

A Geochemical Report on the ALL IN Property

submitted as Representation Work
on the following quartz claims

Work performed on:

ALL IN 1-36
YE90171-YE90188

Work applied to:

ALL IN 1-36
YE90171-YE90188

All claims in Dawson Mining District

Owner: Gordon Richards

Location

115P/02

Camp in centre of claims at

UTM 418,440E, 7,009,460N, Elev 505 m

NAD 83, UTM Zone 8

Field work performed by

Gordon Richards & Jeff Mieras

during the period June 24 to June 30, July 3, 2017

Report written by Gordon Richards

October 1, 2017

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VC172072.xls file of all MMI results for A122-A146, L1-L100.

VC172072.xlsx file of all MMI results for L101-L141.

WHI17000208.xlsx file of all twig sample results for all A and L series.

INTRODUCTION.

The general area of the ALL IN claims was prospected with the aid of a YMEP grants awarded to G Richards in 2016 and 2017. The property is located on a gently eastward sloping hillside from two to six km west of the Klondyke Highway about 25 km south Stewart Crossing within NTS map sheet 115P02. Access was made from the helicopter base at Mayo airport, 80 km distant.

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 includes 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 glaciated terrain immediately adjacent to pre-Reid glaciated terrain. 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 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.

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 5-14. 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. 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 exploration activity anywhere on or near the ALL IN claims.

In 2017 the ALL IN 1-36 claims were staked June 11 and recorded June 15 to cover known anomalous zones identified from the 2016 work and their extensions. A MMI soil and black spruce twig sampling prospecting program was undertaken on the claims June 24 to 30. Results of that work forms the basis of this report and is used to extend expiry dates of the claims. The ALL IN 37-46 claims were staked and recorded August 22, 2017. No work has been conducted on these claims.

Results of the field work were successful in defining a pronounced multi-element anomalous zone in the MMI soil results that measures 800 m to 1100 m wide by 2000 m long and corresponds remarkably well with an aeromagnetic horizontal derivative low. The large geochemically anomalous zone is defined by anomalous Cu and Au with centrally positioned 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.

Recommended work includes a mobile auger or percussion drilling program designed to collect rock samples underlying the main geochemically anomalous zone to determine the cause of the geochemical anomalies.

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 clearing occurs beside the creek cutting across the claims and could have been a pump station. 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 based on MMI soil samples and to a lesser degree black spruce twig samples with similar porphyry signatures.

In 2017 the ALL IN 1-36 claims were staked June 11 and recorded June 15 over the proposed sampling area. Following staking from June 24 to 30 a MMI and black spruce twig sampling program was undertaken over the claims and forms the basis of this report.

In August, the ALL IN 37-46 claims were staked over ground between the original claims and the Klondyke Highway.

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. The work described in this report was funded largely by YMEP grant 17-002 awarded to Gord Richards. A few additional costs were paid for by Richards.

Table 1. Claim Status

Claim Name	Grant No.	Expiry Date
ALL IN 1-36	YE90171-YE90206	2018/06/15
ALL IN 37-40	YE90267-YE90270	2018/08/22
ALL IN 41-44	YF47067-YF47070	2018/08/22
ALL IN 45, 46	YD12692, YD12693	2018/08/22

Certificate to Work will be filed on the ALL IN 1-36 claims based on work described in this report.

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 Figures 3 and 4. 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 14. 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 14, 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 recently 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 or soon after the end of McConnell Glaciation. A few subround 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.

GEOCHEMICAL SURVEY.

SURVEY METHODS.

General.

J. Mieras and G. Richards flew by helicopter from Mayo to the project area on June 11 to stake the ALL IN 1-36 quartz claims. They walked out at the end of the day to the Klondyke Highway and drove to Dawson City on June 15 to record the claims, following the staking of the nearby KRYPTOS claims. Following sampling the KRYPTOS claims they spent June 23 buying food and supplies in Mayo and organizing the helicopter for the next day. They flew from Mayo back to the ALL IN property June 24 to conduct MMI soil sampling and black spruce

		ALL IN		KRYPTOS	
		man days	post recording	man days	post recording
Date	Activity	man days	post recording	man days	post recording
Jun 8	bought supplies Whx	1		1	
Jun 9	Drove Mayo, staking plans	2			
Jun 10	wrote up 96 claim tags, bought food	1		1	
Jun 11	Dropped posts, staked ALL IN claims	2			
Jun 12	Staked KRYPTOS claims			2	
Jun 13	Staked KRYPTOS claims			2	
Jun 14	Staked KRYPTOS claims, record Mayo			1	
Jun 15	Record Dawson, bought food, drove to Kryptos camp			1	
Jun 16	Sampled Kryptos				2
Jun 17	Sampled Kryptos				2
Jun 18	Sampled Kryptos				2
Jun 19	Sampled Kryptos				2
Jun 20	Sampled Kryptos				2
Jun 21	Sampled Kryptos				2
Jun 22	Sampled Kryptos				2
Jun 23	Drove Mayo, bought food, organize helicopter		2		
Jun 24	Heli to ALL IN claims, begin sampling		2		
Jun 25	Sampled ALL IN		2		
Jun 26	Sampled ALL IN		2		
Jun 27	Sampled ALL IN		2		
Jun 28	Sampled ALL IN		2		
Jun 29	Sampled ALL IN		2		
Jun 30	Sampled ALL IN		2		
Jul 1	Demob ALL IN, Drop off for sampling on Kryptos				2
Jul 2	drove Whs, sorted samples, dried out				2
Jul 3	Ship samples, returned gear, stored camp gear.		2		
		3 days	9 days	4 days	9 days
	Of the 9 days on the ALL IN claims all 9 days were spent on the claims				
	Of the 9 days on the KRYPTOS claims, Richards spent 7 days and Mieras spent 6 days.				

Table 1.5. Record of time spent on BENT (ALL IN claims) and KRYPTOS (KRYPTOS claims) Projects of G Richards and J Mieras in 2017.

twig sampling across the claims. **Fourteen man days were spent on the property by Mieras and Richards from June 24 to June 30** collecting 200 MMI soil samples and 85 black spruce twig samples. 12 MMI soil samples and 14 black spruce twig samples were collected off the claims. **188 MMI soil samples and 71 black spruce twig samples were collected within the claims.** July 3 was spent in Whitehorse in demob organizing and shipping samples and storing camp gear.

Four sample series are shown on Figures 5 to 14. “C” and “T” sample series were collected in 2016, “A” and “L” sample series were collected in 2017. The 2017 sampling program was conducted across the ALL IN claims to find the limits of two zones of anomalous samples identified in 2016. Sampling was designed to provide a 100 m sample interval along east-west sample lines spaced about 300 m apart. Considerable latitude was exercised in the field to allow wandering away from selected sites in order to find sites suitable for MMI sampling as this method was considered preferable to black spruce twig sampling and shallow permafrost hindered collection of MMI samples at some sites.

All geochemical results are provided in digital form with NAD 83 Zone 8 UTM co-ordinates provided for all samples. Response ratios calculated for selected elements of all MMI samples are provided in Table 2. Values of all twig samples for selected elements are provided in Table 3. Twig samples were only collected where MMI soil samples could not be collected due to thick organic cover with underlying frost.

MMI Soil Sampling.

MMI analysis uses a weak partial extraction to improve the conventional geochemical response over buried ore deposits. The process measures the mobile metal ions from mineralization, which have moved toward the surface and are loosely attached to the surfaces of soil particles. Its effectiveness has been documented in over 1000 case histories on six continents and includes numerous commercial successes. The anomalies are sharply bounded and in most cases directly overlie and define the extent of the surface projection of buried primary mineralized zones. The MMI process is a proprietary method developed by Wamtech of Australia. SGS Minerals Services in Toronto purchased all rights to the method and provides analyses in Canada.

Watch and ring were removed prior to sampling. Pits were dug by shovel to a depth of 30 cm in order to expose the soil profile for sampling. The profile was scraped clean with a plastic scoop to remove any metal effect from the digging shovel. A continuous strip of soil was collected by plastic scoop over the interval of 10 to 20 cm below the top of true soil, placed in a pre-numbered zip lock baggie and placed in an 11 inch by 20 inch 2 mil plastic bag. Loess was present at nearly all sample sites and was the sample medium for most samples with a minor contribution from underlying till in some samples. Samples were kept cool until they were shipped to SGS Minerals Services in Vancouver for analyses.

In the SGS Lab, samples are not dried or prepared in any way. The MMI process includes analyses of an unscreened 50-g sample using multi-component extractants. Metals are determined by ICP-MS in the parts per billion range.

Response Ratios were calculated for Cu, Mo, Au, Ag, Pb, Zn, Ni, U, and Ti. The average value for results of the lower quartile was calculated for each element and used as background value. One-half of detection limit was used for those samples with values reported as less than detection limit. Then each result was divided by the lower quartile average to obtain its response ratio. A response ratio of 10 or more is considered very significant for indicating underlying mineralization. Lesser values of 5 to 10 can also be important particularly where more than one element has such a value. Response ratios can best be thought of as a multiple of background in interpreting results.

Black Spruce Twig Sampling.

The following description of twig sampling that was used in the present survey is taken from: *Heberlein, D.R., Dunn, C.E. and Macfarlane, W. (2013): Use of organic media in the geochemical detection of blind porphyry copper-gold mineralization in the Woodjam property area, south-central British Columbia (NTS 093A/03, /06); in Geoscience BC Summary of Activities 2012, Geoscience BC, Report 2013-1, p. 47–62.*

Samples of black spruce twigs comprising the most recent two years of growth were snipped from around the circumference of a single tree. Black spruce was easily identified and distinguished from white spruce by observing with aid of a hand lens minute red hairs on the circumference of twigs of the past few years growth. In central Yukon, this amount of growth is typically about a

hand-span in length, at which point, the twig diameter is 4–5mm. This diameter is quite critical because many trace elements concentrate in the bark part of the twig, whereas the woody tissue (the cortex) has lower concentrations of most elements. Consequently, unless there is a consistency in the diameters of the twigs that are collected, any analysis of twig tissue can result in variability among samples simply because of the differing ratios of woody tissue to twig bark. About ten to fifteen black spruce twigs with needles were placed into gusseted kraft sample bags. The use of plastic bags was avoided to minimize the chance of molds forming thereby losing sample integrity.

Analysis of the black spruce twig samples was carried out at Bureau Veritas Laboratories Ltd. (Vancouver) using their VG104-EXT method. In the laboratory, twig samples were thoroughly dried at 60°C in an oven with a forced-air fan for 24 hours to remove moisture. The needles could then be separated from the twigs for ashing. A 50 gram sample of twigs was ashed at 475 degrees Celsius yielding about 1.5 gm ash. A 0.5 gm ash split was digested in 1:1:1 aqua regia for analysis by ultratrace ICP-MS. Results for 51 elements were provided by this VG104-EXT analytic package

SURVEY RESULTS.

Results of the 300 m by 100 m MMI soil and twig sample grid over the ALL IN claims is provided in Tables 2 and 3 and shown graphically on Figures 5 to 14. Results of the 2016 survey described above are also provided graphically on the figures in order to provide a complete picture of the targets.

A pit dug at the field camp in the centre of the claims uncovered a few angular boulders comprised of friable completely chloritized granodiorite that have probably not been transported a long distance by glaciers. The only outcrops found on the soil lines were of unaltered dacite and andesite of the overlying volcanics of the Reid Lakes Complex. They occur on the hill within the southwest portion of the claims as indicated on the figures by a dashed black line.

Two separate areas of geochemically anomalous samples have been identified, a well defined area in the east portion of the claims measuring two km

north-south and one km east-west and a poorly defined area in the northwest portion of the claims measuring 1500 m east west and about 500 m north-south.

The main east target remains open to the north. Black spruce twig samples were of no use in defining patterns of anomalous elements except for Ag. The target is defined by MMI samples that are at least five times background for Cu. The limit of anomalous Cu is shown as a red line on Figures 5 to 14. All MMI samples within this area have a response ratio of at least 5. Anomalous Au, Ni and U form nearly identical patterns of anomalous values with response ratios of 5 or more. Anomalous Ni and U patterns nearly identical to anomalous Cu pattern is a feature that occurs in other geochemical targets developed by the writer on the RGS, DUBLOON, and PIRATE claims 40 km northwest and on the KRYPTOS claims 5 km southeast of the ALL IN claims.

Anomalous Au up to a response ratio of 36 and Ag up to a response ratio of 6 occur within the zones of anomalous Cu-Ni-U. This relationship provides encouragement that the proposed underlying porphyry mineralization contains significant Au and Ag mineralization. There are also many anomalous Au and a few anomalous Ag values occurring sporadically across the rest of the survey area.

Anomalous values for Mo up to a response ratio of 20 and Ag up to a response ratio of 6 form similar patterns central to the anomalous Cu zone as shown on the figures. Although two separate patterns of anomalous Mo are shown on the figures they may coalesce into one complete pattern as the intervening ground between them has only been sampled by black spruce twig samples, which are not considered a reliable sampling method in the present survey. Anomalous Ag values in twigs do occur within these central Mo patterns.

Anomalous Pb and Zn are present but do not form easily interpreted targets. Almost all anomalous Ti values occur peripheral to the Cu anomalous zone. The low Ti values may be related to destruction of illmenite, common in the underlying batholith, by hydrothermal activity related to the proposed porphyry mineralizing event responsible for the anomalous metal values.

The coincident pattern of anomalous geochemistry for Cu, Au, Ni, and U is strikingly similar to the aeromagnetic horizontal derivative low shown on Figure 6. This low is believed to be indicative of magnetic susceptibility destruction related

to a porphyry mineralizing event that has introduced metals and altered the batholithic rock.

The less well defined pattern of geochemically anomalous metals in the northeast portion of the ALL IN claims may ultimately be shown to extend under the volcanoclastics if they form post mineral cover. Anomalous Cu, Au, Ni, and U occur over a 1500 m distance east west and about 500 m north south. The geochemical fingerprint is similar to the main east zone but is not as uniformly anomalous so the limit of this pattern has not been drawn.

CONCLUSIONS .

Sampling in 2017 on the ALL IN claims defined the limits of the main multi-element geochemically anomalous pattern outlined in 2016. This anomaly is 2000 m long north-south, 1000 m wide east-west, and remains open to the north. It is best defined by strongly anomalous Cu RRs in MMI samples (up to 24) and supported by anomalous RRs for Mo (up to 20), Au (up to 36), Ag (up to 6), U (up to 44), and Ni (up to 21). Mg, Ca, and Mn form anomalous patterns coincident with the anomalous Cu pattern and Fe, Ti, Rb, Cs, As, Sb, and Pb form patterns of low geochemical response over the anomalous Cu pattern. Refer to Table 2. No mineralized float was present in the area that might explain the source of the anomalies although strongly chloritized angular granodiorite float found at the field camp 800 m west of the anomalous patterns could be indicative of alteration peripheral to a porphyry mineralized body. It is believed that the patterns described are indicative of a porphyry mineralizing event that has introduced metals and hydrothermally altered the granodiorite host rock. It will take trenching or drilling to explain the source.

The anomalous Cu, Mo, Ni, U, Au and Ag MMI response ratio patterns are very strong. MMI anomalies often directly overlie causative mineralization. The pattern of a central core of Mo and Ag within a larger zone of anomalous Cu-Au-Ni-U-Mg-Ca-Mn and reduced values of Fe-Ti-Rb-Cs-As-Sb-Pb is a strong indication that the targets are caused by underlying mineralization and hydrothermal alteration. The size, signature, and strength of the anomalies are most indicative of porphyry style mineralization. Peripheral anomalous Pb is classic zoning around

porphyry mineralization. The apparent Ti halo could be caused by destruction of illmenite within the unaltered monzogranite batholith by hydrothermal alteration associated with porphyry mineralization. High and low patterns for other elements could be related to hydrothermal alteration related to porphyry mineralization. This model is enhanced by the aeromagnetic horizontal derivative low that is interpreted to indicate destruction of magnetic susceptibility associated with porphyry mineralization.

A second partially defined pattern of anomalous metal values with the same metal signature as the main anomaly occurs in the northwest of the claims. It measures 1500 m east west by 500 m north-south.

This target and the nearby KRYPTOS porphyry targets were discovered by prospecting up-ice and up-drainage from RGS anomalies based on a reinterpretation of geochemical thresholds using a restricted area of similar geology and glacial history. Clustering of five porphyry targets on the RGS, Pirate and Dubloon claims in the north end of the Early Mississippian aged Reid Lakes Batholith and about four similar targets on the ALL IN and KRYPTOS claims in the south end of the batholith is similar to the clustering of the Bethlehem, JA, Highmont, Lornex and Valley Cu-Mo porphyry deposits within the Jurassic age Guichon Creek Batholith in southern BC. Both batholiths intrude their own volcanic pile and are of similar size.

RECOMMENDATIONS.

It is recommended that:

- i) The main anomaly be drill tested using a relatively inexpensive auger drill. This drill could be walked in from the Klondyke Highway two km east of the main anomaly. Such drilling could supply rock samples of bedrock to confirm or deny the existence of underlying mineralization.
- ii) Diamond drilling be considered based on results of the auger drilling.
- iii) The general area has proven to be fertile ground for discovery of geochemical anomalies with porphyry signatures. Additional prospecting in the general area of the claims is recommended.

STATEMENT OF COSTS

Certificate of Work, ALL IN 1-36 quartz claims.

Note: 285 samples were collected of which 259 were on the claims
 188 of 200 MMI samples were collected on the claims
 71 of 85 Twig samples were collected on the claims
 The above fractions were applied to costs as indicated.

Fireweed Helicopter portion of #13746 Jul 1. Demob Property.	\$1222.09
Helicopter #13787 Jun 24. Mob Property.	2529.45
Geochem: Bureau Veritas VAN Twigs 2640.02 x 71/85	2205.19
SGS Labs MMI samples 8452.50 x 188/200	7945.35
Wages: Fieldwork June 24-30; demob July 3	
G Richards 8 days @ \$500/day x 259/285	4089.47
J Mieras 8 days @ \$350/day x 259/285	2862.63
Living Allowance: sample bags, food, sat phone, radios, flagging, etc	
16 man days @ \$100/man day	1800.00
Generator: 8 days @ \$10/day	90.00
Freight: Air North, MMI samples Whitehorse to Vancouver	200.00
Report: 10% of above costs (\$22,944.18)	2294.42
TOTAL	\$25,238.60

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 Professional Engineer, registration number 11,411 with the Association of Professional Engineers and Geoscientists of British Columbia.
2. I hold 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.
3. 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.
4. I have based this report on my own field work and supervision of field work by Jeff Mieras during the period of June 23 to 30, July 1, 2017 and on the results generated by that field work.

Respectfully submitted,

Gordon G Richards, P.Eng.

Figures

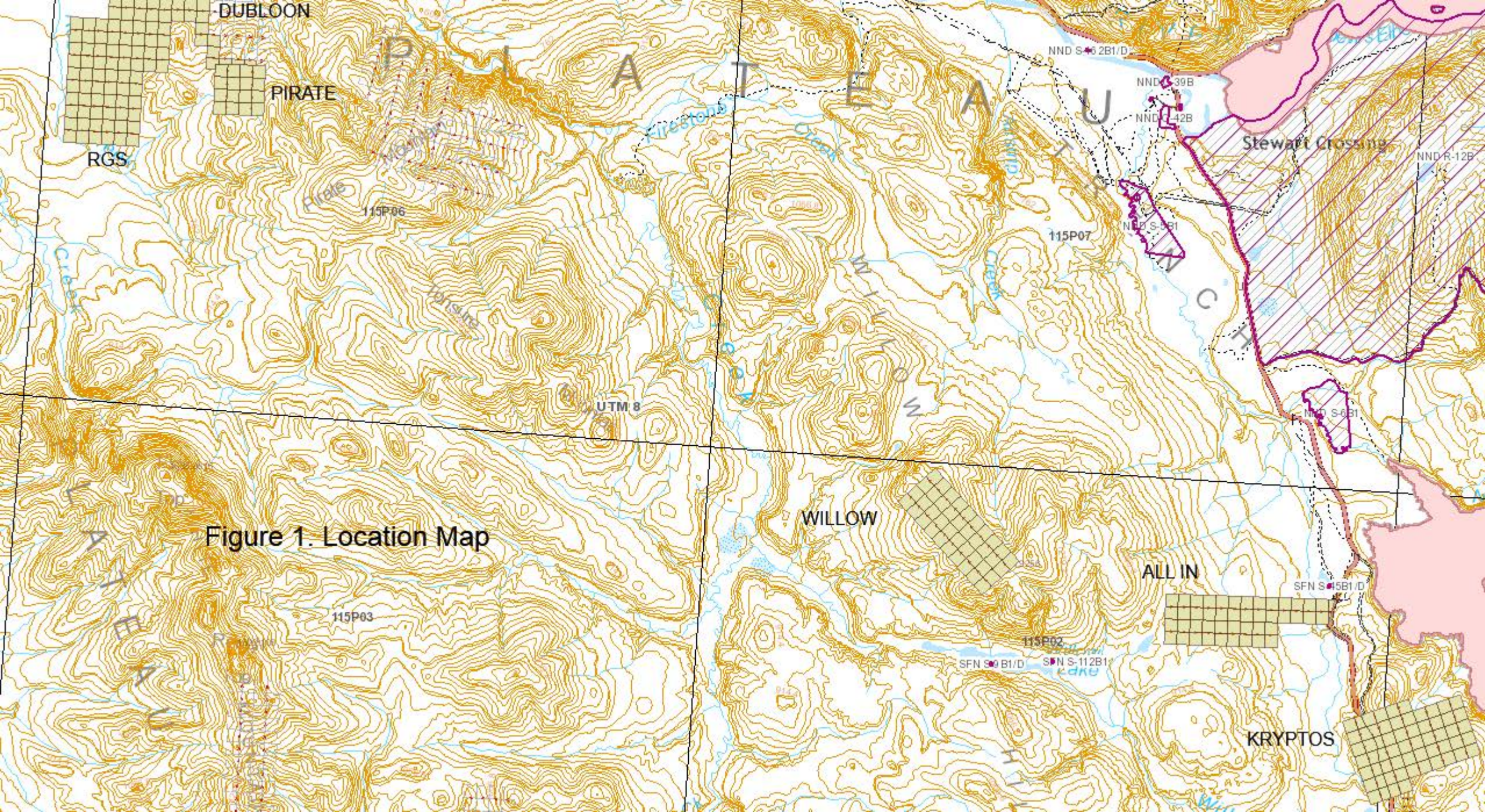


Figure 1. Location Map

Work Area



Klondyke Highway

Figure 2. Claim Map ALL IN Claims.

Map 115P02

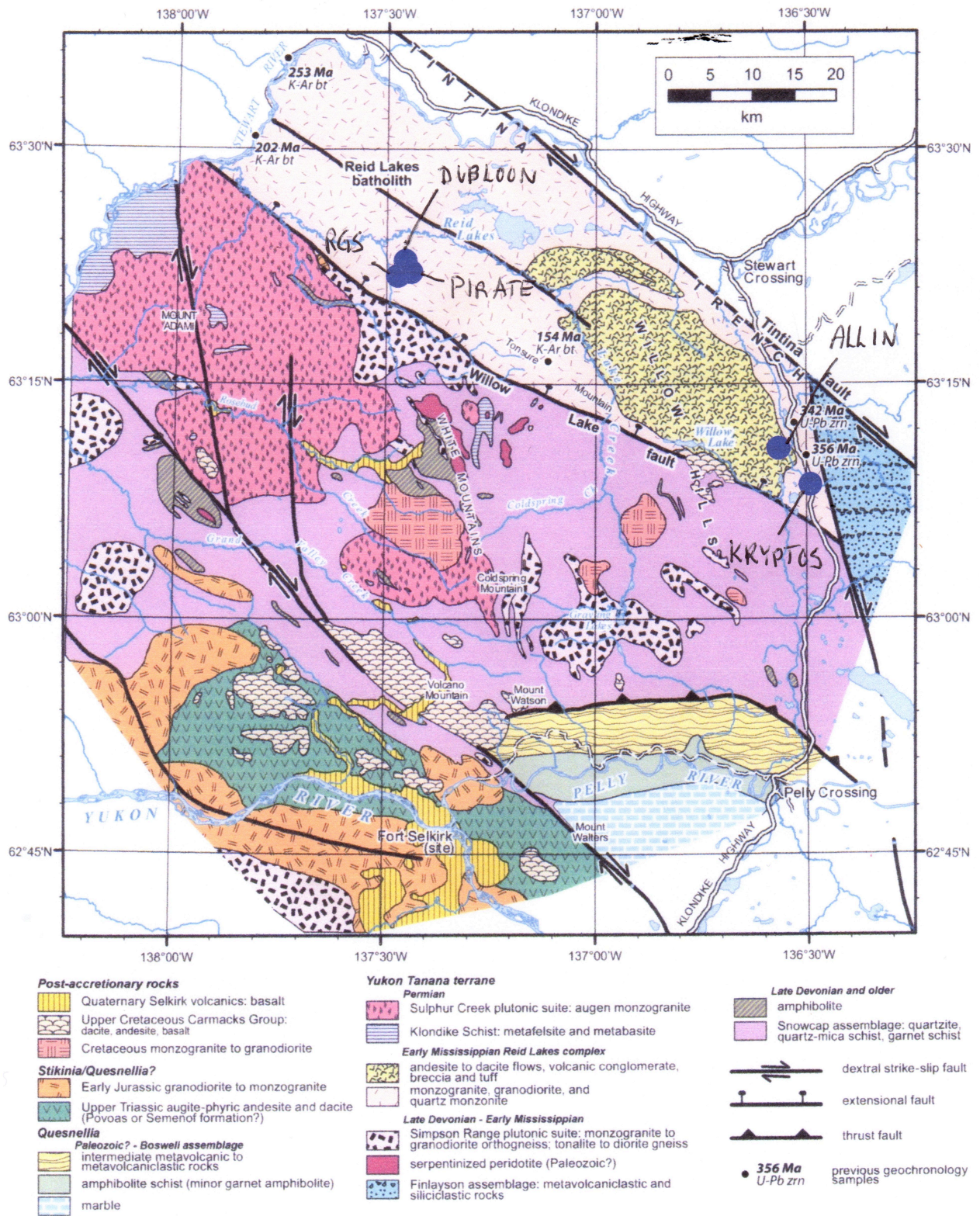


Figure 3 Simplified geological map of southwest McQuesten-northern Carmacks area (after J.J. Ryan, M. Colpron and N. Hayward, in prep.).

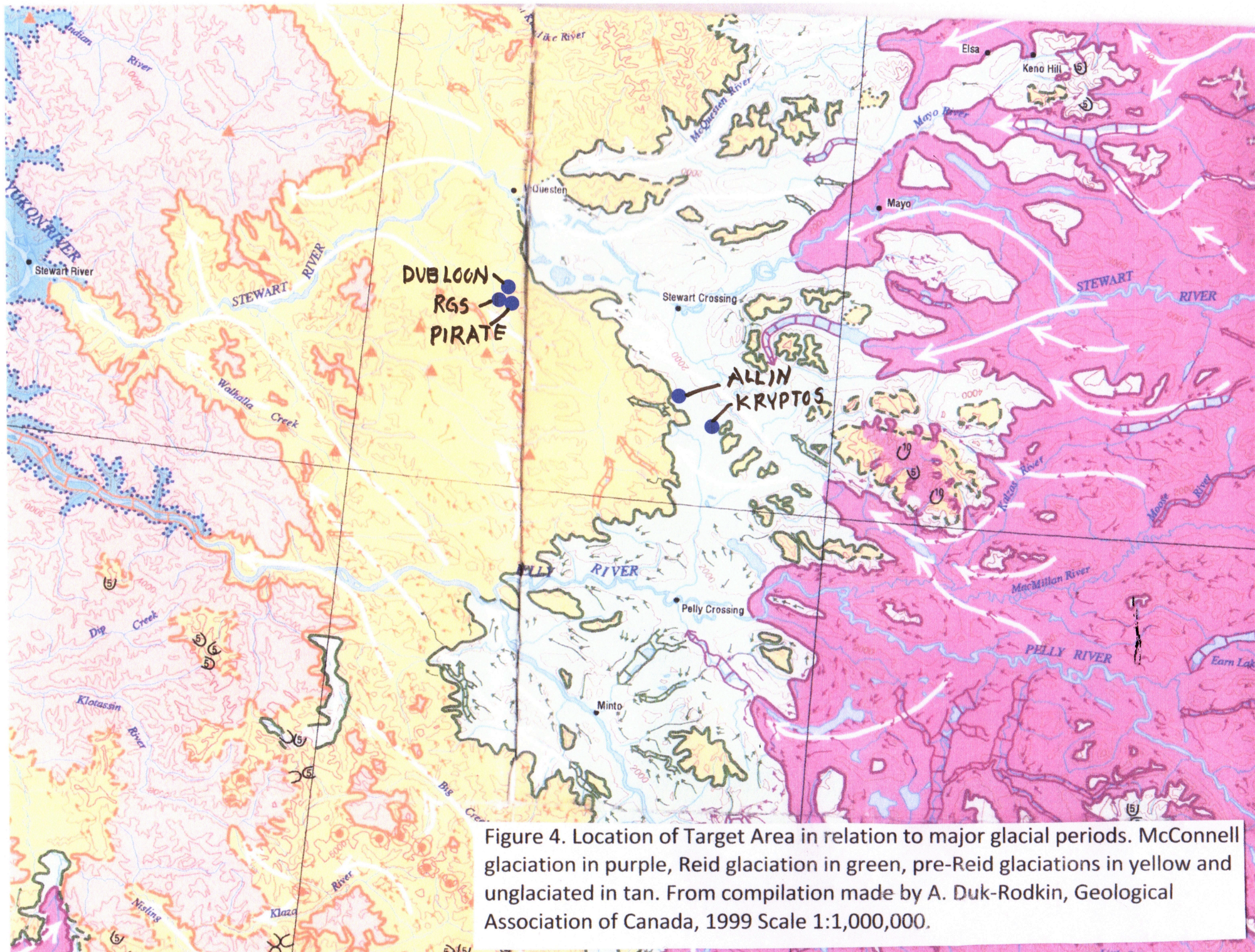
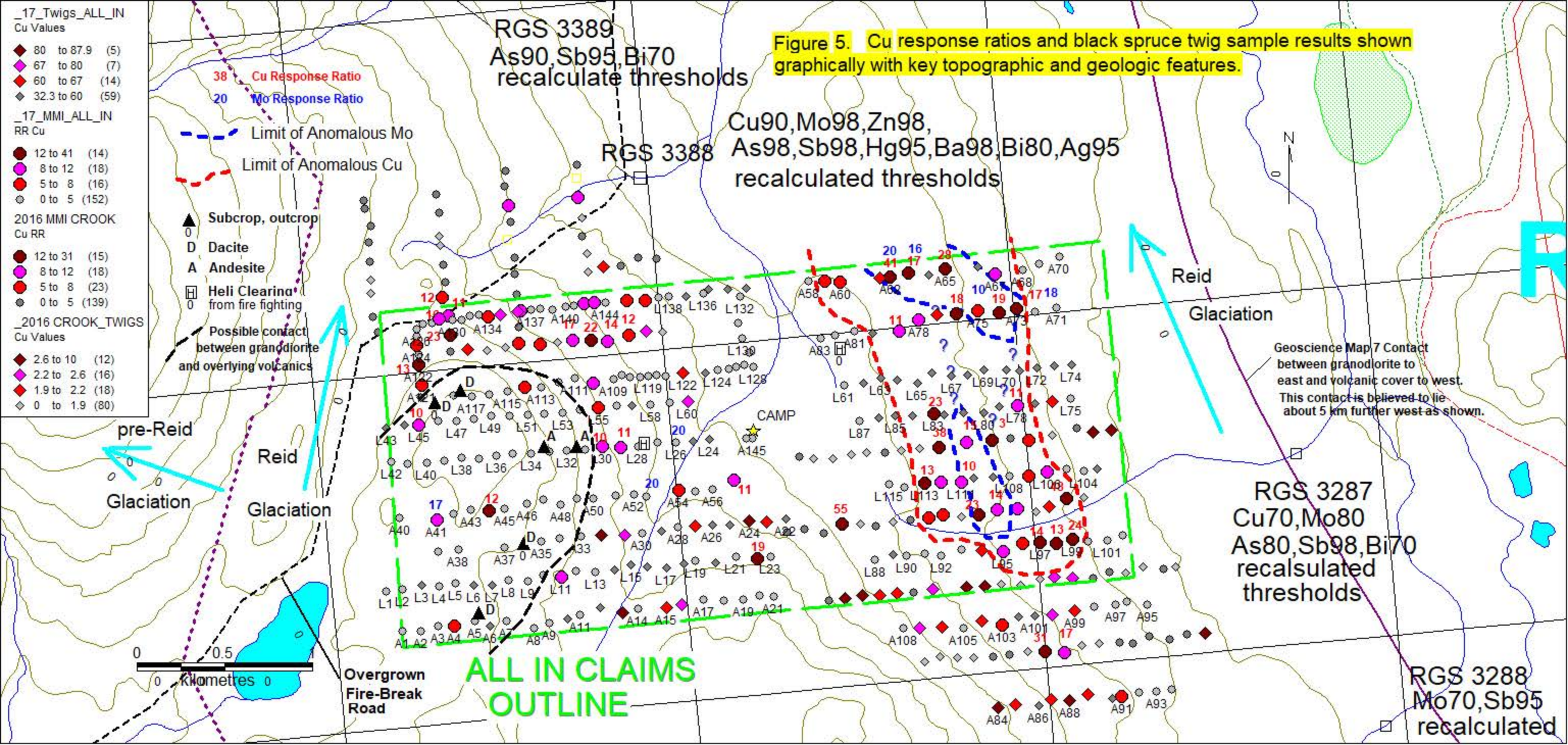


Figure 4. Location of Target Area in relation to major glacial periods. McConnell glaciation in purple, Reid glaciation in green, pre-Reid glaciations in yellow and unglaciated in tan. From compilation made by A. Duk-Rodkin, Geological Association of Canada, 1999 Scale 1:1,000,000.



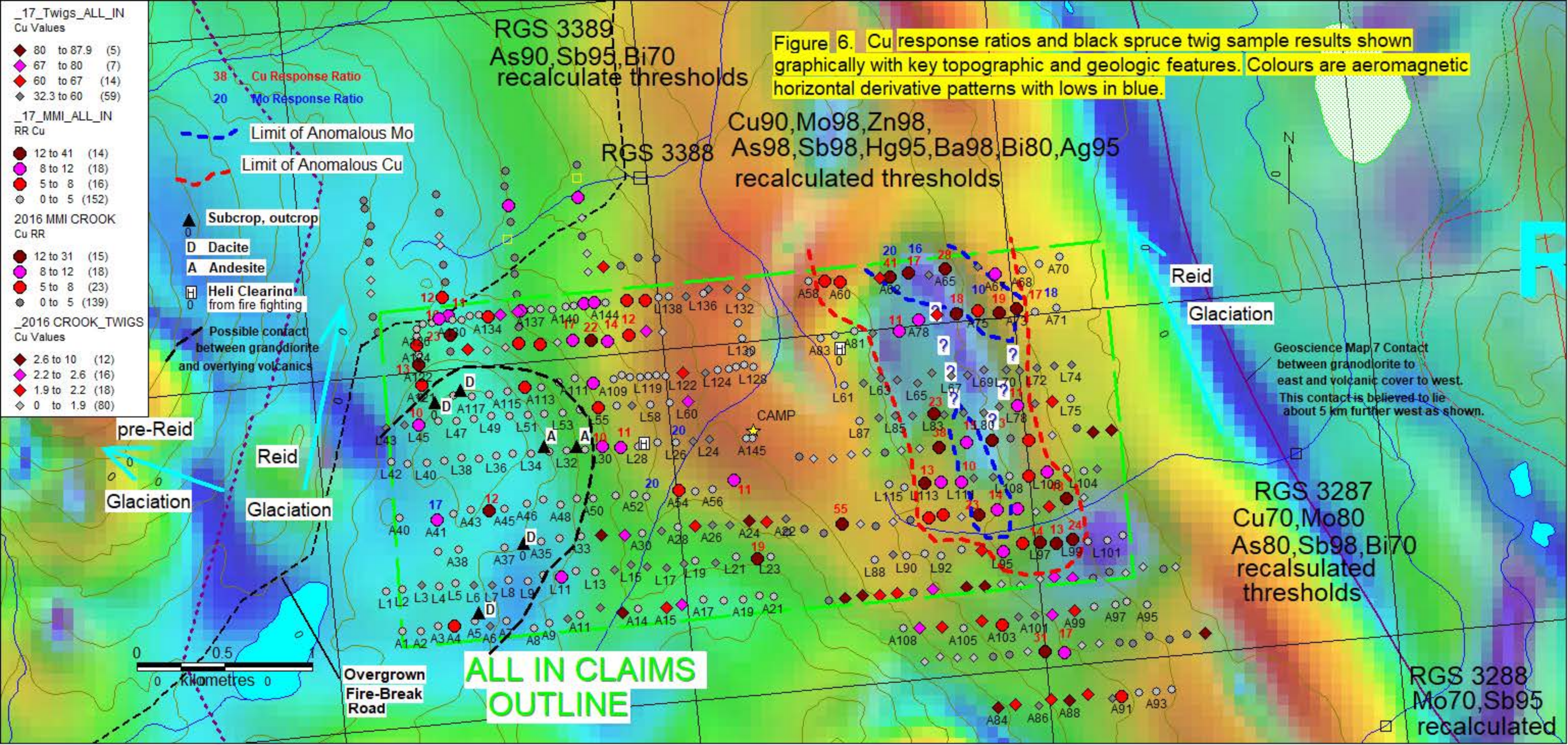


Figure 6. Cu response ratios and black spruce twig sample results shown graphically with key topographic and geologic features. Colours are aeromagnetic horizontal derivative patterns with lows in blue.

RGS 3389
As90, Sb95, Bi70
recalculated thresholds

RGS 3388
Cu90, Mo98, Zn98,
As98, Sb98, Hg95, Ba98, Bi80, Ag95
recalculated thresholds

RGS 3287
Cu70, Mo80
As80, Sb98, Bi70
recalculated thresholds

RGS 3288
Mo70, Sb95
recalculated

- _17_Twigs_ALL_IN
Cu Values**
- ◆ 80 to 87.9 (5)
 - ◆ 67 to 80 (7)
 - ◆ 60 to 67 (14)
 - ◆ 32.3 to 60 (59)
- _17_MMI_ALL_IN
RR Cu**
- 12 to 41 (14)
 - 8 to 12 (18)
 - 5 to 8 (16)
 - 0 to 5 (152)
- 2016 MMI CROOK
Cu RR**
- 12 to 31 (15)
 - 8 to 12 (18)
 - 5 to 8 (23)
 - 0 to 5 (139)
- _2016 CROOK_TWIGS
Cu Values**
- ◆ 2.6 to 10 (12)
 - ◆ 2.2 to 2.6 (16)
 - ◆ 1.9 to 2.2 (18)
 - ◆ 0 to 1.9 (80)

38
20
Cu Response Ratio
Mo Response Ratio

Limit of Anomalous Mo
Limit of Anomalous Cu

Subcrop, outcrop
D Dacite
A Andesite
H Heli Clearing
from fire fighting

Possible contact
between granodiorite
and overlying volcanics

pre-Reid
Reid
Glaciation
Glaciation

0 0.5
Kilometres

Overgrown
Fire-Break
Road

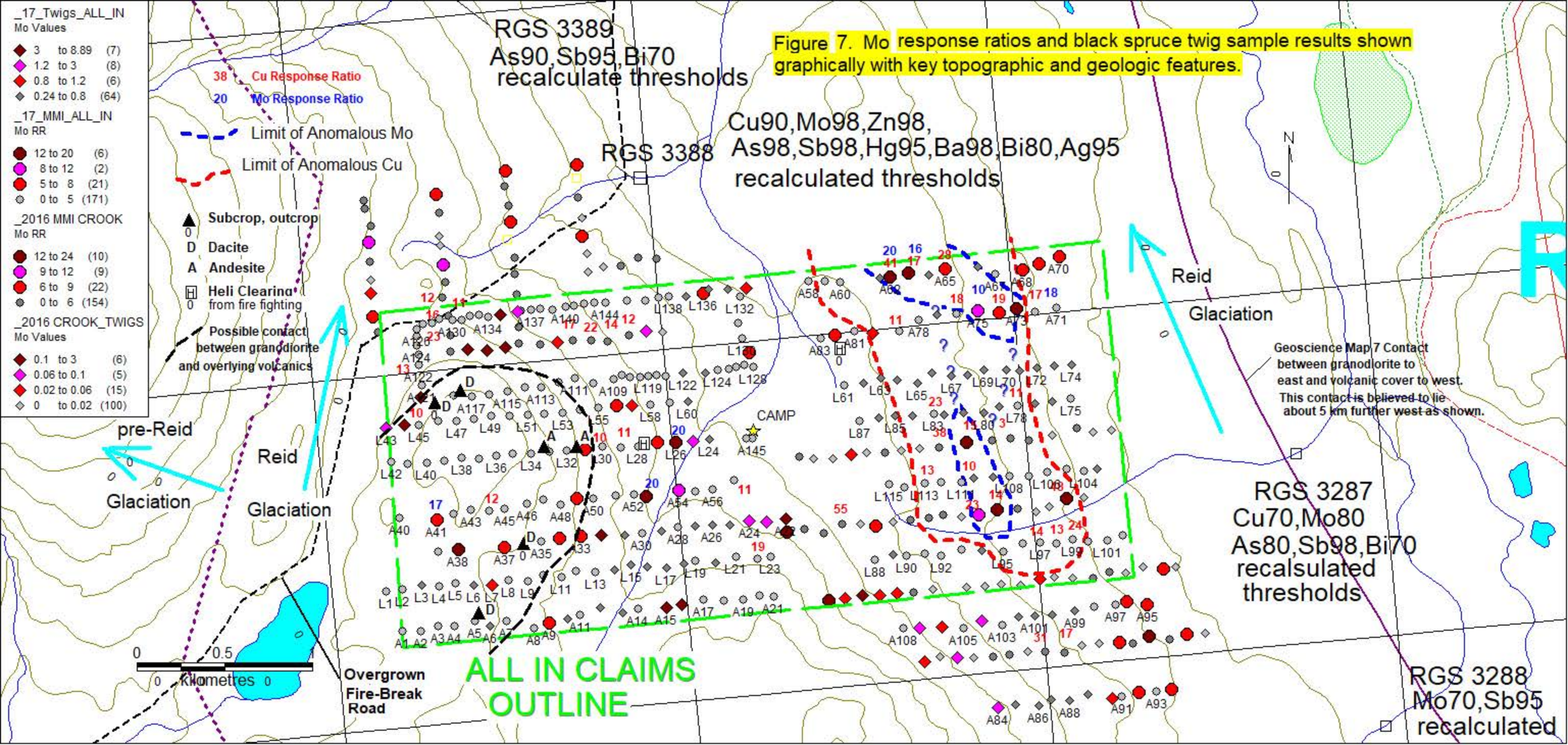
ALL IN CLAIMS
OUTLINE

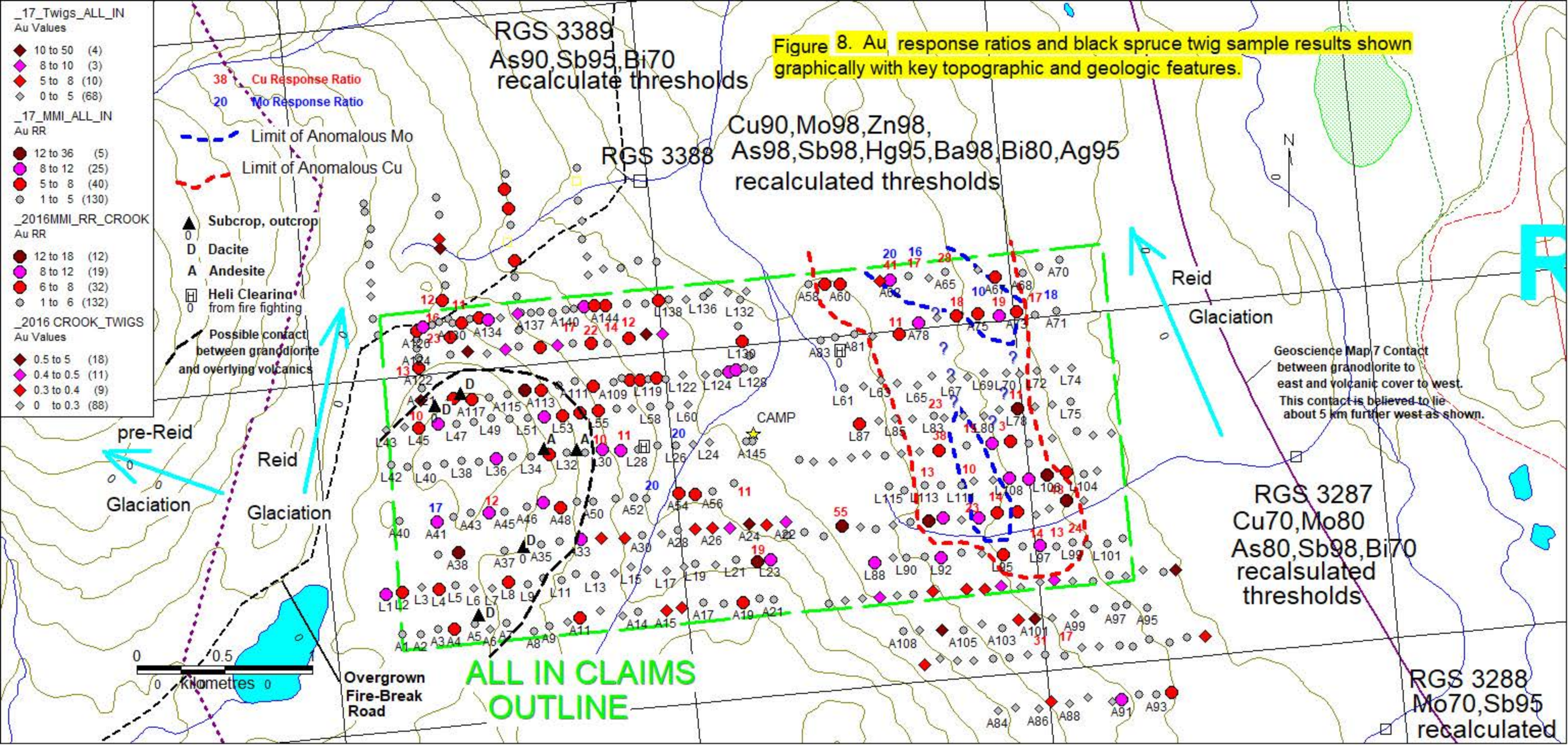


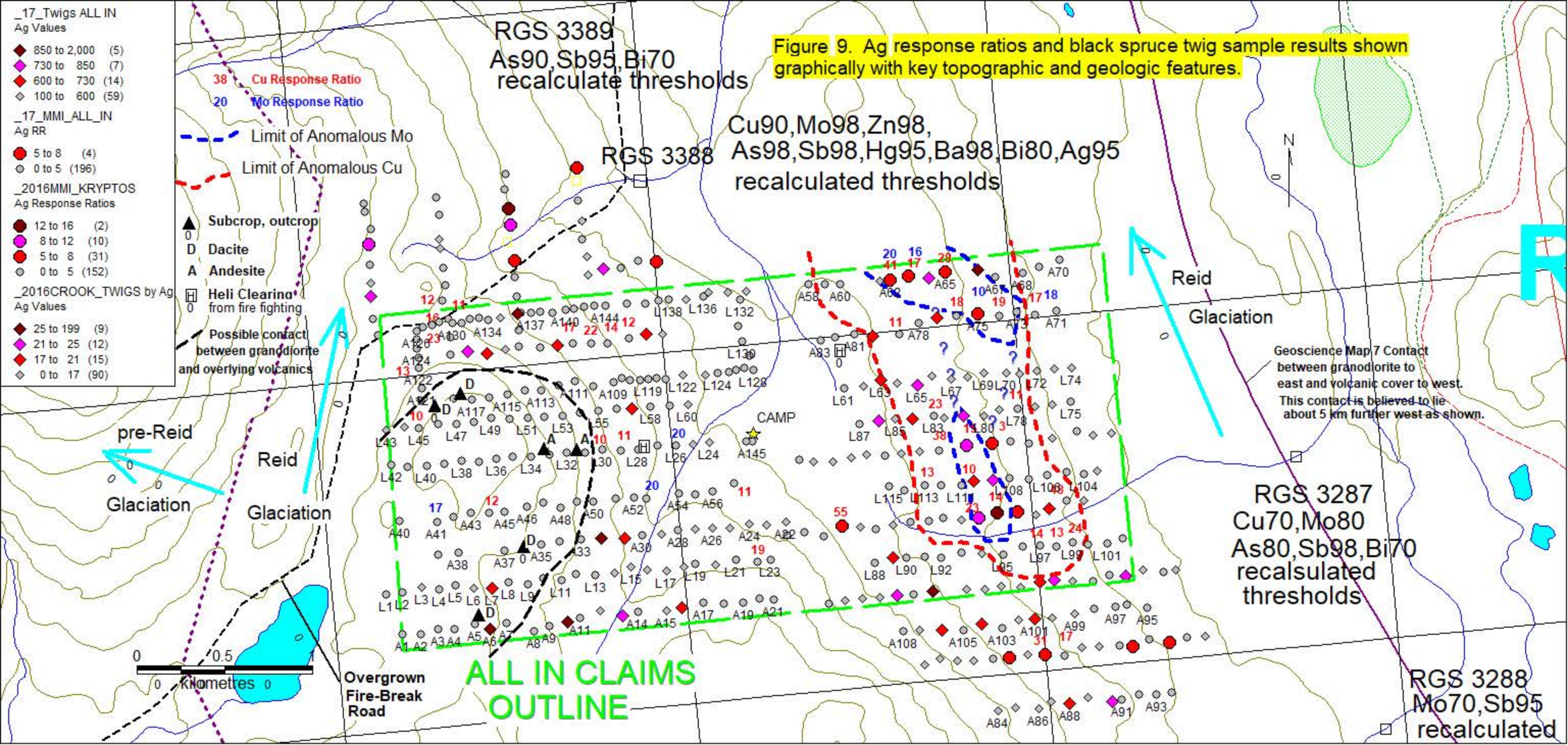
Geoscience Map 7 Contact
between granodiorite to
east and volcanic cover to west.
This contact is believed to lie
about 5 km further west as shown.

CAMP

Reid
Glaciation







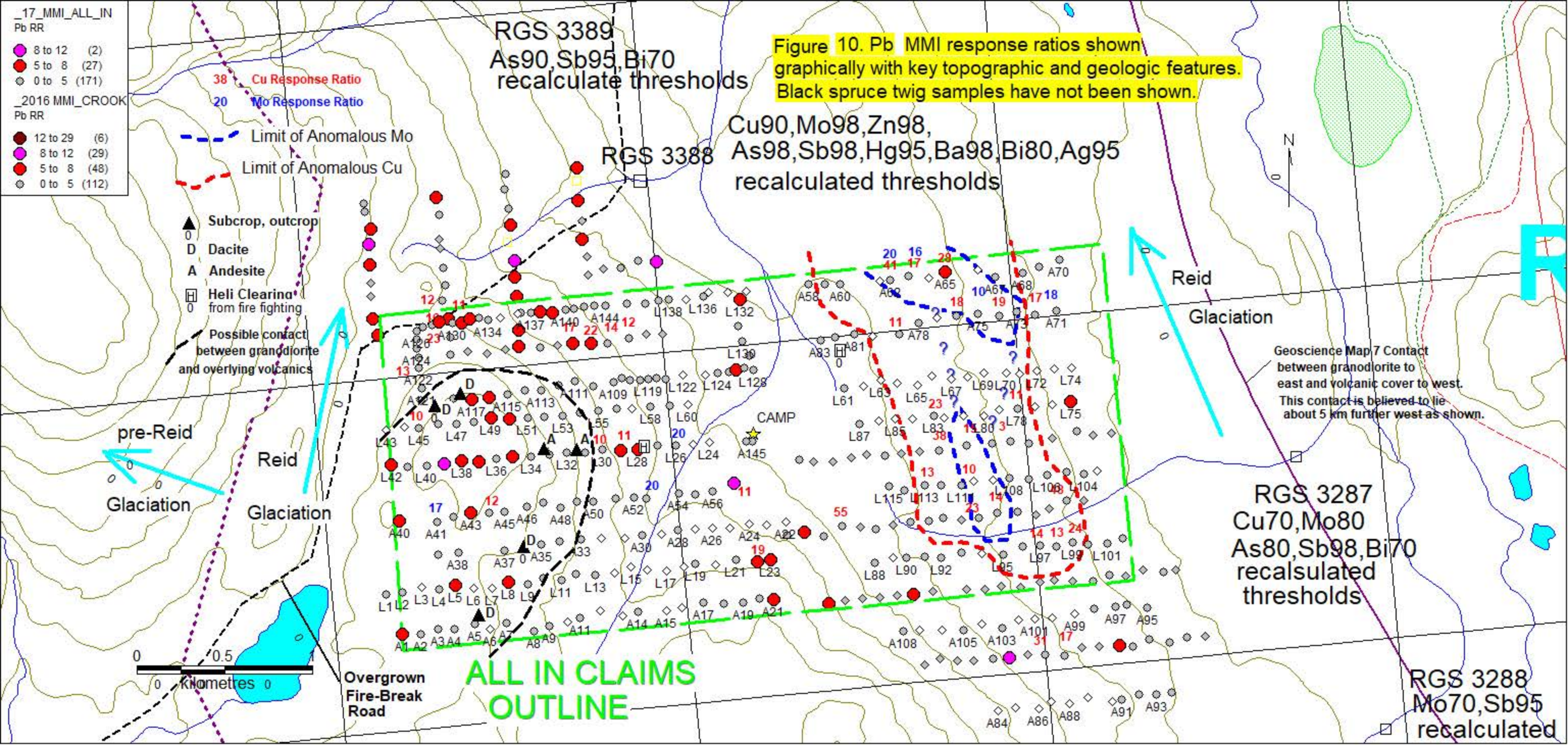


Figure 10. Pb MMI response ratios shown graphically with key topographic and geologic features. Black spruce twig samples have not been shown.

- _17 MMI_ALL_IN Pb RR**
- 8 to 12 (2)
 - 5 to 8 (27)
 - 0 to 5 (171)
- _2016 MMI_CROOK Pb RR**
- 12 to 29 (6)
 - 8 to 12 (29)
 - 5 to 8 (48)
 - 0 to 5 (112)

RGS 3389
As90, Sb95, Bi70
recalculate thresholds

RGS 3388
Cu90, Mo98, Zn98,
As98, Sb98, Hg95, Ba98, Bi80, Ag95
recalculated thresholds

RGS 3287
Cu70, Mo80
As80, Sb98, Bi70
recalculated thresholds

RGS 3288
Mo70, Sb95
recalculated

--- Limit of Anomalous Mo
--- Limit of Anomalous Cu

- ▲ Subcrop, outcrop
- D Dacite
- A Andesite
- Heli Clearing from fire fighting
- Possible contact between granodiorite and overlying volcanics

Reid
Glaciation

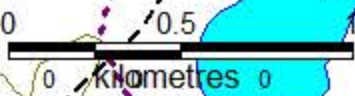
pre-Reid
Glaciation

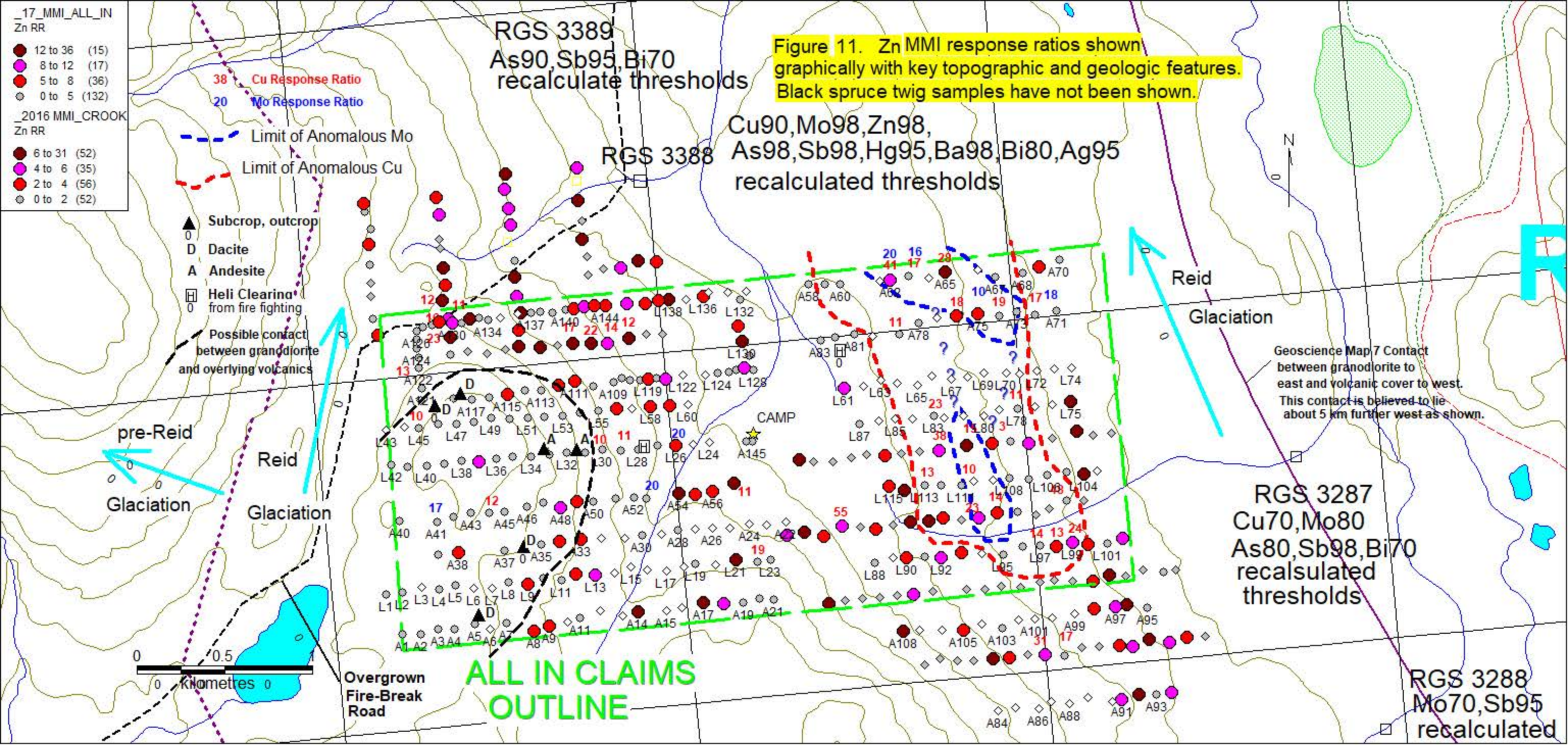
Reid
Glaciation

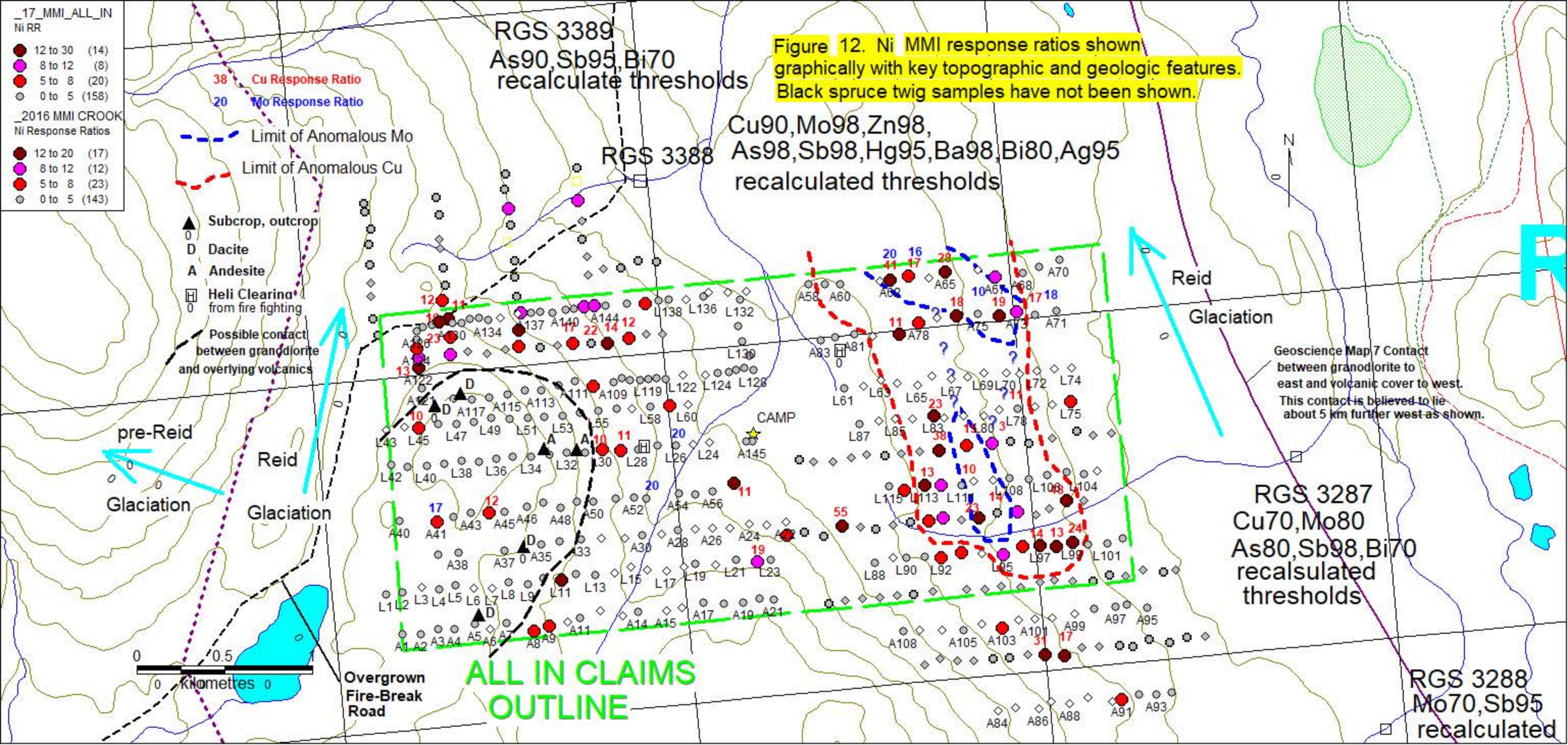
Geoscience Map 7 Contact between granodiorite to east and volcanic cover to west. This contact is believed to lie about 5 km further west as shown.

ALL IN CLAIMS
OUTLINE

Overgrown
Fire-Break
Road







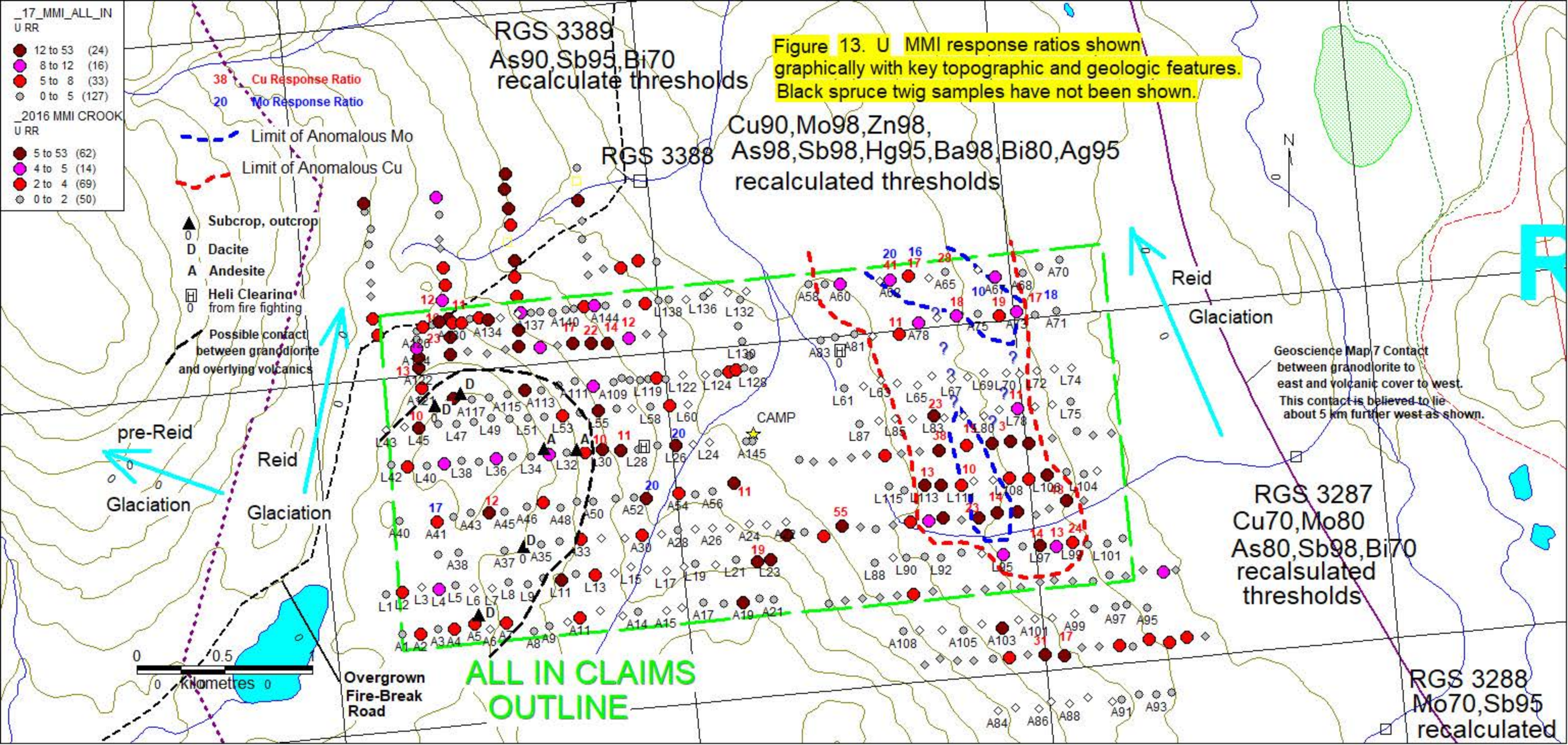


Figure 13. U MMI response ratios shown graphically with key topographic and geologic features. Black spruce twig samples have not been shown.

- _17 MMI_ALL_IN U RR**
- 12 to 53 (24)
 - 8 to 12 (16)
 - 5 to 8 (33)
 - 0 to 5 (127)
- _2016 MMI CROOK U RR**
- 5 to 53 (62)
 - 4 to 5 (14)
 - 2 to 4 (69)
 - 0 to 2 (50)

RGS 3389
As90, Sb95, Bi70
recalculate thresholds

RGS 3388
Cu90, Mo98, Zn98,
As98, Sb98, Hg95, Ba98, Bi80, Ag95
recalculated thresholds

RGS 3287
Cu70, Mo80
As80, Sb98, Bi70
recalculated thresholds

RGS 3288
Mo70, Sb95
recalculated

--- Limit of Anomalous Mo
--- Limit of Anomalous Cu

- ▲ Subcrop, outcrop
- D Dacite
- A Andesite
- Heli Clearing from fire fighting
- Possible contact between granodiorite and overlying volcanics

Reid
Glaciation

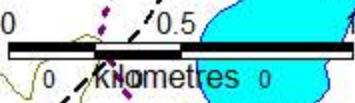
pre-Reid
Glaciation

Reid
Glaciation

Geoscience Map 7 Contact between granodiorite to east and volcanic cover to west. This contact is believed to lie about 5 km further west as shown.

ALL IN CLAIMS
OUTLINE

Overgrown Fire-Break Road



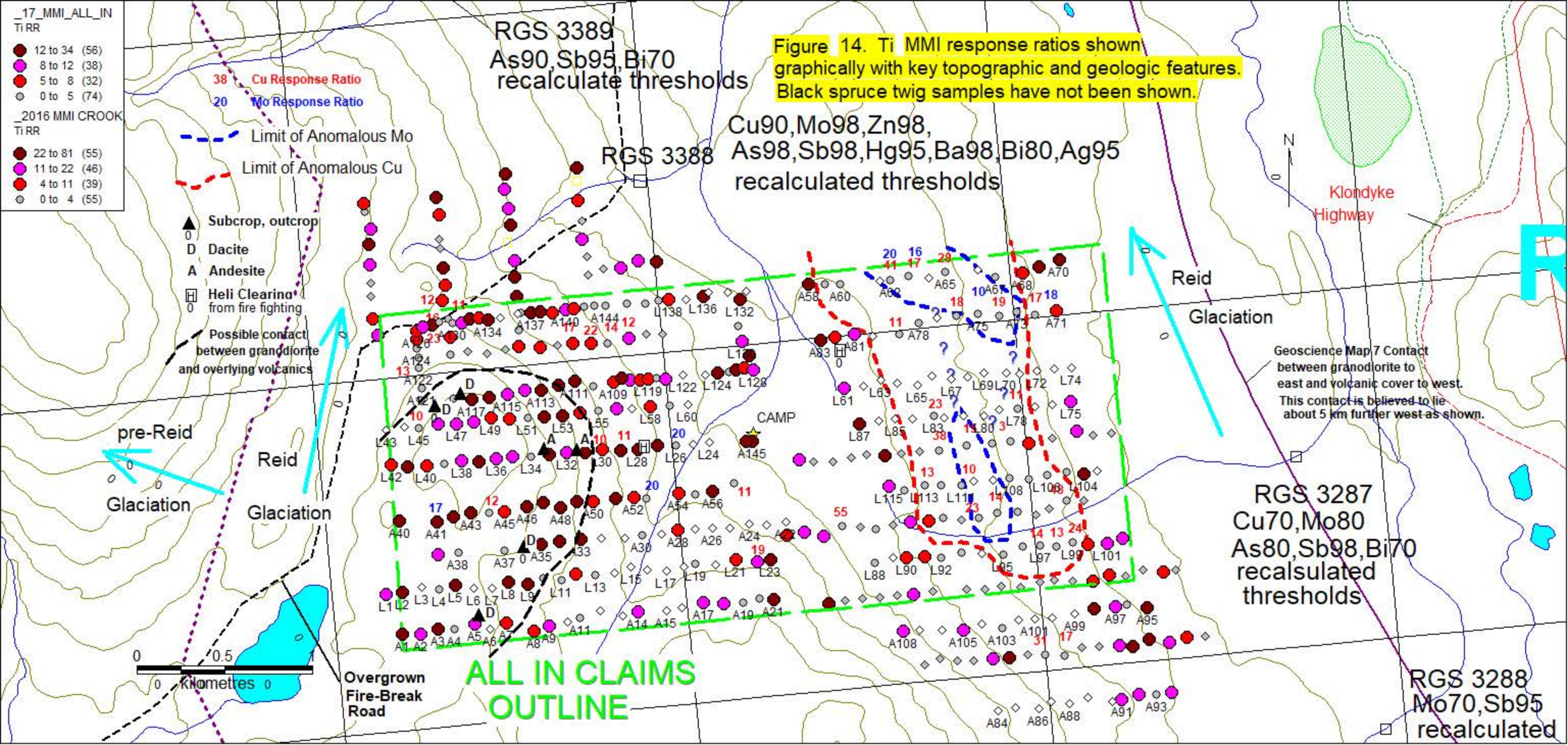


Figure 14. Ti MMI response ratios shown graphically with key topographic and geologic features. Black spruce twig samples have not been shown.

- _17 MMI_ALL_IN TiRR**
- 12 to 34 (56)
 - 8 to 12 (38)
 - 5 to 8 (32)
 - 0 to 5 (74)
- _2016 MMI CROOK TiRR**
- 22 to 81 (55)
 - 11 to 22 (46)
 - 4 to 11 (39)
 - 0 to 4 (55)

RGS 3389
As90, Sb95, Bi70
recalculate thresholds

RGS 3388
Cu90, Mo98, Zn98,
As98, Sb98, Hg95, Ba98, Bi80, Ag95
recalculated thresholds

RGS 3287
Cu70, Mo80
As80, Sb98, Bi70
recalculated thresholds

RGS 3288
Mo70, Sb95
recalculated

Limit of Anomalous Mo
Limit of Anomalous Cu

- ▲ Subcrop, outcrop
- D Dacite
- A Andesite
- Heli Clearing from fire fighting
- Possible contact between granodiorite and overlying volcanics

Reid
Glaciation

pre-Reid
Glaciation

Reid
Glaciation

Geoscience Map 7 Contact between granodiorite to east and volcanic cover to west. This contact is believed to lie about 5 km further west as shown.

ALL IN CLAIMS
OUTLINE

Overgrown
Fire-Break
Road

