

**A Geochemical Report on the KRYPTOS Property**  
submitted as Representation Work

Work performed on:  
**KRYPTOS 39, 43, 45, 47-50,53-60, 61-80**  
YE90245, 249, 251,253-256, 259-266, YE93631-650

Work applied to:  
**KRYPTOS 15-80**  
YE90221-YE90266, YE93631-650  
**Mayo Mining District**

Owner: Gordon Richards

Location  
115P/01 & 02  
Camp on claims at  
UTM 427,700E, 7,005,135N, Elev 945 m  
NAD 83, UTM Zone 8

Field work performed by  
Gordon Richards & Jeff Mieras  
During the period August 1-12,2019

Report written by Gordon Richards  
October 1, 2019

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### DIGITAL COPIES:

Table 3. Response Ratios for mmi samples with UTM xls

Data for Table 3 from SGS lab in CSV and PDF format

Table 4. Rock Chip Results collected from soil pits. xls

Data for Table 4 from Bureau Veritas in CSV and PDF format

Table 5. Rock Chip Descriptions.

Figures 1-11 BMP and This report in WORD

## INTRODUCTION.

The general area of the KRYPTOS claims was prospected with the aid of YMEP grants awarded to G Richards in 2016 and to Jeff Mieras in 2017. The property is located on gentle to moderate slopes across the Klondyke Highway about 25 km south Stewart Crossing within NTS map sheets 115P01 & 02. Access was made by helicopter to a camp in an open meadow in the east side of the property as shown on Figures 4 to 11 from where soil sampling traverses were made.

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 the Early Mississippian aged Reid Lakes Batholith that is a weakly Kspar-porphyrific, medium-grained granite to quartz monzonite intruding its own volcanic pile in the west portion of the claims in contact with metasedimentary rocks of the Finlayson Assemblage (?) in the east portion of the claims. Loess, about 25 cm thick, blankets most slopes. The claims lie entirely within Reid glaciated terrain with the possible occurrence of pre-Reid glaciated terrain along ridge tops.

Regional Geochemical Data (RGS) is 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. 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. Releveling of the RGS data over a portion of 115P that included an area including pre-Reid glaciation over Yukon Tanana Terrain was done to recalculate thresholds for 70<sup>th</sup>, 80<sup>th</sup>, 90<sup>th</sup>, 95<sup>th</sup> and 98<sup>th</sup> percentiles for a number of elements. Using these recalculated threshold values, anomalous results for Cu, Au and other elements were seen to occur in two RGS samples, one draining the claims area (RGS 3230) and one draining a valley to the south of the claims (RGS 3231). A third RGS sample (RGS 3288) is located down-ice from the claims and contained anomalous Mo and Sb. A fourth RGS sample (RGS 3229) draining the same valley south of the claims as RGS 3229 contained no anomalous values.

The RGS results were the reason for prospecting the general area in 2016. Results of soil sampling identified four sizeable targets with porphyry geochemical signatures.

In 2017 the KRYPTOS 1-60 claims were staked June 12 to 14 and recorded June 14 to cover known anomalous zones identified from the 2016 work and their extensions. An MMI soil and black spruce twig sampling prospecting program was undertaken on the claims June 16 to 22 and July 1, 2017 to define the extent of known geochemically anomalous zones and search for additional targets.

Results of the field work were successful in defining four pronounced multi-element anomalous zones in the MMI soil results that have porphyry geochemical signatures. The largest measures 1600m long by 300 to 500m wide and crosses the Klondyke Highway. Other zones measure 600m by 600m, 900m by 300m and 900m by 500m open to the north. All of these zones are characterized by MMI samples having high response ratios for Cu. Response ratios for Au are high in over half the samples within the Cu zones. A few high Mo response ratios occur in samples within two of the Cu zones. High Pb response ratios occur in samples peripheral to the Cu zones. Ti has consistently low response ratios from samples within the Cu zones possibly due to destruction of illmenite by hydrothermal alteration associated with porphyry mineralization. Several other elements have low response ratios within the Cu zone as well.

A poorly defined new zone of anomalous metal values occurred in the southeastern third of the claims. It is characterized by consistently very high response ratios for As, Sb, W, and Mn and numerous high response ratios for Au, Bi, Tl, Fe, Zn, Ti and Cs. Bedrock throughout this zone may be metasediments as one outcrop of micaceous quartzite was noted during the soil sampling and the area is roughly within the area of metasediments described in Geoscience Map 7

In 2019 the KRYPTOS 61-80 claims were staked August 1, and recorded in Dawson Aug 2, 2019. A camp was set out by Fireweed Helicopters on Aug 2 and demobbed Aug 9. MMI soil sampling over the new claims and part of the old claims was carried out during this period.

Results show two patterns of anomalous gold measuring two km long and one km long and up to 400 m wide encompassed within nearly identical sized and coincident patterns of anomalous As, Sb, W, and Bi all defined by response ratios

in excess of 5. 38 small (0.06 to 0.24 kg) rock chip samples were collected and most assayed. Results contained low values of gold and other pathfinder elements leaving the source of the anomalous gold and other elements unexplained.

Recommended work includes digging numerous pits near and around highly anomalous metal values in soils in order to find and sample mineralized float that would explain the cause of the anomalous metals and help with planning future exploration on the property.

## **HISTORY.**

Previous exploration activity occurred in the 1980's by a Mr Jim Carson with the staking of both quartz and placer claims. Two of these previous claim blocks are the MEGALURUS labelled on the figures and extending over much of the area sampled in 2019 and the FIRELORD which is a small claim block along the Crooked Creek at the northeast end of the MEGALURUS claim block. Other claims staked by Carson occur north of the KRYPTOS claims along Crooked Creek.

Only minimal hand trenching was recorded. All of this hand trenching was on narrow quartz veins within schist and micaceous quartzites of the Finlayson Assemblage done north and east of the KRYPTOS claim block along steep slopes into Crooked Creek. Work is summarized in Minfile Report 115P 038. Assessment Report 019539 provides some detail to the sampling. Samples submitted by Carson report grades up to 0.36 oz/T Au from selected samples but reports by personnel working for Curragh Resources, Erickson Gold Mining Corp., and Noranda Exploration Company, Limited all reported no gold from samples collected over greater widths. One claim block, the FIREDEVIL staked in 1987 covers the biggest porphyry target defined by the 2016/2017 surveys although no outcrop is known to exist in this area.

Placer claims were staked over two or three km along the small creek flowing west immediately south of the KRYPTOS claims. No placer production was recorded or evident along the creek that was staked.

YMEP grants 16-056 awarded to Richards and 17-001 awarded to Jeff Mieras.

Work in 2016 by the writer and Mieras and funded by YMEP grant 16-056, awarded to Richards located five poorly defined patterns of strong multi-element geochemical anomalies in MMI soil samples with porphyry mineralization signatures. Work in 2017 by the writer and Mieras and funded by YMEP grant 17-001 awarded to Mieras provided more definition to these anomalous zones. The KRYPTOS 1-60 claims were recorded June 14, 2017 and the KRYPTOS 60-80 recorded Aug 2, 2019. MMI soil sampling done from Aug 2 to Aug 11, 2019 over the Au-As-Sb-W-Bi anomalous zones provides the basis of this report.

## CLAIMS.

Table 1 is a list of all claims forming the property. The claims lie in the Mayo and Dawson Mining District with the Klondyke Highway forming the boundary between the districts. The Registered Owner is Gordon G Richards. The work described in this report was funded largely by Richards.

**Table 1. Claim Status**

Claim Name	Grant No.	Expiry Date	Mining District
KRYPTOS 1-14	YE90207-YE90220	2025/06/15	Dawson
KRYPTOS 15-60	YE90221-YE90266	2021/06/14	Mayo
KRYPTOS 61-80	YE93631-YE93650	2020/08/02	Mayo

Certificate of Work is to be filed on all of the KRYPTOS claims lying within the Mayo District based on work described in this report.

Apply 4 years to KRYPTOS 15-60: 46 cl X 4yrs X \$100/cl-yr = \$18,400.

Apply 5 years to KRYPTOS 61-80: 20 cl X 5yrs X \$100/cl-yr = \$10,000.

## 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. Figure 3 is a portion of that map covering the general area of the property. The claims area is shown on that map to be underlain by the Early Mississippian aged Reid Lakes Batholith in the west portion of the claims in

fault contact with metasedimentary rocks of the Finlayson Assemblage (?) in the east portion of the claims.

The Reid Lakes Batholith is an 80 km long unmetamorphosed Early Mississippian aged batholith that intrudes its own volcanic pile. It is a weakly Kspar-porphyrific, medium-grained granite to quartz monzonite.

The Finlayson Assemblage is a Late Devonian to Early Mississippian metavolcanic and metasedimentary assemblage. The metasediments such as occur on the property are described as 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. Two closely spaced outcrops of the metasedimentary rocks were located in 2017 along the most north-easterly sample line. They were both dark grey micaceous quartzite. In August 2019 three more outcrops were located. An outcrop of quartz monzonite occurs on a small knoll at the west end of the recently staked claims near sample Y140. Two other outcrops of micaceous quartzite were located, one along a creek bank near sample site P124 and the other on the north facing hillside near sample site Y83. All three metasedimentary outcrops had near flat to very gently dipping schistosity.

Glaciation in the area of the property is described as Reid in age on several government maps although pre-Reid glaciation may have occurred on the ridge top in the western half of the recently staked claims. Pre-Reid glaciation is possibly older than 500,000 years (Jeff Bond, personal communication, 2012). Reid glaciation began 200,000 years ago and ended about 50,000 years ago. Younger McConnell Glaciation which lies further east of the claims ended about 20,000 years ago.

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. Till is commonly found beneath the loess on the north facing and east facing slopes containing well rounded cobbles and smaller rocks of foreign origin. In these areas a few subround to round pebbles do occur

in the loess and have probably worked themselves up into the loess from underlying till. At higher elevations along the ridgeline till does occur beneath the loess but angular rock fragments believed to be of local origin are common in many soil pits and in a few pits are very abundant.

## **GEOCHEMICAL SURVEY.**

### **SURVEY METHODS.**

#### **General.**

G. Richards drove from Dawson to the project area on July 31 and staked the KRYPTOS 61-80 quartz August 1. He drove to Mayo August 2 recorded the claims, bought supplies and then drove to meet Mieras along the Klondyke Highway on the property where they met a Fireweed Helicopter to mob a camp into a meadow in the centre of the area to be sampled. They collected samples until August 10 when they demobbed the camp to their vehicles. Richards drove to Whitehorse to return rented radios, sort and ship samples, pay invoices, and clean and store camping gear.

	Mob/demob	Staking	Sampling
Richards	Aug 1, 11	Aug 2	Aug 3-10
Mieras	Aug 2		Aug 3-10
<b>TOTAL</b>	<b>3 man-days</b>	<b>1 man-day</b>	<b>16 man-days</b>

Sixteen man-days were spent collecting samples on the project by Mieras and Richards from August 3 to 10, 2019 collecting **320 MMI soil samples** and **38 rock chip samples of which 34 were assayed**. One man-day was spent demobbing from the property. Mobbing time was done prior to recording the claims and therefore can not be used in the statement of work for assessment purposes.

Four sample series are shown on Figure 4. "C" and "T" sample series were collected in 2016; "R" and "K" sample series were collected in 2017; and P and Y sample series were collected in August 2019.

The 2019 MMI soil sampling program was conducted across the KRYPTOS 61-80 claims and those KRYPTOS claims containing anomalous patterns of Au-As-Sb-W-Bi to find the limits of these anomalous patterns and collect rock samples

for assaying in the hopes of finding mineralized float and outcrop that would explain the anomalous metal patterns. All the rock chip samples were collected from angular float in soil pits except for the two outcrops of quartzite found near soil pits. Sample interval was 100 m along sample lines spaced 200 m apart. A 50 m sample interval and 100 m spaced lines was done in a small area near samples collected in 2017 that contained the highest gold values. Sample locations were recorded on Garmin GPSmap 60Cx handheld units and later downloaded and moved into sample result tables.

All soil 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 3 in digital form. Geochemical analysis results of 34 rock chips are provided in Table 4 and descriptions of these rock chips are provided in Table 5.

### **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 Ag, As, Au, Bi, Ca, Cu, Eu, Fe, Gd, K, La, Mg, Ni, Pb, Sb, Sc, Sr, Ti, Tl, W, and Zn. Response ratios for Au, As, Sb, W, Bi, Ca, and Eu are provided graphically in Figures 5-11. To calculate the response ratios first 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.

## **SURVEY RESULTS.**

Results of the 200 m by 100 m MMI soil and sample grid over the target area on the KRYPTOS claims is provided in Tables 3 to 5. MMI soil sample results are shown graphically on Figures 5 to 11. Results of the 2017 survey provide a small portion of the data shown on these maps in order to provide a complete picture of the targets.

Three unmineralized outcrops found on the soil lines in 2019 and one outcrop found in 2017 are shown on Figure 4. One was of unaltered granodiorite of the Reid Lakes Batholith at three were of micaceous quartzite of the Finlayson Assemblage. They are shown on the figure by black triangles. The contact between these two rock types is twofold. A fault shown on Figure 3 by a NNWly black line in the centre of the map and labelled Carson Fault is one contact. The other is an intrusive contact shown on Figures 5-11 as a black hatched line in the western portion of the survey area and described in the legend.

A large zone of anomalous metal values in MMI soils occurs in the eastern half of the KRYPTOS claims. An irregular horseshoe shaped zone of anomalous Au three km long and up to 300 m wide occurs in the centre of the survey area. Figure 5. The anomalous zone is defined by Au response ratios (RRs) in excess of 5 with highs of 227 at Y38 and 76 at Y29. A second anomalous Au zone one km long and up to 400 m wide defined by MMI soils with RRs of >5 occurs in the northern portion of the survey area.

Both of these anomalous Au zones occur within a larger roughly circular pattern of nearly coincident anomalous As (RR>8), Sb (RR>5), W (RR>5), and slightly less well-defined Bi (RR>5). Other elements that are not plotted on the figures but form nearly coincident patterns of anomalous RRs of >5 in order of diminishing correlation include, Ti, Tl, Zn, Eu and other rare earth elements and Mn. Together they define a footprint of multi-element anomalous geochemistry that surrounds and envelops the anomalous Au zones.

38 small (0.06 to 0.24 kg) rock chip samples were collected and 34 of them assayed. Results contained low values of gold and other pathfinder elements leaving the source of the anomalous gold and other elements unexplained. See Figure 3. The highest gold value was 15.9 ppb with 51 ppm As, 5.1 ppm Sb, <0.1 ppm W, and 0.1 ppm Bi from sample Y87 located in the centre of the horseshoe shaped anomalous MMI gold pattern. It is described on Table 5 as subangular phyllite/schist with limonitic vuggy irregular fractures with some quartz and being darker than other nearby samples. This sample may be the only sample suggestive of a cause of the anomalous soil patterns although of all the elements analyzed, only As and Sb were moderately anomalous. The micaceous quartzite outcrop sampled in 2017 at soil site K138 assayed moderately anomalous values were As-95ppm and Sb-20ppm. They provide some indication of what to look for in future exploration of the property.

Cause of the anomalous elements may be some style of epithermal gold mineralization given the anomalous Au and the number of traditional Au pathfinder elements included in this anomalous suite. These pathfinder elements include As, Sb, Bi, Tl, and W.

## **CONCLUSIONS.**

Sampling in 2019 on the KRYPTOS claims defined two zones of anomalous gold in MMI soils, one measuring 3 km long by up to 300 m wide forming a horseshoe shape and the other one km long by up to 400 m wide all contained within three km diameter patterns of nearly coincident anomalous As, Sb, W, Bi and other elements.

Bedrock throughout this zone is certainly metasediments based on three outcrops and abundant similar angular chips in soil pits. The target area lies within metasediments of the Finlayson Assemblage described on Geoscience Map 7. No strongly mineralized samples were found although one sample, Y87, of phyllite/schist with weakly quartz bearing fractures yielded 15.9 ppb Au with moderately anomalous As and Sb but no anomalous values in any of the other pathfinder elements.

Epithermal gold mineralization may be present within the target area given the anomalous Au in soils and the number of traditional Au pathfinder elements included in this anomalous suite.

## **RECOMMENDATIONS.**

It is recommended that soil pits be dug on and around some of the soil sample locations with the highest gold values in an attempt to find strongly mineralized outcrop and/or angular float. Success could lead to trenching or drilling.

## STATEMENT OF COSTS

Fireweed Helicopter #15442 Aug 2. Mob Property.	\$2,262.33
Fireweed Helicopter #15449 Aug 10. Demob Property.	2,100.74
Geochem:	
Bureau Veritas VAN1900233 Rocks	1181.04
SGS Labs MMI samples	
Invoice 272093	10,471.04
Invoice 575468	3,774.96
Invoice 575658	134.83
Wages:	
G Richards Aug3-11; 9 days @ \$500/day	4500.00
J Mieras Aug 3-10; 8 days @ \$350/day	2700.00
Living Allowance: sample bags, food, sat phone, radios, flagging, etc	
17 man-days @ \$100/man day	1700.00
Truck: Whitehorse-Mayo-Stewart-Mayo-Whitehorse: 1052 kmx\$0.61	641.72
Generator: 8 days @ \$10/day	80.00
YWCB 0.0459 X \$2700	123.93
Freight: Air North, MMI samples Whitehorse to Vancouver	228.20
Report: 10% of above costs      (\$29,898.79)	<u>2,989.88</u>
<b>TOTAL</b>	<b>\$32,888.67</b>

Apply 4 years to KRYPTOS 15-60: 46 cl X 4yrs X \$100/cl-yr = \$18,400.

Apply 5 years to KRYPTOS 61-80: 20 cl X 5yrs X \$100/cl-yr = \$10,000.

## **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 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.
2. I have been practicing my profession as a geologist for over 40 years and as a consulting geological engineer from 1985 to 2018. 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 Jeff Mieras during the period of August 3 to 11 and on the results generated by that field work.

Respectfully submitted,

Gordon G Richards

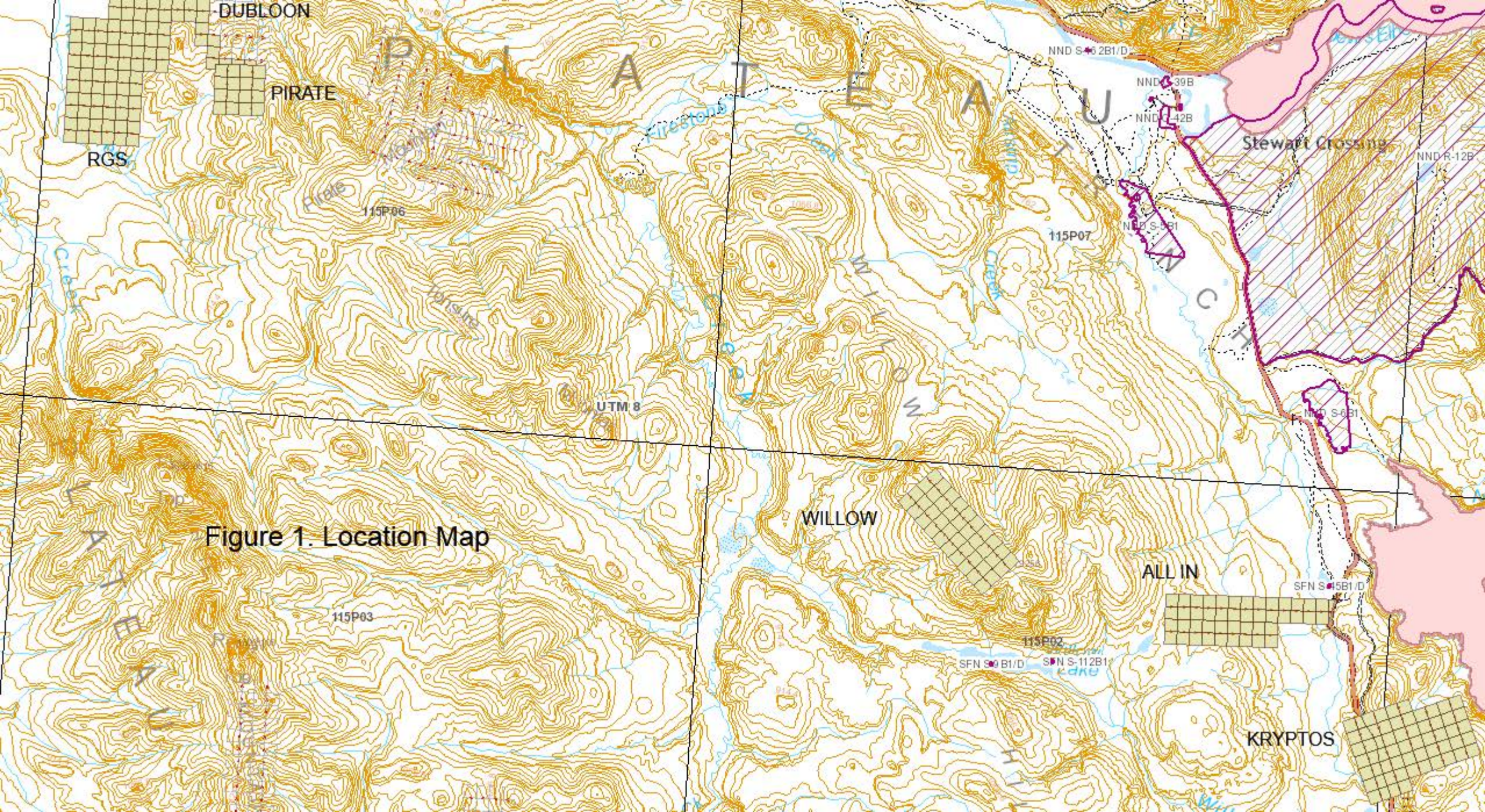
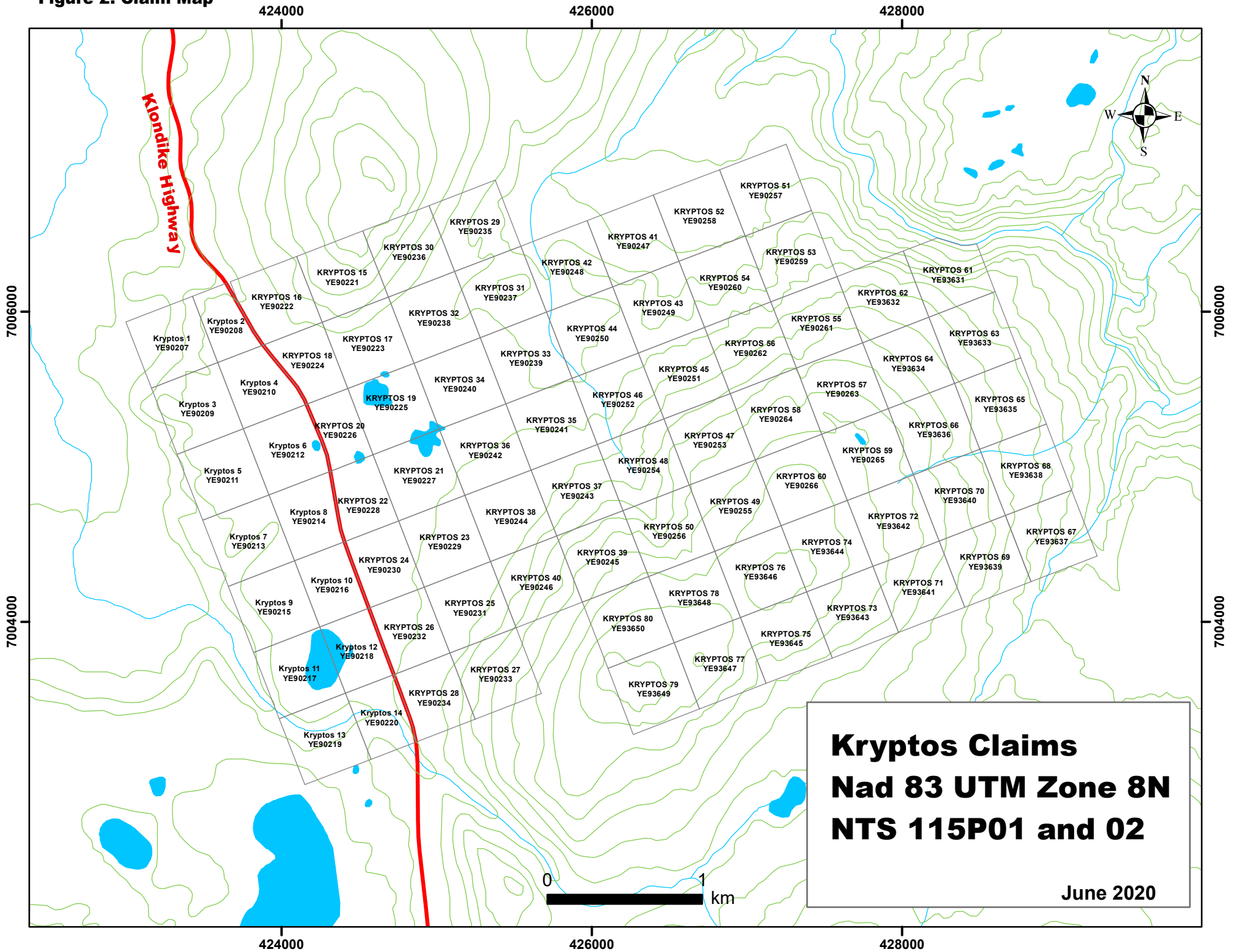


Figure 1. Location Map

Figure 2. Claim Map





## EARLY JURASSIC

EJgA

Aishihik suite: granodiorite to monzogranite ( $\pm$  quartz monzonite and quartz monzodiorite); commonly K-feldspar porphyritic and hornblende-bearing; common biotite  $\pm$  chlorite alteration with secondary epidote; prominent magmatic epidote; intrudes Stikinia and Yukon Tanana terranes; generally underformed but locally foliated plutons and/or dykes.

## PERMIAN

### Metaplutonic and metavolcanic rocks of the Klondike arc

PgSC

Sulphur Creek suite: quartz and K-feldspar porphyritic to augen monzogranite; strain varies from moderately foliated to gneissic (including porphyroclastic straight gneiss); biotite bearing; locally is the protolith to felsic Klondike Schist.

### Klondike Schist (PK1, PK2)

PK2

Metafelsite, commonly porphyritic or augen-textured; possibly derived from felsic volcanic rocks or hypabyssal intrusions; locally derived from equigranular to augen monzogranite; locally exhibits decussate amphiboles pseudomorphed to chlorite-biotite; local coarse porphyroblastic garnet.

PK1

Intermediate to mafic, light-green, pyrite-chlorite schist; commonly exhibits a pitted surface indicative of coarse pyrite cubes having weathered out; primary volcanic textures locally preserved.

## 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.

## 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)

DMF2

Greenstone - greenschist facies metabasite; chlorite-actinolite schist; preserves relict volcanic and volcanoclastic textures when viewed perpendicular to the stretching lineation; commonly medium green; possibly lower grade equivalent of the garnet-amphibolites assigned to the Snowcap Assemblage.

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)

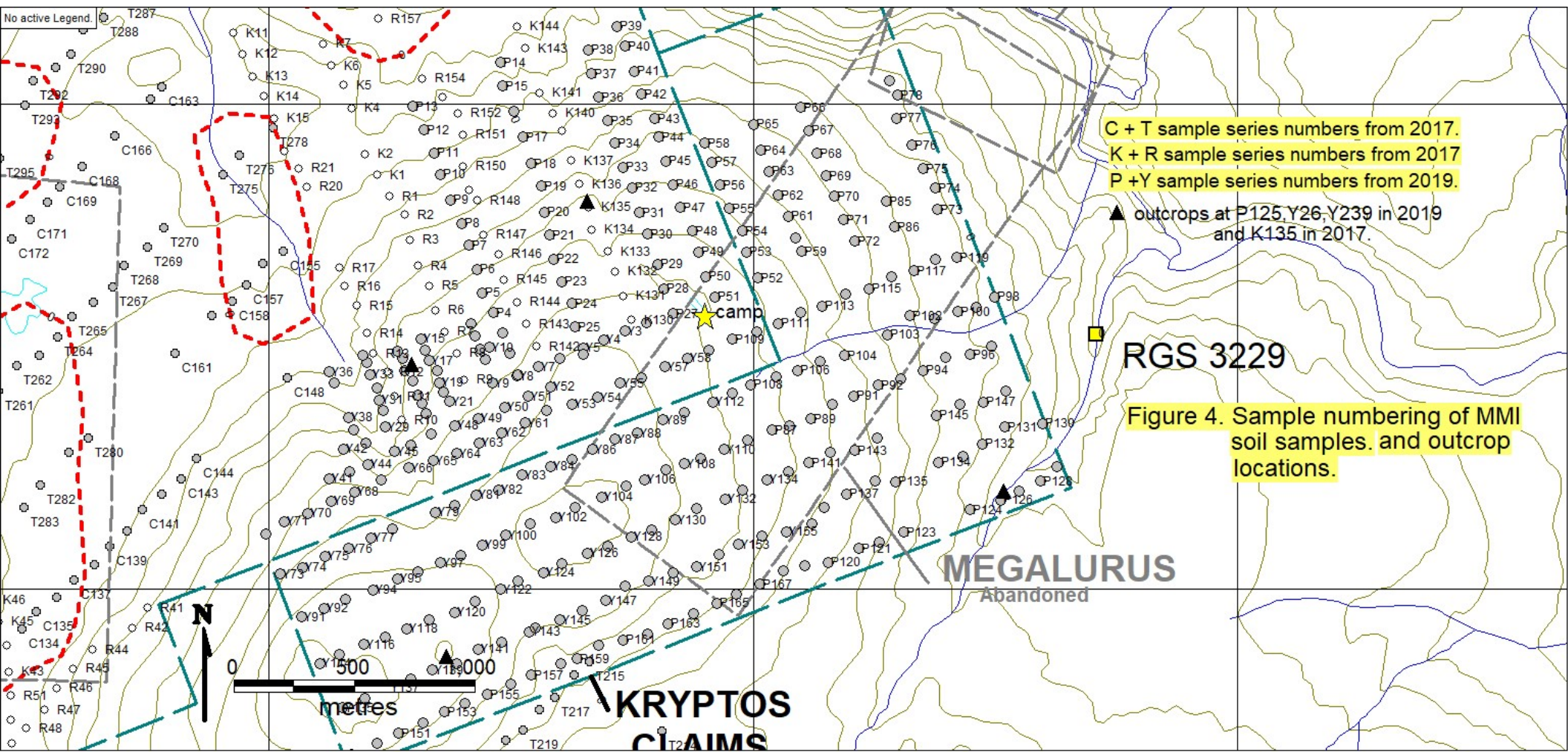
PDS3

Amphibolite schist to garnet-amphibolite; metabasite; usually garnet-hornblende-plagioclase or hornblende-plagioclase, with local chlorite-biotite; probably derived from mafic volcanic to volcanoclastic rocks; some layers that are internally homogeneous may be mafic sills; more intermediate varieties can have rosettes of decussate, larger hornblende.

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 3 taken from: Ryan, J.J., Colpron, M., and Hayward, N., 2010. Geology, southwestern McQuesten and parts of northern Carmacks, Yukon; Geological Survey of Canada, Canadian Geoscience Map 7 (preliminary version), scale 1:125,000.



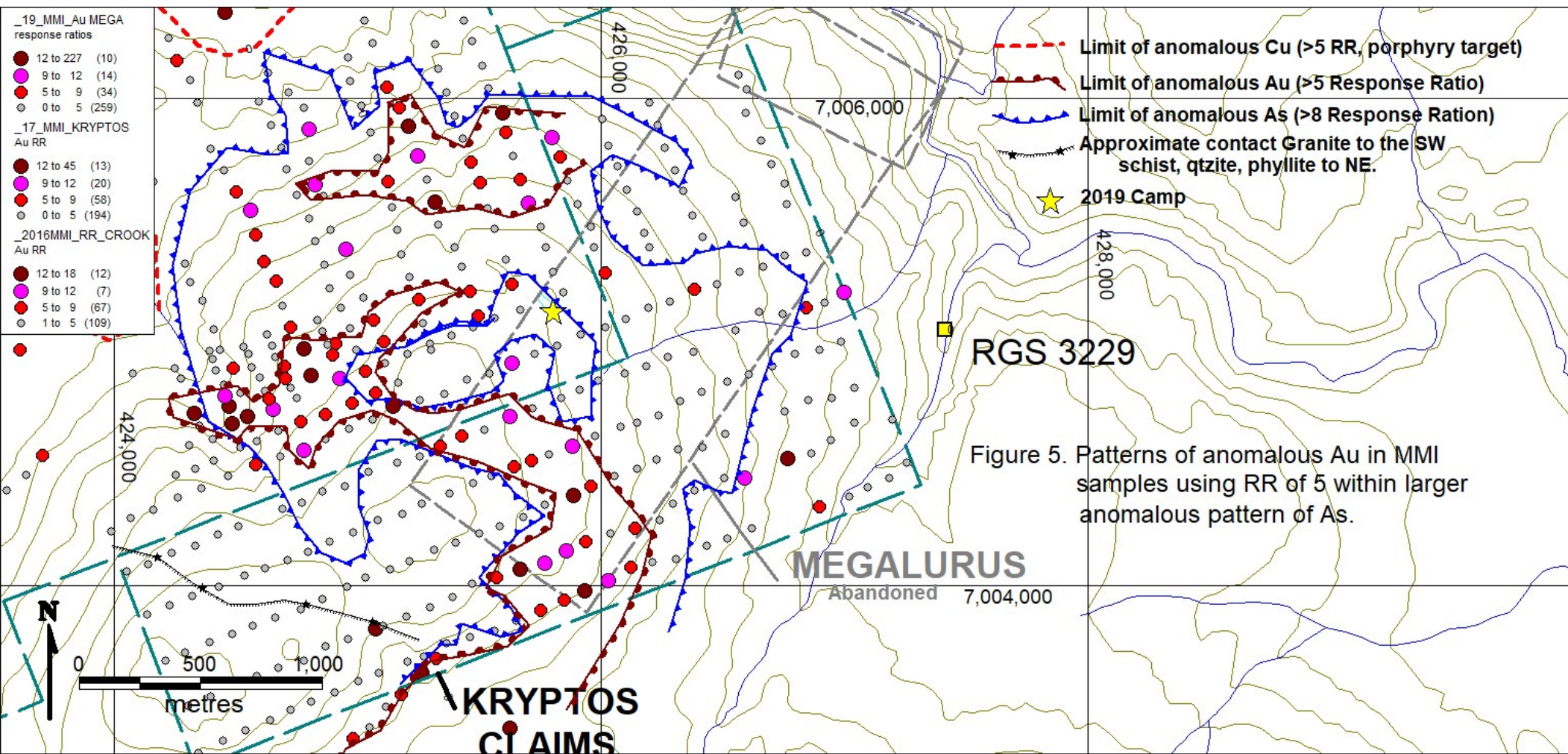


Figure 5. Patterns of anomalous Au in MMI samples using RR of 5 within larger anomalous pattern of As.

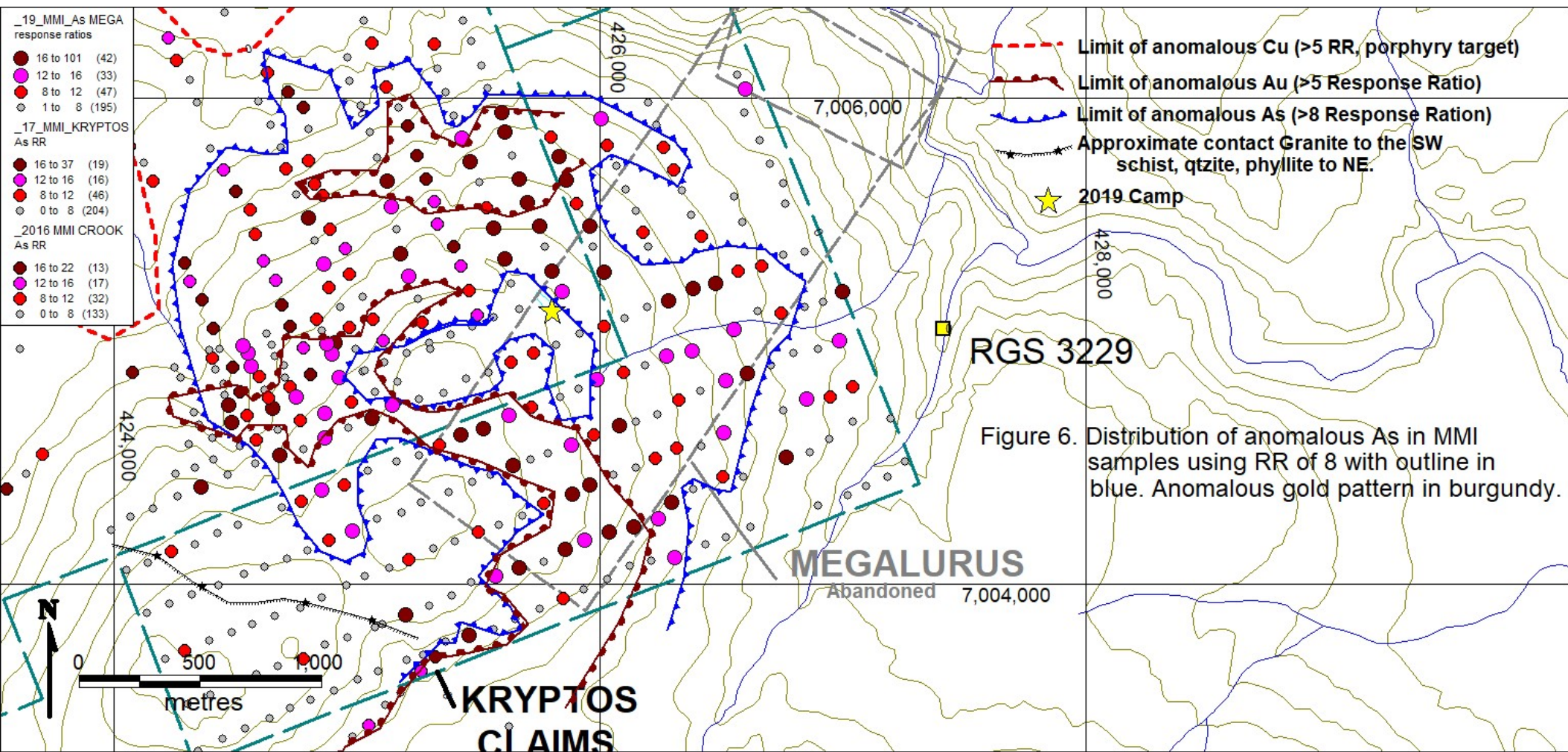


Figure 6. Distribution of anomalous As in MMI samples using RR of 8 with outline in blue. Anomalous gold pattern in burgundy.

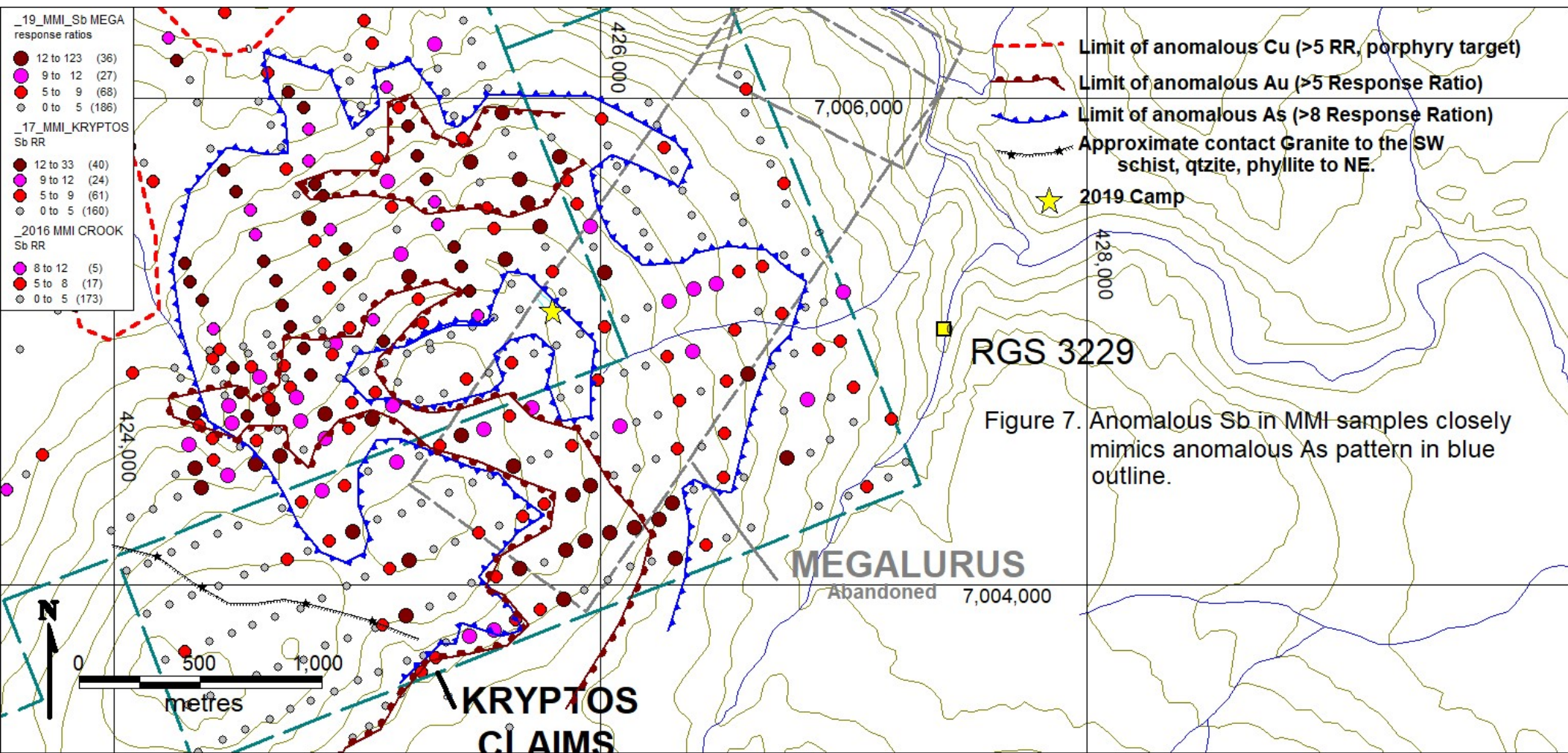
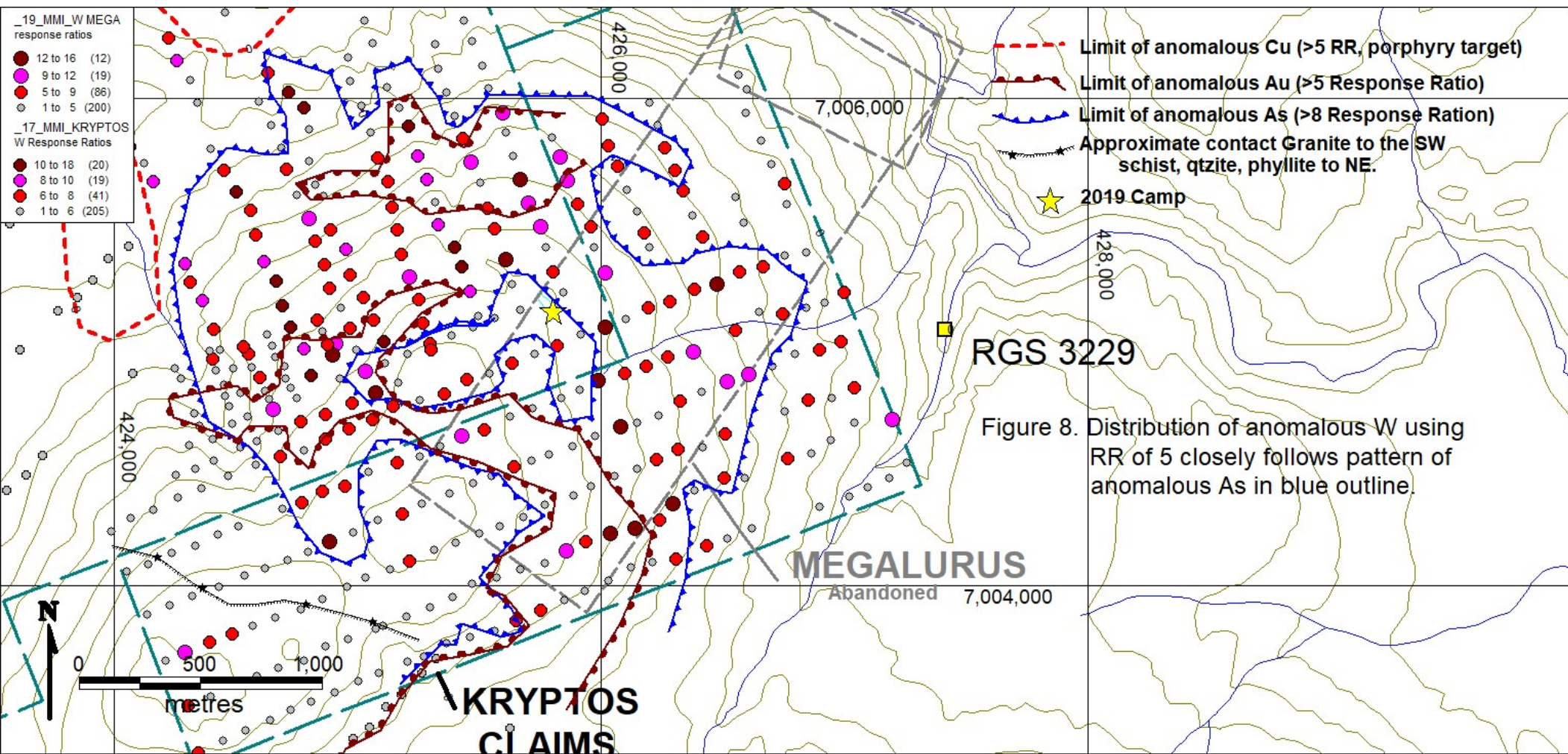


Figure 7. Anomalous Sb in MMI samples closely mimics anomalous As pattern in blue outline.



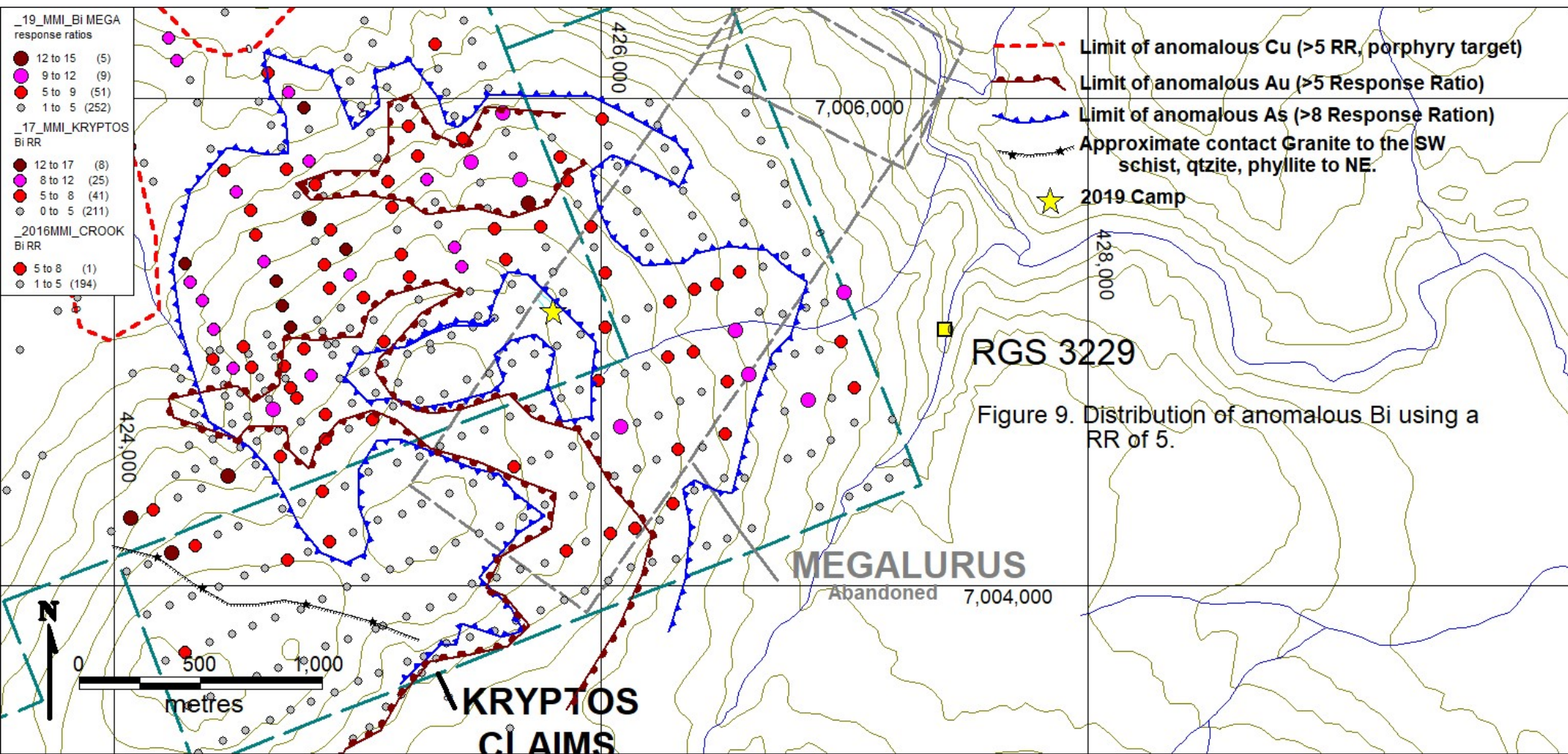
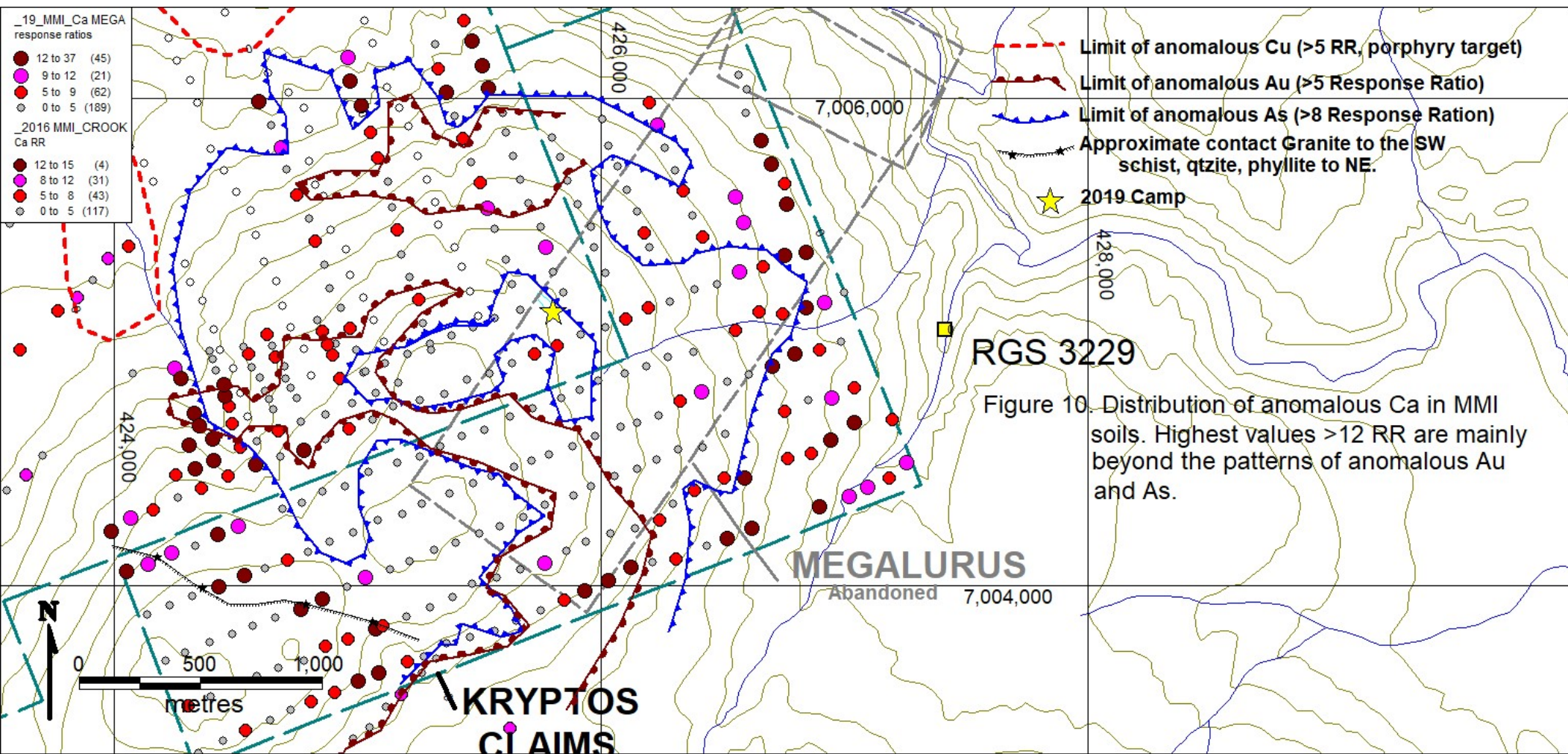


Figure 9. Distribution of anomalous Bi using a RR of 5.



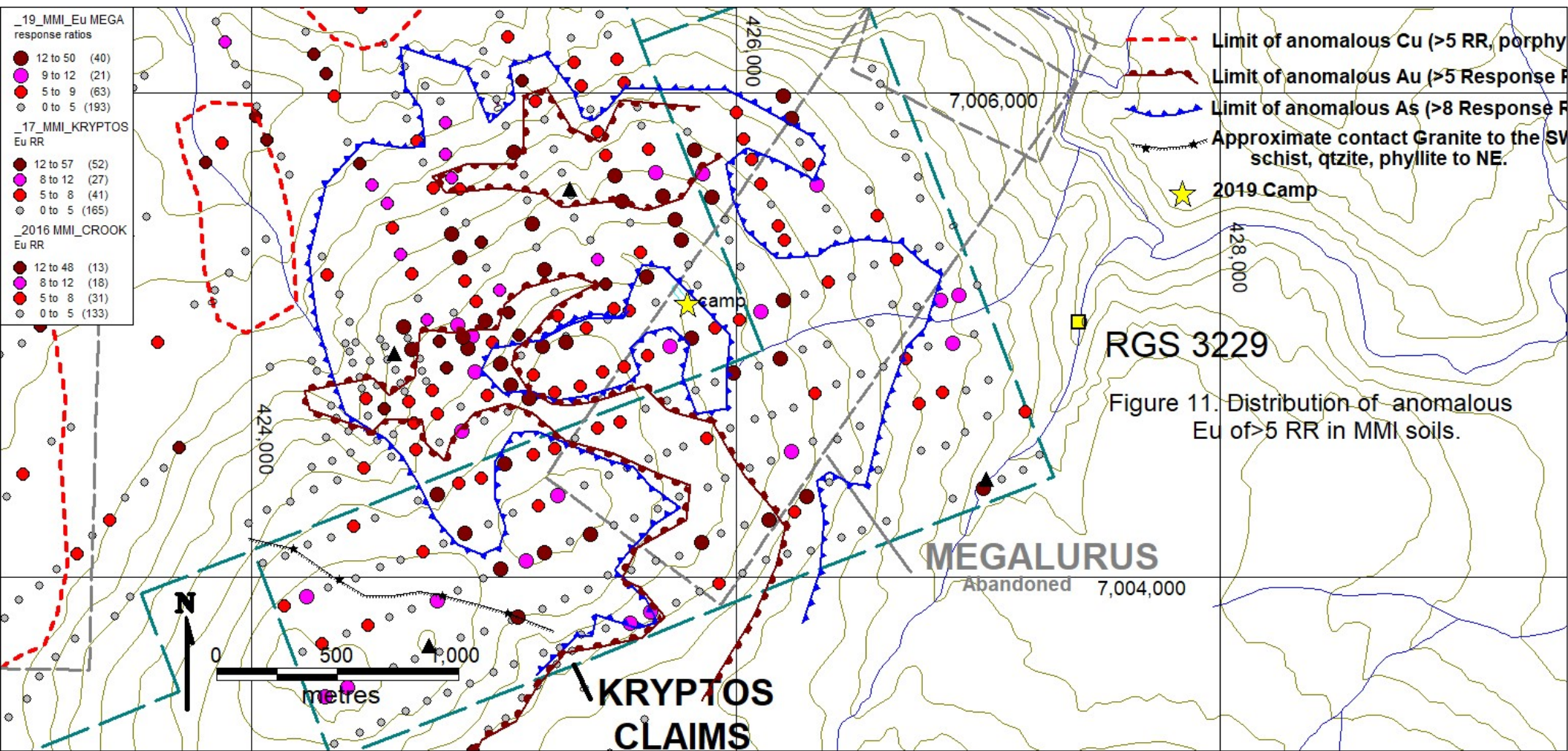


Figure 11. Distribution of anomalous Eu of >5 RR in MMI soils.

ID	UTME	UTMN	WTKG	RR Ag	RR As	RR Au	RR Bi	RR Ca	RR Cu	RR Eu	RR Fe	RR Gd	RR K	RR La	RR Mg	RR Mn	RR Ni	RR Pb	RR Sb	RR Sc	RR Sr	RR Ti	RR Tl	RR W	RR Zn
Y2	427560	7005100	0.14	3	3	2	1	1	2	5	1	5	1	8	1	1	1	3	1	3	1	12	6	3	1
Y3	427472	7005064	0.17	4	5	3	1	1	1	2	1	2	2	3	1	1	1	3	1	2	1	7	5	1	1
Y4	427384	7005028	0.11	10	2	2	1	2	1	5	0	5	1	8	2	1	1	3	1	3	1	8	3	1	1
Y5	427297	7004995	0.18	3	7	3	4	2	1	3	2	2	2	6	1	4	1	2	4	2	1	19	5	5	3
Y6	427203	7004953	0.13	9	3	1	1	2	2	16	0	16	1	24	2	1	1	4	1	10	2	15	4	3	1
Y7	427112	7004917	0.15	6	3	2	1	1	1	1	1	1	1	1	1	0	1	2	0	1	1	3	3	1	1
Y8	427023	7004878	0.14	5	3	1	1	2	1	7	1	7	1	8	2	1	1	4	1	4	2	14	2	2	2
Y9	426923	7004850	0.17	2	12	10	1	5	2	10	1	10	4	15	3	5	2	1	4	5	4	12	2	4	2
Y10	426910	7004997	0.14	3	23	7	4	4	2	11	1	11	8	20	2	12	2	4	11	6	3	33	5	9	4
Y11	426894	7004947	0.18	1	13	8	2	7	4	21	1	22	4	22	5	8	8	1	5	5	5	12	2	14	5
Y12	426873	7004991	0.16	1	12	4	4	5	5	15	1	14	4	21	3	5	4	2	4	7	3	15	3	8	2
Y13	426852	7005044	0.17	1	7	3	3	5	7	10	2	10	2	7	4	11	6	2	2	7	5	9	3	4	3
Y14	426833	7005093	0.22	1	10	0	4	1	1	1	2	1	3	2	1	2	2	3	3	2	1	19	6	6	8
Y15	426628	7005032	0.16	3	3	1	1	5	1	14	0	14	1	17	4	0	1	3	1	7	5	15	4	4	1
Y16	426645	7004987	0.15	1	2	1	1	1	1	1	1	1	1	0	1	7	1	3	1	1	1	5	1	1	11
Y17	426661	7004941	0.12	2	3	3	1	5	1	13	0	13	1	28	3	2	1	4	1	9	6	9	3	2	1
Y18	426697	7004902	0.17	1	7	5	5	2	6	4	2	4	2	5	1	4	2	2	5	4	1	10	5	3	9
Y19	426703	7004852	0.18	3	3	5	1	1	10	0	3	0	1	0	1	1	4	0	2	2	2	4	3	1	1
Y20	426722	7004812	0.2	2	8	4	5	1	6	2	2	2	3	1	1	3	3	2	5	3	1	12	5	3	6
Y21	426747	7004773	0.16	2	12	3	5	3	5	8	1	8	4	11	2	26	5	2	10	6	2	14	2	4	11
Y22	426651	7004725	0.17	2	31	10	10	1	5	6	3	7	10	15	1	25	2	3	22	7	1	41	6	10	9
Y23	426634	7004767	0.13	1	8	6	1	3	1	1	1	1	3	1	2	3	2	3	8	1	2	11	2	2	12
Y24	426617	7004800	0.14	5	5	2	2	1	2	3	1	3	2	5	1	4	1	4	3	3	1	11	4	2	2
Y25	426595	7004857	0.19	1	10	2	3	1	2	1	2	1	3	1	1	5	2	3	9	2	1	20	4	5	15
Y26	426562	7004900	0.15	2	12	1	5	1	2	1	2	1	4	1	1	6	2	3	6	2	1	17	4	4	24
Y27	426552	7004953	0.12	8	12	0	3	5	2	1	1	1	4	2	3	83	7	3	4	2	3	15	3	6	25
Y28	426531	7004981	0.14	1	15	0	5	1	1	1	2	1	5	2	1	4	2	5	3	2	1	26	5	7	4
Y29	426481	7004668	0.18	12	28	76	1	5	3	4	1	4	9	3	3	36	4	2	9	1	4	1	2	1	9
Y30	426472	7004738	0.18	4	16	16	3	6	1	5	1	5	6	5	4	26	4	2	11	4	5	4	2	1	7
Y31	426455	7004780	0.17	17	1	11	1	19	4	2	0	2	0	1	3	1	4	0	2	0	7	0	0	1	1
Y32	426447	7004828	0.14	2	1	1	1	30	1	1	0	1	0	0	3	19	2	0	1	0	7	0	0	1	6
Y33	426416	7004885	0.16	7	3	1	1	1	3	1	1	1	1	1	1	16	3	2	2	2	1	3	1	1	19
Y34	426404	7004933	0.12	9	10	1	5	0	4	1	2	1	3	2	1	76	5	3	5	3	1	18	6	6	45
Y35	426389	7004965	0.13	2	7	0	2	1	1	1	1	1	2	1	2	1	2	5	2	2	2	20	2	4	3
Y36	426248	7004895	0.19	1	3	1	1	9	1	1	1	1	1	1	4	17	2	1	2	1	4	2	2	1	15
Y37	426271	7004851	0.2	2	1	1	1	15	2	1	1	1	0	1	4	15	3	1	0	1	7	1	1	1	6
Y38	426327	7004708	0.14	4	7	227	1	22	3	1	0	1	2	1	5	9	3	0	23	0	7	0	0	1	1
Y39	426348	7004658	0.18	3	1	3	1	21	3	1	1	1	0	1	4	0	4	1	5	0	9	0	1	1	9
Y40	426401	7004602	0.17	2	1	4	1	24	2	1	0	1	0	0	4	1	4	0	5	0	13	0	0	1	16
Y41	426250	7004455	0.15	1	2	1	3	6	1	1	1	1	1	1	2	12	2	3	3	1	3	5	4	1	8
Y42	426307	7004578	0.22	3	1	4	1	21	9	1	1	1	0	1	2	77	7	0	10	1	12	0	0	1	2
Y43	426332	7004482	0.21	3	2	3	1	16	12	2	1	2	1	2	2	128	7	0	14	3	9	0	0	1	5
Y44	426407	7004514	0.22	3	1	1	1	19	7	2	1	3	0	1	4	7	14	1	7	1	10	0	0	1	9
Y45	426518	7004568	0.26	4	3	3	1	7	4	2	1	3	1	2	5	87	9	3	4	2	7	1	2	1	18
Y46	426585	7004593	0.18	2	8	1	4	1	1	1	1	1	3	1	2	4	1	6	7	1	2	14	5	3	11
Y47	426671	7004638	0.21	5	5	3	1	5	1	5	1	6	2	8	5	6	2	3	4	2	4	10	3	4	2
Y48	426765	7004674	0.16	1	10	6	4	3	5	7	2	8	3	6	2	16	7	2	11	4	2	8	3	6	12
Y49	426865	7004703	0.22	2	15	7	6	1	3	3	2	3	5	5	1	5	2	2	13	4	1	19	6	8	6
Y50	426974	7004751	0.15	2	8	7	3	1	2	5	1	5	3	5	1	3	2	3	7	4	1	14	5	6	3
Y51	427072	7004794	0.14	6	7	5	2	3	1	25	1	29	2	29	3	1	1	4	5	10	3	29	4	16	2
Y52	427165	7004834	0.15	3	5	2	1	1	1	5	1	5	2	9	1	1	1	3	4	4	1	20	5	4	2
Y53	427253	7004764	0.12	6	3	1	1	2	2	7	1	8	1	11	1	1	0	3	2	6	1	16	3	4	1
Y54	427355	7004790	0.15	4	5	1	1	2	1	6	1	7	2	9	1	1	1	2	3	4	1	24	5	5	2
Y55	427449	7004849	0.26	3	7	3	4	1	2	6	1	6	2	10	1	2	1	3	5	6	1	31	8	7	3
Y56	427539	7004871	0.12	6	3	2	1	2	2	8	1	10	1	11	2	1	1	3	2	8	2	12	3	4	1
Y57	427633	7004916	0.12	5	10	9	3	3	2	6	1	7	3	6	2	5	2	2	7	4	2	17	3	5	2
Y58	427727	7004953	0.18	1	10	4	2	5	4	10	1	11	3	8	3	7	5	2	3	5	3	6	2	4	4

Table 3. Response Ratios for Selected Elements for MMI Soil Samples MEGA Project

ID	UTME	UTMN	WTKG	RR Ag	RR As	RR Au	RR Bi	RR Ca	RR Cu	RR Eu	RR Fe	RR Gd	RR K	RR La	RR Mg	RR Mn	RR Ni	RR Pb	RR Sb	RR Sc	RR Sr	RR Ti	RR Tl	RR W	RR Zn
Y59	427818	7004987	0.2	3	3	2	1	5	2	16	1	18	1	16	3	3	2	4	2	8	4	10	2	5	1
Y60	427145	7004737	0.13	1	13	13	3	3	2	12	1	13	4	16	2	1	1	3	11	8	2	26	5	7	1
Y61	427059	7004684	0.2	1	16	4	6	2	1	1	2	2	6	5	2	9	2	3	13	3	1	18	5	6	7
Y62	426962	7004644	0.15	3	7	4	2	8	3	4	1	5	2	3	4	7	4	2	6	2	5	6	2	5	7
Y63	426868	7004602	0.13	1	12	2	5	3	2	9	1	9	4	12	2	16	3	2	9	5	3	23	4	8	6
Y64	426776	7004559	0.16	7	1	9	1	20	6	3	0	4	0	2	11	1	7	1	2	1	16	0	0	1	2
Y65	426680	7004530	0.18	2	20	4	6	3	3	6	2	7	7	12	2	2	2	3	15	4	1	18	9	7	4
Y66	426579	7004500	0.12	1	3	6	1	13	9	1	3	1	1	0	9	49	8	0	16	1	10	1	0	1	4
Y67	426465	7004452	0.19	3	7	2	12	5	21	6	3	6	2	5	2	67	22	3	9	6	2	4	2	3	47
Y68	426355	7004400	0.15	1	28	2	4	7	2	3	2	2	9	4	2	20	3	2	123	2	3	6	5	1	11
Y69	426258	7004362	0.15	1	1	0	3	3	1	3	1	3	0	2	2	7	3	12	1	1	4	1	2	1	46
Y70	426159	7004313	0.18	2	2	1	7	6	2	1	2	2	1	2	2	9	2	10	3	1	2	3	4	1	36
Y71	426065	7004278	0.17	16	2	2	15	11	8	2	1	3	1	2	5	27	10	70	2	2	6	1	2	1	139
Y72	425986	7004225	0.16	3	1	1	1	17	1	1	1	2	0	1	6	5	8	1	1	1	10	0	0	1	20
Y73	426047	7004062	0.16	3	1	1	1	16	1	2	0	3	0	10	7	4	1	11	0	1	11	0	2	1	1
Y74	426138	7004090	0.26	1	1	0	1	10	1	4	1	4	0	10	5	133	3	1	2	2	5	2	2	1	7
Y75	426233	7004136	0.2	4	10	2	12	11	4	2	1	2	3	1	4	9	4	2	3	1	7	1	3	1	14
Y76	426330	7004167	0.19	1	5	1	5	1	2	1	2	1	2	1	1	8	3	11	2	2	1	6	5	1	14
Y77	426423	7004211	0.19	18	1	3	1	14	3	5	1	5	0	6	5	16	10	8	2	2	9	0	2	1	39
Y78	426510	7004246	0.17	3	1	2	1	10	5	3	1	3	0	3	5	2	5	3	1	2	5	1	2	1	6
Y79	426687	7004317	0.24	1	3	1	2	2	1	1	2	1	1	1	2	2	1	2	2	1	1	4	3	1	7
Y80	426769	7004344	0.2	1	10	1	3	3	3	13	1	14	3	17	2	9	2	2	5	7	2	16	4	6	4
Y81	426854	7004388	0.17	1	13	3	6	1	3	5	2	5	4	6	1	5	2	2	10	5	1	23	8	8	6
Y82	426947	7004409	0.17	2	10	1	4	2	2	6	2	6	3	10	2	1	2	2	8	5	1	24	6	8	3
Y83	427044	7004470	0.15	1	3	1	1	1	2	12	1	13	1	11	1	1	1	4	2	5	1	8	4	4	1
Y84	427162	7004505	0.14	2	7	2	3	2	2	5	1	6	2	10	1	4	2	8	9	4	2	22	5	7	3
Y85	427252	7004533	0.16	2	5	4	1	1	1	7	1	7	2	12	1	2	1	3	4	4	1	18	3	4	2
Y86	427337	7004575	0.1	2	10	5	1	0	2	2	1	3	3	6	1	6	1	4	6	3	1	12	4	4	2
Y87	427427	7004617	0.17	2	40	8	4	3	2	6	2	7	13	11	3	2	1	5	14	4	2	40	14	10	3
Y88	427520	7004642	0.14	1	16	4	4	2	2	5	1	6	6	13	1	3	1	6	9	3	2	20	8	6	2
Y89	427625	7004698	0.14	3	12	9	2	1	1	2	1	2	4	3	1	2	1	4	5	2	1	14	4	3	2
Y90	427715	7004729	0.13	3	10	4	4	1	1	1	1	1	3	1	1	3	1	4	9	2	1	16	6	3	5
Y91	426135	7003885	0.15	1	3	0	2	1	2	5	1	5	1	17	1	1	1	4	2	3	1	10	5	2	2
Y92	426227	7003921	0.12	0	3	0	2	2	1	9	1	10	1	18	1	1	1	4	2	3	1	8	5	3	1
Y93	426317	7003959	0.15	0	1	0	1	0	1	1	0	1	0	2	0	1	1	4	1	1	1	3	2	1	2
Y94	426429	7003996	0.15	1	1	1	1	15	11	3	2	4	0	3	8	21	7	1	1	3	11	0	1	1	4
Y95	426532	7004043	0.2	4	1	1	1	12	8	4	1	4	0	2	8	5	20	3	3	3	7	0	2	1	62
Y96	426616	7004072	0.19	1	1	1	1	2	2	2	2	2	0	1	1	12	3	8	1	2	1	1	3	1	17
Y97	426710	7004108	0.18	1	5	2	6	5	3	6	1	7	2	12	2	33	3	7	7	3	2	12	4	4	10
Y98	426793	7004140	0.15	1	3	1	1	4	1	1	1	1	1	1	2	3	1	6	3	2	2	12	4	3	2
Y99	426881	7004182	0.16	2	10	1	6	4	2	18	1	19	3	30	2	9	2	3	6	6	3	40	5	12	4
Y100	426979	7004221	0.16	1	12	1	4	2	1	2	1	2	4	4	1	4	1	3	14	1	1	11	8	3	2
Y101	427080	7004269	0.12	6	1	1	1	2	2	3	0	3	0	5	1	0	1	3	1	2	1	4	2	1	1
Y102	427183	7004296	0.13	3	5	1	2	2	2	5	1	6	2	5	1	0	1	2	2	5	1	18	3	5	1
Y103	427264	7004338	0.12	5	2	1	1	2	2	11	1	11	1	12	1	2	1	3	2	7	2	12	4	4	1
Y104	427374	7004379	0.16	4	1	1	1	1	1	2	1	2	0	3	1	1	1	2	1	1	1	4	4	1	1
Y105	427473	7004424	0.14	5	2	1	1	2	1	2	0	2	1	7	1	1	1	4	3	2	2	8	5	1	1
Y106	427550	7004451	0.14	2	3	3	1	1	2	4	1	4	1	7	1	1	1	4	3	3	2	11	4	3	1
Y107	427640	7004491	0.16	2	56	7	5	1	1	1	2	2	19	5	1	7	1	6	32	2	1	25	16	6	4
Y108	427714	7004517	0.16	5	3	5	1	2	1	1	0	1	1	1	2	0	1	3	1	1	2	3	3	1	1
Y109	427783	7004539	0.17	2	7	1	1	1	1	1	1	1	2	2	2	1	1	2	2	1	1	9	2	2	2
Y110	427881	7004576	0.14	1	12	10	4	1	4	6	1	7	4	11	1	1	1	2	7	4	1	11	8	4	6
Y111	427974	7004616	0.14	1	8	4	4	2	4	4	2	4	3	6	1	3	3	2	3	3	1	10	4	4	4
Y112	427833	7004771	0.17	2	3	2	1	1	3	3	1	3	1	3	1	2	3	2	2	2	1	4	3	1	5
Y113	427912	7004807	0.17	2	5	4	4	1	1	1	2	1	2	2	1	4	2	2	2	1	1	6	2	1	11
Y114	426210	7003694	0.15	1	1	0	1	1	1	0	1	0	0	0	2	1	1	1	1	1	1	10	2	2	3
Y115	426290	7003729	0.14	1	10	1	6	1	2	5	2	5	3	13	2	4	2	3	6	4	1	36	7	9	6

Table 3. Response Ratios for Selected Elements for MMI Soil Samples MEGA Project

ID	UTME	UTMN	WTKG	RR Ag	RR As	RR Au	RR Bi	RR Ca	RR Cu	RR Eu	RR Fe	RR Gd	RR K	RR La	RR Mg	RR Mn	RR Ni	RR Pb	RR Sb	RR Sc	RR Sr	RR Ti	RR Tl	RR W	RR Zn
Y116	426391	7003771	0.14	1	5	1	1	1	1	1	1	1	2	2	2	4	2	4	3	2	1	16	7	5	5
Y117	426482	7003803	0.15	1	5	1	1	2	2	6	1	6	2	13	1	4	1	2	2	5	1	16	9	5	2
Y118	426569	7003836	0.12	1	2	0	1	4	1	2	1	2	1	3	2	1	1	3	1	2	3	8	2	2	1
Y119	426661	7003872	0.14	1	1	2	1	3	2	3	0	3	0	4	1	0	1	4	1	1	1	2	5	1	1
Y120	426765	7003904	0.16	2	1	1	1	25	2	9	0	8	0	9	5	2	2	1	0	3	11	0	1	1	1
Y121	426853	7003948	0.13	3	1	3	1	24	4	3	0	3	0	1	22	4	20	1	3	2	13	0	0	1	0
Y122	426956	7003998	0.13	1	1	1	1	4	0	1	1	1	0	1	3	2	1	1	1	1	2	6	2	1	3
Y123	427029	7004035	0.17	1	1	4	1	9	2	25	0	30	0	35	7	4	3	2	1	5	9	2	2	3	1
Y124	427133	7004067	0.14	9	5	2	1	2	2	9	1	12	2	9	2	1	3	6	5	4	2	15	5	4	2
Y125	427211	7004104	0.14	4	10	2	2	3	2	17	1	19	3	26	2	2	1	5	14	7	2	23	7	5	2
Y126	427314	7004149	0.12	5	3	1	1	4	2	4	1	4	1	5	3	1	1	3	1	3	3	13	3	3	1
Y127	427401	7004178	0.1	7	1	4	1	3	4	18	0	18	0	20	4	2	2	5	1	10	4	8	3	3	1
Y128	427496	7004216	0.1	4	8	4	1	2	2	2	1	2	3	3	2	3	2	4	5	3	1	19	5	4	2
Y129	427582	7004244	0.17	7	3	2	1	1	2	2	1	2	1	3	2	1	1	5	2	4	2	14	3	3	1
Y130	427679	7004285	0.13	2	3	4	1	2	2	3	1	3	1	3	1	6	3	6	6	2	2	3	2	1	17
Y131	427767	7004333	0.14	1	10	2	1	2	1	3	1	3	3	4	2	1	1	6	5	3	2	14	4	3	1
Y132	427884	7004372	0.2	2	28	12	3	1	4	3	1	4	9	5	1	3	2	2	100	4	1	14	7	4	3
Y133	427955	7004409	0.13	4	31	6	2	3	2	4	1	6	10	4	2	2	3	3	14	3	3	16	4	4	4
Y134	428055	7004451	0.15	3	3	1	1	1	1	2	1	3	1	4	1	1	1	3	1	3	1	10	2	2	1
Y135	426302	7003509	0.12	3	3	2	1	5	4	10	1	11	1	15	5	1	1	3	2	7	4	22	5	5	1
Y136	426395	7003547	0.11	3	1	1	1	2	4	11	0	12	0	14	2	1	1	5	1	10	2	5	2	1	1
Y137	426494	7003594	0.11	2	3	1	1	1	2	1	1	1	1	2	1	1	2	4	1	2	1	6	2	1	8
Y138	426584	7003630	0.13	2	1	1	1	2	3	2	0	2	0	3	1	0	0	2	1	3	1	3	3	1	1
Y139	426673	7003666	0.11	19	3	3	3	3	2	2	1	2	1	3	2	2	1	6	2	3	3	16	5	3	2
Y140	426777	7003694	0.11	2	8	0	1	3	1	0	2	0	3	0	2	31	1	1	2	2	2	20	3	4	10
Y141	426866	7003752	0.16	2	3	1	1	6	1	1	1	1	1	2	2	1	1	2	1	2	3	9	4	1	2
Y142	426959	7003780	0.11	1	3	0	1	5	1	1	2	1	1	1	2	5	1	3	3	1	3	10	2	1	2
Y143	427073	7003823	0.16	5	1	18	1	16	4	1	0	1	0	1	16	5	5	0	2	1	7	0	2	1	2
Y144	427100	7003838	0.14	2	7	3	3	5	2	13	1	13	2	12	4	4	4	3	7	9	3	20	2	4	2
Y145	427199	7003873	0.14	3	40	2	1	4	1	2	1	2	13	1	2	6	2	3	15	2	4	12	4	3	3
Y146	427295	7003912	0.15	2	3	1	1	4	1	2	1	1	1	1	2	1	2	2	2	2	3	10	2	1	1
Y147	427389	7003953	0.13	18	5	1	1	1	1	1	1	1	2	1	1	8	2	2	2	2	1	8	3	1	2
Y148	427469	7004011	0.09	6	3	1	1	2	1	1	1	0	1	0	2	9	2	3	1	2	3	6	2	1	2
Y149	427568	7004033	0.11	6	12	6	1	1	1	1	1	1	4	1	1	2	1	4	7	2	1	17	4	3	3
Y150	427667	7004068	0.13	6	16	23	1	1	1	1	1	1	6	1	2	2	2	5	12	2	2	12	4	3	2
Y151	427766	7004092	0.15	3	1	9	1	10	4	4	1	5	0	2	7	3	12	2	4	3	8	0	0	1	4
Y152	427857	7004144	0.18	2	21	11	7	4	3	12	2	12	7	20	3	12	2	2	26	6	3	26	3	9	4
Y153	427938	7004183	0.13	6	15	6	3	2	2	2	1	2	5	2	2	4	2	4	12	3	2	31	5	7	4
Y154	428036	7004217	0.13	4	21	2	6	2	2	2	2	2	7	4	2	5	2	4	21	3	2	37	5	12	6
Y155	428138	7004237	0.14	7	25	6	5	4	3	13	2	14	8	16	3	25	4	3	48	8	3	44	3	12	6
P1	427029	7004882	0.19	5	1	5	1	3	2	50	0	59	0	9	3	1	2	3	0	18	4	1	2	10	0
P2	426993	7004972	0.23	10	5	4	2	4	2	5	1	5	2	4	3	2	4	2	3	2	4	10	3	3	4
P3	426966	7005057	0.17	3	8	4	3	8	5	18	1	20	3	19	5	3	7	2	5	8	5	14	2	8	2
P4	426929	7005141	0.17	6	3	1	1	1	2	5	0	5	1	7	1	1	0	5	2	3	1	9	4	3	1
P5	426882	7005222	0.26	1	10	1	5	2	2	6	1	7	3	6	1	3	1	3	5	4	1	25	5	8	2
P6	426861	7005319	0.18	1	12	3	5	4	3	13	1	14	4	15	3	5	2	4	6	7	3	28	4	8	5
P7	426826	7005418	0.18	3	3	3	3	6	8	34	1	36	1	28	4	3	5	4	5	18	4	16	2	8	2
P8	426797	7005508	0.17	2	18	1	13	1	2	3	2	2	6	4	1	15	2	4	12	3	1	27	6	10	17
P9	426749	7005605	0.19	3	1	1	1	5	3	6	1	6	0	1	4	2	6	4	0	3	8	1	0	1	15
P10	426708	7005710	0.29	3	10	1	6	2	2	1	3	1	3	1	1	7	3	4	6	2	1	11	5	5	18
P11	426684	7005799	0.2	1	3	3	1	10	6	7	1	8	1	5	9	7	6	2	4	5	8	4	2	2	7
P12	426641	7005894	0.19	3	3	1	2	1	1	1	1	1	1	1	0	14	1	4	2	1	1	7	2	2	3
P13	426593	7005990	0.23	4	1	3	1	17	5	4	0	5	0	2	11	1	6	0	1	1	14	0	2	1	6
P14	426957	7006172	0.22	2	1	2	1	11	2	1	1	1	0	1	9	1	3	1	2	1	7	1	3	1	4
P15	426967	7006075	0.24	3	1	2	1	15	5	3	0	3	0	2	6	5	5	1	2	1	10	0	2	1	2
P16	427013	7005972	0.19	4	1	3	1	19	6	3	0	3	0	2	16	1	4	1	1	1	13	0	0	1	2
P17	427050	7005864	0.34	4	2	3	1	8	2	4	1	4	1	3	6	1	4	2	2	3	6	3	1	1	3

Table 3. Response Ratios for Selected Elements for MMI Soil Samples MEGA Project

ID	UTME	UTMN	WTKG	RR Ag	RR As	RR Au	RR Bi	RR Ca	RR Cu	RR Eu	RR Fe	RR Gd	RR K	RR La	RR Mg	RR Mn	RR Ni	RR Pb	RR Sb	RR Sc	RR Sr	RR Ti	RR Tl	RR W	RR Zn
P18	427081	7005756	0.18	2	7	3	2	6	7	18	1	19	2	19	3	8	5	2	5	8	4	10	2	5	9
P19	427124	7005662	0.23	1	16	6	6	4	3	4	2	4	6	4	3	8	2	4	9	4	2	24	6	8	6
P20	427139	7005555	0.17	2	15	2	7	4	3	4	2	4	5	5	2	5	3	3	8	4	2	18	5	8	8
P21	427159	7005461	0.22	4	5	4	1	5	2	15	1	17	2	30	3	2	1	4	4	7	5	18	5	6	2
P22	427177	7005361	0.2	2	16	0	5	1	1	1	2	1	6	1	1	27	1	5	9	2	1	17	7	7	7
P23	427211	7005269	0.16	2	12	4	5	4	5	17	1	18	4	18	3	10	3	38	16	10	2	24	4	11	29
P24	427250	7005178	0.19	19	5	5	3	5	3	4	1	5	2	4	3	9	2	195	6	4	3	20	3	6	39
P25	427266	7005080	0.22	5	8	2	2	3	1	8	1	9	3	16	3	5	1	2	7	4	3	21	5	5	2
P26	427298	7004970	0.2	3	5	3	1	4	2	16	1	17	2	14	1	3	2	3	3	9	2	9	3	5	1
P27	427668	7005135	0.21	2	1	1	1	1	3	4	2	4	0	1	0	1	4	2	1	3	1	3	2	1	0
P28	427631	7005240	0.23	10	3	7	1	1	2	18	0	18	1	34	2	1	1	5	3	7	2	19	4	4	1
P29	427606	7005340	0.25	1	20	4	7	2	2	6	2	7	7	32	2	4	2	6	13	4	1	38	11	12	5
P30	427563	7005465	0.19	2	20	1	5	1	1	2	2	2	7	2	1	19	2	4	7	2	1	15	6	6	5
P31	427531	7005552	0.17	2	10	4	2	9	4	21	1	23	3	17	7	7	6	3	6	7	8	10	2	8	7
P32	427500	7005655	0.23	2	5	5	1	8	3	14	0	16	2	11	7	1	5	2	4	2	8	3	1	3	5
P33	427463	7005741	0.18	4	30	7	10	2	4	6	3	6	10	10	1	12	3	5	16	6	1	23	6	9	15
P34	427430	7005839	0.26	3	15	4	5	5	3	5	2	5	5	8	2	8	5	3	8	4	2	12	3	6	14
P35	427398	7005932	0.2	2	5	3	1	1	2	4	1	4	2	3	1	6	3	5	3	3	1	6	2	3	19
P36	427362	7006028	0.26	3	1	4	1	14	10	7	0	9	0	4	9	3	26	2	2	5	11	0	2	1	18
P37	427331	7006125	0.25	2	3	2	1	5	6	7	1	8	1	5	3	4	8	2	3	5	4	3	2	2	4
P38	427317	7006225	0.18	7	10	1	6	1	1	1	1	1	3	2	0	48	1	3	9	2	1	6	4	4	10
P39	427436	7006321	0.17	3	3	1	1	6	2	1	1	1	1	2	6	1	2	5	2	2	5	14	2	4	3
P40	427469	7006239	0.16	4	1	4	1	23	8	2	0	2	0	1	16	1	5	0	1	1	15	0	1	1	0
P41	427510	7006136	0.22	6	1	4	1	18	12	7	0	8	0	3	9	7	17	2	2	4	14	0	0	1	1
P42	427537	7006042	0.24	6	2	4	1	14	8	5	1	6	1	3	9	3	19	2	3	3	9	1	2	1	5
P43	427594	7005941	0.23	4	101	20	10	2	3	3	2	3	34	5	1	15	2	4	24	3	1	24	5	10	6
P44	427609	7005865	0.2	4	25	7	1	1	1	1	1	1	8	2	1	3	1	3	4	1	1	12	3	4	3
P45	427637	7005765	0.21	2	5	2	1	1	2	5	1	7	2	10	2	1	1	4	2	3	2	11	2	3	1
P46	427668	7005669	0.22	4	36	6	9	4	5	10	2	12	12	13	3	11	7	5	18	5	3	19	5	12	16
P47	427700	7005574	0.2	4	48	10	15	3	5	13	3	16	16	17	2	24	4	6	28	7	2	17	5	10	23
P48	427749	7005476	0.2	2	26	4	6	4	2	13	1	14	9	20	2	7	1	3	12	6	2	25	4	10	3
P49	427772	7005391	0.25	1	1	4	1	11	2	19	0	23	0	16	8	1	4	3	1	6	11	1	2	2	1
P50	427802	7005290	0.22	2	23	3	4	2	1	3	1	3	8	5	1	5	1	4	6	2	1	21	5	6	3
P51	427842	7005206	0.25	6	13	2	1	0	1	1	1	1	4	2	0	3	1	4	4	1	0	7	7	2	2
P52	428018	7005284	0.26	1	30	7	6	2	2	3	2	4	10	9	2	10	2	5	12	4	2	33	8	10	6
P53	427970	7005391	0.2	2	1	1	1	0	1	0	1	1	0	0	1	0	1	2	0	1	1	2	1	1	6
P54	427955	7005477	0.21	1	18	2	5	2	1	1	2	1	6	3	2	3	1	4	9	2	2	25	5	8	6
P55	427902	7005569	0.2	1	8	3	3	3	3	19	1	22	3	31	2	11	2	3	5	9	3	21	2	8	3
P56	427861	7005666	0.29	2	16	4	5	4	3	9	1	10	6	14	3	6	3	3	7	5	2	17	2	9	8
P57	427830	7005762	0.25	2	31	5	8	3	3	12	2	14	10	18	2	9	3	4	17	5	2	22	3	10	10
P58	427798	7005840	0.24	2	8	10	1	0	1	2	1	2	3	8	1	1	1	7	4	2	0	13	4	3	2
P59	428198	7005392	0.18	0	3	0	1	2	2	5	1	6	1	4	2	1	3	3	1	3	2	6	3	1	2
P60	428176	7005450	0.23	2	8	2	2	6	3	8	1	10	3	12	3	3	3	2	3	5	4	15	2	5	6
P61	428146	7005538	0.24	2	3	1	1	2	2	3	1	4	1	4	2	0	2	3	1	3	2	5	2	1	1
P62	428104	7005625	0.22	2	3	4	1	2	2	5	1	6	1	6	2	3	2	2	2	3	2	8	3	2	4
P63	428065	7005724	0.23	1	5	2	1	2	2	6	1	7	2	9	1	11	1	2	3	3	2	8	4	6	2
P64	428029	7005810	0.24	3	8	4	3	3	2	7	1	8	3	16	2	1	1	4	4	3	2	18	4	5	2
P65	428002	7005917	0.23	1	15	4	6	0	3	6	2	6	5	17	1	3	1	4	8	4	0	23	7	7	7
P66	428196	7005987	0.26	1	5	4	1	8	2	12	1	15	2	16	7	3	2	2	3	5	6	8	2	4	2
P67	428230	7005892	0.24	3	3	4	1	9	5	26	0	32	1	25	7	4	5	2	2	12	9	5	1	4	2
P68	428261	7005798	0.25	1	8	2	3	1	1	2	1	2	3	5	1	4	1	2	5	2	1	18	6	8	5
P69	428302	7005705	0.23	2	8	3	4	4	2	8	1	10	3	13	3	4	2	2	4	4	3	20	4	8	4
P70	428336	7005621	0.22	1	5	3	1	8	2	10	0	12	2	12	5	2	2	2	2	3	6	6	2	5	2
P71	428372	7005523	0.23	2	5	0	1	0	1	1	1	2	2	3	1	2	1	2	1	2	1	14	7	4	6
P72	428418	7005434	0.29	1	8	1	1	5	1	4	1	4	3	6	4	1	2	3	3	3	4	16	5	6	3
P73	428760	7005566	0.33	3	1	2	1	13	4	2	0	3	0	3	9	2	3	1	1	0	6	1	2	1	1
P74	428752	7005653	0.23	3	7	1	3	6	1	3	1	4	2	12	3	6	1	2	5	1	5	8	2	8	3

Table 3. Response Ratios for Selected Elements for MMI Soil Samples MEGA Project

ID	UTME	UTMN	WTKG	RR Ag	RR As	RR Au	RR Bi	RR Ca	RR Cu	RR Eu	RR Fe	RR Gd	RR K	RR La	RR Mg	RR Mn	RR Ni	RR Pb	RR Sb	RR Sc	RR Sr	RR Ti	RR Tl	RR W	RR Zn
P75	428700	7005734	0.22	3	2	4	1	14	3	3	0	4	1	3	6	1	2	1	1	1	8	1	2	1	1
P76	428656	7005831	0.45	4	1	4	1	15	13	2	1	2	0	2	4	100	17	0	2	2	12	0	1	1	3
P77	428593	7005942	0.29	3	2	2	1	2	8	0	4	0	1	0	2	1	5	0	1	1	3	2	2	1	1
P78	428596	7006038	0.4	1	12	4	2	3	3	3	1	4	4	5	3	9	2	2	5	2	2	7	4	3	11
P79	428562	7006099	0.21	6	5	2	1	1	1	1	1	1	2	2	3	1	3	8	3	1	2	16	3	2	2
P85	428550	7005599	0.19	4	2	3	1	9	1	4	1	5	1	9	10	1	4	5	1	3	9	9	0	2	2
P86	428583	7005493	0.17	2	1	2	1	9	2	6	0	6	0	6	8	2	4	4	1	3	9	4	2	1	1
P87	428078	7004656	0.25	1	20	3	9	3	2	4	2	4	7	7	2	11	2	3	11	3	2	27	5	12	7
P88	428147	7004672	0.32	1	7	4	1	0	3	0	2	0	2	1	1	1	2	0	2	1	1	6	2	1	3
P89	428237	7004702	0.19	0	1	1	1	1	0	0	2	0	0	0	1	1	1	0	1	1	2	2	2	1	4
P90	428325	7004760	0.24	1	10	3	4	7	3	7	1	8	3	9	4	5	2	2	6	4	5	22	2	8	5
P91	428414	7004796	0.22	2	3	2	1	9	3	3	1	4	1	4	6	1	2	2	2	2	7	10	2	4	2
P92	428516	7004841	0.18	2	15	1	6	1	1	2	2	2	5	2	2	3	2	4	7	4	1	27	9	9	7
P93	428606	7004869	0.25	2	21	1	9	1	1	2	2	2	7	2	2	9	3	6	12	3	2	25	9	10	9
P94	428702	7004903	0.36	4	5	4	1	14	5	7	1	8	2	7	4	21	7	2	4	3	8	3	2	3	5
P95	428795	7004955	0.35	7	1	4	1	23	8	2	0	2	0	1	15	17	7	0	2	0	16	0	1	1	1
P96	428895	7004968	0.3	1	7	4	2	7	2	10	1	11	2	13	4	4	2	2	5	3	5	9	2	7	4
P97	428984	7005003	0.24	1	12	1	5	2	3	1	1	1	4	1	1	43	3	2	7	2	1	8	5	8	10
P98	428996	7005205	0.16	6	23	9	10	2	2	1	2	1	8	3	1	4	4	7	9	2	2	16	5	8	4
P99	428918	7005163	0.22	3	5	4	1	9	4	9	1	10	2	9	7	7	4	2	3	6	8	8	2	4	3
P100	428842	7005144	0.23	4	1	6	1	20	7	11	0	14	0	6	13	3	11	1	0	3	17	0	0	1	1
P101	428746	7005116	0.22	3	10	4	4	7	2	2	1	2	3	6	3	17	2	3	6	2	4	14	2	8	3
P102	428647	7005127	0.33	1	5	4	1	6	2	3	0	4	2	4	3	4	1	1	3	1	5	2	2	4	4
P103	428552	7005049	0.37	2	13	2	9	6	2	2	2	2	4	2	3	15	3	3	8	3	3	16	5	8	16
P104	428377	7004963	0.27	3	15	1	8	0	1	1	2	1	5	2	0	16	1	5	9	2	0	12	7	9	11
P105	428274	7004940	0.31	2	13	1	6	2	1	3	2	3	4	4	1	24	2	3	5	2	1	16	4	5	6
P106	428184	7004902	0.29	6	5	4	1	3	3	15	1	16	2	19	2	2	2	4	3	8	3	18	3	6	4
P107	428095	7004874	0.25	3	8	2	4	2	2	2	1	2	3	4	1	2	2	3	4	3	2	22	7	8	4
P108	427988	7004842	0.22	1	12	4	5	4	4	28	1	30	4	50	2	6	1	3	7	10	3	28	5	14	2
P109	427913	7005031	0.14	2	5	2	2	2	2	6	1	6	2	4	2	2	1	4	2	4	1	12	3	4	2
P110	428016	7005062	0.26	2	10	1	6	2	2	5	1	5	3	26	1	35	1	3	7	5	2	31	4	12	3
P111	428102	7005096	0.2	5	3	2	1	5	3	10	1	12	1	10	5	1	2	3	1	6	4	12	2	4	1
P112	428195	7005142	0.21	2	3	4	1	7	3	29	0	33	1	28	7	3	3	3	2	12	7	8	2	6	2
P113	428282	7005167	0.18	2	41	1	8	0	1	1	3	1	14	1	1	8	1	3	11	2	1	20	6	7	9
P114	428382	7005218	0.25	2	23	7	6	4	3	7	2	7	8	15	3	8	2	3	10	4	3	21	4	7	8
P115	428477	7005240	0.24	2	21	2	8	3	1	2	2	2	7	3	2	17	2	3	11	3	2	25	5	12	10
P116	428569	7005289	0.22	4	10	4	8	10	2	3	1	3	3	6	5	17	3	2	6	2	7	5	2	7	7
P117	428663	7005313	0.32	1	10	4	3	7	2	5	1	5	3	7	3	8	3	3	5	3	4	8	2	7	8
P118	428753	7005358	0.26	5	1	3	1	15	3	3	1	4	0	2	5	1	7	1	1	1	7	0	1	1	4
P119	428841	7005368	0.28	8	1	2	1	14	3	3	0	3	0	2	7	3	4	1	3	0	10	0	0	1	5
P120	428308	7004109	0.23	3	13	4	4	5	2	3	1	3	4	4	3	11	3	4	15	3	3	20	2	7	4
P121	428435	7004167	0.24	11	7	1	3	2	1	2	2	2	2	2	3	2	3	2	5	2	3	14	7	6	4
P122	428518	7004195	0.2	8	1	4	1	20	3	1	0	1	0	0	9	3	1	0	1	0	13	0	0	1	1
P123	428620	7004235	0.27	5	2	3	1	14	5	4	0	5	1	3	6	5	6	1	3	1	10	1	2	1	2
P124	428896	7004326	0.35	5	1	7	1	17	7	2	0	3	0	2	7	113	21	0	2	1	10	0	1	1	4
P126	429019	7004367	0.22	1	1	1	1	9	4	22	0	24	0	14	9	17	9	2	2	12	11	2	2	4	2
P127	429096	7004404	0.36	3	5	4	2	10	3	1	0	1	2	1	2	2	1	1	6	1	4	1	2	4	5
P128	429183	7004444	0.41	1	3	2	2	7	2	3	1	3	1	4	4	15	3	3	3	2	4	6	2	4	4
P129	429254	7004507	0.28	5	7	1	1	9	2	3	0	3	2	2	3	4	3	1	3	1	5	1	0	4	4
P130	429194	7004682	0.34	4	7	4	4	7	2	7	1	7	2	13	3	12	3	3	5	2	4	5	5	9	5
P131	429039	7004669	0.36	3	1	2	1	15	2	3	1	4	0	2	6	3	10	1	2	1	10	0	0	1	18
P132	428944	7004598	0.31	9	1	2	1	19	4	2	0	2	0	1	6	6	4	1	1	0	11	0	0	1	3
P133	428864	7004546	0.28	3	5	3	3	8	3	2	0	2	2	4	3	4	2	3	4	1	4	2	4	4	7
P134	428765	7004523	0.3	4	36	37	4	8	2	3	2	3	12	4	5	39	9	1	85	3	6	8	2	5	12
P135	428587	7004443	0.27	8	1	9	1	25	3	4	0	5	0	3	7	4	4	1	1	1	13	0	0	1	1
P136	428503	7004445	0.21	3	8	2	3	5	2	3	1	3	3	2	4	4	2	4	5	2	5	13	3	5	7
P137	428383	7004392	0.22	5	3	1	1	6	1	3	1	4	1	5	5	1	2	4	2	2	5	12	2	4	1

Table 3. Response Ratios for Selected Elements for MMI Soil Samples MEGA Project

ID	UTME	UTMN	WTKG	RR Ag	RR As	RR Au	RR Bi	RR Ca	RR Cu	RR Eu	RR Fe	RR Gd	RR K	RR La	RR Mg	RR Mn	RR Ni	RR Pb	RR Sb	RR Sc	RR Sr	RR Ti	RR Tl	RR W	RR Zn
P138	428292	7004336	0.16	1	20	4	8	2	3	13	2	14	7	43	2	17	2	3	24	9	2	32	5	14	5
P139	428240	7004271	0.22	2	12	4	4	5	2	7	1	8	4	11	3	3	2	3	13	5	3	30	4	8	2
P140	428145	7004483	0.16	6	5	1	1	1	1	3	1	3	2	3	1	1	1	4	2	2	1	10	5	3	1
P141	428228	7004521	0.22	0	8	3	3	3	2	9	1	10	3	21	3	1	1	2	4	4	3	19	5	8	2
P142	428316	7004562	0.24	1	8	4	5	1	1	1	2	1	3	2	1	12	1	3	5	2	1	20	5	5	5
P143	428417	7004571	0.22	2	3	2	1	3	1	2	1	2	1	2	3	3	2	2	2	2	2	11	4	4	3
P144	428510	7004624	0.2	2	15	1	8	2	2	3	2	3	5	4	1	27	4	7	8	2	2	7	5	5	13
P145	428755	7004716	0.22	4	2	3	1	8	3	5	1	5	1	3	3	8	10	2	4	3	4	2	2	1	5
P146	428851	7004764	0.24	3	12	3	10	4	4	7	2	8	4	11	2	13	6	5	9	5	3	7	5	6	8
P147	428949	7004772	0.23	3	8	2	1	10	4	2	1	2	3	1	3	20	2	1	4	1	5	1	2	4	9
P148	429041	7004816	0.32	1	8	4	6	6	2	3	1	3	3	9	3	19	3	1	6	2	4	6	4	5	4
P149	426342	7003315	0.17	2	7	1	2	2	2	3	1	4	2	4	3	2	2	1	4	3	2	34	5	6	4
P150	426445	7003363	0.16	5	2	1	1	2	1	1	1	1	1	1	2	1	1	2	1	2	3	13	4	3	2
P151	426536	7003405	0.18	3	2	0	1	5	1	3	1	4	1	4	7	5	2	1	1	3	3	17	2	4	2
P152	426637	7003448	0.23	4	3	1	1	3	1	2	1	2	1	1	2	2	1	2	2	3	2	22	5	4	2
P153	426723	7003492	0.18	2	7	1	1	4	1	1	1	1	2	1	3	8	1	1	2	2	2	16	4	4	3
P154	426808	7003526	0.21	3	5	3	1	8	1	2	1	1	2	1	5	4	2	1	1	1	4	11	2	4	2
P155	426902	7003564	0.21	2	7	1	1	7	1	0	1	0	2	0	6	2	2	1	2	1	4	20	2	4	2
P156	426999	7003609	0.18	1	1	0	1	12	1	1	0	1	0	0	8	2	1	1	0	0	6	4	0	1	1
P157	427085	7003644	0.22	1	1	1	1	23	1	1	0	1	0	2	7	1	1	4	0	1	11	0	0	1	1
P158	427204	7003691	0.22	3	7	1	1	5	1	1	1	1	2	1	2	23	1	3	4	2	2	10	2	3	2
P159	427271	7003711	0.2	5	5	1	1	4	1	1	1	1	2	1	2	4	3	2	4	1	4	8	2	2	2
P160	427363	7003766	0.28	5	7	1	2	2	1	2	1	2	2	3	3	2	2	4	4	2	2	19	3	3	2
P161	427461	7003789	0.24	9	18	3	3	4	1	3	2	3	6	3	3	2	4	4	11	2	3	16	4	4	3
P162	427562	7003814	0.25	1	7	4	2	4	2	10	1	12	2	16	4	9	3	3	9	3	3	10	3	4	3
P163	427648	7003857	0.21	4	7	4	2	3	3	9	1	10	2	12	3	1	2	3	5	5	3	19	3	6	2
P164	427751	7003898	0.14	14	7	6	2	2	2	4	1	5	2	8	2	1	2	4	8	5	3	24	5	6	2
P165	427848	7003941	0.16	8	10	5	3	5	1	1	2	1	3	1	4	6	2	2	13	2	4	11	2	3	11
P166	427931	7003978	0.23	9	1	16	1	22	3	7	0	9	0	3	5	7	3	0	1	1	10	0	0	1	0
P167	428027	7004020	0.16	8	1	9	1	37	4	2	0	2	0	1	2	1	4	0	2	0	11	0	0	1	0
P168	428122	7004075	0.15	5	1	5	1	15	2	4	0	4	0	4	5	4	2	2	2	2	8	2	0	1	1
P169	428211	7004097	0.15	1	1	3	1	1	3	4	1	5	0	1	1	20	3	3	2	5	1	2	3	2	1

Table 3. Response Ratios for Selected Elements for MMI Soil Samples MEGA Project

	Wgt	Cu	Pb	Zn	Ag	Ni	Mn	Fe	As	Au	Sb	Bi	Ca	La	Mg	Ba	Ti	Na	K	W	Hg	Sc	Tl	S
ID	KG	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPB	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM	PPM	PPM	%
P114	0.1	33.1	25.5	15	0.1	2.8	150	1.38	<0.5	1.3	<0.1	1.4	<0.01	5	0.15	95	0.001	0.01	0.03	<0.1	<0.01	0.8	<0.1	<0.05
P125	0.16	2.9	2.2	3	<0.1	1.4	14	0.24	7	3.1	2.7	<0.1	<0.01	6	<0.01	46	<0.001	0.003	0.09	<0.1	<0.01	0.4	<0.1	<0.05
P167	0.12	9.8	5.7	34	<0.1	12.8	917	0.96	7	2	1.1	<0.1	0.09	6	0.13	104	0.003	0.016	0.03	<0.1	<0.01	1.7	<0.1	<0.05
Y9	0.2	2.4	1.5	4	<0.1	1.3	79	0.24	1.4	0.6	0.6	<0.1	<0.01	<1	0.01	9	0.001	0.008	<0.01	<0.1	<0.01	0.2	<0.1	<0.05
Y11	0.06	29.1	9.9	47	<0.1	20.7	988	1.64	11.3	3.8	0.6	0.1	0.02	7	0.16	233	0.002	0.006	0.11	0.1	0.02	1.5	<0.1	<0.05
Y14	0.19	22	10.8	44	0.1	14.5	156	1.37	18.5	1.7	6.6	0.1	<0.01	3	0.12	75	0.001	0.002	0.11	<0.1	<0.01	0.7	<0.1	<0.05
Y26A	0.15	19.3	2.9	44	<0.1	28.3	98	0.87	0.6	<0.5	0.5	<0.1	0.08	6	0.45	155	<0.001	0.003	0.05	<0.1	<0.01	1	<0.1	<0.05
Y26B	0.11	29.2	3.9	48	0.1	16.2	109	1.43	7.1	<0.5	0.7	<0.1	0.02	6	0.51	324	0.002	0.008	0.09	<0.1	0.01	0.9	<0.1	<0.05
Y38	0.14	9	6.4	26	<0.1	10.9	350	1.45	25.9	<0.5	4.7	<0.1	0.19	15	0.08	54	<0.001	0.019	0.14	<0.1	<0.01	1.6	<0.1	<0.05
Y39	0.04	6.1	8.5	15	<0.1	5.6	97	0.8	17.9	<0.5	2.8	<0.1	0.03	9	0.01	23	<0.001	0.01	0.07	<0.1	<0.01	0.3	<0.1	<0.05
Y40	0.05	15.4	3.6	39	<0.1	14.1	448	2.01	8.9	<0.5	1.8	<0.1	0.05	16	0.08	55	<0.001	0.021	0.1	<0.1	<0.01	1.7	<0.1	<0.05
Y43	0.09	7.3	10.7	9	<0.1	10.8	826	0.81	1.3	<0.5	1.4	<0.1	0.03	12	<0.01	88	<0.001	0.011	0.06	<0.1	<0.01	1	<0.1	<0.05
Y55A	0.11	39.2	27.5	87	<0.1	26.9	790	1.76	22.1	<0.5	2.1	0.3	<0.01	11	0.02	78	<0.001	0.007	0.11	<0.1	<0.01	2.6	<0.1	<0.05
Y55B	0.07	6.6	4.3	9	<0.1	2.6	148	0.76	1.9	<0.5	0.4	0.1	<0.01	1	<0.01	22	<0.001	0.002	0.02	<0.1	<0.01	0.7	<0.1	<0.05
Y61	0.06	10.9	5	41	<0.1	13.4	320	2.45	0.8	<0.5	0.1	<0.1	0.03	15	0.54	56	0.001	0.034	0.09	<0.1	<0.01	1.7	<0.1	<0.05
Y68	0.05	7.9	13	25	<0.1	10.2	377	1.81	13.8	<0.5	9.7	<0.1	0.04	16	0.03	53	0.001	0.02	0.05	<0.1	<0.01	1.3	<0.1	<0.05
Y70	0.1	9	15.6	7	<0.1	1.3	274	0.55	0.9	<0.5	2	<0.1	<0.01	1	<0.01	84	<0.001	0.002	0.02	<0.1	0.04	0.3	<0.1	<0.05
Y73	0.09	1.8	13	27	<0.1	0.8	240	0.91	<0.5	<0.5	0.5	<0.1	0.06	2	0.04	119	0.002	0.012	0.28	0.1	0.02	1.2	<0.1	<0.05
Y83A	0.15	15.6	299.2	285	0.3	17.2	258	1.95	9.4	<0.5	8.7	1.1	<0.01	5	<0.01	3143	0.002	0.004	0.12	<0.1	16.51	4.5	<0.1	0.06
Y83B	0.11	14.1	423.1	244	0.1	10.5	140	2.02	13.7	<0.5	4.4	0.2	<0.01	19	0.01	1446	0.002	0.009	0.2	<0.1	1.48	4.4	0.1	0.14
Y87	0.1	12.4	11.2	16	<0.1	2.6	65	0.53	51.3	15.9	5.1	0.1	0.04	25	0.02	378	0.002	0.006	0.39	<0.1	0.1	0.7	0.1	<0.05
Y88	0.1	8.9	79.9	15	<0.1	1.2	30	0.57	10.2	<0.5	5.4	0.1	<0.01	11	<0.01	1622	0.001	0.015	0.1	<0.1	0.11	0.4	<0.1	0.1
Y95	0.07	9.9	16.4	99	<0.1	14.3	2100	1.72	21.6	2	2	<0.1	0.14	24	0.04	979	0.002	0.01	0.19	<0.1	0.04	2	<0.1	<0.05
Y96	0.04	12.3	12.7	57	<0.1	10.5	430	1.69	8	<0.5	0.4	0.4	0.02	15	0.02	169	<0.001	0.009	0.16	<0.1	0.03	0.8	<0.1	<0.05
Y97	0.16	17.4	21.1	39	<0.1	9.9	75	1.64	4.5	0.5	1.6	0.1	0.02	8	0.02	2455	0.001	0.013	0.13	<0.1	0.02	1	<0.1	0.06
Y98	0.09	8.2	3.3	14	<0.1	5.8	250	1.06	1.3	0.5	0.2	<0.1	<0.01	14	0.01	162	<0.001	0.014	0.15	<0.1	0.01	0.9	<0.1	<0.05
Y100	0.06	14	18.5	12	<0.1	6	403	0.71	10.9	3.6	6.1	0.5	0.02	3	0.01	166	<0.001	0.001	0.15	<0.1	0.01	0.4	<0.1	<0.05
Y106	0.49	14.3	11.5	13	<0.1	5.6	200	0.85	7.3	2.5	4.8	0.2	0.02	4	0.01	64	<0.001	0.008	0.11	<0.1	0.01	0.7	<0.1	<0.05
Y120	0.1	26.5	5.7	31	<0.1	6.4	823	4.63	0.7	0.8	2.4	<0.1	0.28	20	0.08	281	0.002	0.009	0.41	<0.1	0.02	9.7	0.1	<0.05
Y125A	0.1	30	17.9	33	<0.1	10.4	318	1.93	9.2	2.1	5.5	0.3	0.03	27	0.02	108	<0.001	0.006	0.24	<0.1	0.02	1.6	<0.1	<0.05
Y125B	0.12	8.2	11	18	<0.1	5.2	155	0.68	11.3	2.1	4.5	0.3	<0.01	6	<0.01	46	<0.001	0.016	0.08	<0.1	<0.01	0.5	<0.1	<0.05
Y129	0.05	3	2.9	2	<0.1	1	180	0.31	1.9	<0.5	1.6	<0.1	<0.01	<1	<0.01	33	<0.001	0.002	<0.01	<0.1	<0.01	0.1	<0.1	<0.05
Y131	0.13	7.3	8.6	23	<0.1	2.4	168	0.76	47.5	1	4.8	<0.1	<0.01	22	0.02	139	0.003	0.023	0.19	<0.1	0.01	0.9	<0.1	<0.05
Y140	0.08	7.3	1.4	20	<0.1	2	447	1.83	1.1	<0.5	0.1	<0.1	0.34	3	0.45	28	0.067	0.048	0.03	<0.1	<0.01	2.2	<0.1	<0.05
Y142	0.11	9.8	6.7	43	<0.1	4.3	680	3.98	5.1	<0.5	3.8	0.1	0.05	21	0.05	133	0.003	0.016	0.39	<0.1	<0.01	5.2	<0.1	<0.05
Y144	0.24	2.4	1	3	<0.1	1.1	132	0.48	<0.5	<0.5	<0.1	<0.1	<0.01	<1	<0.01	13	<0.001	0.002	0.01	<0.1	<0.01	0.3	<0.1	<0.05
Y145	0.1	33.7	6.4	28	<0.1	5.7	984	1.32	59.1	1	9.6	0.1	0.02	6	0.04	186	0.002	0.015	0.13	<0.1	0.02	2.4	<0.1	<0.05
Y151	0.11	19.5	13.2	60	<0.1	10.5	334	1.67	7.6	0.6	3.1	0.2	0.06	22	0.05	85	<0.001	0.011	0.15	<0.1	0.01	1.3	<0.1	<0.05

Table 4. 2019 Mega Rock Chip Results of samples collected from soil pits.

ID	Table 5. Rock Chip Descriptions. Samples located at MMI soil pits. Refer to Table 3 for UTM.
P114	white qtzite with limonite staining throughout. One face schist 2 mm.
P125	Outcrop in creek. With qtzite with sericite lamellae. Limonite faces throughout. Some lamellae show parting and incipient qtz crystal growth.
P167	Angular chocolate brown qtzite with weakly developed limonite cross fractures.
Y9	10 cm angular qtzite.
Y11	3 pieces angular phyllite/qtzite.
Y14	laminated angular qtzite with 4% sericite along lamellae and throughout. Weak limonite streaks. Few vugs
Y26	Outcrop 3 m long. Finely laminated qtzite with dark grey lamina <1 mm. Sericite along lamellae. Outcrop has qtz veins to 2 cm wide with limonite vugs. E end oc silicified schist/qtzite. Irregular 5 deg slope.
Y26A	2 cm qtz vein with schist walls
Y26B	schist/qtzite with sericite.
Y38	Angular slab pale pink finely laminated qtzite with dark lamellae and much sericite. Minor limonite.
Y39	Angular qtz with sericite schist walls. 5% vugs.
Y40	Angular slab pale pink laminated qtzite with common sericite. 2 cross fracs with limonite and vugs.
Y43	4 angular pieces. Laminated qtzite with vuggy limonitic & sericitic partings and cross fracs.
Y55A	Angular slab impure qtzite with limonitic cross fracs. Sericite throughout.
Y55B	Angular slab 1 cm qtz vein with weak limonitic stain and few fracs.
Y61	Slab qtzite/schist with limonitic lamellae.
Y68	3 pieces limonitic sericitic qtzite.
Y70	Angular qtzite with irregular limonitic vugs to 5 mm and streaky vugs to 3 cm long.
Y72	Angular qtz with limonitic and sericitic vugs and fine fractures.
Y73	2 angular pieces chloritized "granite" with fine limonitic streaks throughout.
Y78	2 angular pieces: one qtz, one laminated qtzite/sericite schist.
Y83A	Sericite schist/qtzite with strong limonitic lamellae
Y83B	Same as Y83A with 5 mm qtz with vuggy limonitic walls.
Y87	Subangular phyllite/schist with limonitic vuggy irregular fractures with some qtz. Darker than above.
Y88	3 pieces qtzite with limonitic lamellae and few cross fracs.
Y95	Angular dark qtzite with Mn and Fe stains and lamellae.
Y96	Angular qtzite with much limonitic lamellae and vugs. Sericite common.
Y97	3 slabs sericite qtzite with limonitic fracs.
Y98	5 pieces sericitic qtzite with limonitic lamellae.
Y100	2 pieces angular dark schist not sampled. 1 piece crackled qtz with irregular limonitic fracs.
Y106	Angular white qtzite with 4 prominent irregular sub parallel limonitic fracs with irregular cockscomb qtz.
Y107	5 pieces angular chloritic qtzite.
Y120	5 pieces angular sericited qtzite with some clay alteration. Very limonitic with irregular vugs, streaks and lamellae.
Y124	Strongly lineated dark grey phyllite

<b>Y125A</b>	Angular dark grey phyllite with qtzite lamellae and low limonitic fracs.
<b>Y125B</b>	Angular qtzite/qtz with faint lamellar texture. Cross fracs common. No limonite.
<b>Y129</b>	Angular qtz/qtzite with weak cross fracs.
<b>Y131</b>	5 pieces slabby angular weakly clay altered with tight cross fracs limonite. Pale colour.
<b>Y140</b>	Qtz 3 cm with chloritized wallrock. Almost bxia texture.
<b>Y142</b>	8 pieces fine grained angular pale metasediment(?) Limonite staining throughout.
<b>Y144</b>	Angular qtz with chlorite wall on one side. Limonitic vugs and fracs throughout.
<b>Y145</b>	8 pieces angular limonite stained throughout fine grained sed(?) with strong foliation. Mn present. Clay alteration?
<b>Y157</b>	Dark lamellae schist with irregular limonitic fracs
Y152	Angular dark phyllite with weak limonitic lamellae

**Samples in bold type were assayed. See Table 4.**