

# Surface Work 2019

On the

## Midas Property

lon 1-10; YC75506 to YC75515 lon 11-22;  
YC93780 to YC93791 Dom 173; YC31119  
Dom 175; YC31121  
Dom 177-182; YC31123 to YC31128 Dom 207-220;  
YC31153 to YC31166 Dom 242-250;  
YC31188 to YC31196 Dom 276; YC32722  
Dom 278; YC32724  
Dom 280; YC32726  
Dom 282; YC32728  
Ty 1-8; YE90275 to YE90282

### **Dawson Mining District, Yukon**

Worked August 2 to August 29, 2019  
Map Sheet NTS 115-O-15  
At  
63° 48' north latitude and 138° 50' west longitude

By Janelle Smith BSc Hons (Geol) MAIG  
February 7, 2020

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## 1. LOCATION AND ACCESS

The Midas Project is in the Dawson Mining Division on the NTS 115-0-15 at 63° 48' north and 138° 50' west in the Klondike placer goldfields at the headwaters of placer gold producers Friday Gulch and Brimstone Creek (Figure 3), tributaries to Sulphur Creek and also Caribou Creek which flows to Dominion Creek.

The property is located approximately 38 km southeast of Dawson. Access is via the Hunker Creek road, the Sulphur Creek road and a spur road which leaves the Sulphur Creek road at the top of Green Gulch Hill and travels the entire length of the property. The Hunker and Sulphur roads are government maintained and typically summer travel only while the spur road is not maintained and has numerous soft spots. Total mileage from Dawson is about 49 kilometers resulting in a 40-minute one-way drive.

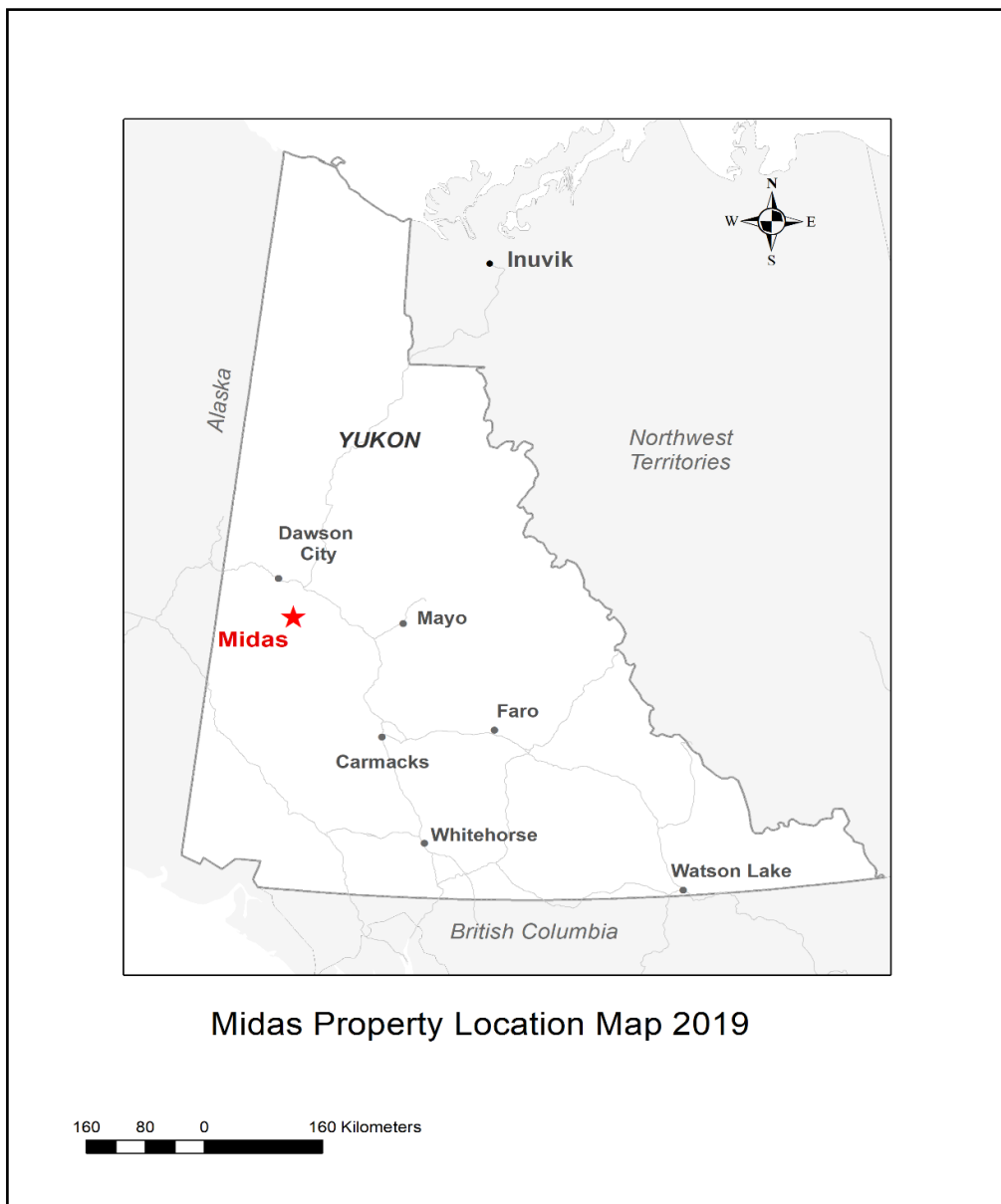


Figure 1. Midas property location.



## 1. TOPOGRAPHY AND VEGETATION

The property lies on the Klondike Plateau, which is characterized by low rolling hills dissected by deeply incised valleys. Elevation on the property ranges from 1214 m at Dominion Mountain (Figure 3) to a low of about 760 m on Caribou Creek in the northeast corner. Most of the property is forested. Higher elevations are covered by mixed spruce and brush with tree cover increasing at lower elevations and on south facing slopes. Areas of permafrost are commonly covered by sparse cover consisting of stunted spruce trees and brush.

As the Klondike plateau was unaffected by Paleocene glaciation an irregularly developed weathered profile, extending to depths in excess of 80 meters, is mostly preserved. Over the Dominion claims recognizable insitu rock is generally covered by two meters of regolith. Exposure of recognizable rock is restricted to old trenches, road cuts, sporadic areas on Dominion Mountain, and along a ridge to the northwest.

Permafrost is widespread on north and east facing slopes, and sporadically occurs in other areas. Areas prone to permafrost should be explored late in the exploration season to allow for maximum thaw.

Climate is characterized by low precipitation and a wide temperature range. Winters are cold and temperatures of -30° Celsius are common. Summers are moderate with daily highs commonly in the 14° to 20° Celsius range. The seasonal window for prospecting and exploration typically lasts from mid-May to mid-October.

## 2. CLAIMS AND LAND STATUS

The Bernard Kreft owns a 100% interest in 65 quartz claims, he signed an option agreement with Taku Gold in 2019. Claim information is detailed on the Table 1.

The Midas project is located within Tr'ondek Hwech'in (Dawson) traditional territory, with no First Nation land claim blocks in the area to be prospected.

Table 1 Claim Status December 2019

<b>Claim Name</b>	<b>Grant Numbers</b>	<b>Registered Owner</b>	<b>Expiry Date</b>
Ion 1-10	YC75506 to YC75515	Bernard Kreft	2025\11\25
Ion 11-16	YC93780 to YC93785	Bernard Kreft	2025\11\25
Ion 17-22	YC93786 to YC93791	Bernard Kreft	2024\11\25
Dom 173	YC31119	Bernard Kreft	2024\11\25
Dom 175	YC31121	Bernard Kreft	2024\11\25
Dom 177	YC31123	Bernard Kreft	2026\11\25
Dom 178	YC31124	Bernard Kreft	2024\11\25
Dom 179	YC31125	Bernard Kreft	2026\11\25
Dom 180-182	YC31126 to YC31128	Bernard Kreft	2024\11\25
Dom 207-210	YC31153 to YC31155	Bernard Kreft	2024\11\25
Dom 211-220	YC31156 to YC31166	Bernard Kreft	2026\11\25
Dom 242-245	YC31188 to YC31190	Bernard Kreft	2024\11\25
Dom 246-250	YC31191 to YC31196	Bernard Kreft	2026\11\25
Dom 276	YC32722	Bernard Kreft	2024\11\25
Dom 278	YC32724	Bernard Kreft	2024\11\25
Dom 280	YC32726	Bernard Kreft	2024\11\25
Dom 282	YC32728	Bernard Kreft	2024\11\25
Ty 1-8	YE90275 to YE90282	Bernard Kreft	2024\11\25

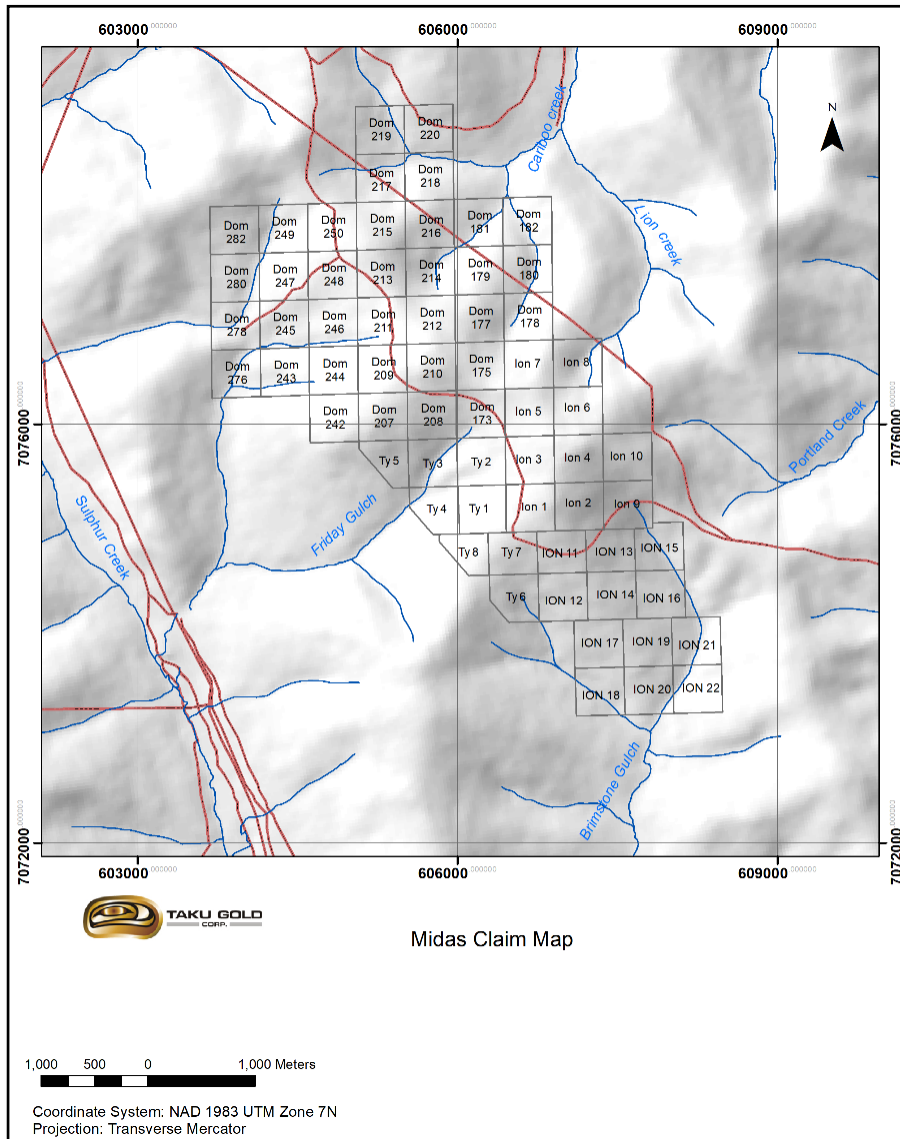


Figure 2 Midas 2019 claim map with creeks and trail.

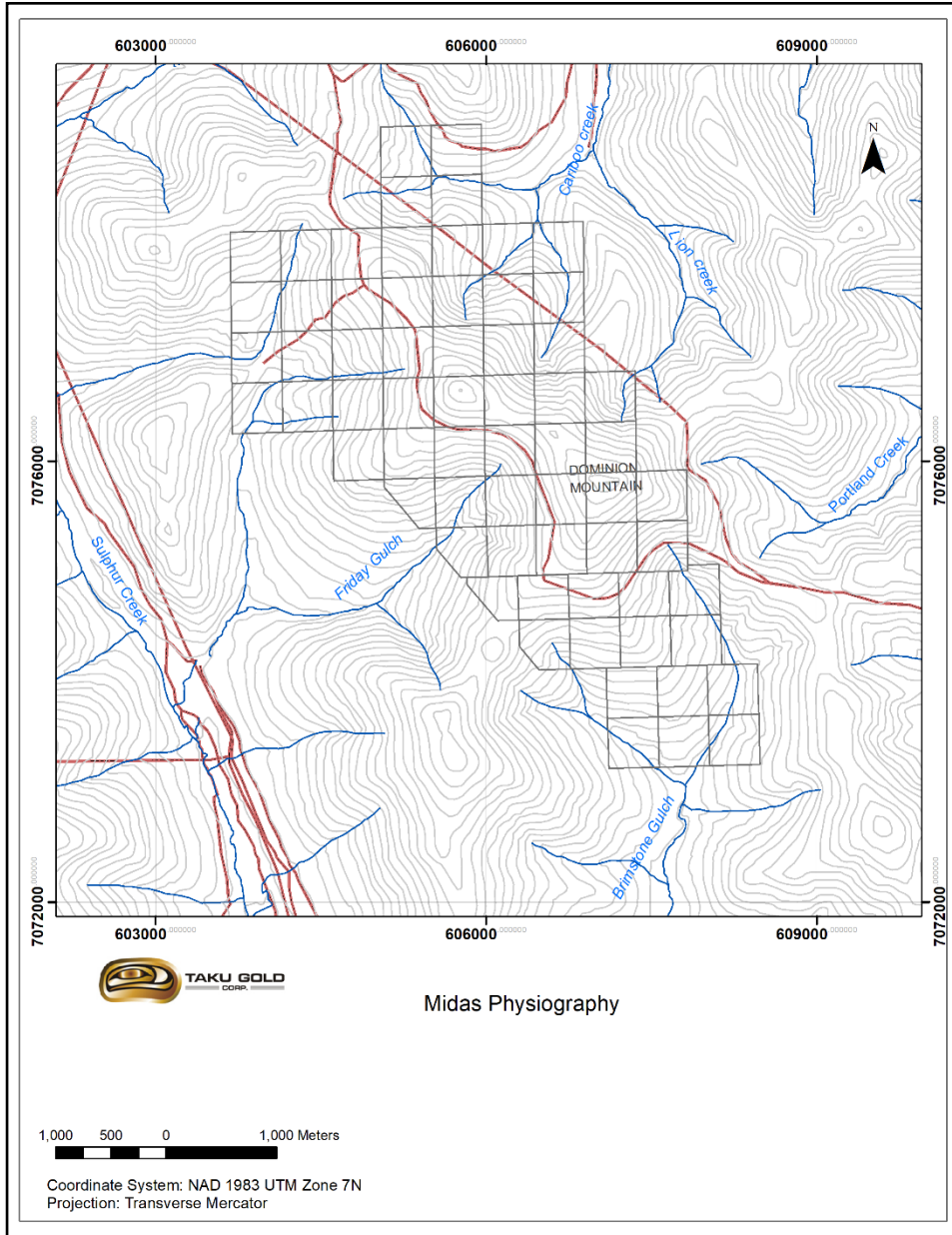


Figure 3 Midas and surrounds physiography with claim outlines.

### 3. PROPERTY GEOLOGY AND MINERALOGY

The property is situated on the southwest side of the Tintina Fault, within the Tintina Gold Belt (“TGB”). The TGB has proven to be an under-explored, yet highly prospective belt of rocks, as witnessed by the recent significant discoveries at White Gold, Coffee, and Pogo. The potential for orogenic and other bulk-tonnage gold targets has been recognized in the Yukon portion of the TGB with the area south of Dawson receiving considerable attention from numerous companies, including majors such as, Kinross, Newmont, Teck, Kennecott and Phelps Dodge as well as a plethora of junior exploration companies.

The property is located within the Klondike Goldfields on a north trending ridge (Figure 3) roughly paralleling and equidistant between major placer gold producers Sulphur Creek and Dominion Creek. Most of the significant bedrock gold showings within the Klondike are orogenic style targets, located in dilatant zones formed in the hanging-wall of regional scale thrust faults where dissected by later structures.

Auriferous mineralization consists of high-grade quartz veins and lower grade disseminated mineralization in the schist wall rock. At Klondike Gold Corps Lone Star property, drill intersections of up to 5.1 g/t Au over 14.3m and 2.4 g/t Au over 41 meters were encountered within a geological setting similar to the Midas Property and located at the headwaters of significant placer gold producers Eldorado Creek and Victoria Gulch.

The Midas Project is in the hanging-wall of a south-west dipping thrust fault and overlies a mixed sequence of chlorite-quartz +/- sericite +/- muscovite +/- biotite schist with rare coarse-grained amphibolite interbeds. Two main types of quartz veins are common on the property: foliaform and discordant. Foliaform veins are discontinuous along strike and range up to 0.3m in thickness. No gold values, visible sulphides or evidence of alteration have been noted in, or associated with, this type of veining. Discordant veins are north to north-west trending, generally vertical, and cross-cut schistosity. They are typically 1 to 30 centimeters in width limonitic, contain traces of pyrite, galena, copper sulphosalts and rare visible gold. Geochemical analyses typically return moderate to highly anomalous gold values. Pyritized, carbonatized, silicified and sericitized alteration envelopes adjacent to discordant quartz veins are typically weakly to moderately anomalous in gold. Wall rock alteration is discernible for up to 2.0 meters from the margins of single veins, while in areas where several parallel veins occur, semi-continuous alteration zones up to 20 meters in width were noted.

Although overburden and vegetation cover result in a near complete masking of bedrock on the Midas Project, work by the author on nearby properties has resulted in a rudimentary understanding of the structural regime present in the general vicinity, and which may be applicable to the Midas Project. The introduction of mineralized quartz vein zones with associated pyritized, carbonatized and silicified wall rock appears to have occurred along a semi-continuous and well developed north trending structures. These mineralized vein zones were subsequently dissected by two structural regimes: a set of vertical east-west faults resulting in a west stepping of the vein zones in the horizontal plane and a set of flat lying faults which resulted in a further west stepping to depth in the vertical plane. Displacement along the vertical east-west faults is unknown but likely in the order of 25m or more while displacement along the flat lying faults is approximately 5-10 meters.

The Klondike Goldfields, in which the Midas Project is located, were un-glaciated and consequently covered by thick locally derived soil, colluvium and regolith. Prospectors rely on soil sampling as a preliminary first pass exploration tool as opposed to more traditional mapping and prospecting. Work by



the author in the Klondike Goldfields has shown that soil anomalies of 40 ppb Au and greater potentially represent significant bedrock mineralization.

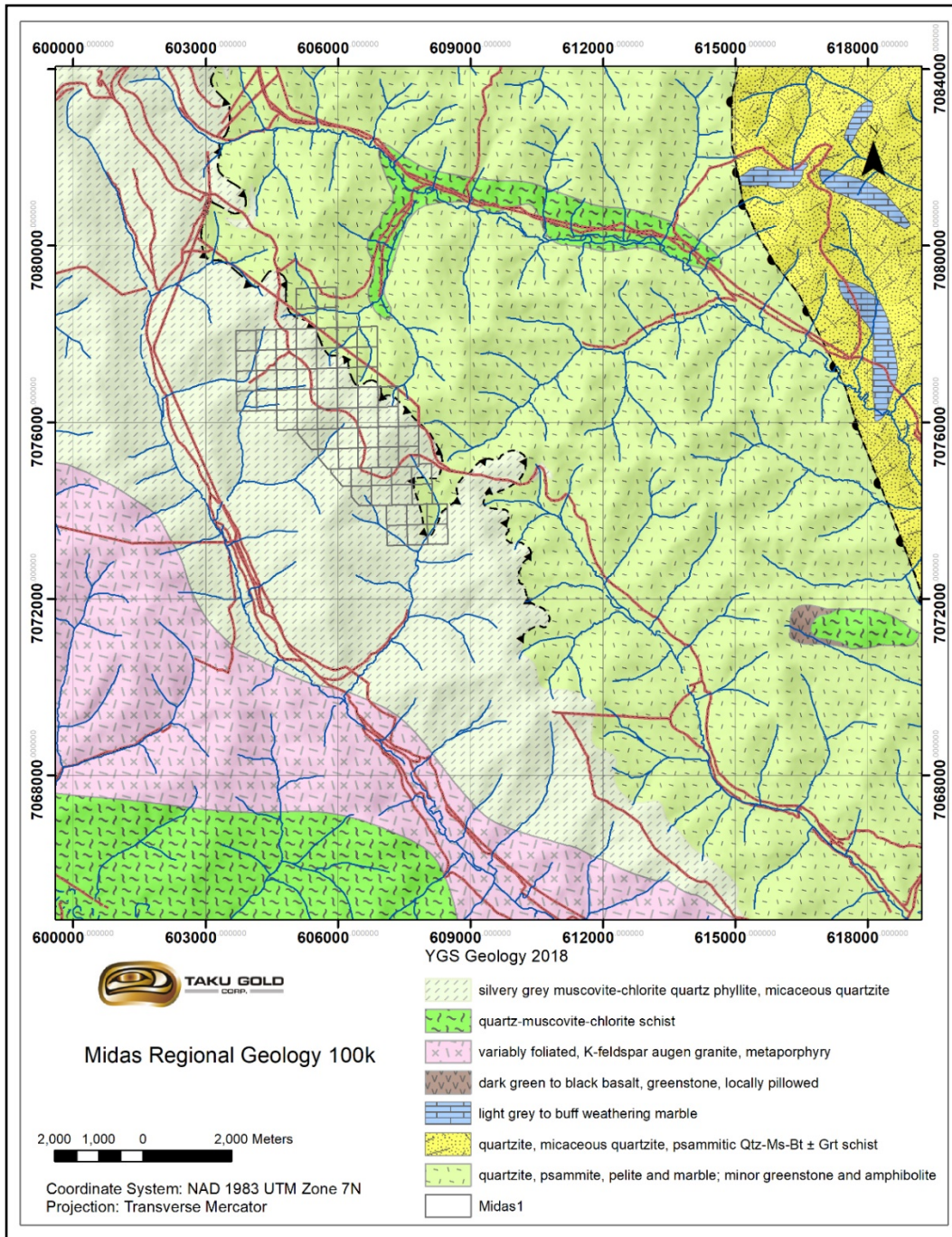


Figure 4. Regional geology Source Yukon Geological Survey 2018, with Midas claim outlines. Trails and existing roads are marked in red

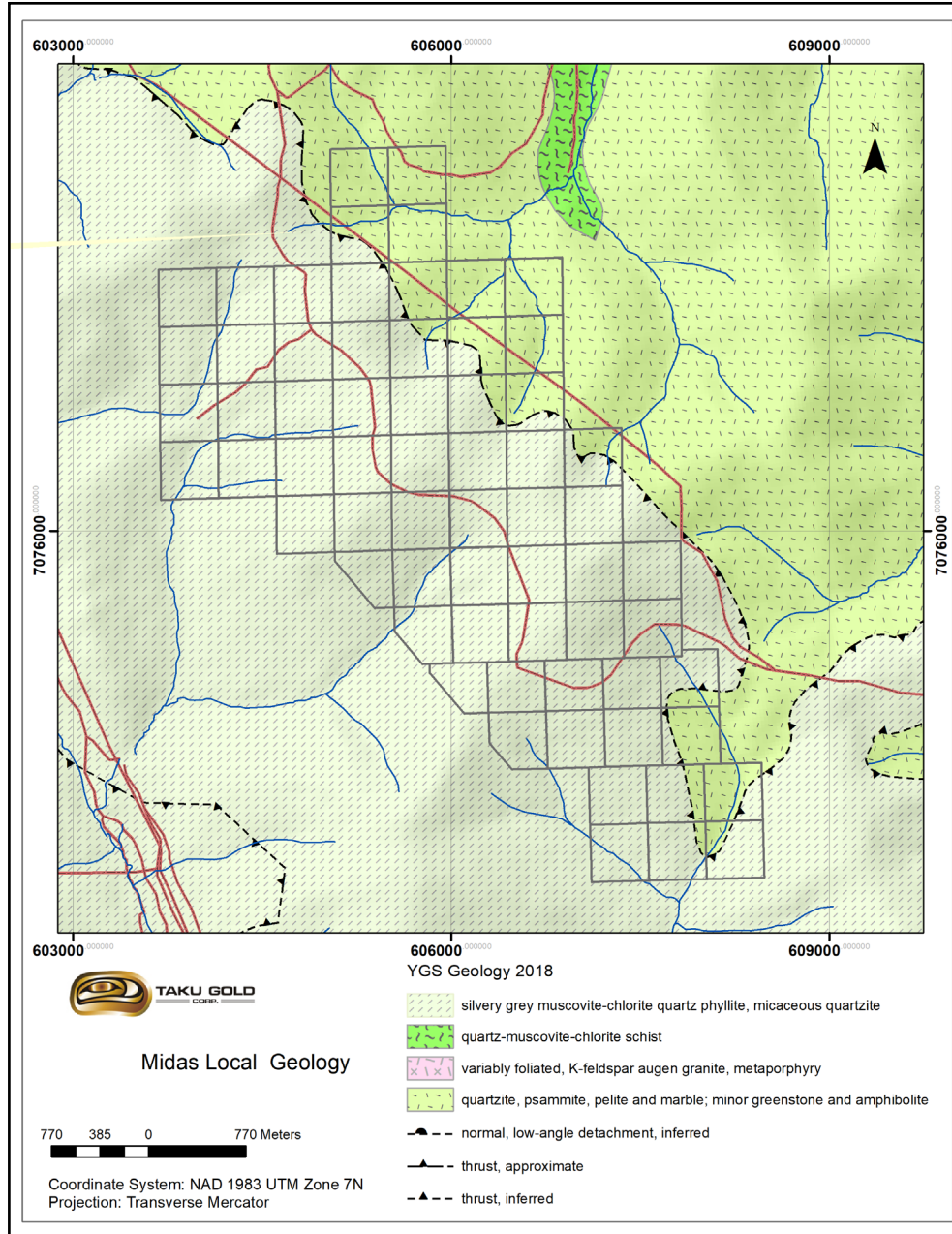


Figure 5 Local geology source Yukon Geological Survey 2018, with Midas claim outlines.

#### 4. GSC AIRBORNE DATA OPEN FILE 3992

In 2001 the GSC published the results of a multi-parameter airborne geophysical survey covering much of the area south and west of Dawson including the area of the Midas Property. Mineralized showings on the Property appear to be associated with a positive moderate northwest trending First Vertical Derivative aeromagnetic anomaly as well as a strong Thorium low as seen on Figures 6 and 7 respectively.

Although geological mapping is required to determine the cause of these anomalies and their relationship to the mineralized showings and zones, it is felt that the strong magnetic anomaly, specifically the contrast between magnetic high and low, is tracing a fault mapped in the area while the Thorium low possibly represents alteration caused by fluid flow along the fault. Ultimately strong and significant airborne geophysical anomalies are directly associated with the showings or geochemical anomalies outlined to date.



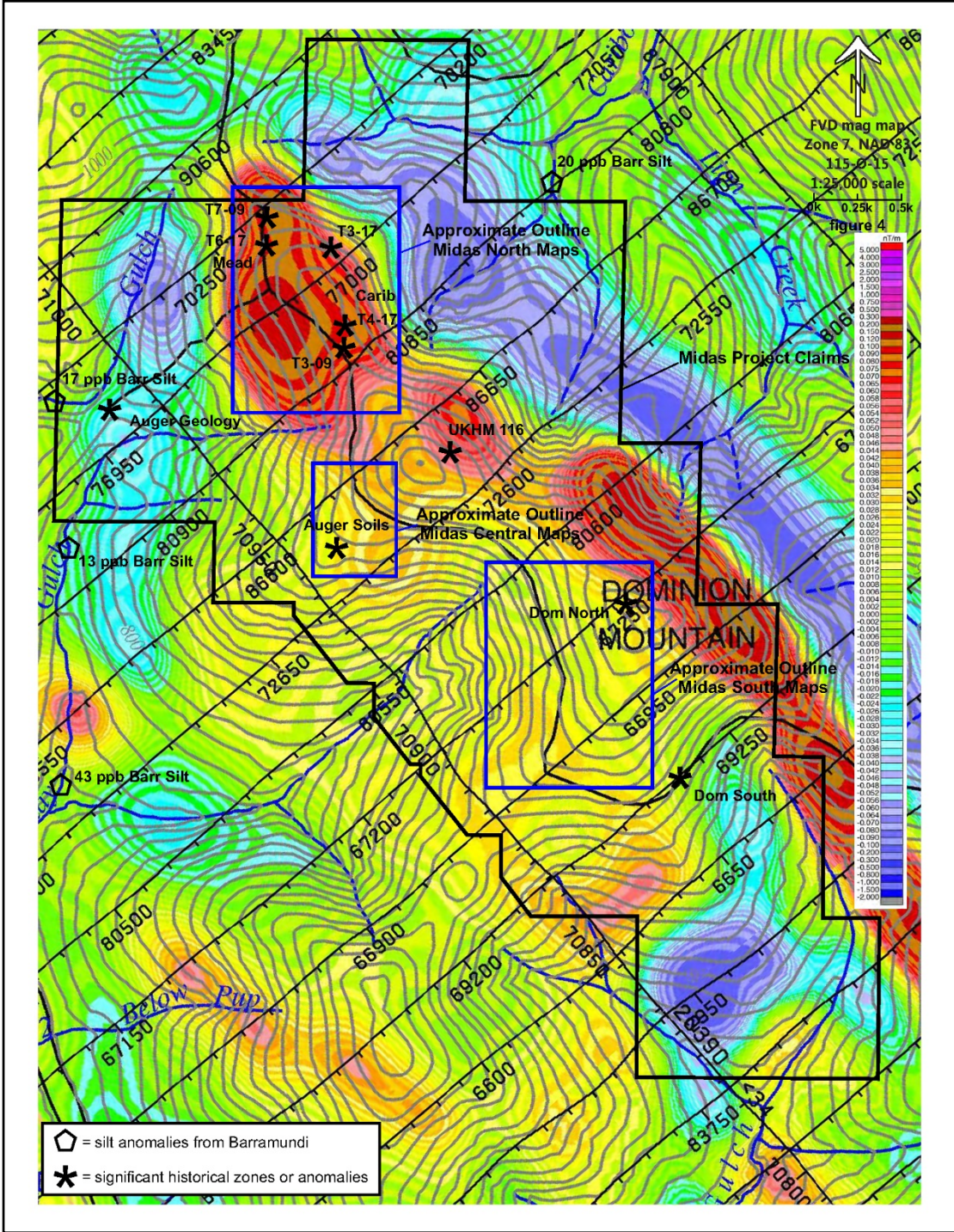


Figure 6 Midas area total magnetic source GSC, 2001



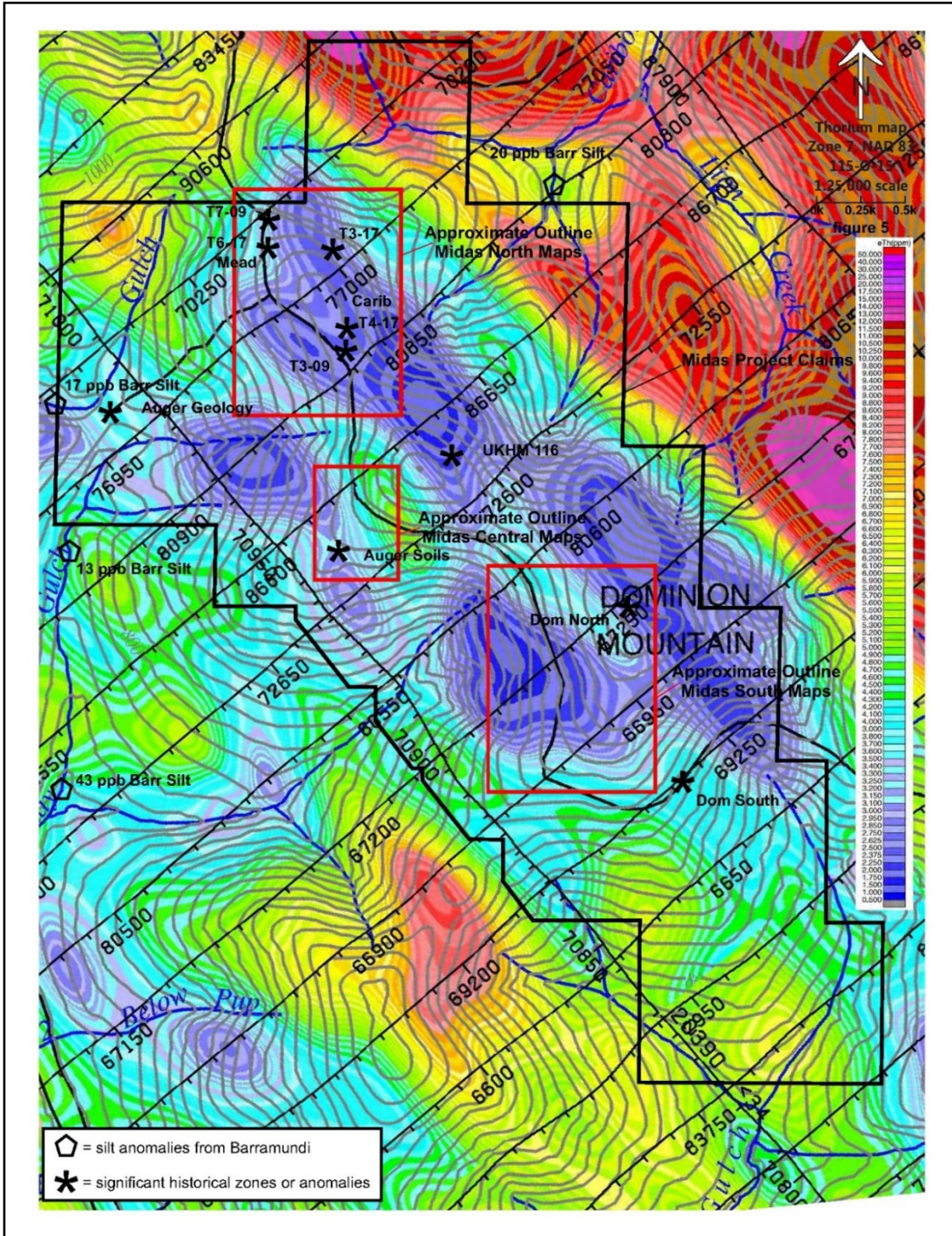


Figure 7 Midas area aeromagnetic thorium data source GSC, 2001

## 5. HISTORY AND PREVIOUS WORK

The Midas Project is bound by Dominion Creek and Sulphur Creek which are two world class placer gold

deposits. Combined, these creeks have likely yielded in excess of two million ounces of placer gold since discovery in 1896. Although gold rush era hard rock prospecting efforts are generally un-documented, numerous well overgrown hand-dug pits and trenches are scattered throughout the property and attest to this work having taken place. Short chronologically ordered summaries of assessment reports available in the public domain, as well as private data from the author's personal files are as follows:

AR092600 – United Keno Hill Mines – 1987 – UKHM staked and sampled a large claim block including the area of the Midas Project. A total of 310 soil samples were taken from a long narrow grid extending north along the ridge from Dominion Mountain to the northern property boundary. Although numerous soil anomalies of up to 603 ppb Au (Dom North) were located no follow up work appears to have been completed.

AR092791 – Auger Mining – 1989 – During 1989 Al Doherty conducted a limited soil sampling and mapping program at the headwaters of Meadow Gulch and the left fork of Friday Gulch. Trenching encountered silicified andesite dykes as well as clay altered rhyolite dykes with occasional chalcedonic veining (Auger Geology), while soil sampling of a second area returned up to 82 ppb Au (Auger Soils).

AR093711 – Barramundi Gold – 1996 – Barramundi completed a regional scale silt sampling program across an extensive claim block covering much of the Klondike. A significant coherent multi-sample gold anomaly was located in Caribou Creek, Meadow Gulch and Friday Gulch, all emanating from the Midas Project. Highly anomalous values ranging from 17-43 ppb Au (Barr Silt) were encountered with the left fork of Friday Gulch proving particularly anomalous, with these results highlighting the northwest portion of the Midas property.

Kreft YMIP 2008-006 – During 2008 the author conducted a wide-ranging regional sampling program throughout the southeast portion of the Klondike Goldfields. Significant values of up to 79 ppb Au in soil were returned from work on the south slope of Dominion Mountain (Dom South), while up to 56 ppb Au in soil was returned from work on the north slope (Dom North).

Kreft YMIP 2009-013 – During 2009 the author followed up 2008 gold soil anomalies located on Dominion Mountain as well as conducting further work throughout the remainder of the Midas Project. Work consisted of soil sampling followed by excavator trenching and rock sampling. A total of 7 trenches were excavated on soil anomalies defined by 2008 and 2009 fieldwork. Results of up to 2.38 g/t Au over 1.3m (T3-09) and 5.48 g/t Au over 0.15m (T7-09) were encountered in several broad spaced trenches.

Kreft 2010 Private Data – During 2010 the author conducted limited soil sampling designed to test for northerly strike extensions to the interval encountered in T3-09 of the 2009 program. A soil sample taken approximately 180 meters north of Trench 3 returned 450 ppb Au. Soil sampling was conducted at 25m sample spacings, and it was felt that sample intervals of as little as 12.5m may be necessary to locate zones in topographically subdued areas or areas prone to permafrost such as east and north facing slopes.

AR095976 – Kestrel Gold – 2011 – Kestrel completed a program of soil sampling covering the area of the Midas Property extending from Dominion Mountain to the northern property boundary. A total of 508 samples were taken at 50m sample spacings on lines 100m to 200m apart, with results showing only a few anomalous sites with values of from 40 to 90 ppb Au. It should be noted that the sampling was conducted in early July at which time the thaw was incomplete resulting in approximately 20% of the total samples encountering permafrost which precluded C-horizon sampling, with the majority of these samples occurring on east and north facing slopes which is where most of the gold bearing showings are now known to occur. This suggests that approximately 40% of the sample sites in the main area of interest were impacted by permafrost and possibly the reason for Kestrel's failure to reproduce historical anomalies identified by UKHM and Kreft.

Kreft 2016 Private Data – During 2016 the author conducted limited hand trenching and rock sampling in the vicinity of the 450 ppb Au soil located by 2010 fieldwork and at a 40 ppb Au soil encountered by Kestrel in 2011. No significant values were encountered at, or in the vicinity of, the 450 ppb Au sample site possibly due to overburden depths exceeding the trenching capabilities of hand tools. Work uphill of the site of a 40 ppb Au soil identified by Kestrel encountered a series of old gold-rush era pits and trenches. Samples from these workings returned up to 106.2 g/t Au and 656 g/t Ag from a 30cm wide limonitic quartz vein with traces of pyrite and galena, while samples of iron-carbonate and weakly pyritic wall rock returned up to 0.525 g/t Au.

Kreft 2017 Private Data – During 2017 the author excavated a total of 6 trenches totaling approximately 145 linear meters over the 450 ppb Au soil sample from 2010, the area of the 2016 rock sample grading 106.2 g/t Au and 656 g/t Ag and southerly strike extensions to the mineralization located in a 2009 trench that encountered 5.48 g/t Au over 0.15m.

Trenching at the 450 ppb Au soil site encountered significant gold mineralization including: a 2cm wide quartz vein with heavily iron carbonate altered selvages which returned up to 87.8 g/t Au, a grab sample of heavily iron carbonate altered and silicified wall rock which returned 50.17 g/t Au and a 0.6m x 0.6m panel sample of limonitic and weakly carbonate altered biotite quartz chlorite schist which returned 8.956 g/t Au (trench T4-17). Over-limit gold values were analyzed by the metallic screen method, with all samples reporting a significant component of coarse gold which in several cases was enough to double the values returned from a regular fire assay. Where measured, veins have a strike of 130°-310° and a near vertical dip.

Trenching at the site of the high grade 2016 rock sample encountered a 0.6m wide quartz limonite pyrite galena vein which returned 50.53 g/t Au and 1,977 g/t Ag with a 0.6m sample of adjacent wall rock returning 0.448 g/t Au (trench T3-17). Over-limit gold values were analyzed by the metallic screen method with samples reporting enough coarse gold to increase the values returned from a regular fire assay by 10%-25%. The location and orientation of known veins as well as float in the trench walls suggests the presence of at least 3 major veins and associated wall rock alteration over an approximate 16m width. Where measured veins have a strike of 135°-315° and a near vertical dip. Given that the

bedrock mineralization at the site of the 450 ppb Au soil, the high grade 2016 rock sample and the gold bearing interval in T3-2009 all strike toward each other and have the same near vertical dip, it is felt that these showings are in fact part of one continuous zone (“Carib Zone”) approximately 570 meters long open to both the north and south.

Trenching 150m on strike to the south of the 2009 trench that returned 5.48 g/t Au over 0.15m (“Mead Zone”) encountered strongly iron carbonate altered chlorite schist cut by hairline to cm-scale quartz veins and with occasional fuchsite. A 0.6m channel sample across two narrow quartz veins and adjacent altered wall rock returned 0.445 g/t Au (trench T6-17). The trench was oriented roughly parallel to the strike of the veins and subsequent trenching efforts in this area should focus on providing a better cross-cut of the veining and alteration encountered.

Kreft 2018 –

Work during the 2018 field season designed to provide detailed soil sampling and prospecting coverage of areas with known anomalies or showings to define trenching targets. A total of 29 rocks and 452 soils were gathered while sampling and prospecting with the results of this work culminating in a trenching program consisting of 19 trenches totaling 420 linear meters yielding 152 trench rock samples.

Most soil samples were taken from the C horizon except where the presence of frozen ground limited sampling to B horizon material. Soil samples were typically taken at 12.5m intervals to provide enough detail for a subsequent excavator trenching program. Prospecting rock samples were sourced from occasional bedrock exposures as well as small hand dug prospecting pits, while trench rock samples were collected from bedrock exposed by trenches. All samples were analyzed by Bureau Veritas.

2018 work concentrated in three areas: Midas North covering the Carib and Mead showings, Midas Central covering Auger Soils showing, and Midas South which consisted of a series of short prospecting and sampling traverses covering random areas along the ridge road at the south end of the property. To help calibrate soil sample values, three soil samples were taken immediately adjacent and parallel to 2017 trench T4-17 which returned numerous gold bearing rock samples to 87.8 ppm Au.

These three closely spaced “calibration” soil samples returned highly variable gold values of 0.015 ppm, 0.034 ppm and 0.469 ppm, suggesting that gold in soil values as low as 0.015 ppm may represent significant bedrock gold mineralization.

Prospecting and sampling at Midas North encountered scattered gold soil anomalies throughout the area, with a total of 24 soil sample sites grading 0.031 ppm Au (moderately anomalous) or greater. Anomalous gold in soil values show no obvious correlation with typical pathfinder elements which mimics bedrock gold mineralization which varies from areas with gold only to areas with a weak to moderate gold polymetallic (Ag-Pb-Cu-As-Sb) signature.

In 2018 13 trenches were completed at Midas North. Significant gold values were found in 9 of 13 trenches, with the bulk of anomalous values found associated with hairline to several centimeter-wide quartz veins with variably carbonatized and pyritized wall rock. A peak value of 83.5 ppm Au and 435 ppm Ag was returned from a 1.0 m channel sample over a 1.0 m wide quartz vein found in T1819. Wide zones of weakly iron-carbonate altered and pyritized schist cut by sheeted quartz lined fractures and narrow veins were found within trenches T1810, 11 and 12 with peak values of 0.153 ppm Au over 16.0m encountered by trench T1810. A silicified, weakly pyritic and heavily quartz to iron carbonate altered zone with no obvious quartz veins was encountered by trench T1816. Channel sampling of this alteration zone returned 4.0m of 0.54 ppm Au, with its similarities to the alteration adjacent to the quartz vein in trench



T1819 (83.5 ppm Au and 435 ppm Ag over 1.0m) suggesting potential for similar style quartz veins in this area.

Prospecting and sampling work at Midas Central encountered numerous gold soil anomalies throughout the area, with a total of 13 soil sample sites grading 0.031 ppm Au (moderately anomalous) or greater.

In 2018 three trenches were completed at Midas Central. A 2.2m channel sample of chlorite schist with no obvious quartz veining or alteration returned 0.242 ppm Au.

Prospecting and sampling work at Midas South focused on rubbly exposures found in the recently cleared road ditch and resulted in the identification of three areas exhibiting anomalous gold values. The northernmost area of interest consisted of a soil sample with 0.066 ppm Au in an area with iron- carbonate altered and quartz veined rubble.

The central area of interest consisted of several soil samples with up to 0.043 ppm Au and weakly carbonate altered and quartz veined chlorite schist with up to 0.222 ppm Au. The southernmost area of interest consisted of a moderate intensity gold-silver soil anomaly with values of up to 0.045 ppm Au and 1.4 ppm Ag, along with a rock sample of quartz-sericite- mariposite schist with up to 2% pyrite, the analyses of which returned 0.129 ppm Au and 4.3 ppm Ag. One trench was located at each area of interest at Midas South. The trench at the northernmost area of interest returned 0.202 ppm Au from a 2.5m channel sample of quartz chlorite schist with a weakly developed set of sheeted quartz lined fractures and adjacent weakly developed iron-carbonate alteration. The remaining two trenches failed to encounter anomalous gold values. It should be noted that all three trenches were oriented approximately north south and were located adjacent and parallel to the access road, which would make them roughly parallel to the predominant strike of mineralization and structure on the Midas property.

Table 2 Significant pre-2018 showings and anomalies

Anomaly	Reports	Best Values	Structure	Notes on Previous Work	Location
Mead	Private, 095164	5.48 g/t Au over 0.15m	N-S	Two trenches 150m apart both hit nice alteration; open ended	604843E and 7078000N
Carib (north)	Private, 095164	vein samples to 106.2 g/t Au and 1,977 g/t Ag	N-S	Limited trenching suggests zone is open ended but structural complications exist	605318E and 7077400N
Carib (south)	Private, 095164	narrow veins to 35.17 ppm Au and fe-carb alt schist to 50.17 ppm Au	N-S	Limited trenching suggests zone is open ended with values associated with a thrust fault	605312E and 7077391N
Auger Geology	092791	42 ppb Au soil	unknown	geology consisting of clay altered and chaledonic veined andesite and rhyolite	603990E and 7076871N
Auger Soils	092791	82 ppb Au soil	unknown	interesting gold in soil value	605303E and 7076120N
UKHM 116	092600	116 ppb Au soil	unknown	interesting gold in soil value	605937E and 7076706N
Dom Mt South	095164	79 ppb Au soil and 113 ppb Au rock	unknown	interesting gold in soil value and some gold in rock	607295E and 7074893N
Dom Mt North	095164, 092600	603 ppb Au soil and 113 ppb Au rock	unknown	interesting gold in soil value unexplained by trenching	606940E and 7075886N

Table 3 Significant 2018 trench results

Trench	Easting	Northing	Size LxDxW metres	Geology	Target	Best Results
T1801	604845	7077650	30 x 1.5 x 1.2	quartz chlorite schist	0.048 ppm Au limonitic soil Mead Zone area	<b>2.0m of 1.12 ppm Au</b> fe-carb alt zone with flat Qtz vein
T1804	606448	7075925	8 x 2 x 3	quartz chlorite schist	0.066 ppm Au soil	2.5m of 0.202 ppm Au fe-carb alt zone with vertical Qtz vein
T1807	605482	7076354	19 x 1.5 x 1.2	quartz chlorite schist	0.045 ppm Au soil	2.2m of 0.242 ppm Au chlorite schist with no alt or veining
T1810	605260	7077457	48 x 1.5 x 1.2	quartz chlorite schist	0.044 ppm Au soil	<b>16m of 0.153 ppm Au</b> incl numerous mm-scale Qtz vns
T1811	605220	7077444	42 x 1.5 x 1.2	chlorite schist	0.044 ppm Au soil	13m of 0.101 ppm Au incl numerous mm-scale Qtz vns
T1812	605021	7077707	17 x 1.5 x 1.2	chlorite schist	0.102 ppm Au soil	8m of 0.113 ppm Au incl numerous mm-scale Qtz vns
T1814	605224	7077755	16 x 1.5 x 1.2	sheared chlorite schist	0.06 ppm Au soil	0.5m of 0.169 ppm Au incl narrow fe-carb and Qtz frags
T1816	605354	7077767	11 x 1.5 x 1.2	fe-carb and silicic schist	0.08 ppm Au soil	<b>4m of 0.54 ppm Au</b> no obvious Qtz vns
T1817	604849	7077852	10 x 1.5 x 1.2	chlorite schist	Mead Zone alteration along road	0.3m of 0.123 ppm Au fe-carb alt frags and hairline Qv's
T1818	605210	7077824	65 x 1.8 x 1.4	quartz chlorite schist	presumed trend of 2017 Carib North veins	<b>2.5m of 0.671 ppm Au</b> fe-carb alt Qtz vein zone
T1819	605207	7077836	5 x 1.5 x 3	chlorite schist	expose 2017 vein at Carib North	<b>1m of 83.5 ppm Au</b> Qtz lim vein

## 6. 2019 WORK DONE

Work was undertaken at Midas from August 2 to August 29, 2019.

### 8.1. Soil Sampling

A total of 54 auger soil samples were collected in 2019 along eight lines. *Soil samples were collected from the C horizon where possible. If the ground was frozen material was collected from the B horizon.* Soil sample sites were marked in the field using flagging inscribed with the sample code and tied to nearby trees or brush. *For each sample 250g of soil was placed in brown Kraft sample bags and dispatched to Bureau Veritas for analyses.* Soil samples were prepped using method SS80 (sieve 100g of soil to -80 mesh) and *analyzed using FA430 (30g Au fire assay) and AQ300 (35 element ICP with 0.5g sample size).* The position of the soil samples is shown on Figure 8. Soil sample descriptions, results and locations are presented in tabular form in Appendix 1.

### 8.2. Rock Sampling

A total of eight rock chip samples were collected from the Midas property in 2019. Prospecting rock

samples were sourced from occasional bedrock exposures as well as small hand dug prospecting pits rock samples were marked in the field by flagging inscribed with the sample code wrapped to rocks representative of the material sampled.

Rock samples were analyzed by Bureau Veritas and prepped using PRP70-250 (crush 70% to 10 mesh and pulverize a 250g split). All samples were analyzed using FA430 (30g Au fire assay) and AQ300 (35 element ICP with 0.5g sample size).

Sample, sites are displayed on Figure 10. Rock chip sample descriptions, results and locations are presented in tabular form in Appendix 1.

### 8.3. Bulk Sample

A 48.5 kg bulk sample was extracted from a 2017 trench exposure of the high grade vein at the Carib North Showing. The position of the pit is shown on Figure 10. The material collected was sent to Bureau Veritas for metallurgical test-work and a report was prepared by metallurgist Michael Redfearn. The bulk sample metallurgical test work report is presented in Appendix 2.



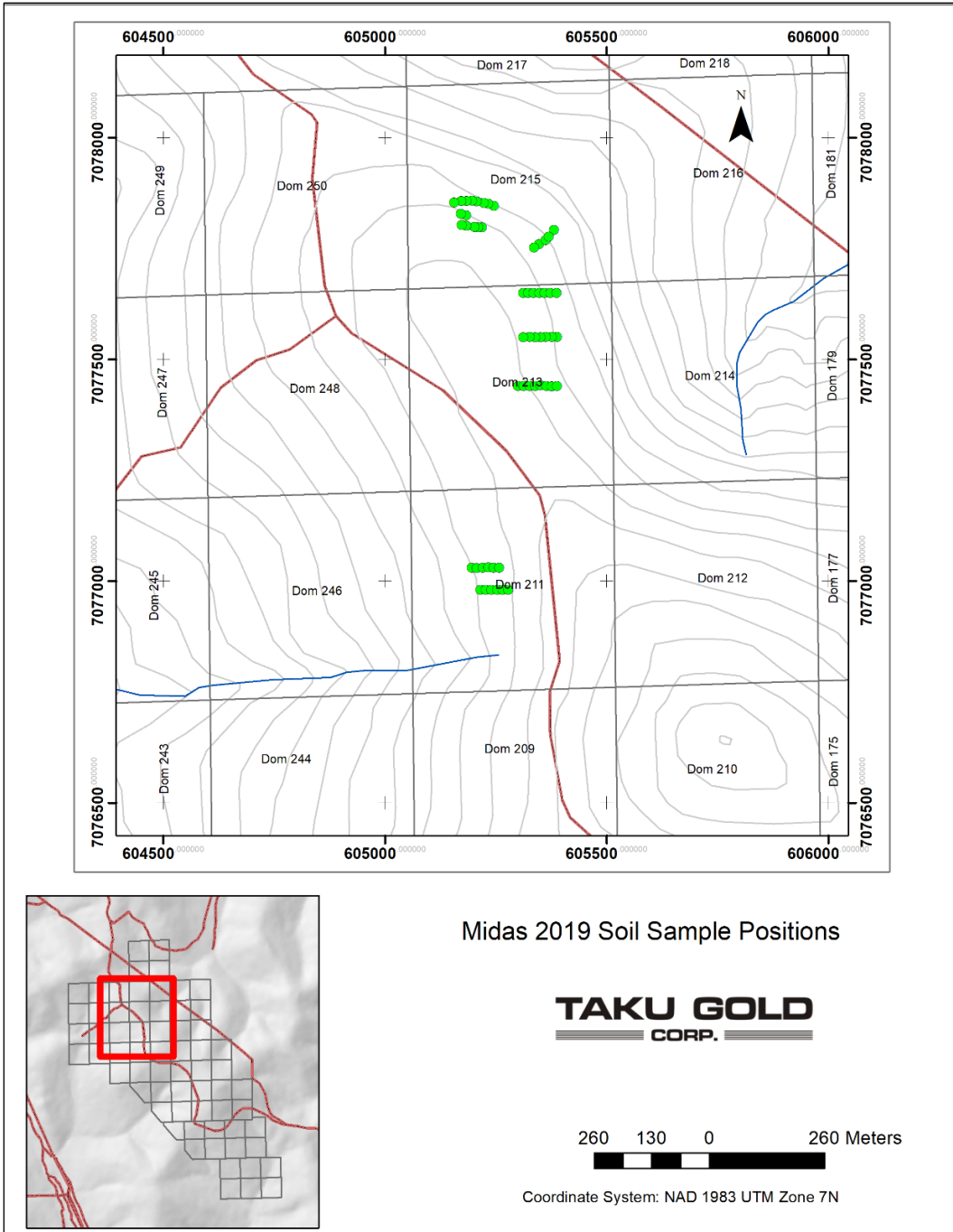


Figure 8 2019 Auger soil sample locations Midas property.

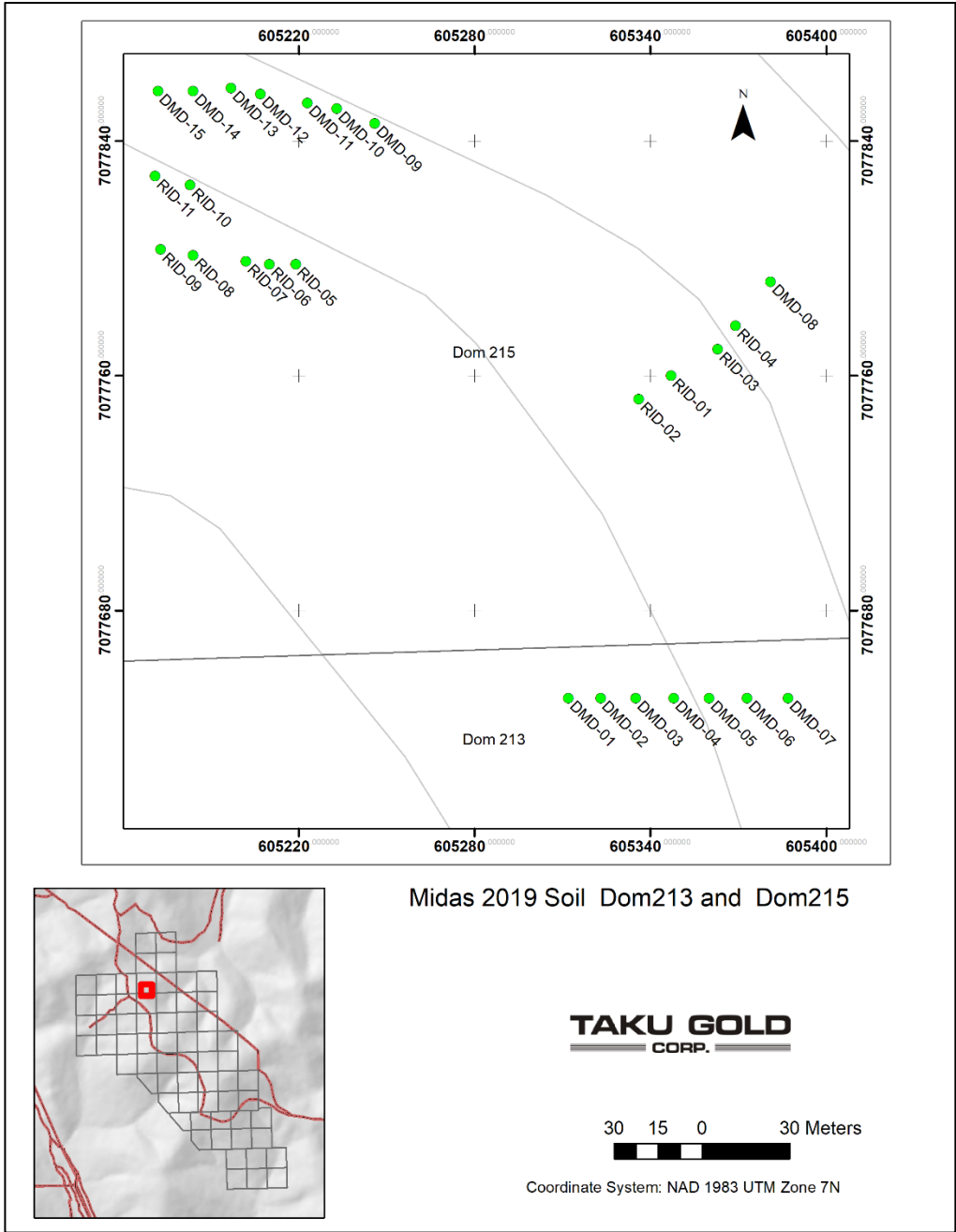


Figure 9 2019 auger soil sample locations Midas property claim blocks DOM 213 and Dom 215

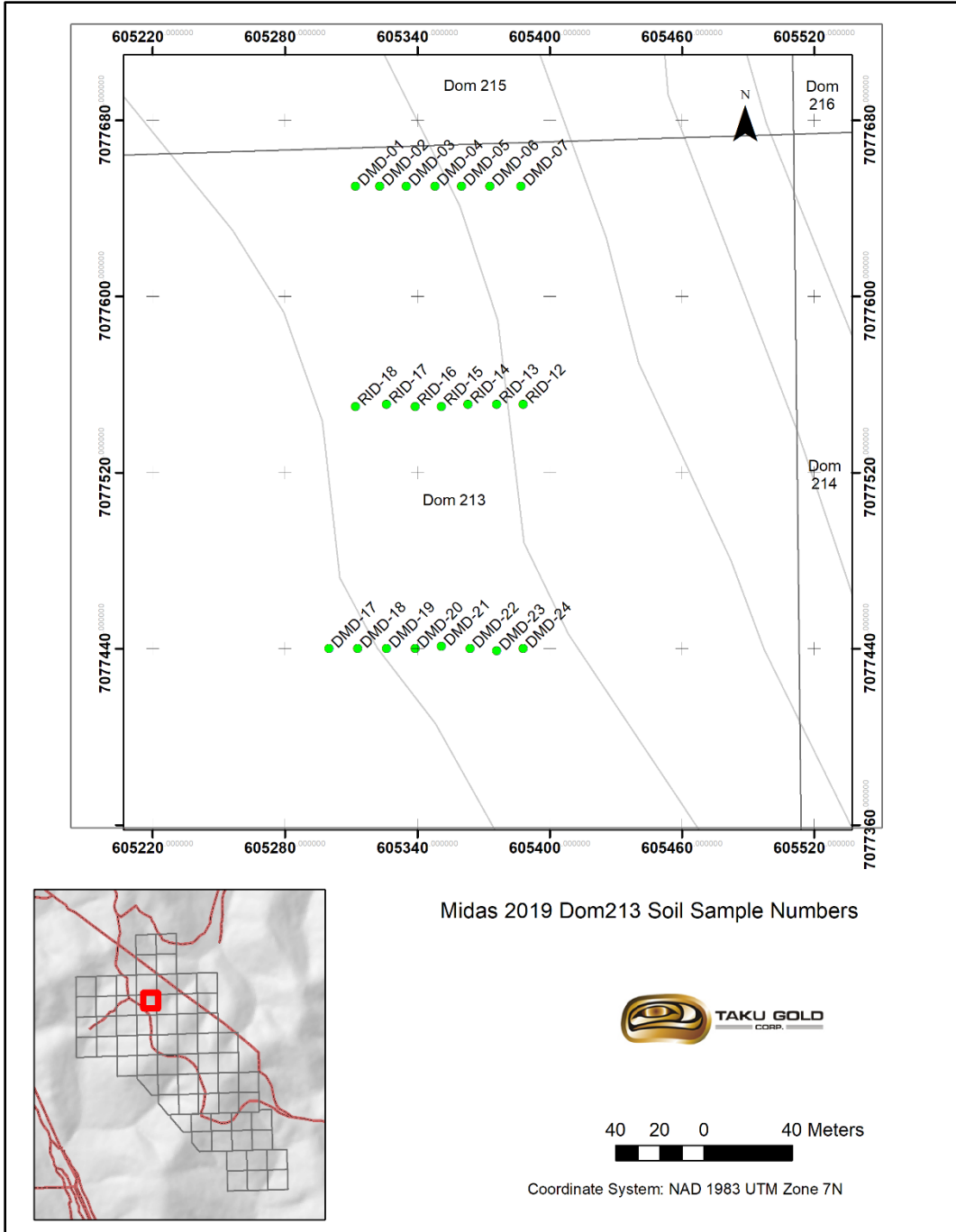


Figure 10 2019 auger soil sample locations Midas property claim blocks.

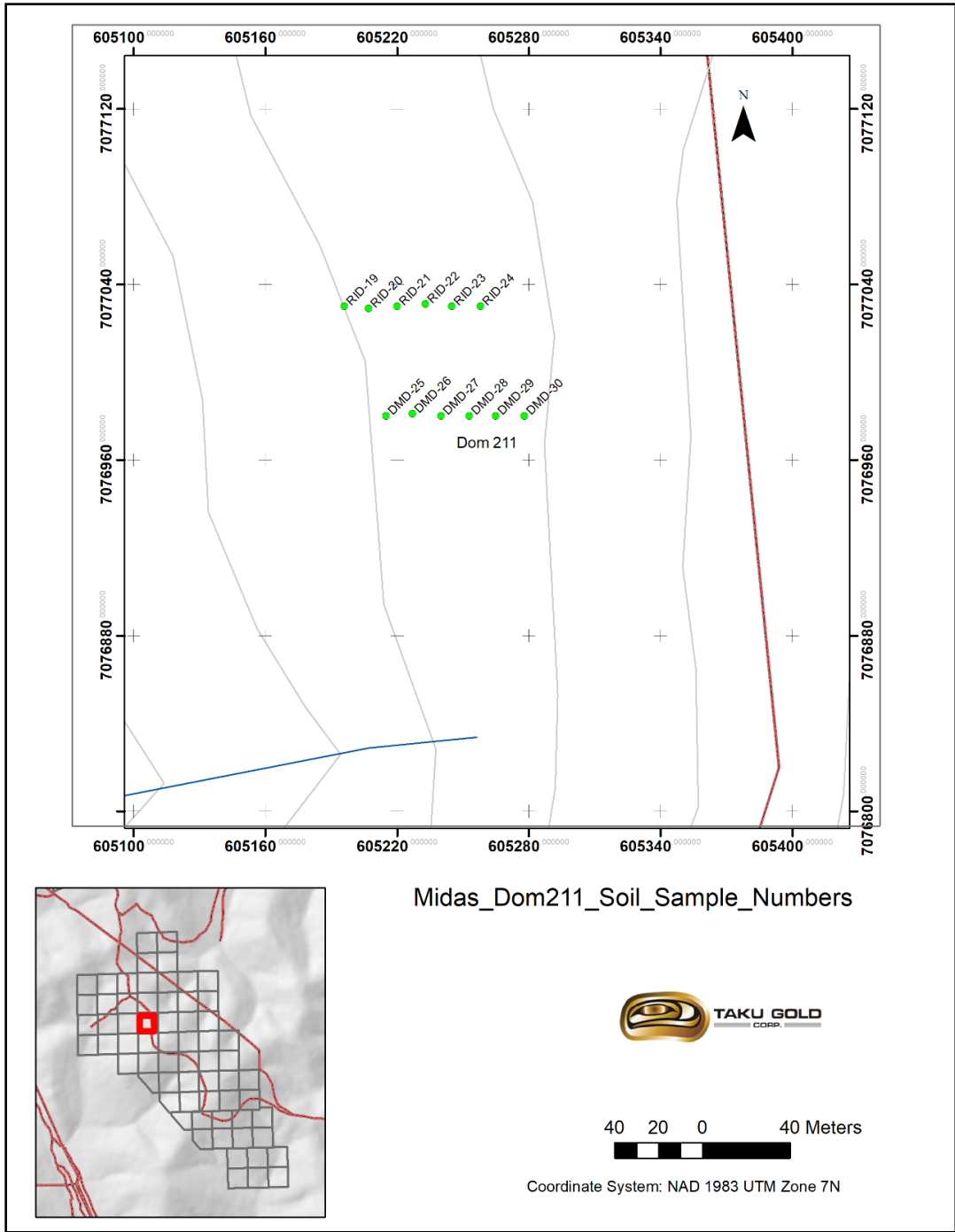
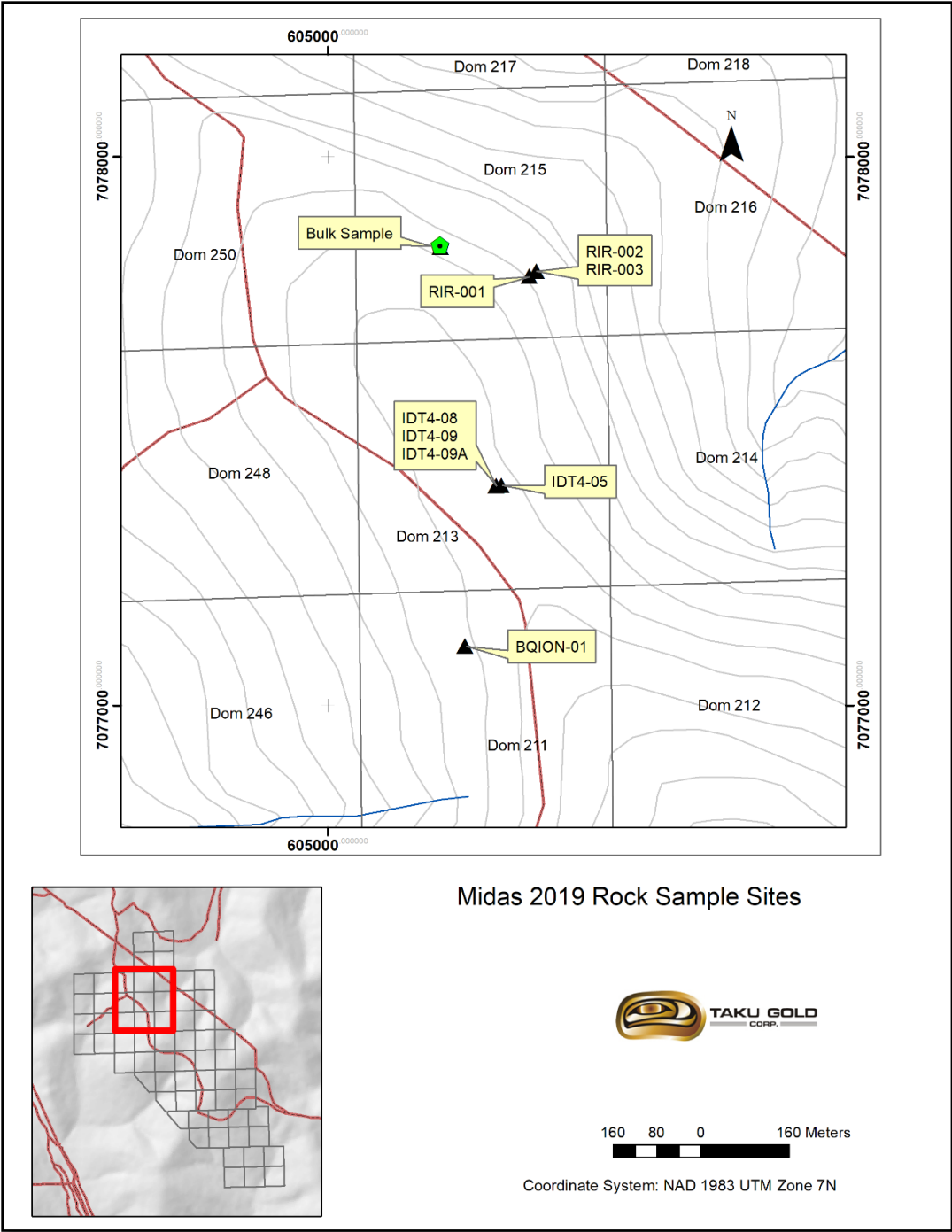


Figure 11 2019 auger soil sample locations Midas property claim blocks DOM 211



Midas 2019 Rock Sample Sites

Figure 12 2019 rock sample locations Midas property

## 7. 2019 RESULTS

### 9.1. Soil Sampling

Of the 54 soil samples collected in 2019 13 returned values greater than the mean grade of 20 ppb Au. Colour coded gold ppb assay results are mapped on Figures 13 – 16 with a compilation of historical and 2019 results in Figure 17.

Table 4 2019 Soil Sample Statistics Au ppb

<b>Statistic</b>	<b>Auppb</b>
Count	54
Minimum	9
Maximum	240
Mean	20
Mode	13

Table 5 2019 Soil Samples Best Results Au ppb

<b>Sample ID</b>	<b>ppb Au</b>	<b>East UTM NAD83 Z7N</b>	<b>North UTM NAD83 Z7N</b>
RID-03	0.224	605363	7077769
RID-22	0.076	605233	7077031
DMD-08	0.055	605381	7077792
DMD-23	0.047	605388	7077440
DMD-27	0.045	605240	7069980

### 9.2. 2019 Rock Results

Excluding the bulk sample material eight rock samples were collected from the Midas property in 2019. Significant results are presented in Table 7 and colour coded gold ppb assay results are mapped on Figures 18 – 19.

Table 6 2019 Rock Samples Best Results Au ppb

<b>Sample</b>	<b>ppm Au</b>	<b>NAD83E</b>	<b>NAD83N</b>
IDT4-05	2.453	605317	7077401
IDT4-08	0.542	605308	7077400
IDT4-09	0.718	605308	7077400
IDT4-09A	3.138	605308	7077400

### 9.3. 2019 Bulk Sample Results

48.5 kg of material was collected from a hand dug pit and sent to Bureau Veritas for metallurgical test work. A metallurgical report was prepared by metallurgist Michael Redfearn P.Eng. Mr Redfearn concluded that the testing of the bulk sample indicated the metallurgy was simple and conventional, his report is included in Appendix 2.

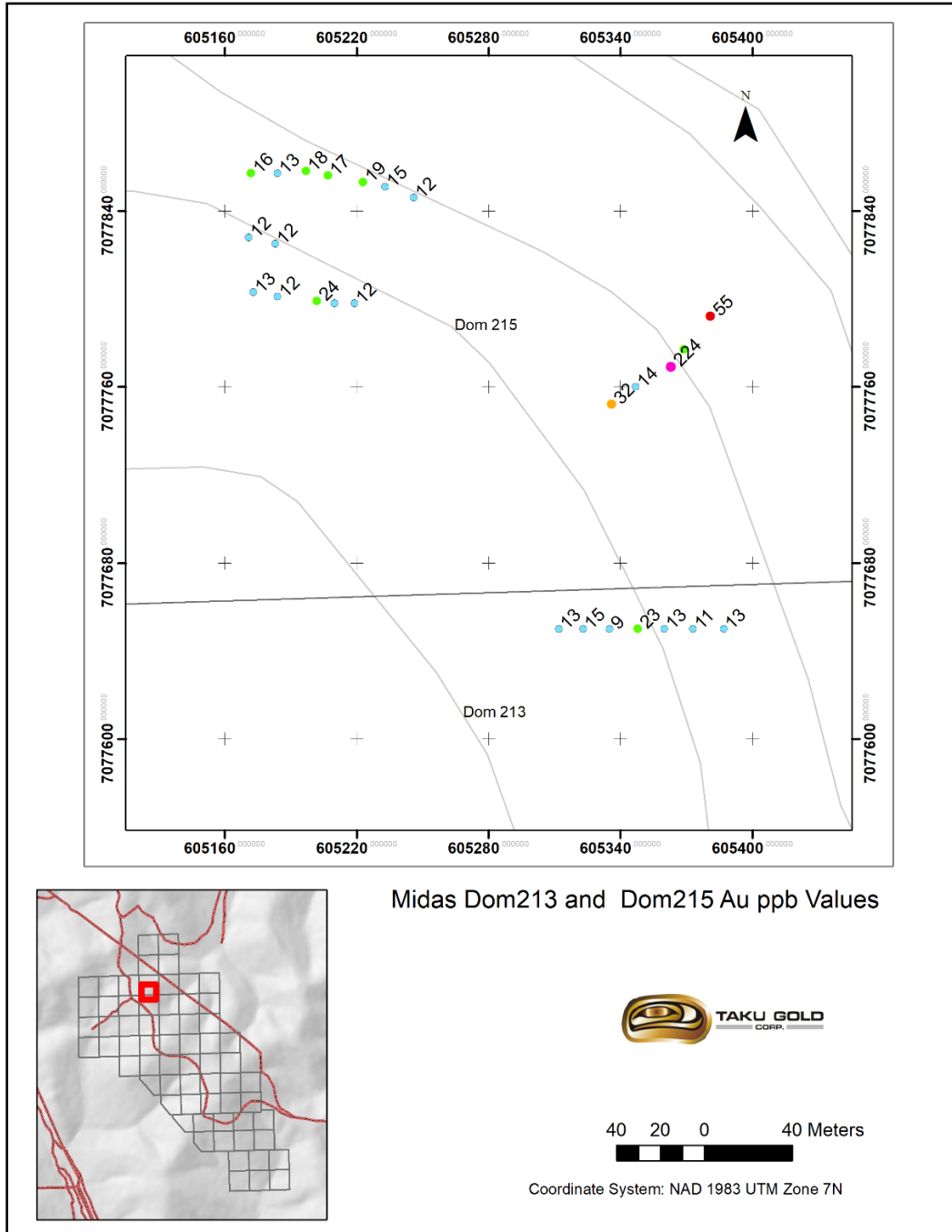


Figure 13 2019 Midas Au in soil ppb

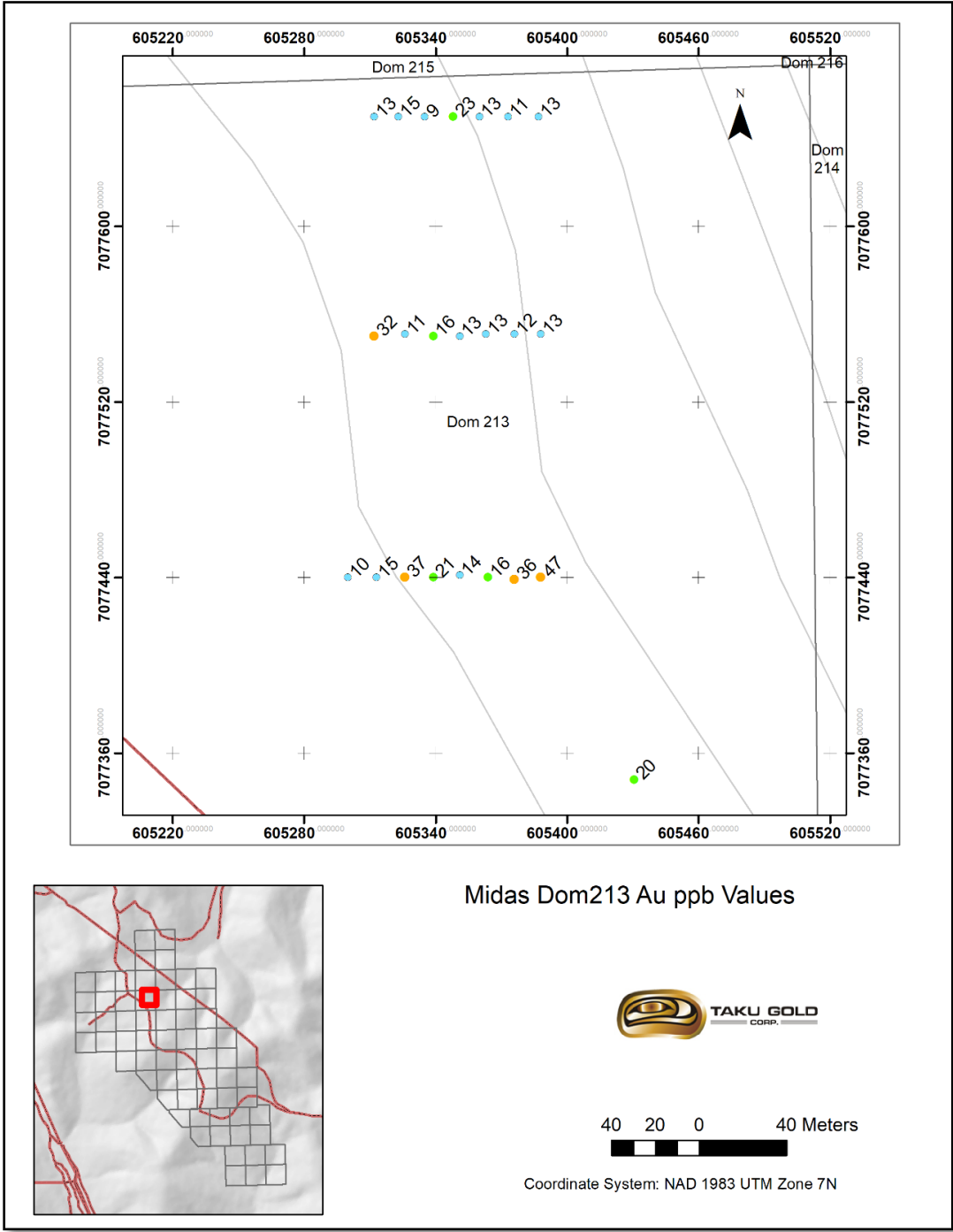


Figure 14 2019 Midas Au in soil ppb



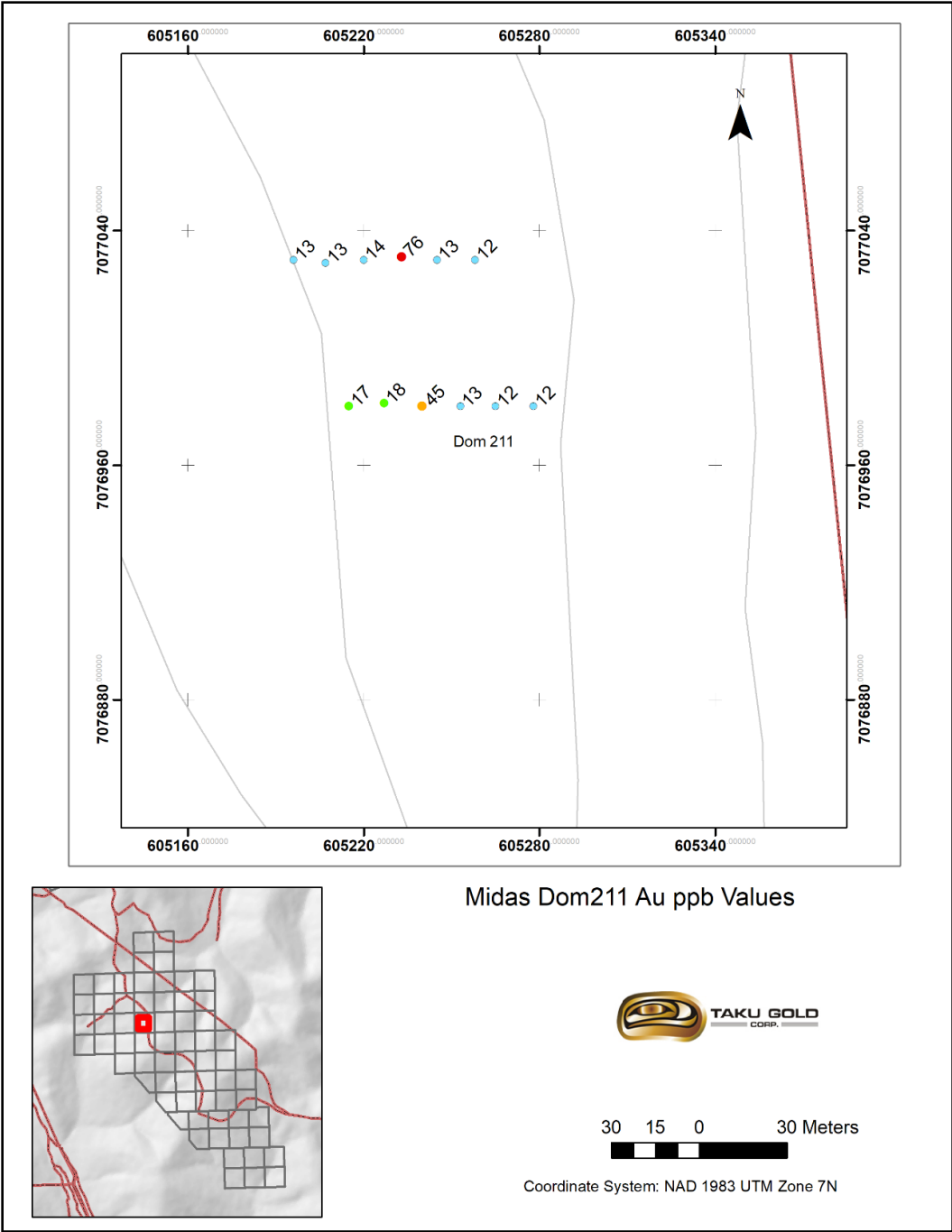


Figure 15 2019 Midas Au in soil ppb.

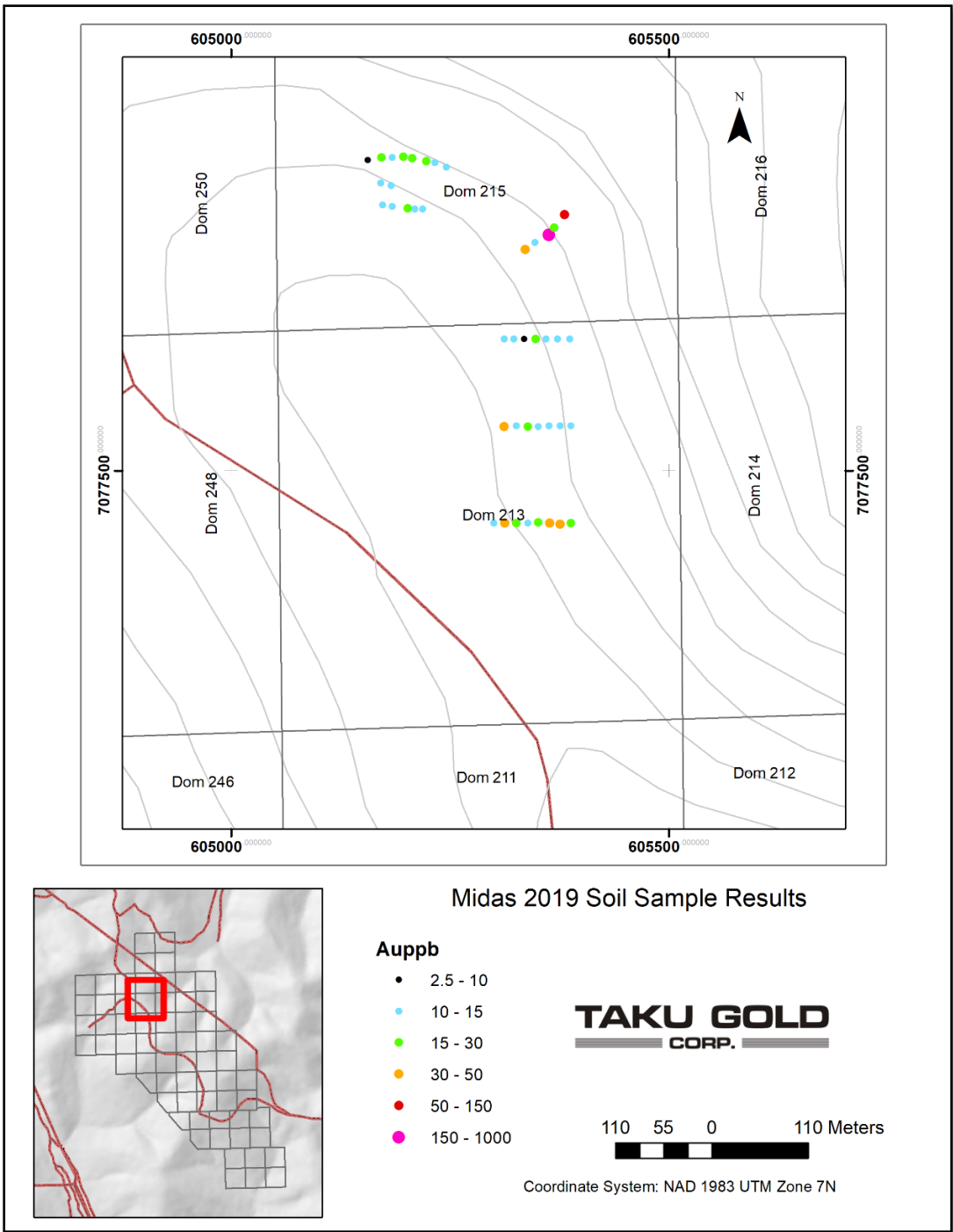


Figure 16 2019 Midas Au in soil ppb.

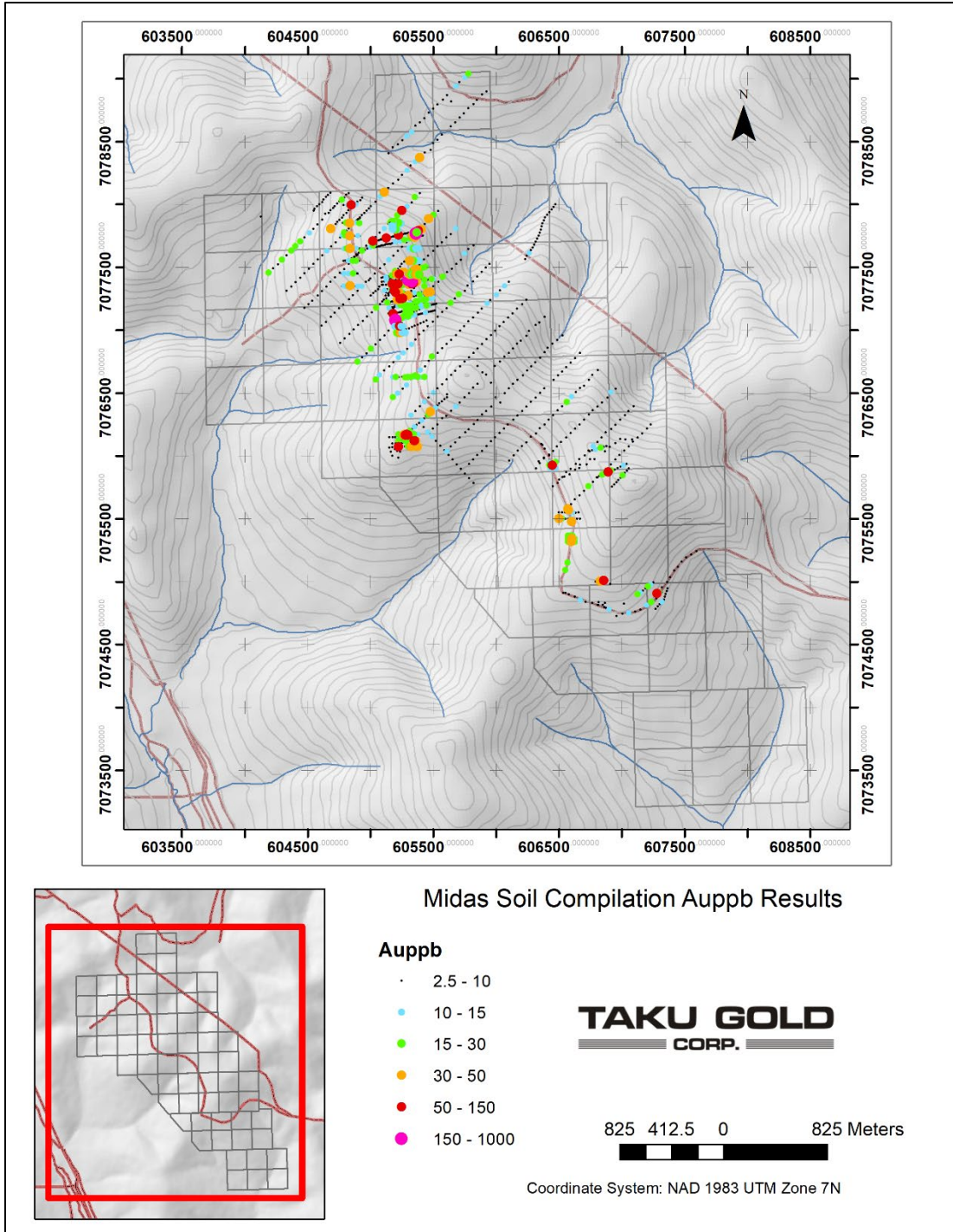


Figure 17 Midas Compilation Au in soil ppb

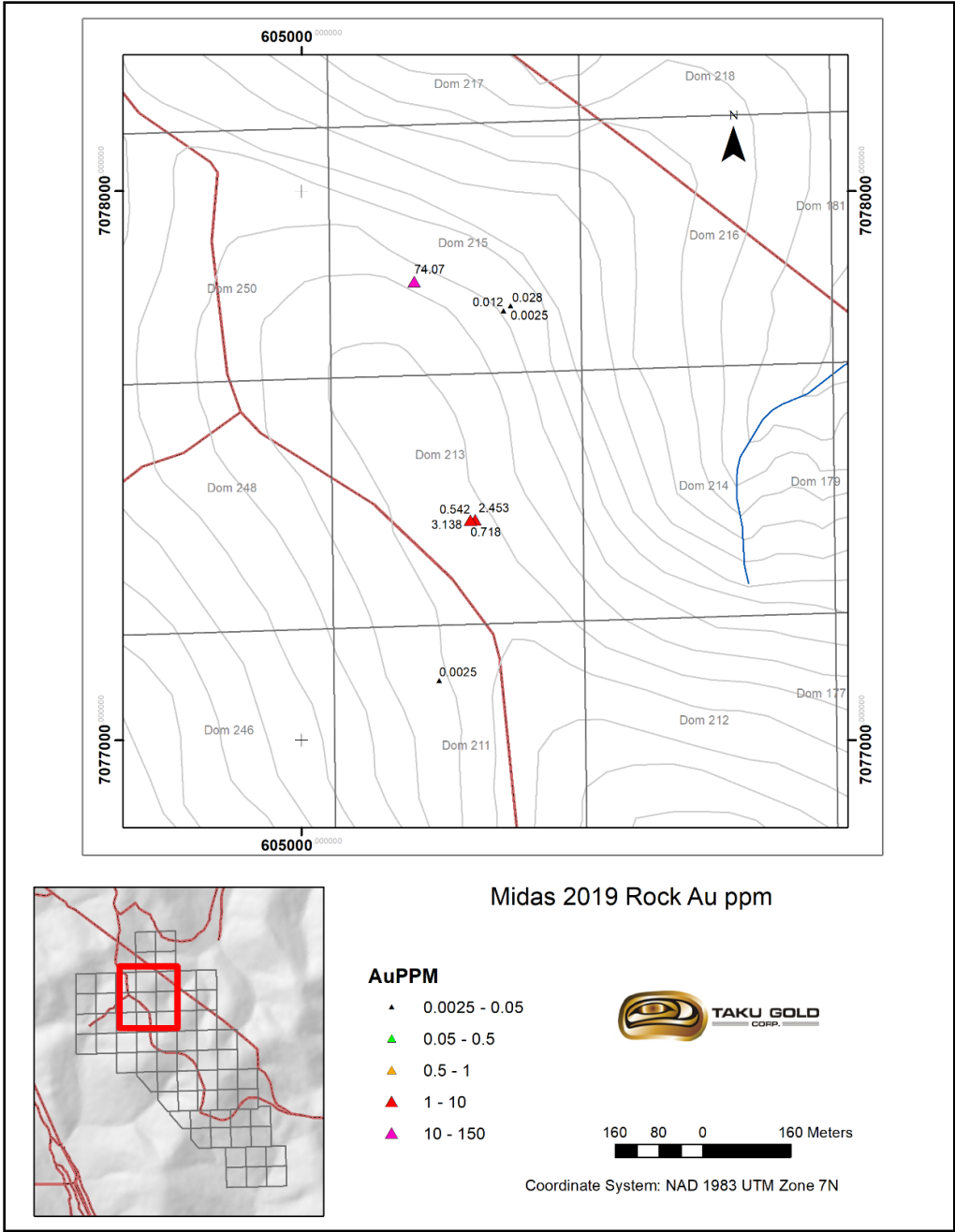


Figure 18 2019 Midas rock Au ppm

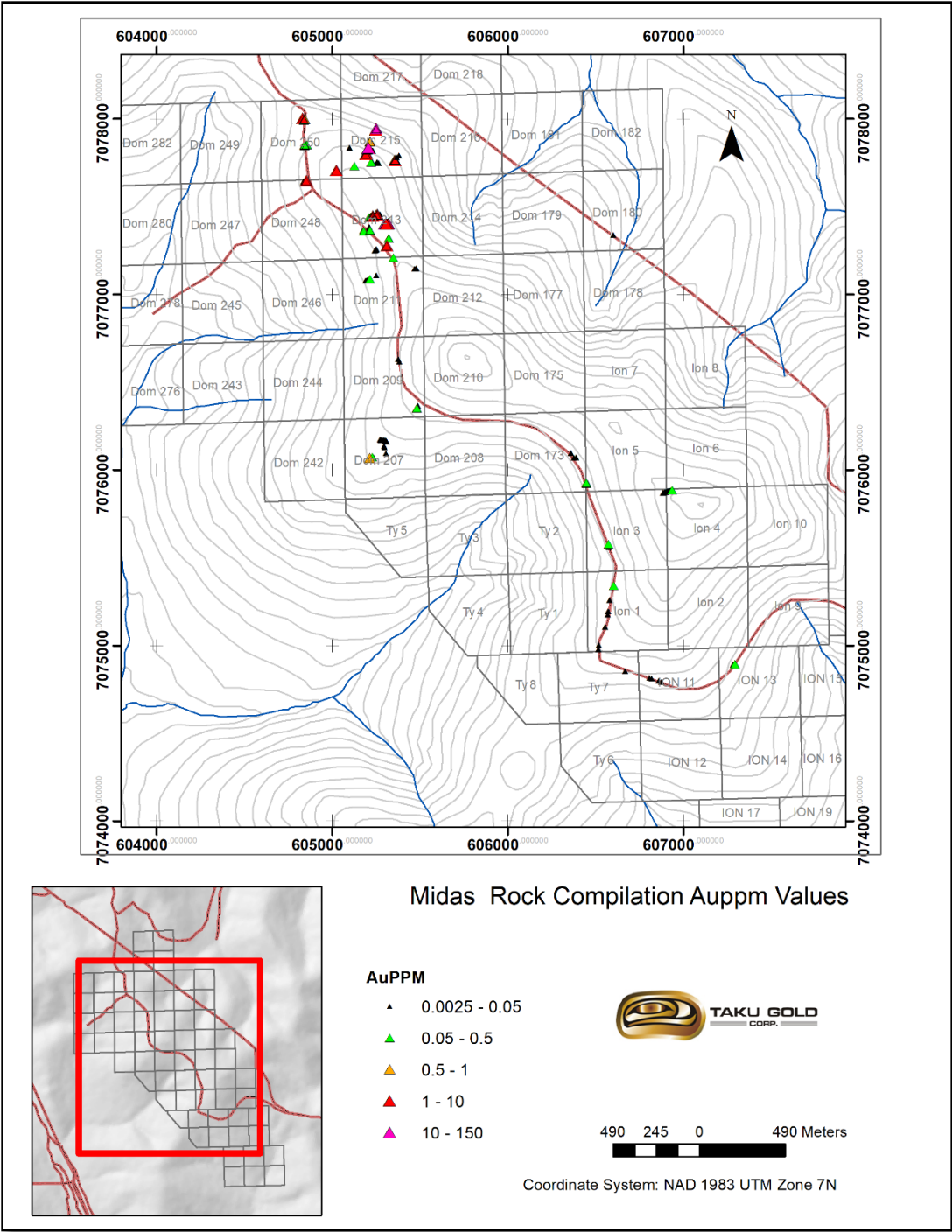


Figure 19 2019 Midas rock samples Au ppm compilation.

## 8. CONCLUSIONS AND RECOMMENDATIONS

The 2019 field program was designed to fill gaps or extend anomalies in the existing soil geochemical coverage, as well as to acquire a bulk sample of the main gold bearing quartz vein at Carib North for preliminary metallurgical test work.

Geochemical results from (C horizon) soil samples collected during the 2019 field season and previous programs suggest values as low as 0.015 to 0.020 ppm Au (15 to 20 ppb Au) may represent significant bedrock mineralization. This is apparent at Carib South where 2018 sample DID-64 (0.034 ppm Au) and DID-65 (0.015 ppm Au) were taken immediately adjacent to a 2017 trench (IDT-04) with widespread bedrock gold values up to 87.8 g/t Au and at 2019 soil samples DMD-09 to DMD-15 which yielded 0.012 to 0.019 ppm Au and which were sourced immediately downhill of the main gold bearing quartz vein at Carib North which has returned rock grab values up to 106.2 g/t Au. Individual soil sample values of 0.076 ppm Au on Dom 211, 0.047 ppm Au on Dom 213, 0.224 ppm Au on Dom 215 (T18-16 area) and moderate but potentially anomalous values of up to 0.024 ppm Au in the immediate vicinity of the gold bearing quartz vein at Carib North all remain open for expansion and require further sampling and trenching. Bulk sample results, particularly the simple metallurgy and good grade, suggest further exploration of the Carib North vein system is warranted with a view towards testing its potential for small scale mining.

A six-day program of soil sampling and prospecting is recommended to provide further definition of existing anomalies and preliminary work within untested areas of the property. An estimated 6-day excavator trenching program is recommended to follow up existing anomalous zones at Carib North and Carib South, various existing soil geochemical anomalies as well as any soil anomalies encountered by the soil sampling portion of the program. Overall cost of this soil sampling and trenching program is estimated to be \$42,500.

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Appendix 1 – Soil and Rock sample Locations and Descriptions

2019 Rock Descriptions

SAMPLE NUMBER	Easting Zone 7, NAD83	Northing Zone 7, NAD83	TYPE	DESCRIPTION	WGHT Wgt	FA430 Auppm	AQ300 Mo	AQ300 Cu	AQ300 Pb	AQ300 Zn	AQ300 Ag	AQ300 Ni	AQ300 Co	AQ300 Mn	AQ300 Fe	AQ300 As
IDT4-05	605317	7077401	grab	1-1.2 cm quartz - Fe carbonate vein with patchy fine grained green chlorite as aggregates to 1 cm, minor pyrite along vein margins	0.16	2.453	<1	14	6	20	<0.3	3	4	1060	1.33	3
IDT4-08	605308	7077400	grab	5 cm calcite - Fe carbonate altered wallrock clasts, minor pyrite along margins, hosted by Fe carbonate altered schist	1.74	0.542	<1	23	43	20	<0.3	2	4	4419	1.88	<2
IDT4-09	605308	7077400	grab	very fine grained red brown strong Fe carbonate altered cataclasite? with patchy fine grained dark green chlorite as aggregates and fine calcite stockwork 3% pyrite especially along margins, minor limonite and lesser Mn boxwork	0.36	0.718	2	7	19	130	<0.3	27	14	5167	8.38	104
IDT4-09a	605308	7077400	grab	very fine grained red brown strong Fe carbonate altered cataclasite? with soft dark rounded knots & patchy fine grained dark green chlorite as aggregates and fine calcite stockwork 3% pyrite especially along margins, minor limonite and lesser Mn boxwork	0.55	3.138	2	17	13	142	0.6	63	28	3642	10.23	150
RIR-01	605368	7077782	grab	quartz fragments from hand trench, qtz frags occur in top material of trench bottom is chlorite schist	1.1	0.012	<1	5	<3	7	<0.3	3	3	264	0.72	15
RIR-02	605381	7077791	grab	iron-carb altered schist from hand trench dug at this site	0.54	0.028	<1	91	6	70	<0.3	15	27	1061	5.65	39
RIR-03	605381	7077791	grab	quartz vein fragments from hand trench dug at this site	0.45	0.0025	<1	3	<3	2	<0.3	1	2	82	0.4	2
BQION-01	605251	7077108	grab	limonitic quartz fragments from small hand pit	0.31	0.0025	<1	7	<3	12	<0.3	5	4	163	0.86	2



## 2019 Soil Sample Descriptions

<b>Sample</b>	<b>Type</b>	<b>NAD83/E</b>	<b>NAD83/N</b>	<b>Au ppm</b>	<b>Description</b>
DMD-01	Soil	605312	7077650	0.013	Green
DMD-02	Soil	605323	7077650	0.015	Green/Brown
DMD-03	Soil	605335	7077650	0.009	Green/Brown
DMD-04	Soil	605348	7077650	0.023	Green/Brown
DMD-05	Soil	605360	7077650	0.013	Green/Brown
DMD-06	Soil	605373	7077650	0.011	Green/Brown
DMD-07	Soil	605387	7077650	0.013	Green/Brown
DMD-08	Soil	605381	7077792	0.055	Green/Brown
DMD-09	Soil	605246	7077846	0.012	Green
DMD-10	Soil	605233	7077851	0.015	Brown rocky B
DMD-11	Soil	605223	7077853	0.019	Green
DMD-12	Soil	605207	7077856	0.017	Green with rust
DMD-13	Soil	605197	7077858	0.018	Green
DMD-14	Soil	605184	7077857	0.013	Brown/Green
DMD-15	Soil	605172	7077857	0.016	Brown/Green
DMD-16	Soil	605300	7077440	0.01	Brown/Green
DMD-17	Soil	605313	7077440	0.015	Brown/Green/Rust
DMD-18	Soil	605326	7077440	0.037	Brown/Green/Rust
DMD-19	Soil	605339	7077440	0.021	Green
DMD-20	Soil	605351	7077441	0.014	Green
DMD-21	Soil	605364	7077440	0.016	Green/Brown
DMD-22	Soil	605376	7077439	0.036	Green/Brown
DMD-23	Soil	605388	7077440	0.047	Green/Brown
DMD-24	Soil	605431	7077348	0.02	Rocky/Frozen/Green B
DMD-25	Soil	605215	7069980	0.017	Brown/Green
DMD-26	Soil	605227	7069981	0.018	Brown/Green
DMD-27	Soil	605240	7069980	0.045	Brown/Green/Rust
DMD-28	Soil	605253	7069980	0.013	Brown/Green/Rust
DMD-29	Soil	605265	7069980	0.012	Brown/Green/Rust
DMD-30	Soil	605278	7069980	0.012	
RID-01	Soil	605347	7077760	0.014	c horizon with schist frags 3/4 depth of auger
RID-02	Soil	605336	7077752	0.032	c horizon with schist frags containing rusty bits 2/3 depth auger
RID-03	Soil	605363	7077769	0.224	as above
RID-04	Soil	605369	7077777	0.022	as above 3/4 auger
RID-05	Soil	605219	7077798	0.012	as per RID-04
RID-06	Soil	605210	7077798	0.012	as above poss frozen
RID-07	Soil	605202	7077799	0.024	as above
RID-08	Soil	605184	7077801	0.012	as above
RID-09	Soil	605173	7077803	0.013	as above poss qv frags
RID-10	Soil	605183	7077825	0.012	shallow b/c horizon soil 1/4 auger depth

<u>Sample</u>	<u>Type</u>	<u>NAD83/E</u>	<u>NAD83/N</u>	<u>Au ppm</u>	<u>Description</u>
RID-11	Soil	605171	7077828	0.012	shallow c horizon soil 1/2 auger depth
RID-12	Soil	605388	7077551	0.013	c horizon 2/3 auger depth
RID-13	Soil	605376	7077551	0.012	as above
RID-14	Soil	605363	7077551	0.013	c with no schist 3/4 depth
RID-15	Soil	605351	7077550	0.013	as per RID-13
RID-16	Soil	605339	7077550	0.016	as above
RID-17	Soil	605326	7077551	0.011	as per RID-14
RID-18	Soil	605312	7077550	0.032	as per RID-16
RID-19	Soil	605196	7077030	0.013	as above
RID-20	Soil	605207	7077029	0.013	
RID-21	Soil	605220	7077030	0.014	
RID-22	Soil	605233	7077031	0.076	some rust
RID-23	Soil	605245	7077030	0.013	as above
RID-24	Soil	605258	7077030	0.012	as above

10.

***Metallurgical Testing of Samples from the  
Taku Gold Corporation, Midas Project***

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Michael Redfearn, P.Eng.

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**3 APPENDICIES**

Size Analysis Data, Test Procedures, Balances, Sample Photo

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## 1. Executive Summary

### 1.1 Objective

A preliminary set of metallurgical tests were conducted on a bulk rock sample from the Taku Gold Corporation, Midas Project at the Bureau Veritas Commodities Canada Ltd., Metallurgical Division in Richmond, B.C. The objective was to observe the response of a gold-silver prospect to standard gravity, flotation and cyanidation processes. This report summarizes the finding of that study.

### 1.2 Conclusions

- i) The primary recovery stage of gravity separation recovered 53.2% of the contained gold and 5.0% of the silver at a nominal grind of P80=72 $\mu$ .
- ii) A subsequent step processing the gravity tailing by flotation recovered 94.8% Au and 83.9% Ag into a sulphide concentrate in which 80.8% of the Pb was recovered.
- iii) A parallel subsequent step processing the gravity tailing by cyanidation resulted in 95.7% Au and 73.7% Ag recovery.
- iv) Combined circuit recoveries are:
  - a) Gravity + flotation:  $53.2 + 40.7 = 93.9\%$  Au  
 $5.0 + 83.9 = 88.9\%$  Ag  
 $0 + 80.8 = 80.8\%$  Pb
  - b) Gravity + cyanidation:  $53.2 + 44.8 = 98.0\%$  Au  
 $5.0 + 70.0 = 75.0\%$  Ag  
 $0 + 0 = 0\%$  Pb
- v) A recovered metal calculation for the flotation and cyanidation circuits indicated very similar results. Close enough that further testing would be required to indicate whether one circuit or the other should be selected.
- vi) Testing of this sample indicates the metallurgy response to be simple and conventional.

### **1.3 Recommendations**

Further testing is recommended when the property advances to the next stage.



## **2. Project Details**

### **2.1 Introduction**

Bureau Veritas Commodities Canada Ltd., Metallurgical Division, was retained by Taku Gold Corporation to perform metallurgical testing on a sample from the Midas Project located 38 km south-east of Dawson City in central Yukon.

There has been no previously recorded metallurgical testing on this deposit.

Testing included the following:

- head sample analysis,
- gravity separation,
- rougher flotation conducted on the gravity circuit tailing,
- cyanidation conducted on the gravity circuit tailing.

A single shipment of rock samples of was received and prepared for testing. Details are described in 2.2.1.

## **2.2 Discussion of Results**

### **2.2.1 Samples, Composite Preparation and Head Analysis**

#### **2.2.1.1 Source of Test Samples**

The sample tested was a composite of rock samples taken across a gold-hosted quartz-limonite-pyrite-galena vein approximately 0.9 metres wide, including roughly 5 cm of wall rock on either side. A photo of the sample location is included in Appendix 1e.

#### **2.2.1.2 Sample Preparation**

One (1) shipment consisting of 5 plastic bags, as a single composite, was received September 4<sup>th</sup>, 2019 from Whitehorse. The samples consisted of broken rock with a top size of 2" from an exploration program. Total weight of the shipment was 45.8 kg.

The entire sample was crushed, mixed and riffle split into parts. One sample was split out for assay. The remainder of the composite sample was riffle split into 2 kg portions and bagged for use in the testing phase.

### 2.2.1.3 Head Analysis

A representative head sample of the composite was analysed for Au, Ag, C, S and ICP-MS. Gold and silver were analysed by fire assay followed with parting and atomic adsorption(AA) spectrophotometer analysis. Sulphur and carbon were analysed by Leco with the minor elements run on ICP-ES/MS following acid digestion. The complete analysis is listed in Tables 1 and 2.

Table 1 Elements of Prime Interest

Element	Unit	Analysis		Element	Unit	Analysis	
		Comp 1				Comp 1	
Gold	Au	g/t	74.07	C (total)	%	0.14	
Silver	Ag	g/t	564	S (total)	%	0.22	
Lead	Pb	%	2.08				

Table 2 ICP-MS Analysis

Element	Unit	Analysis		Element	Unit	Analysis	
		Comp 1				Comp 1	
Aluminum	Al	%	0.61	Nickel	Ni	ppm	6.6
Antimony	Sb	ppm	774.5	Niobium	Nb	ppm	<0.5
Arsenic	As	ppm	337	Phosphorus	P	%	<0.01
Barium	Ba	ppm	142	Potassium	K	%	0.27
Beryllium	Be	ppm	<5	Rubidium	Rb	ppm	9.8
Bismuth	Bi	ppm	<0.5	Scandium	Sc	ppm	2
Cadmium	Cd	ppm	8.4	Selenium	Se	ppm	<5
Calcium	Ca	%	0.03	Sodium	Na	%	0.02
Cerium	Ce	ppm	<5	Strontium	Sr	ppm	<5
Chromium	Cr	ppm	380	Tantalum	Ta	ppm	<0.5
Cobalt	Co	ppm	2.0	Thorium	Th	ppm	<0.5
Copper	Cu	ppm	736.6	Tin	Sn	ppm	2.3
Halfnium	Hf	ppm	<0.5	Titanium	Ti	%	0.011
Iron	Fe	%	1.87	Tungsten	W	ppm	<0.5
Lanthanum	La	ppm	<0.5	Uranium	U	ppm	<0.5
Lithium	Li	ppm	1.2	Vanadium	V	ppm	20.0
Magnesium	Mg	%	0.05	Yttrium	Y	ppm	1.2
Manganese	Mn	ppm	58	Zinc	Zn	ppm	371
Molybdenum	Mo	ppm	1.9	Zirconium	Zr	ppm	<0.5

## **2.2.2 Testing Summary**

A single set of preliminary tests were run using gravity, flotation and cyanidation recovery methods to observe initial response of the precious metals to these methods. A 4 kg head sample was ground to a nominal P80=72 $\mu$ .

The ground sample was subjected to a single pass gravity concentration in a Knelson centrifugal gravity concentrator. The Knelson concentrate was further hand panned to achieve a final gold concentrate that was assayed to extinction by fire assay. The gravity cleaner tailing from panning and the rougher tailing from the Knelson concentrator were combined and split in half for further testing. A photo of the high grade pan concentrate is included with the test result section (2.2.2.1).

The first half of the gravity tailing was subjected to a standard four stage kinetic flotation test. The evidence of sulphides in the head sample indicated the possibility of a sulphide concentrate may be beneficial to the recovery process. The flotation tests were conducted at natural pH with no lime addition due to the lack of pyrite. Standard reagents consisting of two copper collectors (potassium amyl xanthate and Aerofloat 208) along with frother (methyl isobutyl carbinol) were used in a rougher circuit in which four (4) timed concentrates were recovered to study the flotation kinetics of the various minerals. The results are discussed in section (2.2.2.2).

The second half of the gravity tailing was tested by whole-ore cyanidation using a 72 hour bottle roll test. The sample pH was maintained in the 10.5-11.0 range while the cyanidation concentration was kept at 1.0 g/L NaCN. Solution samples were taken at the 2, 6, 24, 30, 48, 54 and 72 hour point and analysed for Au/Ag. The final residue was filtered, dried and assayed for residual Au and Ag content. The results are listed in section (2.2.2.3).

### 2.2.2.1 Gravity Recovery Test

Table 3 Gravity Recovery Metallurgical Balance

		Assays		% Recovery	
		Au (g/t)	Ag (g/t)	Au	Ag
Pan Concentrate		28,152	22,999	53.2	5.0
Tailing		23.12	492.0	46.8	95.0
Calculated Feed		55.89	511.3	100.0	100.0

The gravity separation stage recovered 53.2% of the gold at the nominal grind of P80=72 $\mu$ , illustrating the sample was very amenable to a gravity process. However, only 5% of the silver was recovered, indicating it may be tied up or intimately associated with other minerals such as the sulphides. The following photo illustrates the liberated gold as seen during the panning stage.

Figure 1 Gravity Recovered Gold



### 2.2.2.2 Rougher Flotation Test

Table 4 Flotation Test Metallurgical Balance

Product	Weight		Assay				Distribution			
	(g)	(%)	Au (g/t)	Ag (g/t)	S %	Pb %	Au (%)	Ag (%)	S (%)	Pb (%)
Rougher Concentrate 1	103.3	4.8	437.07	8105	2.19	25.34	90.3	78.6	61.0	65.7
Rougher Concentrate 2	58.9	2.7	38.83	1746	0.90	10.21	4.6	9.6	14.3	15.1
<b>Rougher Concentrate 1-2</b>	<b>162.2</b>	<b>7.5</b>	<b>292.51</b>	<b>5797</b>	<b>1.72</b>	<b>19.85</b>	<b>94.8</b>	<b>88.2</b>	<b>75.3</b>	<b>80.8</b>
Final Tails	1,930.9	89.2	0.76	34	0.03	0.24	2.9	6.2	15.6	11.8
<b>Calculated Head (Gravity Circuit Tails)</b>	<b>2,164.5</b>	<b>100.0</b>	<b>23.12</b>	<b>492</b>	<b>0.17</b>	<b>1.84</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The flotation test consisted of four timed stages. However, only the rougher concentrate from stages 1 and 2 are shown here as indicative of a standard mill process. The concentrate from stages 3 and 4 would normally be recycled within the flotation circuit and would not be used in the calculation. Flotation recovered 94.8% of the gold and 88.2% of the silver, along with 80.8% of the lead into a standard lead sulphide concentrate.

### 2.2.2.3 Cyanidation Test

Table 5 Cyanidation Test Metallurgical Balance

	Time (hours)	Assays		% Recovery	
		Au (g/t)	Ag (g/t)	Au	Ag
Solution	2			81.3	55.8
	6			95.7	73.7
Residue		0.15	73.5	4.3	26.3
Feed (Gravity Circuit Tails)		23.12	492.0		

The second half of the tailing from the gravity separation test was run through a standard whole-ore cyanidation test. The test was conducted over a 72 hour period with 7 sets of solution samples taken throughout. At the end of 72 hours, 99.4% of the gold and 84.7% of the silver had been dissolved. However, for metallurgical comparison purposes, the results after 6 hours have been used as an optimum point on the time/recovery curve. At that point recovery was 95.7% Au and 73.7% Ag.

## 2.2.2.4 Flotation Concentrate Analysis

The combined concentrate from the first two rougher flotation stages was analyzed for both the major and minor elements. Results indicate this product could probably be upgraded to a saleable lead concentrate containing good precious metal values.

Table 6 Flotation Concentrate Major Elements

Element		Analysis		Element	Unit	Analysis
Gold	Au	292.5 g/t	9.40 oz/t	Lead	Pb	%
Silver	Ag	5797 g/t	186.4 oz/t	Copper	Cu	%
				Iron	Fe	%
				Sulphur	S	%
						19.9
						0.58
						13.1
						1.72

Table 7 Concentrate Minor Element Analysis

Element		Unit	Analysis	Element		Unit	Analysis
			Concentrate				Concentrate
Aluminum	Al	ppm	12094	Manganese	Mn	ppm	698
Antimony	Sb	ppm	8885	Molybdenum	Mo	ppm	136
Arsenic	As	ppm	2942	Nickel	Ni	ppm	3398
Bismuth	Bi	ppm	<10	Phosphorus	P	ppm	394
Cadmium	Cd	ppm	60	Potassium	K	ppm	5541
Calcium	Ca	ppm	995	Sodium	Na	ppm	324
Chromium	Cr	ppm	6849	Strontium	Sr	ppm	18
Cobalt	Co	ppm	66	Tungsten	W	ppm	9.5
Magnesium	Mg	ppm	983	Zinc	Zn	ppm	2077



### 2.2.2.5 Metal Recovery Valuation

A calculation was performed to better understand the value of metals recovered in each of the three circuits. Metal values\* and the currency conversion factor were taken from the Kitco website October 17, 2019 as: gold US\$1492/oz, silver US\$17.56/oz, lead US\$0.994/lb, US\$ to CDN\$ at 1.3135. The recoveries were calculated for each circuit individually to determine initial circuit comparisons with respect to combined metals. The feed grade to the flotation and cyanidation circuits were calculated as the gravity circuit tailing and are considered identical as that sample was split in half for the second stage of testing.

A flotation concentrate will allow for the recovery of lead, not possible by gravity or cyanidation, indicating as much as 15% of the silver may be contained within the galena. Although this circuit contains slightly more recovered metal value than that by cyanidation, much more testing would be required to confirm which of the two methods is superior.

Table 8 Recovered Metal Valuation

Metal	Metal Price * \$ CDN	Sample Feed Grade oz / %	Contained Units oz / lbs	Recovery by Gravity	Gravity Circuit Recovery Value \$CDN
Au Ag	1960 /oz	61.95	1.99	53.2	2076.86
Pb	23.06 /oz	529	17.01	4.9	19.22
	1.31 /lb	1.96	43.20	0	0
<b>Total Gravity Circuit Recovered Value</b>					<b>2096.08</b>
Metal	Metal Price * \$ CDN	Sample Feed Grade oz / %	Contained Units oz / lbs	Recovery by Flotation	Flotation Circuit Recovery Value \$CDN
Au Ag	1960 /oz	23.12	0.74	94.8	1381.18
Pb	23.06 /oz	492	15.82	88.2	321.73
	1.31 /lb	1.96	43.20	80.8	45.72
<b>Total Flotation Circuit Recovered Value</b>					<b>1748.63</b>
Metal	Metal Price * \$ CDN	Sample Feed Grade oz / %	Contained Units oz / lbs	Recovery by Cyanidation	Cyanidation Circuit Recovery Value \$CDN
Au Ag	1960 /oz	23.12	0.74	95.7	1394.29
Pb	23.06 /oz	492	15.82	73.7	268.84
	1.31 /lb	1.96	43.20	0	0
<b>Total Cyanidation Circuit Recovered Value</b>					<b>1663.13</b>

### **2.3 Summary, Conclusions and Recommendations**

The preliminary metallurgical program conducted produced positive results, and helped established baseline parameters for future testing with no abnormalities or significant problems encountered.

Testing of this sample indicates the metallurgy response to be simple and conventional.

Further testing is recommended when the property advances to the next stage.

**Metallurgical Testing of Samples from the Taku Gold Corporation, Midas Project**

**APPENDIX**

**TESTING DATA and BALANCES**

<b>Appendix</b>	<b>Data</b>
1a	Sample Grind Size Analysis
1b	Gravity Separation and Flotation Procedure
1c	Gravity Separation and Flotation Metallurgical Balance
1d	Cyanidation Procedure and Balance
1e	Metallurgical Sample Location

## Appendix 1a Sample Grind Size Analysis

### SIZE ANALYSIS REPORT



**Client:** Bernie Kreft

**Date:** 02-Oct-19

**Test:** GF1

**Project:** 1901909

**Sample:** Composite

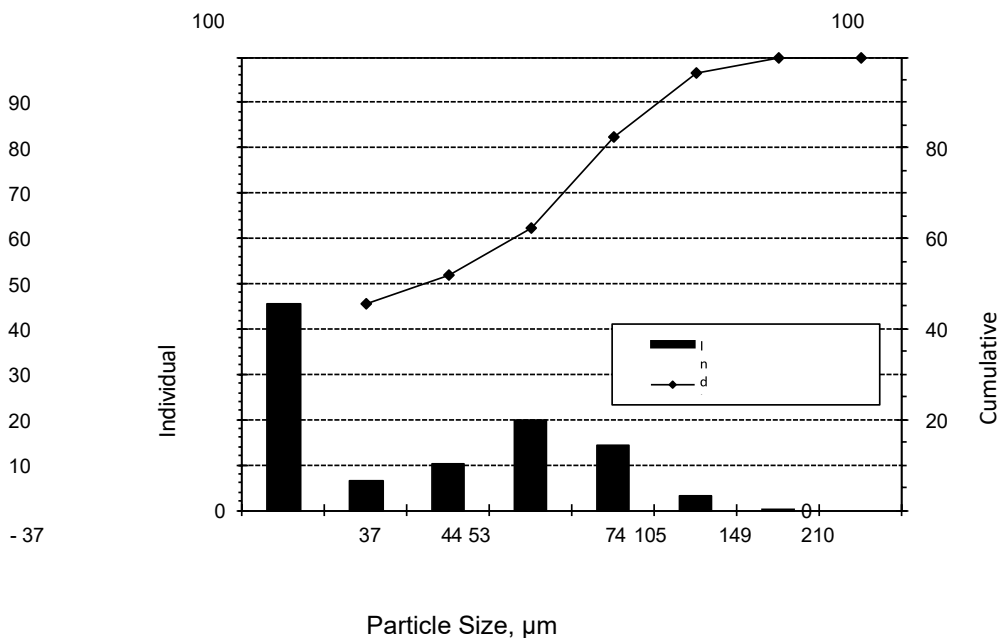
**Grind:** 2 kg sample ground for 35 minutes @65% solids in stainless steel Mill #3

Sieve Size		Individual	Cumulative
Tyler Mesh	Micrometers	% Retained	% Passing
65	210	0.0	100.0
100	149	0.1	99.9
150	105	3.3	96.6
200	74	14.4	82.2
270	53	19.9	62.3
325	44	10.4	51.9
400	37	6.5	45.5
Undersize	- 37	45.5	-
<b>TOTAL:</b>		100.0	

**80 % Passing Size ( $\mu\text{m}$ ) =**

**72**

**Size Distribution**



# Appendix 1b Gravity Separation and Flotation Procedure


## GRAVITY + FLOTATION TEST PROCEDURE



Client: Bernie Krefit  
 Test: GF1  
 Sample: Composite

Date: 02-Oct-19  
 Project: 1901909  
 Operator: LC

**Objective:** Baseline gravity+flotation to evaluate the sample's response to gravity+flotation process

Stage	Reagent (g/t)				Time, minutes			pH	Comments
	Lime	PAX	A208	MIBC	Grind	Cond.	Float		
<b>Grind ( 2 x 2 kg)</b>					35.0				natural pH 6.3
<b>Knelson 1 stage Gravity</b>									clean by hand pan; assay pan conc to extinction
<b>ROUGHER FLOTATION on ~2kg combined Knelson and Pan tail</b>									
Condition 1		80	40			1			pH 7-8
Rougher Float 1				6			6.0	7.0	Ro 1 brownish froth appearance, picture
Condition 2		50	20			1			
Rougher Float 2				5			5.0	7.1	
Condition 3		30	20			1			
Rougher Float 3				3			5.0	7.2	
Condition 4		20	5			1			
Rougher Float 4				0			5.0	7.3	no visible mineralization
<b>TOTAL REAGENTS ADDITION</b>	<b>0</b>	<b>180</b>	<b>85</b>	<b>14</b>					

Flotation Stage	C e l l S i z e	RPM	Air Rate,L/min
			Final Tail

Water Source& temp. = Municipal Potable 15 °C

Float Unit # #2

Appendix 1c

Gravity Separation and Flotation Metallurgical Balance

GRAVITY + FLOTATION TEST METALLURGICAL BALANCE										
Client: Bernie Kreft							Date: 02-Oct-19			
Test: GF1							Project: 1901909			
Sample: Composite							Operator: LC			
Objective: Baseline gravity+flotation to evaluate the sample's response to gravity+flotation process										
Overall balance (Gravity + Flotation)										
Product	Weight		Assay				Distribution			
	(g)	(%)	Au (g/t)	Ag (g/t)	S (%)	Pb (%)	Au (%)	Ag (%)	S (%)	Pb (%)
<u>Gravity Separation</u>										
Pan Concentrate	2.37	0.11	28152	22999			57.1	4.9		
<u>Flotation on Gravity Tail +Pan Tail</u>										
Rougher Concentrate 1	103.3	4.8	437.07	8105	2.19	25.34	38.7	74.8	61.0	65.7
Rougher Concentrate 2	58.9	2.7	38.83	1746	0.90	10.21	2.0	9.2	14.3	15.1
<b>Rougher Concentrate 1-2</b>	<b>162.2</b>	<b>7.5</b>	<b>292.51</b>	<b>5797</b>	<b>1.72</b>	<b>19.85</b>	<b>40.7</b>	<b>83.9</b>	<b>75.3</b>	<b>80.8</b>
Rougher Concentrate 3	32.7	1.5	19.89	1207	0.67	6.50	0.6	3.5	5.9	5.3
<b>Rougher Concentrate 1-3</b>	<b>194.9</b>	<b>9.0</b>	<b>246.83</b>	<b>5028</b>	<b>1.55</b>	<b>17.61</b>	<b>41.2</b>	<b>87.5</b>	<b>81.2</b>	<b>86.1</b>
Rougher Concentrate 4	38.8	1.8	12.41	527	0.30	2.37	0.4	1.8	3.1	2.3
<b>Total Flotation Concentrate</b>	<b>233.6</b>	<b>10.8</b>	<b>207.95</b>	<b>4281</b>	<b>1.34</b>	<b>15.08</b>	<b>41.6</b>	<b>89.3</b>	<b>84.4</b>	<b>88.4</b>
<b>Gravity+Flotation</b>	<b>236.0</b>	<b>10.9</b>	<b>488.28</b>	<b>4469</b>	<b>1.33</b>	<b>14.93</b>	<b>98.7</b>	<b>94.1</b>	<b>84.4</b>	<b>88.4</b>
Final Tails	1,930.9	89.1	0.76	34	0.03	0.24	1.3	5.9	15.6	11.6
<b>Calculated Head</b>	<b>2,166.9</b>	<b>100.0</b>	<b>53.85</b>	<b>517</b>	<b>0.17</b>	<b>1.84</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Measured Head			74.02	564	0.22	2.08				
Flotation balance										
Product	Weight		Assay				Distribution			
	(g)	(%)	Au (g/t)	Ag (g/t)	S (%)	Pb (%)	Au (%)	Ag (%)	S (%)	Pb (%)
Rougher Concentrate 1	103.3	4.8	437.07	8105	2.19	25.34	90.3	78.6	61.0	65.7
Rougher Concentrate 2	58.9	2.7	38.83	1746	0.90	10.21	4.6	9.6	14.3	15.1
<b>Rougher Concentrate 1-2</b>	<b>162.2</b>	<b>7.5</b>	<b>292.51</b>	<b>5797</b>	<b>1.72</b>	<b>19.85</b>	<b>94.8</b>	<b>88.2</b>	<b>75.3</b>	<b>80.8</b>
Rougher Concentrate 3	32.7	1.5	19.89	1207	0.67	6.50	1.3	3.7	5.9	5.3
<b>Rougher Concentrate 1-3</b>	<b>194.9</b>	<b>9.0</b>	<b>246.83</b>	<b>5028</b>	<b>1.55</b>	<b>17.61</b>	<b>96.1</b>	<b>91.9</b>	<b>81.2</b>	<b>86.1</b>
Rougher Concentrate 4	38.8	1.8	12.41	527	0.30	2.37	1.0	1.9	3.1	2.3
<b>Total Flotation Concentrate</b>	<b>233.6</b>	<b>10.8</b>	<b>207.95</b>	<b>4281</b>	<b>1.34</b>	<b>15.08</b>	<b>97.1</b>	<b>93.8</b>	<b>84.4</b>	<b>88.4</b>
Final Tails	1,930.9	89.2	0.76	34	0.03	0.24	2.9	6.2	15.6	11.6
<b>Calculated Head</b>	<b>2,164.5</b>	<b>100.0</b>	<b>23.12</b>	<b>492</b>	<b>0.17</b>	<b>1.84</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Measured Head										

# Appendix 1d Cyanidation Procedure and Balance



## CYANIDATION TEST REPORT

Client: Bernie Krefl  
 Test: GC1  
 Sample: Composite

Date: 23-Sep-19  
 Project: 1901909

**Objective:** To recover Au/Ag by gravity separation at P80-75  $\mu\text{m}$  followed by cyanidation of gravity tailings **Actual**  
 regrind P80 size: 72  $\mu\text{m}$

### TEST CONDITIONS

Solids: 1,817 g  
 Solution: 3,000 g  
 Slurry Density: 38 %  
 Size - P80: 72  $\mu\text{m}$   
 Initial NaCN: 1.00 g/L  
 Target pH: 10.5 - 11.0  
 Test Duration: 72 hours

### TEST DESCRIPTION

- ground 2x2kg samples in stainless steel rod mill to P80-75 microns
- concentrated Au and Ag on 4kg charges by single pass gravity separation  
 Knelson concentrator operating parameters: ~20% solids, 1psi, 120G.
- upgraded gravity rougher concentrate by hand panning
- assayed pan concentrate for Au and Ag to extinction
- combined pan tail and gravity tail, and then rotary split into halves
- took one half ~2kg gravity tails as required and repulped to 45% solids
- adjusted to and maintained pH 10.5-11
- adjusted to and maintained at 1.0g/L NaCN
- sampled at 2, 6, 24, 30, 48 and 54 hours
- test ended after 72 hours
- filtered and displacement washed with cyanide solution followed by two hot water rinses
- solution and solids assayed for Au and Ag content

### HEAD GRADE

<b>Au</b>	<b>Ag</b>
Calculated Total: 57.93 g/t	505.7 g/t
Measured Total: 74.02 g/t	563.5 g/t

### LEACH TEST DATA

Time (hours)	NaCN		Lime (g)	pH		dO <sub>2</sub> (mg/L)	Slurry Weight (g)	Solution			Au		Ag	
	(g/L)	(g)		before	after			Vol. (mL)	Assay Vol (mL)	(mg/L)	(mg)	(mg/L)	(mg)	
0	1.00	3.00	1.32	6.5	11.0		4,817	3,000						
2	0.52	1.44		11.0		8.7	4,998	3,181	15	12.60	40.08	153.1	487.0	
6	0.80	0.60		11.0			4,998	3,181	15	14.77	47.17	201.5	643.3	
24	0.86	0.42		10.8		8.9	4,990	3,173	15	14.98	47.94	225.8	721.8	
30	0.90	0.30		10.7			4,996	3,179	15	15.05	48.48	225.4	725.2	
48	0.86	0.42		10.6		8.9	4,985	3,168	15	15.19	48.98	227.3	732.2	
54	0.90	0.30	0.20	10.5	10.8		4,990	3,173	15	15.12	49.06	226.8	735.1	
72	0.70			10.7		8.9	4,998	3,181	15	15.00	49.03	226.6	739.7	
<b>Total</b>		6.48	1.52											

### SOLIDS

Time (hours)	Total Residue		
	Weight (g)	Au (g/t) (mg)	Ag (g/t) (mg)
72	1,817	0.150.28	73.5 133.55

### CYANIDATION RESULTS

Time (hours)	Distribution		Reagent Consumption		Reducing Power 0.1 N KMnO <sub>4</sub> /L (mL)
	Au (%)	Ag (%)	NaCN (kg/t)	Ca(OH) <sub>2</sub> (kg/t)	
2	81.3	55.8	0.74		210
6	95.7	73.7	1.04		
24	97.2	82.7	1.27		
30	98.3	83.1	1.43		
48	99.3	83.8	1.67		
54	99.5	84.2	1.83		
72	99.4	84.7	2.34	0.84	
Residue	0.6	15.3			
<b>Total</b>	<b>100.0</b>	<b>100.0</b>			

### METALLURGICAL BALANCE

	Weight (g)	Au		% Distribution	Ag		% Distribution
		(g/t)	(mg)		(g/t)	(mg)	
Gravity Conc.	1,987	28152	55.95	53.2	22999	45.71	5.0
Solution		49.03		46.6		739.70	80.5
Residue	1,817	0.153	0.28	0.3	73.5	133.55	14.5
<b>Total</b>		<b>105.26</b>		<b>100.0</b>	<b>918.96</b>		<b>100.0</b>



## Appendix 1e Metallurgical Sample Location



## APPENDIX 4 – Assay Certificates.

Sent electronically.

## APPENDIX 5 – Statement of Qualifications

### Certificate of Qualifications

I, Janelle Smith, having my place of residence at 1704 – 1020 Harwood St Vancouver, British Columbia, V6E 4R1, do hereby certify that:

1. I obtained a Bachelor of Science Degree (Geology) from the University of New England New South Wales Australia. I have been continuously engaged as a Geologist since 1986 and am a Member in good standing of the Australian Institute of Geoscientists (4640). I am a “qualified person ” as defined in Section 1.2 in and for the purposes of National Instrument 43-101;
2. I have not visited the Midas property.
3. I am the person, responsible for the contents of this technical report entitled “Assessment Report of 2019 Surface Work on the Midas Property in the Dawson Mining District, Yukon, NTS Sheet 1150-15, 63° 48’ N and 138° 50’ L,” based on my professional experience, a review of relevant reports and maps made available to me from government and corporate sources and my oversight of work programs described in the report.
4. I am not aware of any material fact or material change with respect to the subject matter of the report that is not disclosed in the report which, by its omission, makes the report misleading;
5. I hold no shares in Taku Gold Corp.;
6. I hold no direct interest in the Midas property.
7. I have read, and this report has not been prepared for the purposes, nor in full compliance with, National Instrument 43-101 and according to Form 43-101F1.

Respectfully submitted February 7, 2020.

***(s) “Janelle Smith”***

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Janelle Smith (MAIG)

## APPENDIX 6 – Statement of Costs

### Cost Statement

Wages Bernie Kreft 2 man days x \$400/day	=	\$800.00
Wages Justin Kreft 2 man days x \$350/day	=	\$700.00
Wages Jarret Kreft 2 man days x \$350/day	=	\$700.00
Food, field and camp 6 man days \$100/day	=	\$600.00
Bureau Veritas Assays (8 rock samples and 54 soil samples by FA430 and AQ300)	=	\$1,534.90
4x4 Truck from Whitehorse to Dawson/property and return 1,244km x \$0.6/km	=	\$746.40
100lb Metallurgical Sample processed by Bureau Veritas Metallurgical Lab	=	\$2,737.00
Metallurgical Data Compilation and assessment by Mike Redfearn P.Eng	=	\$600.00
Report Preparation Janelle Smith	=	<u>\$2,000.00</u>
	TOTAL	= \$10,418.30