seen are probably Cretaceous volcanics related to the Fanning pluton located immediately north of the property. Sample locations and hand sample descriptions are provided in Table 2 below.

Table 2. 2017 FA Thin Section Locations & Descriptions

			<u>Hand Specimen Descriptions</u>
FA 1	506295	7160470	Fine-grained quartz-feldspar-biotite microgranite ridge subcrop
FA 2	505000	7160500	Pit #3 boulder, Bomb tuff, white rhyolitic bombs in grey matrix
FA 3	505294	7159961	Fine-grained hard, black outcrop with pyrrhotite and pyrite ("hornfels")
FA 4	504837	7160500	Boulder, bleached siliceous rock, possible "calc-silicate hornfels"
FA 5	505855	7160325	Laminated rhyolite, white, subcrop
FA 6	505962	7160317	Coarse-grained, siliceous "calc-silicate hornfels" subcrop
FA 7	505962	7160317	Coarse-grained, siliceous "calc-silicate hornfels" subcrop
FA 8	505294	7159984	Fine-grained hard, black outcrop with pyrrhotite and pyrite ("hornfels")

UTM NAD 83 Zone 7N

2017 Test Pits

Three test pits were dug with pick and shovel at soil sample sites with strong polymetallic anomalies from 2011, with data presented in Table 3 below. Photos of each pit are also shown below. In all cases flagging tape from 2011 sampling was still present to confirm the site locations. The pit depths ranged from 65cm to 100cm, with depth partly limited by permafrost. Bedrock was not reached in any of the pits, though Pit #2 was successful in reaching weakly mineralized and oxidized pebbles. Digging in Pit #3 was limited by the presence of large boulders. Pit #1 is considered to be the least successful test, with polyolithic pebbles encountered suggesting mixed colluvium from upslope. Pit #3 encountered boulders of only one rock type (bomb tuff), suggesting a local source. The rock sample geochemistry was similar to the soil geochemistry for Pits #1 & 3, with no mineralized rocks encountered.

Pit #2 rocks returned significantly enriched metal values relative to soils. Oxidized pebbles returned 1871 ppm Pb, 699 ppm Zn, 3.6 ppm Ag, 1229 ppm Cu along with highly anomalous Fe, Mn, As, Cd, Sb, Bi, Ga and Se. All pits were backfilled after photography, description and sampling.

Table 3. FA Claims 2017 Test Pit Data

Pit 1	Location	507600E	7159100N	UTM NAD 83 Zone 7N
	Pit Size	80 cm x 60 cm	70 cm deep	
	Strata:	A horizon	15 to 20 cm	Moss, grass, roots, humus
		Ash	1 cm	below humus, probably White River Ash
		Loess	20 to 30 cm	clay, silt, fine sand, minor pebbles, dark grey-brown
		C horizon	to depth	light grey-brown, angular rock ~50%, frost
	Rock			several rock types, largest cobble 11cm
	Samples	Rock	65953	150 ppm Pb, 206 ppm Zn, 1.6 ppm Ag, 105 ppm Cu
		Soil	5286679	288 ppm Pb, 101 ppm Zn, 2.2 ppm Ag, 44 ppm Cu (2011)

Pit 2	Location	507800E	7159500N	UTM NAD 83 Zone 7N
	Pit Size	80 cm x 90 cm	65 cm deep	
	Strata:	A horizon	7 to 11 cm	thin layer of moss and lichen, roots, humus
		Ash	1 to 5 cm	below humus, probably White River Ash
		Loess	20 cm	orange, silty mineral soil
		C horizon		~60% rusty angular pebbles, frost
	Rock			pebbles, max 11cm, orange, red, black MnOx stained
	Samples	Rock	65951	1871 ppm Pb, 699 ppm Zn, 3.6 ppm Ag, 1229 ppm Cu, 1129 ppm As
		Soil	5286945	658 ppm Pb, 205 ppm Zn, 0.7 ppm Ag, 186 ppm Cu, 176 ppm As (2011)

Pit 3	Location	505000E	7160500N	UTM NAD 83 Zone 7N
	Pit Size	120 cm x 100 cm	100 cm deep	
	Strata:	A horizon	10 to 20 cm	moss, humus, roots
		Ash	nil	
		Loess	nil	
		C horizon	to depth	angular boulders 50%, silty soil 50%
	Rock			rusty lapilli bomb tuff, felsic bombs, grey matrix
	Samples	Rock	65952	35 ppm Pb, 146 ppm Zn, 2.3 ppm Ag, 76 ppm Cu
		Soil	5286714	65 ppm Pb, 429 ppm Zn, 2.2 ppm Ag, 79 ppm Cu (2011)



Figure 15. Pit #1



Figure 16. Pit #2



Figure 17. Pit #2 rocks, sample 65951.



Figure 18. Pit #3.

2017 Portable XRF Utilization

A Niton XL3t portable hand-held XRF was used in the field to provide rapid evaluation of soils and rocks. The information provided by the XRF was useful in adjusting soil line locations to maximize data in anomalous areas. For example, the samples collected on line 504800E were added based on highly anomalous XRF values for Pb, Zn and Cu in soils from line 504600E. This area appears to be the most highly mineralized part of the claims discovered to date. Low metal values on the north end of line 504600E were reason not to extend line 505000E to the north, as originally planned.

XRF readings were taken for 30 seconds through the soil sample bags, and high values of Pb, Zn, Cu (and sometimes As) used as indicators of mineralization. Rock samples were also analyzed by XRF, and this information was used to reduce the number of rock samples submitted for assay.

SAMPLE PREPARATION, ANALYSES AND SECURITY

The 2017 samples were placed into rice bags in the field by the author, sealed with zip ties and secured. The samples were transported and delivered directly by the author to the Whitehorse preparation facility of Bureau Veritas Minerals (AcmeLab). The samples were shipped by BVM to their Vancouver laboratory. Bureau Veritas Mineral Laboratories is accredited and certified to the International Organization for Standardization for Quality ISO9001:2008, Environmental Management: ISO14001 and Safety Management OH SAS 18001 and AS4801.

At the laboratory samples were dried at 60°C. Soil samples were sieved to -80 mesh. Rocks were crushed, then a 250g split was pulverized to 200 mesh. The samples were analyzed by BVM method AQ201 for 36 elements by ICP-MS after digestion of 15g by 1:1:1 aqua regia.

Quality control procedures were implemented at the laboratory, involving the regular insertion of blanks and standards and repeat analyses on the samples. Quality Assurance data is provided for each batch of samples and included with each analytical certificate (Appendices 3 & 4).

There was no evidence of any tampering with the samples during collection or shipping. All sample preparation was conducted by the laboratory.

INTERPRETATION AND CONCLUSIONS

The geology of the Gladman area and FA property is still poorly understood due to scarce outcrop and limited mapping, however significant progress has been made in 2017. The regional northeast trending fault may be an important control of mineralization, similar to the Fortymile CRD district in nearby Alaska. The southeast trending FVD magnetic high anomaly may reflect a splay structure off this fault. Epigenetic pyrrhotite-pyrite mineralization is thought to be the source of the magnetic high. Rocks found to the north of the FVD magnetic high structure are undeformed subaerial volcanics with a band of limestone, and the strong polymetallic soil geochemical anomaly coincides with this package of rocks. The location where the limestone overlies the magnetic high is currently thought to be the best target, with an area roughly 500m in diameter returning some of the highest Zn, Cu and Ag values from a cluster of about 30 samples.

High temperature carbonate replacement deposit or skarn, along with epithermal veins appear to be the most likely targets to explain the polymetallic anomaly. High arsenic values might suggest undiscovered gold potential.

The Border Hill target was investigated due to the presence of a small Tertiary intrusion on Green's original geological map of the area that is absent on more recent maps. The hill is underlain by undeformed felsic bomb tuff cut by rhyolite dykes. A small recessive weathered granite subcrop was observed just southeast of the hill, approximately on trend with the northeasterly regional fault. The granite, dykes and volcanics might all be mid Cretaceous and related to the Fanning pluton, though the area is mapped as Finlayson group metavolcanics. If the granite is related to the pluton, the southern margin of the pluton extends considerably beyond the current map. It is interesting/ puzzling that Border Hill lies within a broad magnetic low, while similarly anomalous geochemistry on the FA claims correlates well with a linear magnetic high anomaly.

RECOMMENDATIONS

The Gladman area and FA property covers a large Pb- Zn- Ag- Cu anomaly in soils and stream sediments that is open to further expansion. The nature of the target is unknown, but is likely a CRD, skarn or epithermal deposit. The length, width and continuity of the soil anomaly is encouraging, and may lead to a significant discovery.

Soil geochemistry appears to be a very effective exploration method for this property. Additional soil lines should be sampled to the southeast along the anomalous trend, and also to infill gaps in the existing sample pattern. Particular focus should be on the roughly 500m diameter area of highly anomalous soils where favourable limestone host rocks are interpreted to overlie the magnetic high anomaly centered near 504600E, 7160400N. The highest Zn, Cu and Ag values on the claims lie within this cluster. Test pitting should also be conducted in this area. Soil sampling should be tightened up to 100m by 50m spacing.

Geological mapping and prospecting should be continued along the anomalous trend and across the entire area.

The Border Hill area seems very promising based on 2017 work, with a string of consistently elevated soil values and the presence of narrow epithermal veins with elevated Ag, Au, As, Pb, Mo & Cu. This area also returned local elevated Zn, Sb and Bi values. Staking is recommended. Further prospecting and soil sampling is recommended for this area.

The property has reasonable logistics, with roads within 10 or 15km to the southeast at Clinton Creek or across the border to the west in Alaska. The terrain is moderate, so construction of trails would be reasonably easy if exploration is successful, with no stream crossings necessary.

Respectfully submitted,

William D. Mann, M.Sc., P.Geo.

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