A Geochemical Report on the Dubloon Property

submitted as Representation Work
on the following quartz claims

Work performed on:	Work performed on:
Pirate 11-14, YF47061-064	RGS 5, 7-10, YE71439, 441-444
RGS 3,5, YE71437, YE71439	Dubloon 7-34, YF50107-134
Dubloon 1-6, YF50101-106	Dubloon 39-46, YF50139-146
Work was applied July 4, 2016	Dubloon 51, 53, YF50151, 153
To PIRATE 1-16 claims	Work to be applied
YF47051-YF47066	to DUBLOON and RGS claims

All claims in Dawson Mining District
Owner: Gordon Richards

Location
115P/06
Camp in centre of claims at
UTM 380,030E, 7,030,050N, Elev 699 m
NAD 83, UTM Zone 8

Field work performed by
Gordon Richards & Jeff Mieras
during the period June 12 to June 25, 2016

Report written by Gordon Richards
September 20, 2016

TABLE OF CONTENTS

TABLES

FIGURES all at back of report

DIGITAL COPIES:
Table 2. xlsx file. Selected response ratios of MMI samples with UTM co-ordinates
Table 3. xlsx file. Selected results of Twig Values with UTM co-ordinates.
Table 4. xlsx file. Selected results of Silts with UTM co-ordinates.
VC162169.xls file of all MMI results for D1-D118.
VC162161.xls file of all MMI results for D120-D154, T1-T75.
VC162162.xlx file of all MMI results for T76-T138.
WH16000065.CSV file of all twig sample results for D57-D156, T43-T127.
WH16000065.XML file of all twig sample results for D57-D156, T43-T127.
WH16000066.CSV file of all 6 silt sample results.
WH16000066.XML file of all 6 silt sample results.

INTRODUCTION.

The general area of the DUBLOON claims has been prospected with the aid of YMIP and YMEP grants in 2012, 2013, 2014 and 2016. The property is located on a gently northward slope east of Robbed Creek, a tributary of Lake Creek, about 10 km southwest of Reid Lake and 40 km due west of Stewart Crossing within NTS map sheet 115P06. 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. The area is underlain by the Early Mississippian aged Reid Lakes Batholith Complex, a weakly Kspar-porphyritic, medium-grained granite to quartz monzonite intruding its own volcanic pile. A few unaltered outcrops occur in the east portion of the Dubloon claims. Loess, about 25 cm thick, blankets most slopes. The claims lie entirely within pre-Reid glaciated terrane.

The McQuesten aeromagnetic survey by Kiss, F., and Cryle, M., 2009 is available as Geoscience Data Repository through Natural Resources Canada. Pacific Ridge Exploration (PEX) provided the writer with horizontal and tilt derivative maps derived from the raw aeromagnetic data. These derivatives show structures where magnetite destructive hydrothermal alteration has probably occurred and was used to provide the early targets for prospecting in 2012 and 2013.

Regional Geochemical Data (RGS) is also published, readily available and provides geochemical data for numerous elements of stream sediments collected throughout the area including several creeks draining the general area of the claims. 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 were used to recalculate thresholds for 70^{th}, 80^{th}, 90^{th}, 95^{th} and 98^{th} 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. Recalculated threshold values ≥ 70% for Cu, Mo, Au, As, Sb, Hg, Ba, and Pb from around the RGS Property provided anomalous results for Cu, Mo, Au and other elements with high (>80%) threshold values from creeks immediately down-ice from the area prospected.

The magnetic derivative maps and RGS data were used to identify broad prospecting targets. Very Few Minfile occurrences are known in the general area and none near the Dubloon claims. There is no known previous exploration activity anywhere on or near the Dubloon, RGS or Pirate claims, which have been staked by the writer as a result of the prospecting described.

Previous prospecting work by the writer began in 2012 under a YMIP grant and was followed by additional prospecting and claim staking under YMIP and YMEP grants in 2013 to 2016.

In 2016 the Dubloon 1-60 claims were staked and recorded June 17 to cover extensions of anomalous zones on the RGS and Pirate claims and the intervening ground between the RGS and Pirate claims blocks. A MMI and black spruce twig sampling prospecting program was immediately undertaken on the Dubloon claims and limited portions of the RGS and Pirate claims. Results of that work forms the basis of this report and is used to extend expiry dates of many of the RGS/Pirate/Dubloon claims.

Results of this work were successful in defining the limits of the RGS north and Pirate anomalous zones and found one additional geochemically anomalous zone.

Recommended work includes an induced polarization survey to test for underlying chargeability/resistivity anomalies followed by diamond drilling.

HISTORY.

Work in 2012 produced a cluster of five MMI soils strongly anomalous for Cu, Au, Mo and U near the base of slope on a gentle west facing hillside associated with a horizontal derivative magnetic low.

Follow-up prospecting on a grid in 2013 produced four patterns of MMI soils that were strongly anomalous for several elements. Three of these patterns were of a shape and size that could be indicative of underlying porphyry mineralization. They measure 500 by 1000 m, 900 m by 900 m and 500 m by 700 m based on anomalous Cu, U, and Ni in MMI soil samples. Anomalous Mo forms somewhat smaller anomalous patterns within two of these Cu-U-Ni patterns. A fourth pattern of anomalous metals at the north end of the survey area formed a linear pattern that was thought to be indicative of a structurally controlled mineralized source. The two southernmost porphyry targets were open to the west under adjacent very gently sloping muskeg where MMI soils were impossible to collect due to poor drainage with associated shallow frozen ground. The linear anomalous target in the north of the 2013 survey was open to the east and west.

In 2014, RGS 1-78 quartz claims were staked covering all four anomalous soil patterns. Claims were recorded June 18, 2014. Starting June 19, 2014 vegetative sampling on a grid west of the three previously identified porphyry sized geochemically anomalous targets and MMI sampling over and beyond the linear geochemically anomalous target was undertaken in an attempt to extend and define the geochemically anomalous targets. Sampling of black spruce twigs was used west of the porphyry sized targets because the ground was not amenable to MMI sampling. MMI sampling was used over the linear target where results showed the target not to be linear as previously thought but to be 1000 m by 500 m (open to the north and east) and to have a multi-element geochemically anomalous response similar to the other three porphyry targets. Also several pits dug down to frost on 2013 MMI samples anomalous for Cu, Mo, U, and Ni failed to reach bedrock but did find abundant <5 mm angular chips of granite colluvium displaying limonite and propylitic alteration with a minor till component all of which was probably sourced uphill of the samples sites. No outcrops or mineralized angular boulders have been found anywhere on the property.

Although results of the black spruce twig sampling were limited in defining additional targets, they should not be used to limit the extent of possible underlying mineralization. Twig samples collected over some of the previous anomalous MMI samples failed to yield anomalous results indicating that twig sampling is not a reliable method in this environment. However, a cluster of samples anomalous for Mo was defined measuring 1000 m by 600 m about 300 m west of the previous MMI defined targets. Cs and Rb anomalies, which are surrogates for K, formed coincident large anomalous patterns in these twig samples. MMI anomalies generally are indicative of immediately underlying mineralization so the proposed source of the anomalous MMI soil patterns remains as underlying porphyry style mineralization.

Also in 2014 initial prospecting work was undertaken as follow-up on a single sample collected in 2012 that was highly anomalous for Cu, Mo, Au and U near a creek that was sampled by the RGS survey and was highly anomalous for Cu, Mo, Au, As, Sb, Hg, Pb, and Ag using threshold values recalculated for 278 samples lying within Yukon Tanana Terrane glaciated by pre-Reid glaciation. The aeromagnetic derivative map showed a large pattern of magnetic low measuring 800m by 1500 m along the creek and adjacent hillsides. A MMI and twig sample survey across the creek defined a large pattern of geochemically anomalous Cu measuring up to 1200 m east-west by 1500 m north-south and open to the north containing a central core of geochemically anomalous Mo measuring up to 400 m east-west by 1400 m north-south. Ag is geochemically anomalous over much of the Cu anomalous zone. Au forms a geochemically anomalous cluster of samples on the west portion of the survey area and includes a single sample that has extremely high response ratios of 6134 Au and 402 Ag that could be related to high-grade mineralization.

In 2015 the Pirate 1-16 claims were staked and recorded June 25 to cover the above Cu-Mo-Ag-Au anomalous zone.

In 2016 the Dubloon 1-60 claims were staked over the multi element anomalous pattern at the north end of the RGS claims and southeast of here to tie in with the Pirate 1-16 claims. Following staking a MMI and black spruce twig sampling program was undertaken over the claims and forms the basis of this report.

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 16-057 awarded to Jeff Mieras. A few additional costs were paid for by Richards.

Table 1.5. Claim Status

Claim Name	Grant No.	Expiry Date
RGS 1-31, 33, 35, 37, 39-46, 55-66, 67-78	YE71435-YE71465, 467, 469, 471 YE71473-480, YE71489-500, YE71583-594	2018/06/18
RGS 32, 34, 36, 38 47-54	YE71466, 468, 470, 472 YE71481-488	2019/06/18
PIRATE 1-16	YF47051-YF47066	2021/06/25
DUBLOON 1-60	YF50101-YF50160	2017/06/17

A Certificate of Work was filed July 4, 2016 on the Pirate 1-16 extending their expiry dates to June 25, 2021 using $8000.00 of the costs of the work.

A second Certificate of Work will be filed on the following claims to extend their expiry dates as shown:

RGS 1-31, 33, 35, 37, 39-46, 55-66, 67-78: YE71435-YE71465, 467, 469, 471, YE71473-480, YE71489-500, YE71583-594: 66 claims.
Apply 2 years work to all 66 claims. New expiry date: 2020/06/18.

RGS 32, 34, 36, 38, 47-52: YE71466, 468, 470, 472, YE71481-486: 10 claims.
Apply 2 years work to all 10 claims. New expiry date: 2021/06/18.

RGS 53, 54: YE71487, 488: 2 claims.
Apply 1 years work to all 2 claims. New expiry date: 2020/06/18

Dubloon 1-10, 12, 14, 16, 23-28, 39, 40, 42, 51, 52, 54, 56, 58. 27 claims.
YF50101-110, 112, 114, 116, 123-128, 139, 140, 142, 151, 152, 154, 156, 158.
Apply 4 years work to all 27 claims. New expiry date: 2021/06/17.

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 13. The claims area is shown to be underlain by compositionally monotonous, coarse-grained, massive, quartz-phyric, biotite monzogranite that forms part of the Yukon Tanana Terrain. A few outcrops were seen on the property well away from the geochemically anomalous patterns. All these outcrops and float have a similar texture that includes less than 5% somewhat diffuse phenocrysts of Kspar measuring 5 cm long. Small chips of similar rock type were noted in colluvium in many soil sample pits.

In the north of the claims on the small hill covered by RGS 7 and further north and west, soil pits exposed fine-grained muscovite bearing schists that could be a roof pendant or fault bound block of some other formation.

Glaciation is described as pre-Reid in age. Reid glaciation began 200,000 years ago and ended about 50,000 years ago. Younger McConnell Glaciation ended about 20,000 years ago. The glaciation across the general area of the RGS Property is described as much older than Reid, 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. In particular they noted that tills have largely been removed by weathering from hilltops and modest slopes leaving hillsides amenable to soil sampling with effectiveness believed to be similar to unglaciated terrain further west. This relationship is true on modest slopes but on the gentle slopes encountered within the Dubloon claims loess is underlain primarily by tills and colluvium-till mixtures.

Uppermost soil is an organic soil from almost absent to less than one cm thick on dry now aspen-wooded slopes and in excess of 10 cm thick over birch and stunted spruce wooded slopes. Forest fires tend to destroy the organic soil particularly on dryer slopes so that it is continually being formed by the accumulation and decomposition of leaf and needle litter. On stunted spruce covered gentle slopes fires are less intense and therefore less destructive of the organic soil.

Loess occurs on all slopes, generally about 20 to 30 cm thick beneath the organic soil. This loess is believed to have formed during late McConnel Glacial periods. A few rocks do occur in the loess and have probably worked themselves up into the loess from underlying colluvium and till.

Till is commonly found beneath the loess although colluvium with a very minor content of round till-derived pebbles does occur in some areas. Where colluvium is found, angular pebbles are of typical Reid Lakes Batholith quartz monzonite. In 2012 and 2013 till was found to be largely eroded from steeper slopes immediately east of and upslope from the claim area. Much of the till found in the claims is therefore probably re-worked till and older loess deposits from these steeper slopes with some admixed colluvium. Five pits were dug in 2014 on MMI samples anomalous for several elements without encountering bedrock.

GEOCHEMICAL SURVEY.

SURVEY METHODS.

General.

J. Mieras and G. Richards flew by helicopter from Mayo to the property on June 15 to stake the Dubloon 1-60 Quartz Claims. They flew out June 17 and drove to Dawson to record the claims. They flew back to the property June 18 to conduct MMI soil sampling and black spruce twig sampling across the Dubloon and adjacent Pirate and RGS claims. **Fourteen man days** were spent by Mieras and Richards from June 18 to June 24 collecting **211 MMI soil samples, 77 black spruce twig samples** and **6 stream sediment samples.**

The survey was divided into two areas. On the west side of the Pirate claims follow-up soil sampling was conducted on a single sample that was highly anomalous for Au, 6134 Response Ratio, and Ag, 402 Response Ratio, in sample L223 in the 2014 survey. Here sample line spaced 50 m apart with sample interval of 25 m was completed over the top of the hill where sample L223 was collected. 28 MMI soil samples were collected from this area.

The second area that formed the bulk of the sampling program was conducted across the Dubloon claims and adjacent part of the RGS claims to prospect the newly staked ground and to find the limits of anomaly 'A' located at the north end of the RGS claims and shown on the figures. During the course of staking a few outcrops of unaltered monzogranite were noted on the hill on the southeast portion of the Dubloon claims. A traverse over this hill at the start of sampling found additional outcrops of unaltered monzogranite that were used to limit the eastern extent of the sampling program. Sampling was conducted along lines spaced 400 m apart with a 100 m sample interval.

All geochemical results are provided in digital form with UTM co-ordinates provided for all sample locations. Response ratios calculated for selected elements of all MMI samples are provided in Table 2. Values of all twig and silt samples for selected elements are provided in Tables 3 and 4. Twig samples were only collected where MMI soil samples could not be collected usually due to thick organic cover 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 colluvium or 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, Ni, U, Ti, Pb, and Zn. The average value for results of the lower quartile was calculated for each element. 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 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 black spruce twigs with needles were placed into porous polypropylene bags (‘Hubco’ Inc.’s Sentry II). The use of plastic bags was avoided to minimize the chance of moulds forming thereby losing sample integrity.

Analysis of the black spruce twig samples was carried out at Acme Analytical Laboratories Ltd. (Vancouver) using their VG101-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. In preparation for chemical analysis, each twig sample was then milled to a powder using a Wileymill. A 1 g split of milled material was digested in nitric acid then aqua-regia digestion, and analyzed by ICP-MS ultralow detection limits for 53 elements and selected REE.

Stream Sediment Sampling.

Stream sediment samples were collected from creeks draining the Dubloon claims. Samples were collected by plastic scoop, placed into numbered gusseted kraft sample bags and stored in 11 by 20 cm plastic bags. These samples were collected to corroborate grid soil results and establish effectiveness of silt sampling in the general area. Samples were sent to Acme Labs in Vancouver, B.C., where samples were dried at 60*C, 100g sieved through an 80 mesh screen, digested in 1:1:1 Aqua Regia and then sent for Acme’s Ultratrace MS-ICP analysis.

SURVEY RESULTS.

Pirate Au Target.

Results of the 50 m by 25 m soil sample grid over the 2014 MMI soil with high Au and Ag response ratios is provided in Table 4 and shown graphically on Figures 24 to 26. There is no pattern of anomalous values for any element that could be interpreted as representing structurally controlled mineralization. The numerous samples with high Pb values are interpreted to be related to peripheral Pb around the Cu-Mo porphyry target described in the 2014 report on the Pirate project (YMIP 14-051). There are few high Ag values. Two samples 50 m from L223 returned Au response ratios of 154 and 113 which are very high even though much less than the 6134 Au response ratio for L223. These highs could be related to structural related Au lying downslope to the south in untested ground through glacial smearing or to structurally related Au of local origin to the sample sites.

Dubloon + RGS Sampling.

Results of the 400 m by 100 m soil and twig sample grid over the Dubloon claims and adjacent RGS claims is provided in Tables 2 and 3 and shown graphically on Figures 4 to 12. Target A described in the RGS 13-035 YMIP grant final report has been well constrained by the current work. Another small target leading off the claims further north has been identified. These targets are defined by strong consistently anomalous Cu with nearly identical distributions of anomalous Ni and U. U also forms another target with no support from other elements in the southeast portion of the area sampled. Target A now measures 2000 m east-west and 500 to 1000 m north-south. Cu RRs up to 34 are very strong and encouraging for finding underlying Cu mineralization. The target at the north end of the property measures 1000 m east-west and 400 m north-south and open to the north with RRs up to 20.

Mo forms anomalous patterns central to the Cu anomalous zones and a separate anomalous Mo zone between the two Cu anomalous zones. Mo RRs up to 101 within Target A and 29 in the north zone are encouraging for finding underlying Mo mineralization.

Anomalous Pb and to a lesser extent Zn occur almost exclusively outside the zones of anomalous Cu-Mo-Ni-U, a relationship seen on other zones, B, C, and D on the RGS claims. This relationship is interpreted to represent Pb and Zn mineralization peripheral to the Cu-Mo porphyry targets a phenomenon common in many Cu-Mo porphyry mines around the world.

Anomalous Au and Ag values occur consistently within the zones of anomalous Cu-Mo-Ni-U. This relationship provides encouragement that underlying porphyry mineralization contains significant Au and Ag mineralization. There are also many anomalous Au and Ag values occurring sporadically across the rest of the survey area.

Numerous Ti anomalies occur peripheral to the Cu-Mo-Ni-U anomalous patterns and few within them. Many of the anomalous values are well in excess of 50 with a high of 962. The high values are thought to be related to Ti mineralization, probably illmenite, within unaltered monzogranite and the low values to the destruction of illmenite by hydrothermal alteration related to a porphyry mineralizing event.

Silt sample T64 was collected from a north flowing stream in the western portion of anomaly A. Using recalculated thresholds based on pre-Reid glaciated terrane, this sample contains 98 %tile Mo, 80 %tile Cu, 98 %tile U, 70 %tile Ni, 90 %tile Pb, 70 %tile Zn, 98 %tile Sb, 80 %tile As, and 80 %tile Bi. Other silt samples had few low level threshold values for various elements.

CONCLUSIONS .

The tight 50 m by 25 m soil sampling grid on the Pirate claims failed to define an anomalous metal pattern that could be interpreted as a mineralized structure. Two samples with high Au response ratios of 154 and 113 occur near the original sample that has a 6132 Au response ratio. They could be related to underlying discontinuous structurally related mineralization or to glacially transported mineralization or to some other cause.

Sampling on the Dubloon and adjacent RGS claims defined the limits of the previously indentified anomaly A on the north end of the RGS claims. This anomaly is 2000 m long east-west and 500 to 1000 m wide north-south. It is best defined by strongly anomalous Cu RRs in MMI samples (up to 34) and supported by anomalous RRs for Mo (up to 101), Au (up to 21), Ag (up to 12), U (up to 480), and Ni (up to 24). No mineralized float was present in the area that might explain the source of the anomalies. 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 location of the anomalous geochemical targets at the base of slope could make interpretation of their occurrence as base of slope transported (false) geochemical anomalies. However the pattern of a central core of Mo within a larger Cu-Ni-U anomalous zone and all with a halo of anomalous Pb, Zn, and Ti is a strong indication that the targets are caused by underlying mineralization. It would be difficult to see development of the anomalous patterns by transportation. The size, signature, and strength of the anomalies are most indicative of porphyry style mineralization. Peripheral anomalous Pb and Zn 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.

A second smaller and only partially defined pattern of anomalous metal values with the same metal signature as anomaly A occurs along the north edge of the Dubloon claims. It measures 1000 m east west by 400 m north-south.

Clustering of five porphyry targets including anomaly A, Pirate, and anomalies B, C, and D on the RGS claims within the Early Mississippian age Reid Lakes 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) Limits of the anomaly lying along the north edge of the Dubloon claims be defined by continuing MMI sampling to the north on east-west lines spaced 300 m apart with a 100 m sample interval.

ii) An Induced Polarization Survey be conducted over Anomaly A in order to locate and define chargeability and resistivity anomalies associated with the geochemical anomalies.

iii) Diamond drilling be considered based on the geochemical anomalies described and results of the Induced Polarization Survey.

iv) The general area has proven to be fertile ground for discovery of geochemical anomalies with porphyry signatures. Prospecting north and west of previously examined ground using similar geochemical techniques is highly recommended.

STATEMENT OF COSTS

Certificate of Work, PIRATE Claims, July 4, 2016

Fireweed Helicopters portion of #12297 Jun 18. Mob to Property.		$1400.00
Geochem: SGS Labs 61 MMI samples @ $38.60		2470.50
Wages for mob June 14, sampling June 18 and 19:		
G Richards 3 days @ $600/day		1800.00
J Mieras 3 days @ $350/day		1050.00
Living Allowance: sample bags, food, sat phone, radios, flagging, etc		
6 man days @ $100/man day		600.00
Report: 10% of above costs	($ 7,320.50)	732.05
	TOTAL	**$8,052.55**

Certificate of Work, DUBLOON and RGS claims.

Fireweed Helicopters portion of #12297 Jun 18. Mob to Property.		$5024.13
Geochem: Bureau Veritas VAN 1255728 6 Silts		158.89
Bureau Veritas VAN1256093 77 Twigs		2526.56
SGS Labs VC162160 MMI samples		3404.52
SGS Labs VC162161 MMI samples		3404.52
SGS Labs VC162161 MMI samples		1742.79
Less 61 MMI samples on Pirate Cert Work @$38.60		<-2354.60
Less 4 MMI samples off of claims @ $38.60		<-154.40>
Wages for demob July 3,4, Fieldwork June 20-25		
G Richards 8 days @ $600/day		4800.00
J Mieras 8 days @ $350/day		2800.00
Living Allowance: sample bags, food, sat phone, radios, flagging, etc		
16 man days @ $100/man day		1600.00
Truck: Whitehorse-Mayo-Stewart-Mayo-Whitehorse: 1052 kmx$0.61		641.72
Freight: Air North, MMI samples Whitehorse to Vancouver		230.99
Report: 10% of above costs	($23,825.12)	2382.51
	TOTAL	**$26,207.63**

STATEMENT OF QUALIFICATIONS.

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

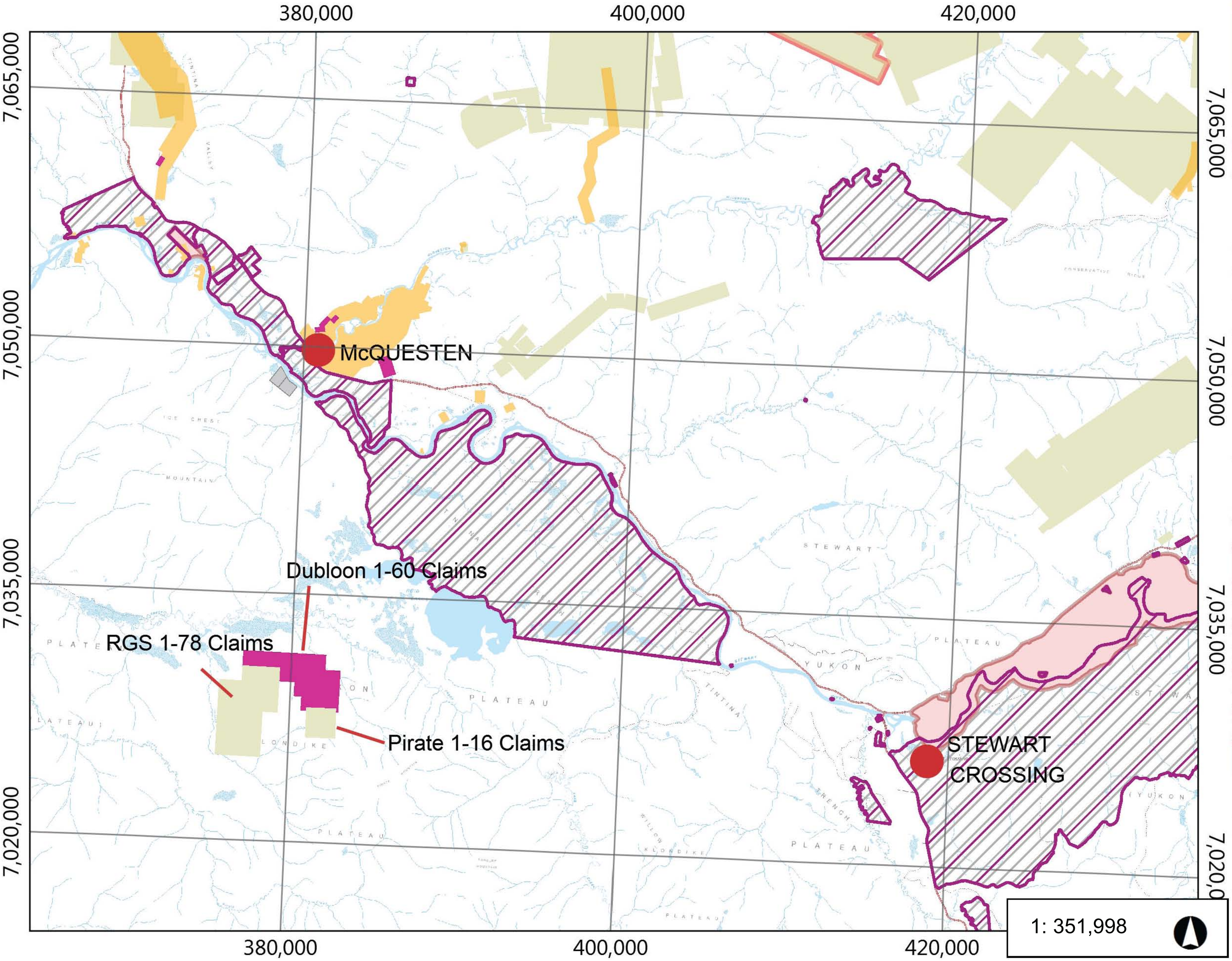
1. I am a Professional Engineer, registration number 11,411 with the Association of Professional Engineers and Geoscientists of British Columbia.
2. I hold a B.A.Sc. (1968) in Geology from The University of British Columbia, and an M.A.Sc. (1974) in Geology from The University of British Columbia.
3. 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 field work and supervision of field work by Jeff Mieras during the period of June 18 to 24, 2016 and on the results generated by that field work.

Respectfully submitted,

Gordon G Richards, P.Eng.

Figure 1. Location Map of Project

Yukon
Energy, Mines and Resources



Legend

Current Class 1 Notifications
- Valid
- In Review
- Pending
- Cancelled
- Expired
- Rejected
- Closed

- Areas defined by OIC
- First Nation Surveyed Lands -
- First Nation Unsurveyed Lands
- New Placer Claims (1M)
- Placer Claims (1M)
- New Quartz Claims (1M)
- Quartz Claims (1M)

Quartz Mining Land Use Permi
- Class 3
- Class 4

- Areas withdrawn from staking i

Settlement Lands (Surveyed)
- A: Surface and Subsurface Rights
- B: Surface Rights
- FS: Fee Simple
- 4.1.1 Retained Reserve

Settlement Lands (Unsurveyec
- A: Surface and Subsurface Rights
- B: Surface Rights

Notes

17.9 0 8.94 17.9 Kilometers

Yukon Albers
Produced from: Yukon Mining Viewer

Date Printed: 08-Sep-2016

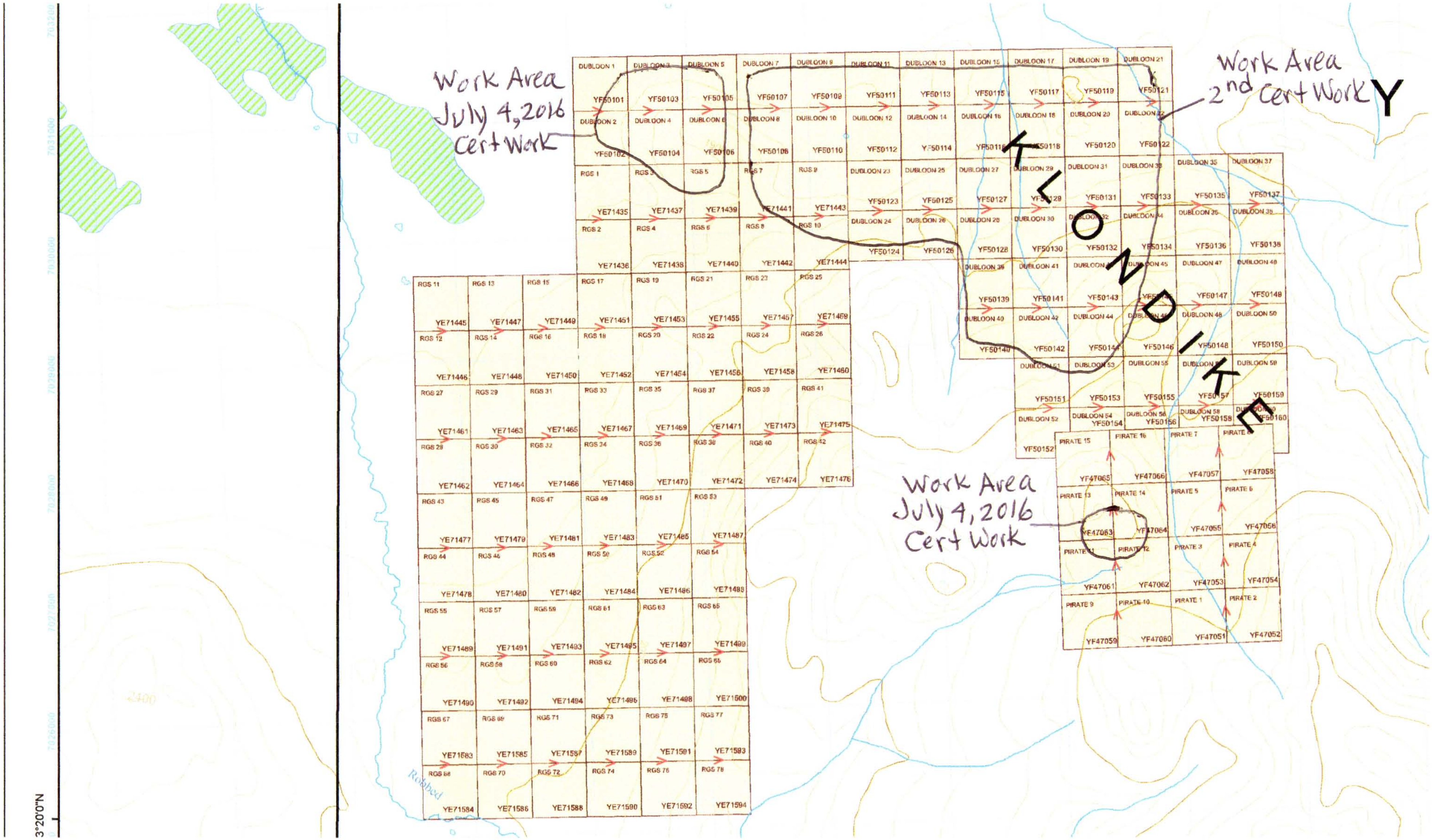


Figure 2. Claim Map and Work Areas.

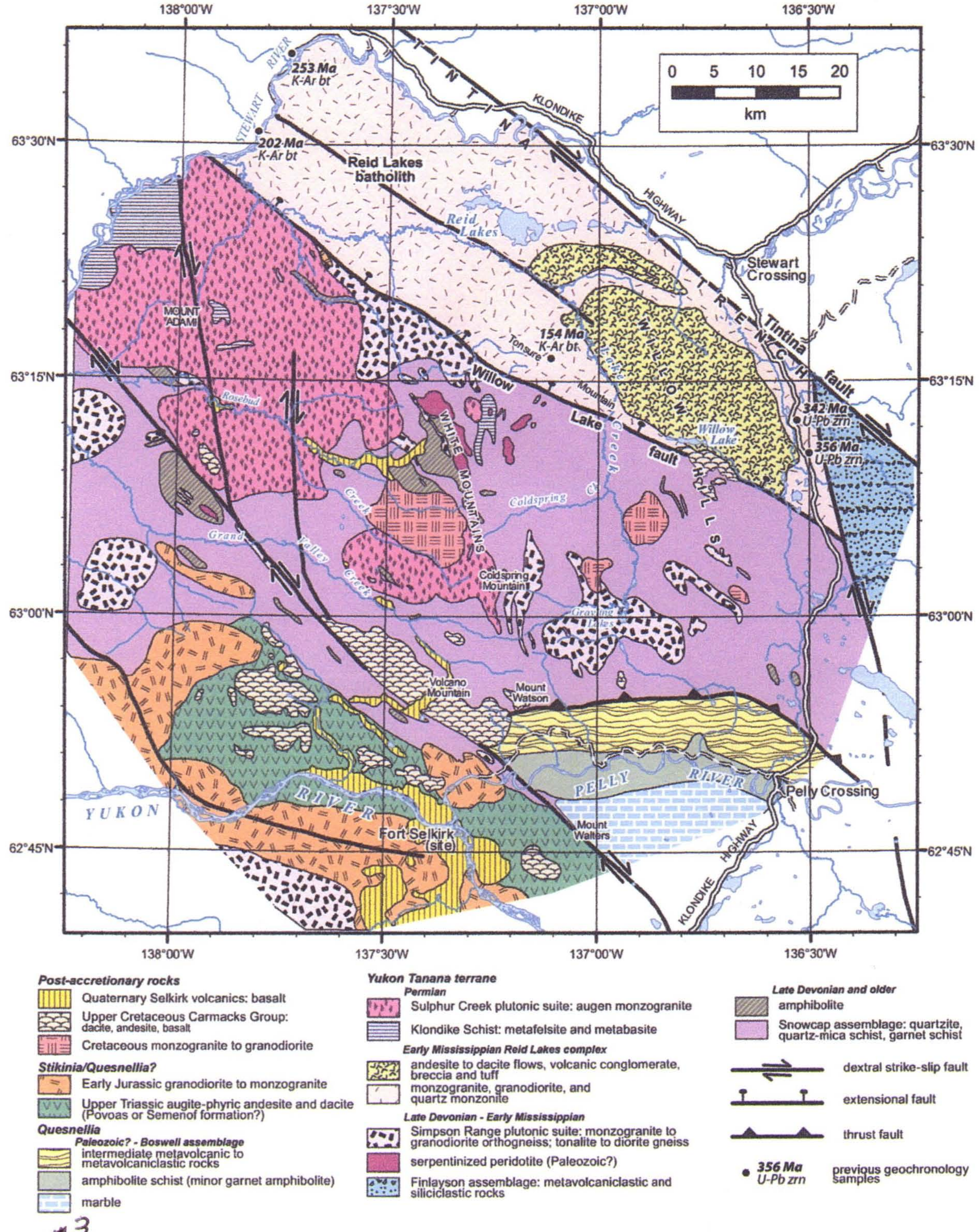


Figure 3. Simplified geological map of southwest McQuesten-northern Carmacks area (after J.J. Ryan, M. Colpron and N. Hayward, in prep.).

POST-ACCRETIONARY ROCKS

UPPER CRETACEOUS

Carmacks Group (uKC1, uKC2)

uKC2	Basalt to basaltic andesite flows and/or sills; locally hornblende-phyric; high magnetic susceptibility.
uKC1	Dacite to rhyodacite; commonly plagioclase-phyric; may correlate with Donjek Volcanics.

MIDDLE CRETACEOUS?

mKgW	Whitehorse suite: pink to grey monzogranite to granodiorite, locally syenogranite; generally biotite-bearing; locally K-feldspar porphyritic; forms undeformed cross-cutting plutons and dykes.

YUKON TANANA

EARLY MISSISSIPPIAN

Reid Lakes complex (MgbRL, MgRL, MqRL, MvRL)

MgRL	Reid Lake batholith: polyphase; undeformed to weakly foliated monzogranite, granodiorite and quartz monzonite; typically biotite-bearing and exhibiting abundant blebby to porphyritic smokey quartz; fresh magmatic hornblende and K-feldspar phenocrysts common in eastern extent; slightly foliated adjacent to Willow Lake fault; easily confused with undeformed post-Triassic intrusions.
MqRL	Quartz sandstone; little metamorphosed, with blue grey colour; associated with Reid Lake volcanic rocks.
MvRL	Volcanic and volcaniclastic rocks; andesite to dacite flows, volcanic conglomerate, breccia and tuff; local rhyolite to rhyodacitic porphyritic flows; generally unlayered, except for faint layering in volcanic sandstone; local volcanic siltstone; presumed extrusive equivalents of the Reid Lake batholith.

LATE DEVONIAN - EARLY MISSISSIPPIAN

Moderately to strongly foliated (orthogneissic) plutonic rocks

Simpson Range suite (MgSR, MiSR, MagSR)

MgSR	Monzogranite to granodiorite; equigranular; pink to orange; generally biotite-bearing (after hornblende?); homogeneous to layered.
MiSR	Intermediate to mafic granitoid (tonalite to diorite) sheets; intermediate to dark colour; homogeneous to layered.

Metavolcanic and metasedimentary rocks

Finlayson Assemblage? (DMF1, DMF2)

DMF1	Carbonaceous quartzite to mica-quartz schist; black to white quartzite, with schist and garnet schist interlayers; and rare black phyllite; possibly equivalent to Nasina formation, or simply a carbonaceous member of the Snowcap assemblage.

LATE DEVONIAN AND OLDER

Snowcap assemblage (PDS1, PDS2, PDS3)

PDS3	Amphibolite schist to garnet-amphibolite; metabasite; usually garnet-horneblende-plagioclase or horneblende-plagioclase, with local chorite-biotite; probably derived from mafic volcanic to volcaniclastic rocks; some layers that are internally homogeneous may be mafic sills; more intermediate varieties can have rosettes of decussate, larger hornblende.
PDS2	Marble; metacarbonate (derived from pure to impure limestone); associated calcsilicate schist (derived from calcareous metapelite).
PDS1	Quartzite to quartz-mica schist; banded to massive, grey to white in colour; locally conglomeratic; commonly contains beds of micaceous quartz arenite; clastic in origin; quartz-muscovite-biotite schist is possibly derived from siliceous siltstone; commonly finely interlayered with garnet-metapelite.

Table 1. Legend for Figure 7. From Canadian Geoscience Map 7.

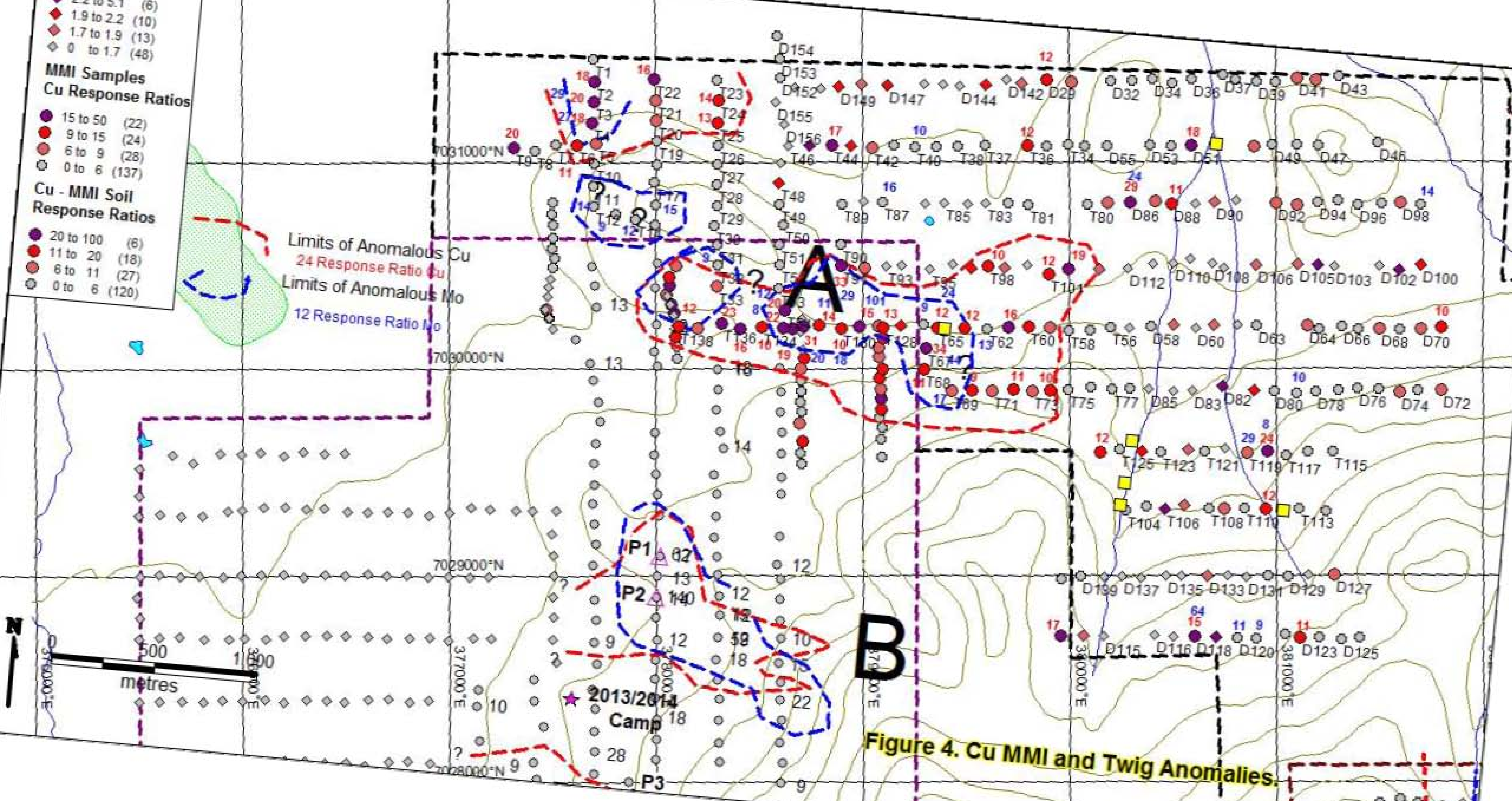


Figure 4. Cu MMI and Twig Anomalies.

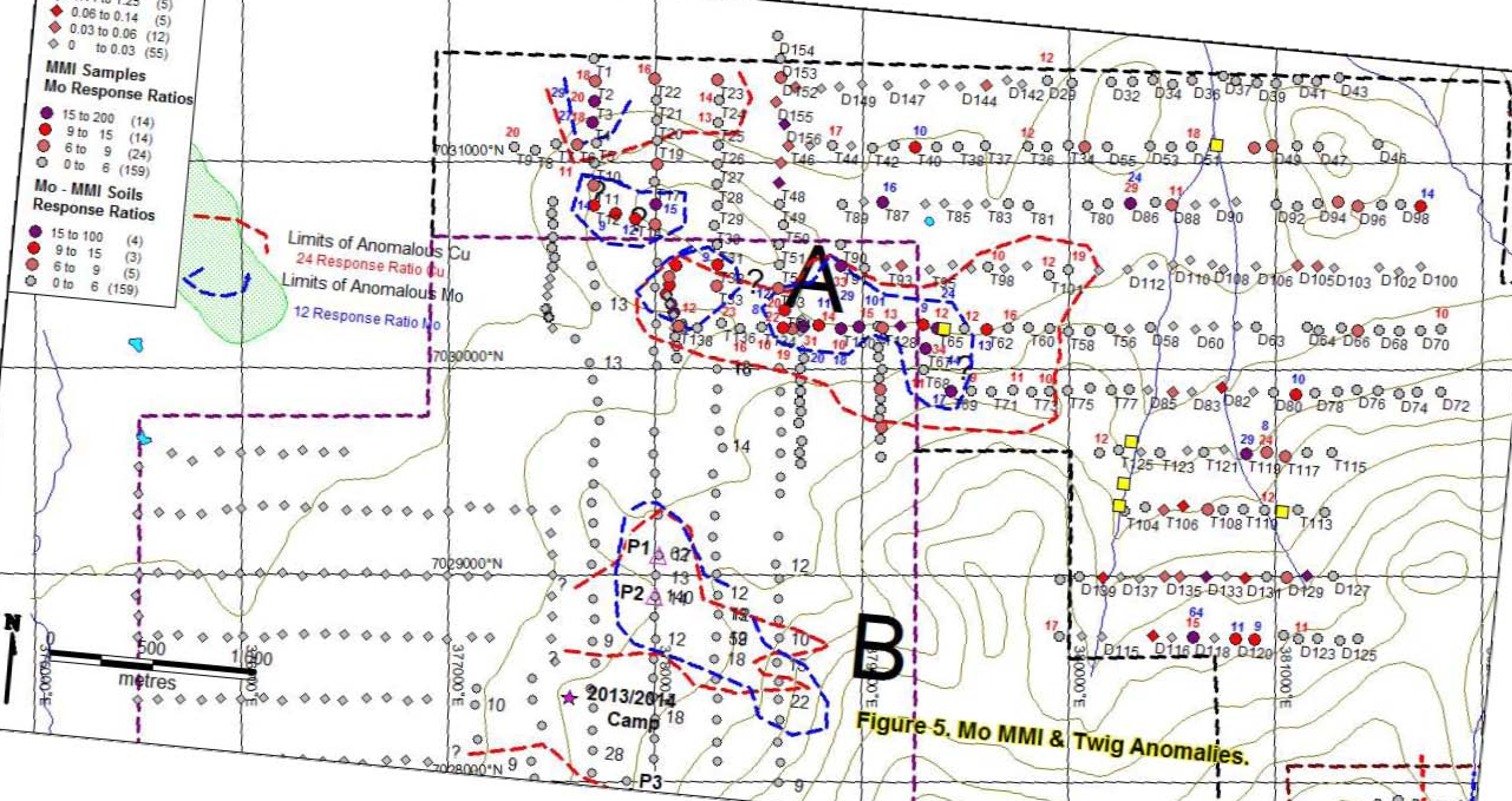


Figure 5. Mo MMI & Twig Anomalies.

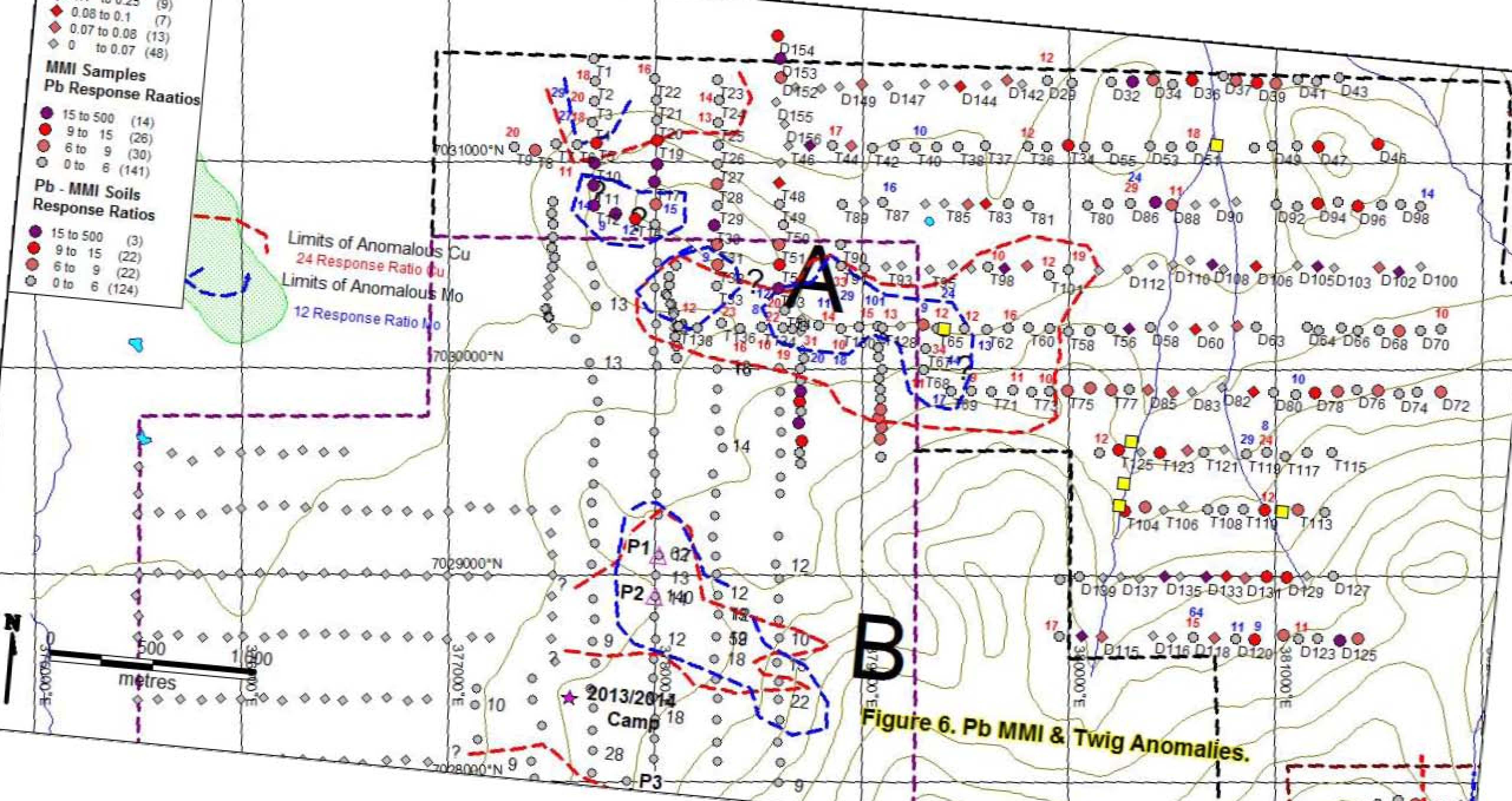


Figure 6. Pb MMI & Twig Anomalies.

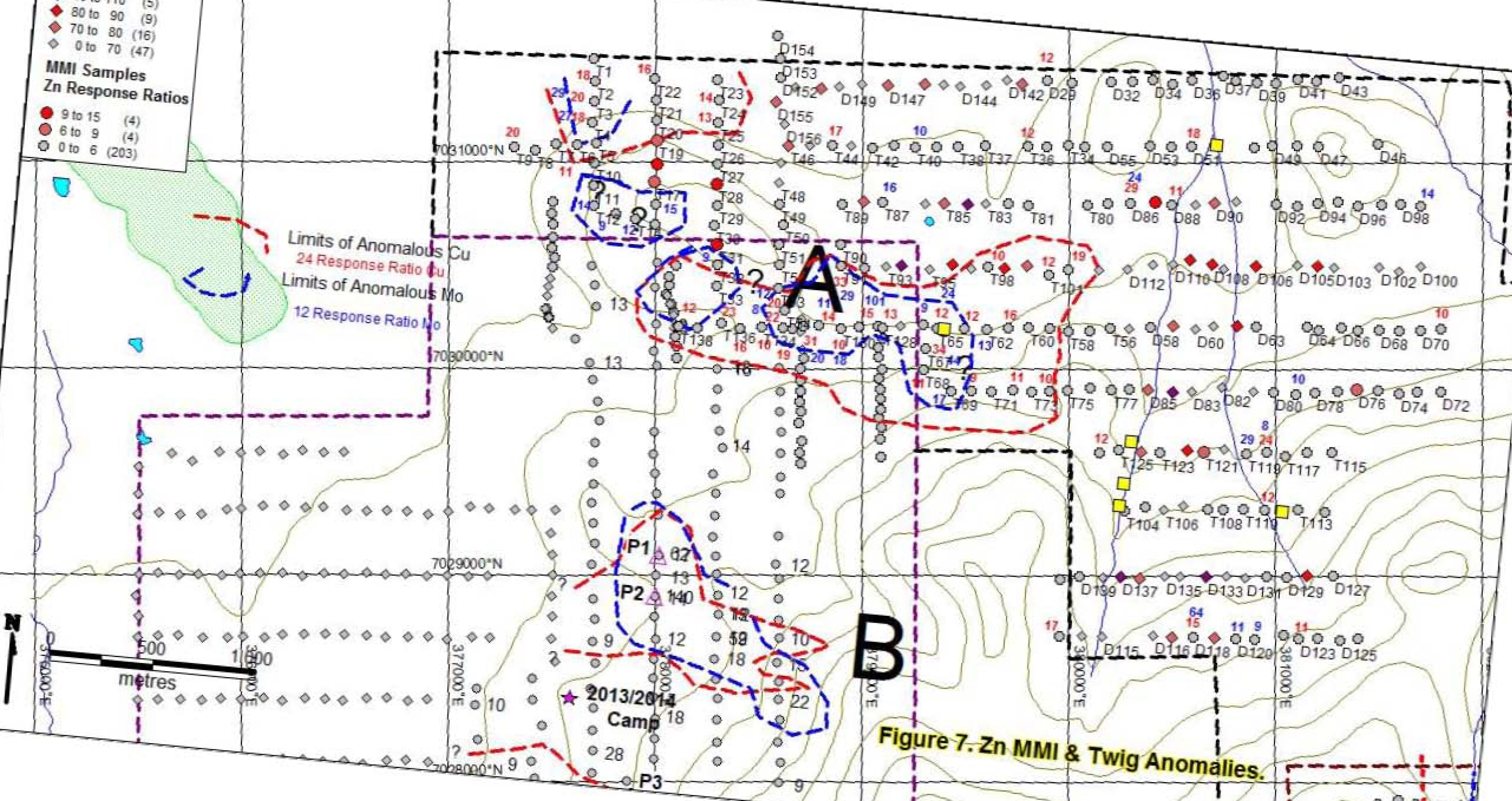


Figure 7. Zn MMI & Twig Anomalies.

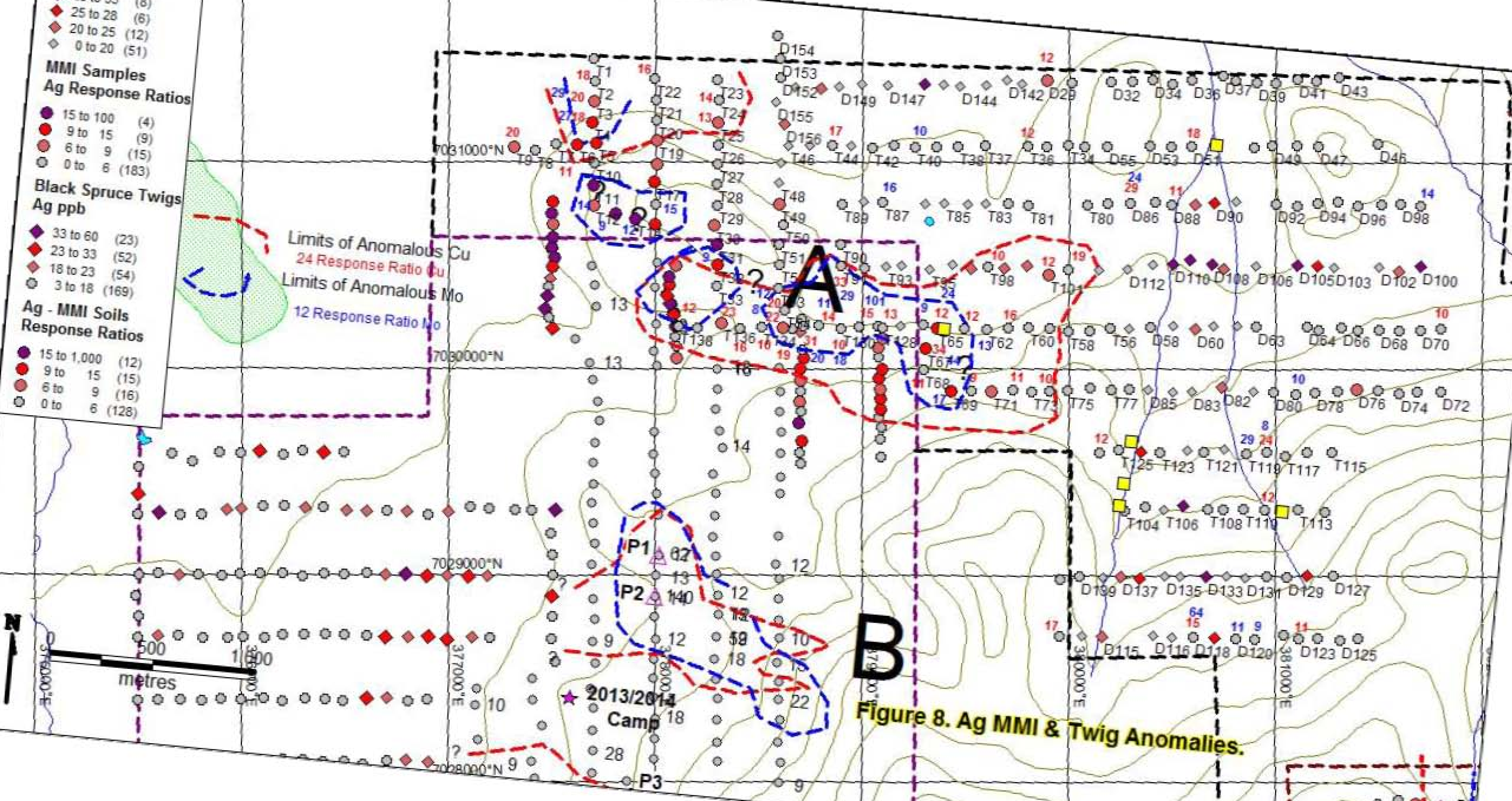


Figure 8. Ag MMI & Twig Anomalies.

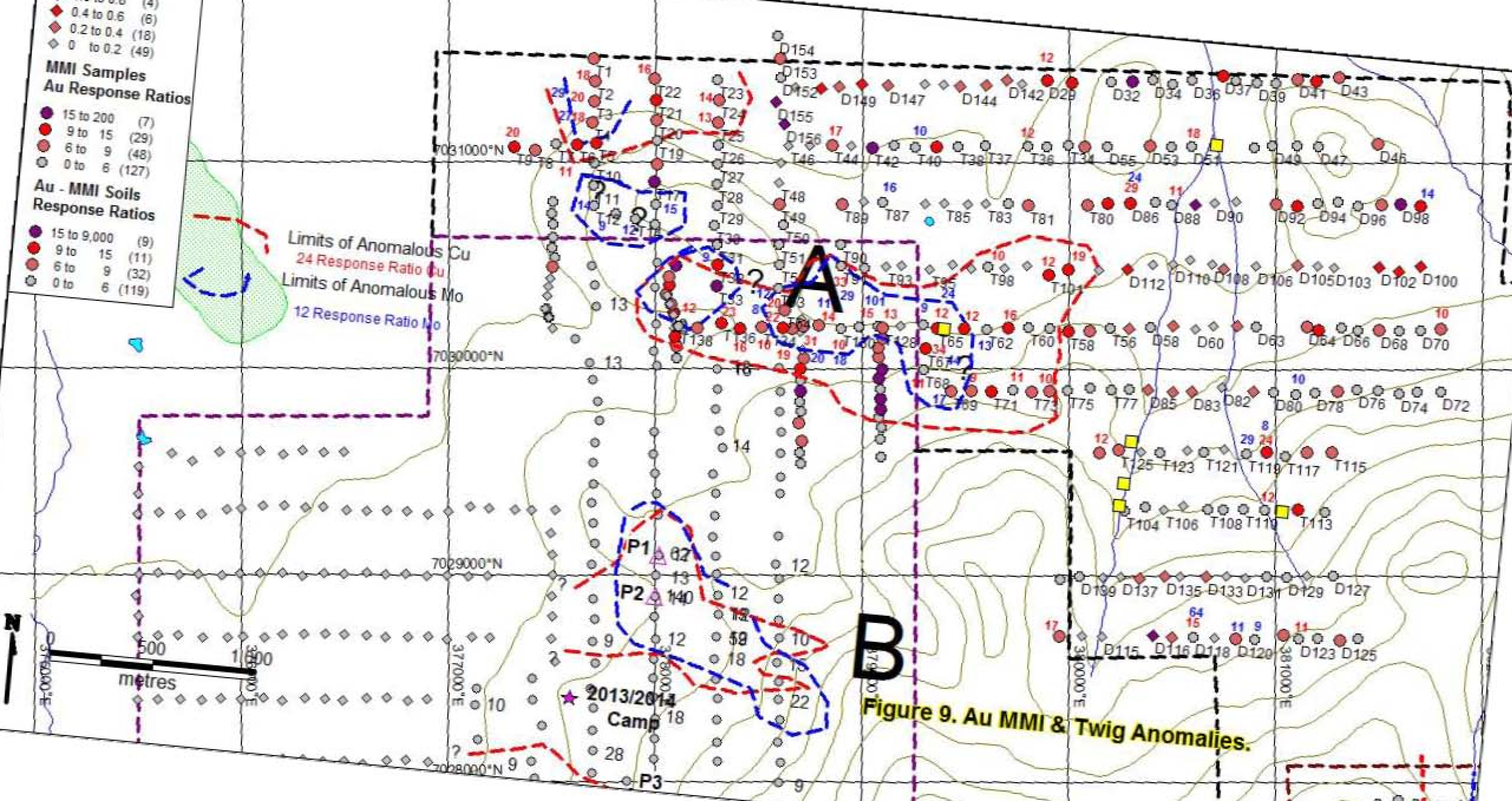


Figure 9. Au MMI & Twig Anomalies.

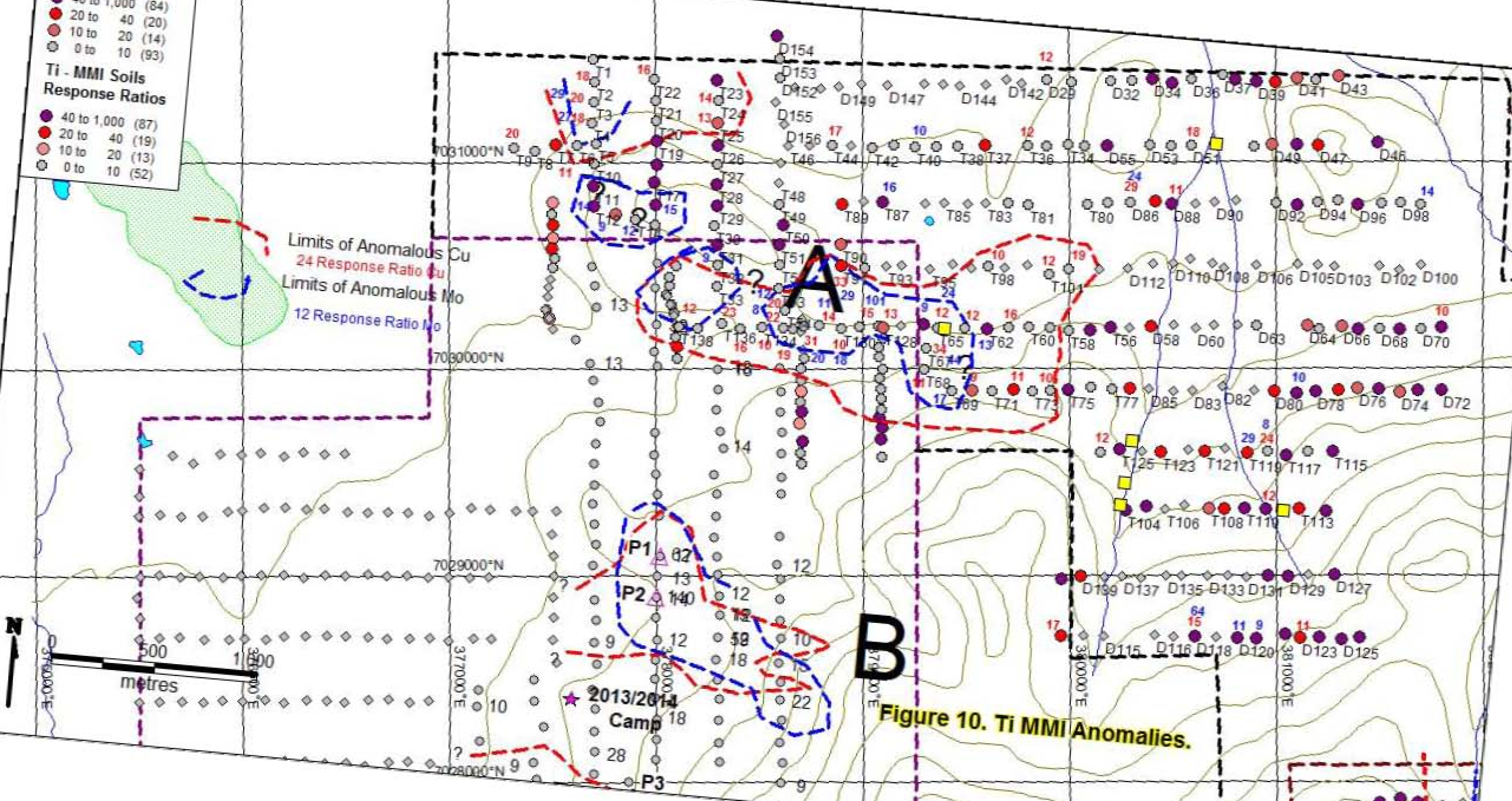


Figure 10. Ti MMI Anomalies.

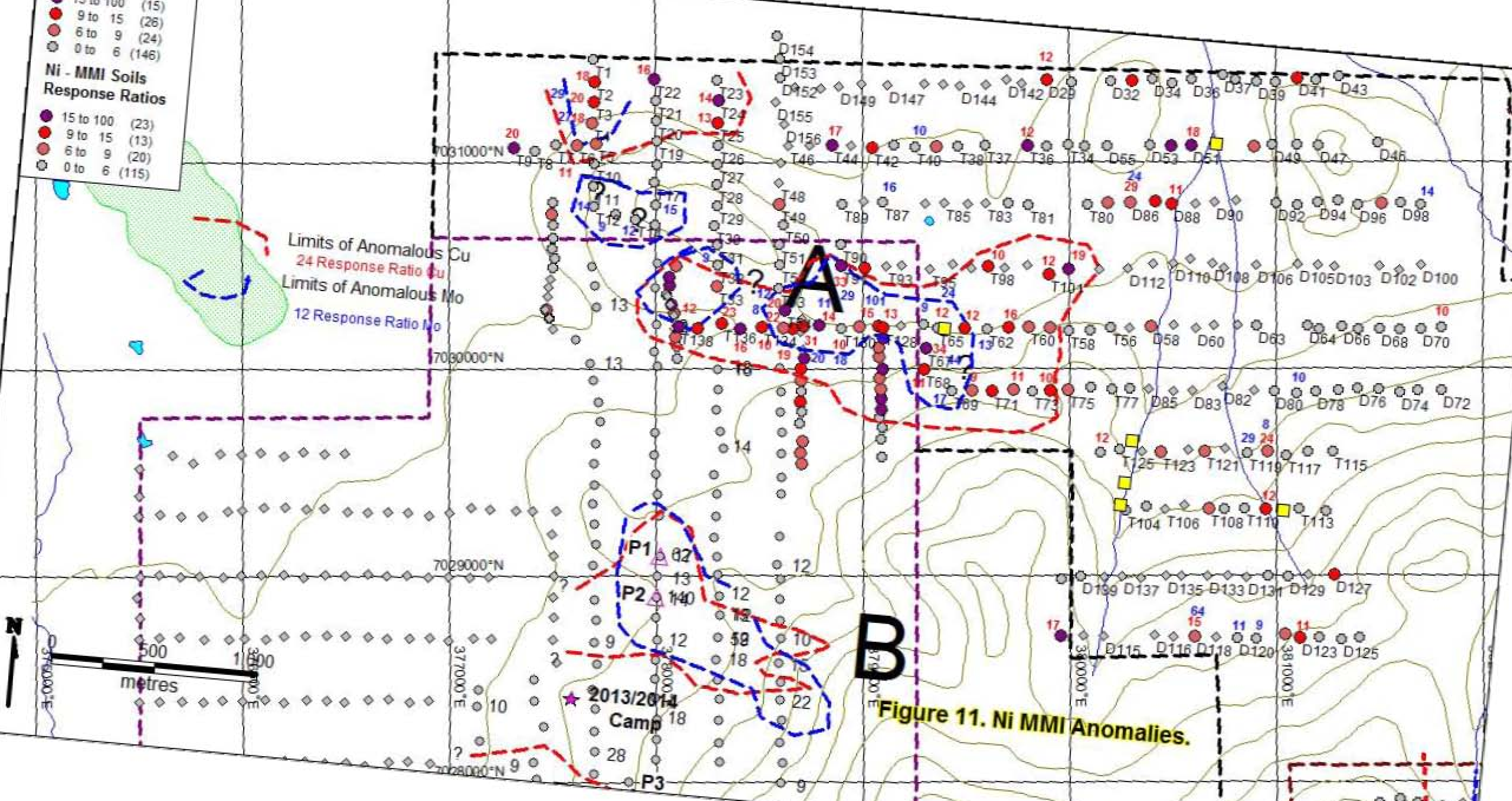


Figure 11. Ni MMI Anomalies.

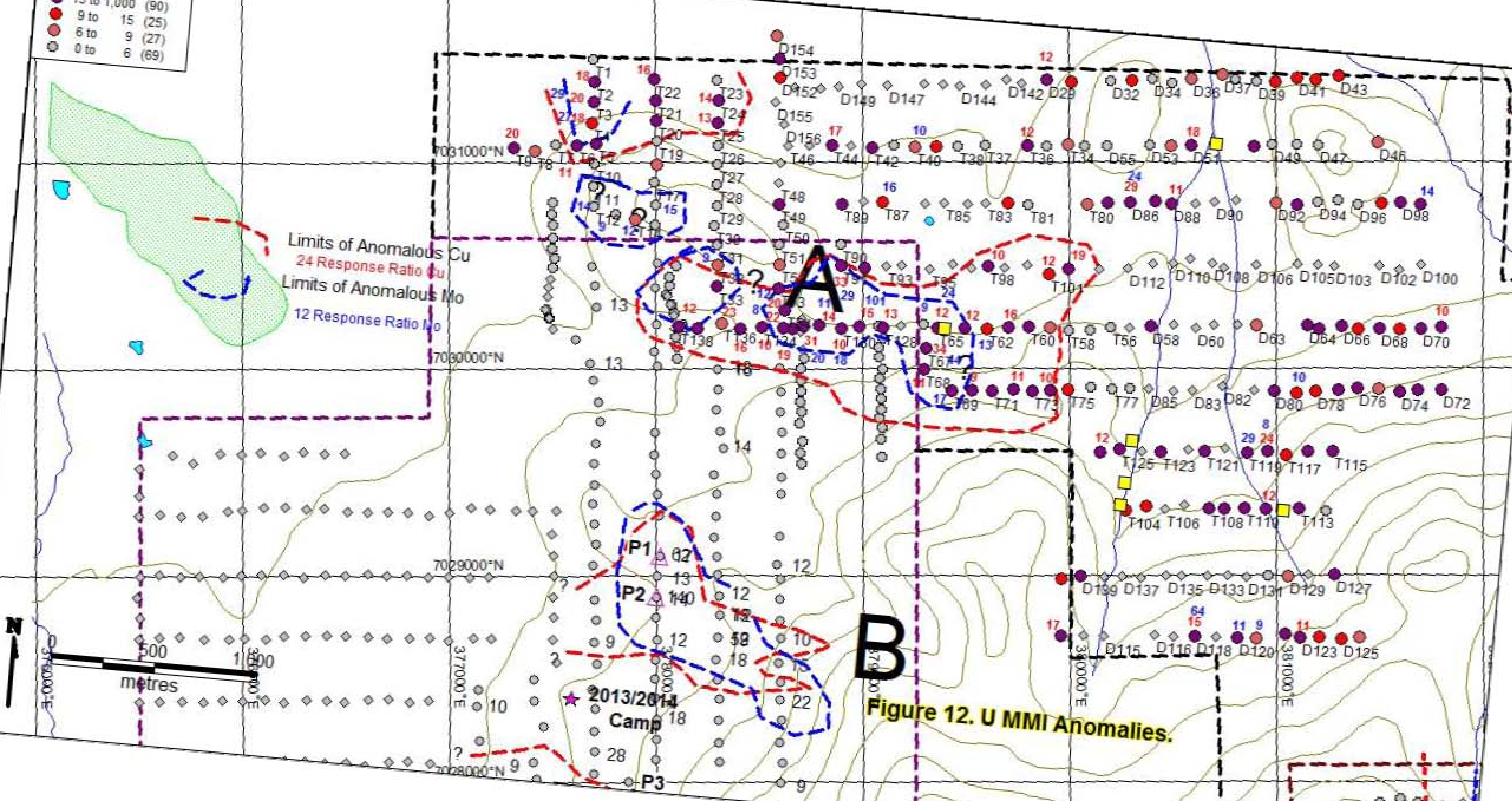


Figure 12. U MMI Anomalies.

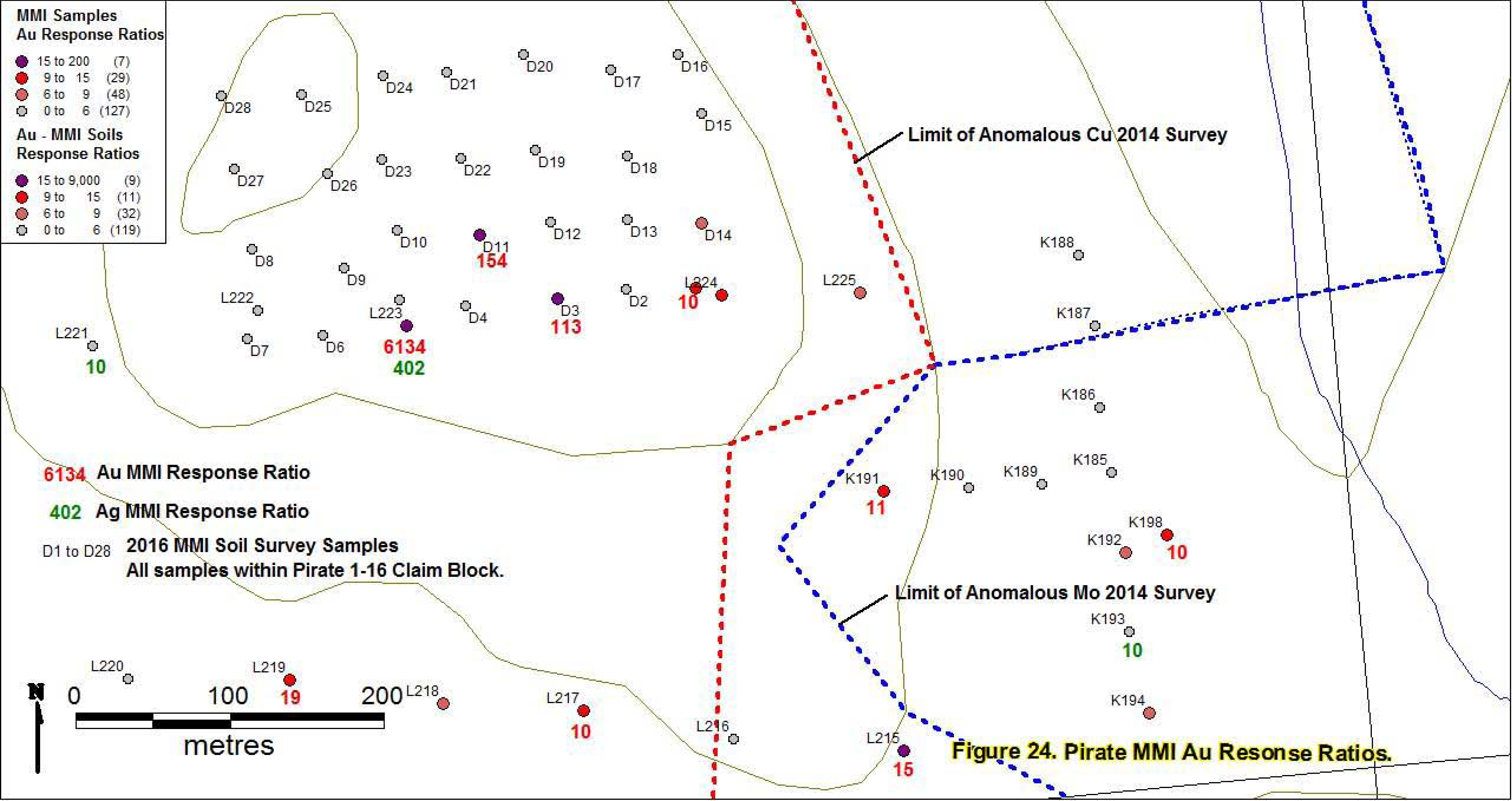


Figure 24. Pirate MMI Au Resonse Ratios.

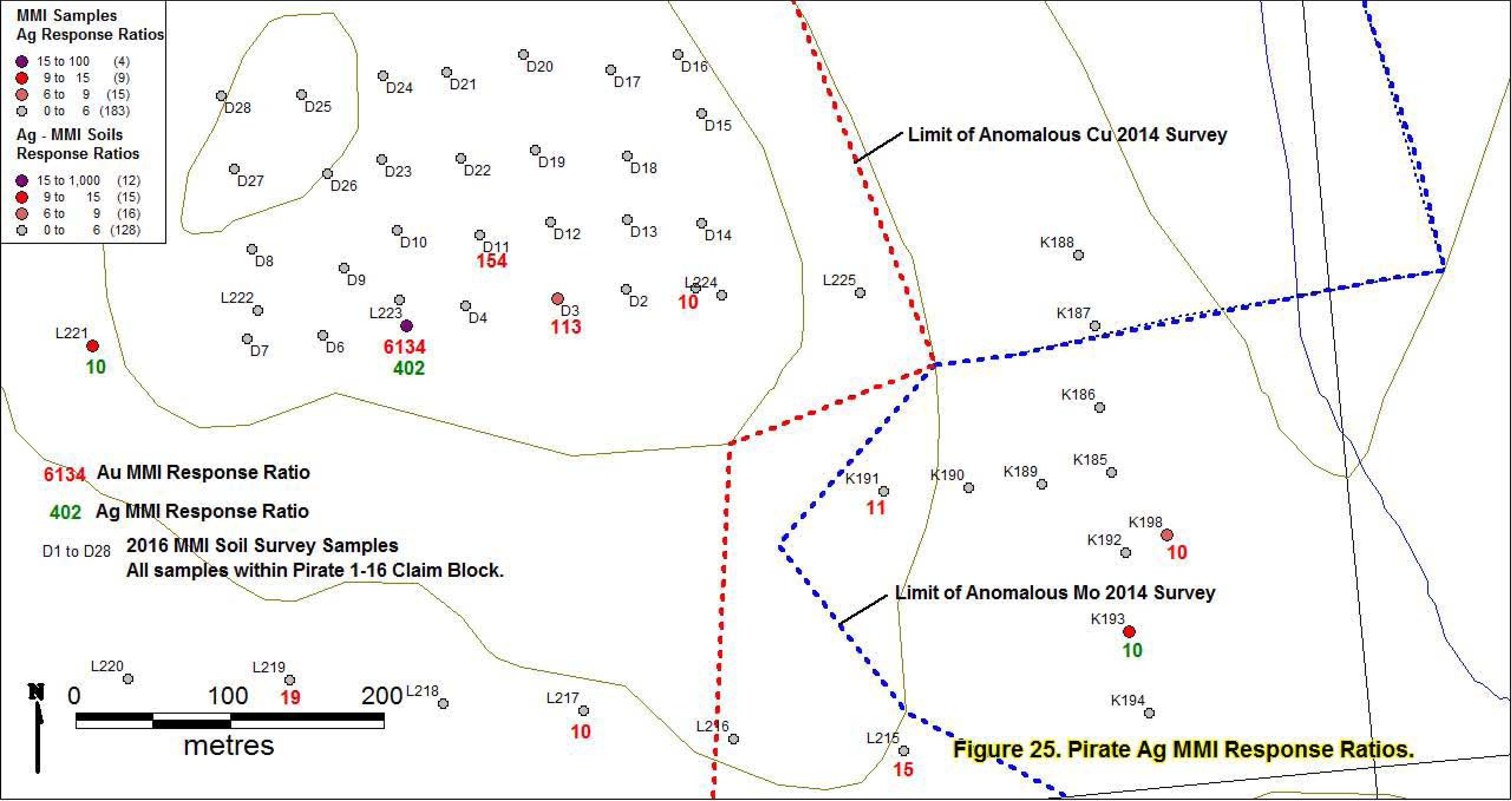


Figure 25. Pirate Ag MMI Response Ratios.

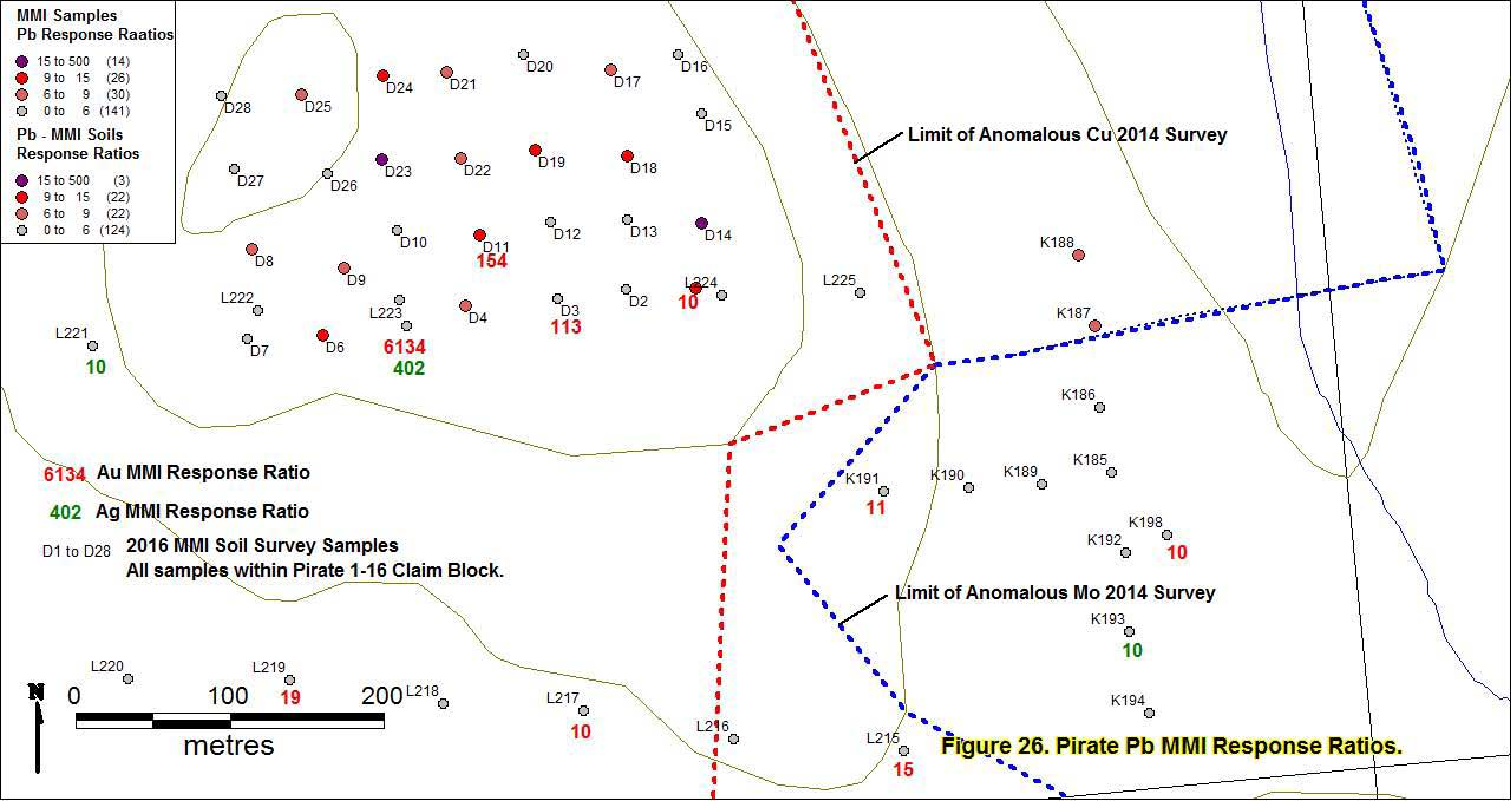


Figure 26. Pirate Pb MMI Response Ratios.

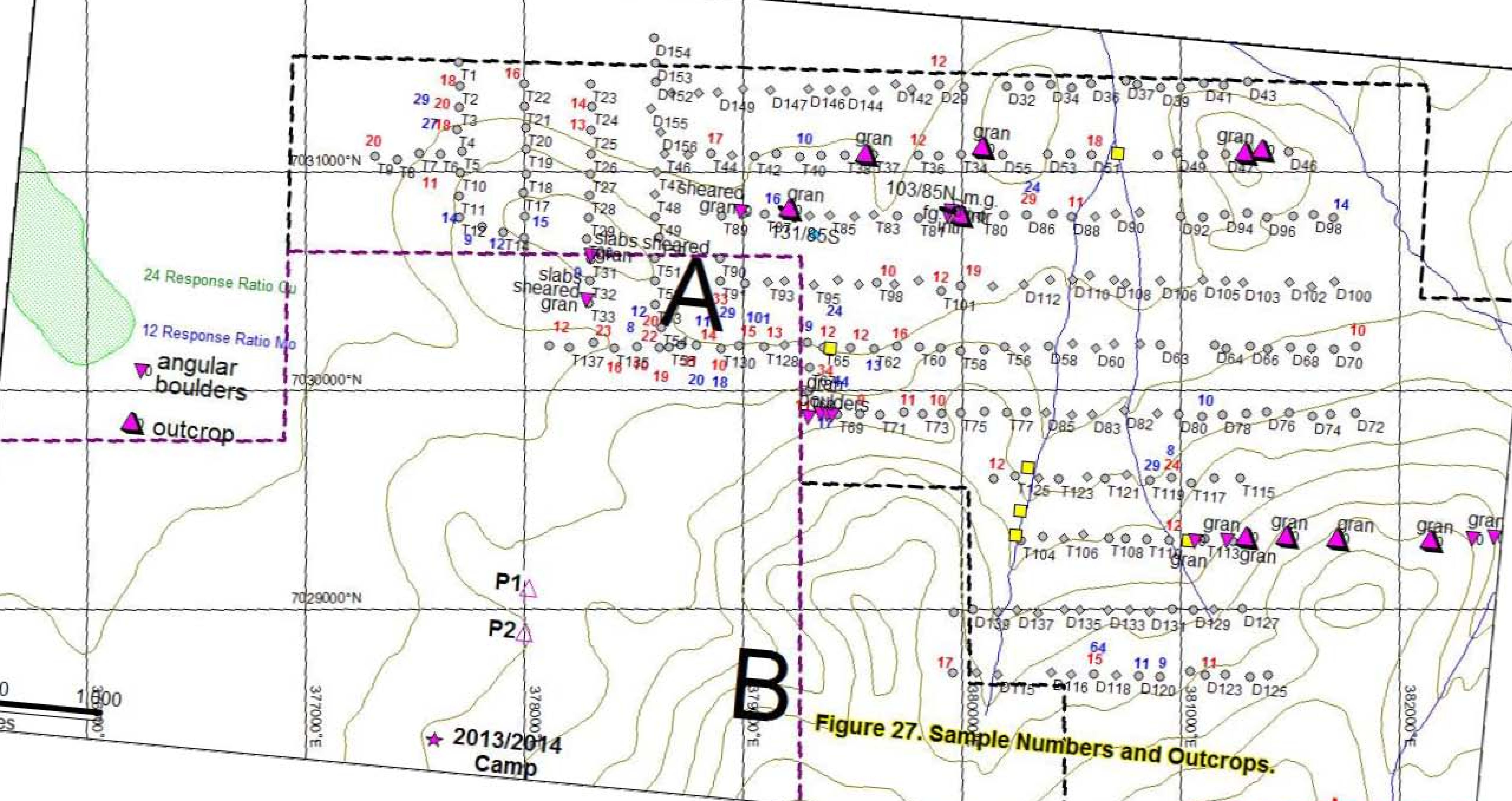


Figure 27. Sample Numbers and Outcrops.

Table 2. 2016 Dubloon MMI Response Ratios.												
ID	UTM 83E	UTM 83N	RR Ag	RR Au	RR Ca	RR Cu	RR Mo	RR Ni	RR Pb	RR Ti	RR U	RR Zn
D1	381591	7027351	3	9	0	3	2	1	9	272	4	0
D2	381546	7027354	2	1	1	1	3	0	2	100	2	0
D3	381501	7027352	6	113	0	1	4	0	4	126	3	0
D4	381441	7027353	2	3	1	1	1	1	6	324	3	0
D5	381399	7027361	3	3	1	1	2	1	2	928	2	1
D6	381347	7027343	3	1	0	2	3	5	9	540	4	1
D7	381298	7027345	5	1	2	1	3	1	4	16	1	0
D8	381307	7027403	2	1	1	1	3	1	6	732	1	1
D9	381365	7027385	1	1	1	1	3	1	8	496	4	0
D10	381402	7027406	1	1	0	1	3	0	2	444	1	0
D11	381455	7027398	5	154	1	1	3	1	12	248	3	0
D12	381501	7027402	1	3	2	1	1	1	1	94	7	0
D13	381551	7027399	0	1	0	1	4	1	5	376	2	0
D14	381599	7027392	3	7	1	2	2	1	15	450	15	1
D15	381605	7027463	1	1	1	1	5	1	5	588	7	1
D16	381594	7027503	1	3	1	1	3	1	2	434	3	1
D17	381549	7027497	2	4	0	1	3	1	8	354	2	1
D18	381555	7027440	5	1	0	1	4	1	12	442	3	1
D19	381496	7027450	4	3	0	1	1	1	13	46	1	0
D20	381494	7027512	1	3	1	1	1	0	3	120	3	0
D21	381443	7027505	1	1	1	1	3	1	6	422	6	1
D22	381447	7027449	2	4	1	1	2	1	8	146	8	0
D23	381396	7027453	5	4	1	3	3	2	18	496	8	1
D24	381402	7027507	3	3	1	2	1	1	12	210	7	0
D25	381348	7027500	4	1	1	1	3	1	6	546	3	1
D26	381360	7027447	2	1	0	1	5	0	2	546	2	0
D27	381300	7027456	2	1	1	1	3	2	4	844	1	1
D28	381296	7027504	2	1	0	1	3	1	5	992	2	1
D29	379895	7031399	6	13	5	12	5	9	0	1	17	0
D30	380010	7031389	2	13	4	7	1	5	1	1	12	0
D32	380202	7031393	1	1	4	1	1	3	1	4	2	0
D33	380307	7031391	2	18	3	4	1	9	18	2	13	1
D34	380404	7031400	2	1	3	1	1	4	7	80	1	0
D35	380500	7031383	1	1	3	1	3	2	4	40	3	0
D36	380592	7031403	3	4	5	2	1	5	10	1	6	0
D37	380746	7031419	1	12	4	3	3	3	1	2	7	0
D38	380802	7031401	1	1	2	1	3	1	8	266	2	0
D39	380906	7031387	3	1	2	1	3	1	11	178	1	0
D40	380999	7031388	1	3	3	2	1	5	8	24	9	0
D41	381105	7031403	1	6	4	6	1	9	4	10	14	0
D42	381196	7031396	4	9	6	7	2	4	1	1	10	1
D43	381304	7031412	2	7	4	5	1	4	2	12	12	0
D46	381494	7031094	3	7	1	3	4	3	12	506	6	1
D47	381205	7031079	3	4	2	3	1	4	13	26	4	0
D48	381103	7031081	1	1	1	0	3	1	3	80	1	1

ID	UTM 83E	UTM 83N	RR Ag	RR Au	RR Ca	RR Cu	RR Mo	RR Ni	RR Pb	RR Ti	RR U	RR Zn
D49	380983	7031084	2	1	2	1	6	1	4	16	1	0
D50	380897	7031076	4	4	5	7	7	7	2	4	51	1
D51	380592	7031080	3	3	3	18	4	21	5	6	144	3
D52	380496	7031080	5	1	3	5	4	15	2	4	8	1
D53	380392	7031079	2	7	4	4	3	3	2	1	4	0
D55	380186	7031080	1	1	2	1	3	1	2	214	1	0
D56	380076	7031076	2	7	4	4	8	1	1	2	5	0
D58	380396	7030204	1	1	2	5	5	7	4	34	97	1
D63	380904	7030207	1	3	3	2	3	1	1	4	7	0
D64	381153	7030207	2	7	3	6	1	4	3	10	43	0
D65	381207	7030191	4	10	4	5	1	3	2	2	21	0
D66	381317	7030201	1	3	3	4	3	2	3	14	27	1
D67	381395	7030191	1	4	2	4	8	2	5	144	13	2
D68	381500	7030194	2	6	3	8	4	3	1	6	41	1
D69	381599	7030190	4	4	3	3	1	2	7	54	10	0
D70	381698	7030189	2	4	3	6	2	3	2	8	19	0
D71	381798	7030199	2	6	2	10	3	5	5	80	49	0
D72	381799	7029896	2	4	2	7	3	4	6	194	49	1
D73	381686	7029892	5	4	3	5	3	2	3	108	55	0
D74	381600	7029886	4	4	3	6	1	5	5	16	38	1
D75	381494	7029898	2	3	2	2	4	2	7	212	8	1
D76	381394	7029901	7	1	3	4	1	4	5	14	40	6
D77	381299	7029896	2	7	1	4	3	2	6	24	33	0
D78	381192	7029890	5	4	1	4	3	3	10	226	13	3
D79	381097	7029880	2	1	1	1	10	1	5	378	9	1
D80	380990	7029891	3	4	3	4	3	1	2	26	25	0
D86	380297	7030801	3	9	5	29	24	6	1	4	75	0
D87	380414	7030808	1	1	1	8	4	9	16	32	80	9
D88	380498	7030796	2	4	2	11	6	13	7	42	95	1
D92	381000	7030799	5	7	4	8	3	3	1	1	7	0
D93	381102	7030790	3	10	2	8	5	3	5	150	16	0
D94	381199	7030805	1	3	3	2	1	3	11	8	4	0
D95	381302	7030811	2	4	3	3	6	2	5	2	5	0
D96	381395	7030792	2	1	1	2	7	2	9	158	1	0
D97	381511	7030796	2	6	4	4	3	6	2	1	12	0
D98	381604	7030802	1	21	4	8	2	4	1	1	22	0
D99	381698	7030790	2	13	4	4	14	5	2	1	42	0
D113	379958	7028707	3	6	2	17	3	21	5	34	88	1
D118	380601	7028705	1	3	3	15	64	7	3	42	126	1
D120	380809	7028697	2	6	2	5	11	3	3	168	73	2
D121	380902	7028691	1	1	1	2	9	1	10	848	7	2
D122	381042	7028717	3	6	2	5	1	7	6	68	30	5
D123	381111	7028698	2	4	4	11	3	12	1	24	38	2
D124	381204	7028700	1	3	1	1	1	1	5	286	11	1
D125	381315	7028690	2	7	1	3	4	2	93	394	14	1
D126	381399	7028700	0	1	0	1	3	1	8	658	6	1

ID	UTM 83E	UTM 83N	RR Ag	RR Au	RR Ca	RR Cu	RR Mo	RR Ni	RR Pb	RR Ti	RR U	RR Zn
D127	381279	7029001	2	3	2	7	1	9	5	64	21	1
D129	381055	7028996	0	1	1	1	8	2	9	436	6	2
D130	380959	7028999	1	1	0	1	3	1	9	822	5	1
D139	380049	7028997	1	1	3	2	3	1	0	30	41	0
D140	379961	7028984	3	1	1	1	4	1	4	318	9	0
D152	378602	7031410	3	4	4	3	7	2	7	1	11	0
D153	378601	7031501	3	6	2	2	1	4	15	1	169	0
D154	378590	7031612	4	3	2	1	1	2	13	132	7	0
T1	377700	7031500	1	6	4	2	5	1	1	4	3	0
T2	377705	7031391	2	6	4	18	6	11	2	1	105	2
T3	377701	7031295	6	6	5	20	27	9	1	1	90	0
T4	377692	7031193	12	7	5	18	29	7	2	1	14	1
T5	377715	7031094	10	9	4	6	2	6	10	8	29	1
T6	377618	7031081	9	12	6	11	6	8	4	1	130	0
T7	377519	7031086	1	1	3	1	3	2	4	20	3	1
T8	377420	7031058	3	6	4	3	2	3	6	2	8	0
T9	377316	7031070	6	9	4	20	2	19	4	1	31	2
T10	377704	7030998	5	1	5	1	1	3	18	1	1	1
T11	377701	7030888	19	3	1	3	7	5	17	308	3	2
T12	377701	7030790	6	1	1	1	14	1	32	608	2	4
T13	377805	7030751	15	1	3	2	9	2	20	10	2	1
T14	377900	7030725	23	3	5	3	12	3	9	1	6	1
T15	377999	7030697	9	1	4	1	7	1	2	2	1	1
T16	377999	7030797	3	4	2	1	15	1	6	154	2	2
T17	377993	7030904	14	18	1	1	3	2	79	116	2	6
T18	378009	7030989	8	6	1	2	8	3	15	246	6	9
T19	378007	7031107	8	1	3	2	4	3	10	142	5	6
T20	378007	7031202	3	7	5	6	2	4	1	1	31	1
T21	378002	7031298	2	10	5	8	3	4	2	1	25	0
T22	377997	7031401	5	7	4	16	7	15	1	1	28	1
T23	378300	7031400	3	1	2	3	8	1	5	124	3	2
T24	378308	7031301	4	6	4	14	3	32	2	2	28	1
T25	378303	7031191	6	6	4	13	3	10	1	12	28	1
T26	378302	7031080	2	1	3	1	3	2	2	48	1	1
T27	378302	7030990	2	1	4	1	1	3	5	8	2	1
T28	378298	7030894	3	1	2	1	1	2	6	124	2	11
T29	378296	7030792	3	3	3	1	2	2	4	118	2	0
T30	378286	7030693	6	1	3	1	1	3	154	1	3	1
T31	378300	7030600	19	1	2	2	5	1	8	216	2	12
T32	378300	7030502	10	9	4	5	9	4	7	1	6	4
T33	378295	7030402	2	18	5	7	6	8	3	1	37	0
T34	379995	7031082	2	3	3	3	3	5	10	1	6	1
T35	379893	7031074	2	3	4	2	3	1	0	1	3	0
T36	379802	7031078	3	3	4	12	3	20	2	1	60	2
T37	379594	7031079	1	1	2	1	2	1	1	28	2	0
T38	379463	7031077	3	3	3	1	3	2	2	2	3	3

ID	UTM 83E	UTM 83N	RR Ag	RR Au	RR Ca	RR Cu	RR Mo	RR Ni	RR Pb	RR Ti	RR U	RR Zn
T39	379356	7031076	1	9	6	2	1	7	1	1	9	0
T40	379255	7031071	2	1	5	1	10	2	1	2	7	0
T41	379150	7031084	1	4	4	1	1	3	1	1	3	0
T42	379050	7031072	3	19	4	8	3	14	1	1	18	0
T44	378851	7031083	4	7	4	17	3	24	1	1	82	1
T49	378596	7030795	7	6	5	4	1	6	2	1	31	1
T50	378618	7030700	2	4	1	3	1	2	5	156	3	0
T51	378595	7030604	3	1	2	1	3	3	7	152	2	1
T52	378598	7030502	2	1	3	2	1	2	12	6	6	1
T53	378595	7030392	3	1	4	4	6	3	27	2	42	0
T54	378623	7030286	4	7	4	20	12	20	1	1	101	1
T55	378660	7030197	4	7	5	22	8	14	1	1	69	3
T56	380197	7030197	1	3	2	2	3	2	5	244	4	1
T57	380101	7030186	2	7	2	2	1	2	5	66	3	1
T58	379994	7030182	5	9	3	5	1	3	5	1	5	0
T59	379904	7030197	4	3	4	7	1	7	2	1	8	0
T60	379804	7030201	2	3	6	9	3	6	1	1	59	0
T61	379703	7030201	3	10	4	16	3	14	1	4	19	0
T62	379600	7030192	2	4	2	4	13	2	3	104	14	2
T63	379490	7030195	5	13	4	12	1	10	1	2	45	1
T65	379363	7030195	10	10	5	12	24	3	1	1	141	0
T66	379292	7030217	3	1	1	2	9	1	6	270	3	1
T67	379304	7030102	10	9	5	34	44	16	1	6	134	1
T68	379296	7029995	4	4	4	11	5	14	2	4	18	3
T69	379431	7029890	11	6	6	6	17	2	2	1	79	1
T70	379530	7029895	4	6	3	9	2	8	2	12	19	2
T71	379624	7029889	6	9	4	8	3	9	1	1	16	2
T72	379731	7029900	4	4	4	11	4	8	3	22	57	3
T73	379820	7029893	5	6	4	8	3	4	2	2	27	2
T74	379906	7029896	3	6	4	10	3	11	1	2	26	0
T75	379995	7029898	2	4	2	5	2	6	8	186	9	0
T76	380100	7029907	1	3	2	2	1	2	6	6	5	0
T77	380207	7029902	2	4	4	1	1	4	6	1	2	1
T78	380294	7029903	1	1	2	1	2	2	2	28	2	0
T79	380189	7030801	4	10	4	7	3	8	1	1	61	0
T80	380090	7030793	2	6	3	2	4	3	3	1	8	0
T81	379800	7030791	1	6	2	3	1	4	4	1	5	0
T82	379704	7030801	0	4	3	5	1	4	2	1	10	0
T87	379098	7030805	0	1	2	1	16	1	1	112	9	3
T89	378902	7030797	4	7	3	3	3	2	1	20	20	0
T90	378893	7030602	2	1	3	1	1	1	1	10	1	1
T91	378894	7030500	2	4	2	33	29	23	3	24	130	3
T92	379008	7030490	2	3	3	7	3	9	2	4	69	5
T98	379609	7030496	2	3	4	10	3	13	2	4	26	3
T101	379904	7030455	6	9	4	12	5	14	1	1	10	0
T102	379994	7030481	5	10	4	19	3	23	2	1	27	1

ID	UTM 83E	UTM 83N	RR Ag	RR Au	RR Ca	RR Cu	RR Mo	RR Ni	RR Pb	RR Ti	RR U	RR Zn
T104	380271	7029312	1	3	1	1	5	1	11	542	10	1
T105	380370	7029333	1	1	1	3	3	2	6	232	10	1
T108	380670	7029324	1	1	3	3	8	6	4	12	212	1
T109	380748	7029324	2	4	3	6	5	3	5	32	15	1
T110	380844	7029322	3	4	2	3	3	2	4	68	18	1
T111	380945	7029318	3	3	2	12	3	14	9	78	45	1
T113	381109	7029322	2	12	2	3	1	2	8	38	20	0
T114	381239	7029312	1	1	1	1	3	1	5	206	4	2
T115	381272	7029601	2	6	2	3	5	2	2	86	25	1
T116	381152	7029598	1	6	3	5	1	5	5	6	18	1
T117	381048	7029580	1	1	1	2	6	1	5	280	12	1
T118	380956	7029602	5	10	4	24	8	7	1	1	58	0
T119	380860	7029592	2	3	2	7	29	5	1	20	34	0
T121	380651	7029599	1	1	2	1	5	6	2	22	230	7
T123	380442	7029597	1	1	1	3	1	6	13	30	74	3
T125	380243	7029609	1	7	2	3	3	3	9	76	26	1
T126	380146	7029598	4	7	3	12	3	3	4	2	39	0
T128	379096	7030202	1	7	3	13	6	12	1	16	64	2
T129	378982	7030203	1	4	4	15	101	6	2	1	480	1
T130	378898	7030194	3	3	3	10	18	4	1	2	148	0
T131	378787	7030210	4	6	4	14	11	17	1	1	167	2
T132	378716	7030209	3	7	4	31	20	12	1	1	134	1
T133	378618	7030196	6	10	5	19	12	6	0	1	34	0
T134	378515	7030201	3	6	4	10	3	10	1	1	20	0
T135	378408	7030194	4	10	4	16	3	24	1	1	16	1
T136	378318	7030219	6	10	5	23	5	14	1	1	6	1
T137	378204	7030198	1	6	4	8	3	10	1	2	22	0
T138	378112	7030203	1	4	4	12	7	17	1	1	42	1

Table 3. 2016 Dubloon Black Spruce Twig Values.

ID	UTM 83E	UTM 83N	Mo	Cu	Pb	Zn	Ag	Ni	Au	
			ppm	ppm	ppm	ppm	ppb	ppm	ppb	
D57	380289	7030199	0.02	1.48	0.1	59.6	13	0.05	0.3	
D59	380505	7030213	0.02	1.82	0.06	76.7	12	0.1	0.3	
D60	380609	7030195	0.005	1.19	0.08	66	21	0.05	0.1	
D61	380697	7030212	0.005	1.72	0.06	57.2	8	0.05	0.1	
D62	380813	7030212	0.02	1.19	0.07	80.8	13	0.05	0.2	
D81	380895	7029895	0.01	1.95	0.08	48.5	9	0.05	0.3	
D82	380740	7029910	0.06	2.34	0.05	44.7	22	0.3	0.1	
D83	380592	7029894	0.005	1.61	0.06	55.7	16	0.2	0.3	
D84	380501	7029891	0.03	1.45	0.07	101.8	10	0.1	0.2	
D85	380384	7029899	0.01	1.47	0.07	73.2	3	0.05	0.2	
D89	380610	7030796	0.005	1.5	0.06	56.5	20	0.1	0.7	
D90	380704	7030808	0.005	1.89	0.06	76.7	27	0.05	0.1	
D91	380808	7030812	0.005	1.01	0.05	60.3	9	0.05	0.1	
D100	381700	7030499	0.005	1.95	0.06	59.9	28	0.3	0.4	
D101	381598	7030477	0.005	2.63	0.1	66.2	23	0.1	0.4	
D102	381497	7030497	0.005	1.33	0.07	49.6	19	0.1	0.4	
D103	381283	7030491	0.005	1.28	0.06	55.9	14	0.2	0.1	
D104	381204	7030502	0.03	5.01	0.25	83.9	25	0.05	0.1	
D105	381102	7030503	0.03	1.86	0.05	69.7	28	0.1	0.3	
D106	380906	7030501	0.01	1.7	0.08	86.4	19	0.2	0.1	
D107	380749	7030487	0.005	1.47	0.06	64.5	20	0.1	0.2	
D108	380694	7030507	0.005	1.44	0.15	87	28	0.1	0.1	
D109	380585	7030527	0.005	1.27	0.05	81.1	31	0.05	0.1	
D110	380504	7030507	0.005	1.52	0.04	63.2	35	0.1	0.1	
D111	380403	7030504	0.005	1.37	0.05	65.3	11	0.2	0.1	
D112	380281	7030482	0.005	1.17	0.05	43.2	18	0.2	0.5	
D114	380066	7028708	0.005	1.71	0.12	48.2	18	0.4	0.1	
D115	380162	7028703	0.005	1.3	0.07	51.5	21	0.2	0.1	
D116	380407	7028712	0.07	1.17	0.06	67	5	0.05	0.6	
D117	380499	7028700	0.02	1.64	0.06	79.9	7	0.3	0.2	
D119	380706	7028700	0.005	2.87	0.07	78.3	25	0.1	0.1	
D128	381151	7029000	0.19	1.08	0.06	84.3	26	0.05	0.1	
D131	380856	7028991	0.06	1.5	0.07	56.8	6	0.1	0.1	
D132	380764	7028996	0.005	1.68	0.09	54.8	12	0.1	0.1	
D133	380667	7028994	0.18	1.86	0.1	92.1	31	0.05	0.2	
D134	380536	7028995	0.03	1.55	0.05	63.7	13	0.05	0.1	
D135	380466	7028998	0.04	1.61	0.13	66.3	15	0.05	0.2	
D136	380344	7028984	0.005	1.48	0.05	77	25	0.05	0.2	
D137	380251	7028994	0.005	1.66	0.04	102	22	0.05	0.1	
D138	380163	7028990	0.13	1.59	0.05	50.6	19	0.05	0.1	
D141	379769	7031378	0.01	1.77	0.06	77	4	0.05	0.1	
D142	379695	7031399	0.005	1.55	0.07	69.1	5	0.3	0.3	
D143	379596	7031375	0.03	1.93	0.06	62.3	14	0.05	0.2	
D144	379470	7031367	0.005	1.2	0.08	53.6	10	0.05	0.2	

ID	UTM 83E	UTM 83N	Mo	Cu	Pb	Zn	Ag	Ni	Au	
D145	379394	7031374	0.005	1.44	0.06	62.1	14	0.05	0.1	
D146	379298	7031380	0.005	1.36	0.05	78.4	28	0.05	0.1	
D147	379123	7031374	0.005	2.06	0.05	78.3	10	0.05	0.2	
D148	378997	7031380	0.005	1.81	0.07	57.5	10	0.05	0.4	
D149	378884	7031366	0.005	1.96	0.06	65.4	16	0.1	0.2	
D150	378797	7031359	0.005	1.39	0.06	70.3	22	0.2	0.4	
D151	378675	7031364	0.03	1.57	0.06	63.9	17	0.1	0.1	
D155	378581	7031290	0.05	1.12	0.04	72.2	12	0.1	0.6	
D156	378622	7031184	0.18	1.13	0.03	57.2	22	0.05	0.6	
T43	378947	7031077	0.005	2.02	0.07	65.7	10	0.1	0.1	
T45	378747	7031081	0.005	2.57	0.1	55.2	11	0.05	0.1	
T46	378639	7031082	0.03	1.35	0.04	70.5	18	0.05	0.1	
T47	378606	7030999	0.04	1.63	0.04	66.5	18	0.05	0.1	
T48	378597	7030899	0.23	2.13	0.09	53	19	0.05	0.1	
T83	379596	7030802	0.005	1.34	0.08	66	6	0.1	0.1	
T84	379508	7030797	0.01	1.16	0.07	90.6	10	0.05	0.1	
T85	379397	7030802	0.005	1.01	0.06	71.2	6	0.05	0.1	
T86	379303	7030798	0.005	1.17	0.05	61.2	12	0.05	0.1	
T88	379003	7030808	0.005	1.3	0.04	76.4	18	0.05	0.1	
T93	379111	7030496	0.005	1.63	0.06	64.1	8	0.05	0.1	
T94	379187	7030498	0.03	1.32	0.03	90.8	11	0.05	0.1	
T95	379324	7030482	0.01	1.26	0.05	63.3	6	0.05	0.1	
T96	379434	7030504	0.005	1.06	0.05	87.3	10	0.05	0.1	
T97	379525	7030484	0.005	2.03	0.05	67.4	24	0.2	0.1	
T99	379688	7030488	0.005	1.75	0.11	82.8	20	0.05	0.1	
T100	379799	7030502	0.005	1.51	0.07	74.4	23	0.1	0.1	
T103	380142	7030478	0.02	1.89	0.05	68.8	14	0.05	0.1	
T106	380462	7029322	0.04	2.2	0.05	39.6	17	0.3	0.1	
T107	380555	7029340	0.13	1.76	0.03	48.9	28	0.3	0.1	
T120	380752	7029616	0.005	1.66	0.04	61.5	18	0.1	0.1	
T122	380571	7029605	0.005	1.86	0.07	86.3	11	0.2	0.1	
T124	380349	7029601	0.01	2.18	0.06	70.1	25	0.2	0.1	
T127	379187	7030208	1.25	2.11	0.05	49.5	14	0.1	0.1	

Table 4. 2016 Dubloon SILT Values

ID	UTM 83E	UTM 83N	Mo	Cu	Pb	Zn	Ag	Ni	Mn	Fe	As	U	Au	Sb	Bi
			ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm
S 1	380714	7031085	0.42	6.77	3.94	28.2	24	7	101	0.99	2.8	1	2.5	0.29	0.07
S 2	380242	7029341	0.62	5.82	3.99	29.5	28	6.7	185	1.02	2.2	1.5	3.5	0.2	0.06
S 3	380266	7029448	0.59	6.88	4.62	32.1	39	7.7	219	1.13	2.7	1.7	2	0.22	0.06
S 4	380301	7029649	0.79	8.39	4.84	37	40	8.4	390	1.25	3.3	2.3	2.2	0.26	0.06
T64	379397	7030193	2.37	18.68	8.81	58.1	84	17	332	1.98	7.4	10.2	1.5	0.58	0.14
T112	381031	7029312	0.45	7.04	4.1	41.1	39	8.1	219	1.44	2.8	0.8	9	0.2	0.06