Van Gogh East RGS Project Report

YMEP 18-022
Grassroots Module

Prospecting and Soil, Silt and Rock Geochemical Survey

Grassroots Exploration Work Near the

Very Highly Anomalous Polymetallic RGS Target

located in the

Van Gogh (East) Claim Block

Southwest of Km 160, Robert Campbell Hwy.

Claim Map 105 H/04
Watson Lake Mining District

by Van Krichbaum

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Van Gogh East RGS Project Report

In 2013 I was successful in receiving a YMIP grant, the **YMIP 13-017 Focused Regional Hard Rock "Van Gogh RGS Targets Project".** The "Van Gogh RGS Targets Project" was divided into Van Gogh West and Van Gogh East (Van Gogh (E)). The Van Gogh West portion was successfully completed but the Van Gogh East portion was only barely started due to very unusual hypothermic bad weather conditions in July during the pre-set helicopter support time period. Soil and silt sampling was only able to be done for a few hours on the last day when the weather cleared enough for the pre-arranged helicopter pickup. Even so, excellent results were obtained and point to a very high likelihood of further discoveries. The RGS silt sample on the Van Gogh East claim block is extremely anomalous with 9 metals at the 98-99th percentile for all 8000+ Yukon Tanana RGS sites. This Grassroots Module YMEP 18-022 project was primarily designed to further assess the potential of the Van Gogh East claims near the very anomalous polymetallic RGS location. Coincidentally, this project to the same area was also again affected by very unusual hypothermic conditions - this time in the first 2 weeks of August.

Background

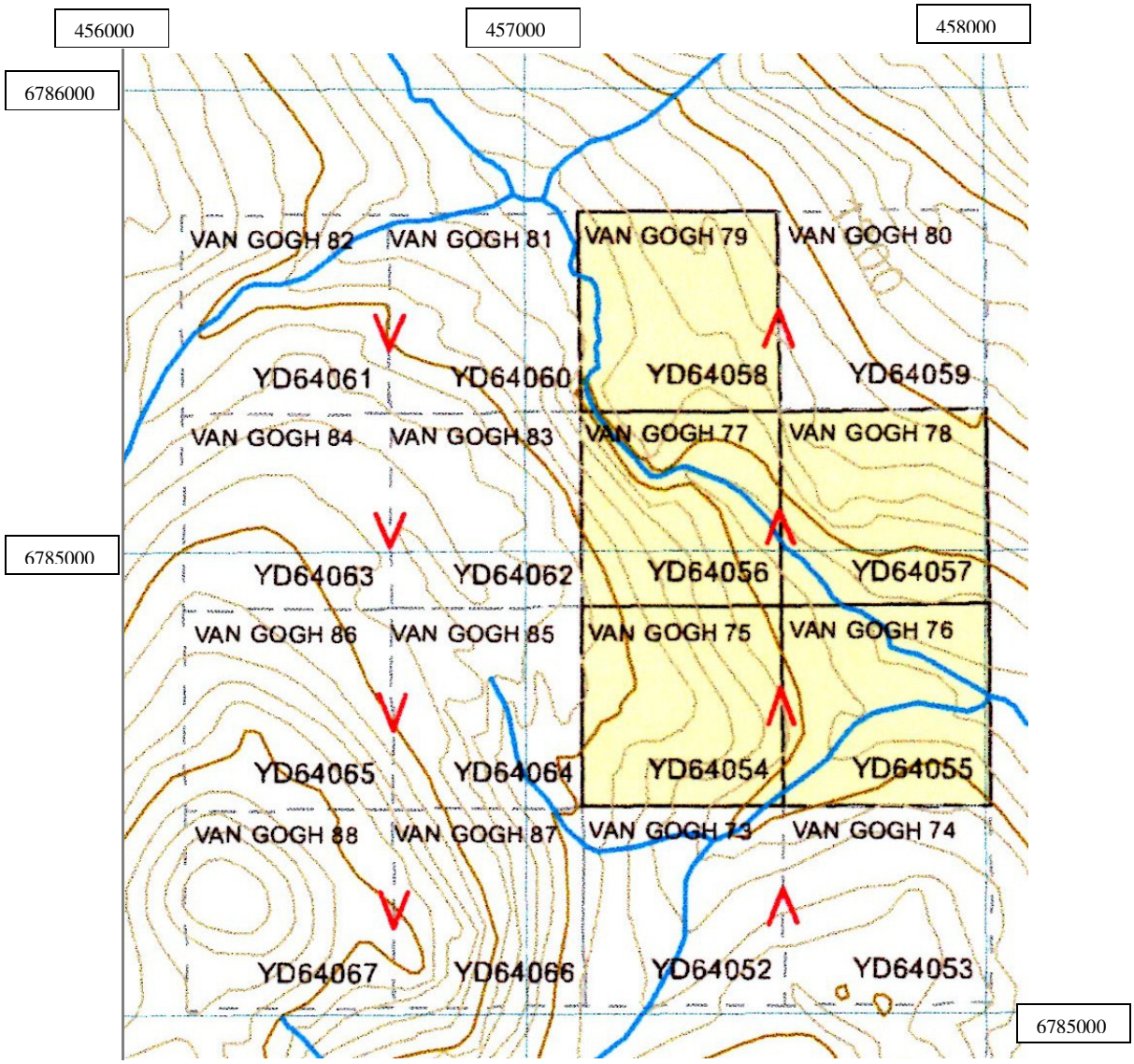
This project application is indirectly an outcome of YMIP Grassroots projects from 1990 and 1992, and directly a result of the 2013 YMIP Focused Regional grant 2013-17. During the helicopter portion of the 1990 and 1992 grants a large gossanous area was noted, and the helicopter was landed at the site. It was briefly explored and samples were taken, but nothing of note was done with this at that time as the focus for that module was nephrite jade and ultramafic rock PGE's. Curiosity about the site was intermittent over the years until Feb. 2011 at which time I decided to see what information was available on that site in the Yukon Gov. data base, using YGS MapMaker Online from the Yukon Geological Survey as the resource of choice.

As it turned out, there were no YGS RGS silt sediment samples for that location – but other nearby sites had extremely anomalous polymetallic element assays. Two RGS silt sediments stood out in particular in the Van Gogh area, both being extremely anomalous polymetallic element 95-99th percentile silt samples, plus another RGS sample in the region closer to the Campbell Hwy near Jules Creek, also stood out - again, being a very anomalous polymetallic element 95-99th percentile sample. In July 2011 I approached Northern Tiger Resources (NTR) with rock samples from the 1990 and 1992 YMIP grants' large gossanous area. After examining the rocks they helped me stake the 3 RGS target sites with claims names of "Van Gogh" (3 different claim blocks) and "Julsey D" (1 claim block) in Aug. 2011. Northern Tiger Resources staked the claims jointly with myself on a 'right of first refusal' basis (I think that is the right term), and later signed the claims and all the assay data over to me, Van Krichbaum. The Northen Tiger Resources data and results from the 2013 YMIP Focused Regional grant 2013-17 for the Van Gogh claim blocks is presented as background material along with geological, geophysical, geochemical and structural analysis of the Van Gogh claim blocks.

This report will provide a further update with the YMEP 18-022 prospecting, soil, silt and rock geochemical survey results and analysis. Overall, despite the limitations placed on this project by inclement weather, important new discoveries were made with respect to evidence for a possible mineral deposit on the Van Gogh East claim block.

VAN GOGH EAST - PROPERTY & CLAIM STATUS

Van Gogh East



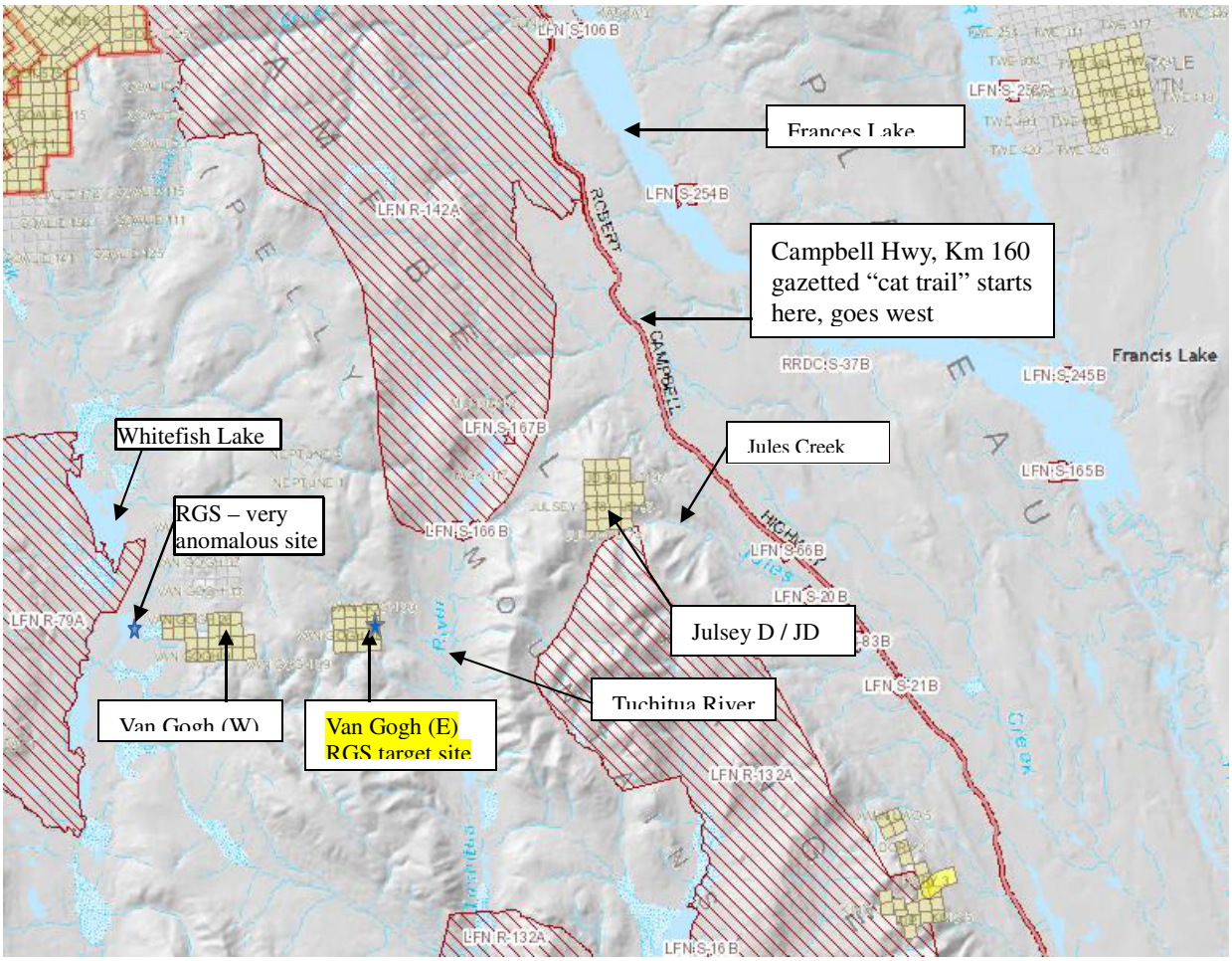
Map 1. Claims map, northwest corner of 105 H/04. Van Gogh East claims.

Grant#	RegType	ClaimName	Claim #	Recording Date	StakingDate	Claim ExpiryDate	Status
YD64054	Quartz	VAN GOGH	75	22/09/2011	08/09/2011	22/09/2019	Active
YD64055	Quartz	VAN GOGH	76	22/09/2011	08/09/2011	22/09/2019	Active
YD64056	Quartz	VAN GOGH	77	22/09/2011	08/09/2011	22/09/2019	Active
YD64057	Quartz	VAN GOGH	78	22/09/2011	08/09/2011	22/09/2019	Active
YD64058	Quartz	VAN GOGH	79	22/09/2011	08/09/2011	22/09/2019	Active

Table 1. VAN GOGH (E) Claims Ownership - 100% Everett Van Krichbaum. *All of the Van Gogh EAST claims are in the Watson Lake Mining District.*

LOCATION and ACCESS OF PROJECT AREA

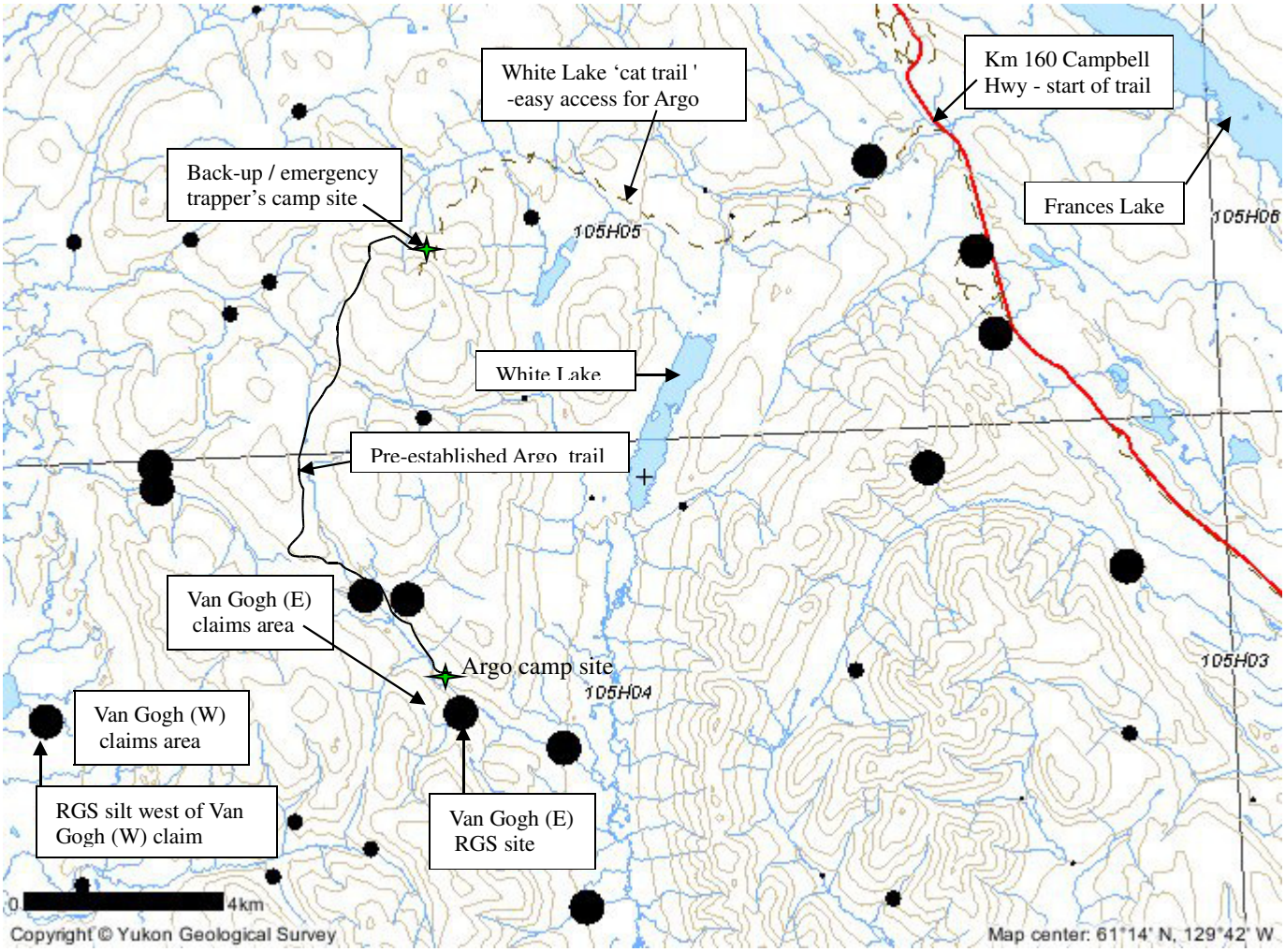
Please refer to "Map 2. Project Location Map" below. The project area is southwest of the 'Campbell Hwy' - Km 160. The Van Gogh East claims area can be accessed by Argo ATV from the gazetted "cat-trail" that goes west from the Robert Campbell Hwy. at Km 160, then on a trail cross-country from the end of the gazetted "cat-trail" to the Van Gogh East Argo Camp. See Map 3 for details.



Map 1. Project Location Map. The project area is southwest of 'Campbell Hwy' Km 160. The Van Gogh East (and Van Gogh West) claim blocks and the Whitefish Lake south RGS are on NTS map sheet 105 H/04. All claims are in the Watson Lake Mining District. *For reference, this map shows where claims were staked since the Aug. 2011 initial staking. Some have since lapsed.*

The main focus for this project, Van Gogh East, is only 4 km from the somewhat mineralized Van Gogh West area. Both have the same past history and regional geology, which is presented first to help show the mineral potential for this region as it applies to the very anomalous polymetallic RGS silt at the Van Gogh East claim property ('Site B' page 12). This is followed with the Van Gogh East property geology, a summary of all previous relevant investigations (including recent work by Northern Tiger Resources (NTR), YMIP 13-017 Van Gogh East assay results), targets, YMEP 18-022 work program, details of surface evaluation (including a description of the methods of sampling employed and assay method), results of the work, conclusions and recommendations.

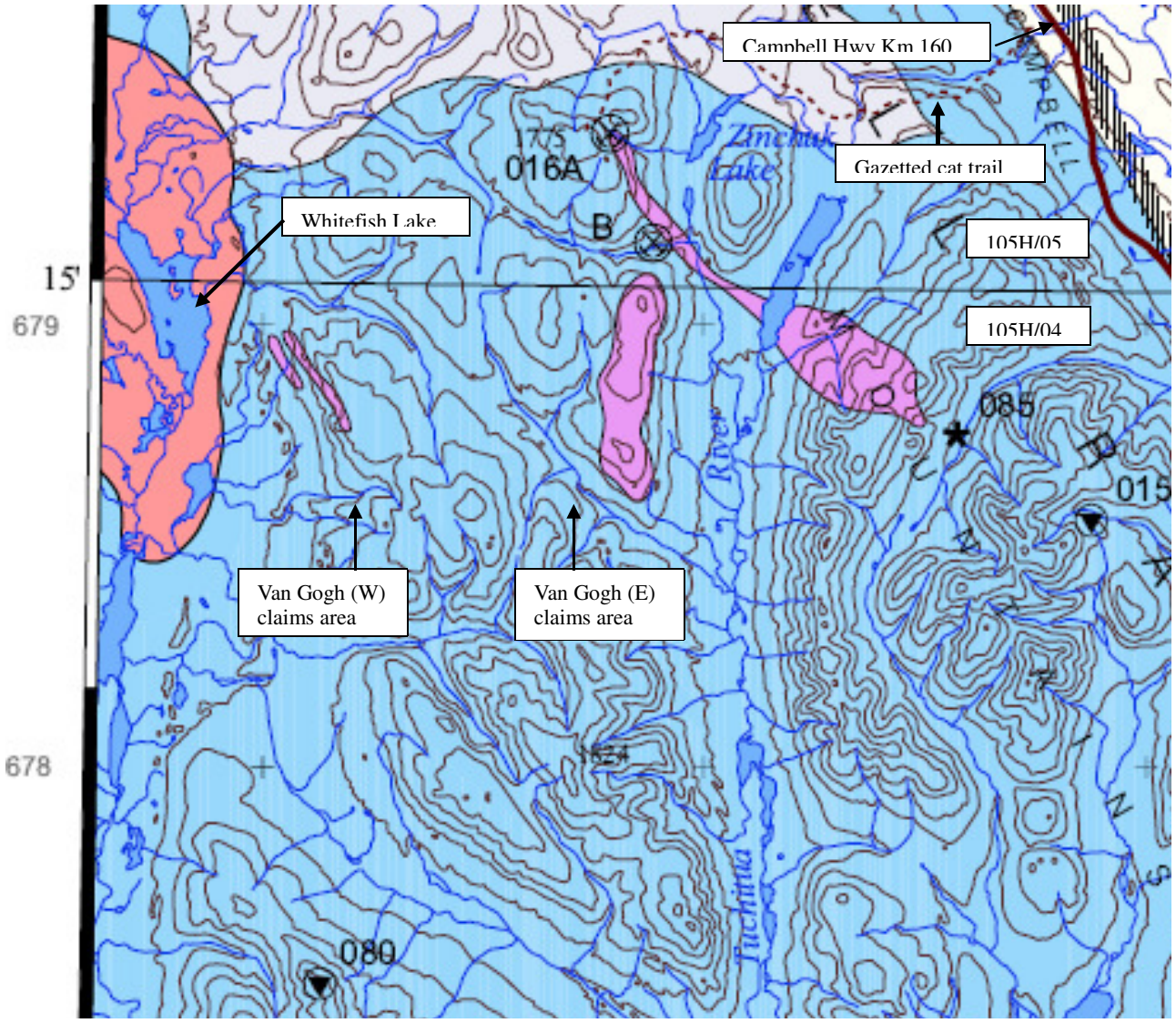
The regional scale map below shows camp sites and Argo access route for the Van Gogh East project.



Map 2. Access Route and Camp Sites for Van Gogh (E). Long dashed line is a gazetted 'cat trail', solid line is an existing Argo trail, green stars are camp sites. Large black circles are 99th percentile RGS mercury silt sediment ranking for Yukon-Tanana, next smaller are 95th percentile. NTS Map sheets 105 H/ 04 and 105 H/ 05.

VAN GOGH AREA - PAST WORK HISTORY (MINFILES)

There appears to be no work history for the Van Gogh West (W) and Van Gogh East (E) immediate claims area as reported on the Yukon MinFile Occurrence Map below.



Map 3. Minfile Occurrence Map. *Mostly NTS map sheet 105 H/04 and part of 105 H/05.*

The nearest Minfile Occurrences are:

- Minfile Occurrence Numbers 105H 016A & 105H 016B were for Nephrite Jade.
- Minfile Occurrence Number 105H 080; Occurrence Name KNEIL; Occurrence Type Polymetallic Veins Ag-Pb-Zn+/-Au; Location: 61° 6' 27" N -129° 54' 13" W; NTS Mapsheet 105H/04. Claims (Previous & current) CHIT, CHIT, JAYS, JAYS, KNEIL, TUA, TUA, TUC.
- Minfile Occurrence Number 105H 085; Occurrence Name BEANS; Occurrence Type Hard-rock; Location: 61°13'15" N -129°38'16" W; NTS Mapsheet 105H/04. Claims (Previous & current) BEANS, CAMPBELL, CHIEF, GOFPHER, JADE, JOE, LIMA, PIKA, TACK, TRAPPER, JULSEY D.

- Minfile Occurrence Number 105H 015; Occurrence Name DOUG; Occurrence Type Hard-rock; Showing; COPPER - Cu+/-Ag Quartz Veins; Location: 61°12'12" N - 129°34'52" W; NTS Mapsheet 105H/04. Claims (Previous & current) EVA

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Minfile Occurrence Number 105H 080; Occurrence Name KNEIL; Occurrence Type Polymetallic Veins Ag-Pb-Zn+/-Au; Location: 61° 6' 27" N -129° 54' 13" W; NTS Mapsheet 105H/04. Claims (Previous & current) CHIT, CHIT, JAYS, JAYS, KNEIL, TUA, TUA, TUC

Staked as Kneil cl 1-48 (YA66651) and cl 51-60 (YA66699) in Jul/81 by Cyprus Anvil Mining Corporation, which performed mapping and geochemical sampling later in the year.

Restaked within Chit cl 1-146 (YB51060) in Jul/94 by Cominco Ltd, following a regional airborne geophysical survey. The company staked Tua cl 1-23 (YB51037) 13 km to the east at the same time. Cominco carried out preliminary geological mapping and geochemical sampling on both properties and completed ground HLEM, magnetic and gravity geophysical surveys on the Tua claims. In Dec/94 Cominco staked Tua cl 24-71 (YB56931).

In May/95 Cominco staked Jays cl 1-172 (YB59412) to the northeast. In 1995 the company carried out ground HLEM, magnetic and gravity surveys on the Chit claims followed by further geological mapping, prospecting and soil sampling. On the Jays claims, Cominco carried out a helicopter-borne geophysical survey and a silt sampling program. In Oct/95 Cominco staked Tua cl 75-122 (YB68990) and Jays cl 172-431 (YB63270). In Nov/95 the company staked Chit cl 147-216 (YB71033).

In Jan/96 Cominco staked Tuc cl 1-84 (YB71767) 7 km to the northeast. The company added Tuc cl 85-96 (YB5735) in Jul/96. During the 1996 field season the company carried out a HLEM/Mag ground geophysics program on the Jay claims followed by detailed geological mapping, soil and rock sampling programs. On the Chit claims the company carried out detailed geological mapping, soil sampling and ground geophysics on 4 grids and on the Tua and Tuc claims limited geological mapping, geochemical sampling and prospecting programs.

In Jul/97 Cominco carried out two days of detailed geological mapping to further define the area west of the Kneil showing.

Minfile Occurrence Number 105H 085; Occurrence Name BEANS; Occurrence Type Hard-rock; **Location:** 61°13'15" N -129°38'16" W; **NTS Mapsheet** 105H/04. **Claims (Previous & current)** BEANS, CAMPBELL, CHIEF, GOFPHER, JADE, JOE, LIMA, PIKA, TACK, TRAPPER, JULSEY D.

Beginning in Oct/83 the occurrence was staked within various small claim groups including Beans cl 1 (YA70692) by J. and H. Caesar, Pika cl 1-4 (YA70700) by H. Caesar, and Jade cl 1 (YA91081) by B. McGeorge. T. Dickson staked Joe cl 1 (YA71347) 3 km to the northwest in Jul-Sep/84.

H. Caesar, T. Dickson and others staked Campbell cl 1-2 (YA73625) 2 km to the north in Aug/85 and Jun/86. G. Edzerza staked Lima cl 1-4 (YA99397) 1 km northeast of the Jade claim in Sep/86. J. Chief tied on Chief cl 1-2 (YB14552) to the south in Jul/88. Later in the month, H. Caesar staked Gofpher cl 1 (YB14426) and D. Morris staked Trapper cl 1 (YB14427) beside the Jade claim. No assessment reports were filed for any of these claim groups.

Restaked within Tack cl 1-550 (YB78704) in Mar/96 by Westmin Resources Ltd, which explored with soil and stream sediment sampling later in the year. In Mar/98 Westmin was acquired by Boliden Ltd and in Sep/98 ownership in the claims was transferred to Boliden Westmin Limited. In Apr/99 the claims were transferred to Archer Cathro and Associates (1981) Ltd. The last remaining claims lapsed in Mar/2000.

The original claims were mostly staked over units located in the footwall of the Jules Creek Thrust. According to Murphy (2001) nephrite jade is locally developed near the basal contact of the ultramafic body (unit PPum) and is the presumed cause of the staking activity in the 1980's.

Wide spaced soil sampling by Westmin, searching for volcanogenic massive sulphide (VMS) deposits, yielded only spotty Cu (<195 ppm), Pb (<26 ppm) and Zn (<140ppm) values. Gold analysis returned only background values (Terry et al.,1997). Additional soil sampling by Westmin in 1997 yielded a small gold in soil anomaly (<90 ppb) over a chert - ultramafic contact (Terry et al, 1998). Spotty soil anomalies were returned for Cu (<105 ppm), Pb (<36 ppm) and a small coherent, multi sample, anomaly for Zn (<1125 ppm). Geologic mapping by Westmin in 1996 and 1997 failed to locate stratigraphy similar to that hosting the Wolverine VMS deposit (Minfile Occurrence #105G 072) and the Tack claims were allowed to gradually lapse.

Minfile Occurrence Number 105H 015; Occurrence Name DOUG; Occurrence Type Hard-rock; Showing; COPPER - Cu+/-Ag Quartz Veins; Location: 61°12'12" N - 129°34'52" W; NTS Mapsheet 105H/04. Claims (Previous & current) EVA

Staked as Eva cl (Y54554) in Oct/70 by Doug Parent, who performed sampling and prospecting in 1971.

GSC maps indicate the claims are underlain by Devono-Mississippian shale near the end of a long, linear magnetic anomaly. Chalcopyrite occurs in a vein up to 1.5 m wide which was traced for a length of 61 m. Assays were reportedly low.

VAN GOGH AREA - REGIONAL GEOLOGY

The Finlayson Lake district is underlain by the Yukon-Tanana Terrane: a Late Proterozoic to Paleozoic metamorphosed volcano-sedimentary assemblage. This terrane hosts several known volcanogenic massive sulphide (VMS) deposits and occurrences, including Kudz Ze Kayah (Minfile Occurrence #105G 117), Wolverine (Minfile Occurrence #105G 072) and Ice (Minfile Occurrence #105G 118).

The Yukon -Tanana Terrane in the Frances Lake area consists of several fault or unconformity-bound successions. These rock packages are bound to the southwest by the Tintina Fault zone and on the northeast by the Finlayson Lake Linear. Prominent regional scale thrust faults are along the Jules Creek Thrust.

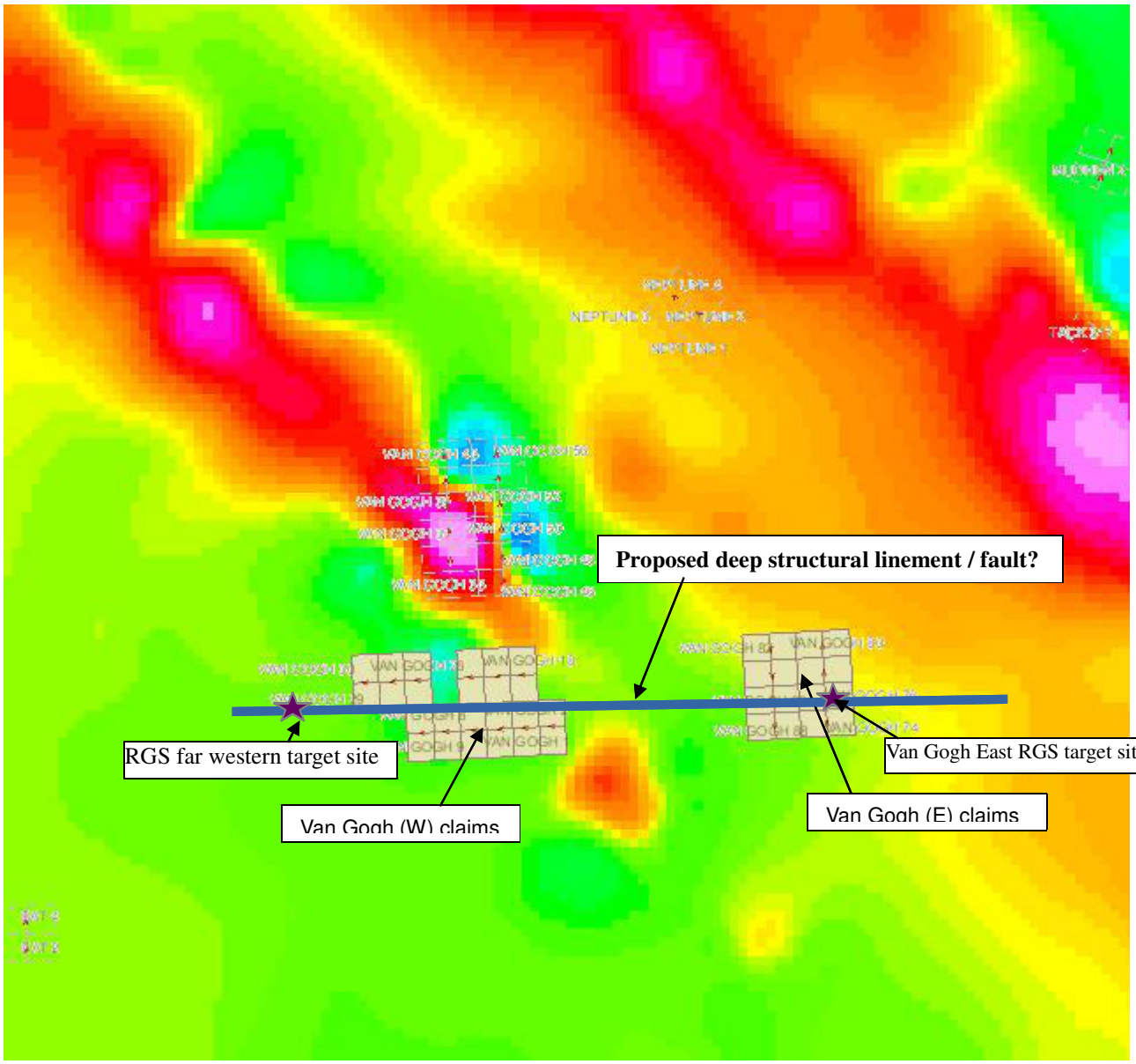
To the east of the Van Gogh area, Devine et al. (2004) reports the southern Campbell Range is underlain by greenschist facies volcaniclastic, epiclastic and sedimentary units of the Tuchitua River and Money Creek formations. Stratigraphy is deformed by at least three syn- to post-Early Permian folding events. Northwest-striking, high-angle faults imbricate the folded metasedimentary package with sheets of serpentinite. These rocks are juxtaposed against basinal rocks of the Fortin Creek group to the east, along the Jules Creek Thrust fault.

The Van Gogh area is underlain by a sequence of Devonian to Mississippian metavolcanic and metasedimentary rocks which have not yet been assigned a specific succession. These rocks are overlain by Pennsylvanian to Permian mafic and ultramafic rocks formerly believed to belong to the Slide Mountain Terrane, but recently assigned by Piercey and Murphy (2000) to the Campbell Range Succession. Murphy and Piercey's work suggests that the contact between the two units is depositional in nature and that the entire package, including the Campbell Range Succession represents a transitional island arc/continental arc to marginal basin/ocean (back-arc?) basin environment and together constitute Yukon-Tanana Terrane.

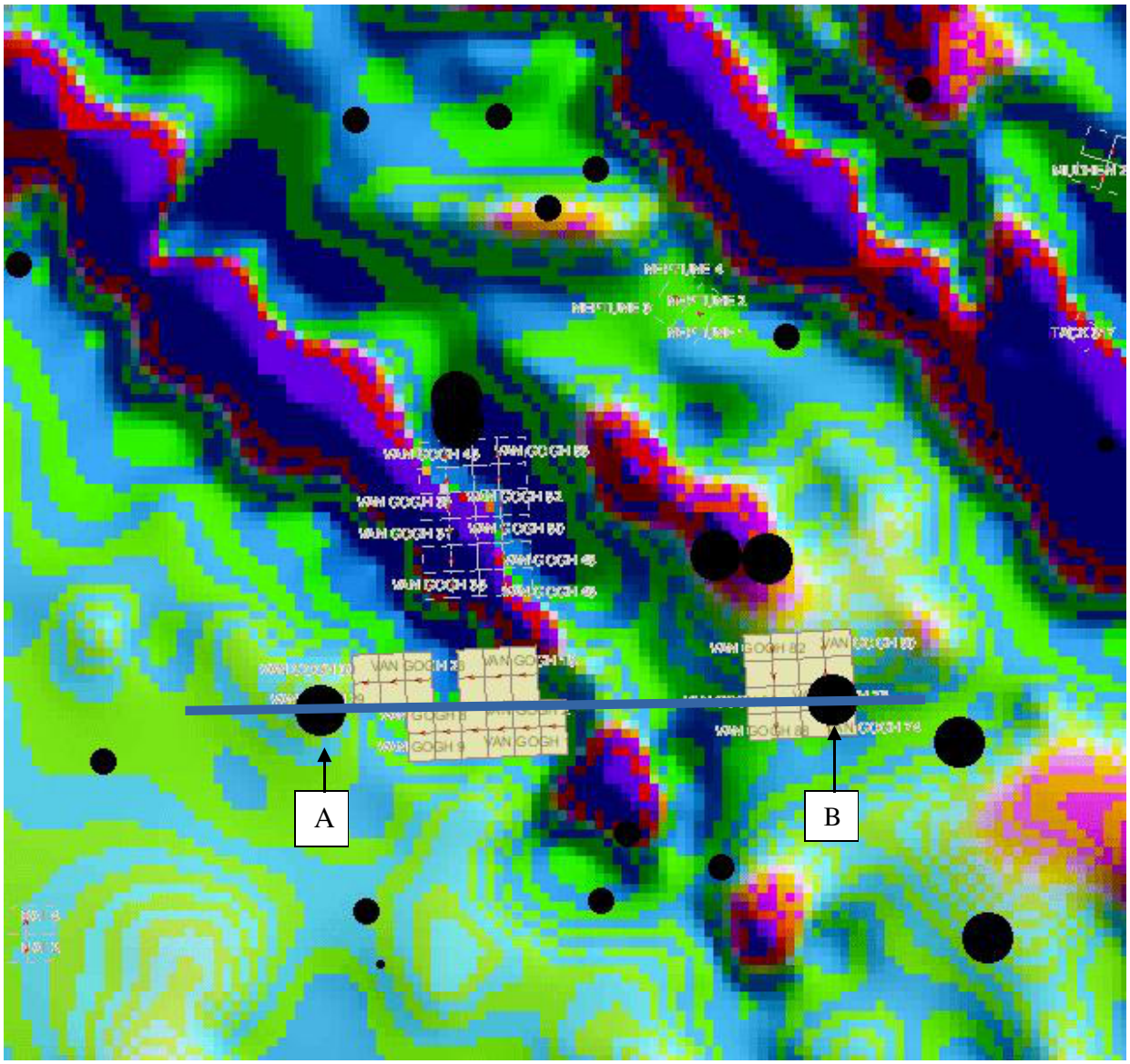
A large Mississippian age, porphyry stock, tentatively identified as part of the Simpson Range Plutonic Stock intrudes the sequence to the south. A large mid-Cretaceous post-accretionary pluton, specifically the 85 Ma granite-granodiorite Money Plug intrusion, is only 650 m to the west of the target RGS site west of the Van Gogh (W) claim block.

Geological and geophysical mapping of magnetics shows prominant northwest-southeast structural alignment features. The area is very anomalous for Hg at almost all RGS silt sites. Two RGS silt sediments stood out in particular in the Van Gogh area as being very anomalous polymetalic 95-99th percentile silt samples. These are labelled on the 1st Vertical Derivitive Aeromag map on page 11. Mineralization on the Van Gogh West and Van Gogh East claims occurs where there are anticline folds in permeable rock and where there are fault and rock unit contacts of impermeable (cap)rock overtop of permeable reactionary carbonate rock.

\The Van Gogh area regional residual total field aeromag map below and the 1st vertical derivitive aeromag map on the next page show prominant northwest linear trends in the regional geology. Both maps were acquired from the Yukon MapMaker Online website.



Map 4. Residual Total Field Aeromag. Van Gogh East (VGE) and Van Gogh West (VGW) regional area showing prominent northwest linear trends in the regional geology. The VGW claim gap was a result of a recording error by the NTR stakers, and they failed to stake the very highly anomalous RGS site just to the west of the Van Gogh claim block due to swampy conditions. Blue line is a proposed deep structural linement / fault that connects the very highly anomalous RGS sites 'A' and 'B' (see above) and passes through the east-west striking fault proposed by the NTR geologist (Ouellette, 2011, pers comm), and is supported by the lower aeromag signature (green 'gap' at the blue line mid-point) in the map above and on page 12. (Map from YTG MapMaker Online web site).



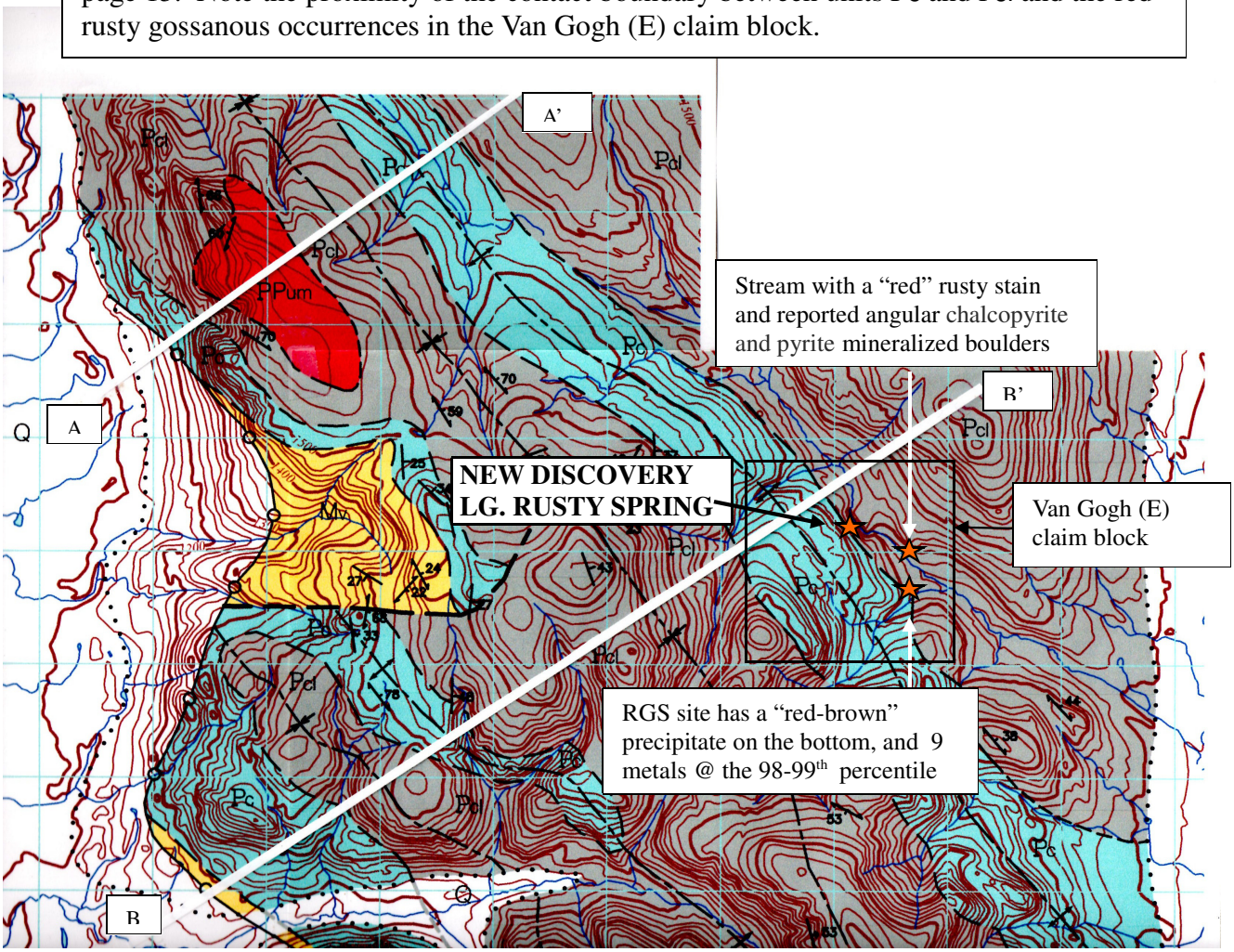
Map 5. 1st Vertical Derivitive Aeromag. Van Gogh (W) and Van Gogh (E) regional area showing prominent northwest linear trends in the regional geology. Large black circles are 99th percentile RGS Hg silt sediments for Yukon-Tanana, and the next smaller circles are 95th percentile RGS Hg silt sediments. 'A' and 'B' are multi-element 95-99th percentile polymetallic RGS silt anomalies. Blue line is a proposed deep structural linement / fault and connects the very highly anomalous RGS Sites 'A' and 'B'. The RGS Site 'B' area is the high priority target for this project. (Map from YTG MapMaker Online web site).

Two RGS silt samples in the area (marked 'A' and 'B') had multi-element 95th, 98th and 99th percentile polymetallic anomalies, and both were the focus of the Van Gogh West and Van Gogh East claim staking in 2011. The Van Gogh area is also very anomalous for Hg at almost all RGS silt sites as shown on the RGS Hg percentile symbols on the map above.

Van Gogh West is only 4 km (west) from Van Gogh East.

VAN GOGH AREA - LOCAL GEOLOGY

Below is the geology map by Donald C. Murphy from Open File 2000-16 showing the Van Gogh area with cross-section lines A-A' and B-B'. The cross-section diagrams are on page 15. Note the proximity of the contact boundary between units Pc and Pcl and the red rusty gossanous occurrences in the Van Gogh (E) claim block.



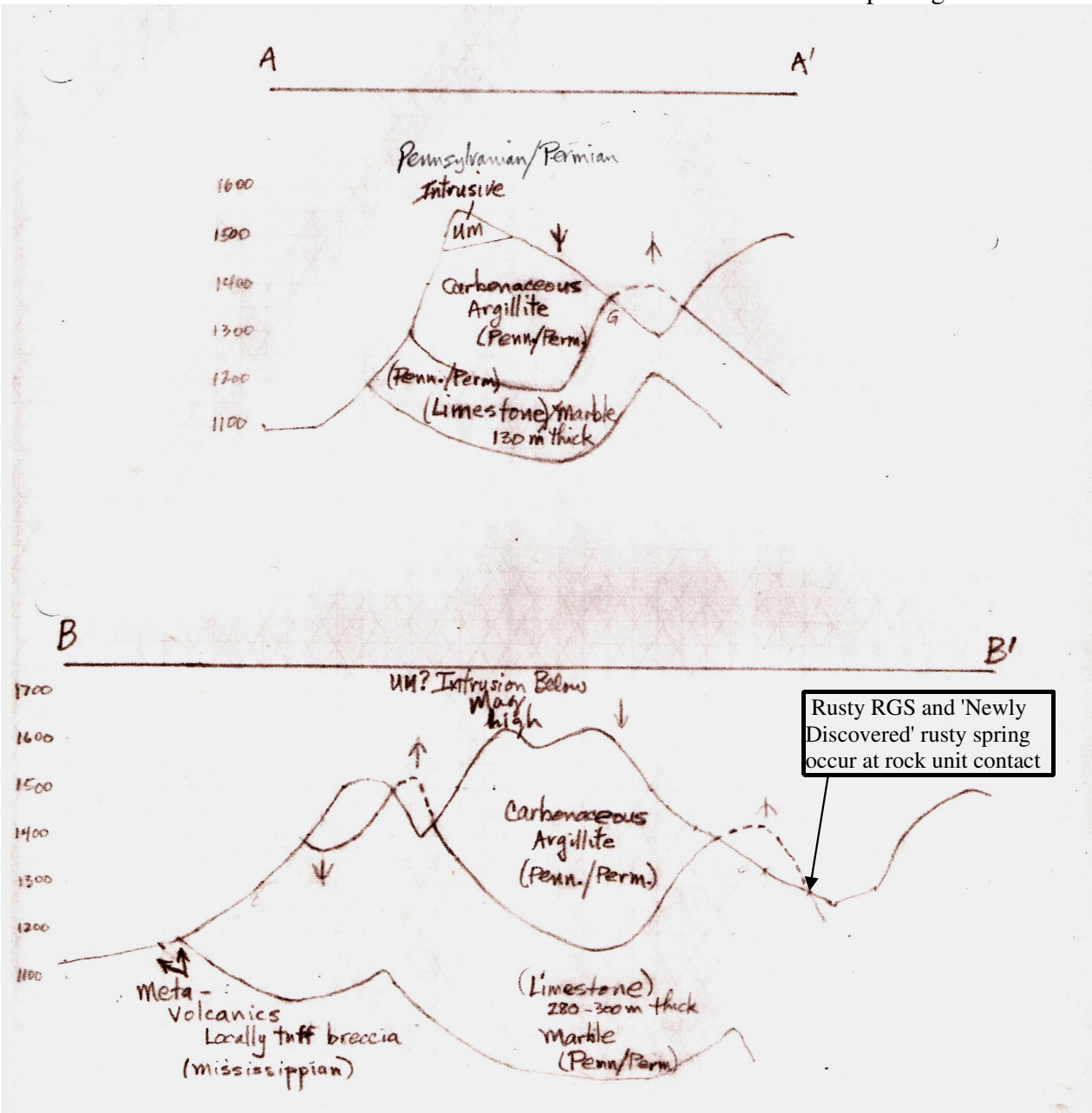
Map 6. Locations of Cross-section Lines A-A', B-B'. *There are not many strike-dip symbols to use to construct the 2 cross-sections, but there are some, particularly along cross-section line B-B'. Elevations and strike-dip symbols were used to construct the correct thickness of the various layers in the cross-sections (pg.15).*

The Van Gogh area on map 105H/04 on page 13 has several important geological features. Three major rock packages are present as designated on the geology map by Murphy (2000). Their descriptions are as follows:

Pcl	Dark grey to black carbonaceous argillite, dark grey chert, dark grey matrix-supported diamictite, grey chert-pebble conglomerate, grey-brown, poorly sorted, quartzofeldspathic greywacke, uncommon tan quartz sandstone. Uncommon limestone-pebble conglomerate at base.
	unconformity?
Pc	Massive to thickly bedded, light to medium grey, light grey-weathering marble. Locally crinoidal. Pennsylvanian to Early Permian conodonts have been reported from this unit elsewhere (Orchard, M. in Gordey and Makepeace, 1999).
MISSISSIPPIAN	
Mv	Light to medium green, locally quartz- and feldspar-phyric, intermediate meta-volcanic rocks. Locally, this unit comprises maroon and green tuff breccia. A Mississippian U-Pb age has been reported for a similar tuff breccia in 105H/4, south of the area mapped (Mortensen, 1992).

Table 2. Major Rock Units for Map 6 showing the Van Gogh Area (pg. 13).

Please refer to the cross-sections below for the discussion on the carbonate rock package thickness.



Cross-section 1. Cross-sections at Lines A-A' and B-B'. *View looking NNW. Layers are to scale but exaggerated vertically 6X.* The ultramafic rock at surface on line A-A' is designated as an intrusion in Yukon Open File 2000-16 (105H/ 04 Geology Map). Its geometry is unknown from the lack of strike-dip symbols and is only surmised in the A-A' cross-section. The linear strike of the aeromag high is SSE under the 'mag high' noted above for line B-B'. The Van Gogh East claim block is approximately on B-B' at the right anticline for Limestone / Marble.

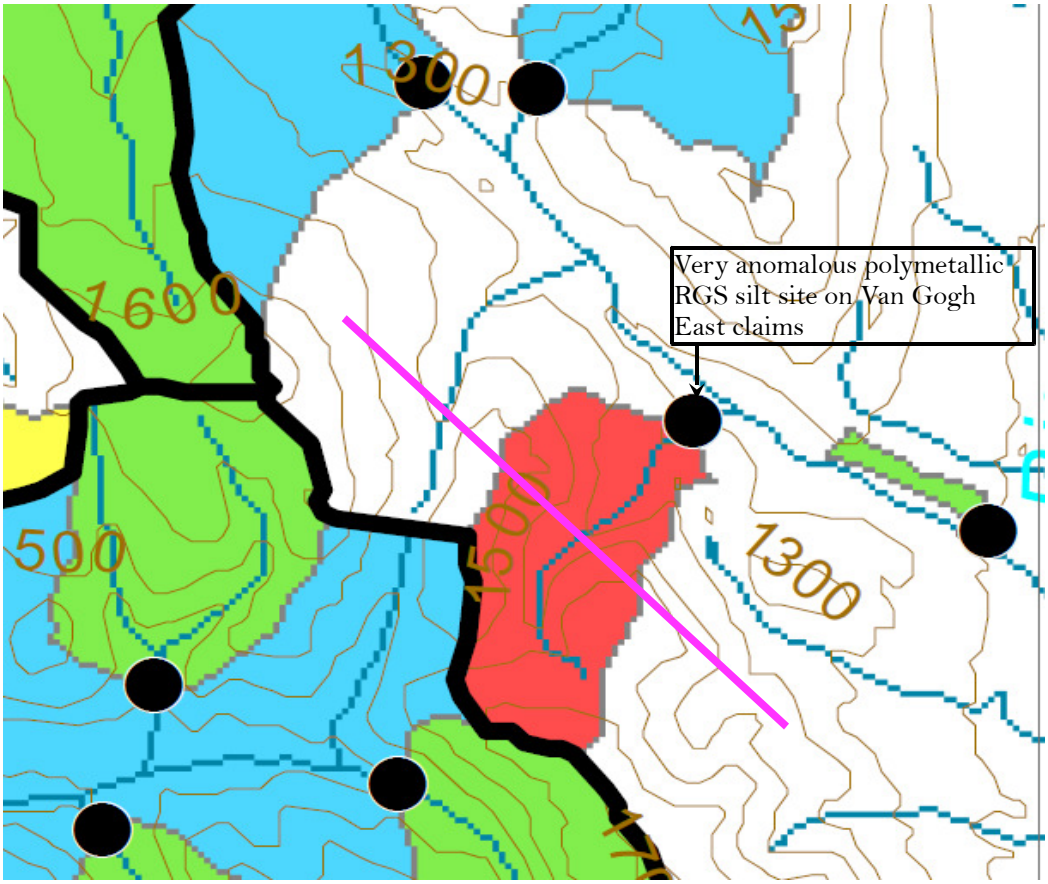
What is impressive in the cross-section above is the thickness of the carbonate package. Along the northern line A-A' the carbonate package is approximately 130 m thick. However, the thickness increases markedly as one goes southeast toward the Van Gogh (E) claims, reaching approximately 280-300 m thickness. This greatly improves the deposit size potential for carbonate hosted mineral deposits for Van Gogh (E).

VAN GOGH EAST - PROPERTY / AREA GEOLOGY

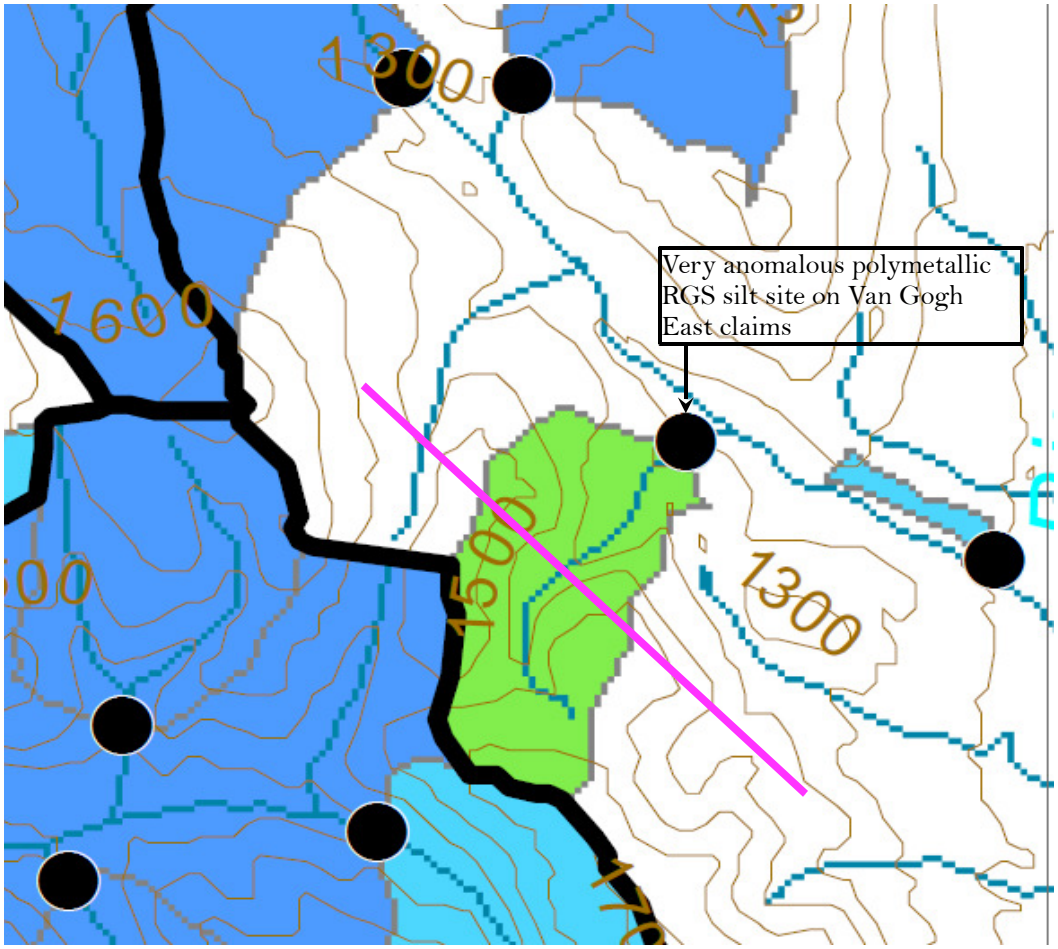
YGS (http://data.geology.gov.yk.ca/Reference/69466) has provided updated 1:250,000 maps using weighted sums modelling (WSM) and a variety of deposit type models present within the 105H mapsheet using catchment basins to visually present results. "Other target deposit types may be represented in a given model due to similarities in elemental abundances and associations." Co-Cu-Ag type deposit modelling is not presented, but is possibly warranted by the previous silt sample Co-Cu-Ag data for Van Gogh East.

"A variety of types of base and precious-metal mineralization are known to occur in the Frances Lake map sheet (105H)". Skarn is (the) dominant style of mineralization in the area". "The Findlayson Lake Zn-Pb-Cu-Ag VMS district and the Tintina polymetallic Ag-Pb-Zn deposit occur in the adjacent map area towards the west (105G).

The relevant maps showing the RGS 873091 silt sample catchment basin on the Van Gogh East claim block with elevated mineral deposit (model) potential are shown, with commentary, on the following 6 pages. Relevant higher potential skarn maps are given first on pages 16-17, followed by a VMS Pb-Zn potential map, then Epithermal Au-Ag and Porphyry Mo maps.



Map 7. Cu Skarn Deposit Model for RGS on Van Gogh East claims. *WSM geology methodology gives red catchment basin = 98-100th percentile*. ***Higher Zn (and Cu) but low Pb silt values indicate a Cu-Zn skarn could be present.*** The carbonate/marble rock unit Pc anticline strike axis (Murphy 2000), or conversely the thrust fault strike axis (YGS MapMaker Online) is along the *fuschia pink line*.

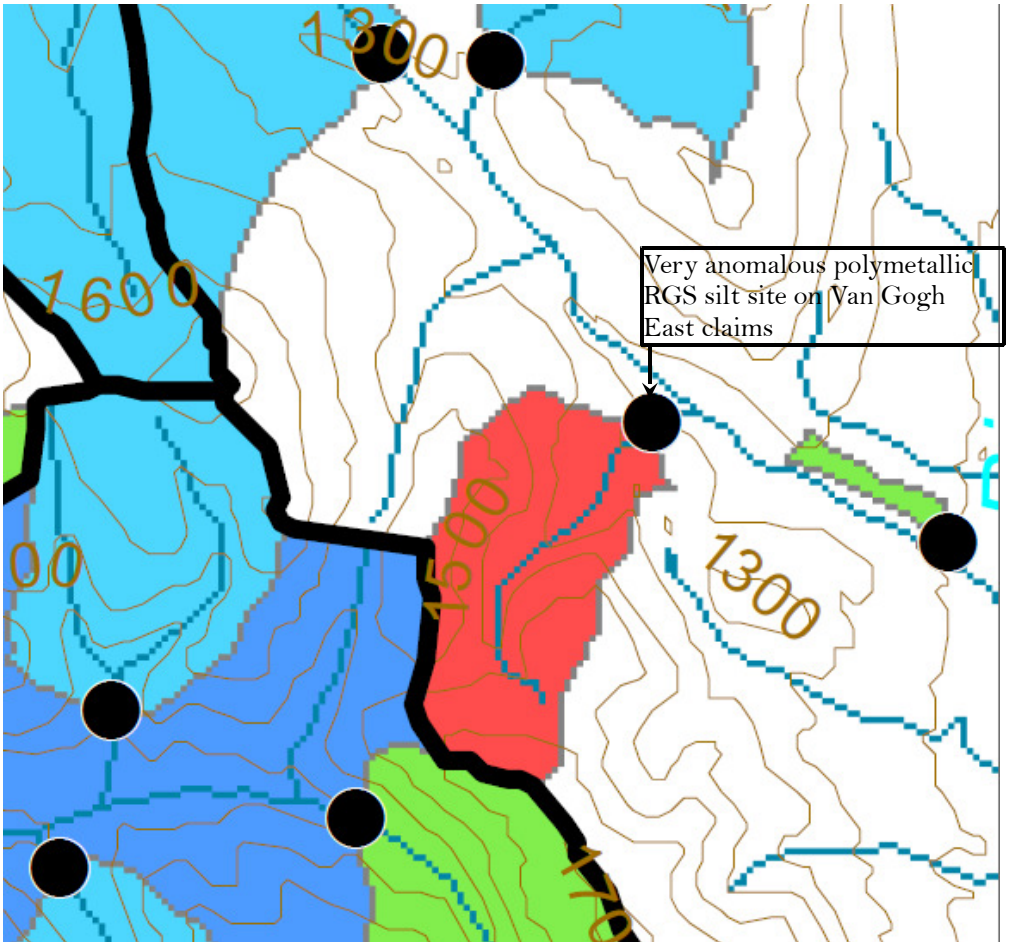


Map 8. Pb-Zn Skarn Deposit Model for RGS on Van Gogh East claims. *WSM geology methodology gives green catchment basin = 75-95^{h} percentile.* ***Higher Zn (and Cu) but low Pb silt values indicate a Cu-Zn skarn could be present.*** The carbonate/marble unit Pc anticline strike axis (Murphy 2000), or conversely the thrust fault strike axis (YGS MapMaker Online) is along the *fuschia pink line.*

Cox and Singer and Singer (1986) state "skarns form by replacement of carbonate-bearing rocks (in most cases) during contact or regional metamorphism and metasomatism. The majority of the world's major skarn deposits are thought to be related to hydrothermal systems. Skarns can be barren or contain metals with economic value. Skarn deposits are important sources of base and precious metals as well as tin, tungsten, and iron. Skarns are relatively high-temperature mineral deposits related to magmatic hydrothermal activity associated with granitoid plutons in orogenic tectonic settings." "Pb-Zn skarns may lack spatial associations with intrusions."

A note of possible significance – http://data.geology.gov.yk.ca/Reference/69466 105H (1:250,000) **Geology Series map** for Pb-Zn Skarn shows the catchment basin for the RGS silt sample on Van Gogh East as a *green catchment basin = 75-95^{h} percentile [above] while* the **PC Series map** for Pb-Zn Skarn for the same basin shows the potential as a *yellow catchment basin = 90-95th percentile.* *"Most economic skarn ore is present as exoskarn, which forms in carbonate rock that hosts a mineralizing intrusion. Endoskarn, which is variably developed on the intrusion side of intrusion-wallrock contacts, can be important when fluid flow was directed into the intrusion or channelized along the intrusion-wall rock contact."*

"Deposit trace element geochemistry Zn-Pb skarns: Zn, Pb, Mn, Cu, Co, Au, Ag, As, W, Sn, F, possibly Be; exoskarn, high in iron, sulfur, and manganese and low in aluminum." The catchment basin in green (previous page) is high in Fe,Mn (and low in Al), and indicates an exoskarn may be present.

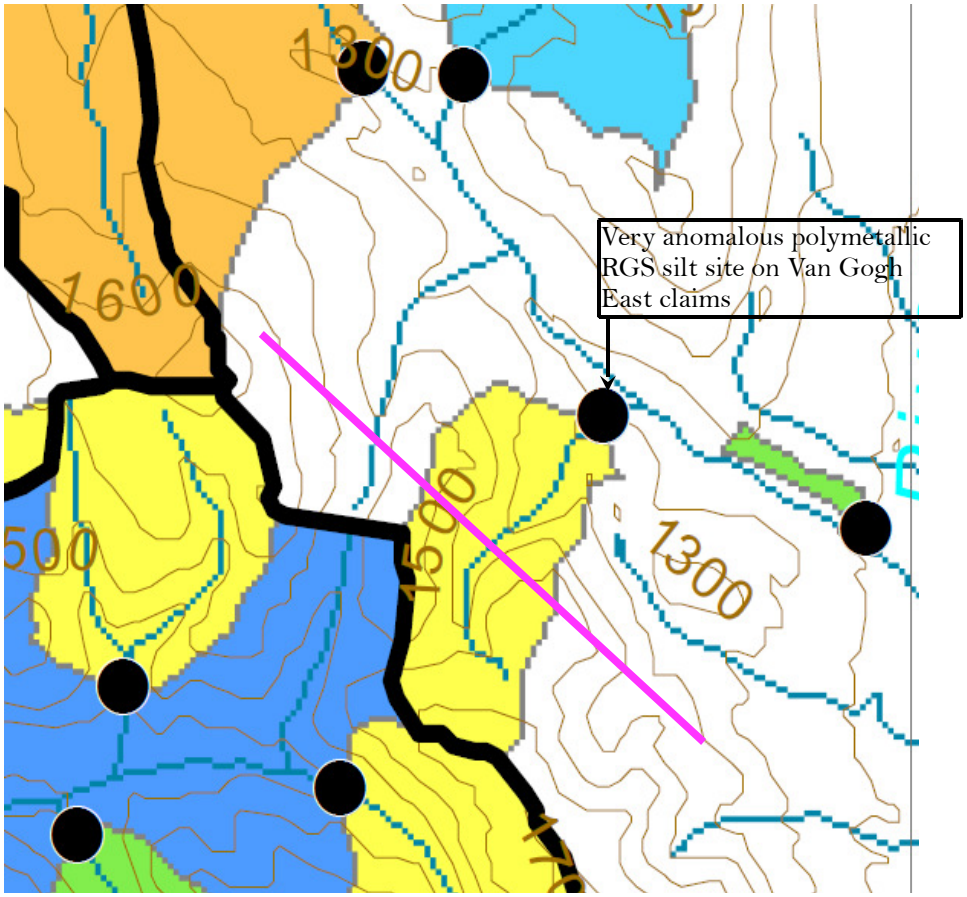


Map 9. VMS Zn-Pb Deposit Model for RGS on Van Gogh East claims. *WSM geology methodology gives red catchment basin = 98-100th percentile.* The carbonate/marble unit Pc anticline strike axis (Murphy 2000), or conversely the thrust fault strike axis (YGS MapMaker Online) is along the *fuschia pink line.*

A note of possible significance – http://data.geology.gov.yk.ca/Reference/69466 105H (1:250,000) **Geology Series map** VMS Zn-Pb Deposit Model shows the catchment basin for the RGS silt sample on Van Gogh East as a *red catchment basin = 98-100th percentile [above] while* the **PC Series map** for the VMS Zn-Pb Deposit Model for the same basin shows the potential as a 'light orange' *catchment basin = 90-95th percentile.* Both map series show high potential for the VMS Pb-Zn deposit model in this catchment basin.

"Distinction between skarn and other deposit types is not always apparent, and in many districts, skarns form an intermediate "zone" between porphyry deposits in the center of mining districts and peripheral zones of polymetallic vein and replacement and distal disseminated deposits. In many cases, geochemical signatures in stream sediment or water may reflect mixtures of several deposit types."

"Ore minerals may be present in massive, stratiform, vein, and (or) disseminated form; grain size is highly variable and ranges from fine to very coarse. Ore may be present in sulfide mineral zones, oxide zones, and in supergene, clay-rich oxidized zones. Sulfide minerals and gold generally are deposited during late, retrograde alteration within zones characterized by hydrous calcsilicates.



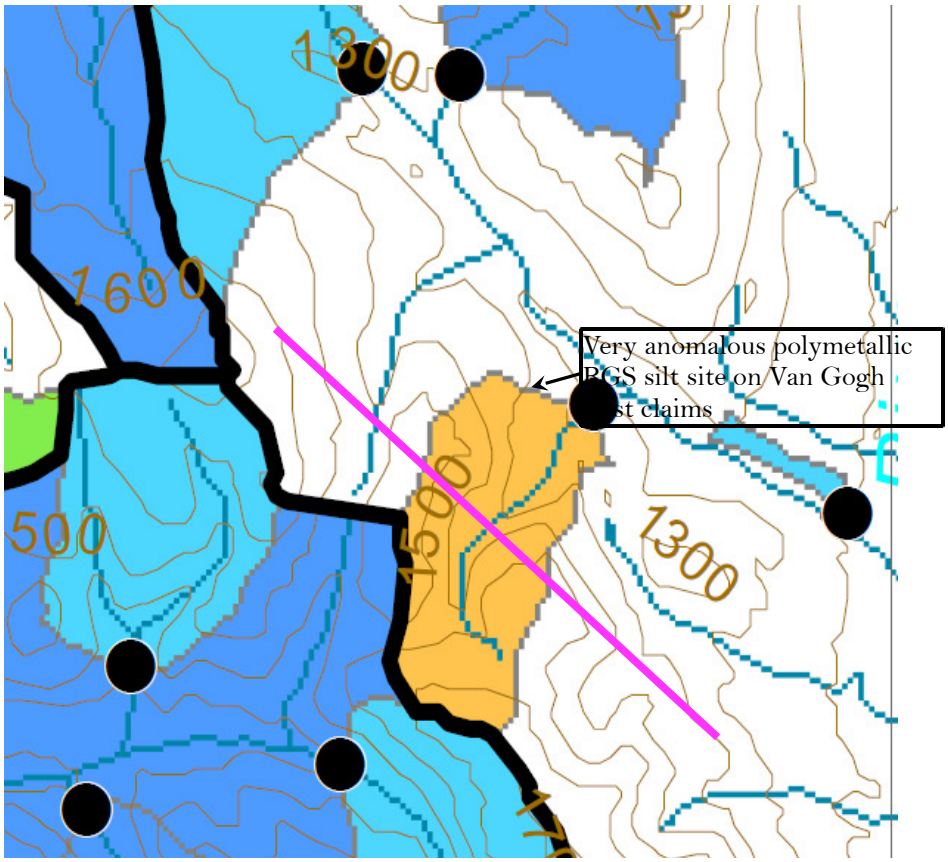
Map 10. Epithermal Au-Ag Deposit Model for RGS on Van Gogh East. *WSM geology methodology gives yellow catchment basin = 90-95th percentile*. The carbonate/marble unit Pc anticline strike axis (Murphy 2000), or conversely the thrust fault strike axis (YGS MapMaker Online) is along the *fuschia pink line*.

Structural depressional features occur parallel to and along the Pc carbonate/marble anticline axis strike. The carbonate/marble rock unit Pc anticline strike axis (Murphy 2000), or conversely the thrust fault strike axis (YGS MapMaker Online) is along the *fuschia pink line* in the map above. Both of these these represent structural pathways for mineralization/skarn formation in the marble Pc rock unit and at the contact between the marble Pc and the relatively impermeable carbonaceous argillite Pcl rock capping unit at the very anomalous polymetallic RGS silt site on the Van Gogh East claim block.

Schroeter et al. (1996) reported that the alteration mineralogy for carbonate-hosted disseminated Au-Ag is strongly controlled by local stratigraphic and structural features, and deep structural faulting. The northwest trending gullies and ridges on the Van Gogh 85 claim appear to be structural features, and these are just offset of and parallel to the linear marble anticline crest stratigraphy (fuschia pink line in map above as mapped by Murphy (2000). Additionally, they are on line with the proposed regional deep seated mineralized fault presented on pages 11-12. The area appears structurally prepared for fluid movement.

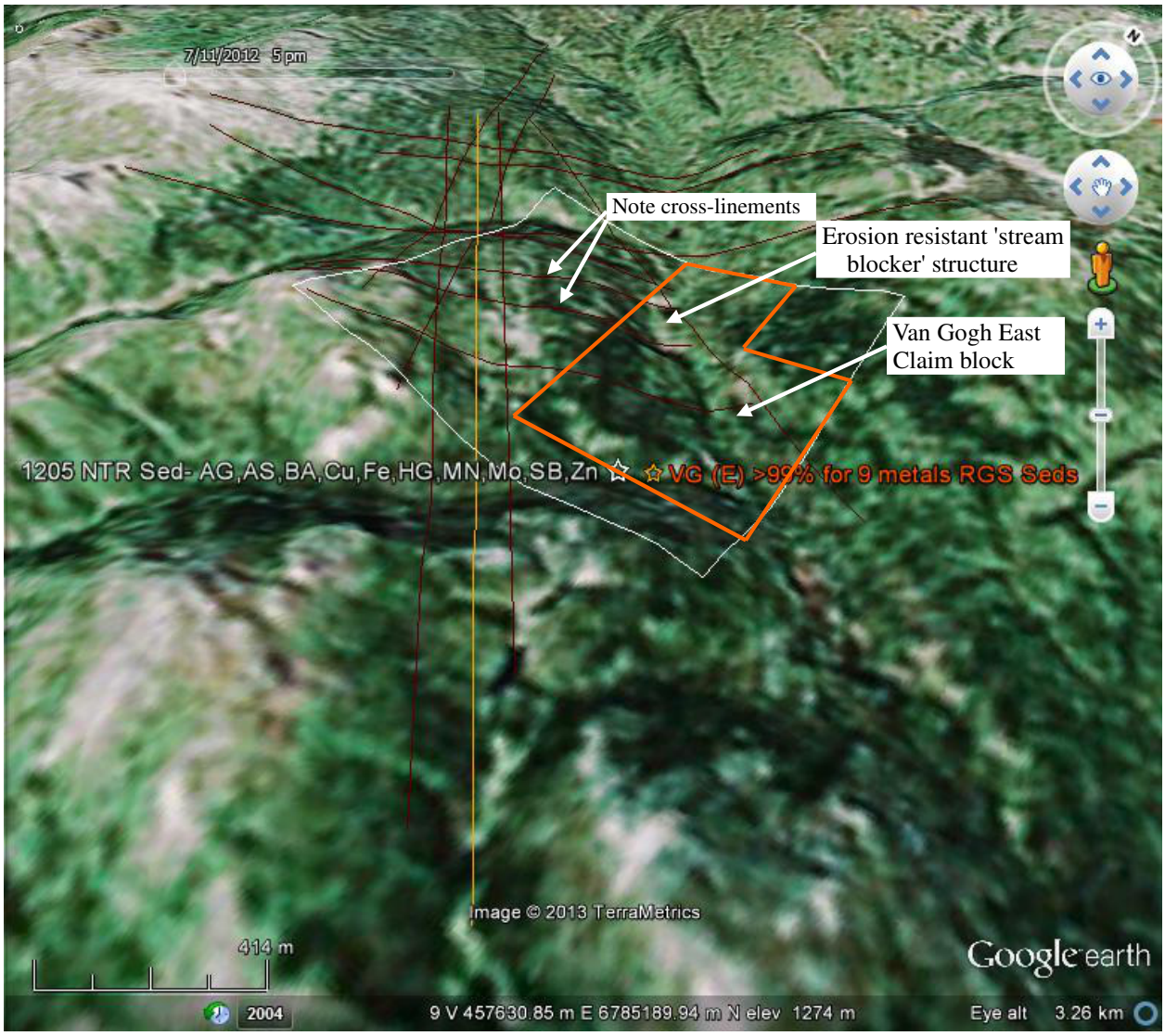
"Skarn deposits commonly are also associated with many other types of magmatic-hydrothermal deposits in mineral districts." Perhaps the strong evidence for this Epithermal Au-Ag Deposit Model from silt sample VGE 13-408 on the north edge of the RGS catchment basin continues outside of the basin both to the north and south along the Pc marble anticline strike axis as shown on the geology map on page 13.

"Concentrations of lead, mercury, arsenic, and cadmium are controlled strongly by surface distribution of pre- and syn-mineralization faults that acted as conduits for mineralizing fluids. In addition, mercury, and to a lesser degree tin abundances, appear to be sharply zoned relative to some of the most intensely mineralized skarns (B.B. Kotlyar, unpub. Data, 1995)" (Cox and Singer, 1986). The extremely high mercury level at YMIP 13-017 VGE 13-408 may indicate such a case, and perhaps link the VMS Pb-Zn, the Cu and Pb-Zn Skarn and the Epithermal Au-Ag Deposit Models for the Van Gogh East claims as **possibly one or two zoned hydrothermal mineralizing events**.

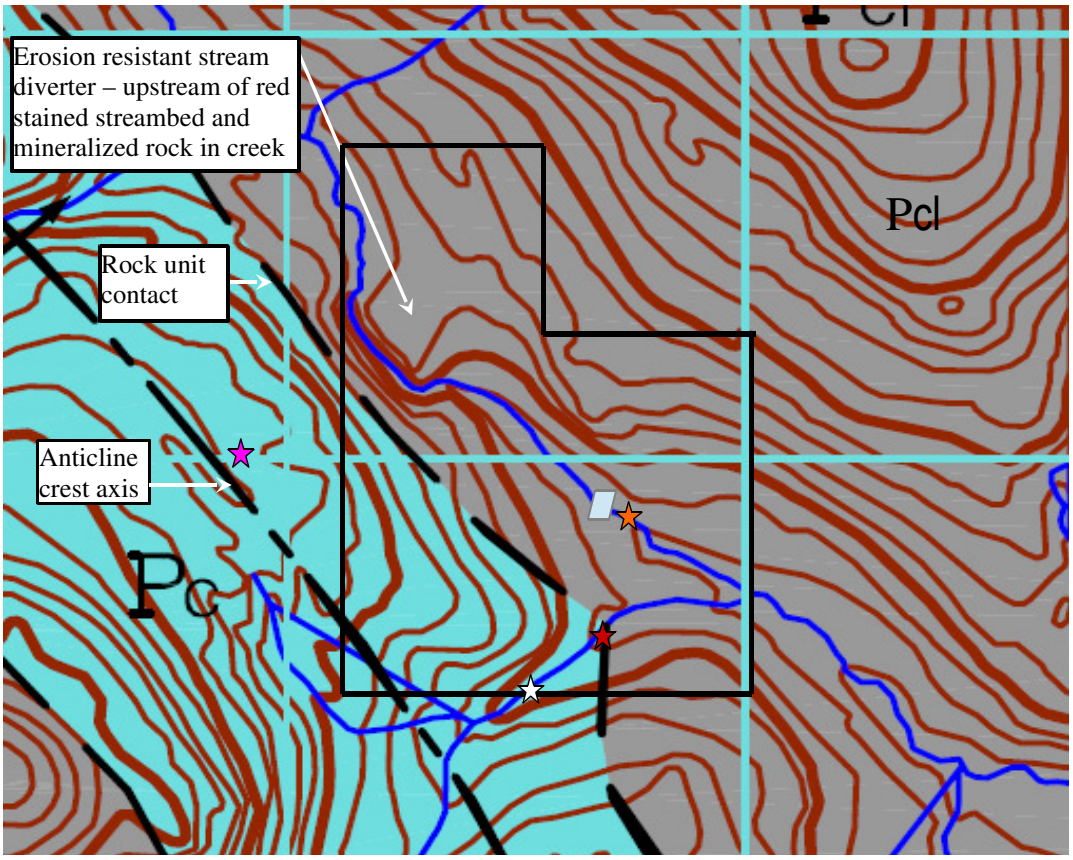


Map 11. Porphyry Mo Deposit Model for RGS silt sample on Van Gogh East claims. *WSM geology methodology gives 'light orange' catchment basin = 90-95th percentile*. The carbonatemarble unit Pc anticline strike axis (Murphy 2000), or conversely the thrust fault strike axis (YGS MapMaker Online) is along the *fuschia pink line*. Perhaps this potential porphyry Mo deposit model provides some evidence for a nearby intrusion - one the could account for the possible skarn and epithermal Au-Ag mineralized hydrothermal fluids necessary for these deposit types for which there is data present.

Numerous recessional features appear on the older Google Earth satellite images See Google Earth above) image that are now not visible with the current lower quality Google Earth imagery (pixel size is now too large for smaller details). The 'older' Google Earth imagery with these recessional features marked with brown lines is shown on below. Many recessional features were visible in the marble unit Pc both at and parallel to the anicline axis and also as cross-cutting features. These are believed to be structural breaks and indicate that the marble unit may have been structurally prepared for mineralized fluid penetration leading to mineral deposition as carbonate/marble, vein or skarn deposits. Limited soil and silt sampling for a period of only a few hours has already found indications of mineralization in the marble unit Pc.



Map 12. Van Gogh (E) Area Recessional Features. The area has 2 main linear recessive linements (fractures?) (brown) parallel to the stream and at the crest of the marble anticline (yellow gold). Other recessional features (fractures?) (brown) intersect the marble anticline crest axis, indicating favorable structural preparation for mineralizing fluids. *'BOLD' assay highlights are 99th percentile (ex. AG), 'not bold' ones are 90-95th percentile (ex. Fe) for NTR silt sample 1205.* Brief exploration in 2013 during the YMIP grant also returned >90 th percentile anomalous silt and soil values for Au, Ag, Hg, Sb, Tl, Ni, Cu, Co, Pb, Zn, Cd and Fe. Van Gogh East claim block outlined in orange. View looking NNW.



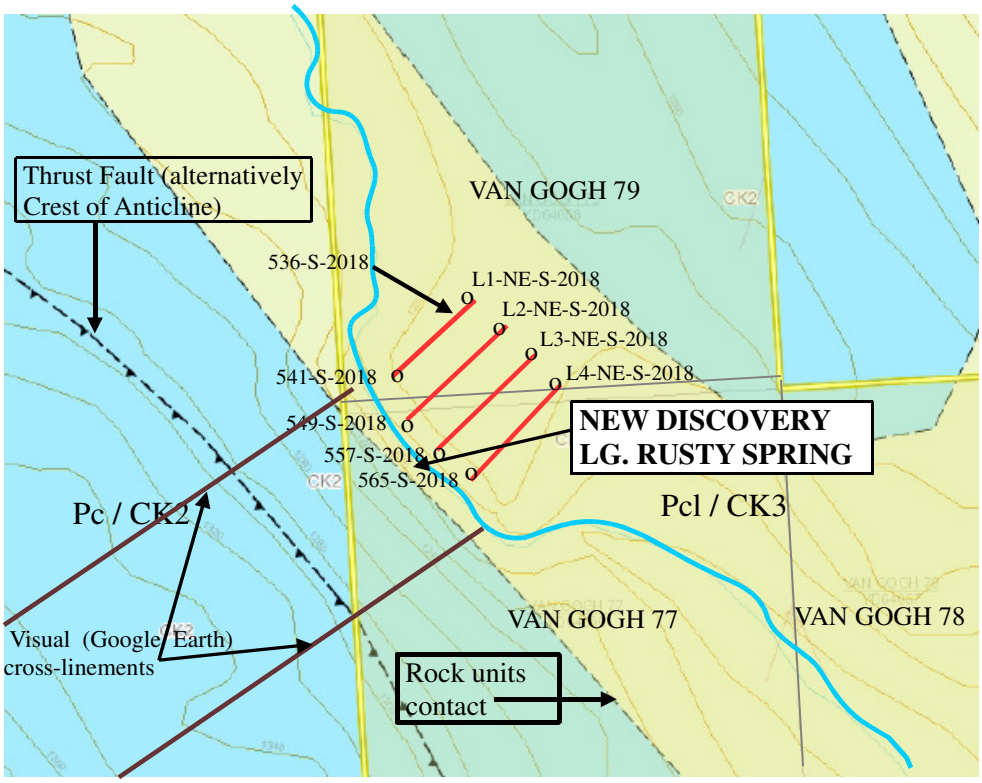
Map 13. Past significant results nearby and within the Van Gogh East claims. Red star marks the very anomalous polymetallic RGS silt sample no. 873091 from GSC Open File 1649. This RGS site has a rusty "red-brown precipitate" on the stream bottom. White star is very anomalous polymetallic Northern Tiger Resources (NTR) silt sample 1205, orange star is very anomalous polymetallic NTR silt sample 1204 - which is another 'red staining' streambed. White parallelogram is NTR rock sample 20939 which NTR stakers reported was from 'angular, abundant, sulphide mineralized' rock in streambed. Fuschia star is the YMIP2013-017 very anomalous Au/Ag silt sample and Au pathfinder element anomalies soil sample area. Note that this site is 'on line' with the stream diverting structure and at the intersection of the marble anticline axis (Murphy's structural interpretation, Open File 2000-16).

Unit (Pcl) occurs to the west and the east on the limbs of the linear anticline marble unit Pc on the Van Gogh (E) claims block. This unit (Pcl) is stratigraphically above the carbonate unit Pc, and could perform a capping function, restricting fluid flow upward, confining it to the more reactive carbonate unit Pc. The RGS and NTR silt samples are anomalous over a 600 m strike for gold pathfinder elements at or very near the eastern contact boundary of the Pc and Pcl units. Red stained rocks and red precipitates in streams and abundant angular chalcopyrite and pyrite mineralized boulders in the steambed occur at or very near this rock unit contact boundary.

The rock unit contact boundary between the marble unit (Pc) and the carbonaceous argillite – chert - greywacke unit (Pcl) was a focus of this grassroots project.

VAN GOGH EAST - WORK PROGRAM

The elevated valley crossing stream-diverting structure that caused three abrupt near 90 degree stream direction changes received a **prospecting and a soil sampling grid program**. The stream erosion resistant rock has diverted the stream – not far upstream of where the NTR reported abundant angular mineralized rock is present in the stream, NTR rock site 20939.



Map 14. Soil sample "Grid" on top of silicious resistant 'stream diverting structure'. Soil sample #'s are sequential and are the GPS waypoint #'s (excepting the "L#" line start designations). The soil sample grid lines were spaced 40 m apart with soil samples taken every 15 m. Soil lines are laid out at 225° SW. The 'Stream cut' through the silicious resistant 'stream blocker' created a deep steep gorge located at the SW end of the soil sample 'grid' (note topo elevation lines). Map from YGS MapMaker Online.

Two very interesting cross lineations seen on Google Earth occur along the two E-W edges of the erosion resistant stream-diverting structure. These are shown on the Google Earth image on page 21. This erosion resistant stream-diverting structure is just upstream of NTR reported abundant angular sulphide mineralized rocks. These indicate that the structure potentially continues westward of the stream, or alternatively the cross lineations could be parallel SW-NE faults bounding this hard silicious structure. This hard resistant stream diverting structure was a major target to define by prospecting and soil sampling, in particular at the stream. Rock was sampled from the sites of both cross linements near their intersection with the stream – at both the upsteam site of the stream diversion entry point and downstream at the stream diversion exit point. The upstream rock sample site was a few metres above the stream channel but the downstream one was taken at the top of the gorge due to inaccesability for safety reasons. Additional rock sampling was done for some of the rock encountered in the soil sample holes and in the streambed of the stream followed along the access route to the Van Gogh East claim block.

The gorge site proved to be a possible major discovery as a very rusty spring (kill zone?) was noted here on the west side of the stream, although access to this site was not possible due to very slippery wet weather conditions combined with the steep descent into the gorge the stream erosion has caused in the hard silicious material that caused the stream diversion. Photos were taken of the rusty spring, and the site named "Red Spring Gorge". The red rusty barren spring bordered and flowed into the stream. From this point the entire downstream streambed was excessively rust stained for 100's of metres (as far as could be seen from the top of the gorge). Sampling of the Red Spring Gorge remains a very high priority site for future work.

A silt sample was taken at the upstream entry into the Red Spring Gorge for a control (before) sample. This allowed a comparison to the NTR silt sample taken downstream of the Red Spring Gorge.(after). The hazardous decent into the gorge to get a soil sample of the rusty material at the barren kill zone(?) and a downstream silt sample was not able to be done as there were no days during the YMEP project where it could be done safely due to the near constant rain and drizzle creating very slippery wet footing combined with the near vertical steep slope down into the gorge. This remains a very high priority site for future work also.

Prospecting observations were done along all traverses where rock exposures permitted. Traverse maps with accompanying observations comments are provided in the Appendix.

PROSPECTING AND SAMPLING PROCEDURES FOR VAN GOGH EAST

The primary method of sampling was surficial geochemistry, consisting of rock, soil and stream silt sediments. Soil samples were taken from the 'B' horizon, approx. 30 cm deep. Soil characteristics were noted in the daily 'Prospecting Journal'. A stream silt sediment sample was taken of the silt fraction collected from the active part of the stream at the start of the gorge to augment the NTR silt sample taken downstream of the gorge. All soil and silt samples were marked with the GPS waypoint number. Rock grab samples were taken as observations warranted, and bagged or otherwise labelled with the GPS waypoint number with permanent ink. A daily journal was kept of work performed and prospecting observations, etc. The daily journal is in the Appendix.

Assays were done by Bureau Veritas Labs in Vancouver, BC using their AQ201 Analytical Package for the soil and silt samples, and their AQ202 Analytical Package for the rock samples. These Packages used 1:1:1 Aqua Regia digestion and ICP-MS analysis.

RESULTS

Soil sample assay results for the stream-diverting silicious structure were not very anomalous for metals as anticipated. Most of the soil samples were weakly anomalous for Cu and Zn. What was possibly significant was rock collected from the hole dug for soil sample 554-S-2018, which was marble. Interestingly, of the 34 soil samples assayed, soil sample 554-S-2018 had the highest assay results for Zn, Ag, Ni, Mn, Cd, Hg and Se. This sample also most corresponded elementally to the top results for the YMIP 2013-017 soil sampling which was in a marble unit (Pc). See Map 13 (page 22) fuscia star symbol, for the YMIP 2013-017 soil sampling location. This, combined with the occurence of the large barren (kill zone?) red rusty spring in the gorge and the rusty gossan in the gorge rock, likely adds more evidence for the probability of a mineral deposit in the marble unit Pc west of the gorge. See the rock sampling assay results section (next) for further detail.

Rock sampling assay results were also not anomalous for metals as anticipated. Rock sample 554-B-2018, collected at soil sample 554-S-2018, was marble, possibly from the upslope marble Pc (Open File 2000-16)/ CK2 (YGS MapMaker Online) across the gorge, and downslope of the very anomalous YMIP 2013-017 soil sampling location. This 554-B-2018 rock sample had the highest Au assay of the 21 rock samples collected, although it was not high (5 ppb). The marble indicates thermal metamorphism – and is evidence for possible hydrothermal alteration of the Pc / CK2 rock package. This would correlate with the YMIP 2013-017 low temperature hydrothermal gold pathfinders found at the location of the bottom left 'CK2' label on Map 14 (page 23) and possibly with the "new discovery" of a large very rusty barren (kill zone?) spring just on the west side of the stream in the gorge at the Pc / Pcl rock unit contact (Open File 2000-16), indicating that the Pcl is probably acting as a fluid-flow caprock. The extremely anomalous polymetallic RGS sample approximately 1 km downstream is at the same Pc / Pcl (cap?)rock unit contact. Assay results for rock 535-A-2018 also correlate with the YMIP 2013-017 low temperature hydrothermal gold pathfinders found at the location of the bottom left 'CK2' label on Map 14 (page 23), being significantly anomalous in As, Sb, Hg, Tl and Se compared to the other rocks assayed.

Silt sampling assay results for silt sample "NW Gorge Silt" were most anomalous for Ag at the 95th percentile compared to the Yukon-Tanana RGS Silt Percentile Threshold Cut-offs regional survey results table in the Appendix. Using the same table, this silt sample was anomalous for Cu and Ni at the 90th percentile and almost 90th percentile for Mg, Cd, and Sb.

Comparing the silt samples "NW Gorge Silt" (before the Gorge) and NTR 1205 (several hundred metres after the Gorge *and the large barren (kill zone?) red rusty spring that empties into the stream in the Gorge*), it appears that the red rusty spring is very anomalous for Ag, As, Co, Hg, Mn, Ni, Sb, Se and Zn, and anomalous for Tl. This comparison, especially for the presence AGAIN of the low temperature Au pathfinders (As,Hg,Sb,Tl and Se) further 'backs up' the growing amount of data pointing to a possible/probable Au-Ag deposit to the west of the Red Spring Gorge.

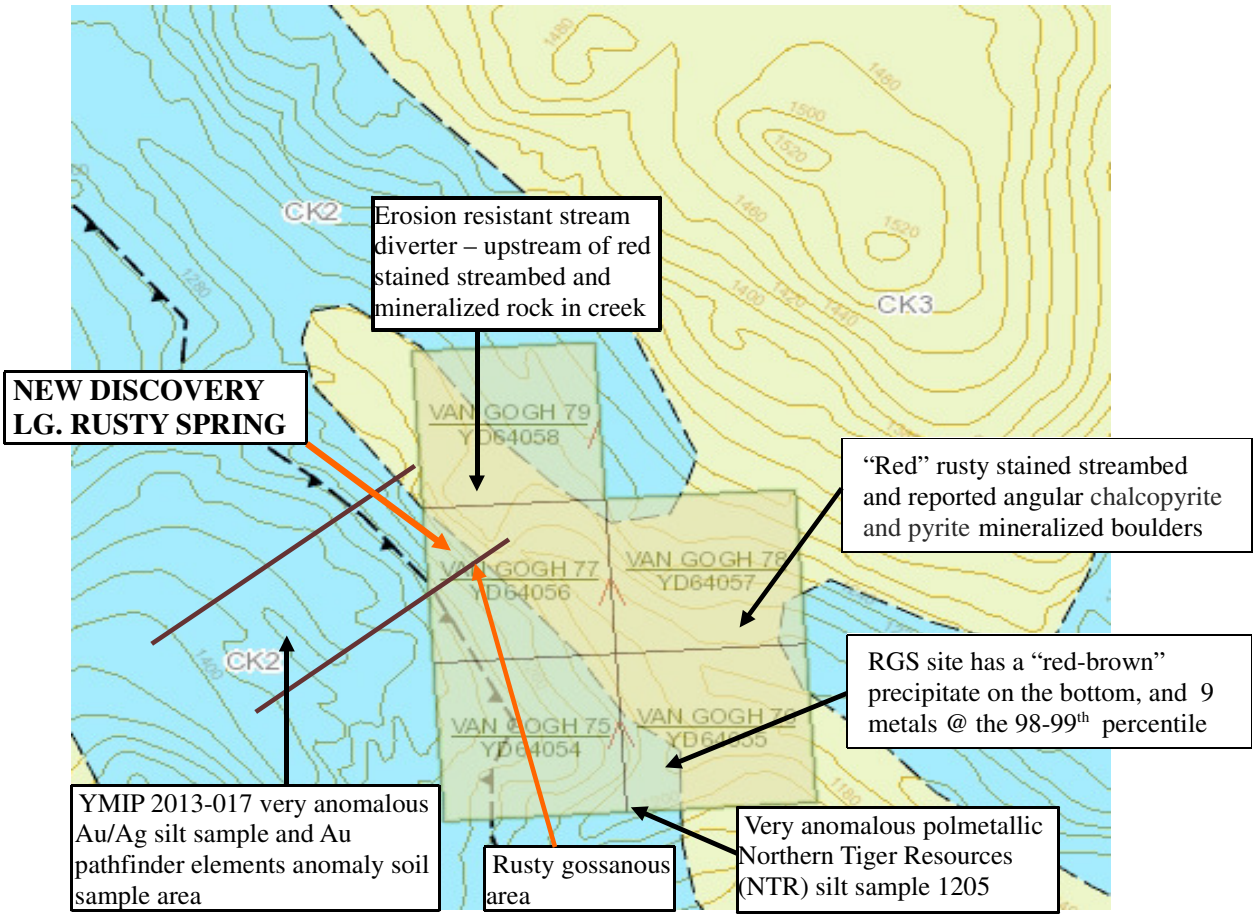
Geological observations made while sampling, prospecting and accessing the Van Gogh East property yielded some notable information. See the traverse maps in the Appendix.

- Cliffs at the edge of the valley at point 'A' on the traverse map appear to be a normal fault striking 145° ESE, and in-line with the stream valley - also a fault?
- Jasper was noted in the stream at several places – basically each time the stream was crossed, indicating that it is a common occurence along the section of the stream traversed. One site was GPS'd at UTM 455818 E, 6788031N, point 'B' on the traverse map.
- Many rocks on a rock bar in the stream at 456707E, 6787132 at point 'C' on the traverse map exhibited decalcification and silicification, while others had pyrite mineralization.
- A gossanous slope was observed at the downstream exit from Red Spring Gorge, at the point labelled on the map on the next page.
- A large red rusty barren (kill zone?) spring was observed on the west streambank of the stream in the Red Spring Gorge, at the point labelled on the map on the next page. From this active rusty spring there was significant red staining downstream for 100's of metres.

Other new geological observations are labelled with white arrows on the map on the next page. Older known geological findings are also included on the map, and labelled with black arrows.

Additionally, based on limited prospecting observations and sampling, I believe that Murphy's structural marble anticline interpretation map (Open File 2000-16) on page 13 is correct and the map on the next page's (and the one on page 23) structural carbonate thrust fault interpretation map(YGS Mapmaker Online) on page is incorrect in that respect.

VAN GOGH EAST HIGHLIGHTS SUMMARY



Map 15. 'Summary map' of all previous and present observations. New geological observations are labelled with white arrows, older known geological findings are labelled with black arrows. Visual (old Google Earth images) cross-linements – probably faults – are brown straight lines. Based on limited prospecting observations and sampling I believe the page 13 Murphy's structural marble anticline interpretation map (Open File 2000-16) is correct and this map's (and the one on page 23) structural carbonate thrust fault interpretation (YGS Mapmaker Online) is incorrect.

CONCLUSIONS AND RECOMMENDATIONS

This YMEP 18-022 grassroots project suffered as a result of the extremely unusual cold (frozen H_2O even!!) rainy wet hypothermic weather conditions. Under 'normal' circumstance much better weather is expected for the first 2 weeks of August! This safety factor consideration severely limited the amount of prospecting and sampling, negatively affecting the project's work program. However, significant discoveries were made in the area prospected and sampled.

- Most notable was the discovery of an active large red rusty barren (kill zone?) spring beside the main valley stream in a steep gorge, which I've named "Red Spring Gorge". This red rusty spring water was actively entering the stream and rust staining it downstream for 100's of metres. A comparison of silt assays above and below (downstream) this red rusty spring indicates it is very anomalous for Ag, As, Co, Hg, Mn, Ni, Sb, Se and Zn, and anomalous for Tl and several other elements as well.

- Low temperature Au pathfinders (As,Hg,Sb,Tl and Se) in (talus?) valley floor marble rock further 'backs up' the growing amount of data pointing to a possible/probable Au-Ag deposit to the west of the Red Spring Gorge in (structurally prepared – see below) marble. This marble also had the highest assay results for Au, Zn, Ag, Ni, Mn, Cd, Hg and Se of all rocks sampled.
- Other supporting data collected during this grassroots survey include the discovery of a rusty gossan hillside just south (downstream) of the large red rusty spring.
- The rusty gossan hillside is 'in-line' with the southern one of the two very interesting cross lineations seen on Google Earth that project westward along the two E-W edges of the erosion resistant stream-diverting structure. These 2 'cross-lineations' appear to be faults bounding the stream blocking structure on both sides. If that is the case then the stream blocking structure is probably a horst.
- Silt sample "NW Gorge Silt" were most anomalous for Ag at the 95th percentile compared to the Yukon-Tanana RGS Silt Percentile Threshold Cut-offs regional survey results table in the Appendix. Using the same table, this silt sample was anomalous for Cu and Ni at the 90th percentile and almost 90th percentile for Mg, Cd, and Sb.
- Soil sample assay results for the stream-diverting silicious structure were not very anomalous for metals as anticipated, indicating that the topo high weathering resistant silicious stream blocking/gorge creating rock is not the source of anomalous mineralization to the west in mable rock.
- Based on limited prospecting observations and sampling, I believe that Murphy's structural marble anticline interpretation map (Open File 2000-16), Map 6 page 13, for the area to the west of the stream blocking structure is correct and the structural carbonate thrust fault interpretation map (YGS Mapmaker Online) for that area is incorrect in that respect.
- The red rusty spring and the very highly anomalous polymetallic RGS silt downstram both occur at the Pc / Pcl rock unit contact (Open File 2000-16). Pcl is likely acting as a caprock, channeling mineralized fluids along the underside of this rock unit.
- Many rocks on a rock bar in the stream at 456707E, 6787132 at point 'C' on the traverse map exhibited decalcification and silicification, while others had pyrite mineralization. Also Jasper was noted in the stream at several places – basically each time the stream was crossed - indicating that it is a common occurence along the section of the stream traversed. Both of these are present in many low temperature carbonate Au deposits, adding further evidence for the possibility for that deposit type's presence west of the stream blocking structure in the marble Pc unit.

Recommendations

It is highly warrented and recommended that sampling be undertaken for

- Soil and rock sampling at the large red rusty barren (kill zone?) spring in Red Spring Gorge
- Soil and rock sampling the hillside gossan
- Silt sampling the rusty streambed section just downstream of the red rusty spring
- Soil (and rock?) sampling the Pc / Pcl rock unit contact between the large red rusty barren (kill zone?) spring in Red Spring Gorge and the very highly anomalous polymetallic RGS site downstream
- Soil (and rock?) sampling of the Pc marble unit west of the main valley stream within the Van Gogh East claim block

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STATEMENT OF QUALIFICATIONS

- 37 years experience doing geological prospecting in Yukon.
- Author of several Yukon YMIP reports on mineral property evaluations or grassroots prospecting programs, plus previous Yukon assessment reports.
- 13 years Geology teaching experience at first year University equivalent.
- Operator of one mine property in Yukon (for Nephrite Jade).
- Owner of 34 Yukon quartz claims.
- Many geological short courses including ones on diamonds, platinum, geophysics, glacial drift prospecting, VMS deposits, rare earth elements, MMI, exploration geochemistry.
- Exploration manager and technical report writer for Crusader Gold in B.C. 2007-2017, including ARIS Reports 28546, 30293, and 31281.
- BSc degree in Biology, (including some university geology courses)

"Everett Van Krichbaum", March 16, 2018

APPENDICES

BUREAU VERITAS MINERAL LABORATORIES Canada

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Submitted By: Van Krichbaum
Receiving Lab: Canada-Vancouver
Received: October 22, 2018
Report Date: November 26, 2018
Page: 1 of 2

CERTIFICATE OF ANALYSIS VAN18002950.1

CLIENT JOB INFORMATION

Project: Van Gogh East
Shipment ID: 1
P.O. Number YMEP 18-022
Number of Samples: 21

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	21	Crush, split and pulverize 250 g rock to 200 mesh			VAN
AQ202	21	1:1:1 Aqua Regia digestion ICP-MS analysis	30	Completed	VAN

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

ADDITIONAL COMMENTS

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: AdVantage GeoConsulting
Box 382
New Denver British Columbia V0G 1S0
Canada

CC:

KERRY JAY
Geochem Project Specialist

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Project: Van Gogh East
Report Date: November 26, 2018

Page: 2 of 2 Part: 1 of 2

CERTIFICATE OF ANALYSIS VAN18002950.1

Method		WGHT	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202
Analyte		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
MDL		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
219-A-2018	Rock	0.28	0.3	2.9	3.4	9	0.2	7.5	0.9	570	0.50	1.4	<0.5	0.3	536	0.1	0.2	<0.1	4	22.17	0.022
219-B-2018	Rock	0.10	4.2	10.8	6.9	43	<0.1	6.5	4.3	313	2.76	8.7	<0.5	2.8	18	<0.1	0.5	<0.1	44	0.25	0.041
219-C-2018	Rock	0.14	2.7	11.3	6.2	34	<0.1	5.3	2.0	239	2.16	7.8	1.0	2.6	9	<0.1	0.4	<0.1	35	0.16	0.033
219-D-2018	Rock	0.13	0.2	14.3	7.2	36	0.2	16.2	1.9	728	1.37	2.2	0.7	2.7	60	0.4	0.2	0.1	16	1.62	0.049
219-E-2018	Rock	0.09	0.4	8.0	2.4	19	<0.1	10.3	2.0	175	0.80	1.9	<0.5	0.6	3	<0.1	0.2	<0.1	8	0.08	0.013
219-F-2018	Rock	0.09	0.3	9.2	12.0	37	<0.1	13.8	4.6	282	2.34	2.3	1.8	11.0	6	<0.1	0.2	0.1	14	0.09	0.031
219-G-2018	Rock	0.09	0.1	10.2	4.9	38	0.1	6.0	2.7	487	1.42	0.6	<0.5	1.6	227	0.2	0.2	<0.1	26	15.11	0.045
219-H-2018	Rock	0.04	0.6	21.8	3.2	63	<0.1	23.6	6.2	300	2.60	4.0	3.0	1.4	6	0.1	0.2	<0.1	17	0.26	0.059
219-I-2018	Rock	0.07	0.8	14.5	3.2	28	<0.1	20.3	2.9	1780	1.17	6.2	1.9	1.1	10	0.4	0.4	<0.1	9	0.24	0.034
219-J-2018	Rock	0.04	0.2	21.8	8.4	41	0.2	17.2	2.3	649	1.43	2.5	1.4	2.7	10	0.3	0.2	0.1	15	0.17	0.051
535-A-2018	Rock	0.08	4.0	12.7	10.1	10	<0.1	2.8	0.3	77	1.04	63.8	<0.5	0.4	21	<0.1	5.0	<0.1	5	0.02	0.015
535-B-2018	Rock	0.20	1.5	5.4	3.4	5	<0.1	0.9	0.2	17	0.23	10.2	<0.5	0.4	7	<0.1	1.7	<0.1	1	<0.01	0.004
535-C-2018	Rock	0.10	0.4	6.7	5.4	5	<0.1	1.2	0.2	46	0.45	5.8	<0.5	0.2	9	<0.1	1.2	<0.1	<1	<0.01	0.002
535-D-2018	Rock	0.06	0.8	3.5	8.0	4	<0.1	1.1	0.2	30	0.33	3.9	<0.5	0.7	3	<0.1	1.3	<0.1	2	<0.01	0.002
554-A-2018	Rock	0.09	0.3	9.7	2.8	25	<0.1	7.1	2.8	423	1.53	4.1	<0.5	1.9	8	<0.1	0.4	<0.1	5	0.07	0.034
554-B-2018	Rock	0.10	<0.1	13.6	4.0	32	<0.1	1.3	0.7	748	0.24	2.2	5.0	<0.1	247	1.5	0.1	<0.1	8	31.70	0.130
NWG-A-2018	Rock	0.11	0.6	9.1	1.8	3	<0.1	1.7	0.5	54	0.63	3.4	<0.5	<0.1	3	<0.1	0.4	<0.1	<1	0.16	0.003
NWG-B-2018	Rock	0.17	0.8	66.2	4.0	23	<0.1	8.5	3.2	60	1.44	13.3	<0.5	<0.1	6	<0.1	1.6	<0.1	1	0.03	0.014
NWG-C-2018	Rock	0.12	1.1	8.3	11.0	5	<0.1	1.3	0.2	44	0.48	6.7	<0.5	0.6	6	<0.1	1.5	0.1	3	0.04	0.003
NWG-D-2018	Rock	0.09	0.4	10.5	1.0	6	<0.1	2.3	0.6	63	0.58	1.6	<0.5	0.3	2	<0.1	0.2	<0.1	1	<0.01	0.002
NWG-E-2018	Rock	0.08	0.5	32.4	1.2	11	<0.1	8.3	0.7	83	0.98	6.4	<0.5	<0.1	7	<0.1	0.7	<0.1	4	0.03	0.010

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Project: Van Gogh East

Report Date: November 28, 2018

Page: 2 of 2 Part: 2 of 2

CERTIFICATE OF ANALYSIS VAN18002950.1

	Method	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202
	Analyte	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
219-A-2018	Rock	4	1	0.68	351	<0.001	<1	0.04	0.006	<0.01	<0.1	0.19	2.2	<0.1	0.08	<1	<0.5	<0.2
219-B-2018	Rock	9	15	0.55	643	0.115	1	1.16	0.107	0.12	0.2	0.11	5.1	0.3	0.24	4	<0.5	<0.2
219-C-2018	Rock	6	12	0.43	314	0.100	<1	0.90	0.114	0.08	0.1	0.08	4.2	0.1	0.06	3	<0.5	<0.2
219-D-2018	Rock	12	8	0.40	253	0.003	3	0.71	0.023	0.21	<0.1	0.02	2.6	<0.1	<0.05	2	<0.5	<0.2
219-E-2018	Rock	2	12	0.06	61	0.008	2	0.23	0.004	0.04	<0.1	<0.01	1.0	<0.1	<0.05	<1	<0.5	<0.2
219-F-2018	Rock	30	20	0.37	113	0.005	6	1.10	0.031	0.28	<0.1	0.06	1.7	<0.1	<0.05	4	<0.5	<0.2
219-G-2018	Rock	7	8	0.68	248	0.003	<1	0.77	0.031	0.09	<0.1	0.04	4.0	<0.1	<0.05	3	<0.5	<0.2
219-H-2018	Rock	12	26	1.03	138	0.003	5	1.25	0.019	0.19	<0.1	0.01	3.3	<0.1	<0.05	3	<0.5	<0.2
219-I-2018	Rock	10	9	0.08	423	0.002	3	0.24	0.008	0.11	<0.1	0.05	1.5	<0.1	<0.05	<1	<0.5	<0.2
219-J-2018	Rock	12	8	0.40	231	0.004	1	0.70	0.021	0.19	<0.1	0.03	2.3	<0.1	<0.05	2	<0.5	<0.2
535-A-2018	Rock	1	5	<0.01	2301	<0.001	1	0.07	0.002	0.04	0.5	1.34	0.3	0.4	0.08	<1	0.6	<0.2
535-B-2018	Rock	2	1	<0.01	1006	<0.001	<1	0.04	0.001	0.02	0.3	0.44	0.2	0.4	<0.05	<1	<0.5	<0.2
535-C-2018	Rock	<1	4	<0.01	1151	<0.001	<1	0.02	<0.001	0.01	<0.1	0.12	0.1	0.2	<0.05	<1	<0.5	<0.2
535-D-2018	Rock	4	3	<0.01	366	<0.001	<1	0.06	0.001	0.04	0.3	0.43	0.2	0.3	<0.05	<1	<0.5	<0.2
554-A-2018	Rock	3	8	0.09	195	0.001	2	0.42	0.003	0.12	<0.1	0.10	0.9	0.1	<0.05	1	<0.5	<0.2
554-B-2018	Rock	3	3	0.19	49	<0.001	<1	0.10	0.002	<0.01	<0.1	0.06	1.7	<0.1	<0.05	<1	<0.5	<0.2
NWG-A-2018	Rock	<1	4	<0.01	85	<0.001	<1	0.03	<0.001	0.02	<0.1	0.06	0.1	<0.1	<0.05	<1	<0.5	<0.2
NWG-B-2018	Rock	<1	3	<0.01	144	<0.001	<1	0.08	<0.001	0.02	<0.1	0.11	0.4	<0.1	0.06	<1	<0.5	<0.2
NWG-C-2018	Rock	3	5	<0.01	891	0.001	3	0.10	0.002	0.06	0.3	0.64	0.4	0.8	<0.05	<1	<0.5	<0.2
NWG-D-2018	Rock	1	5	<0.01	355	<0.001	2	0.11	0.001	0.07	<0.1	0.02	0.4	<0.1	<0.05	<1	<0.5	<0.2
NWG-E-2018	Rock	<1	10	<0.01	45	<0.001	<1	0.08	0.001	<0.01	<0.1	0.03	0.3	<0.1	<0.05	<1	<0.5	<0.2

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QUALITY CONTROL REPORT VAN18002950.1

	Method	WGHT	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.001
Pulp Duplicates																					
219-A-2018	Rock	0.28	0.3	2.9	3.4	9	0.2	7.5	0.9	570	0.50	1.4	<0.5	0.3	536	0.1	0.2	<0.1	4	22.17	0.022
REP 219-A-2018	QC		0.2	2.9	3.6	9	0.2	6.8	0.8	548	0.49	1.2	<0.5	0.3	546	0.1	0.2	<0.1	4	21.84	0.022
Reference Materials																					
STD DS11	Standard		14.1	158.2	138.9	359	1.8	81.4	14.1	996	3.19	43.5	74.9	7.5	62	2.3	7.6	11.0	50	1.06	0.075
STD OXC129	Standard		1.2	27.1	6.3	37	<0.1	76.2	19.7	404	3.11	0.6	183.3	1.8	171	<0.1	<0.1	<0.1	54	0.65	0.095
STD OXC129 Expected			1.3	28	6.2	42.9		79.5	20.3	421	3.065	0.6	195	1.9					51	0.684	0.102
STD DS11 Expected			14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	79	7.65	67.3	2.37	8.74	12.2	50	1.063	0.0701
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.001
Prep Wash																					
ROCK-VAN	Prep Blank		1.0	4.6	1.7	31	<0.1	1.3	3.8	496	1.78	1.1	0.6	2.5	25	<0.1	<0.1	<0.1	23	0.61	0.042
ROCK-VAN	Prep Blank		1.0	3.8	1.8	32	<0.1	1.0	3.7	505	1.87	0.9	<0.5	2.3	25	<0.1	<0.1	<0.1	23	0.59	0.041

QUALITY CONTROL REPORT VAN18002950.1

	Method	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202	AQ202
	Analyte	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																		
219-A-2018	Rock	4	1	0.68	351	<0.001	<1	0.04	0.006	<0.01	<0.1	0.19	2.2	<0.1	0.08	<1	<0.5	<0.2
REP 219-A-2018	QC	4	1	0.66	338	<0.001	<1	0.04	0.006	0.01	<0.1	0.17	2.2	<0.1	0.08	<1	<0.5	<0.2
Reference Materials																		
STD DS11	Standard	18	61	0.85	388	0.092	6	1.16	0.076	0.40	2.9	0.28	3.2	5.0	0.29	5	2.2	4.6
STD OXC129	Standard	12	49	1.56	48	0.370	2	1.51	0.510	0.39	<0.1	<0.01	1.3	<0.1	<0.05	5	<0.5	<0.2
STD OXC129 Expected		12.5	52	1.545	50	0.4	1	1.58	0.59	0.3655			1.1			5.5		
STD DS11 Expected		18.6	61.5	0.85	385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																		
ROCK-VAN	Prep Blank	5	4	0.45	66	0.074	<1	0.89	0.117	0.10	<0.1	<0.01	3.0	<0.1	<0.05	4	<0.5	<0.2
ROCK-VAN	Prep Blank	6	3	0.45	70	0.078	1	0.96	0.134	0.12	0.1	<0.01	3.3	<0.1	<0.05	4	<0.5	<0.2

Table 3. Silt/Soil Assay Certificate, YMEP 18-022 - Van Gogh East

Rock Descriptions – YMEP 18-022

Sample #	Description	Acid Test (+,-)
219-A-2018	White bladed calcite thoroughly intertwinned/replaced? by brown/black silicious material. Brown/black silicious material is slightly rusty on weathered surface, resistant, very hard. No metallics visible, very noticeably heavy (dense).	+
219-B-2018	Grey hard silicious material with some quartz veining and clots. A few large pyrite crystals oxidized to limonite on the surface. Limonite abundant in fractures and as a crust inside. Numerous small vugs internally associated with limonite.	-
219-C-2018	From same sample as 219-B-2018. Same description as above, with additional patches of dark red brown hard material.	-
219-D-2018	Grey brown hard silicious material with very numerous small rusty vugs, porus, low density. Appears decalcified, but some spots test + for acid test. Limonite on much of the outer surface.	+
219-E-2018	Fine grained grey brown material with light coloured honey comb small quartz veins throughout. Slightly rusty, vuggy, porus, decalcified? Whitish veins somewhat bladed,	-
219-F-2018	Grey volcanic? rock with very small light coloured phenocrysts? Weathered tan-brown surface. Scattered very small 'yellow' metallic crystals? (pyrite?)	
219-G-2018	Medium grey (small) crystalline limestone/marble? rock with white calcite clots and veins. (+ acid test). 1 cm thick (ave.) porus-vuggy-decalcified outer surface (- acid test). Small scattered 1-2 mm dark grey black crystals internally. Possible scattered tiny 'yellow' metallic crystals? (pyrite?)	+
219-H-2018	Hard silicified? light grey internally with limonite rusty weathered very vuggy/pitted surface.	-
219-I-2018	Tan to limonitic rusty light weight (low density) rock with very porus/pitted rusty surface - appears 'spongy' throughout, decalcified? Surface has small 1-3 mm scattered dark rusty inclusions and one 2 x 5 cm area that is entirely limonite.	-
219-J-2018	Tan to limonitic rusty light weight (low density) rock with very porus/pitted rusty surface - appears 'spongy' throughout, low density, decalcified? Surface has small 1-3 mm scattered dark rusty inclusions. Similar to 219-I-2018.	-
535-A-2018	Silicious, dark grey, hard, resistant outcrop. Weathered to limonite on entire surface except for some 1-2mm and occasional large black patches.	-
535-B-2018	Silicious, dark grey and black 2mm laminated layers (chert?), hard, resistant outcrop. Abundant 2-3mm limonite patches on dull darker grey surface (manganiferous?) to more extensive limonite weathering.	-
535-C-2018	Similar to 535-A-2018 but without visible laminations, cherty appearance outside, Micro-crystalline internally.	-
535-D-2018	Light to dark grey streaked, hard, highly silicious (chert?), irregular 4+mm laminations, slightly limonitic. Weathered surface entirely limonitic.	-
554-A-2018	Very dark grey, volcanic? With small light coloured bladed phenocrysts?, slightly limonitic. Abundant limonite and black manganiferous? weathered surface.	-
554-B-2018	Light grey crystalline marble with minor medium brown non-metallic opaque inclusions. These inclusions are weathering resistant and stand above the weathered surface which is very light grey and non-rusty.	+
NWG-A-2018	Silicious, very dark grey-brown, hard. Weathering to hematite/limonite on entire surface with some blackish-brown 2mm wide semi-parallel veins. A few random very thin >1mm crystalline veins.	-
NWG-B-2018	Silicious, micro-crystalline, hard, variably 1-5 mm laminated. Thin laminations are very dark grey-brown, thicker ones are light brown (cherty?) 'outside' but white internally (fresh break). Weathering to limonite and hematite patches on most of the surface.	-
NWG-C-2018	Silicious, grey, hard, uniformly 2-3mm laminated and not visibly micro-crystalline (chert?). Surface is weathered to limonite patches (but no hematite weathered patches like NWG-B-2018).	-
NWG-D-2018	Similar to NWG-C-2018. Silicious, streaked grey to dark grey , hard, uniformly 2mm laminated and not visibly micro-crystalline (chert?). Some limonite patches on small weathered surface.	-
NWG-E-2018	White massive? bladed quartz with some brown patches, possibly laminated or flow banding?, has a few tiny pits. Surface is entirely covered in limonite (water staining).	-

Table 4. Rock Sample Characteristics, YMEP 18-022 - Van Gogh East

GPS Rock Sample co-ordinates for YMEP 18-022

Sample Name	UTM Zone	Easting	Northing	Description	Sample Type
219-A-2018	09V	456707	6787132	Gravel Bar	Rock
219-B-2018	09V	456707	6787132	Gravel Bar	Rock
219-C-2018	09V	456707	6787132	Gravel Bar	Rock
219-D-2018	09V	456707	6787132	Gravel Bar	Rock
219-E-2018	09V	456707	6787132	Gravel Bar	Rock
219-F-2018	09V	456707	6787132	Gravel Bar	Rock
219-G-2018	09V	456707	6787132	Gravel Bar	Rock
219-H-2018	09V	456707	6787132	Gravel Bar	Rock
219-I-2018	09V	456707	6787132	Gravel Bar	Rock
219-J-2018	09V	456707	6787132	Gravel Bar	Rock
535-A-2018	09V	457266	6786235	mid Rock Mound	Rock
535-B-2018	09V	457266	6786235	mid Rock Mound	Rock
535-A-2018	09V	457266	6786235	mid Rock Mound	Rock
535-A-2018	09V	457266	6786235	mid Rock Mound	Rock
554-A-2018	09V	457238	6786344	Line 3	Rock
554-B-2018	09V	457238	6786344	Line 3	Rock
566-S-2018	09V	457266	6786221	south Rock Mound	Rock
NWG-A-2018	09V	457167	6786221	N Canyon Rock	Rock
NWG-B-2018	09V	457167	6786221	N Canyon Rock	Rock
NWG-C-2018	09V	457167	6786221	N Canyon Rock	Rock
NWG-D-2018	09V	457167	6786221	N Canyon Rock	Rock
NWG-E-2018	09V	457167	6786221	N Canyon Rock	Rock
--------	09V	455818	6788031	Jasper in creek	----------
--------	09V	455204	6792744	Mateo Flat	Rock

Table 5. Rock Sample GPS Coordinates, YMEP 18-022 - Van Gogh East

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Submitted By: Van Krichbaum
Receiving Lab: Canada-Vancouver
Received: October 22, 2018
Report Date: November 28, 2018
Page: 1 of 3

CERTIFICATE OF ANALYSIS VAN18002951.1

CLIENT JOB INFORMATION

Project: Van Gogh East
Shipment ID: 1
P.O. Number YMEP 18-022
Number of Samples: 34

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days
DISP-RJT-SOIL Immediate Disposal of Soil Reject

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
DY060	34	Dry at 60C			VAN
SS80	34	Dry at 60C sieve 100g to -80 mesh			VAN
AQ201	34	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
DISPL	34	Disposal of pulps			VAN

ADDITIONAL COMMENTS

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

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CC:

KERRY JAY
Geochem Project Specialist

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Project: Van Gogh East
Report Date: November 28, 2018

CERTIFICATE OF ANALYSIS VAN18002951.1

	Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
NW Gorge Silt	Silt	1.1	35.7	11.9	89	0.4	46.0	11.1	717	2.56	7.5	3.6	1.9	50	0.5	0.8	0.2	30	1.00	0.100	19
L1-NE-S-2018	Soil	2.1	57.4	26.5	140	0.4	93.4	16.4	1602	4.63	24.0	2.6	2.9	23	1.0	1.7	0.4	58	0.45	0.151	18
536-S-2018	Soil	1.1	43.7	20.2	86	0.2	51.4	12.8	518	3.09	11.3	5.2	6.1	22	0.2	1.1	0.3	44	0.38	0.083	24
537-S-2018	Soil	0.8	37.3	16.3	72	0.1	49.2	11.4	559	2.69	10.5	3.4	5.8	19	0.1	1.1	0.2	42	0.34	0.084	24
538-S-2018	Soil	0.9	35.0	17.2	78	0.3	55.0	12.4	888	2.43	9.9	2.7	2.0	36	0.6	1.0	0.3	33	1.11	0.095	19
539-S-2018	Soil	0.3	30.2	3.5	12	0.3	26.1	2.8	872	0.49	1.8	2.8	0.3	102	1.4	0.9	0.3	4	4.79	0.084	10
540-S-2018	Soil	1.5	20.0	17.7	89	<0.1	43.5	16.4	857	3.08	13.8	1.0	3.9	13	0.9	1.3	0.3	41	0.11	0.066	20
541-S-2018	Soil	1.6	20.5	19.9	89	<0.1	44.8	10.7	434	4.00	16.7	0.9	4.9	10	0.8	1.4	0.3	36	0.12	0.053	17
L2-NE-S-2018	Soil	0.8	29.4	13.7	62	<0.1	34.9	8.1	363	2.39	7.8	4.2	5.9	15	0.2	0.8	0.2	41	0.21	0.056	27
542-S-2018	Soil	0.9	38.8	18.1	85	0.1	51.5	14.1	594	2.83	10.2	2.4	6.4	19	0.3	1.1	0.2	43	0.30	0.083	24
543-S-2018	Soil	1.3	23.7	16.5	81	0.2	44.1	20.0	1476	2.87	11.4	1.2	1.8	13	0.3	0.8	0.3	51	0.14	0.084	21
544-S-2018	Soil	<0.1	4.4	0.5	5	<0.1	1.1	0.6	27	0.22	<0.5	<0.5	<0.1	12	<0.1	<0.1	<0.1	9	0.32	0.025	1
545-S-2018	Soil	1.2	29.4	26.0	89	0.2	61.4	16.2	974	3.09	16.6	1.6	2.0	24	0.7	1.4	0.2	29	0.85	0.091	18
546-S-2018	Soil	0.6	30.7	8.1	31	0.4	29.3	5.2	974	1.08	2.3	0.5	0.3	44	1.5	0.4	0.2	21	1.94	0.130	18
547-S-2018	Soil	1.0	42.6	22.0	89	0.2	48.4	12.9	469	3.01	17.6	2.7	5.9	27	0.2	1.6	0.2	39	0.67	0.089	23
548-S-2018	Soil	1.0	17.7	15.7	66	<0.1	44.9	11.9	474	2.43	9.6	<0.5	3.4	18	0.3	0.7	0.2	36	0.52	0.049	22
549-S-2018	Soil	1.2	33.0	15.1	77	0.3	45.7	10.0	454	2.62	14.6	2.9	4.3	21	0.2	1.3	0.2	35	0.54	0.055	24
L3-NE-S-2018	Soil	0.9	37.2	17.3	79	<0.1	47.2	13.6	568	2.86	9.6	2.7	6.3	19	0.2	1.0	0.2	46	0.29	0.071	26
550-S-2018	Soil	0.7	22.3	13.8	58	<0.1	28.0	6.8	272	2.26	7.9	1.7	4.3	13	<0.1	0.8	0.2	37	0.16	0.053	27
551-S-2018	Soil	1.8	26.3	16.8	92	0.1	53.9	10.1	500	4.66	19.6	1.4	4.3	10	0.3	1.3	0.3	42	0.07	0.190	21
552-S-2018	Soil	1.6	22.5	16.5	119	0.1	47.7	10.9	624	3.90	16.2	1.7	4.7	12	0.5	1.1	0.3	46	0.11	0.137	20
553-S-2018	Soil	1.6	14.5	15.9	102	0.1	35.8	9.6	1206	3.64	10.2	0.8	2.9	8	0.8	0.7	0.2	32	0.08	0.075	15
554-S-2018	Soil	1.0	29.5	16.4	187	1.5	89.7	17.4	5115	3.00	11.1	2.0	2.5	27	4.1	0.7	0.1	58	1.52	0.640	25
555-S-2018	Soil	0.6	36.7	7.2	54	0.5	21.8	5.5	1629	0.94	1.9	1.0	0.3	65	1.1	0.5	0.1	13	3.58	0.142	9
556-S-2018	Soil	0.8	32.3	16.1	62	0.3	38.8	8.8	548	2.57	11.7	1.3	2.0	28	0.3	1.0	0.2	40	1.01	0.085	19
557-S-2018	Soil	1.9	27.4	20.8	93	0.2	62.7	15.7	587	3.61	24.4	6.9	4.0	15	0.4	1.7	0.3	39	0.29	0.052	20
L4-NE-S-2018	Soil	1.2	42.5	23.8	97	0.2	53.8	14.5	687	3.01	15.5	2.5	6.7	23	0.4	1.4	0.2	40	0.37	0.104	24
558-S-2018	Soil	0.8	32.5	14.0	73	0.1	37.7	8.9	416	2.69	9.5	2.8	5.1	19	0.2	0.9	0.2	40	0.30	0.077	25
559-S-2018	Soil	1.1	45.0	14.5	80	0.1	58.9	14.6	679	2.92	10.2	2.3	6.8	22	0.1	1.1	0.2	48	0.35	0.075	26
560-S-2018	Soil	0.9	36.5	13.8	74	<0.1	46.2	11.7	471	2.89	9.7	2.5	5.6	18	0.1	0.9	0.2	45	0.29	0.064	26

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	Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
NW Gorge Silt	Silt	1.1	35.7	11.9	89	0.4	46.0	11.1	717	2.56	7.5	3.6	1.9	50	0.5	0.8	0.2	30	1.00	0.100	19
L1-NE-S-2018	Soil	2.1	57.4	26.5	140	0.4	93.4	16.4	1602	4.63	24.0	2.6	2.9	23	1.0	1.7	0.4	58	0.45	0.151	18
536-S-2018	Soil	1.1	43.7	20.2	86	0.2	51.4	12.8	518	3.09	11.3	5.2	6.1	22	0.2	1.1	0.3	44	0.38	0.083	24
537-S-2018	Soil	0.8	37.3	16.3	72	0.1	49.2	11.4	559	2.69	10.5	3.4	5.8	19	0.1	1.1	0.2	42	0.34	0.084	24
538-S-2018	Soil	0.9	35.0	17.2	78	0.3	55.0	12.4	888	2.43	9.9	2.7	2.0	36	0.6	1.0	0.3	33	1.11	0.095	19
539-S-2018	Soil	0.3	30.2	3.5	12	0.3	26.1	2.8	872	0.49	1.8	2.8	0.3	102	1.4	0.9	0.3	4	4.79	0.084	10
540-S-2018	Soil	1.5	20.0	17.7	89	<0.1	43.5	16.4	857	3.08	13.8	1.0	3.9	13	0.9	1.3	0.3	41	0.11	0.066	20
541-S-2018	Soil	1.6	20.5	19.9	89	<0.1	44.8	10.7	434	4.00	16.7	0.9	4.9	10	0.8	1.4	0.3	36	0.12	0.053	17
L2-NE-S-2018	Soil	0.8	29.4	13.7	62	<0.1	34.9	8.1	363	2.39	7.8	4.2	5.9	15	0.2	0.8	0.2	41	0.21	0.056	27
542-S-2018	Soil	0.9	38.8	18.1	85	0.1	51.5	14.1	594	2.83	10.2	2.4	6.4	19	0.3	1.1	0.2	43	0.30	0.083	24
543-S-2018	Soil	1.3	23.7	16.5	81	0.2	44.1	20.0	1476	2.87	11.4	1.2	1.8	13	0.3	0.8	0.3	51	0.14	0.084	21
544-S-2018	Soil	<0.1	4.4	0.5	5	<0.1	1.1	0.6	27	0.22	<0.5	<0.5	<0.1	12	<0.1	<0.1	<0.1	9	0.32	0.025	1
545-S-2018	Soil	1.2	29.4	26.0	89	0.2	61.4	16.2	974	3.09	16.6	1.6	2.0	24	0.7	1.4	0.2	29	0.85	0.091	18
546-S-2018	Soil	0.6	30.7	8.1	31	0.4	29.3	5.2	974	1.08	2.3	0.5	0.3	44	1.5	0.4	0.2	21	1.94	0.130	18
547-S-2018	Soil	1.0	42.6	22.0	89	0.2	48.4	12.9	469	3.01	17.6	2.7	5.9	27	0.2	1.6	0.2	39	0.67	0.089	23
548-S-2018	Soil	1.0	17.7	15.7	66	<0.1	44.9	11.9	474	2.43	9.6	<0.5	3.4	18	0.3	0.7	0.2	36	0.52	0.049	22
549-S-2018	Soil	1.2	33.0	15.1	77	0.3	45.7	10.0	454	2.62	14.6	2.9	4.3	21	0.2	1.3	0.2	35	0.54	0.055	24
L3-NE-S-2018	Soil	0.9	37.2	17.3	79	<0.1	47.2	13.6	568	2.86	9.6	2.7	6.3	19	0.2	1.0	0.2	46	0.29	0.071	26
550-S-2018	Soil	0.7	22.3	13.8	58	<0.1	28.0	6.8	272	2.26	7.9	1.7	4.3	13	<0.1	0.8	0.2	37	0.16	0.053	27
551-S-2018	Soil	1.8	26.3	16.8	92	0.1	53.9	10.1	500	4.66	19.6	1.4	4.3	10	0.3	1.3	0.3	42	0.07	0.190	21
552-S-2018	Soil	1.6	22.5	16.5	119	0.1	47.7	10.9	624	3.90	16.2	1.7	4.7	12	0.5	1.1	0.3	46	0.11	0.137	20
553-S-2018	Soil	1.6	14.5	15.9	102	0.1	35.8	9.6	1206	3.64	10.2	0.8	2.9	8	0.8	0.7	0.2	32	0.08	0.075	15
554-S-2018	Soil	1.0	29.5	16.4	187	1.5	89.7	17.4	5115	3.00	11.1	2.0	2.5	27	4.1	0.7	0.1	58	1.52	0.640	25
555-S-2018	Soil	0.6	36.7	7.2	54	0.5	21.8	5.5	1629	0.94	1.9	1.0	0.3	65	1.1	0.5	0.1	13	3.58	0.142	9
556-S-2018	Soil	0.8	32.3	16.1	62	0.3	38.8	8.8	548	2.57	11.7	1.3	2.0	28	0.3	1.0	0.2	40	1.01	0.085	19
557-S-2018	Soil	1.9	27.4	20.8	93	0.2	62.7	15.7	587	3.61	24.4	6.9	4.0	15	0.4	1.7	0.3	39	0.29	0.052	20
L4-NE-S-2018	Soil	1.2	42.5	23.8	97	0.2	53.8	14.5	687	3.01	15.5	2.5	6.7	23	0.4	1.4	0.2	40	0.37	0.104	24
558-S-2018	Soil	0.8	32.5	14.0	73	0.1	37.7	8.9	416	2.69	9.5	2.8	5.1	19	0.2	0.9	0.2	40	0.30	0.077	25
559-S-2018	Soil	1.1	45.0	14.5	80	0.1	58.9	14.6	679	2.92	10.2	2.3	6.8	22	0.1	1.1	0.2	48	0.35	0.075	26
560-S-2018	Soil	0.9	36.5	13.8	74	<0.1	46.2	11.7	471	2.89	9.7	2.5	5.6	18	0.1	0.9	0.2	45	0.29	0.064	26

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	Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
	Analyte	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
561-S-2018	Soil	53	0.77	291	0.049	2	1.39	0.009	0.08	0.1	0.08	4.3	0.1	<0.05	4	<0.5	<0.2
562-S-2018	Soil	54	0.75	284	0.060	1	1.30	0.007	0.07	0.1	0.10	4.7	<0.1	<0.05	4	<0.5	<0.2
563-S-2018	Soil	53	0.70	218	0.055	1	1.37	0.007	0.07	0.1	0.09	4.6	<0.1	<0.05	4	<0.5	<0.2
565-S-2018	Soil	18	0.17	682	0.016	2	1.20	0.007	0.08	<0.1	0.06	1.6	0.2	<0.05	4	<0.5	<0.2

	Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
561-S-2018	Soil	0.9	34.9	14.9	77	<0.1	45.3	11.4	506	2.74	10.3	3.8	5.6	19	0.2	0.9	0.2	43	0.30	0.066	24
562-S-2018	Soil	0.8	39.6	14.1	77	0.1	53.9	12.9	510	2.66	9.4	3.0	6.8	20	0.1	1.1	0.2	45	0.36	0.078	26
563-S-2018	Soil	0.8	36.1	14.0	73	<0.1	40.6	13.1	525	2.78	8.8	4.5	6.0	18	0.1	1.0	0.2	46	0.30	0.062	24
565-S-2018	Soil	1.3	36.6	17.7	111	0.4	27.9	16.6	3638	1.37	2.5	<0.5	0.5	30	6.2	0.3	0.3	26	0.65	0.112	19

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	Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
Pulp Duplicates																					
L3-NE-S-2018	Soil	0.9	37.2	17.3	79	<0.1	47.2	13.6	568	2.86	9.6	2.7	6.3	19	0.2	1.0	0.2	46	0.29	0.071	26
REP L3-NE-S-2018	QC	0.9	37.8	17.2	79	<0.1	45.5	13.2	551	2.84	9.5	3.2	6.1	18	0.2	1.0	0.2	45	0.28	0.069	25
Reference Materials																					
STD DS11	Standard	15.2	155.2	138.8	341	1.6	80.5	14.0	1015	3.07	44.5	78.5	8.6	65	2.4	8.7	11.8	51	0.99	0.077	20
STD DS11	Standard	14.3	144.6	134.7	333	1.7	75.4	13.0	971	3.01	41.5	117.1	8.6	73	2.3	9.6	11.8	49	1.01	0.065	20
STD OREAS262	Standard	0.7	119.0	59.0	150	0.4	64.6	27.9	527	3.22	37.1	57.3	9.8	35	0.7	5.5	1.2	22	2.82	0.041	17
STD OREAS262	Standard	0.6	113.4	58.2	144	0.5	60.2	25.4	508	3.17	34.9	75.2	9.9	37	0.6	6.8	1.0	23	2.83	0.038	18
STD OXC129	Standard	1.3	29.2	6.7	43	<0.1	82.0	21.0	432	3.12	<0.5	188.8	2.0	195	<0.1	<0.1	<0.1	58	0.72	0.109	13
STD OXC129	Standard	1.4	26.9	6.6	40	<0.1	80.0	20.2	424	3.10	0.8	203.7	2.0	196	<0.1	<0.1	<0.1	54	0.74	0.106	13
STD OXC129 Expected		1.3	28	6.2	42.9		79.5	20.3	421	3.065	0.6	195	1.9					51	0.684	0.102	12.5
STD DS11 Expected		14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	79	7.65	67.3	2.37	8.74	12.2	50	1.063	0.0701	18.6
STD OREAS262 Expected		0.68	118	56	154	0.45	62	26.9	530	3.45	35.8	72	9.33	36	0.61	5.06	0.98	22.5	2.98	0.04	15.9
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	3	<0.01	<0.001	<1
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1

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QUALITY CONTROL REPORT VAN18002951.1

	Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
	Analyte	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																	
L3-NE-S-2018	Soil	60	0.76	300	0.059	2	1.39	0.007	0.07	<0.1	0.11	5.2	0.1	<0.05	4	<0.5	<0.2
REP L3-NE-S-2018	QC	57	0.74	307	0.057	1	1.32	0.006	0.07	0.1	0.12	5.0	<0.1	<0.05	4	<0.5	<0.2
Reference Materials																	
STD DS11	Standard	60	0.82	359	0.095	8	1.12	0.074	0.37	3.0	0.24	3.3	4.9	0.26	5	2.5	4.6
STD DS11	Standard	56	0.83	355	0.094	5	1.22	0.072	0.39	2.8	0.27	3.2	4.9	0.25	5	2.3	4.9
STD OREAS262	Standard	45	1.13	249	0.003	4	1.27	0.064	0.27	0.2	0.15	3.4	0.5	0.25	4	0.5	0.2
STD OREAS262	Standard	41	1.14	248	0.003	3	1.38	0.061	0.31	0.2	0.16	3.3	0.5	0.24	4	0.5	0.3
STD OXC129	Standard	55	1.45	51	0.417	1	1.56	0.565	0.35	<0.1	<0.01	0.9	<0.1	<0.05	6	<0.5	<0.2
STD OXC129	Standard	52	1.59	48	0.413	<1	1.60	0.586	0.36	<0.1	<0.01	0.9	<0.1	<0.05	6	<0.5	<0.2
STD OXC129 Expected		52	1.545	50	0.4	1	1.58	0.59	0.3655			1.1			5.5		
STD DS11 Expected		61.5	0.85	385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56
STD OREAS262 Expected		41.7	1.17	248	0.003	4	1.3	0.071	0.295	0.2	0.17	3.49	0.47	0.272	4.59	0.67	0.23
BLK	Blank	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2

Table 6. Silt/Soil Assay Certificate, YMEP 18-022 - Van Gogh East

GPS Soil/Silt Sample co-ordinates for YMEP 18-022

Sample Name	UTM Zone	Easting	Northing	Description	Sample Type
NW Gorge Silt	09V	456137	6786455	Silt along bank	Silt
L1-NE-S-2018	09V	457258	6786443	Line 1	Soil
536-S-2018	09V	457244	6786435	Line 1	Soil
537-S-2018	09V	457231	6786424	Line 1	Soil
538-S-2018	09V	457220	6786416	Line 1	Soil
539-S-2018	09V	457207	6786408	Line 1	Soil
540-S-2018	09V	457196	6786398	Line 1	Soil
541-S-2018	09V	457180	6786393	Line 1	Soil
L2-NE-S-2018	09V	457282	6786409	Line 2	Soil
542-S-2018	09V	457269	6786402	Line 2	Soil
543-S-2018	09V	457255	6786396	Line 2	Soil
544-S-2018	09V	457243	6786386	Line 2	Soil
545-S-2018	09V	457234	6786377	Line 2	Soil
546-S-2018	09V	457220	6786370	Line 2	Soil
547-S-2018	09V	457205	6786363	Line 2	Soil
548-S-2018	09V	457193	6786352	Line 2	Soil
549-S-2018	09V	457178	6786348	Line 2	Soil
L3-NE-S-2018	09V	457305	6786377	Line 3	Soil
550-S-2018	09V	457291	6786373	Line 3	Soil
551-S-2018	09V	457276	6786367	Line 3	Soil
552-S-2018	09V	457263	6786359	Line 3	Soil
553-S-2018	09V	457250	6786352	Line 3	Soil
554-S-2018	09V	457238	6786344	Line 3	Soil
555-S-2018	09V	457222	6786338	Line 3	Soil
556-S-2018	09V	457208	6786333	Line 3	Soil
557-S-2018	09V	457194	6786328	Line 3	Soil
L4-NE-S-2018	09V	457328	6786343	Line 4	Soil
558-S-2018	09V	457316	6786336	Line 4	Soil
559-S-2018	09V	457301	6786331	Line 4	Soil
560-S-2018	09V	457288	6786328	Line 4	Soil
561-S-2018	09V	457275	6786320	Line 4	Soil
562-S-2018	09V	457259	6786316	Line 4	Soil
563-S-2018	09V	457245	6785311	Line 4	Soil
564-S-2018	09V	457231	6786304	Line 4	Soil
565-S-2018	09V	457216	6786301	Line 4	Soil

Table 7. Silt/Soil GPS Coordinates, YMEP 18-022 - Van Gogh East

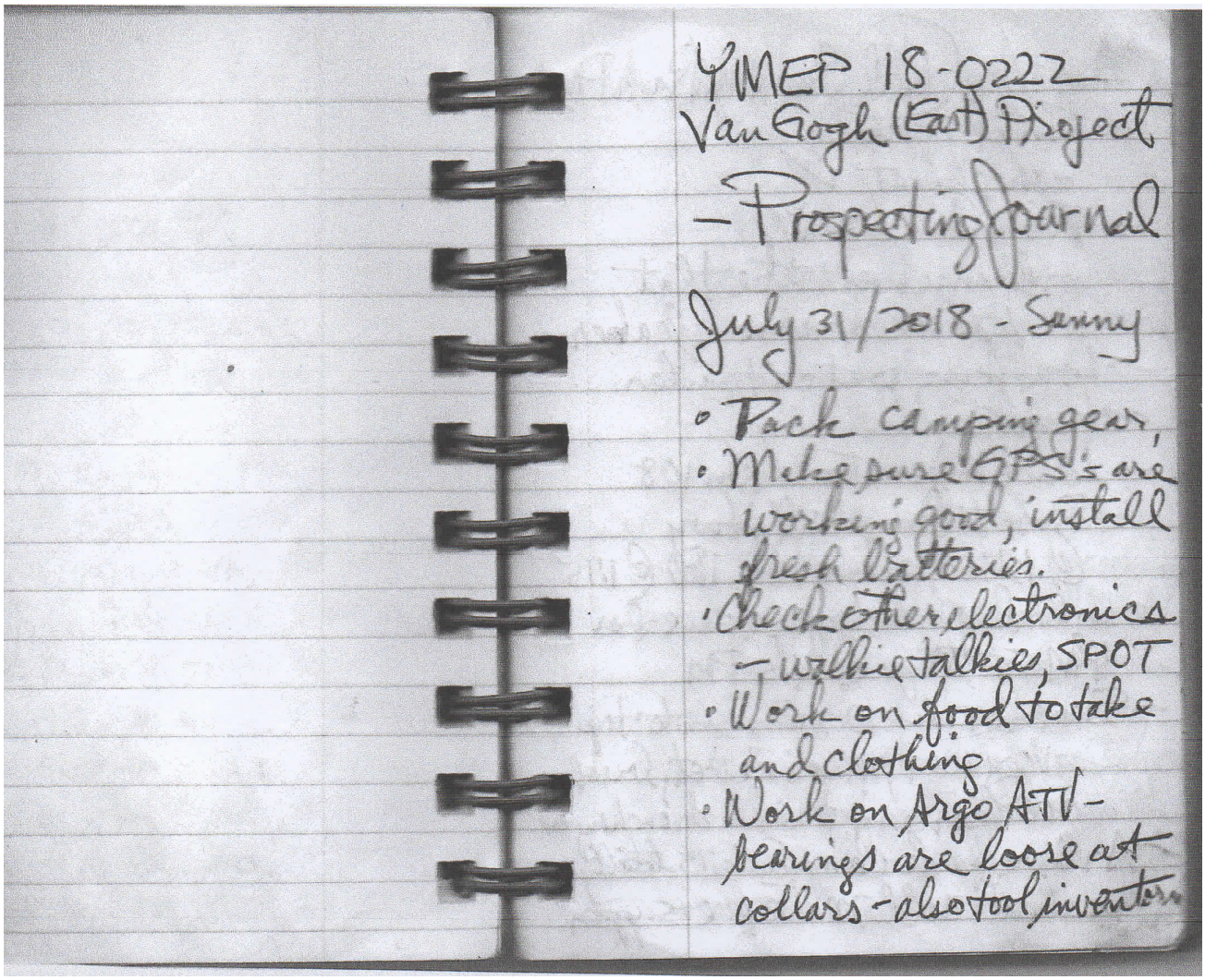


Table 8. Start of prospector's Journal for YMEP 18-022 Grassroots Module. *This page is not part of the funded "field days".*

Aug 1/18 (Wed) Sun AM/Rain PM
- Final packing
  - checklist ✓
- Final Argo stuff
  - Change over 1 tire that was fixed - remove leaker
- Load Argo, put on trailer
- Load Truck
- Leave M Junction / Km 108 Robert Campbell Hwy @ 12:30, arrive Km 180 @ 1:15
Unload, pack Argo, leave for YMEP trip @ 2:15 PM
Severe rain 10 mins. into trip
- Very wet, map is wet, bush overhanging trail is drenching
Arrive Jade Camp @ 6:15 total, tired + cold. Make fire + supper

Aug 2 (Thurs) - Decent weather
- Build fires, try to dry out stuff.
- Repack. load, leave some heavy stuff @ Jade Camp - gasoline jerry can propane stove - tools
- Decide to go w Butane backup stove
- Leave about noon - late because of wet + repacking
- Argo recommended trail by my brother but overgrown
- Fight thick bush all day
camp at Headwaters Camp
- No significant observations very little exposed rock
- continue drying out clothes

Aug. 3/18 Cloudy cool (Fri.)
- Breakfast, unpitch camp repack ARGO. One leaking tire, still lots of gas in tank
- ARGO downstream, scouting trail ahead when needed
- Valley getting taller, buckbrush and willows - chainsaw - some downed willows + logs
- Narrows spot may be trouble - scouting says "no go" along stream
- decide to go up steep valley wall
- mark trail so can find on way back
- Geo observation - steep "cliffy" walls at stream base appear to be caused by series of faults - strike approx. 150° SSE.
- continue down main valley
- Now stuck in unseen hole and can't get out - Dig, dig, dig, then totally unload Argo
- still digging out @ nightfall
- make camp - designate it "HELL HOLE CAMP"!
- Drizzle rain starts, cool

Aug 4/18 (Sat) Scattered rain
- continue digging out ARGO
  - maybe wreck winch? wire cable stuck in housing
- finally get ARGO out of Hell Hole, then fix winch
- noteable Jasper rocks in creek at campsite
  - multitoned red + yellow
GPS location noted/pic

Aug 5/18 (Sun.) Overcast day
- ARGO to VanGogh claims and set up camp
- Noteable rock in stream along the route, GPS location noted + (pics) - (Samples) taken for assay
- some/many are decalcified + silicified or calcite replacement - also some marble + ultra-mafic rock, some mineralized w limonite after pyrite relic crystals to 3 mm.
- Campsite on structure blocking valley, note rock is very highly silicified (chert?) and mineralized some at water hole site at NE end of canyon

Aug 6/18 (Mon.) Rain all day
- Rain starts heavy during the night and continues all day.
- Bush totally wet and we still have wet clothes from digging the ARGO out of the Hell Hole.
- put up tarps over tent and fire pit area
- Decide to wait out the rain as it is pretty darn cold (can almost see breath at times)
- Start paper layout for soil sample grid to be

Aug 7. (Tues.) Raining in AM
- Bush is still totally wet in AM, wait for it to dry some
- Around noon go out and start the soil sample grid layout.
- Slow going in wet bush
- Layout with GPS the start of the 4 soil sample lines 40 m. apart
  - Flagged start of Line 1 → 4
- Lines - GPS marked as L1-NE-S-2018 and L2-NE-S-2018 and L3-NE-S-2018 and L4-NE-S-2018.
  L = Line S = Soil NE = North East (end of line)

Aug 8 (WED.) Continued drizzle rain
- Bush very wet, cold, decide to wait to mid day for warmer
- Put on rain wear, need to start getting samples
- Starting at L1-NE-S-2018 soil samples are taken from cleaned out holes at approx 1 ft. depth
- Complete Soil Grid Line 1
  - ends at "cliff" overlooking stream - about 100' below other side is steep but not cliff - looks like a GORGE
- Complete Soil Grid Line 2 soil sampling as in Line 1)
- Soil samples taken every (15 m along lines @ 225°)

Aug 9 (Thurs.) - STILL raining and cold - see breath
- Same thing as every day at VanGogh East camp
  - Bush very wet, colder every day so far
  - Potential hypothermia weather
- Limited ability to go far away from camp, so decide to soil sample lines 3 and 4 nearby
- Go out at noon and take soil samples as the day before
  - Lines 3 and 4, soil sample in B horizon every 15 m along lines @ 225° heading starting at L3-NE-S-2018 and L4-NE-S-2018 and continuing to edge of Gorge.

Soil Sample Characteristics

L1-NE-S-2018 - clay } lake bed
536 - clay
537 - clay } ?
538 - dark brown, stoney
539 - Black brown
540 - Brown/rusty, stoney
541 - Rusty, stoney
L2-NE-S-2018 - Olive brown clay
542 - Brown, clay
543 - Brown, rocky
544 - Tan
545 - Brown, rocky
546 - Brown black
547 - Clay
548 - Brown, rocky
549 - Brown black

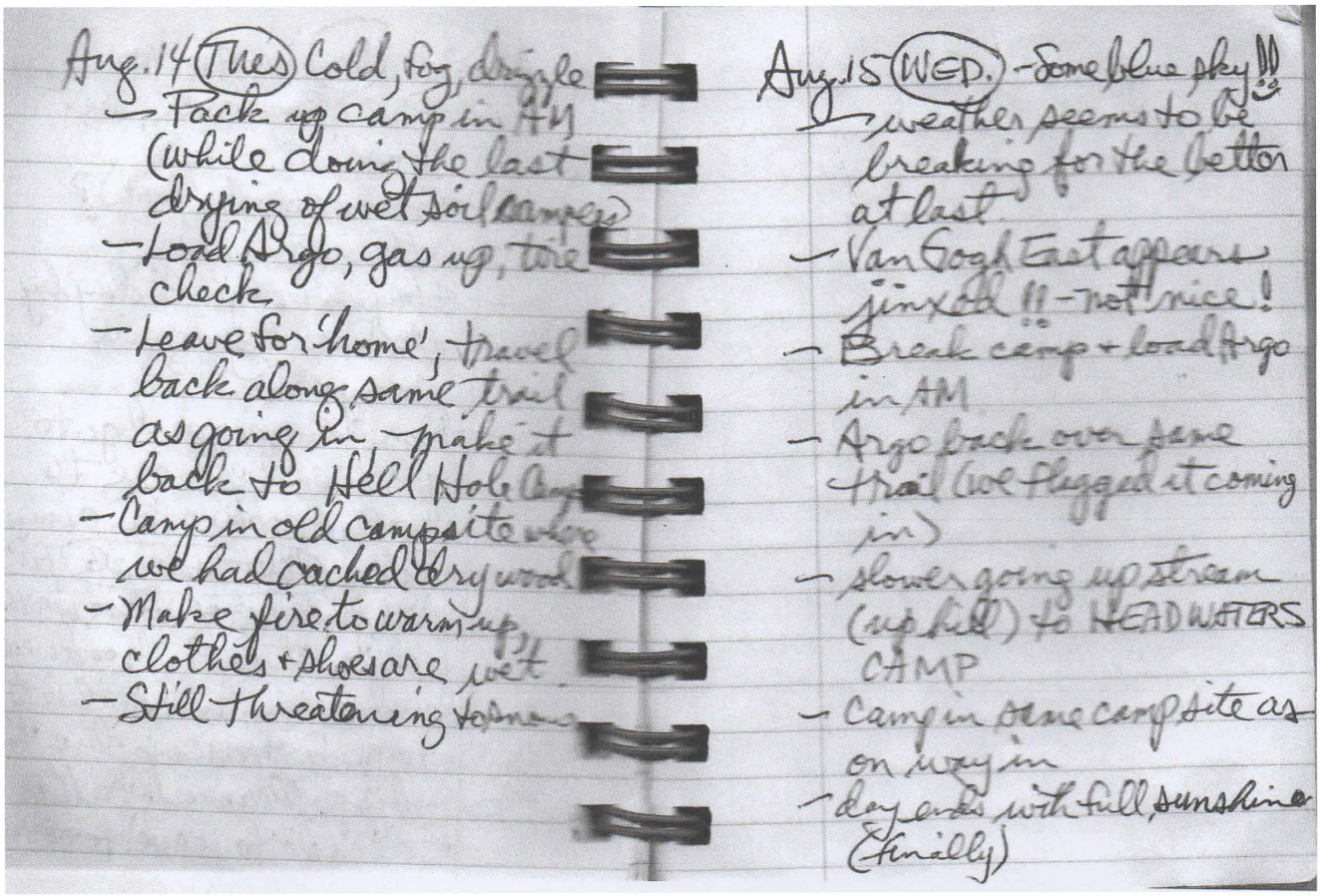
L3-NE-S-2018 - Olive brown clay
550 - Olive brown clay
551 - Rusty stoney
552 - Rusty, rocky
553 - Rusty, rocky
554 - Rusty, rocky
555 - Black reddish
556 - Dark brown, stoney
557 - Rusty, rocky
L4-NE-S-2018 Choc. Brown stoney
558 - Olive, clay, stoney
559 - Light brown olive, clay
560 - Olive brown, clay
561 - Light brown
562 - Light brown, clay
563 - Light brown
564 - No sample - hornets
565 - Brown with black, stoney

Aug 10 - FRI - Drizzle, cold
- Rained all night, tent did pretty well, only a few drips (condensation?)
- Bush totally wet, won't dry with drizzle
- Soil samples bags got totally wet!! - some are just dripping, water in bottom of bag - what a mess!
- Set out bags of soil to drain
- Don rain gear, go to north end of Gorge, take pics and Rock samples, GPS site
  - Rusty siliceous mineralized quartz massive (some evidence of layering - chert?)
- Cold, frost in eve., try to dry soil samples.

Aug 11 (Sat.) - frost in AM
- Soils still very wet, make fire under tarp and start drying bags
  - clay samples turn hard and don't dry well at all
  - Drying is slow by fire as it is so cold out - see breath
- Still too bad of weather (hypothermia) to go far from camp - Very cold, rain
  - Don raingear, go to south end of Gorge
  - Rusty siliceous rock like north end of gorge
  - Rock knoll suitable for helicopter landing
- Take (pics) rock (samples)
- The gorge on west side is rusty (mineralized) rock (pics) - sizeable deposit
- Of special note is the large rusty spring hill zone beside stream (pics)
  - Very rusty streambed rock downstream for 100's of meters (pics)
- Int geologic contact, same as rusty RGS downstream 1 km - could be a large skarn at the carbonate / rock contact
- The site I named as RED GORGE or RED SPRING GORGE - best discovery so far!

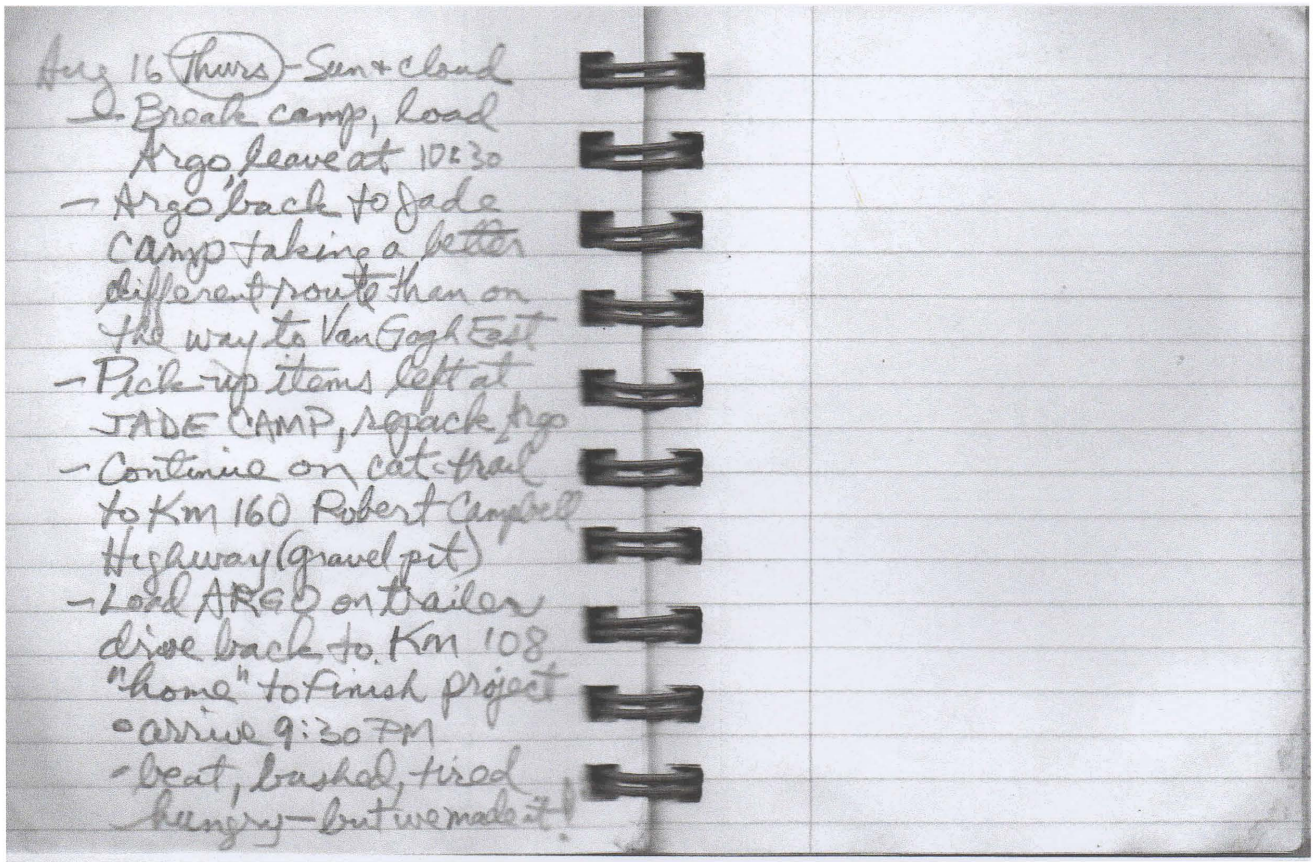
Aug 12 (Sun.) - Very cold night - water outside frozen solid, drizzle all day
- with continued wet weather and freezing there is the prospect of snow and we may not get out on schedule
- check food supply, start rationing
- Continue with drying soil samples by fire - some are dry, most still wet
- Still too bad weather to go far from camp, it now seems we won't be able to complete all of the proposed project sampling.

Aug. 13 (Mon.) Frost in AM
- Rain, fog, cold, wet bush
- Snow clouds (dark)? threatening
- Stay in camp all day by the fire drying soil samples
- Don raingear and go to north end of gorge to "water supply" for camp
- Take (silt sample), GPS
- With prospect of worse weather (and not better) / good weather and snow, and inability to go far from camp due to hypothermic weather
- decide to leave tomorrow



Aug. 14 (Thes) Cold, fog, drizzle
- Pack up camp in AM (while doing the last drying of wet soil samples)
- Load Argo, gas up, tire check
- Leave for 'home', travel back along same trail as going in - make it back to Hell Hole Camp
- Camp in old campsite where we had cached dry wood
- Make fire to warm up, clothes + shoes are wet
- Still threatening to rain

Aug. 15 (WED.) - Some blue sky!! weather seems to be breaking for the better at last
- Van Gogh East appears jinxed !! - not nice!
- Break camp + load Argo in AM
- Argo back over same trail (we flagged it coming in)
- slower going up stream (up hill) to HEADWATERS CAMP
- Camp in same campsite as on way in
- day ends with full sunshine (finally)



Aug 16 (Thurs) - Sun + cloud
- Break camp, load Argo, leave at 10:30
- Argo back to Jade Camp taking a better different route than on the way to Van Gogh East
- Pick-up items left at JADE CAMP, repack, go
- Continue on cat-trail to Km 160 Robert Campbell Highway (gravel pit)
- Load ARGO on trailer drive back to Km 108 "home" to finish project
  - arrive 9:30 PM
  - beat, bashed, tired hungry - but we made it!

Table 9. Prospecting Journal for YMEP 18-022 - Van Gogh East

NTR Sample Locations - Van Gogh East

Sample Type	Sample #	Zone	Easting	Northing	NAD
Silt	1201	9V	456709	6786718	83
Silt	1202	9V	456808	6786718	83
Silt	1203	9V	457103	6786726	83
Silt	1204	9V	457598	6785976	83
Silt	1205	9V	457549	6785490	83
Rock - grab	20939	9V	457465	6786101	83

Table 10. Van Gogh (E) - NTR Sample Locations by UTM Coordinates

Analytical Results - Van Gogh East - NTR Rock Sample - results in ppm

sample #	Project	Easting	Northing	Datum	utm zone	Sample date	Type	Source
20939	NTRvan	457465	6786101	NAD83	9	08/09/2011	Grab	Float

samp. #	Au_aa1	Ag	Al	As	Ba	Be	Bi	Ca	Cd
20939	0.003	0.040	1.360	36.300	10000.0	0.100	0.120	0.080	0.170

samp. #	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf
20939	14.810	2.100	158.000	0.630	17.600	0.480	2.070	0.070	0.700

samp. #	Hg	In	K	La	Li	Mg	Mn	Mo	Na
20939	0.300	0.020	0.020	1.300	0.400	50.000	18.000	0.780	50.000

Samp.#	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc
20939	0.600	12.900	390.000	3.500	1.400	0.001	0.040	4.650	0.300

samp. #	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
20939	0.500	0.200	51.200	0.070	0.025	1.100	0.013	0.900	0.300

samp. #	V	W	Y	Zn	Zr
20939	5.000	0.400	2.600	75.000	12.200

Table 11. Van Gogh East -NTR Rock Sample Assay Results. *Inspectorate Labs., Certificate No 11-360-07685-01v05. Assay results provided by Northern Tiger Resources.*

Analytical Results - Van Gogh East - NTR Silt Samples - results in ppm

sample #	Project	Easting	Northing	Datum	utm zone	Sample date	Sampler	Flow vel
1201	NTRvan	456709	6786718	NAD83	9 V	26/08/2011	NG/AH	F
1202	NTRvan	456808	6786718	NAD83	9 V	26/08/2011	NG/AH	S
1203	NTRvan	457103	6786726	NAD83	9 V	26/08/2011	NG/AH	M
1204	NTRvan	457598	6785976	NAD83	9 V	27/08/2011	NG/AH	S
1205	NTRvan	457549	6785490	NAD83	9 V	27/08/2011	NG/AH	M

samp. #	Flow dir	Comp	Turb	%Org	Comments	lab	sample	Source
1201	E		M	40	Moss Mat	Inspec	Grab	Silt
1202	E		L	60		Inspec	Grab	Silt
1203	S		H	5		Inspec	Grab	Silt
1204	S		M	5	Red staining	Inspec	Grab	Silt
1205	E		H	50	Moss Mat	Inspec	Grab	Silt

samp. #	Au_aa1	Ag	Al	As	Ba	Be	Bi	Ca	Cd
1201	0.003	0.650	1.060	10.300	266.000	0.400	0.150	1.720	1.730
1202	0.003	0.600	0.960	9.300	248.000	0.380	0.110	2.040	1.770
1203	0.007	0.280	1.110	8.200	315.000	0.360	0.120	0.750	0.460
1204	0.003	0.230	1.320	35.300	292.000	0.340	0.140	0.560	0.840
1205	0.003	1.270	0.760	75.600	504.000	0.360	0.150	1.710	4.030

samp. #	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf
1201	0.840	49.500	1.560	2.250	0.025	0.180	0.840	49.500	1.560
1202	0.720	51.300	1.430	1.950	0.025	0.140	0.720	51.300	1.430
1203	0.530	27.200	2.220	3.120	0.025	0.090	0.530	27.200	2.220
1204	0.990	89.300	4.080	2.650	0.025	0.110	0.990	89.300	4.080
1205	0.870	123.900	5.310	1.680	0.025	0.170	0.870	123.900	5.310

samp. #	Hg	In	K	La	Li	Mg	Mn	Mo	Na
1201	0.610	0.020	0.060	16.400	11.400	0.380	400.000	1.490	0.010
1202	0.780	0.010	0.050	15.500	9.800	0.320	400.000	1.310	0.010
1203	0.170	0.020	0.040	11.800	15.100	0.750	537.000	1.280	50.000
1204	0.320	0.020	0.040	10.200	11.200	0.580	708.000	2.020	50.000
1205	0.580	0.020	0.050	11.400	5.400	0.300	2631.000	6.930	0.010

Van Gogh East - NTR Silt Samples - (cont.) - results in ppm

Samp.#	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc
1201	0.450	44.500	1268.00	12.000	6.200	0.010	0.140	2.050	1.700
1202	0.420	39.400	1302.00	10.900	5.600	0.020	0.170	1.850	1.300
1203	0.360	49.900	697.00	12.300	4.700	0.005	0.050	0.910	2.300
1204	0.290	55.900	882.00	12.800	4.400	0.005	0.180	3.250	2.500
1205	0.210	111.300	2545.00	13.900	6.100	0.020	0.130	9.800	1.500

samp. #	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
1201	3.500	0.100	58.600	0.010	0.040	1.400	0.006	0.090	2.160
1202	4.400	0.100	59.800	0.005	0.030	0.900	0.005	0.110	3.150
1203	1.300	0.100	30.400	0.005	0.020	1.800	0.014	0.025	1.430
1204	1.300	0.100	33.000	0.005	0.050	4.100	0.012	0.110	2.250
1205	4.400	0.100	97.500	0.005	0.090	1.600	25.000	0.110	6.1

samp. #	V	W	Y	Zn	Zr
1201	24.000	0.100	22.980	150.000	3.500
1202	22.000	0.090	23.280	157.000	2.900
1203	45.000	0.080	9.030	98.000	1.900
1204	44.000	0.090	13.570	181.000	2.300
1205	34.000	0.180	17.830	416.000	2.900

Table 12. Van Gogh East - NTR Silt Sediment Assay Results. *Inspectorate Labs., Certificate No 11-360-06949-01v03. Assay results provided by Northern Tiger Resources.*

Assay Sample #	Sample type (Rock, silt, soil)	UTM Zone9V, NAD 83 Easterly	Northerly
VG(E)-13-S-203	Soil	456117	6784697
VG(E)-13-S-207	Soil	456166	6784779
VG(E)-13-S-209	Soil	456177	6784853
VG(E)-13-S-210	Soil	456194	6784928
VG(E)-13-S-212	Soil	456240	6785029
VG(E)-13-S-213	Soil	456307	6785096
VG(E)-13-S-214	Soil	456333	6785166
VG(E)-13-S-216	Soil	456449	6785356
VG(E)-13-S-413	Soil	456840	6785828
VG(E)-13-S-414	Soil	456834	6785827
VG(E)-13-S-415	Soil	456823	6785786
VG(E)-13-S-416	Soil	456798	6785780
VG(E)-13-S-417	Soil	456614	6785640
VG(E)-13-S-420	Soil	456567	6785455

Table 13. Van Gogh East Soil Sample UTM Locations. YMIP13-017

Assay Sample #	Sample type (Rock, silt, soil)	UTM Zone 9V Easterly	Northerly
VG(E)-13-SED-406	Silt	455955	6785598
VG(E)-13-SED-408	Silt	456818	6785693
VG(E)-13-SED-411	Silt	456841	6785806
VG(E)-13-SED-412	Silt	456888	6785829

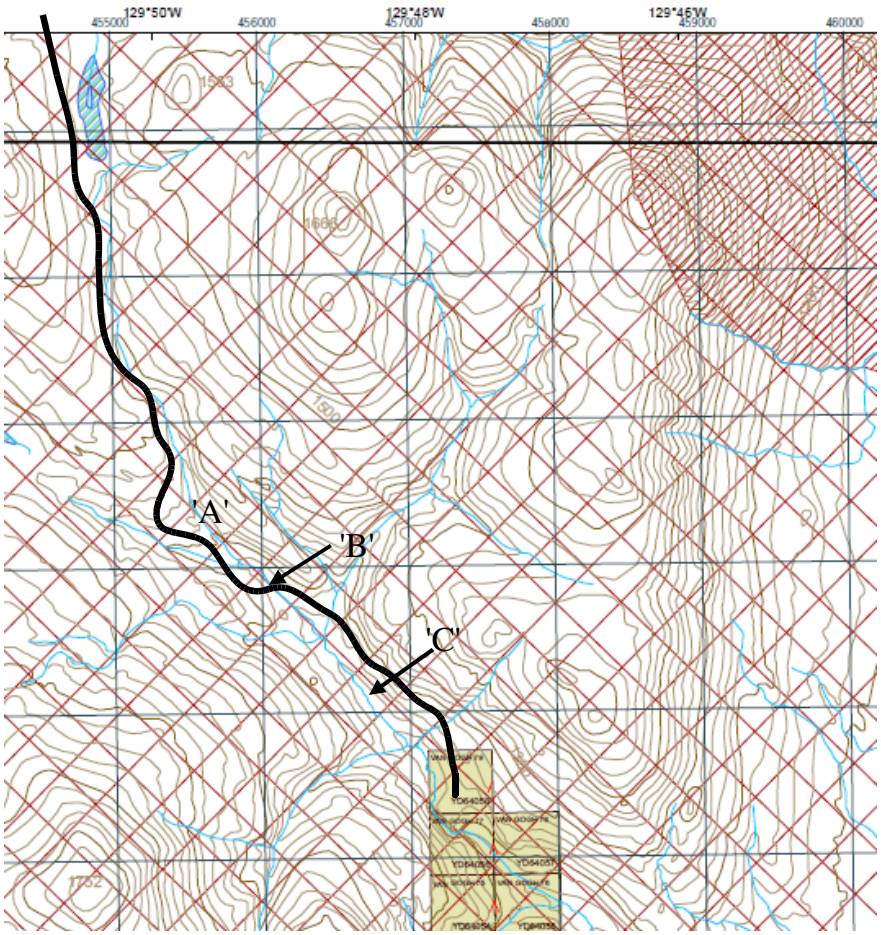
Table 14. Van Gogh East Silt Sample UTM Locations. YMIP13-017

Assay Sample #	Sample type (Rock, silt, soil)	UTM Zone 9V, NAD 83 Easterly	Northerly
VGE-13-R407	Rock	456778	6785698
VGE-13-R409	Rock	456844	6785738
VGE-13-R410	Rock	456833	6785798
VGE-13-R416	Rock	456798	6785780
VGE-13-R418	Rock	456568	6785635

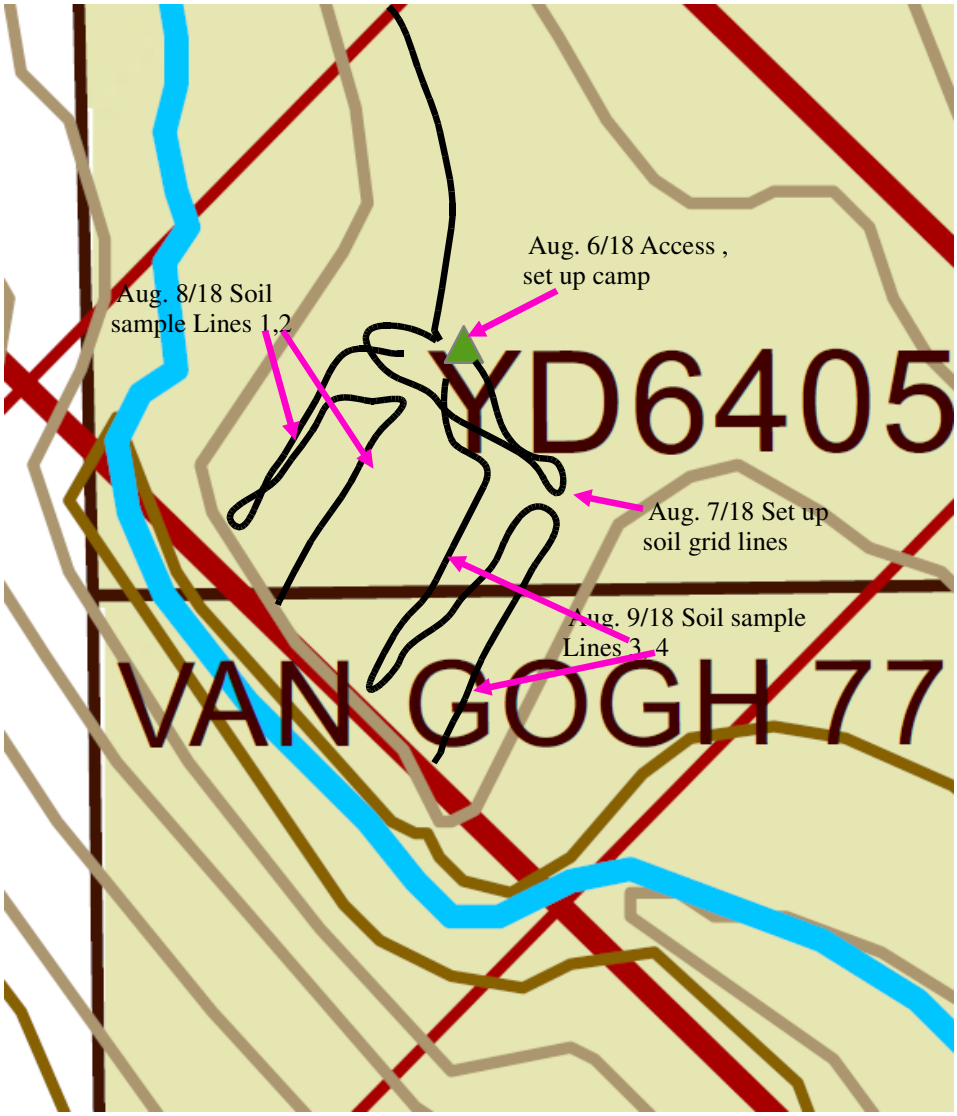
Table 15. Van Gogh East Rock Sample Locations – YMIP 2013-017

Yukon-Tanana Terrane												
SAMPLE	AG	AS	AS_INA	AU	AU_R	AU_INA	BA	BA_INA	BI	CD	CO	CO_INA
min	0.1	0.5	0.2	0.5	0.5	1	54	270	0.1	0.1	1	2.5
50th percentile	0.1	3.5	5.8	1	4	3	870	1100	0.1	0.1	8	13
90 th percentile	0.2	13.5	15.8	9	37	10	1247.9	1700	0.26	0.6	14	21
95th percentile	0.3	22	23.4	18	85	17	1493.35	1900	0.28	1.1	17	24
98th percentile	0.5	46.02	36	46.86	172	40.8	1900	2300	0.292	2.1	22	32
99th percentile	0.7	80	54.608	96.43	280	62	2222.9	2500	0.296	3.001	29	40
max	3.3	489	280	1680	1185	1050	11550	3600	0.3	46.8	180	160
n	8206	7200	1013	7158	801	1013	7472	1013	5	7900	8206	1013
	CU	FE	FE_INA	HG	MN	MO	NI	PB	SB	SB_INA	SN	
min	1	0.11	0.7	2.5	2.5	1	1	1	0.1	0.05	0.5	
50th percentile	18	1.95	3.76	30	330	1	18	7	0.3	0.6	1	
90 th percentile	37	2.97	5.6	84	780	2	41	16	0.9	1.6	4	
95th percentile	48	3.49	6.2	119	1479.5	3	58	23	1.4	2	5	
98th percentile	68	4.337	6.8	170.5	2900	5	96.9	36	2.42	2.876	7	
99th percentile	94	5.5195	7.788	245	4899.3	7	147	47	3.6	3.488	10	
max	4510	29.9	18	3349	40546	94	1000	694	170	9.1	138	
n	8206	8206	1013	8176	8206	8206	8206	8206	7191	1013	7876	
	TA_INA	U	U_INA	V	W	W_INA	ZN	PH	F_W	U_W		
min	0.25	0.2	0.8	2.5	1	0.5	2	4.1	10	0.02		
50th percentile	0.9	3.3	3.7	35	2	0.5	63	7.2	80	0.11		
90 th percentile	1.4	8.6	13	59	3	2	123	7.9	240	1.5		
95th percentile	1.5	13.1	19	68	5	3	165	8	350	2.746		
98th percentile	1.8	26.104	34.096	83	10	4	249.8	8.2	540	5.2		
99th percentile	2	40.104	60.291	92	16	7.88	350	8.3	720	8.272		
max	2.7	236	351	470	140	29	2510	8.6	3170	255		
n	1013	7499	722	7884	7475	1013	8206	8065	8066	8065		

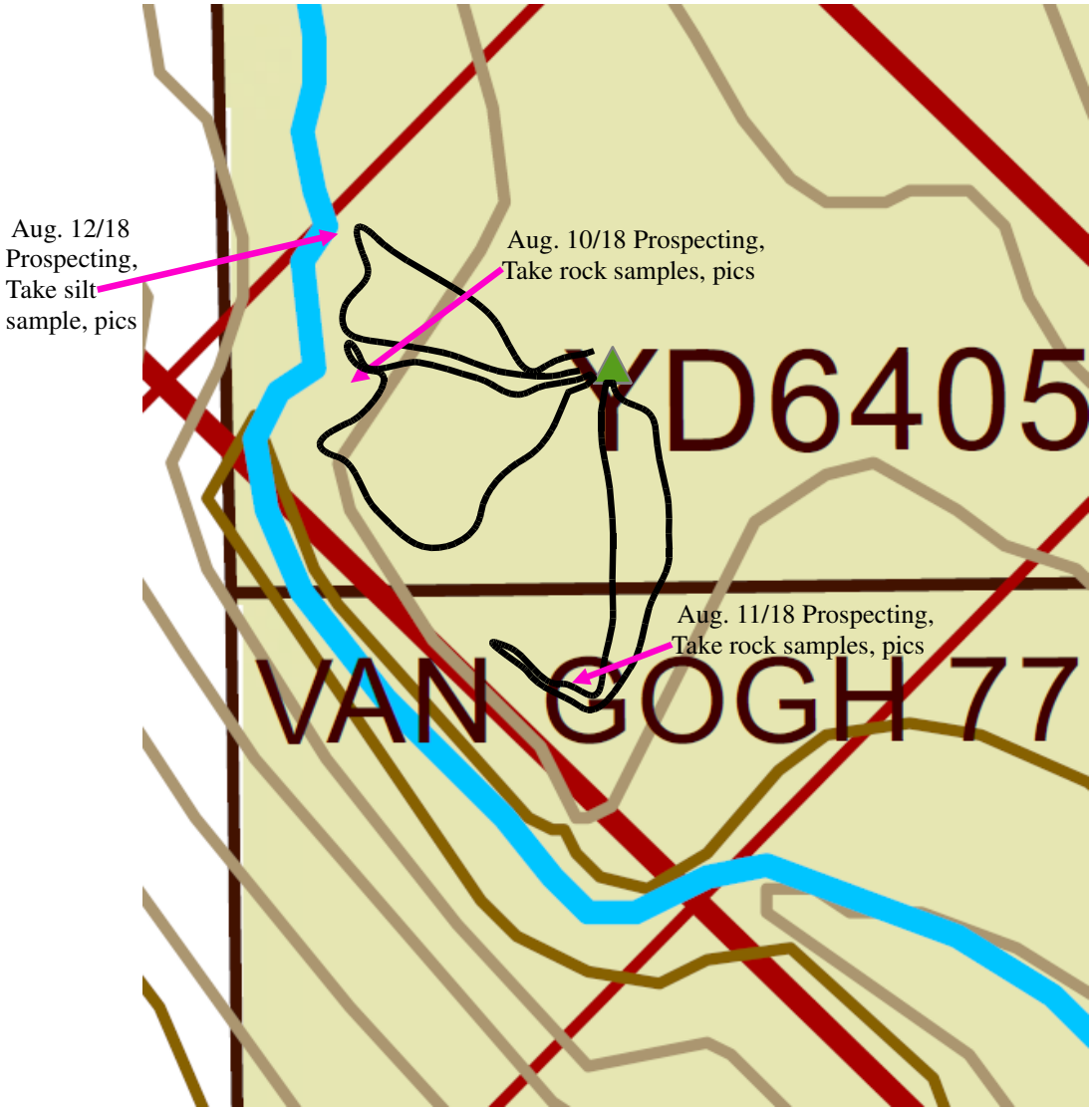
Table 16. Yukon-Tanana RGS Silt Percentile Threshold Cut-offs



Map 16. 'Traverse map #1'. Access route traverse is black line. 'A' is probably a normal fault striking 135° SE. 'B' is one of several occurences of Jasper in stream along stream access route. Rock sample site 'C' is a rock bar/dry streambed.



Map 17. 'Traverse map #2'. Dates and traverses shown correspond to Prospector's Journal entries. Access route traverse is black line. Camp is green triangle.



Map 18. 'Traverse map #3'. Dates and traverses shown correspond to Prospector's Journal entries. Access route traverse is black line. Camp is green triangle.