

An Auger Drill Report on the ALL IN Property
submitted as a TECHNICAL REPORT for YMEP Grant 18-004
on the ALL IN Target Evaluation

Comprised of following Quartz Claims:

ALL IN 1-46
YE90171-YE90206
YE90267-YE90270
YF47067-YF47070
YD12692-YD12693

All claims in Dawson Mining District
Owner: Gordon Richards

Location
115P/02
Camp on Kryptos Quartz Claims at
UTM 424,440E, 7,005,200N,
NAD 83, UTM Zone 8

Field work performed under the supervision of
Gordon Richards
during the period June 3 to, August 2, 2018

Report written by Gordon Richards

January 3, 2019

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DIGITAL COPIES:

Report in PDF, Table 2 as xls File, and all Figures as PNG, JPG and BMP Files.

INTRODUCTION.

The general area of the ALL IN claims was prospected with the aid of YMEP grants awarded to G Richards in 2016 and 2017. The property is located on a gently eastward sloping hillside from the Klondyke Highway westward for 6 km about 25 km south Stewart Crossing within NTS map sheet 115P02. Access was made by riding on the auger-drill equipped track-mounted Morooka.

The geology of the area has been described on Canadian Geoscience Map 7 of southwestern McQuesten and parts of northern Carmacks by Ryan, J.J., Colpron, M., and Hayward, N., 2010. Figure 3. The area is shown on that map to be underlain by volcanoclastic cover rocks of the Early Mississippian aged Reid Lakes Batholith Complex, that contains a weakly Kspar-porphyritic, medium-grained granite to quartz monzonite intruding its own volcanic pile. However it is believed that the claims are underlain mainly by the batholith with some volcanic cover rocks in the west portion of the claims. A few unaltered outcrops and angular rubble of andesite and dacite occur in the east portion of the claims. Angular cobbles and a boulder of chloritized granodiorite were found in a pit at the camp in the centre of the claims. Granodiorite float was the predominant rock type found at RGS sample sites bracketing the claims. Geochemical results also support the belief that granitic rocks underlie most of the claim block. Loess, about 25 cm thick, blankets most slopes. The claims lie entirely within Reid Ice Age glaciated terrain immediately adjacent to pre-Reid Ice Age glaciated terrain to the west. Figure 4.

The McQuesten aeromagnetic survey by Kiss, F., and Cryle, M., 2009 is available as Geoscience Data Repository through Natural Resources Canada. Tilt and horizontal derivative maps were useful in showing where magnetitic susceptibility is low and was used to provide prospecting targets in 2016 and 2017. The main geochemical target has a striking similarity in shape and size with a pronounced low of the horizontal derivative aeromagnetic map.

Regional Geochemical Data (RGS) is also published, readily available and provides geochemical data for numerous elements of stream sediments collected throughout the area including three creeks draining the general area of the

claims. Figures 5-10. The RGS samples were collected in 1986 (OF 1650) and re-analyzed in 2011 using more sophisticated analytical techniques and released in Open File 2012-09. Geochemical data from 278 selected samples that are lying only within the pre-Reid glaciated area within Yukon Tanana Terrain on NTS 115P were used to recalculate thresholds for 70th, 80th, 90th, 95th and 98th percentiles for a number of elements. It was believed that this data would provide a more representative data-set on which to evaluate exploration potential for the area. The claims lie immediately east of the area of recalculated thresholds within Reid Ice Age glaciation so these thresholds were used in evaluating this area. Recalculated threshold values provided anomalous results for Cu, Mo, Ag and other elements with high (70thtile to 98thtile) threshold values from one creek draining the claim area (RGS 3287) and one creek down-ice from the claim area (RGS 3388).

There is no known previous mineral exploration activity anywhere on or near the ALL IN claims.

An MMI and black spruce twig sampling program was undertaken in 2016 to evaluate the area drained by creeks with the anomalous RGS results. The ALL IN 1-36 claims were staked June 11 and recorded June 15, 2017 to cover known anomalous zones and their extensions identified from the 2016 work. A second MMI soil and black spruce twig sampling prospecting program was undertaken on the claims June 24 to 30, 2017. Results of this work was applied as representation work to the ALL IN 1-36 claims. The ALL IN 37-46 claims were staked and recorded August 22, 2017.

Results of the previous field work were successful in defining a pronounced multi-element anomalous zone in the MMI soil results that measures 1000 m wide by 2000 m long and coincides remarkably well in size and shape with an aeromagnetic horizontal derivative low. The large geochemically anomalous zone is defined by anomalous Cu and Au with centrally positioned zones of anomalous Mo and Ag. Many other elements form strong anomalous zones supportive of the above patterns. The geochemical signature is interpreted to be indicative of underlying porphyry mineralization.

A second less well defined zone of anomalous metal values occurs west of the above zone and appears to be another porphyry target that is partially overlain by volcanoclastic cover rocks of the Reid Lakes Complex.

In 2018 a track mounted Morooka MST 1100 equipped with an auger drill was used in an attempt to collect rock fragment samples from bedrock lying beneath overburden over the main geochemically anomalous zone to determine the cause of the geochemical anomalies.

Results of the 2018 work were disappointing. Nine six-inch diameter holes were drilled to a 40-foot depth or less without encountering bedrock except for the most westerly drill hole that encountered strongly chloritized bedrock or broken bedrock with some till in the bottom fifteen feet of the hole. All holes encountered till and in some holes sand with very few boulders or cobbles.

HISTORY.

There is no record of any exploration work ever having been conducted on the claims area or anywhere within several km of the claims prior to 2016 both in the field and in government Minfile records. There were a few old helipads found in 2017 that appear related to the fighting of a forest fire about 20 years ago. One chainsaw cut clearing occurs beside the creek cutting across the claims 500 m north of the 2016/2017 camp and could have been a water pump station for fighting the fire. The main forest fire burn occurs north and west of the claims and extends for many km to the north. A 500 m diameter satellitic fire burn occurs in the north central portion of the claims.

Work in 2016 by the writer and funded by YMEP located two patterns of strong multi-element geochemical anomalies in MMI soil samples measuring about 800 m in diameter and open to the north in the southeast zone and 1500 m wide east-west and open to the south in the northeast zone. Work in 2017 was designed to find the limits for these anomalies and search for additional ones. Previous work funded by YMIP and YMEP over the past six years by the writer and his assistant, Jeff Mieras, within the Reid Lakes Batholith has been successful in defining about ten geochemical targets with similar porphyry signatures based on results of MMI soil samples and to a lesser degree black spruce twig samples.

Results of the 2017 field work were successful in defining a pronounced multi-element anomalous zone in the MMI soil results that measures 1000 m wide by 2000 m long and coincides remarkably well in size and shape with an aeromagnetic horizontal derivative low. The large geochemically anomalous zone is defined by anomalous Cu and Au with centrally positioned zones of anomalous Mo and Ag. Many other elements form strong anomalous zones supportive of the above patterns. The geochemical signature is interpreted to be indicative of underlying porphyry mineralization. Refer to Figures 5-9

In 2018 an auger drill program as described below was undertaken to sample rock chips from bedrock beneath the main geochemically anomalous target. The work described in this report was funded largely by YMEP grants 16-056, 17-002, and 18-004 awarded to Gord Richards. A few additional costs were paid for by Richards.

CLAIMS.

Table 1 is a list of all claims forming the property. The claims lie in the Dawson Mining District. The Registered Owner is Gordon G Richards.

Table 1. Claim Status

Claim Name	Grant No.	Expiry Date
ALL IN 1-36	YE90171-YE90206	2023/06/15
ALL IN 37-40	YE90267-YE90270	2023/08/22
ALL IN 41-44	YF47067-YF47070	2023/08/22
ALL IN 45, 46	YD12692, YD12693	2023/08/22

GEOLOGY.

Bedrock geology is best described on Canadian Geoscience Map 7 of *Southwestern McQuesten and Parts of Northern Carmacks* by Ryan, J.J., Colpron, M., and Hayward, N., 2010. See Figure 3. The claims occur within the Reid Lakes Batholith, an 80 km long unmetamorphosed Early Mississippian aged batholith that intrudes its own volcanic pile. The claims area is shown on Geoscience Map 7 to be underlain by volcanoclastics of the Reid Lakes Complex. However, work in 2016 and 2017 has shown that the claims area is largely underlain by granodiorite of the Reid Lake Complex with dacite and andesite of the overlying volcanoclastics occurring in the western portion of the claims as shown on Figures 5 to 10. Evidence for this reinterpretation of underlying geology is the occurrence of abundant granitic float in RGS sample sites 3388, 3389, and 3287 shown on Figures 5 to 10, the occurrence of porphyry signatures in the geochemical anomalous patterns, and the occurrence of heavily chloritized with weak limonitic staining of angular boulders and cobbles found in two one-half metre deep soil pits at the field camp in the centre of the claims.

Glaciation is described as Reid in age on several government maps. Reid glaciation began 200,000 years ago and ended about 50,000 years ago. Younger McConnell Glaciation ended about 20,000 years ago. Glaciation immediately west of the claims is pre-Reid in age, which is possibly older than 500,000 years (Jeff Bond, personal communication, 2012). Jeffrey Bond and Panya Lipovsky of the Yukon Geological Survey have in recent years provided a number of papers, maps and posters on the surficial geology of the pre-Reid glaciated area with descriptions related to exploration.

Uppermost soil is an organic soil from almost absent to less than one cm thick on dryer slopes and in excess of 10 cm thick over gentle poorly drained slopes. Loess occurs on all slopes, generally about 20 to 30 cm thick beneath the organic soil. This loess is believed to have formed in late stages of or soon after the end of McConnell Glaciation. A few sub round to round pebbles do occur in the loess and have probably worked themselves up into the loess from underlying till.

Till is commonly found beneath the loess containing well rounded cobbles and smaller rocks of foreign origin. Only in two deeper pits dug at camp were somewhat angular cobbles and boulders found. These were intensely chlorite altered granitic rocks probably part of the Reid Lakes Batholith. Sand dunes occur beneath the loess in some areas.

PREVIOUS SURVEYS.

Recalculated threshold values of government RGS samples provided anomalous results for Cu, Mo, Ag and other elements with high (70%tile to 98%tile) threshold values from one sample (RGS 3287) collected from a creek draining the claim area containing the porphyry target and from one sample (RGS3388) collected from a creek down-ice from the claim area.

During 2016 and 2017 over 400 MMI and black spruce twig samples were collected along lines spaced from 200 m to 400 m apart and with a sample interval of 100 m. Black spruce twig samples proved ineffectual in helping develop the anomalous metal patterns so only the MMI sample results were used to establish the limits of anomalous metals.

The main target defined from this work is a 1000 m wide by 2000 m long zone of consistently anomalous Cu with about 70% of the samples also anomalous for Au contains a central core of anomalous Mo and Ag as shown on the figures.

The McQuesten aeromagnetic survey by Kiss, F., and Cryle, M., 2009 is available as Geoscience Data Repository through Natural Resources Canada. Tilt and horizontal derivative maps were useful in showing where magnetic susceptibility is low and was used to provide prospecting targets in 2016 and 2017. The main geochemical target has a striking similarity in shape with a pronounced low of the horizontal derivative aeromagnetic map. Figure 6.

Figure 6 shows the horizontal derivative of the aeromagnetic map for the Project Area and beyond with the zones of anomalous Cu and Mo in soils superimposed on it. The above results are interpreted to be representative of underlying porphyry style mineralization of roughly the same size of the geochemical target.

2018 AUGER DRILL PROGRAM.

Procedure.

June 3. Moved drill from Kryptos Project (YMEP Grant 18-003) to All In Project and moved drill onto property as far as creek where crossing was built.

June 4. Richards to Dawson to buy supplies and find chainsaw operator. Mieras and driller cut trail and moved drill.

June 5. Richards, Mieras, Hallowse cut trail and moved drill.

June 6. Drilled and cut trail.

June 7. Drilled and cut trail.

June 8. Drilled and cut trail.

June 9. Drilled and cut trail.

June 10. Drilled and cut trail. Moved drill to highway.

June 11. Drill put on truck to Pelly Farm. Broke camp. Mieras, driller, and Hallowse to Dawson. Richards to Whitehorse.

June 12. Richards demob camp gear, drill samples.

July 30 to Aug 2. Richards 2 days collecting samples and reclamation.

Summary: Richards 13 days. Mieras 9 days. Driller (Z Bidrman) 8 days. Hallowse 5 days.

The Kryptos Project of J. Mieras was done in conjunction with the nearby All In Project of G. Richards. Costs were shared and same camp was used. Mob costs were used on the Kryptos and demob costs were used on the All In Project.

Permit LQ00483 was granted to Gordon Richards by YESAB for an auger drill program on the Kryptos and All In Projects. A track mounted Morooka MST 1100 equipped with a Meranne auger drill was used in an attempt to collect rock fragment samples from bedrock lying beneath overburden over the main geochemically anomalous zone to determine the cause of the geochemical anomalies. Nine six-inch diameter holes were drilled across the width of the main geochemical target as shown on Figure 10. Results were disappointing. See Table 2.

Procedure was to set up the drill on as flat a surface as possible. Drill samples from the first 15 feet spun out of the holes cleanly and could be examined with confidence as to the depth each sample represented. As drilling progressed below this depth samples would not rise to surface cleanly so typically five feet would be drilled and then the rods would be raised in order to examine and sample that interval. One sample for each five-foot run would be screened in water in order to examine for angular rock chips and overall composition of the sample. One sample from the bottom of each hole was panned for gold colours. One sample from across the bottom five feet of each hole was collected for assay to determine if elevated metal values were present.

Results.

Position of the nine auger drill holes relative to the claim outline and main geochemical anomalous zone is shown on Figure 9. Drill Logs are provided in Table 2 and assay results for samples collected at the bottom of each hole is provided in an Appendix. Panned samples returned no gold. Assay results were low for all elements. The soil geochemical anomaly remains untested and continues to provide an excellent target for discovery of underlying porphyry mineralization. Nine six-inch diameter holes were drilled to a 40-foot depth or less without encountering bedrock except in the one most westerly hole that lies well outside the main geochemical target. The bottom of this hole encountered small strongly chloritized fragments of granitic rock over the bottom five feet similar to angular friable heavily chloritized boulders of granitic rock obtained in holes dug the previous year at the campsite. All holes encountered till and in some holes sand with very few boulders or cobbles.

Table 2. ALL IN 2018 AUGER DRILL HOLE LOGS						
Hole#	UTM E	UTM N	ELEV m	From ft	To ft	Description
AL 1A	419,991	7,009,625	682	0	27	Till. Dark grey with pebbles to 2 cm. Much clay.
AL 1B				0	30	As above. Both holes bottomed in pebbly layer.
AL 2	419,898	7,009,595	692	0	25	Dark grey till with round pebbles, angular and round grit. Clay rich 2 ft seam at 22 ft. Bottom 10 ft is pebble rich with 5 - 10% pebbles quartz. Hole difficult to drill over bottom 5 feet.
AL 3	419,706	7,009,554	702	0	28	0-15 ft grey till with quartz pebbles common. 15-25 ft grey clay rich till with few pebbles. 25-28 ft many pebbles and some cobbles
AL4	419,601	7,009,525	709	0	30	Clay rich till with few pebbles Quartz pebbles throughout particularly near surface. 25-30 ft much quartz pebbles in clay rich till.
AL 5	419,549	7,009,305	726	0	32	Gritty grey till with clay rich sections throughout. Abundant quartz pebbles 5-10%(?) mostly <0.5 cm.
AL 6	419,504	7,009,116	723	0	40	Medium dark grey till with high clay content. 5-10 % pebbles <0.5 cm with few pebble layers. Quartz pebbles 10% or more. Some angular chips near bottom of hole are grey green.
AL 7	419,135	7,009,269	740	0	29	0-25 ft gritty sand, medium grey, with much quartz. 25-29 ft sandy till with pebbly layers.
AL 8	418,761	7,009,396	758	0	24	0-4 mixed sand dune with outwash. 4 ft start pebbly till with high clay content. Very pebbly bottom 10-15 ft made drilling difficult.
AL 9	418,475	7,009,594	749	0	40	0-25 ft dark brown grey till with angular to subround pebbles. @25 ft hole started returning grey muddy till-. bedrock (?) mixture. Small angular chips of heavily chloritized granitic rock over bottom five feet.
Note: All pebbles were round to subround except where noted otherwise.						
UTM coordinates are NAD 83 Zone 8. NTS Map Sheet 115P02.						

CONCLUSIONS.

Results of the drill program failed to provide any direct evidence that would explain the cause of the main soil geochemical anomalous zone. Assays of bottom samples from all holes returned low metal values. Panned samples from samples collected at the bottom of all holes contained no visible gold. The small rock chips of highly chloritized granitic rocks in the bottom of the most westerly drilled hole, hole AL9, are considered to be outcrop and could be a sample of fringe propylitic hydrothermal alteration that lying around porphyry mineralization underlying the main soil geochemical anomalous zone.

RECOMMENDATIONS.

It is recommended that diamond drilling or another drilling method capable of sampling much deeper than auger drilling be conducted over the main soil geochemical anomaly in order to explain the cause of the anomaly. Obtaining porphyry style mineralization would assist considerably in optioning the property to a resource company particularly if grades were of sufficient tenor.

STATEMENT OF QUALIFICATIONS.

I, Gordon G Richards, with business address at 6410 Holly Park Drive, B.C., V4K 4W6, do hereby certify that:

1. I am a practising geologist holding a B.A.Sc. (1968) in Geology from The University of British Columbia, and an M.A.Sc. (1974) in Geology from The University of British Columbia.
2. I have been practicing my profession as a geologist for over 40 years and as a consulting geological engineer since 1985. I have work experience in western areas of the United States, Alaska, Canada, Mexico and Africa.
3. I have based this report on my own field work and supervision of field work by the driller, Zdenek Bidrman and assistants Jeff Mieras and Matt Hallowse during the period of June 3 to Aug 2, 2018 and on the results generated by that field work.

Respectfully submitted,

Gordon G Richards,