ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: 2013 Thin Section and Petrographic Assessment Report on the FOREMORE PROPERTY

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PROPERTY NAME: Foremore

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COMMODITIES SOUGHT: Pb, Zn, Ag, Au, Cu.

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN:

MINING DIVISION: Liard Mining Division
NTS / BCGS: NTS 104G/2, 3; 104B/14,15
LATITUDE: 57° 03'
LONGITUDE: 130° 55' (at centre of work)
UTM Zone: 9-U EASTING: UTM 383,785m E NORTHING: 6,326,997m N

OWNER(S): CJL Enterprises Ltd

MAILING ADDRESS: PO Box 662, 3176, Smithers, BC, V0J 2N0
Tel: Office 250 847 3612
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REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

Barnes, D.R. (1989): Assessment Report Geological – Geochemical Report Foremore Group; British Columbia Ministry of Energy and Mines Assessment Report # 19,379.

Gunning, D.R. (1995): Report on the Antler Property; British Columbia Ministry of Energy and Mines Assessment Report # 24,076.

Holroyd, R.W. (1989): Foremore Property Assessment Report on Geophysical Surveys 1989; British Columbia Ministry of Energy and Mines Assessment Report # 19,380.

Holroyd, R.W. (1992): Foremore Property 1992 Assessment Report on Geophysical Surveys; British Columbia Ministry of Energy and Mines Assessment Report # 22,614.

2013 Thin Section and Petrographic Report on the

FOREMORE PROPERTY

More Creek Area
Liard Mining Division
NTS 104G/2, 3; 104B/14,15
57^{o} 03’ N Latitude
130^{o} 55' W Longitude

Prepared by:

Mike Middleton

Operator:

ROCA Mines Inc.
490-1122 Mainland Street
Vancouver, BC, V6B 5L1

Owner:

L.B. Warren

December 2013

SUMMARY

In 2013, Roca Mines Inc. employed Middleton Geoscience Ltd. to carry out thin section and petrographic work on twenty five select massive sulphide samples from previously sampled trenches on the Foremore property. The work focused on the mineralization along the contact of the More Creek Rhyolite horizon, located along the More Creek valley. The objective of the petrographic study was to understand and improve the knowledge of the volcanic hosted massive sulphide mineralization on the property.

The Foremore property covers 155 km^2 in the Coast Range Mountains of north western British Columbia approximately 120 kilometres NNW of Stewart, B.C. The property is accessible by helicopter from the Bob Quinn airstrip, which lies 46 kilometres to the east along all-weather Highway 37.

Previously, exploration on the Foremore property consisted of geological mapping, rock, soil and stream sediment sampling, ground geophysics and diamond drilling programs. The property host numerous mineral deposit types, the most economically significant being gold-rich volcanic hosted massive sulphide (VHMS).

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1.0 INTRODUCTION

A total of 25 samples received for petrographic analysis. The package received included: polished thin sections, off-cuts and hand samples. The samples examined revealed eight basic rock types: mudstone, foliated mudstone, chlorite mudstones, muscovite schist, chlorite schist, quartz vein, quartz-carbonate vein and massive sulfide ore. These samples asides from the veins and the massive sulfide ore are metamorphic rocks of sedimentary origin likely a mudstone. The chlorite schists could have an igneous origin such as a tuff or basalt but the absence of the mineral prehnite or actinolite in these samples precluded this possibility. All of these rocks have undergone some degree of quartz-carbonate alteration that is represented as a fracture fill of penetrative flooding. The mineral assemblages observed suggest relatively low temperature metamorphism. The general characteristic of the rock types is given below:

Mudstones
These samples are the lowest grade metamorphosed rocks and are defined by their fine-grained quartz-sericite assemblage and lack of chlorite and a foliated fabric

Foliated Mudstones
This sample is distinguished by the presence of the foliated fabric.

Chlorite Mudstones
These samples are distinguished by the presence of chlorite.

Muscovite Schist
These samples are thought to be of a similar protolith but higher-grade metamorphosed rocks than the **Mudstone** samples by the presence of the similar assemblage but with a coarser grain size and the foliated fabric.

Chlorite-Schist
These samples are likely of a different protolith composition than the Mudstone rocks due to the drastic increase in the amount of chlorite.

Massive Sulphide Ore
These samples are distinguished by the presence of more than 50% sulfides. Of these samples pyrite is the most abundant sulphide (60-80%) followed by sphalerite (2-10%) and with varying amounts of galena and chalcopyrite (<2%).

Veins
Both quartz and quartz-carbonate veins were identified in the mineral suite and are distinguished by the presence or absence of carbonate minerals.

The association of metapelite and volcanic rocks with massive sulfide mineralization observed in these samples suggest a Mafic-siliciclastic Volcanogenic Massive Sulfide environment. Careful note should be made of the metamorphic nature of the rocks observed and that the mineralization may have been remobilized during the metamorphic event and may not be in its original depositional environment.

2.0 PROPERTY DESCRIPTION AND LOCATION

The Foremore property is accessible by helicopter from the Bob Quinn airstrip, located 46 kilometres east along Highway 37 and is suitable for fixed wing aircraft up to and including small passenger and cargo jets. The centre of the property is at 57°03' north latitude and 130° west longitude (Figure 1). The Bob Quinn airstrip lies approximately 410 kilometres by road north from Smithers, B.C., which has commercial jet airliners service daily from Vancouver. The Eskay Creek Mine access road lies approximately 55 kilometres to the southeast of the property.

The Foremore property is located in the headwaters of More Creek, is largely above treeline, and is approximately 50% covered by glaciers and permanent snowfields. Elevations range from 910m on More Creek to 2100m at the western margin of the property.

Vegetation consists mainly of spruce and alder on the slopes of More Creek and in the lower reaches of the Hanging Valley, with alpine vegetation at higher altitudes. Non-vegetated glacial morainal material covers much of the property.

The property comprises of 73 contiguous mineral claims totalling 28,680 hectares in the Liard Mining Division (Figure 2). A list of claims is included in Appendix A.

Figure 1: Property location.

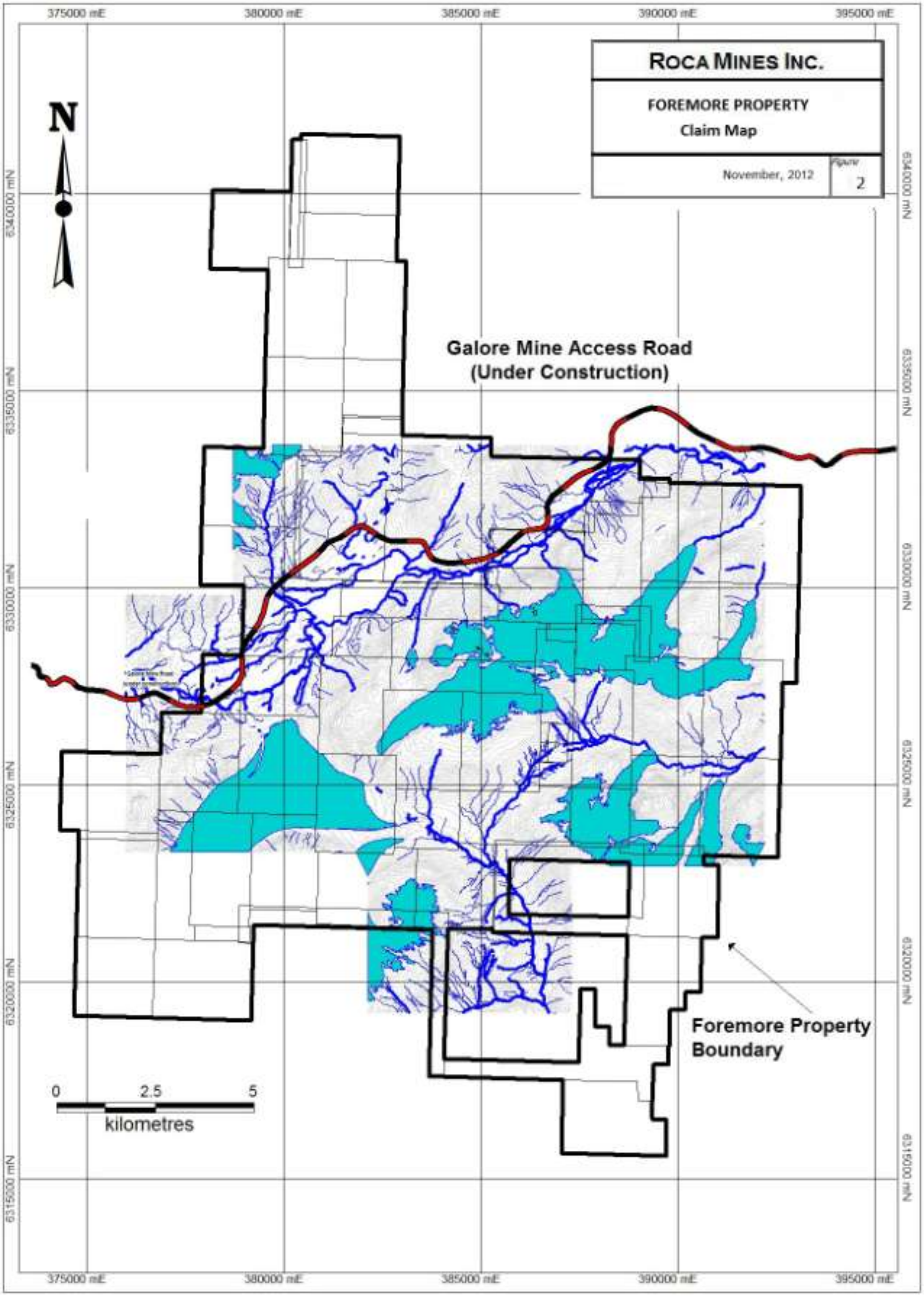


Figure 2: Claim map

3.0 PROPERTY HISTORY

The history of exploration work on the Foremore Property has been detailed by Harris (2002), and further by Sears (2004), and Sears and Watkins (2005). Significant in the early history of the property was the discovery, in 1987 by Cominco Ltd, of two sulphide-rich boulder fields in moraines of the More Glacier, the North and South boulder fields. Work by Cominco to locate the source of the mineralized boulders included ground geophysical surveys and 2,011 metres of drilling in 6 holes collared on ice of the More Glacier. Cominco allowed the mineral claims to revert back to the Crown. In 1999, Lorne Warren staked the initial Foremore Property mineral claims.

In 2002, Roca optioned the Foremore Property and staked additional mineral claims. Equity Engineering Ltd. of Vancouver was contracted to carry out a program of mapping, prospecting and geochemical sampling on the Property followed with a NI 43-101 compliant report (Harris, 2002).

In 2003, Roca cored 11 drill holes in 1,121 metres (Sears, 2004).

In 2004, Roca carried out property scale prospecting, ground geophysical surveys and cored 37 drill holes totalling 5,900 metres (Sears and Watkins, 2005).

In 2005, Roca cored 4 drill holes totalling 2,033 metres and completed geological mapping, rock and soil sampling surveys (Watkins and Melling, 2005). In August a 700 line kilometre helicopter supported airborne magnetometer and electromagnetic survey was flown over 50% of the Property (McPhar, 2005). The integration of new and historic data into the MapInfo platform was initiated.

In late August 2006, the Property was flown for orthophotography

In 2007, Roca carried out a detailed mapping program in the Hanging Valley. A total of 149 rock and 231 soil samples were submitted for chemical analysis (Watkins and Melling, 2007).

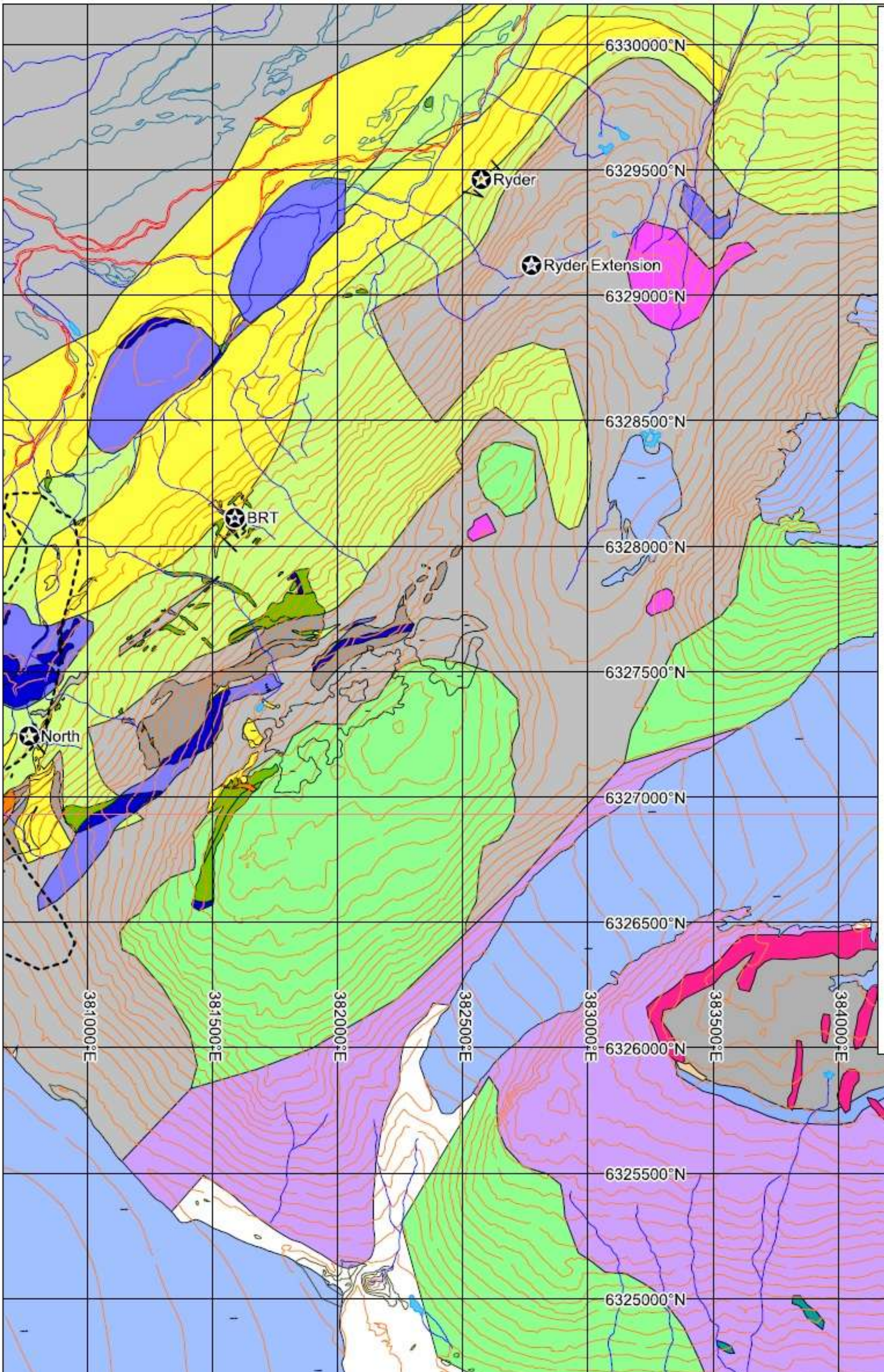
In 2011, a total of 818 soil samples were collected from the hillside around the Side Glacier zone, a gold-rich, massive sulphide showing.

4.0 PROPERTY GEOLOGY

The Property is underlain by Stikine Terrane rocks comprising Paleozoic and Mesozoic volcanic island arc successions. Like other exotic terranes that make up the Canadian Cordillera, the Stikine Terrane is believed to have originated offshore as a volcanic arc complex. The volcanic rocks that underlie much of the property likely represent the earliest stage of island arc formation. By Late Devonian time the arc was mature and thick enough to allow for the formation of plutons.

Exposed over much of the property (Figure 3) is a primitive calcalkaline suite of volcanic and sedimentary rocks that range in age from Early Devonian to mid Carboniferous. Intruding the stratified rocks along the southeast side the property is the More Creek Batholith. Unconformably overlying the Paleozoic rocks are remnants of Mesozoic volcaniclastic rocks.

At least three phases of deformation have affected the rocks on the property (Logan, 2002). The oldest deformation is characterized by isoclinal folds and thrust faults with a relatively flat-lying foliation that is axial planar to these early structures. The second deformation phase folded bedding and the early foliation about open, northwest-trending and southeast plunging folds. The third phase structures are characterized by low amplitude east-trending folds that crenulate earlier foliations. The Paleozoic rocks underlying much of the property have been metamorphosed to the lower greenschist facies.



6330000°N
6329500°N
Ryder
Ryder Extension
6329000°N
6328500°N
BRT
6328000°N
6327500°N
North
6327000°N
6326500°N
6326000°N
6325500°N
6325000°N
381000°E
381500°E
382000°E
382500°E
383000°E
383500°E
384000°E

5.0 VMS ORE DEPOSIT POTENTIAL

Roca has identified two favorable stratigraphic intervals on the property that have the potential to host VMS ore deposits, as shown on Figure 3; both are rhyolitic and have associated polymetallic, sulphide-rich mineralization.

The most significant is the More Creek Rhyolite, identified in wide spaced and relatively deep, vertical diamond drill holes collared at the lower slopes on the southeast side of More Creek Flats. Overlying the rhyolite is a variably altered, and locally mineralized unit of basalt that ranges in thickness from about 50 meters to greater than 200 meters. Conformably overlying the basalt is a thick sequence of intercalated black argillite and hetrolithic, commonly thick bedded, fine to coarse wackes. It is interpreted that the More Creek Rhyolite is of the Early Devonian basement sequence.

The rhyolite has been followed for over 3.5 kilometers along strike and dips gently to the southeast. Its thickness exceeds 250 meters as seen in two drill holes, FM04-33 and -36.

The mineralization in the More Creek Rhyolite occurs at two stratigraphic levels: One is related to the top contact of the rhyolite and includes the North, BRT and Ryder surface showings, and the second is located at depth, within the rhyolite. The BRT showing occurs at the top of the More Creek Rhyolite unit in contact with overlying basalt. Mineralization consists of banded semi-massive to massive sphalerite, galena, pyrite and lesser chalcopyrite. Channel samples across the mineralized zone returned values of 2.19g/t Au, 71.35g/t Ag, 0.74% Zn, 0.55% Pb and 0.11% Cu over 8.0 meters.

The top contact of the More Creek Rhyolite in hole FM04-33 (for example) includes four semi-massive to massive sulphide intersections that represents a 2.35 meter thick, dyke intruded, sulphide-rich layer that averages 1.35% Cu, 0.19% Pb, 2.72% Zn, 59g/t Ag and 0.58g/t Au. In addition, hole FM-04 intersected 2.10m. of massive sulphide that averaged 0.25%Cu, 1.69% Pb, 7.59% Zn, 1561 g/t Ag and 22.19g/t Au.

At depth within the More Creek Rhyolite, wide zones of anomalous metal values have been intersected. For example, in hole FM04-32 wide intervals of anomalous base and precious metals occur throughout the hole that includes 0.80m that assayed 2.22% Cu, 1.28% Pb, 8.64% Zn, 85g/t Ag and 26.5g/t Au.

It should be noted that the North Boulder Field lies in the vicinity of sub-cropping More Creek Rhyolite. The boulder field contains two types of sulphide mineralized boulders; twenty-nine sphalerite-rich samples have an averaged assay of 10.2% Zn, 3.5% Pb, 0.22% Cu, 96g/t Ag and 1.0g/t Au. Twelve chalcopyrite-rich samples averaged 2.3% Cu, 6.2% Zn, 0.5% Pb, 186g/t Ag and 1.5g/t Au. Roca believes the mineralized boulders originated from sulphide-rich lenses hosted somewhere in the nearby More Creek Rhyolite.

Comparisons to Myra Falls are compelling given that the upper deposits at Myra were known to be smaller and have significant precious metal values.

6.0 GEOLOGY OF THE MORE CREEK FLATS AREA

The surface geology of the More Creek Flats area is shown on Figure 3. More Creek Flats is underlain by the oldest rocks in the district, probably Early Devonian, and primarily comprised of poly-deformed felsic and mafic volcanic schists and meta-sedimentary sequences intruded by subvolcanic diorite and gabbroic bodies. .

The mineralization in the More Creek Flats area is hosted by a 300 m thick sequence of rhyolite-rich volcaniclastic rocks and includes a number of intercalated basalt flows and sills. The geological interpretation is based primarily on nine widely spaced, deep, vertical drill holes collared on the hillside above More Creek Flats. Three of the holes, FM05-39, 40 and 41, were drilled in 2005, and six of the holes, FM04-28, 32, 33, 35, 36 and 37, were drilled in 2004. Recent channel sampling on the Ryder, BRT and North Showings is used to compliment the mineralized styles found in diamond drill core. Bedrock exposures on the valley floor are limited to scattered outcrops in the southwest part of the area shown in. Rare bedrock exposures exist on the valley floor in the northeast part of the mapped area and the interpreted geology here is taken primarily from a ground magnetometer survey (Visser 2004). This stratigraphy sequence strikes northeast for a distance of greater than 5 km, dips fairly consistently at a shallow angle to the southeast and is interpreted to underlie all of More Creek Flats.

A pervasive northeast striking, shallow southeast dipping penetrative fabric (S1) has affected all the stratified rocks in the More Creek Flats area. This S1 fabric is, at least in part, conformable with the stratified rocks, however the possibility exists that the stratigraphic sequence is isoclinally folded and the shallow dipping fabric is axial planar to these early structures. This penetrative fabric is accentuated by the VMS-related alteration with the formation of strong schist zones. Chlorite, sericite and talc characterise the alteration mineralogy of the basalt; sericite and quartz, with lesser chlorite and talc, characterize the felsic volcanic rocks. Wide intervals of pyrite-rich quartz-sericite schists, with or without base and precious metal mineralization, are present within the rhyolite. Relatively small sericite-rich zones, in part carrying base and precious metal, are present in the basalt.

6.1 More Creek Rhyolite

The More Creek Rhyolite is in the order of 300 m thick. It is not well exposed on surface, with outcrops restricted to the lower slopes above More Creek Flats, and as scattered outcrops located on the valley floor. The best exposures of the rhyolite are seen in a series of deep vertical drill holes collared above the Flats.

The More Creek Rhyolite is a poorly sorted sequence of volcaniclastic rocks primarily consisting of lapilli tuff, lapilli stone and coarse to fine grained tuff, which is hetrolithic with felsic (rhyolite) clasts dominating and displaying different degrees of hydrothermal alteration. Other clast lithologies present include chlorite and talc altered basalt, pyrite-rich lapilli, and minor argillite.

In the More Creek Flats area there appears to be a gross, large scale grading of the volcaniclastic sequence within the More Creek Rhyolite. Coarser clastic, thick bedded and unsorted volcaniclastic rocks are more evident toward the northeast end of the Flats; and more tuffaceous, thinner bedded, with an increase in beds of argillite, appear to dominate toward the southwest end of the Flats. Massive rhyolite has been logged in drill hole FM04-28, collared at the northeast end of the area and less massive looking rhyolite in hole FM04-32. There may be a similar gross grading in the vertical sense with coarse volcaniclastic rocks more evident at the top of the sequence, and more bedded felsic tuff and argillite appearing at depth.

The More Creek Rhyolite sequence consists of numerous subaqueous pyroclastic flows formed by explosive volcanism with fragment size and bed thickness commonly, but not always, decreasing down flow. Massive rhyolite, perhaps dome related, is present in drill hole FM04-28, and generally would not be expected to extend far from their source vents. Within the More Creek Rhyolite there is a change in the clastic nature of the rhyolite with vent-proximal coarse clastic and massive rhyolite facies seen in the northeast sector of More Creek Flats, and grading to the finer grained, bedded tuffs with argillite, representing a more distal or basinal facies to the southwest.

6.2 More Creek Basalt

Basalt consisting of subaqueous flows is exposed continuously along the lower slopes above More Creek Flats and can be followed to the southwest to include a large outcrop area at the front of the More Glacier, and beyond. The same basalt is seen in most holes drilled on the hill side above the Flats. Other units of basalt are present within the More Creek Rhyolite sequence. Primary textures present in the basalt include amygdules, thick hyaloclastite-rich intervals, flow and pillow breccias, and pillowed lava. Thick massive basalt intervals are interpreted to be proximal to their eruptive source. Not uncommon in the basalt are intervals of massive and poorly bedded chert. Rare thin and fine bedded, interflow sediments are present. The basalt, when strongly altered, can take on a strong penetrative fabric to form schist zones. Intervals of talc schist, chlorite schist and sericite schist are found within the basalt units and may be reflecting primary VMS-related alteration.

An important feature seen in the basalt units hosted within the More Creek Rhyolite is their apparent marked changes in stratigraphic thickness. The thinning-thickening seen in the basalt units may indicate the presence of fault controlled topographic relief in the rhyolite sequence, that would have hindered the spread and deposition of the basalt flows.

Intersected in one drill hole, FM04-37, are a number of massive, fine to medium grained, magnetic, gabbroic bodies. These bodies, at least in part, are sill-like in form as seen in two low profile hills on the valley floor. They are interpreted to be synvolcanic intrusions and are probably related genetically to the basalt flows.

6.3 Sediments

Overlying the More Creek rhyolite / basalt is a sequence of unknown total thickness consisting primarily of bedded and siliceous argillite, in places strongly graphitic. Present within this argillite sequence are thin to very thick beds of unsorted, hetrolithic, coarse volcaniclastic tuff and lapilli stone that carry massive pyrite lapilli. These volcaniclastic beds are interpreted to be debris flows originating from a distant felsic and mineralized volcanic source area. The sedimentary unit is well exposed forming the steep cliff faces, along the lower slopes above More Creek Flats.

Holes drilled by Cominco, in 1990, near the toe of the More Glacier tested a number of electromagnetic (EM) anomalies that turned out to be graphite-rich beds hosted in an argillite-rich sequence. It is now apparent that these holes intersected the contact zone lying between the sediments and the first basalt at the top of the More Creek Rhyolite. If these holes had been drilled to greater depths they would have entered the More Creek Rhyolite.

6.4 VMS mineralization and associated alteration

Sulphide mineralization at More Creek Flats is classified as VMS, volcanogenic massive sulphide, formed by processes directly connected with volcanism. Ores in VMS settings are primarily won from massive sulphide to semi-massive sulphide (MS-SMS) bodies that formed directly on the seafloor and/or as replacement bodies formed close to the seafloor. Nearby stringer, or stockwork mineralization, is commonly copper-rich and occupies parts of the hydrothermal conduit that leads to massive sulphide bodies. The initial shapes of the sulphide bodies can take any form, however with the strong penetrative S1 fabric that characterizes the altered volcanic rocks of More Creek Flats, a strong structural control on the shape and the distribution of significant mineralization is to be expected. Such bodies could be dismembered and pulled apart, or they could be remobilized into the hinges of folds and fault zones.

The sulphide mineralization seen in the More Creek Flats area is typical of many VMS deposit settings. Pyrite dominates with lesser sphalerite, chalcopyrite and galena, bornite is present, free gold and electrum are not uncommon. The pyrite has been recrystallized and is commonly set in a ground massive of quartz and sericite. In some massive sulphide intervals the pyrite is very fine grained and does not appear to have been recrystallized. Banding is present in massive and in semi-massive sulphide sections and could reflect primary depositional features seen in true exhalative ores.

The sulphide mineralization in the More Creek Flats area is hosted primarily in volcaniclastic rocks of the More Creek Rhyolite and, to a lesser extent, in basalt flows. The sulphide mineralization takes on a number of styles occurring as (1) wide sections of disseminated pyrite host in the More Creek Rhyolite, as (2) smaller zones of pyritic mineralization hosted in basalt, as (3) bodies of massive to semi-massive sulphides , and as (4) massive pyrite-rich clasts hosted in volcaniclastic rocks.

1. Within volcaniclastic rocks of the More Creek Rhyolite, <u>wide sections of disseminated pyrite</u> mineralization have been cut in drill holes. Hosted within these pyritic zones are wide intervals containing very anomalous and significant base and precious metal mineralization. The best example of a wide interval of pyrite-rich mineralization is seen in drill hole FM05-40 with nearly continuous pyrite mineralization for 260 m. If these large sulphide mineralized zones outcropped large gossans would have formed that would have attracted mine finders early in the mine exploration history of the district.

2. <u>Smaller zones of pyritic mineralization hosted in basalt</u>, with or without base and precious metal values, are hosted within the basalt flows of which the North showing is the best example. Mineralization at the North showing consists of thin foliation parallel disseminated and lenses of pyrite, sphalerite and galena. Basalt hosted mineralization is interpreted to be following permeable hyaloclastite-rich beds intercalated in the massive basalt flows.

3. <u>Bodies of massive to semi-massive sulphides (MS-SMS)</u> are present on surface and are intersected in a number of drill holes in the BRT showing area, near the Ryder showing area, in deep drill holes in the Ryder Extension area and occurring as boulders in the North Boulder Field.

4. Seen throughout the More Creek Flats area are fine grained, massive pyrite-rich clasts hosted in volcaniclastic rocks, in the order of 2 to 3 mm in diameter. The clasts were probably derived from a massive sulphide body present near the source of the pyroclastic flow. Such flows can probably transport small clasts for substantial distance (kilometres). Transport distance of large clasts (>10 cm) are likely to be much less. The clasts provide clear evidence of the presence of a massive sulphide deposit; however the direction and distance to the source generally cannot be accurately determined.

To quantify the VMS-related hydrothermal alteration a number of criteria are offered. These are: total sulphide as pyrite, the Ishikawa Alteration Index (AI), and % sodium as Na_2O. Total sulphides, given here as % pyrite and calculated using sulphur analysis, should outline the gross 3D geometry of the hydrothermal systems now being identified within the More Creek Rhyolite. Pyrite values greater than 1% are considered significant and are highlighted in the tables. The Ishikawa Alteration Index, $AI=100(K_20+MgO) / (K_20+MgO+Na_2O +Ca0)$, was defined to quantify the intensity of sericite and chlorite alteration that occurs in the footwall volcanic rocks of Japanese VMS deposits. The alteration index is particularly useful by providing an estimate of the intensity of VMS-related alteration, increasing to maximum values in the hydrothermal vent zone leading to MS-SMS mineralization. In the More Creek Flats area an Alteration Index of 70 or greater is considered significant. A good measure of the alteration grade is also indicated by sodium content. Unaltered rhyolite normally contains Na_2O values in the range of 3 to 4%. Sodium values less than 1% Na_2O are considered significant, less than 0.1% very significant. Barium is also presented in the tables and there is a strong correlation between mineralization and very low Ba values.

6.5 BRT SHOWING

The **BRT showing** occurs at the top of the More Creek Rhyolite in contact with overlying basalt. Mineralization at the BRT showing consists of banded semi-massive to massive spalerite, galena, pyrite and less chalcopyrite. Logan (2003) believes the sulphide bed has been significantly thickened in a shallow, southeast-plunging fold. During the 2012 field season 50 Channel samples (Figure 4) across the sulphide mineralization returned:

0.73% Cu, 0.94% Pb, 6.34% Zn, 190 g/t Ag and 2.75 g/t Au over 2.05 m,
0.11% Cu, 4.27% Pb, 9.52% Zn, 162 g/t Ag and 2.03 g/t Au over 2.80 m, and
0.41% Cu, 2.13% Pb, 1.33% Zn, 276 g/t Ag and 1.33 g/t Au over 4.30 m.

A number of drill holes have tested the BRT showing area and have intersected varying widths of VMS horizons. In the immediate area of the showing the basalt - rhyolite contact can be followed down dip and along strike in the drill holes. A total of 16 thin sections from 11 samples were submitted for petrographic study, the sample assays are tabulated below with the petrographic studies to follow.

Alteration Minerals Associated With VMS Deposits									
Sample	**Easting**	**Northing**	**Showing**	**As (ppm)**	**Sb (ppm)**	**Hg (ppm)**	**Mg (%)**	**Mn (ppm)**	
584902	381594	6328117	BRT	38.1	119.0	100.00	0.49	1364	
584904	381593	6328117	BRT	40.4	93.0	100.00	0.38	931	
584908	381593	6328118	BRT	114.7	110.4	100.00	0.18	793	
584914	381588	6328117	BRT	77.0	4.9	42.67	0.13	367	
584917	381588	6328118	BRT	0.5	0.1	0.20	1.34	3275	
584922	381588	6328119	BRT	50.0	11.7	51.39	0.22	937	
584926	381588	6328120	BRT	88.7	11.8	100.00	0.73	1290	
584940	381589	6328117	BRT	15.8	1.5	1.02	1.89	3706	
584947	381586	6328118	BRT	0.5	0.1	0.29	1.50	3657	
584949	381592	6328118	BRT	43.6	8.9	77.32	1.62	1530	
584950	381595	6328118	BRT	20.3	37.0	100.00	0.19	820	

VMS Mineralization								
Sample	**Easting**	**Northing**	**Showing**	**Au (ppm)**	**Cu (ppm)**	**Pb (ppm)**	**Zn (ppm)**	**Ag (ppm)**
584902	381594	6328117	BRT	0.911	1422.6	10000.0	10000	100.0
584904	381593	6328117	BRT	2.312	2732.6	10000.0	10000	100.0
584908	381593	6328118	BRT	2.018	400.9	10000.0	10000	100.0
584914	381588	6328117	BRT	6.786	276.2	2096.3	10000	100.0
584917	381588	6328118	BRT	0.048	10.4	14.0	373	1.6
584922	381588	6328119	BRT	2.507	10000.0	4316.6	10000	100.0
584926	381588	6328120	BRT	1.295	1993.5	10000.0	10000	88.2
584940	381589	6328117	BRT	5.893	975.6	449.3	1128	18.3
584947	381586	6328118	BRT	0.023	15.3	8.7	449	0.8
584949	381592	6328118	BRT	1.372	4891.6	10000.0	10000	98.2
584950	381595	6328118	BRT	2.369	10000.0	10000.0	10000	100.0

Table 1: Summary table for BRT samples used for petrographic study.

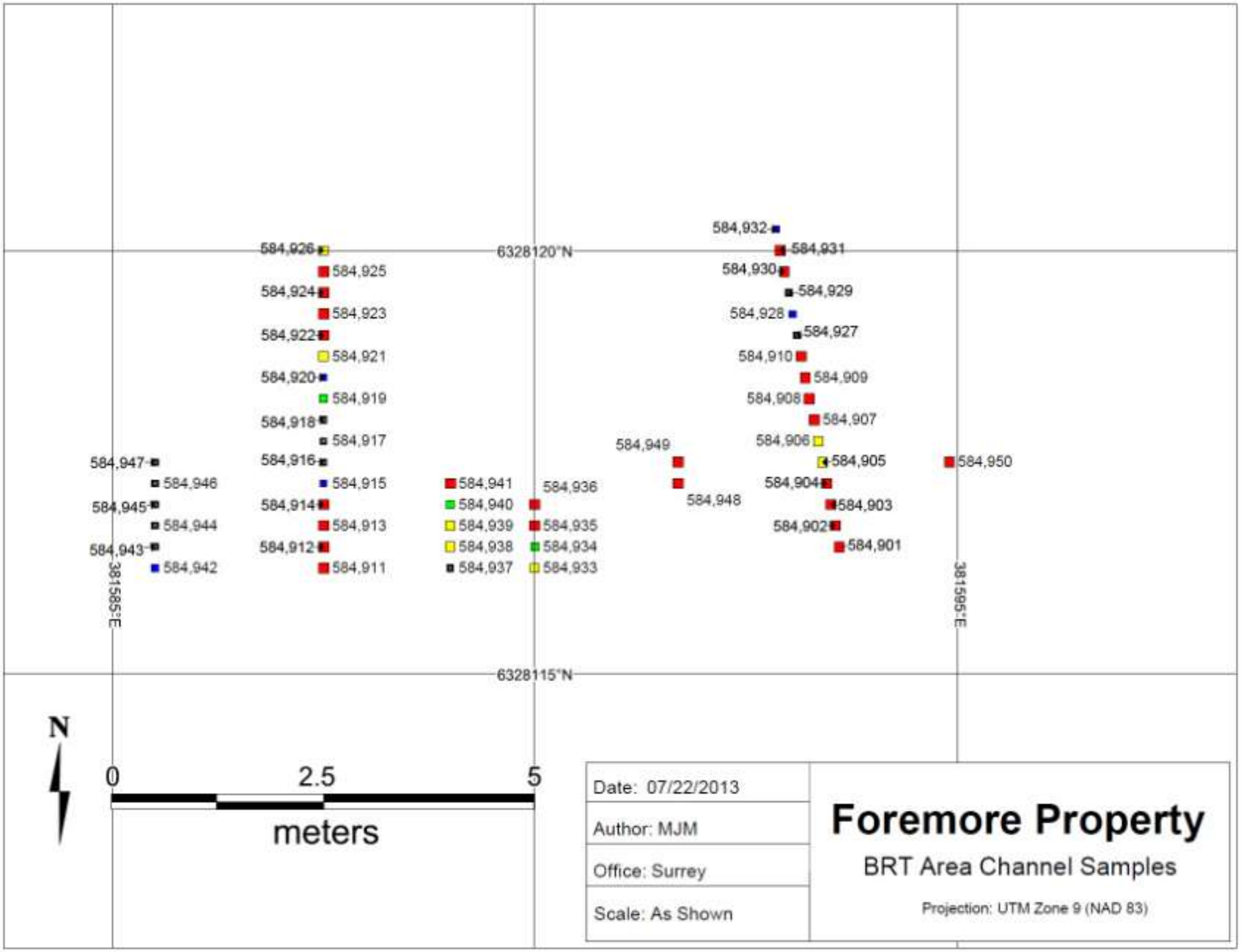


Figure 4: BRT sample locations.

Sample: 584902

Rock Name: Massive sulfide ore

Texture:
Coarse grained

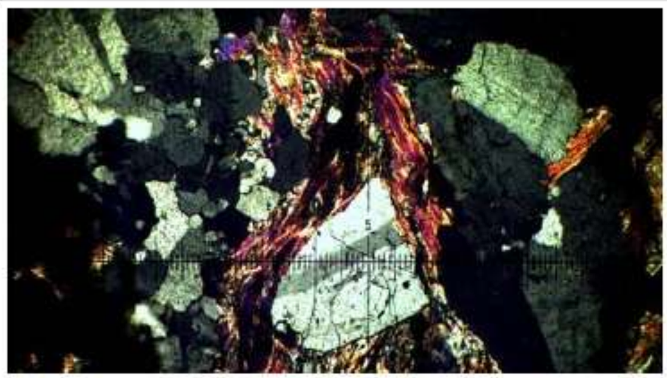
Alteration/Mineralization:
Strong pyrite, moderate sphalerite and minor galena mineralization

Petrogenesis: This rock was likely a mudstone that was metamorphosed to a coarse –grained muscovite-albite assemblage. The sulphide mineralization is associated with quartz-carbonate gangue and likely predates the metamorphism.

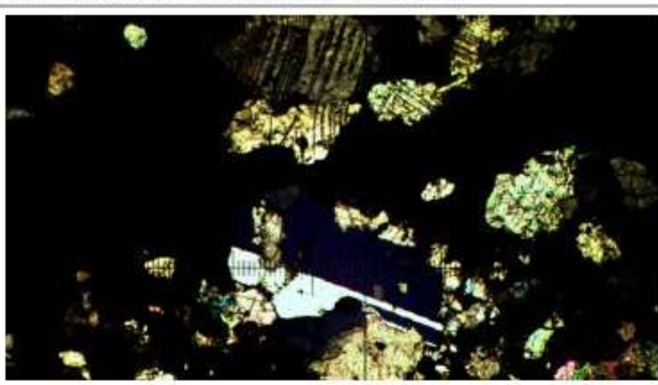
	Mineral	Area
Mudstone (35-45%):	Albite	60-70%
	Muscovite	20-30%
	Quartz	5-10%
Vein (55-65%):	Sphalerite	20-30%
	Galena	<5%
	Pyrite	50-60%
	Quartz	20-30
	Calcite	<5%

Mineral Descriptions:
Pyrite: fine- to coarse-grained rounded cubic minerals
Sphalerite: Formed prior to galena
Galena: void-filling

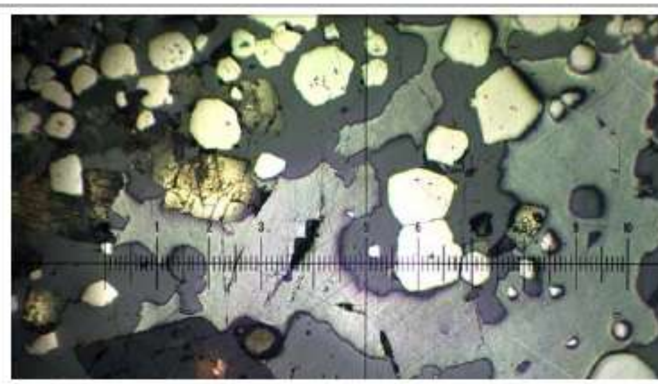
A. Prepared section off-cut. The white minerals on the right are albite and some muscovite, the white minerals on the left are a quartz aggregate. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing quartz, albite, and muscovite. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing albite and calcite. XPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite, galena, sphalerite. Partial cross- polarized RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584904-A

Rock Name: Massive Sulphide Ore

Texture:
Massive sulphide mineralization

Alteration/Mineralization:
Strong pyrite, moderate sphalerite, minor galena and minor chalcopyrite mineralization

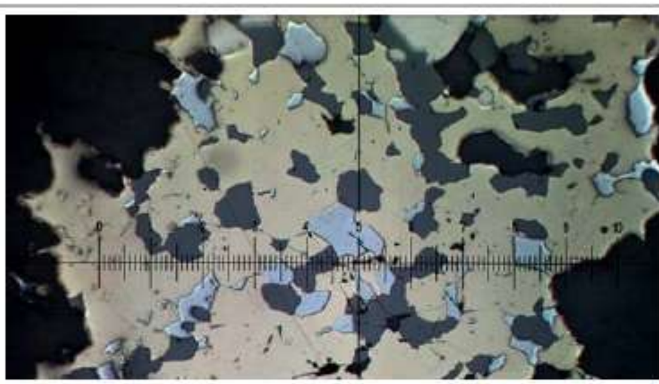
Petrogenesis: The massive sulphide mineralization is associated with medium- to coarse-grained quartz-gangue, likely making this rock a vein or a remobilized massive sulfide lens.

	Mineral	Area
Ore (100%):	Pyrite	60-70%
	Quartz	20-30%
	Sphalerite	2-8%
	Chalcopyrite	<5%
	Galena	<5%

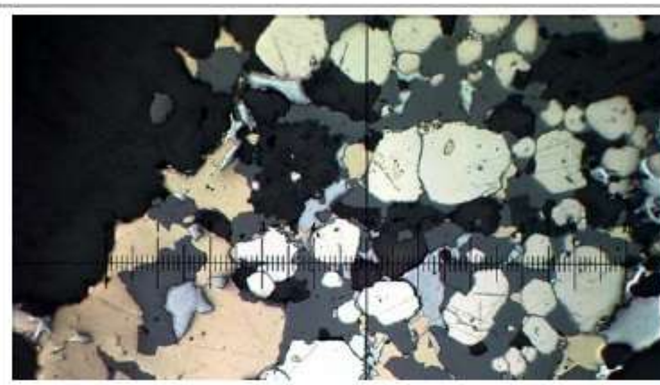
Mineral Descriptions:
Pyrite: rounded cubic grains
Chalcopyrite: void-filling
Galena: void-filling
Sphalerite: anhedral to void-filling

A. Prepared section off-cut. The white minerals are quartz and the metallic mineral is pyrite. Field of view is approximately 26mm x 46 mm.

B. Photomicrograph showing coarse- and fine-grained quartz. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing chalcopyrite, sphalerite and galena. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing chalcopyrite, pyrite, galena and sphalerite. RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584904-B

Rock Name: Massive sulfide ore

Texture:
Massive sulphide mineralization

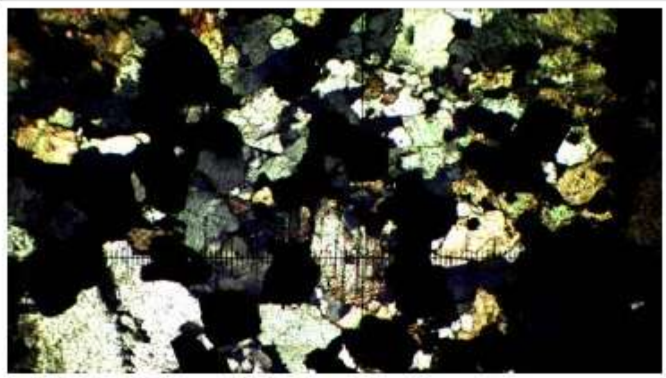
Alteration/Mineralization:
Strong pyrite, moderate sphalerite and minor galena mineralization

Petrogenesis: The massive sulphide mineralization is associated with medium-grained quartz-caclite gangue, likely making this rock a vein or a remobilized massive sulfide lens.

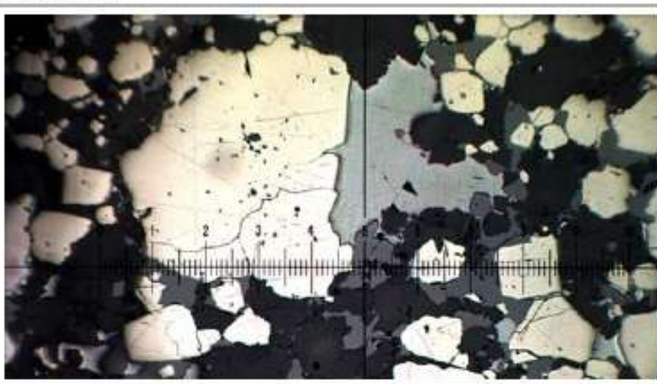
	Mineral	Area
Vein (100%):	Pyrite	60-70%
	Quartz	20-30%
	Calcite	5-10%
	Sphalerite	2-8%
	Galena	<5%

Mineral Descriptions:
Pyrite: rounded cubic grains
Galena: void-filling
Sphalerite: anhedral to void-filling

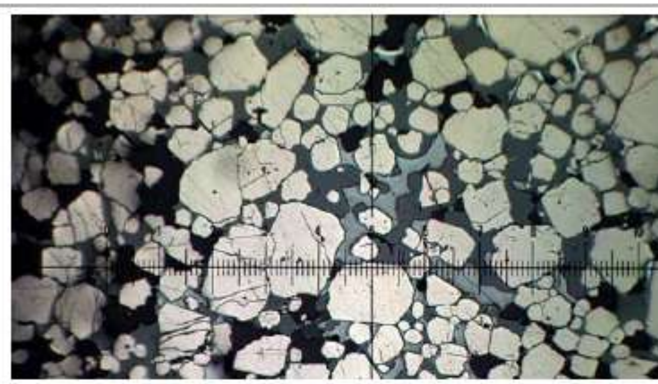
A. Prepared section off-cut. The white minerals are feldspar and quartz, the dark minerals are pyroxene and hornblende. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing calcite and quartz. XPL. Each whole measure on the scale bar is 0.4mm



C. Photomicrograph showing pyrite, galena and sphalerite. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite, galena and sphalerite. RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584908-A

Rock Name: Massive Sulphide Vein(?) or a remobilized massive sulfide lens(?)

Texture:
Massive sulphide mineralization

Alteration/Mineralization:
Strong pyrite, moderate sphalerite and minor galena mineralization

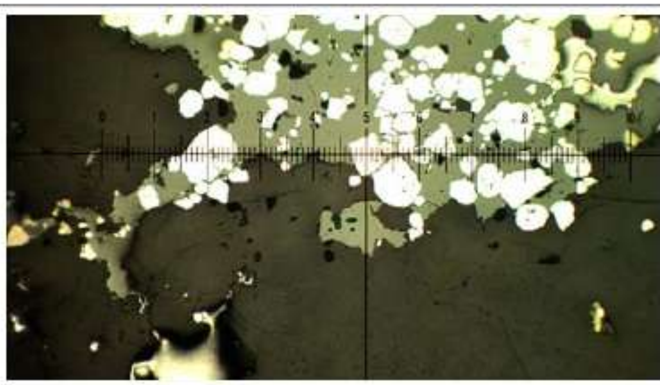
Petrogenesis: The massive sulphide mineralization is associated with medium-grained quartz-caclite gangue, likely making this rock a vein or a remobilized massive sulfide lens.

	Mineral	Area	Size
Vein (100%):	Pyrite	55-65%	
	Quartz	35-45%	
	Calcite	<1%	
	Muscovite	<1%	
	Sphalerite	5-10%	
	Galena	<2%	

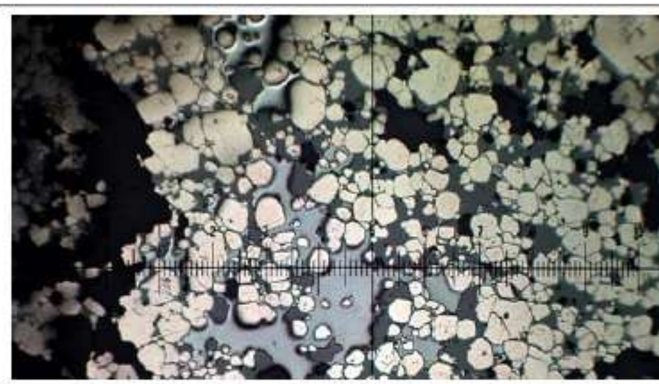
Mineral Descriptions:
Pyrite: fine- to coarse-grained rounded cubic grains
Galena: void-filling
Sphalerite: anhedral to void-filling

A. Prepared section off-cut. The white minerals are quartz, the metallic mineral pyrite. Field of view is approximately 26mm x 46 mm.

B. Photomicrograph showing spahlerite and quartz. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing pyrite, galena and sphalerite. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite, galena and sphalerite. RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584908-B

Rock Name: Massive sulfide ore

Texture:
Massive sulphide mineralization preserving some form of original sedimentary layering

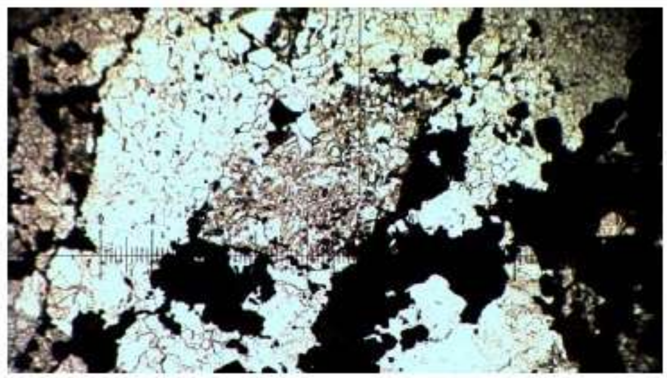
Alteration/Mineralization:
Strong pyrite, moderate sphalerite and minor galena mineralization and trace chalcopyrite

Petrogenesis: The massive sulphide mineralization is associated with medium-grained quartz that is preserving some sort of sedimentary feature, likely making this rock a remobilized massive sulfide lens.

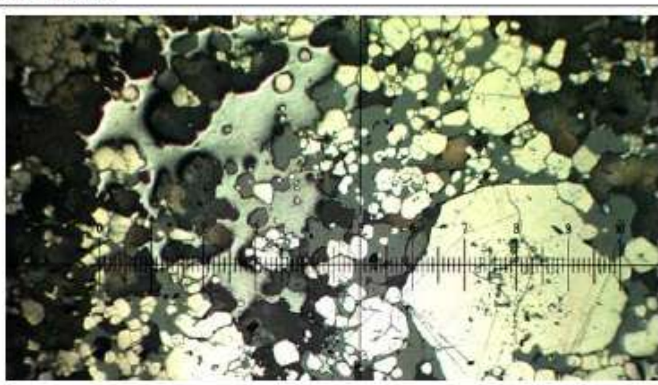
	Mineral	Area	Size
Lens (100%):	Pyrite	55-65%	
	Quartz	35-45%	
	Calcite	<1%	
	Muscovite	<1%	
	Sphalerite	5-10%	
	Galena	<2%	

Mineral Descriptions:
Pyrite: fine- to coarse-grained rounded cubic grains
Galena: void-filling
Sphalerite: anhedral to void-filling

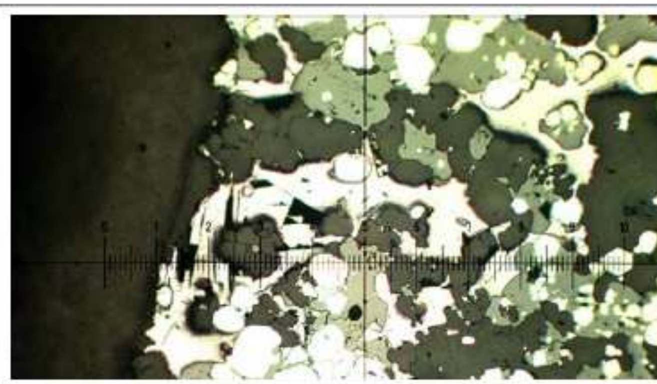
A. Prepared section off-cut. The white minerals are feldspar and quartz, the dark minerals are pyroxene and hornblende. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing calcite and quartz. PPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing pyrite, chalcopyrite and galena. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite, chalcopyrite and galena. RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584914

Rock Name: Massive sulfide ore

Texture:
Massive sulphide mineralization

Alteration/Mineralization:
Strong pyrite mineralization

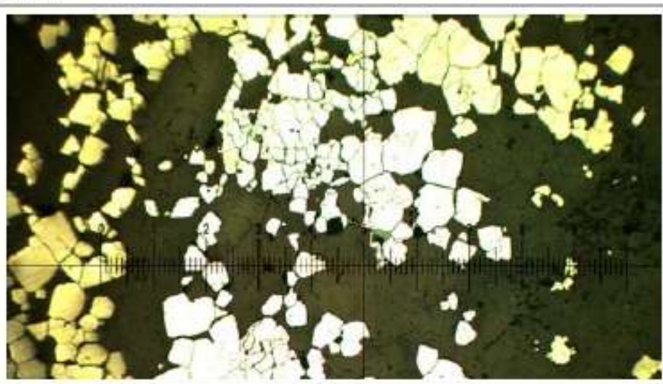
Petrogenesis: The massive sulphide mineralization is associated with medium-grained quartz-caclite gangue, likely making this rock a vein or a remobilized massive sulfide lens.

	Mineral	Area	Size
Vein (100%):	Pyrite	45-55%	
	Quartz	45-55%	

Mineral Descriptions:
Pyrite: fine- to coarse-grained rounded cubic grains, commonly aggregating
Quartz: fine- to medium-grained, some colloform grains around pyrite

A. Prepared section off-cut. The white minerals are plagioclase and quartz, the dark mineral is hornblende. Field of view is approximately 26mm x 46 mm.

B. Photomicrograph showing quartz. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing rounded cubic grains pyrite. Same position as Plate A. RL. Each whole measure on the scale bar is 0.4mm.

D. Photomicrograph showing pyrite aggregate. RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584917

Rock Name: Chlorite schist

Texture:
Muscovite and chlorite giving a foliated fabric; coarse-grained

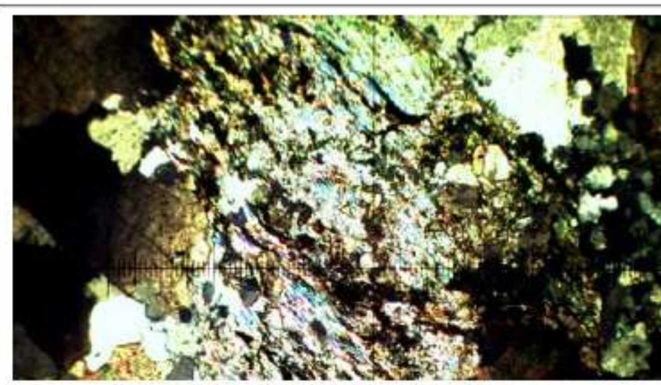
Alteration/Mineralization:
Carbonate

Petrogenesis: This rock was likely mudstone metamorphosed to chlorite-carbonate-muscovite-quartz assemblage.

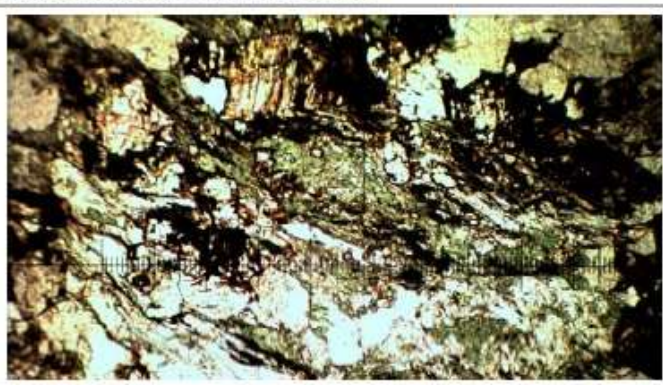
	Mineral	Area
Schist (99-100%):	Quartz	30-40%
	Muscovite	15-25%
	Carbonate	20-30%
	Chlorite	10-20%
Sulphides (<1%):	Pyrite	100%

Mineral Descriptions:
Quartz: Coarse-grained
Muscovite: Coarse-grained; foliated fabric
Carbonate: Coarse-grained
Chlorite: Coarse-grained; foliated fabric

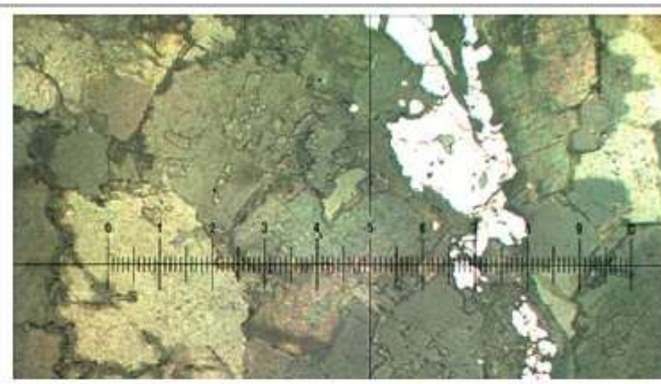
A. Prepared section off-cut. The white minerals (left) are quartz, the white-yellow minerals (right) are carbonate, muscovite and chlorite. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing muscovite, chlorite and quartz. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing chlorite. PPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite. Partial Cross Polarized RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584922

Rock Name: Quartz vein

Texture:
Disseminated chalcopyrite in quartz host

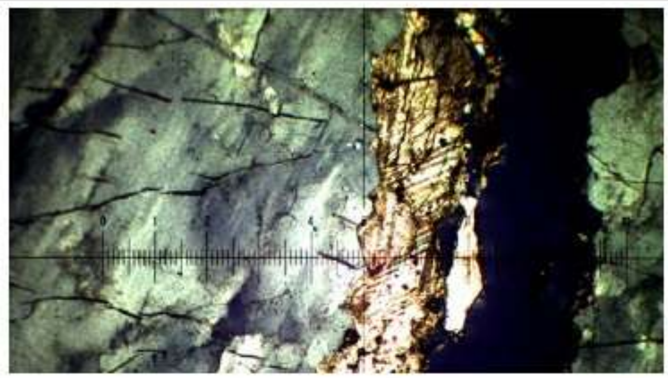
Alteration:
Oxidized rims (Goethite) around chalcopyrite grain boundaries.

Petrogenesis: This Cu mineralized rock appears to be a chalcopyrite mineralized quartz vein

	Mineral	Area
Veins (60-70%):	Quartz	95-100%
	Calcite	<5%
	Sulfide	<1%
Fragment 1 (10-20%):	Albite	35-45%
	Chlorite	10-20%
	Quartz	20-30%
	Carbonate	5-10%
Fragment 2 (15-25%):	Carbonate	100%
Sulfides	Chalcopyrite	95-100%
	Pyrite	<5%

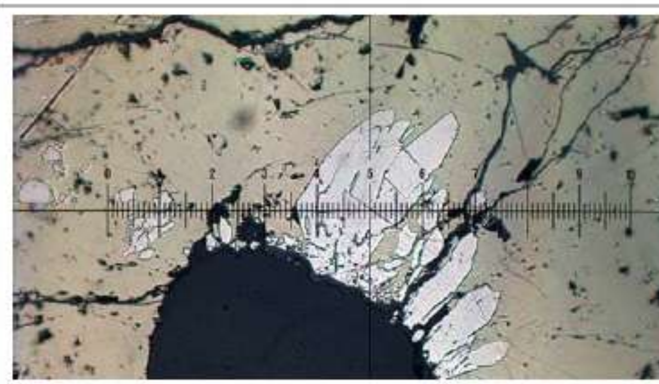
Mineral Descriptions:
Quartz: coarse-grained in vein and Fragment 1
Carbonate: coarse-grained
Chaclopyrite: Anhedral aggregate
Pyrite: Colloform being replaced by chalcopyrite

A. Prepared section off-cut. The white minerals are quartz, the fragment on the right is carbonate and the fragment on the left is albite, chlorite and quartz. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing calcite and quartz. XPL. Each whole measure on the scale bar is 0.4mm.

C. Photomicrograph showing quartz and albite. XPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing chalcopyrite and pyrite. RL. Each whole measure on the scale bar is 0.16mm.

Sample: 584926

Rock Name: Massive sulfide ore

Texture:
Massive sulphide mineralization

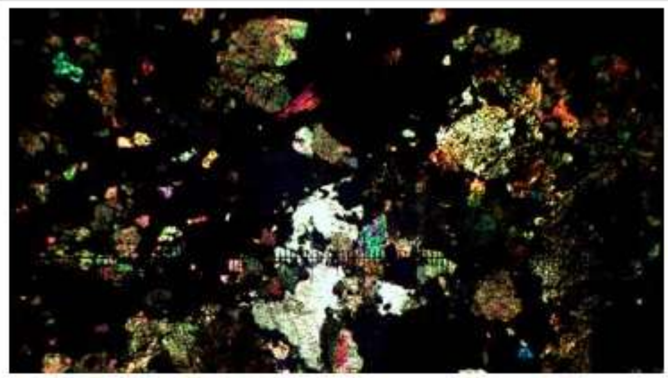
Alteration/Mineralization:
Strong pyrite, moderate sphalerite, minor chalcopyrite and minor galena mineralization

Petrogenesis: The massive sulphide mineralization is associated with quartz, albite and caclite gangue, likely making this rock a vein or a remobilized massive sulfide lens.

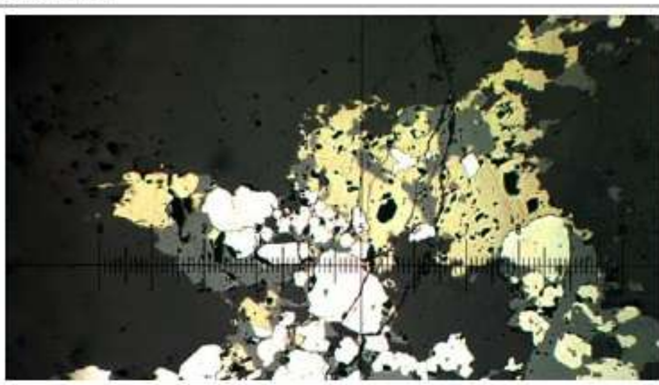
	Mineral	Area
Ore (100%):	Quartz	20-30%
	Calcite	20-30%
	Sulphide	50-60%
Sulphide:	Sphalerite	20-30%
	Chalcopyrite	5-10%
	Galena	2-8%
	Pyrite	60-70%

Mineral Descriptions:
Quartz: associated with pyrite
Carbonate: associated with pyrite,chalcopyrite, galena, and sphalerite

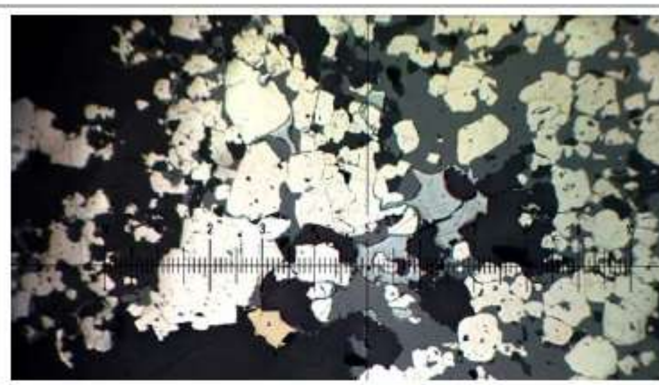
A. Prepared section off-cut. The white minerals are feldspar and quartz, the dark minerals are pyroxene and hornblende. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing calcite and quartz. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing chalcopyrite, sphalerite, pyrtie. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite, galena, sphalerite and chalcopyrite. RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584940-A

Rock Name: Chlorite-Schist

Texture:
Chlorite foliation permeated with quartz filled fractures and veins

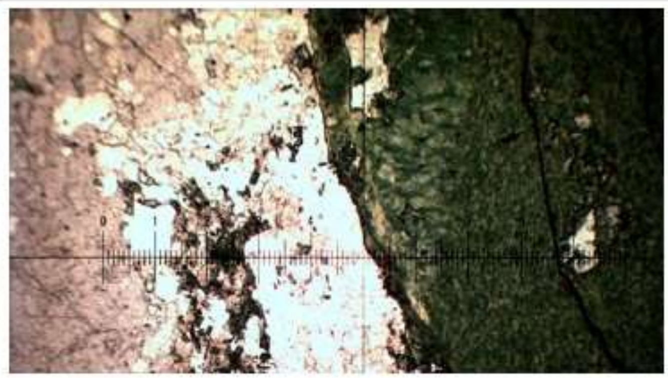
Alteration:
Strong chloritization

Petrogenesis: This rock was likely a mudstone metamorphosed to quartz-chlorite assemblage.

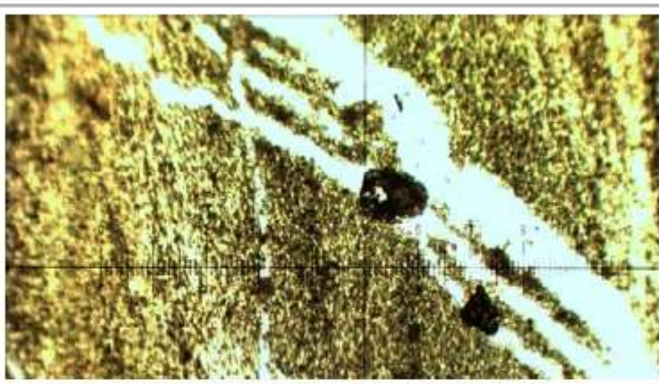
	Mineral	Area	Size
Schist (70-80%):	Chlorite	80-90%	
	Quartz	10-20%	
Vein (20-30%):	Quartz	90-100%	
	Calcite	<10%	

Mineral Descriptions:
Chlorite: Pervasive
Quartz: fine- to coarse-grained in fractures in vein; fine-grained in schist
Calcite: coarse-grained

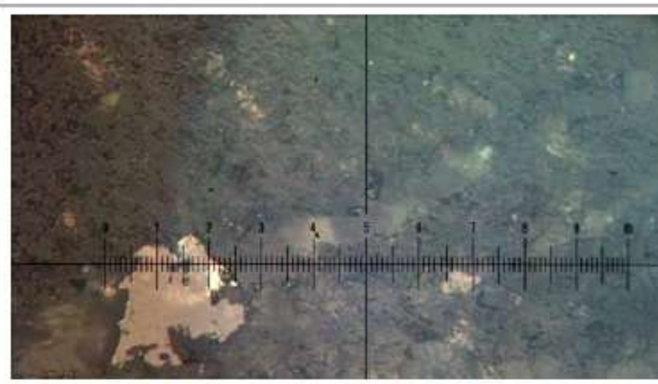
A. Prepared section off-cut. The white minerals are plagioclase and quartz, the dark mineral is hornblende. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing chlorite and quartz. PPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing chlorite and quartz. XPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing sphalerite in partially crossed polarized RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584940-B

Rock Name: Chlorite-Schist

Texture:
Chlorite foliation permeated with quartz-carbonate filled fractures and veins

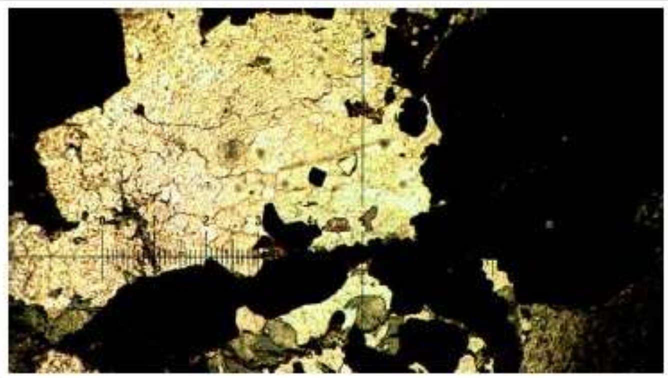
Alteration/Mineralization:
Strong chloritization; moderate pyrite, trace sphalerite and trace chalcopyrite mineralization

Petrogenesis: This rock was likely a mudstone metamorphosed to quartz-chlorite assemblage.

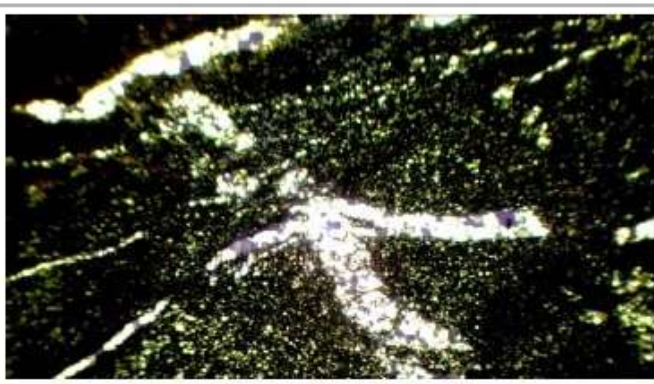
	Mineral	Area
Schist (60-70%):	Quartz	20-30%
	Chlorite	70-80%
	Sericite	<5%
	Carbonate	<5%
Veins (30-40%):	Quartz	60-70%
	Carbonate	10-20%
	Sulphides	<5%
Sulphides:	Pyrite	99-100%
	Sphalerite	<1%
	Chalcopyrite	<1%

Mineral Descriptions:
Carbonate: rhombohedran crystals
Chlorite: Fine- to coarse-grained
Pyrite: rounded subhedral grains
Chalcopyrite: anhedral

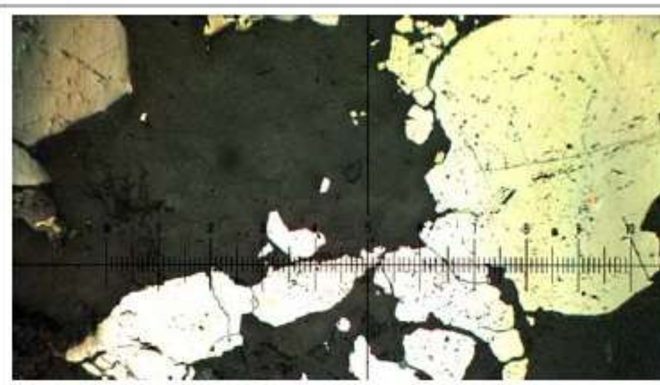
A. Prepared section off-cut. The white minerals are calcite and quartz, the dark minerals are chlorite. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing quartz and chlorite. PPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing quartz and chlorite. PPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite. RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584947-A

Rock Name: Quartz-carbonate vein

Texture:
Coarse-grained

Alteration:
Carbonate

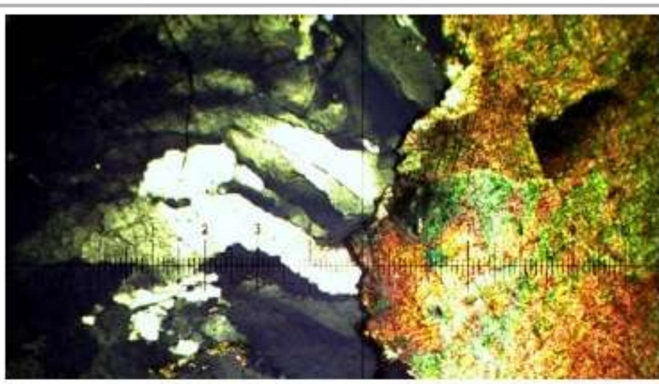
Petrogenesis: This rock appears to be a quartz-carbonate vein hosted in a chlorite schist.

	Mineral	Area
Vein (100%):	Quartz	60-70%
	Carbonate	30-40%

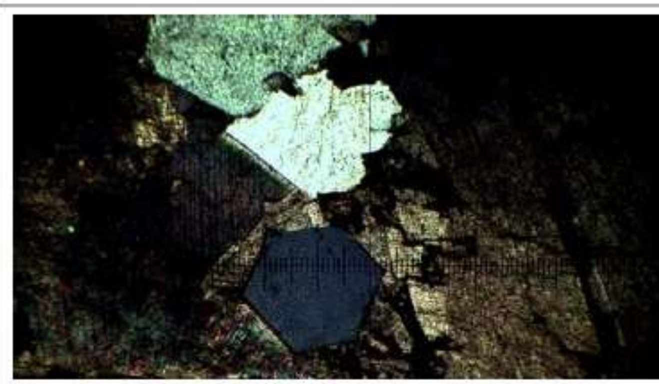
Mineral Descriptions:
Quartz: coarse-grained
Carbonate: coarse-grained

A. Prepared section off-cut. The white minerals are quartz, the off-white mineral are carbonate minerals. Field of view is approximately 26mm x 46 mm.

B. Photomicrograph showing quartz and carbonate minerals. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing quartz and carbonate minerals. XPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing quartz and carbonate minerals. XPL. Each whole measure on the scale bar is 0.4mm.

Sample: 584947-B

Rock Name: Chlorite-Schist

Texture:
Chlorite foliation permeated with quartz-carbonate filled fractures and veins

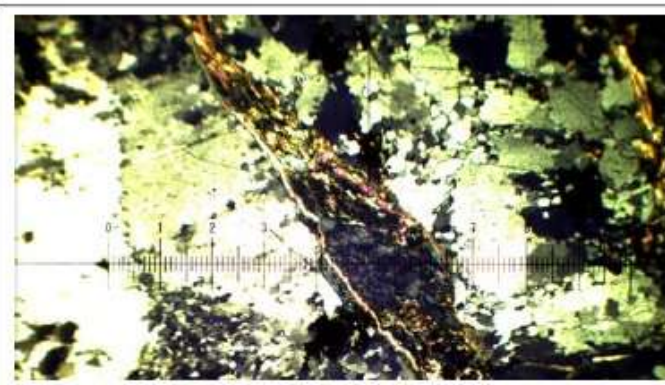
Alteration:
Strong chloritization

Petrogenesis: This rock was likely a mudstone metamorphosed to quartz-chlorite-carbonate-muscovite assemblage.

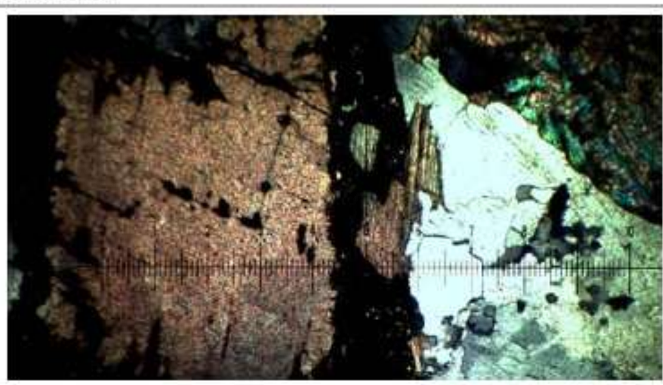
	Mineral	Area
Schist (60-70%):	Quartz	60-70%
	Carbonate	10-20%
	Chlorite	20-30%
	Muscovite	5-10%
Vein (30-40%):	Quartz	70-80%
	Carbonate	20-30%

Mineral Descriptions:
Quartz: Fine-grained in schist; medium-grained in vein
Carbonate: Rhombohedra to anhedral coarse-grains
Chlorite: Fine- to coarse-grained giving a foliated fabric

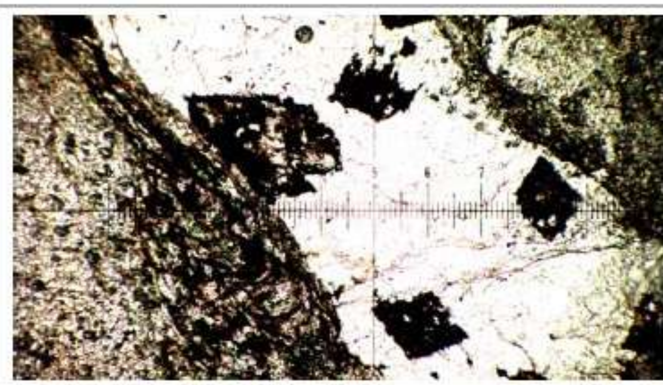
A. Prepared section off-cut. The white minerals are feldspar and quartz, the dark minerals are pyroxene and hornblende. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing muscovite, chlorite and quartz. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing carbonate and quartz. XPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing rhombohedra of recrystallized carbonate with a massive chlorite matrix in a quartz vein. PPL. Each whole measure on the scale bar is 0.4mm.

Sample: 584949

Rock Name: Chalcopyrite mineralized quartz vein

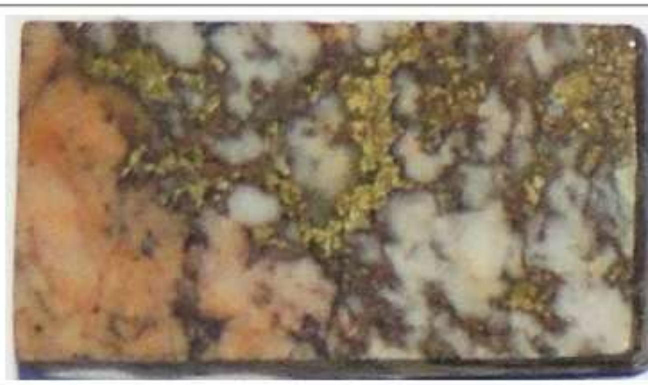
Texture:
Disseminated chalcopyrite in quartz host (vein?)

Alteration:
Oxidized rims (Goethite) around chalcopyrite grain boundaries.

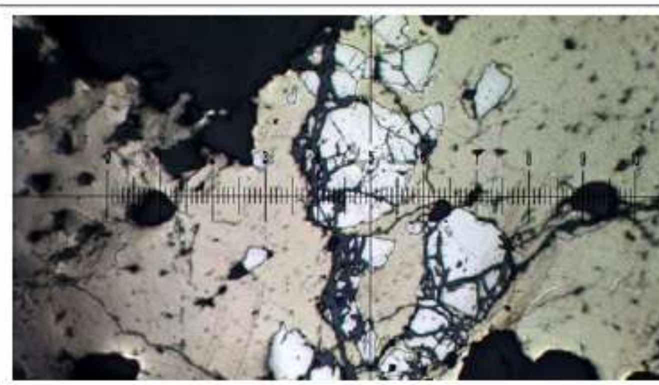
Petrogenesis: This Cu mineralized rock appears to be a chalcopyrite mineralized quartz vein likely remobilized from a Cu rich source.

	Mineral	Area
Sulphides (40-50%):	Chalcopyrite	80-90%
	Pyrite	10-20%
Oxides (02-05%):	Goethite	100%
Gangue (50-60%):	Quartz	99-100%
	Sericite	<1%

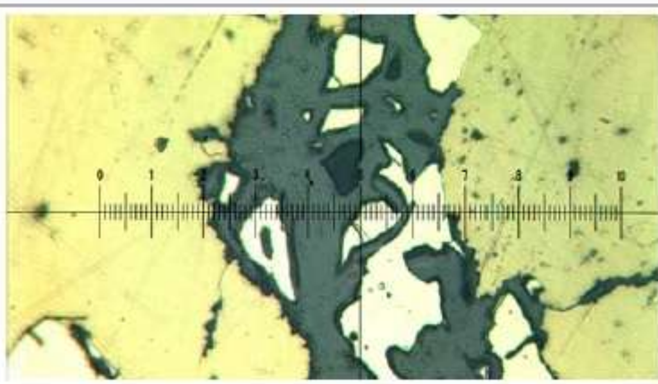
Mineral Descriptions:
Chalcopyrite: fracture filling medium- to coarse-grained anhedral aggregates oxidized rims to goethite
Pyrite: Relict pyrite partially replaced by chaclopyrite
Quartz: Coarse-quartz host displaying strained extinction, mottled surface and sutured grain boundaries; medium- to coarse-grained quartz in chalcopyrite not showing strained extinction or mottled texture.



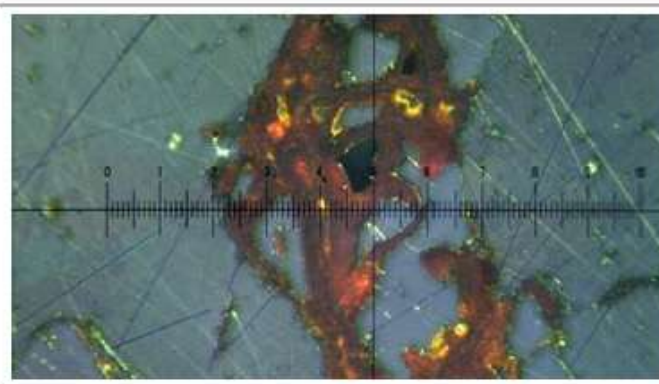
A. Prepared section off-cut. White mineral is quartz and brassy-yellow color is chalcopyrite. Field of view is approximately 26mm x 46 mm



B. Photomicrograph showing relict pyrite partially replaced by chalcopyrite and FeOx filled fractures. RL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing chalcopyrite with relict pyrite in a FeOx filled fractures. RL. Each whole measure on the scale bar is 0.064mm.



D. Photomicrograph showing the same view a Plate-C but with crossed nicols. Note internal reflections of goethite. XRL. Each whole measure on the scale bar is 0.064mm.

Sample: 584950-A

Rock Name: Quartz-muscovite-albite schist

Texture:
Muscovite foliated fabric

Alteration/Mineralization:
Carbonate alteration; minor chalcopyrite, minor pyrite, trace sphalerite and trace galena mineralization

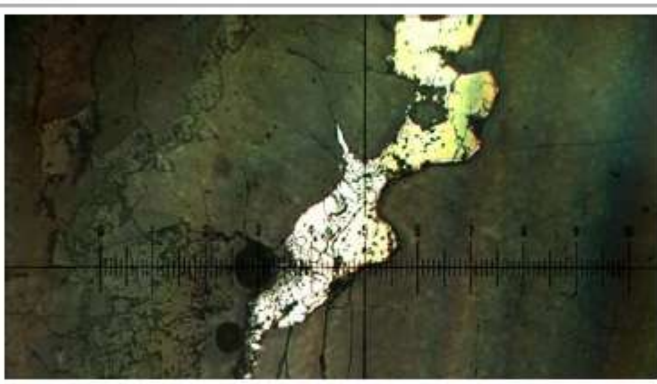
Petrogenesis: This rock was likely a mudstone that had been metamorphosed to a quartz-muscovite-albite assemblage.

	Mineral	Area
Schist (100%):	Quartz	30-40%
	Albite	25-35%
	Carbonate	5-15%
	Muscovite	5-10%
	Sulphides	<2%
Sulphides:	Pyrite	10-20%
	Galena	<5%
	Sphalerite	<5%
	Chalcopyrite	75-85%

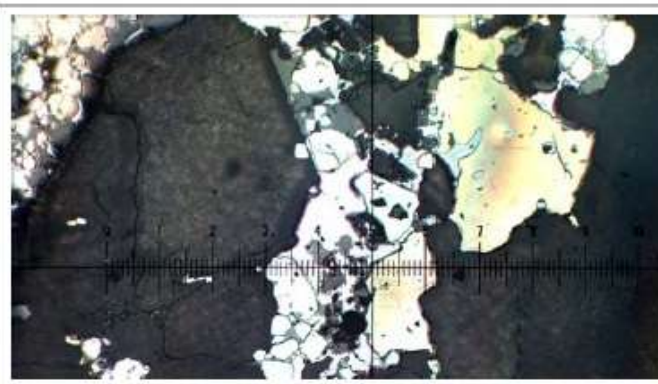
Mineral Descriptions:
Chalcopyrite: Void-space filling
Galena: Void-space filling
Pyrite: rounded cubic grains

A. Prepared section off-cut. The white minerals are plagioclase and quartz, the dark mineral is hornblende. Field of view is approximately 26mm x 46 mm.

B. Photomicrograph showing albite and quartz. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing chalcopyrite. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite, galena, chalcopyrite and pyrite. RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584950-B

Rock Name: Massive sulfide ore

Texture:
Muscovite foliated fabric

Alteration/Mineralization:
Carbonate alteration; Strong pyrite, minor sphalerite, trace chalcopyrite and trace galena mineralization

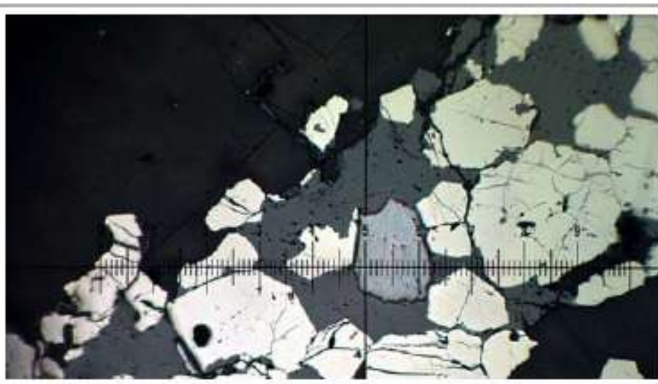
Petrogenesis: This rock was likely a mudstone that had been metamorphosed to a quartz-muscovite-albite assemblage. The timing of massive sulfide mineralization is unknown.

	Mineral	Area
Gangue (10-20%):	Quartz	30-40%
	Albite	25-35%
	Carbonate	5-15%
	Muscovite	5-10%
Ore (80-90%):	Pyrite	75-85%
	Galena	<5%
	Sphalerite	5-10%
	Chalcopyrite	<5%

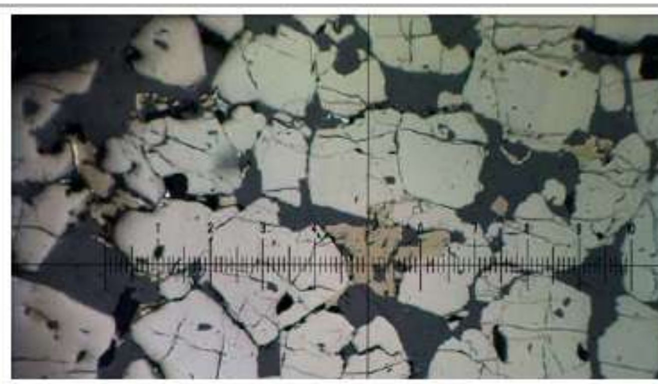
Mineral Descriptions:
Chalcopyrite: Void-space filling
Galena: Void-space filling
Pyrite: rounded cubic grains

A. Prepared section off-cut. The white minerals are albite and quartz, the metallic mineral is pyrite. Field of view is approximately 26mm x 46 mm.

B. Photomicrograph showing carbonate and quartz. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing pyrite and sphalerite. RL. Each whole measure on the scale bar is 0.4mm.



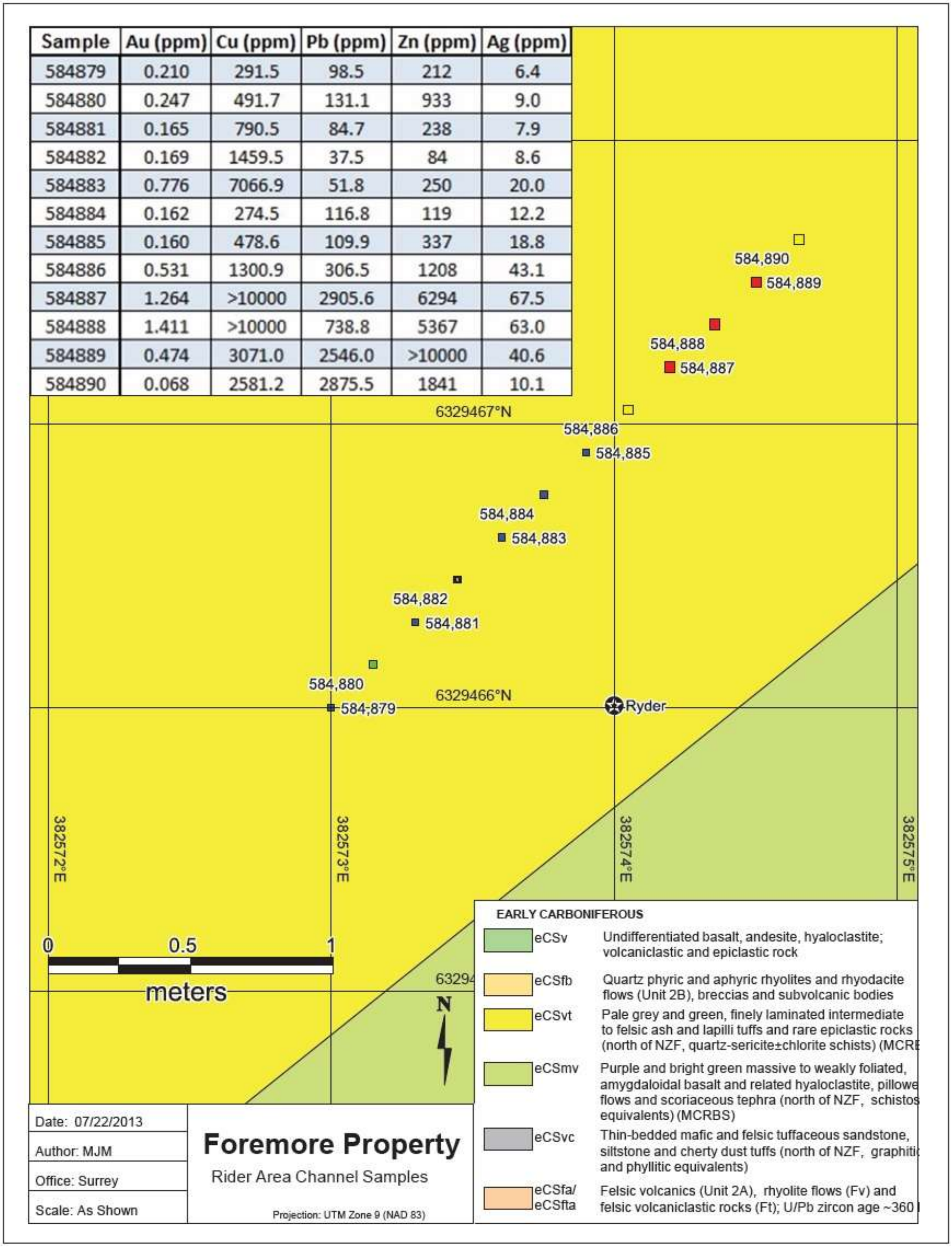
D. Photomicrograph showing pyrite and chalcopyrite. RL. Each whole measure on the scale bar is 0.4mm.

6.6 RYDER SHOWING

At the **Ryder showing** weak, narrow and discontinuous MS-SMS mineralization is exposed on surface and intersected in three of eight short holes drilled (Sears and Watkins, 2005). The best drill hole intersection came from a poorly recovered semi-massive sulphides over a 4.40 m interval in hole FM04-13. Two samples were submitted for petrographic work.

Alteration Minerals Associated With VMS Deposits								
Sample	**Easting**	**Northing**	**Showing**	**As (ppm)**	**Sb (ppm)**	**Hg (ppm)**	**Mg (%)**	**Mn (ppm)**
584879	382573	6329466	Ryder	46.4	2.7	0.60	0.01	32
VMS Mineralization								
Sample	**Easting**	**Northing**	**Showing**	**Au (ppm)**	**Cu (ppm)**	**Pb (ppm)**	**Zn (ppm)**	**Ag (ppm)**
584851	380770	6327241	North	0.101	105.0	25.5	6645	2.5

Table 2: Summary table for Ryder sample used for petrographic study.



Sample	Au (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
584879	0.210	291.5	98.5	212	6.4
584880	0.247	491.7	131.1	933	9.0
584881	0.165	790.5	84.7	238	7.9
584882	0.169	1459.5	37.5	84	8.6
584883	0.776	7066.9	51.8	250	20.0
584884	0.162	274.5	116.8	119	12.2
584885	0.160	478.6	109.9	337	18.8
584886	0.531	1300.9	306.5	1208	43.1
584887	1.264	>10000	2905.6	6294	67.5
584888	1.411	>10000	738.8	5367	63.0
584889	0.474	3071.0	2546.0	>10000	40.6
584890	0.068	2581.2	2875.5	1841	10.1

Figure 5: Ryder sample locations.

Sample: 584879-A

Rock Name: Mudstone

Texture:
Quartz colloform around coarse-grained pyrite
Coarse-grained quartz silicification

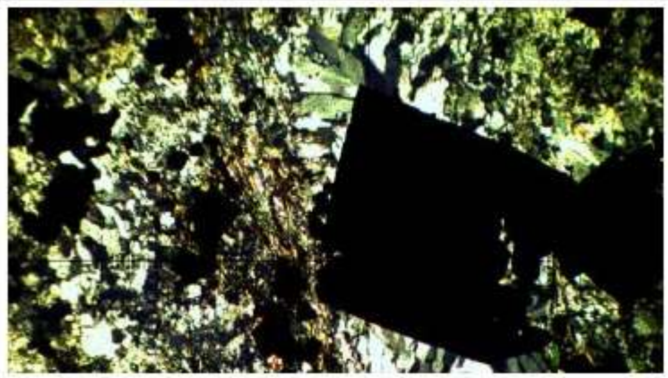
Alteration:
Strong silicification
Strong disseminated pyrite mineralization

Petrogenesis: This rock was likely a mudstone that was metamorphosed to a quartz and sericite assemblage that was later strongly silicified bringing with this alteration event pyrite mineralization.

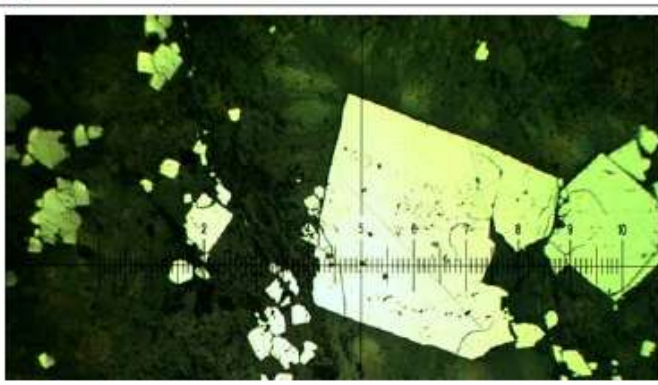
	Mineral	Area	Size
Host:	Quartz	65 to 75%	
	Sericite	10 to 20%	
	Sulfides	20 to 30%	
Sulfides:	Pyrite	100%	

Mineral Descriptions:
Quartz: Colloform around coarse-grained pyrite; fine- to coarse-grained matrix
Pyrite: fine- to coarse-grained cubic minerals; dominantly free from inclusions

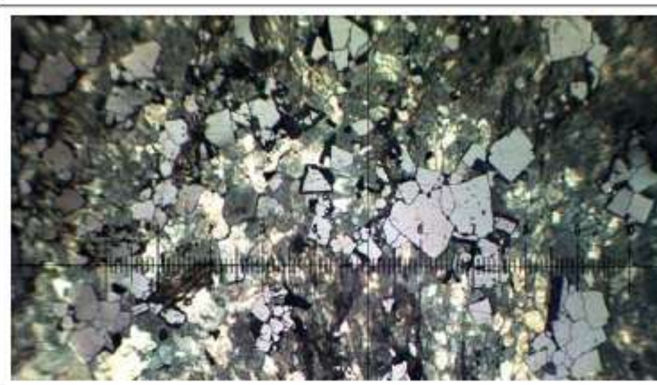
A. Prepared section off-cut. The white minerals are quartz, the dark minerals are sericite and quartz, the metallic areas are pyrite. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing colloform quartz around opaque pyrite and sericite. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing same view as Plate-B. Partial cross- polarized RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite. Partial cross- polarized RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584879-B

Rock Name: Mudstone

Texture:
Quartz colloform around coarse-grained pyrite
Coarse-grained quartz silicification

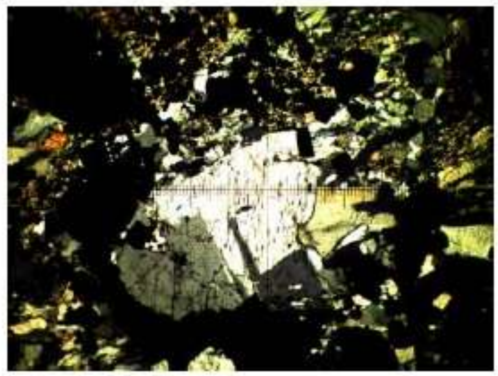
Alteration/Mineralization:
Strong silicification
Strong disseminated pyrite mineralization

Petrogenesis: This rock was likely a mudstone that was metamorphosed to a quartz-sericite-albite assemblage that was later strongly silicified bringing with this alteration event pyrite mineralization.

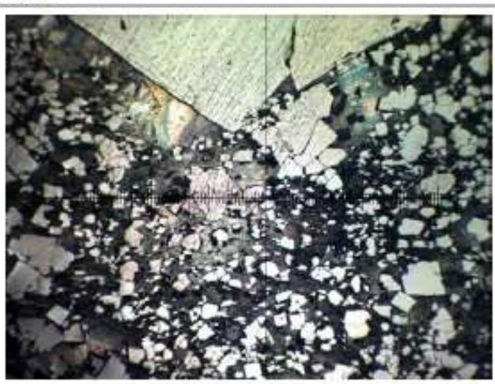
	Mineral	Area	Size
Mineralogy:	Quartz	60 to 70%	
	Sericite	10 to 20%	
	Sulfides	25 to 35%	
	Albite	5-10%	
Sulfides:	Pyrite	100%	

Mineral Descriptions:
Quartz: Colloform around coarse-grained pyrite; fine- to coarse-grained matrix
Albite: Bi-axial positive; Albite twin fast ray extinction angle 9-11 degrees
Pyrite: fine- to coarse-grained cubic minerals; dominantly free from inclusions

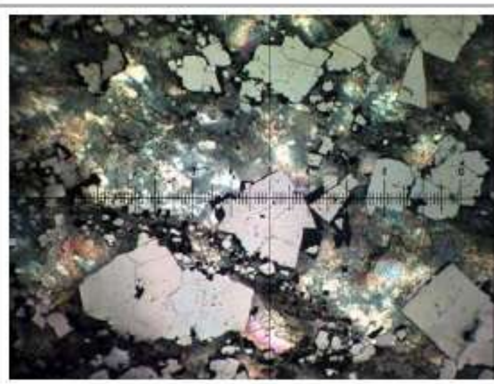
A. Prepared section off-cut. The white minerals are plagioclase and quartz, the dark mineral is hornblende. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing quartz, albite, and sericite. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing pyrite. Partial cross-polarized RL. Each whole measure on the scale bar is 0.4mm..



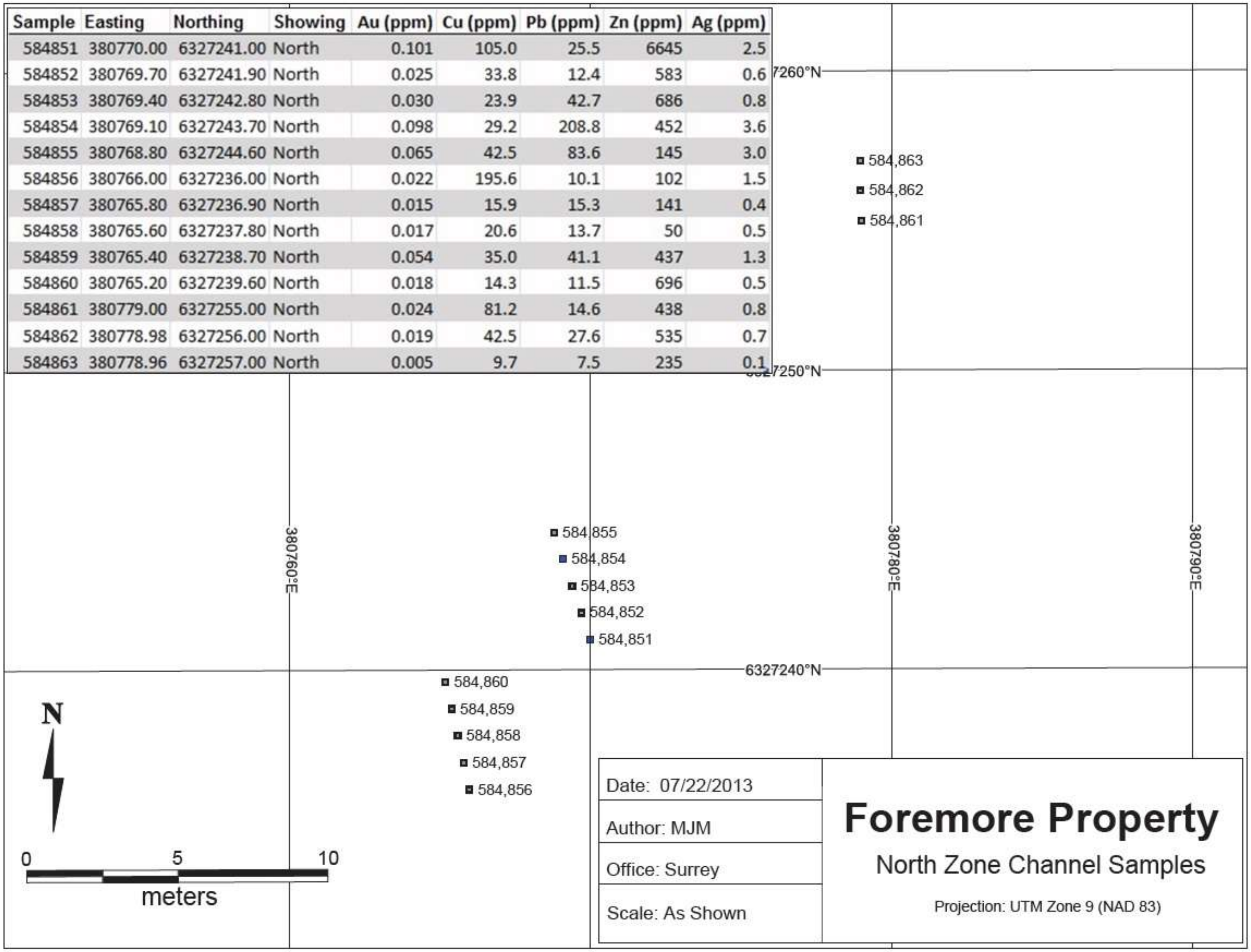
D. Photomicrograph showing pyrite. Partial cross-polarized RL. Each whole measure on the scale bar is 0.4mm.

6.7 NORTH SHOWING

Two holes, FM04-22 and -23, totalling 274m and drilled from the same setup tested under the North Showing. The holes intersected a top section of weakly deformed purple and green mafic volcanic tuffs overlying a more strongly deformed quartz sericite schist. Within the quartz sericite schist is a moderately foliated chlorite hematite schist. A 2.0m section of quartz sericite pyritic schist was intersected in FM04-22 from 104.4 to 106.4m that assayed 0.23% Zn and 0.12 g/t Au over 1.0m. It is unclear if this weakly mineralized interval is an extension of the mineralization seen on surface. Complicating the geological setting of the mineralization at the North Showing is a southeast dipping thrust fault.

Alteration Minerals Associated With VMS Deposits									
Sample	**Easting**	**Northing**	**Showing**	**As (ppm)**	**Sb (ppm)**	**Hg (ppm)**	**Mg (%)**	**Mn (ppm)**
584851	380770	6327241	North	61.3	1.4	11.92	0.53	1500
VMS Mineralization									
Sample	**Easting**	**Northing**	**Showing**	**Au (ppm)**	**Cu (ppm)**	**Pb (ppm)**	**Zn (ppm)**	**Ag (ppm)**
584851	380770	6327241	North	0.101	105.0	25.5	6645	2.5

Table 3: Summary table for North area sample used for petrographic study.



Sample	Easting	Northing	Showing	Au (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
584851	380770.00	6327241.00	North	0.101	105.0	25.5	6645	2.5
584852	380769.70	6327241.90	North	0.025	33.8	12.4	583	0.6
584853	380769.40	6327242.80	North	0.030	23.9	42.7	686	0.8
584854	380769.10	6327243.70	North	0.098	29.2	208.8	452	3.6
584855	380768.80	6327244.60	North	0.065	42.5	83.6	145	3.0
584856	380766.00	6327236.00	North	0.022	195.6	10.1	102	1.5
584857	380765.80	6327236.90	North	0.015	15.9	15.3	141	0.4
584858	380765.60	6327237.80	North	0.017	20.6	13.7	50	0.5
584859	380765.40	6327238.70	North	0.054	35.0	41.1	437	1.3
584860	380765.20	6327239.60	North	0.018	14.3	11.5	696	0.5
584861	380779.00	6327255.00	North	0.024	81.2	14.6	438	0.8
584862	380778.98	6327256.00	North	0.019	42.5	27.6	535	0.7
584863	380778.96	6327257.00	North	0.005	9.7	7.5	235	0.1

Figure 6: North zone sample locations.

Sample: 584851

Rock Name: Sericite Schist

Texture:
Strongly foliated sericite schist; fine-grained muscovite (sericite)

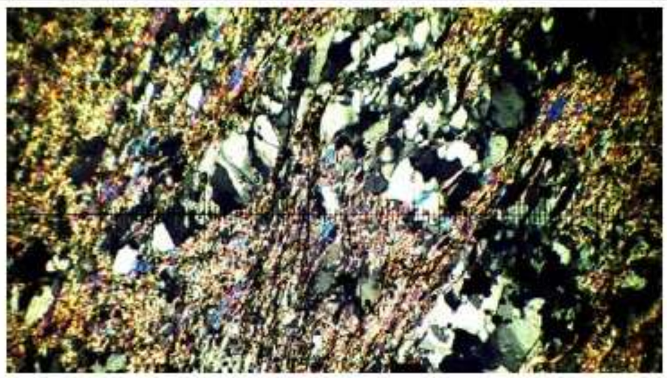
Alteration/Mineralization:
Strongly silicified; minor pyrite and trace sphalerite mineralization

Petrogenesis: This rock is likely a mudstone metamorphosed to an assemblage of quartz and sericite.

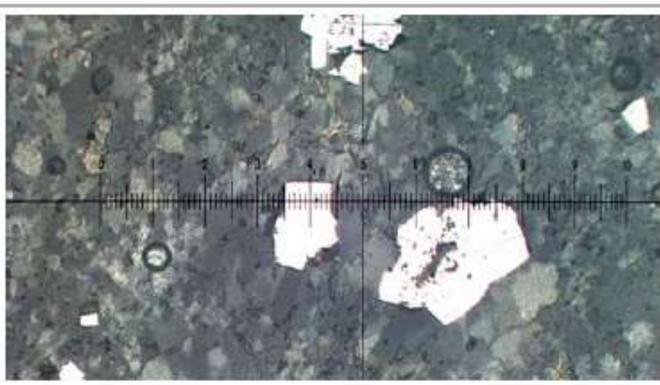
	Mineral	Area
Host Rock (95-99%):	Quartz	40-50%
	Sericite	40-50%
	Calcite	<2%
Sulphides (<5%):	Pyrite	99-100%
	Sphalerite	<1%

Mineral Descriptions:
Quartz: Fine-grained
Sericite: Strongly foliated and fine-grained
Pyrite: Euhedral-subhedral fine- to medium-grained
Sphalerite: A single grain of sphalerite with pyrite inclusions.

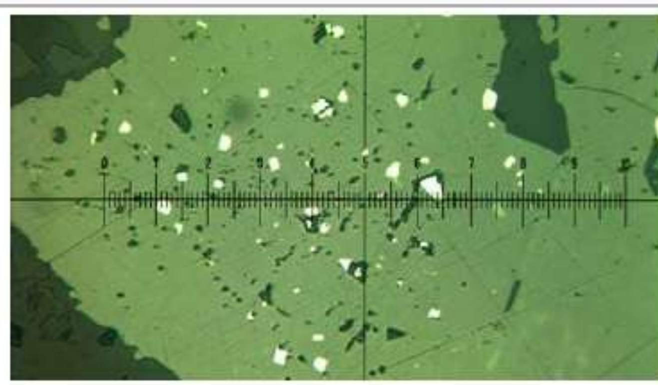
A. Prepared section off-cut. The dark grey areas are sericite and quartz. The white areas are zones of quartz aggregates. Field of view is approximately 26mm x 46 mm



B. Photomicrograph showing quartz and sericite. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing euhedral pyrite grains. Partial polarized RL. Each whole measure on the scale bar is 0.16mm.



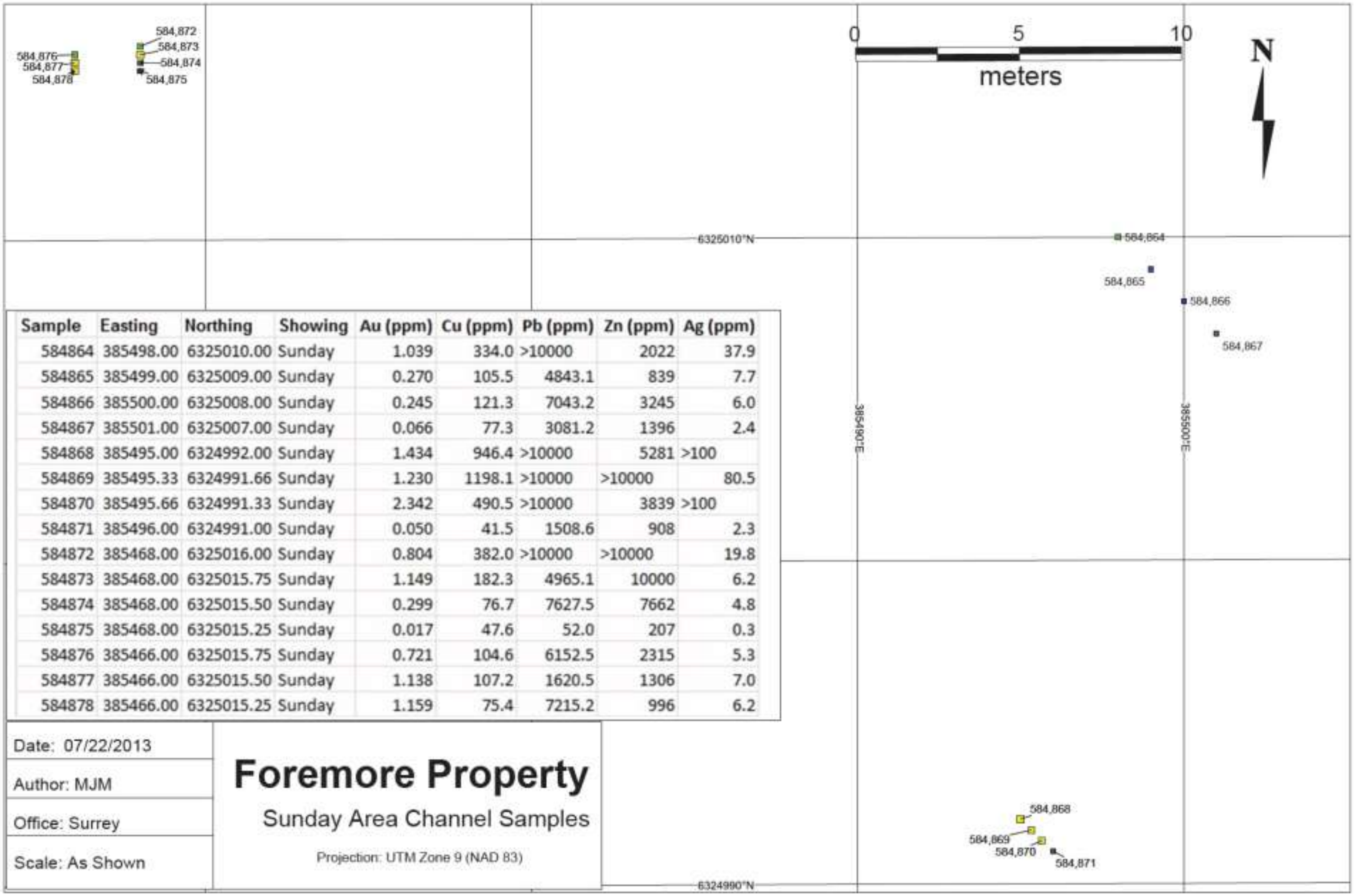
D. Photomicrograph showing sphalerite with pyrite inclusions. RL. Each whole measure on the scale bar is 0.064mm.

6.7 SUNDAY SHOWING

The Sunday Prospect is described by Sears (2004) and is located 1100m south-southeast of the SG Showing (Figure 3). The mineralization occurs in a number of parallel veins of disseminated to massive arsenopyrite, galena, sphalerite and pyrite with good precious metal values. Best analytical results from outcrop include 8.0 g/t Au, 16.9 g/t Ag, 3.96% Pb, and 1.2% Zn over 0.12m.; and 3.06 g/t Au, 20.9 g/t Ag, 1.65% Zn, 0.6% Pb and 6.17% As. Another trench on a parallel vein assayed 2.21 g/t Au, 119.2 g/t Ag, 1.08% Zn, 8.07% Pb and 2.46% As over 1.0m. Mineralization is hosted in parallel vein systems cutting stratigraphy at 030^0 and dipping shallow to moderately southeast and followed in one vein system for 120m. The mineralization may be related to a felsic / mafic volcanic with nearby limestone.

Alteration Minerals Associated With VMS Deposits								
Sample	**Easting**	**Northing**	**Showing**	**As (ppm)**	**Sb (ppm)**	**Hg (ppm)**	**Mg (%)**	**Mn (ppm)**
584869	385495	6324992	Sunday	10000.0	42.8	1.32	0.07	80
584872	385468	6325016	Sunday	900.7	4.5	1.62	0.56	503
584873	385468	6325016	Sunday	1228.1	1.8	0.34	0.35	249
584874	385468	6325016	Sunday	356.4	0.8	0.24	0.86	611
VMS Mineralization								
Sample	**Easting**	**Northing**	**Showing**	**Au (ppm)**	**Cu (ppm)**	**Pb (ppm)**	**Zn (ppm)**	**Ag (ppm)**
584869	385495	6324992	Sunday	1.230	1198.1	10000.0	10000	80.5
584872	385468	6325016	Sunday	0.804	382.0	10000.0	10000	19.8
584873	385468	6325016	Sunday	1.149	182.3	4965.1	10000	6.2
584874	385468	6325016	Sunday	0.299	76.7	7627.5	7662	4.8

Table 4: Summary table for Sunday area samples used for petrographic study.



Sample	Easting	Northing	Showing	Au (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
584864	385498.00	6325010.00	Sunday	1.039	334.0	>10000	2022	37.9
584865	385499.00	6325009.00	Sunday	0.270	105.5	4843.1	839	7.7
584866	385500.00	6325008.00	Sunday	0.245	121.3	7043.2	3245	6.0
584867	385501.00	6325007.00	Sunday	0.066	77.3	3081.2	1396	2.4
584868	385495.00	6324992.00	Sunday	1.434	946.4	>10000	5281	>100
584869	385495.33	6324991.66	Sunday	1.230	1198.1	>10000	>10000	80.5
584870	385495.66	6324991.33	Sunday	2.342	490.5	>10000	3839	>100
584871	385496.00	6324991.00	Sunday	0.050	41.5	1508.6	908	2.3
584872	385468.00	6325016.00	Sunday	0.804	382.0	>10000	>10000	19.8
584873	385468.00	6325015.75	Sunday	1.149	182.3	4965.1	10000	6.2
584874	385468.00	6325015.50	Sunday	0.299	76.7	7627.5	7662	4.8
584875	385468.00	6325015.25	Sunday	0.017	47.6	52.0	207	0.3
584876	385466.00	6325015.75	Sunday	0.721	104.6	6152.5	2315	5.3
584877	385466.00	6325015.50	Sunday	1.138	107.2	1620.5	1306	7.0
584878	385466.00	6325015.25	Sunday	1.159	75.4	7215.2	996	6.2

Figure 7: Sunday zone sample locations.

Sample: 584869-A

Rock Name: Mudstone

Texture:
Massive sphalerite mineralization. Sericite minerals are oriented in all directions. Sphalerite has pyrite and chalcopyrite inclusions.

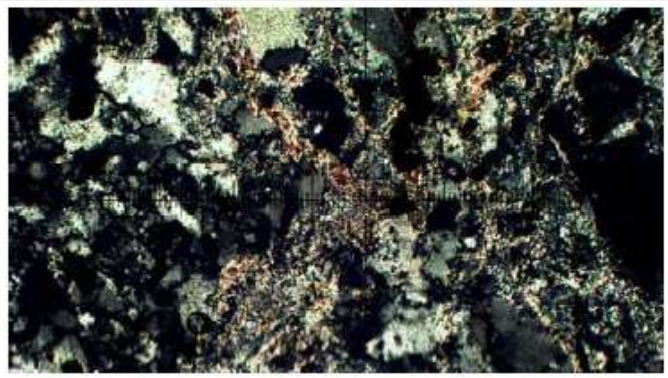
Alteration/Mineralization:
Strong sphalerite, moderate pyrite and minor chalcopyrite mineralization

Petrogenesis: This rock was likely mudstone metamorphosed to quartz-sericite assemblage.

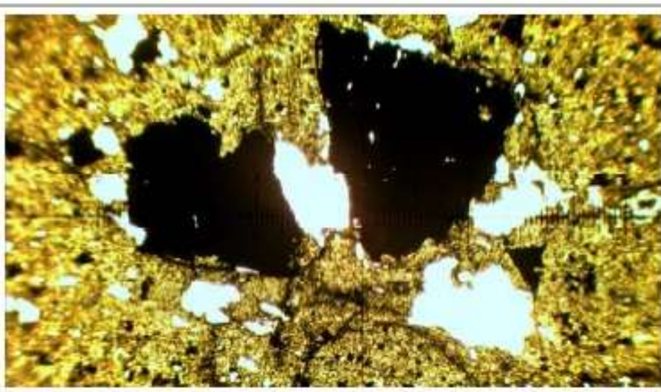
		Mineral	Area
Schist	(50-60%):	Quartz	60-70%
		Sericite	30-40%
Sulphides	(40-50%):	Sphalerite	70-80%
		Pyrite	20-30%
		Chalcopyrite	5-15%

Mineral Descriptions:
Quartz: Fine-grained
Sericite: Fine-grained giving a foliation
Sphalerite: Coarse-grained filled with pyrite and chalcopyrite inclusions
Pyrite: Fine- to coarse-grained

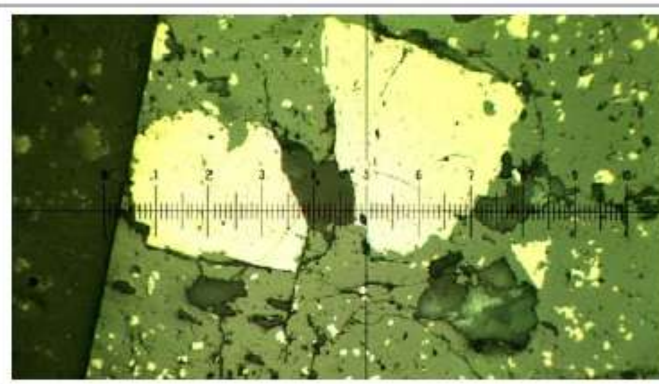
A. Prepared section off-cut. White-transluscent minerals are quartz, and muscovite, and dark mineral is pyroxene. Field of view is approximately 26mm x 46 mm



B. Photomicrograph showing quartz, sericite and pyrite. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing quartz, sphalerite and pyrite. PPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing the same area as Plate-C under partially cross polarized RL. Each whole measure on the scale bar is 0. 4mm.

Sample: 584869-B

Rock Name: Mudstone

Texture:
Fine grained with multiple crosscutting quartz vein

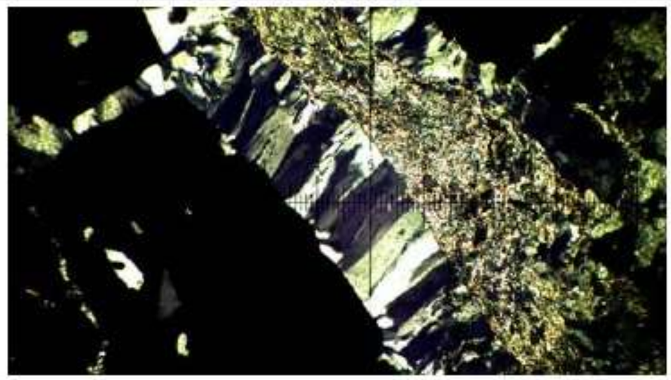
Alteration:
Pyrite mineralization strongly associated with quartz veining

Petrogenesis: This rock was likely mudstone metamorphosed to quartz-sericite assemblage.

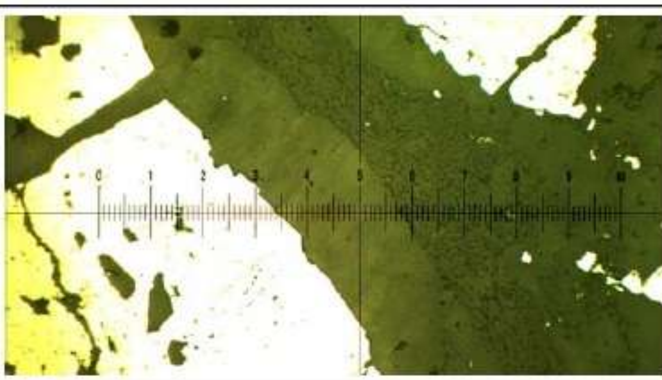
		Mineral	Area
Host	(70-80%):	Quartz	40-50%
		Sericite	50-60%
Sulphides	(5-15%):	Pyrite	99-100%
		Sphalerite	<1%
Veins	(10-20%):	Quartz	80%
		Sulphides	10-20%

Mineral Descriptions:
Quartz: coarse-grained colloform grains around pyrite grains; fine grained quartz in host
Sericite: fine-grained random textured
Pyrite: fine- to coarse-grained
Sphalerite: fine-grained

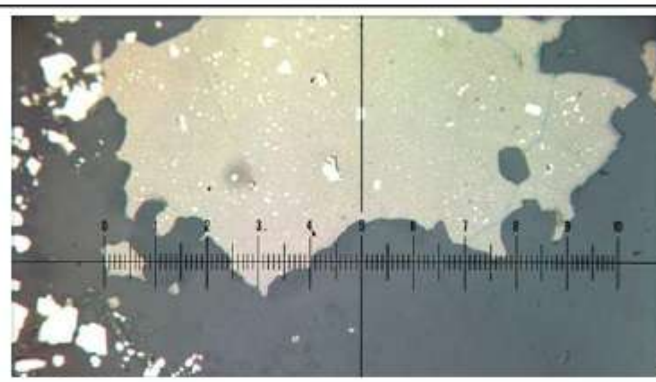
A. Prepared section off-cut. Grey mineral is muscovite and quartz, transparent grains are quartz veins. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing colloform quartz, fine-grained muscovite and quartz matrix. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing pyrite. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing sphalerite with pyrite inclusions. RL. Each whole measure on the scale bar is 0.064mm.

Sample: 584872-A

Rock Name: Chlorite-Mudstone and Feldspar-porphyry volcanic flow

Texture:
Feldspar porphyry

Alteration/Mineralization:
Volcanic flow strongly chlorite altered; moderate pyrite mineralization

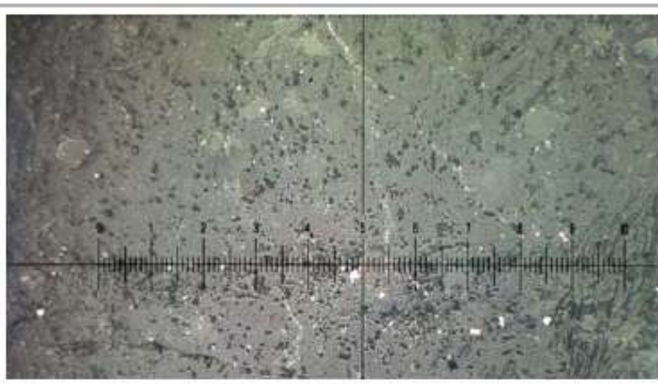
Petrogenesis: This rock was likely a feldspar porphyry mafic flow in contact with a mudstone

	Mineral	Area
Volcanic (30-40%):	Chlorite	70-80%
	Feldspar	15-20%
	Calcite	5-10%
Mudstone (30-40%):	Muscovite	50-60%
	Quartz	35-45%
	Calcite	5-15%
	Chlorite	<5%
Sulphides (2-8%):	Pyrite	100%

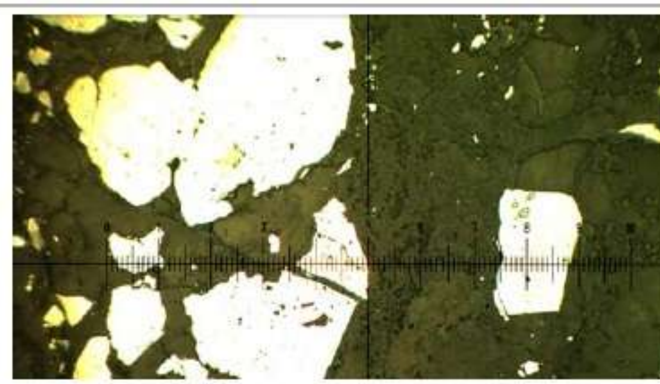
Mineral Descriptions:
Plagioclase: lathes
Pyrite: coarse grained
Chlorite: Pervasive fine-grained

A. Prepared section off-cut. Contact between mudstone (left) and volcanic flow (right) with pyrite. Field of view is approximately 26mm x 46 mm

B. Photomicrograph showing contact between plagioclase needle volcanic and mudstone. PPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing fine grained pyrite in plagioclase porphyritic volcanic flow. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing coarse grained pyrite in mineralized zone. Partial XP RL. Each whole measure on the scale bar is 0.4mm.

Sample: 584872-B

Rock Name: Chlorite-Mudstone

Texture:
Subhedral sphalerite is void filling, filled in and partially replaced by galena

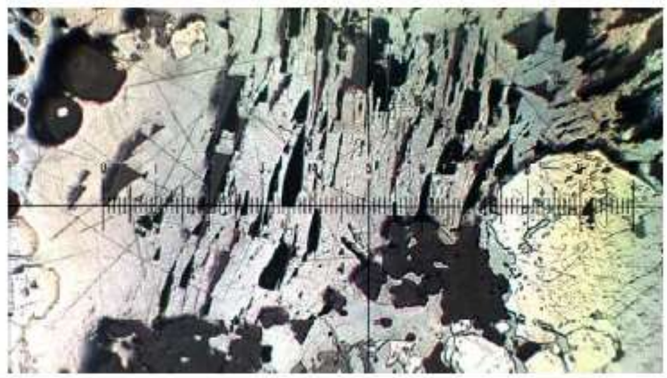
Alteration/Mineralization:
Moderate pyrite, moderate galena, moderate sphalerite and minor chalcopyrite

Petrogenesis: This rock was likely a mudstone metamorphosed to quartz-muscovite-chlorite assemblage that was mineralized with a rich Pb-Zn fluid.

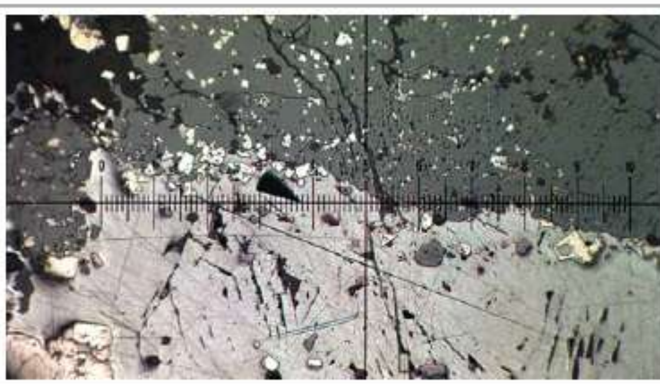
	Mineral	Area
Mudstone (70-80%):	Quartz	45-55%
	Muscovite	45-55%
	Chlorite	5-10%
Sulphides (15-25%):	Pyrite	30-40%
	Galena	20-30%
	Sphalerite	25-35%
	Chalcopyrite	<10%

Mineral Descriptions:
Galena: Fracture filling and replacing sphalerite
Spahlerite: Inclusions of pyrite and chalcopyrite
Chalcopyrite: Interstitial between pyrite grains and galena and as an inclusion in sphalerite

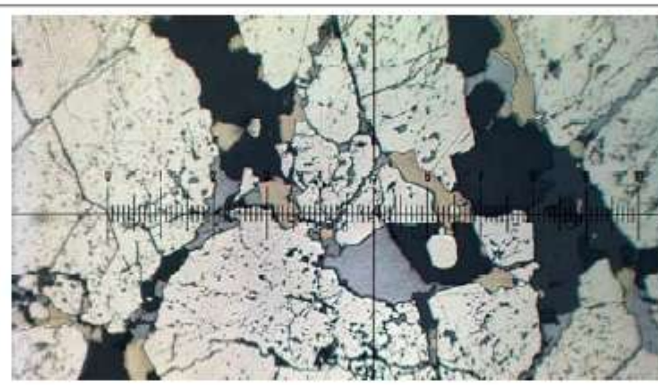
A. Prepared section off-cut. The white mineral quartz, the dark minerals are muscovite and chlorite. Field of view is approximately 26mm x 46 mm



B. Photomicrograph showing galena and pyrite. RL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing galena, sphalerite (filled with pyrite and chalcopyrite inclusions) and pyrite. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite, chalcopyrite and galena. RL. Each whole measure on the scale bar is 0.064mm.

Sample: 584873

Rock Name: Chlorite-Mudstone

Texture:
Fractured and silica flooded

Alteration/Mineralization:
Silica flooding with pyrite mineralization

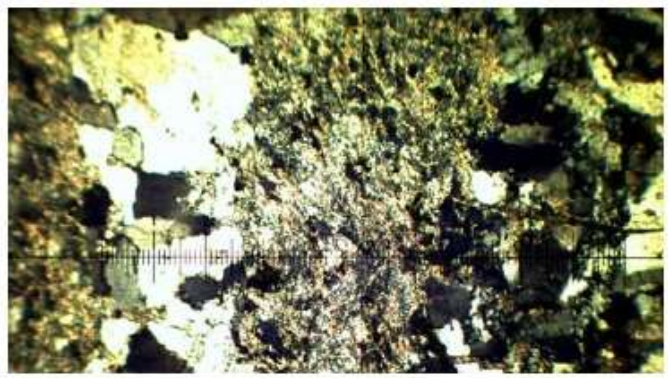
Petrogenesis: This rock was likely a mudstone metamorphosed to a fine-grained quartz-muscovite-chlorite assemblage that was fractured and silica-flooded. The silica flooding brought with it pyrite mineralization.

	Mineral	Area
Mudstone (40-50%):	Quartz	35-45%
	Muscovite	45-55%
	Chlorite	10-20%
Silica Flood (40-50%):	Quartz	70-80%
	Muscovite	5-10%
	Sulfides	10-20%

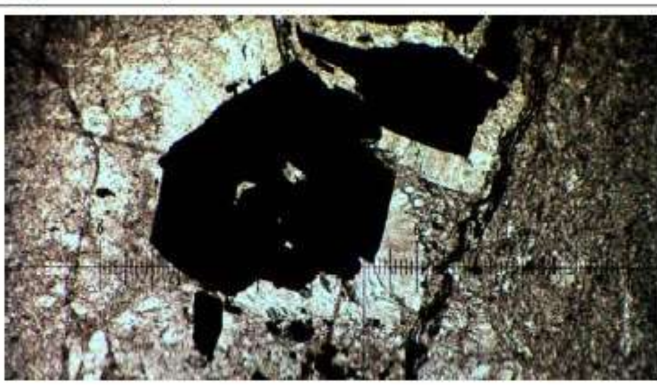
Sulphides: Pyrite 100%

Mineral Descriptions:
Quartz: Fine-grained in the mudstone; coarse-grained in the silica flooded area; colloform around pyrite grains
Pyrite: Subhedral showing destructive textures

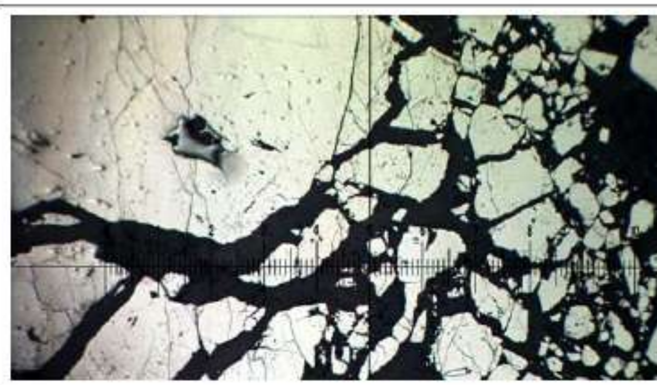
A. Prepared section off-cut. The whitish area is the silica flooded and the brownish area is the metamorphosed mudstone. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing quartz and sericite. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing collorform quartz around pyrite. PPL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing partial destruction of coarse-grained pyrite. XPL. Each whole measure on the scale bar is 0.4mm.

Sample: 584874

Rock Name: Chlorite Schist

Texture:
Chlorite filled fractures containing pyrite and trace chalcopyrite

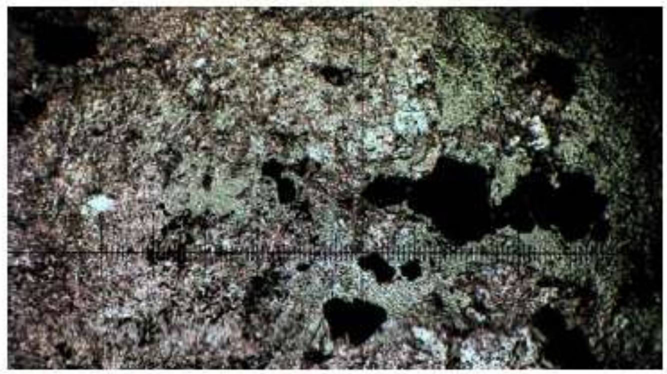
Alteration/Mineralization:
Moderate chlorite alteration
Moderate pyrite and trace chalcopyrite and sphalerite mineralization

Petrogenesis: This rock was likely a mudstone that has been metamorphosed to a fine-grained quartz-sericite-chlorite assemblage that was later fractured-filled with chlorite and pyrite and trace amounts of chalcopyrite and sphalerite.

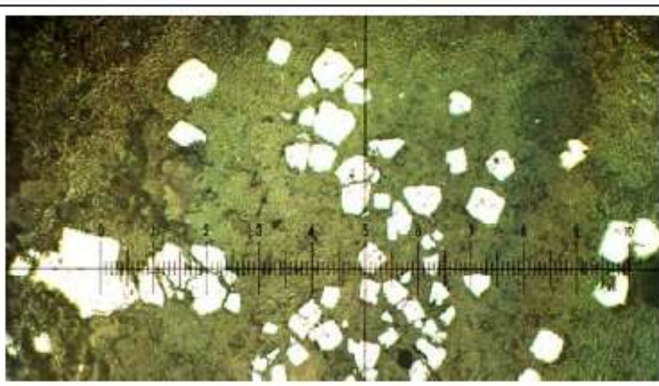
	Mineral	Area
Mudstone (80-90%):	Quartz	10-20%
	Chlorite	20-30%
	Sericite	50-60%
Fractures (10-20%):	Chlorite	60-70%
	Calcite	5-10%
	Sulphides	20-25%
Sulphides:	Pyrite	95-100%
	Chaclopyrite	<5%
	Sphalerite	<5%

Mineral Descriptions:
Chlorite: fracture filling and as patches in mudstone
Pyrite: rounded cubic crystals with an abundance of inclusions
Chalcopyrite: Very fine grained inclusions in sphalerite

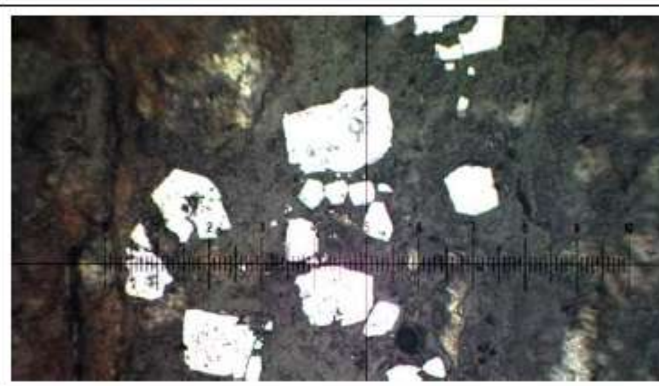
A. Prepared section off-cut. The darker areas are chlorite rich the lighter areas are sericite rich. Field of view is approximately 26mm x 46 mm.



B. Photomicrograph showing quartz chlorite and sericite. XPL. Each whole measure on the scale bar is 0.4mm.



C. Photomicrograph showing pyrite. RL. Each whole measure on the scale bar is 0.4mm.



D. Photomicrograph showing pyrite. Partial cross-polarized RL. Each whole measure on the scale bar is 0.4mm.

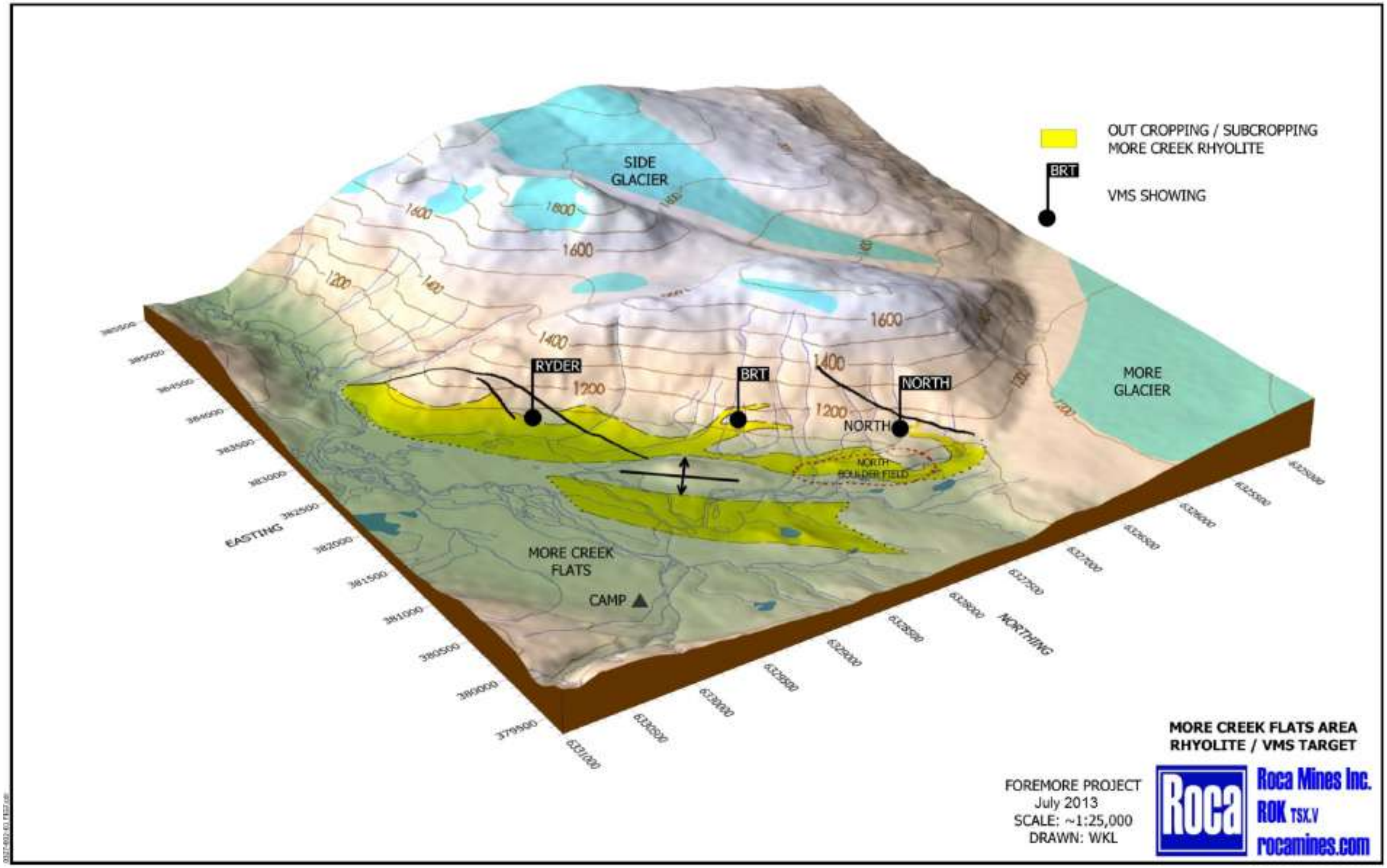


Figure 8: More creek flats rhyolite/VMS target.

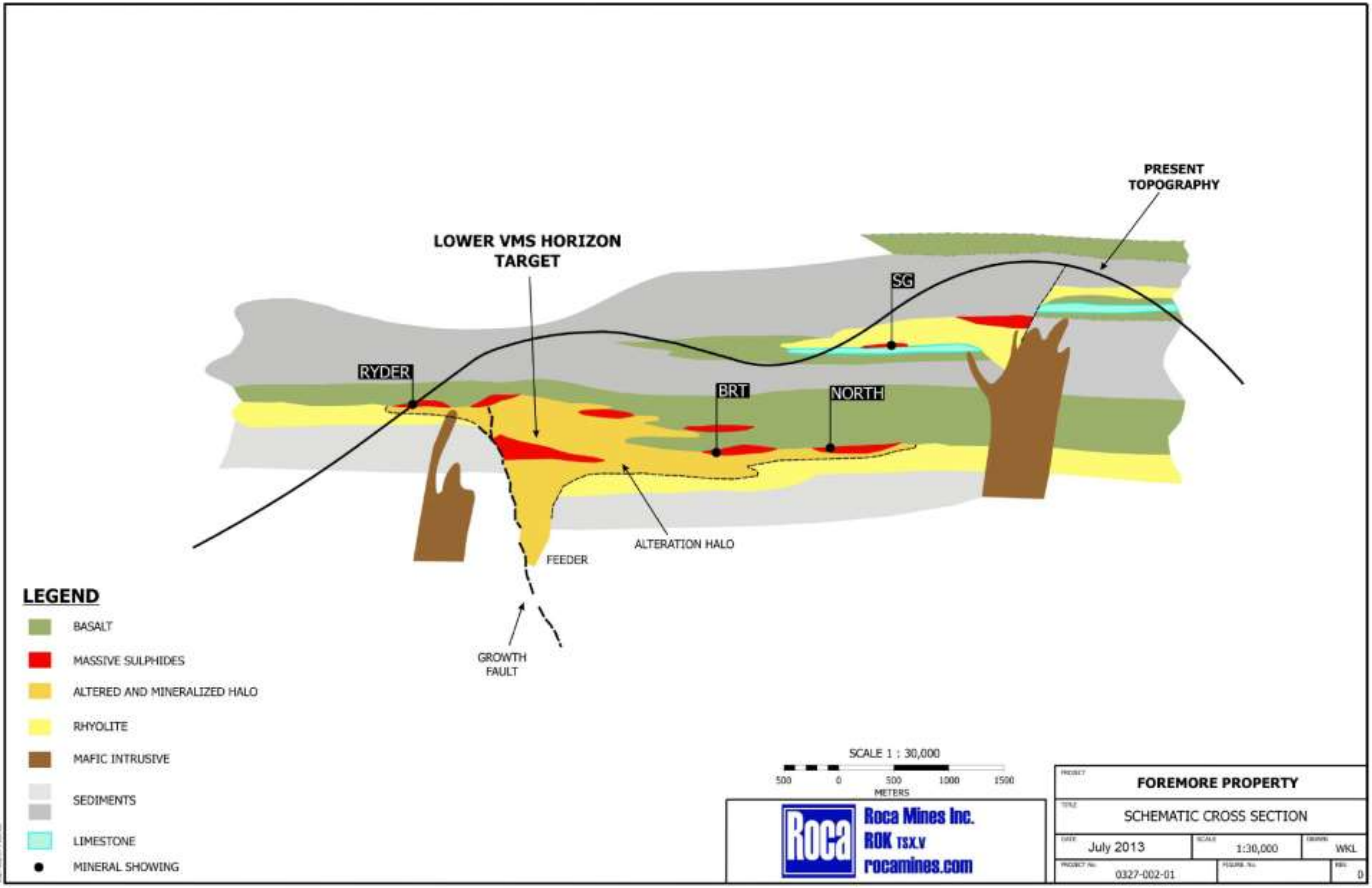


Figure 9: More creek flats schematic cross section.

7.0 2013 EXPLORATION PROGRAM

There were a total of 25 samples received for petrographic analysis. The samples examined revealed eight basic rock types: mudstone, foliated mudstone, chlorite mudstones, muscovite schist, chlorite schist, quartz vein, quartz-carbonate vein and massive sulfide ore. These samples asides from the veins and the massive sulfide ore are metamorphic rocks of sedimentary origin likely a mudstone. The chlorite schists could have an igneous origin such as a tuff or basalt but the absence of the mineral prehnite or actinolite in these samples precluded this possibility. All of these rocks have undergone some degree of quartz-carbonate alteration that is represented as a fracture fill of penetrative flooding. The mineral assemblages observed suggest relatively low temperature metamorphism. The general characteristic of the rock types is given below:

Mudstones
These samples are the lowest grade metamorphosed rocks and are defined by their fine-grained quartz-sericite assemblage and lack of chlorite and a foliated fabric

Foliated Mudstones
This sample is distinguished by the presence of the foliated fabric.

Chlorite Mudstones
These samples are distinguished by the presence of chlorite.

Muscovite Schist
These samples are thought to be of a similar protolith but higher-grade metamorphosed rocks than the **Mudstone** samples by the presence of the similar assemblage but with a coarser grain size and the foliated fabric.

Chlorite-Schist
These samples are likely of a different protolith composition than the Mudstone rocks due to the drastic increase in the amount of chlorite.

Massive Sulphide Ore
These samples are distinguished by the presence of more than 50% sulfides. Of these samples pyrite is the most abundant sulphide (60-80%) followed by sphalerite (2-10%) and with varying amounts of galena and chalcopyrite (<2%).

Veins
Both quartz and quartz-carbonate veins were identified in the mineral suite and are distinguished by the presence or absence of carbonate minerals.The association of metapelite and volcanic rocks with massive sulfide mineralization observed in these samples suggest a Mafic-siliciclastic Volcanogenic Massive Sulfide environment.

Sample	Rock Name	Mineralization*	Alteration*	Petrogenesis
584949	Quartz Vein	Cpy (4)	Iron oxidation (2)	This Cu mineralized rock appears to be a chalcopyrite mineralized quartz vein.
584851	Sericite Schist	Py (2) Sph(1)	Silicified(4)	This rock is likely a mudstone metamorphosed to an assemblage of quartz and sericite.
584869A	Mudstone	Sph (4) Py (3) Cpy (2)		This rock was likely mudstone metamorphosed to quartz-sericite assemblage.
584869B	Mudstone	Py (3) Sph (1)	Silica flooding (3)	This rock was likely mudstone metamorphosed to quartz-sericite assemblage.
584872A	Chlorite-Mudstone and Feldspar-porphyry volcanic flow	Py (3)	Chlorite (4)	This rock was likely a feldspar porphyry mafic flow in contact with a mudstone
584872B	Chlorite-Mudstone	Py (3) Gal (3) Sph (3) Cpy (2)	Chlorite (2)	This rock was likely a mudstone metamorphosed to quartz-muscovite-chlorite assemblage.
584873	Chlorite-Mudstone	Py (3)	Chlorite (1) Silica flooding (3)	This rock was likely mudstone metamorphosed to quartz-sericite-chlorite assemblage.
584874	Chlorite Schist	Py (3) Sph (2) Cpy (2)	Chlorite (3)	This rock was likely a mudstone that has been metamorphosed to a fine-grained quartz-sericite-chlorite assemblage.
584879A	Mudstone	Py (3)	Silica flooding (3)	This rock was likely a mudstone that was metamorphosed to a quartz and sericite assemblage that was later strongly silicified bringing with this alteration event pyrite mineralization.
584879B	Mudstone	Py (3)	Silica flooding (3)	This rock was likely a mudstone that was metamorphosed to a quartz-sericite-albite assemblage that was later strongly silicified bringing with this alteration event pyrite mineralization.
584902	Massive sulfide ore	Py (4) Sph (3) Gal (2)		This rock was likely a mudstone that was metamorphosed to a coarse –grained muscovite-albite assemblage.

* (4) Strong – (3) moderate– (2) minor– (1) trace

Sample	Rock Name	Mineralization*	Alteration*	Petrogenesis
584904 A	Massive sulfide ore	Py (4) Sph (3) Gal (2) Cpy (2)		The massive sulphide mineralization is associated with medium- to coarse-grained quartz gangue, likely making this rock a vein or a remobilized massive sulfide lens.
584904 B	Massive sulfide ore	Py (4) Sph (3) Gal (2)		The massive sulphide mineralization is associated with medium-grained quartz-caclite gangue, likely making this rock a vein or a remobilized massive sulfide lens.
584908 A	Massive sulfide ore	Py (4) Sph (3) Gal (2)		The massive sulphide mineralization is associated with medium-grained quartz-caclite gangue, likely making this rock a vein or a remobilized massive sulfide lens.
584908 B	Massive sulfide ore	Py (4) Sph (3) Gal (2)		The massive sulphide mineralization is associated with medium-grained quartz-caclite gangue, likely making this rock a vein or a remobilized massive sulfide lens.
584914	Massive sulfide ore	Py (4)		The massive sulphide mineralization is associated with medium-grained quartz-caclite gangue, likely making this rock a vein or a remobilized massive sulfide lens.
584917	Chlorite schist	Py (2)		This rock was likely mudstone metamorphosed to chlorite-carbonate-muscovite- quartz assemblage.
584922	Quartz Vein	Cpy (2) Py (1)	Carbonate (2)	This Cu mineralized rock appears to be a chalcopyrite mineralized quartz vein.
584926	Massive sulfide ore	Py (4) Sph (3) Cpy (2) Gal (2)		The massive sulphide mineralization is associated with quartz, albite and caclite gangue
584940 A	Chlorite Schist		Carbonate (2)	This rock was likely a mudstone metamorphosed to quartz-chlorite assemblage.
584940 B	Chlorite Schist	Py (2) Sph (1) Gal (1)	Carbonate (2)	This rock was likely a mudstone metamorphosed to quartz-chlorite assemblage

* (4) Strong – (3) moderate– (2) minor– (1) trace

Sample	Rock Name	Mineralization*	Alteration*	Petrogenesis
584947A	Quartz-Carbonate Vein			This rock appears to be a quartz-carbonate vein hosted in a chlorite schist.
584947B	Chlorite Schist		Carbonate (3)	This rock was likely a mudstone metamorphosed to quartz-chlorite-carbonate-muscovite assemblage.
584950A	Muscovite Schist			This rock was likely a mudstone that had been metamorphosed to a quartz-muscovite-albite assemblage
584950B	Massive sulfide ore	Py (4) Sph (3) Gal (2) Cpy (2)	Carbonate (3)	The massive sulphide mineralization is associated with quartz-muscovite-albite assemblage.

Table 5: Petrographic summary.
* (4) Strong – (3) moderate– (2) minor– (1) trace

8.0 CONCLUSIONS AND RECOMMENDATIONS

The Foremore property hosts at least 12 precious and base metal-bearing mineral occurrences of many different styles ranging from structurally controlled quartz sulphide veining to syngenetic volcanic hosted massive sulphide deposition.

A number of criteria demonstrate a VMS deposit setting exists in the More Creek Flats area on the Foremore Property.

- The presence of numerous massive sulphide showings on surface and intersected in drill holes.
- The recognition of a bimodal rhyolite – basalt volcanic sequence at More Creek Flats is a key criteria and is a critical component to many of the great VMS district of the world.
- The presence of sediments within the bimodal rhyolite – basalt volcanic sequence indicates breaks occurred in the volcanic activity. Pauses in the extrusive volcanism are needed for the accumulation of large massive sulphide bodies on the sea floor.
- The rhyolite – basalt sequence hosting the sulphide mineralization is in the order of hundreds of meters thick and has been followed along strike for greater than five kilometres and remains open in all directions. This area is largely un-explored.
- Within this relatively thick sequence of rhyolite – basalt, sulphide mineralization appears to be stacked. The mineralization is present at more than one stratigraphic position. This aspect characterises many of the great VMS districts worldwide.
- The association of synvolcanic intrusive bodies within the More Creek Flats stratigraphic sequence is a characteristic of other VMS districts. These intrusive bidies are interpreted to act as the “heat engine” that drives the VMS system.
- There is evidence of the presence of syn-volcanic faults in the More Creek Flats rhyolite – basalt sequence. Syn-volcanic faults act as the conduits for discharging hydrothermal fluid onto the sea floor and they create sediment and massive sulphide traps.
- The presence of precious metals in the sulphide mineralized intervals adds to the economic viability in the More Creek Flats VMS setting. Precious metal credits are a common feature of many VMS camps and their presence greatly enhances overall economic viability.
- VMS related alteration, in particular strong sericite, with and without associated pyrite, and to a lesser degree chlorite, talc and carbonate, with strong and wide intervals of sodium depletion and potassium enrichment are similar to many VMS camps worldwide

The property as a whole needs further prospecting, mapping and sampling to further understand the mineral potential and mineralized styles. Further drilling on the property should be focused on the Rider and BRT showings to further understand the structural controls for the mineralization. Down hole geophysics would greatly influence the location of further drill holes by showing the mineralized trends.

Respectfully submitted,

Mike Middleton
Roca Mines Inc.
Vancouver, BC, December 2011

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APPENDIX A
Mineral Claims

Tenure Number	Claim Name	Map Number	Good To Date	Area (ha)
374763	FORE 1	104G006	2011/dec/16	500.0
374764	FORE 2	104G006	2011/dec/16	500.0
374765	FORE 3	104G006	2011/dec/16	300.0
374766	MORE 1	104G006	2011/dec/16	300.0
374767	MORE 2	104G006	2011/dec/16	500.0
374768	MORE 3	104G006	2011/dec/16	500.0
374769	MORE 4	104G006	2011/dec/16	450.0
374770	MORE 5	104G006	2011/dec/16	500.0
380863	FM 1	104G006	2011/dec/16	25.0
380864	FM 2	104G006	2011/dec/16	25.0
380865	FM 3	104G006	2011/dec/16	25.0
380866	FM 4	104G006	2011/dec/16	25.0
392631	FORE 4	104G006	2011/dec/16	450.0
392632	FORE 5	104G006	2011/dec/16	225.0
392641	FORE 6	104G006	2011/dec/16	400.0
392642	FORE 7	104G006	2011/dec/16	450.0
392643	FORE 8	104G006	2011/dec/16	150.0
392644	FORE 10	104G006	2011/dec/16	500.0
392645	FORE 9	104G006	2011/dec/16	400.0
392646	FORE 11	104G006	2011/dec/16	400.0
392647	FORE 12	104G006	2011/dec/16	500.0
392648	FORE 13	104G006	2011/dec/16	500.0
392649	EBF1	104G006	2011/dec/16	500.0
392650	EBF2	104G006	2011/dec/16	500.0
392651	EBF3	104G006	2011/dec/16	500.0
392652	EBF4	104G006	2011/dec/16	500.0
392655	MORE 6	104G006	2011/dec/16	500.0
392656	MORE 7	104G005	2011/dec/16	500.0
392657	MORE 8	104G005	2011/dec/16	300.0
392658	MORE 9	104G005	2011/dec/16	400.0
392659	MORE 10	104G005	2011/dec/16	500.0
392660	MORE 11	104G005	2011/dec/16	500.0
393458	ANT 1	104G017	2011/dec/16	500.0
393459	ANT 2	104G017	2011/dec/16	500.0
393460	ANT 3	104G017	2011/dec/16	500.0
393461	ANT 4	104G017	2011/dec/16	500.0
393462	NEW 1	104B086	2019/dec/01	500.0
393463	NEW 2	104B086	2019/dec/01	500.0
393464	NEW 3	104B086	2019/dec/01	500.0
393465	NEW 4	104B086	2019/dec/01	500.0
393466	MONT 1	104B086	2019/dec/01	500.0
393467	MONT 2	104B086	2019/dec/01	500.0
393468	MONT 3	104B086	2019/dec/01	500.0
393469	MONT 4	104B086	2019/dec/01	500.0

395889	MOR 1	104G005	2011/dec/16	100.0
395890	MOR 2	104G005	2011/dec/16	50.0
395891	MOR 3	104G005	2011/dec/16	75.0
400284	ROKS 1	104G006	2011/dec/16	150.0
400285	ROKS 2	104G006	2012/sep/30	500.0
400286	ROKS 3	104G006	2012/sep/30	400.0
400287	ROKS 4	104G016	2012/sep/30	375.0
400288	ROKS 5	104G016	2012/sep/30	450.0
400294	ROC 8	104G016	2012/sep/30	500.0
400295	ROC 9	104G016	2012/sep/30	375.0
400296	ROC 10	104G016	2012/sep/30	375.0
400297	ROC 11	104G016	2012/sep/30	500.0
400298	ROC 12	104G016	2012/sep/30	500.0
400299	ROC 13	104G016	2012/sep/30	225.0
400300	ROC 14	104G016	2012/sep/30	400.0
406128	DICE 1	104G016	2012/sep/30	500.0
406129	DICE 2	104G016	2012/sep/30	375.0
406130	RHINO	104G016	2012/oct/18	250.0
537084	ROCATOWN	104B	2011/dec/16	405.2
537085	ROCATOWN	104G	2011/dec/16	440.2
537086	ROCATOWN	104B	2011/dec/16	440.7
537207	ROCATOWN	104G	2011/dec/16	122.8
537208	ROCATOWN	104G	2012/sep/30	70.2
540082	ROCA FLATS #1	104G	2012/sep/30	843.4
540083	ROCA FLATS #2	104G	2012/sep/30	1616.4
904240	ROCK	104G	2012/oct/01	140.7
904242	ROCK 1	104G	2012/oct/01	52.8
926657	ROCA TOWN	104G	2012/oct/31	70.3
926658	ROCA TOWN	104G	2012/oct/31	52.7

APPENDIX B
Statement of Qualification

Statement of Qualifications:

Michael J. Middleton
14948 90th Ave
Surrey, B.C.
V3B 2P5
Telephone (604) 585-0954.
Email Middleton.geoscience@gmail.com

I, Michael J. Middleton, do hereby certify that:

1. I am currently employed as a Consulting Mining and Geological Technician by Roca Mines Inc.

2. I have practiced my profession of prospecting since 1990.

3. I am a graduate of British Columbia Institute of Technology with a diploma of Technology in Mining and Mineral Exploration, obtained in 2001. I have been practicing my profession continuously in Canada since graduation.

4. My input into this report is based mainly upon conducting the 2013 sampling program on the Foremore Property, supplemented by a review of past work on the property and its geological setting as well as compilation of previous geological maps into the Mapinfo program.

5. I have no interest in the property reported on herein, and nor do I expect to receive any.

Dated at Surrey, British Columbia, this eighteenth day of November, 2013.

November 18, 2013
Surrey, B.C.

M.J.Middleton
Consulting Technician

APPENDIX C
Cost Statement

Vancouver Petrographics Ltd.		
Polished Thin Sections		$1,331.40
DGW Consultants		
Foremore Petrographic Report		$2,310.00
Middleton Geoscience		
Sample Preparation		$350.00
Data Compilation		$350.00
Assessment Report		$908.60
	Total	$5,250.00