# 2011-2012 SOIL GEOCHEMICAL, TRENCHING AND DIAMOND DRILLING ASSESSMENT REPORT

**on the**

**MARIPOSA PROPERTY**

***Owned by Pacific Ridge Exploration***

| Claim Name | Grant Number | | Claim Name | Grant Number |
|---|---|---|---|---|
| AC 1-66 | YD64152-64217 | | DORA 23 | YD31560 |
| AC 67-98 | YD64219-64250 | | DORA 29 | YD64292 |
| AC 97A-98A | YD64251-64252 | | LOT 1 | YD64281 |
| AC 99-126 | YD64253-64280 | | LOT 2 | YD64218 |
| AP 1-40 | YD16601-16640 | | LOU 67-72 | YD30097-30102 |
| BID 50-69 | YE62385-62404 | | LOU 107-120 | YD30137-30150 |
| BID 111-262 | YD156111-156262 | | LOU 149-174 | YD30179-30204 |
| CAB 7-10 | YD30271-30274 | | PM 1-24 | YD64301-64324 |
| CAB 27-30 | YD30291-30294 | | PTL 1-39 | YC44279-44317 |
| CR 1-2 | YD106501-106502 | | QE 14-41 | YD30315-30342* |
| CR 3-19 | YD156003-156019 | | QE 54 | YD31540 |
| CR 20-69 | YD156020-156069 | | QE 55 | YD31520 |
| CR 101-107 | YD156101-156107 | | QE 56-58 | YD31541-31543 |
| CR 109-110 | YD156109-156110 | | QE 59 | YD31516 |
| CR 111-266 | YD156311-156466 | | RUM RUN 37-40 | YC20208-20211 |
| DORA 13-16 | YD31550-31553 | | | |

**Claim Sheets No 115O/01, 115O/02, 115J/15 and 115J/16**
**Latitude 63° 00’ N, Longitude 138° 32’ W**
**Dawson Mining District, Yukon**

**For Work Performed between May 1, 2011 and October 15, 2012**
**conducted by Pacific Ridge Exploration Ltd.**

**by**

**Gerald G. Carlson, Ph.D., P.Eng.**

**November 21, 2013**

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# SUMMARY

The Mariposa Property (the "Property") was acquired by Pacific Ridge Exploration Ltd. ("Pacific Ridge" or the "Company") in September 2009, by way of an option agreement with the privately-owned Tintina Syndicate that granted Pacific Ridge the right to earn a 100% interest in the Property subject to a 2% NSR by making stipulated cash and share payments. With the success of the 2010 YMIP supported exploration program, and subsequent major exploration programs in 2011 and 2012, Pacific Ridge has expanded the property to include 1,477 claims covering a 30 x 10 km area, or approximately 295 $km^2$.

The Property is located 120 kilometres southeast of Dawson City, Yukon. It is 40 kilometres southeast of the Underworld/Kinross White Gold discovery and 30 kilometres east-northeast of Kaminak's Coffee property. The Property lies within a regional major northwest trending structural corridor which hosts numerous gold and copper deposits.

The local geological setting of the Property is similar to the White Gold and Coffee properties in terms of the host lithologies, the structural controls and brittle style of deformation and the style of gold mineralization. Prior exploration identified an open-ended 7 km long horizon of altered sulphide bearing quartz mica schist in the Skookum Zone area of the Property. This unit is locally flanked by intrusive and mafic rock units, a setting favorable for hosting a gold-mineralizing system.

The history of gold exploration within the Property dates to 1898, when gold was first discovered in Scroggie and Mariposa Creeks. The first mechanized mining began in the mid 1950's, while large scale mechanized mining began in 1980 and has continued uninterrupted up until the present. It has been estimated that approximately 100,000 ounces of gold with a fineness of 905 has been produced from Mariposa and Scroggie Creeks.

The first lode gold exploration in the area was reported in 1917, when claims were staked over a reported quartz vein occurrence in the area of the Mariposa Creek placer workings in the general vicinity of the current Skookum Main Zone anomaly. Interest in lode gold exploration picked up in the early 1970's, with the porphyry copper exploration boom in the Dawson Range, but, it is only during the past 12 years that a sustained exploration effort has been carried out on the Property, including ridge and spur prospecting, geochemical sampling (rock, soil and silt), trenching and more recently with several localized soil grids throughout the claims along with two seasons of diamond drilling.

Soil geochemistry has proven to be the most effective surface exploration tool, utilizing initial reconnaissance ridge and spur traverses to define potential target areas, followed by grid sampling to define anomaly strength, size and limits. Geophysical surveys, in particular magnetics, have proven useful for defining lithologies and structure in areas with limited outcrop exposure. Finally, trenching is an effective tool to further refine targets prior to drilling.

The 2010 to 2012 soil geochemical surveys outlined several targets within the Property, the most important of which is the Skookum Main Zone; with Skookum West and Maisy May along strike to the west and Skookum East to the east. Other key targets include Big Alex, Hackly and Alberta Creek along with second tier anomalies that include Skookum North, Gertie and Lou's Linear.

Trenching at Skookum Main Zone outlined a strong anomaly in Trench SZ-02 (1,250 ppb gold over 30 m within 150 m of 493 ppb Au), which was undercut by drill hole 11MP-01, the best intersection during the campaign (2.44 gpt Au over 38.9 m, including 6.44 gpt Au over 11.1 m, within an 81.5 m intersection grading 1.51 gpt Au). Subsequent drilling outlined an east-northeast trending ($70^{o}$) gold-enriched structural zone, approximately 100 m wide and at least 300 m in strike length. Continuity of gold mineralization within the zone appears to be an issue, but McIntosh (2012) has shown that this is due at least in part to cross-cutting mafic units being a poor host for gold mineralization. Most of the 2012 drilling was directed in a westerly direction, parallel to the trend of the structure, and was therefore not effective in defining average grade or mineralization limits.

Additional drilling is required at Skookum Main Zone to better define the orientation and distribution of the strongest gold mineralization. This would include mainly shallow holes with modest (<25 m) step-outs, directed towards the north-northwest to cross-cut the defined structure.

At Skookum West, drilling in 2011 failed to intersect significant mineralization, although a number of narrow gold intersections were encountered. Trenching in 2012 defined two targets that potentially represent buried mineralized zones. Additional trenching is recommended to further define the location and orientation of mineralized structures, prior to additional drill testing.

Several other zones on the Property have been defined by soil geochemistry, magnetic surveying, prospecting for high grade gold in float and, in some cases, preliminary drilling. These zones include Skookum East, Skookum North, Hackly, Gertie, Maisy May, Big Alex and Alberta Creek. It is felt that the limited drilling completed so far at Big Alex, Maisy May and Hackly has not provided an adequate test for these zones. Further exploration is recommended, beginning with trenching over the strongest portions of the soil geochemical anomalies, to be followed by drill testing.

# INTRODUCTION

The Mariposa Property (the "Property") was acquired in September 2009, by way of an option agreement with the Tintina Syndicate that granted Pacific Ridge the right to earn a 100% interest in the Property subject to a 2% NSR by making cash and share payments. With the success of the 2010 YMIP supported exploration program, and subsequent major exploration programs in 2011 and 2012, Pacific Ridge has expanded the property to include 1,477 claims covering a 30 x 10 km area, or approximately 295 $km^2$.

This report describes exploration programs carried out between May 1, 2011 and October 15, 2012. The primary purpose of the 2011-2012 exploration programs was to drill test targets defined by prospecting and soil geochemistry and to further define and expand these targets with additional soil sampling, trenching and a variety of geophysical surveys. Total expenditures on the Property over the two years of exploration that are documented in this report amounted to $4,234,134 (see Statement of Expenditures).

This report is being submitted in partial satisfaction of two assessment filings. In September, 2012, $312,295 in assessment work was filed in two Applications for a Certificate of Work and in March, 2013, $299,392 in assessment work was filed in two additional Applications for a Certificate of Work.

The report describes the Property, its geological setting and exploration history, followed by a detailed description of the 2011-12 exploration programs, an interpretation of the results achieved and a recommendation for further work. The report encompasses all exploration work on the Property during the 2011 and 2012 fields seasons, not just that which was filed for assessment.

# LOCATION, ACCESS AND PHYSIOGRAPHY

The Mariposa Property is located 120 km south of the Dawson City, Yukon, (Figure 1) and lies within four 1:50,000 NTS topographic map sheets: 115O/1 & 2, 110J/15 &16. The property is accessible by helicopter or fixed-wing aircraft from Dawson City or Whitehorse, to a 750 m airstrip located within the Scroggie Creek valley, in the west-central portion of the Property. The Property is also accessible in summer by ATV from Pelly Farm on the north side of Pelly River, 40 km west of Pelly Crossing, a distance of approximately 70 km. Within the Property, access by ATV is possible along existing placer mining roads which flank Scroggie and Mariposa Creeks. More distant parts of the Property are best accessed by helicopter.

The property lies within an unglaciated portion of the Yukon Plateau. The topography is moderate, with low sinuous plateaus cut by narrow valleys and creeks that drain into the broader flat-bottomed valleys of Scroggie and Mariposa Creeks. These drainages are lined with gravels of past and present placer mining workings. Elevations in the area range from 900 m to 1150 m above sea level. Spruce and poplar trees are found on south-facing slopes while the north-facing slopes are sparsely treed with dwarf spruce. Permafrost is intermittent and is limited to north-facing slopes and valley bottoms. Much of the property was burned during a 2009 forest fire.

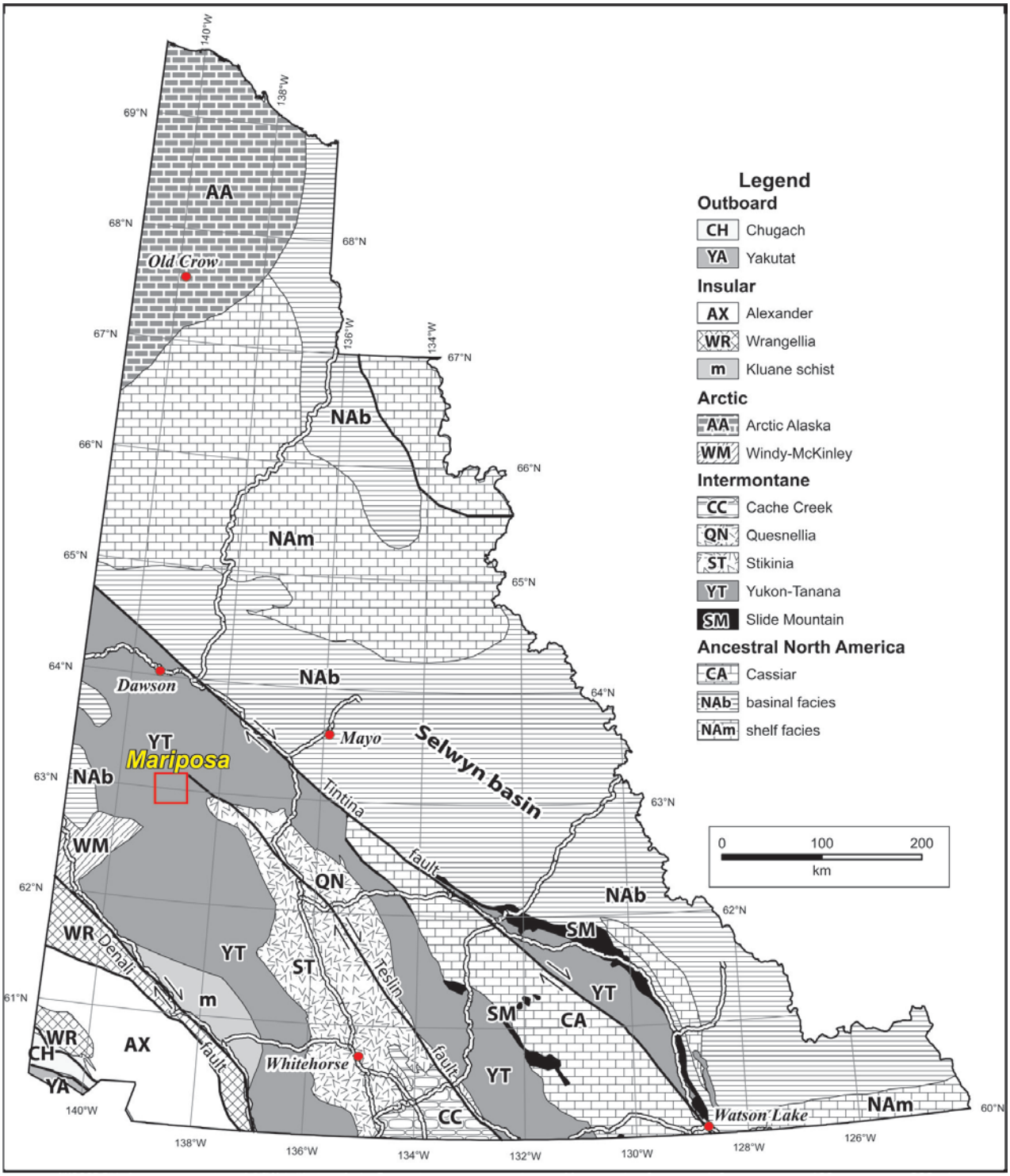


**Figure 1. Yukon Location Sketch.**

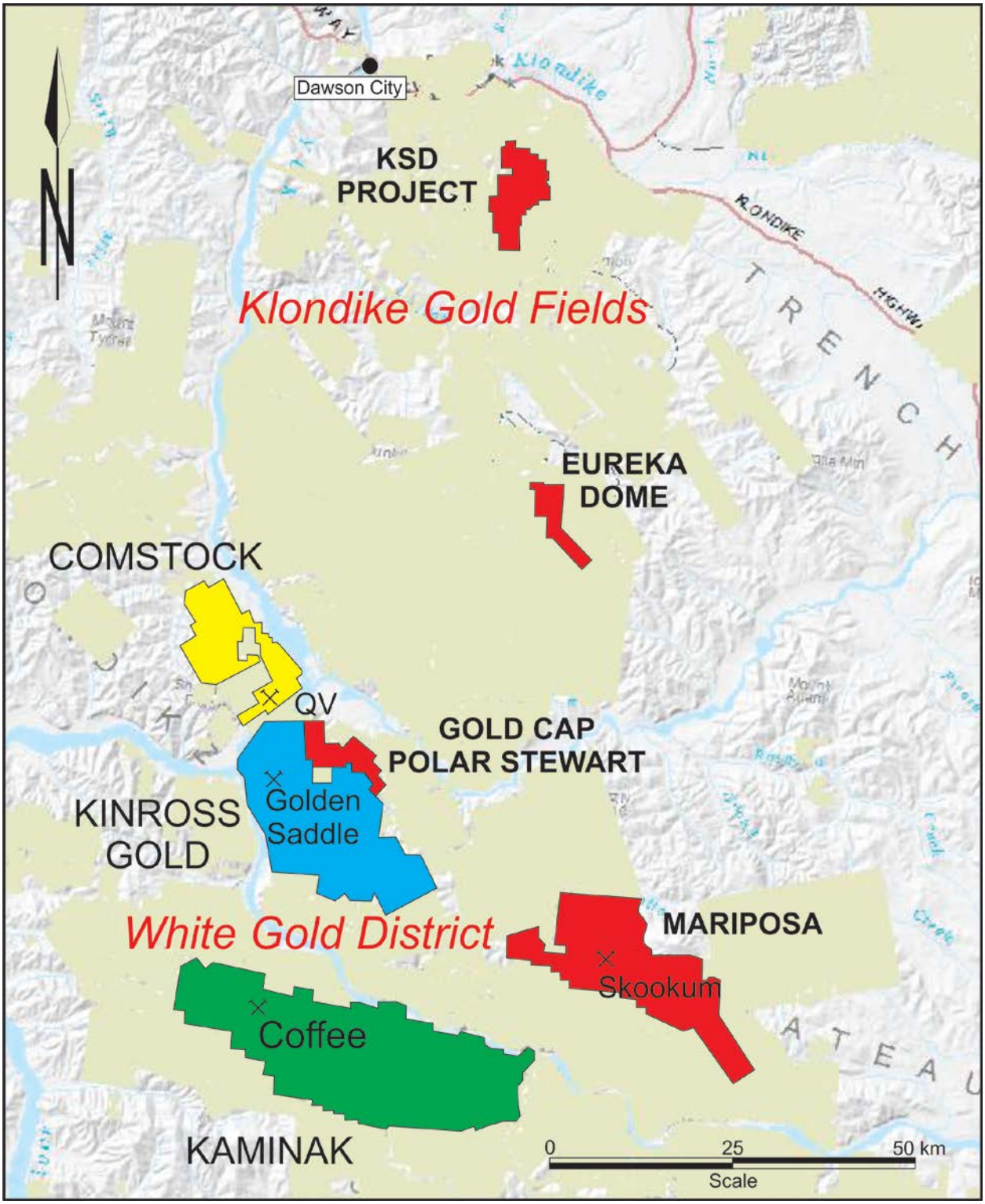


**Figure 2. Mariposa Property - White Gold and Klondike District Location Sketch.**

There is less than 5% outcrop exposed on the property. In the areas of drilling, overburden in the Mariposa Grid area has been shown to range from 2 to 6 m in depth. Much of the central Yukon is covered by a thin blanket of volcanic ash and tephra that resulted from recent eruptions in Alaska.

# CLAIM STATUS

The Mariposa Property consists of 1,477 quartz claims within the Dawson Mining District, as listed in Appendix I (the "Property"). Of this number, 200 core claims are under option from Gordon G. Richards (Tintina Syndicate) under an agreement dated September 17, 2009 and the 39 PTL claims were under option from Glen MacDonald under an option agreement dated July 27, 2011 (see Figure 3).

This report is submitted in qualifying two separate assessment work filings, as described below.

September 5, 2012 Filing: Assessment work is being applied on two separate claim groupings. Assessment work to the value of $74,335 is being applied on Group "A" (HD03356) for a total of 596 claim years. Assessment work to the value of $237,960 is being applied on Group "B" (HD03357) for a total of 1,822.5 claim years.

February 15, 2013 Filing: Assessment work is being applied on two separate claim groupings: Assessment work to the value of $201,543 is being applied on Group "A" (HD03356) for a total of 1,132 claim years. Assessment work to the value of $97,849 is being applied on Group "B" (HD03357) for a total of 439 claim years.

# PROPERTY HISTORY

The history of gold exploration within the Property dates to 1898, when gold was first discovered in Scroggie and Mariposa Creeks. The first mechanized mining began in the mid 1950's, while large scale mechanized mining began in 1980 and has continued uninterrupted up until the present. It has been estimated that approximately 100,000 ounces of gold with a fineness of 905 has been produced from Mariposa and Scroggie Creeks (Richards, 2005).

The first lode gold exploration in the area was reported in 1917, when claims were staked over a reported quartz vein occurrence in the area of the Mariposa Creek placer workings in the general vicinity of the current Skookum Jim anomaly.

In 1971 and 1972, Silver Standard Mines Limited and American Smelting & Refining Company prospected a copper-molybdenum porphyry occurrence in the Scroggie Creek area (McMichael, 1973), located south of Scroggie Creek and just outside the Property boundary. Sparse mineralization observed related to a siliceous, medium-grained quartz-feldspar porphyry included finely disseminated chalcopyrite and pyrite. Finely disseminated molybdenite occurs as quartz vein fracture coatings in a quartz-rich breccia, approximately 130 m wide and unknown strike length. Soil sampling outlined a 1,000 m by 300 m plus 100 ppm Cu anomaly and a coincident 1,000 m by 250 plus 60 ppm Mo anomaly. McMichael concluded that molybdenum appeared to be the primary metal of interest in the system.

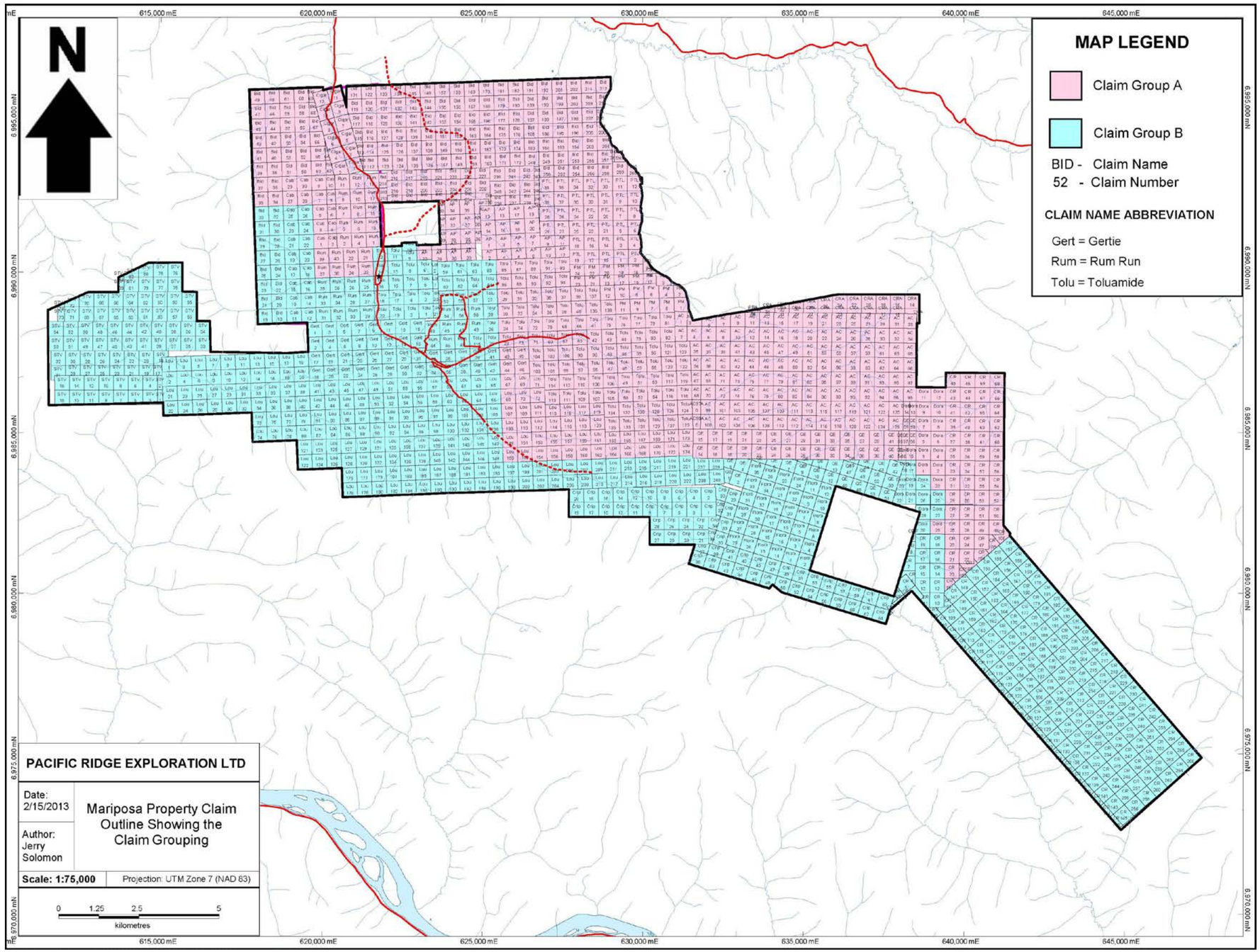


**Figure 3. Mariposa Property Claim Map.**

In 1980, Amax of Canada Limited (Booth et. al., 1980) completed additional soil sampling and confirmed the Cu-Mo soil anomaly and completed an IP geophysical survey which outlined a weak (1% sulphide content) chargeability anomaly beneath the soil anomaly. In addition to the Cu and Mo mineralization, one speck of native gold was observed in a schist specimen. Gold values in soils were typically low, 10 ppb (detection limit), with a few samples in the 30 to 40 ppb range.

In 1986, Kerr Addison Mines Ltd. staked the SIZZLER showing, now within a third party claim inside the eastern portion of the Mariposa property. The area of interest includes quartz stringers, stringer stockworks and silicified breccias over a 1.7 km diameter area (Pautler, 1986). Soil geochemistry failed to locate a significant gold anomaly, however two rock samples from the southwest margin of the silicified area assayed 1,050 and 400 ppb Au.

In 1986, Doron Exploration Inc. staked the Pyroxene Mountain claims, located just north of the Mariposa property (Wallis, 1987). That property was acquired in order to examine potential for platinum group mineralization associated with the ultramafic rock units that underlie Pyroxene Mountain. Previous workers had reported that placer gold in creeks with their headwaters on Pyroxene Mountain contained appreciable amounts of platinum group minerals. Work in 1987 (Waugh, 1988) included the collection of 1596 soil samples and 22 rock samples along 101 km of survey line. The survey outlined two Pt-Pd soil anomalies as well as several other single point anomalies and one rock sample that assayed 0.444 ounces per ton ("opt") Au.

In 1987, Ron McPhee staked the Wine and Fish claims, located within the current Property boundary, along the north side of Scroggie and Mariposa Creeks and in the area of Pacific Ridge's Skookum Jim anomaly (Minfile 115O-075). Initial exploration work defined a weak gold in soil anomaly north of upper Mariposa Creek.

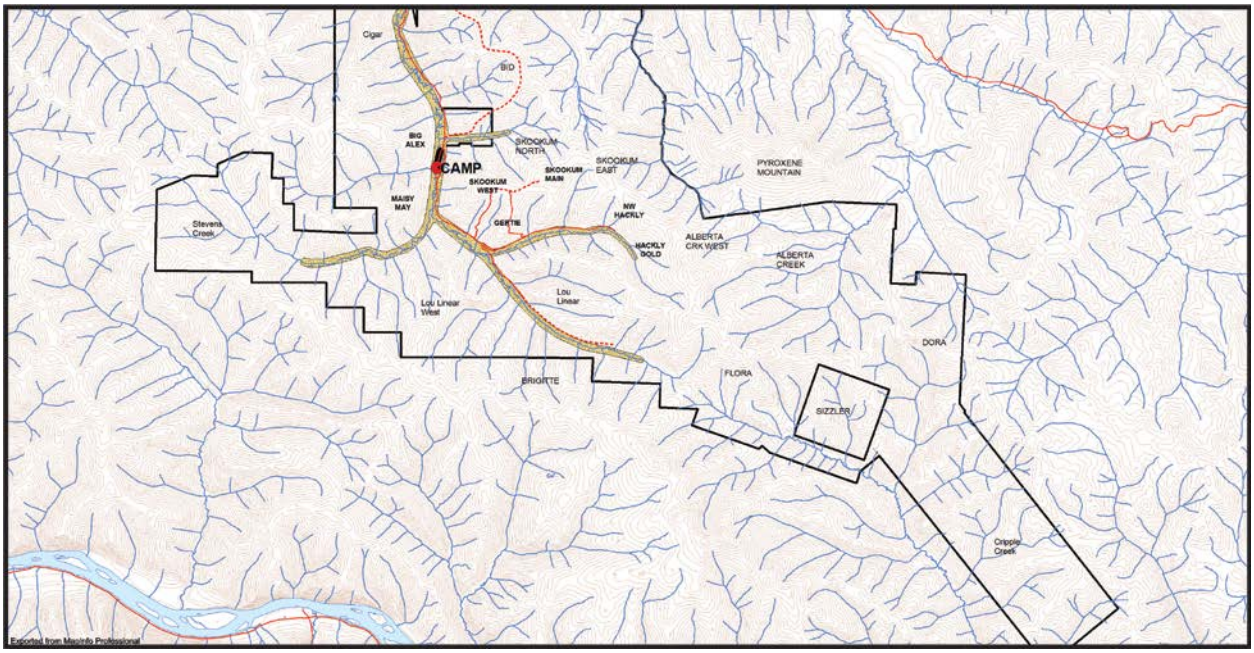

**Figure 4. Mariposa Property showing historical placer workings and main target areas.**

In 1988, D. Waugh (1989) completed a program of prospecting and the collection of 174 rock samples on the Fish and Wine claims. Most of the work was completed on the Fish 94 claim in an area at the intersection of two structural lineaments. Assay results were disappointing, mostly below 30 ppb Au, with the exception of three samples that ran 3.1 gpt, 2.6 gpt and 2.0 gpt Au.

During the 1988 placer mining season, Richards (2005) reported that mining cuts along Scroggie Creek downstream from Stevens Creek yielded abundant arsenopyrite crystals in the sluice concentrates over about 300 meters of workings. No source for the arsenopyrite was ever found during the course of excavation for placer mining.

Richards (2005) also reported that in 1990 a black sand sluice concentrate, containing coarse gold, was anomalous for several elements including Au, Ag, Bi, Pb, W and Sn. He concluded that this suite of elements could be indicative of an intrusion-related gold deposit. Pt and Pd values were also anomalous.

In 1990, Ron McPhee carried out an additional work program on the Irish and Kip claims on Pyroxene Mountain (Richards, 1991). The work included a VLF-EM survey and soil sampling. The soils were moderately anomalous in Cr, Ni and Cu. The VLF defined a conductor that correlates with a significant linear magnetic anomaly, interpreted to be caused by massive magnetite, conductive sulphides or serpentinization.

In 1996, Newmont Exploration Limited completed a one day property examination of the Bos and Stock claims on Pyroxene Mountain (Stammers, 1996). The examination was carried out in the area of the previously reported best results. However, these results could not be duplicated.

In 1999, Shawn Ryan staked the Scroggie 1-16 claims, along the east side of Scroggie Creek adjacent to the Rum Run claim group, and completed a program of prospecting and sampling. Ryan reported two anomalous silt samples of 77 ppb and 378 ppb, the latter near an occurrence of pegmatite. In 2000, Ryan added the Scroggie 17-24 claims.

Gordon Richards began prospecting the area in 1999 and staked the RUM RUN 1-20 quartz claims. In June 2000, Richards added the RUM RUN 21-50 and 53-59 claims. Initial work involved prospecting and limited soil sampling (Richards, 2001a-d). The Pegmatite Zone, along Scroggie Creek on the Rum Run 1-20 claims, is defined by a gold-in-soil anomaly approximately 1 km in diameter, with associated moderate anomalies of Mo, Pb and Sb. Rock outcrops with anomalous gold values, up to 3,020 ppb, are associated with quartz stockwork in pegmatitic units. In July and August 2001 he completed a program of geochemical sampling, including 95 soils, 15 rock chips and 4 silt samples, mapping and a VLF–EM geophysical survey in an effort to locate the Scroggie fault.

During 2000, Morgan (2001) completed prospecting and geochemical sampling (11 soils, 5 rocks and 4 stream sediments) on the Wolf 1-42 and Pyrex 1-4 claims, adjoining the Rum Run claims along Scroggie Creek to the east. The highest gold value, from a soil sample, was 111 ppb Au.

Richards (2004) reported that in 2001, gold-quartz pebbles with angular gold were obtained from a localized area of placer workings along Scroggie Creek, with a gold-in soil anomaly identified on the slope above this occurrence. He believed that this occurrence could indicate the possible importance of the Scroggie Fault or related splays in controlling bedrock gold mineralization. However, no bedrock gold source has yet been found in this area.

In July and August of 2003 Richards (2004) completed magnetometer surveys and limited geochemical sampling over the Pegmatite, QMS and East Zones. The magnetic surveys over the Pegmatite and QMS zones were generally featureless. Over the East Zone, linear highs, trending southwesterly, probably reflect mafic layers, parallel to the metamorphic foliation.

In 2005, Richards completed a magnetometer survey near the south end of the Scroggie airstrip and another magnetic survey on the east side of the property (Richards, 2005). The purpose of the surveys was to fill in areas between previous surveys in an effort to tie down the location of the Scroggie Fault. Richards suggests that a weak magnetic low along Scroggie Creek could be related to the fault. A strong mag high is associated with the contact between metamorphic rocks and the younger granodiorite. In addition, 8.5 km of VLF-EM surveying was carried out along 200 m spaced lines. No significant anomalies were detected.

In 2005, Richards (2006a) completed a program of mapping, sampling and a magnetometer survey on his East Zone. Of 42 soil samples collected, only a weak gold anomaly was defined with associated Bi-Pb-Te-As-Ag values. The magnetic survey detected linear trends reflecting compositional layering in metamorphic rocks.

During the 2006 field season, Richards completed an orientation mobile metal ion ("MMI") soil survey along selected lines throughout the property and dug a tractor trench along Scroggie Creek. Initial results from the MMI work were encouraging, with anomalous values in Au and Ag supported by anomalous Zn, Mo and Pb, providing more discrete targets than conventional soil sampling. The trenching failed to locate mineralization related to the Scroggie Fault. Much of this exploration work was completed with the assistance of YMIP grubstake and target evaluation grants (Richards, 2006b).

In 2008, Richards (2009) completed a program of bedrock sampling from recent mining cuts along Scroggie Creek and MMI sampling along the base of slope west of the mining cuts on the Cigar claims, contiguous with the north end of the Rum Run claim block. Pyrite and pyrrhotite were noted in many of the rock samples, along with minor disseminated chalcopyrite. The samples contained weakly anomalous values of Cu and Mo, but no Au values. The MMI samples showed only a weak Cu anomaly. The zone of potential copper mineralization is open to the north. In 2008 and 2009, Richards added the Toluamide claims to the claim group.

In 2009, Richards completed a program of geochemical soil sampling and rock sampling over selected areas within the Toluamide claim group. In September, 2009, Richards optioned the Mariposa claim group, comprising 203 mineral claims, to Pacific Ridge.

Pacific Ridge's 2010 exploration program included prospecting, rock sampling, grid soil sampling and trenching in the area of the newly discovered Skookum Jim anomaly and staked an additional 40 AP claims to the north. A total of 2,952 auger soil samples were collected. The survey defined a strong gold anomaly approximately 600 m by 1,100, with gold values ranging up to 1,570 ppb that remained open to the north and west. To the east of Skookum Jim, locally elevated gold results were detected in areas of sporadic permafrost. Soil samples in the Hackly Gold, Maisy May and Big Alex areas also returned elevated gold results. Five trenches were completed for a total of 1,605 m of trenches in the area of the Skookum Jim (now Skookum Main) Zone.

Also in 2010, with the assistance of a YMIP grant, Richards (2010) staked the 128 claim AC claim group in the Alberta Creek area and then carried out a geochemical survey, including 202 soil samples, two silt

samples and 11 rock chip samples. Several of the soil samples reported moderately anomalous Au values (20 to 134 ppb) with supporting anomalous Mo, Pb, As and Sb. The claims were subsequently added to the Pacific Ridge option agreement with Richards.

# REGIONAL GEOLOGY

The Property is located within the central Dawson Range, southwest-central Yukon, where it forms part of a regionally extensive, northwest-southeast trending polymetallic mineral belt associated with Early Jurassic to latest Cretaceous magmatism.

The Property lies entirely within the Yukon-Tanana Terrane ("YTT"), an accreted terrane separated from the Selwyn Basin and associated carbonate platforms strata of the ancestral North American margin by the NW-SE trending Tintina Fault. The NW-SE trending Denali or Shakwak Fault, located approximately 190 km to the southwest forms the southwestern boundary of the YTT (Gordey and Makepeace, 2000).

The YTT consists of a belt of Late Devonian to Late Permian metamorphic rocks, including various metasedimentary and metavolcanic assemblages, and up to four distinct suites of calc-alkaline metaplutonic rocks (Mortensen, 1996; Colpron et al., 2006). In the Dawson Range, the YTT typically includes intercalated packages of metasedimentary and metavolcanic rock sequences predominantly composed of quartz-mica schist and diorite gneiss. The magmatic episodes are associated with penetrative deformation and metamorphic events ranging in age from late Paleozoic to Tertiary.

According to Colpron et.al. (2006), the Yukon Tanana Terrane consists of four unconformity-bounded tectonic assemblages: the basal siliciclastic Snowcap Assemblage, and three volcanic and volcaniclastic sequences including the Upper Devonian to Upper Mississippian Finlayson Assemblage, the Mid Mississippian to Lower Permian Klinit Assemblage and the Mid to Upper Permian Klondike Assemblage. A coeval oceanic sequence of chert, argillite and mafic volcanic rocks of the Slide Mountain Terrane is preserved discontinuously along the eastern margin of the YTT. A sequence of immature fine grained clastic rocks and polymictic conglomerate of Permian to late Triassic age overlie the strata of the YTT and adjacent Slide Mountain Terrane, as well as the Selwyn basin to the east.

Plutonic rocks of the mid-Cretaceous Dawson Range batholith intrude the Yukon-Tanana terrane over vast areas and consist of large bodies of granodiorite and quartz monzonite, and smaller high-level felsic porphyry plugs and sills. The Property is underlain by one of the larger bodies of this unit (see Figure 5). Locally, narrow ultramafic units of unknown age have been emplaced along major structures within the Yukon-Tanana terrane. Pyroxene Mountain, located immediately to the northeast of the Property, is cored by this ultramafic unit.

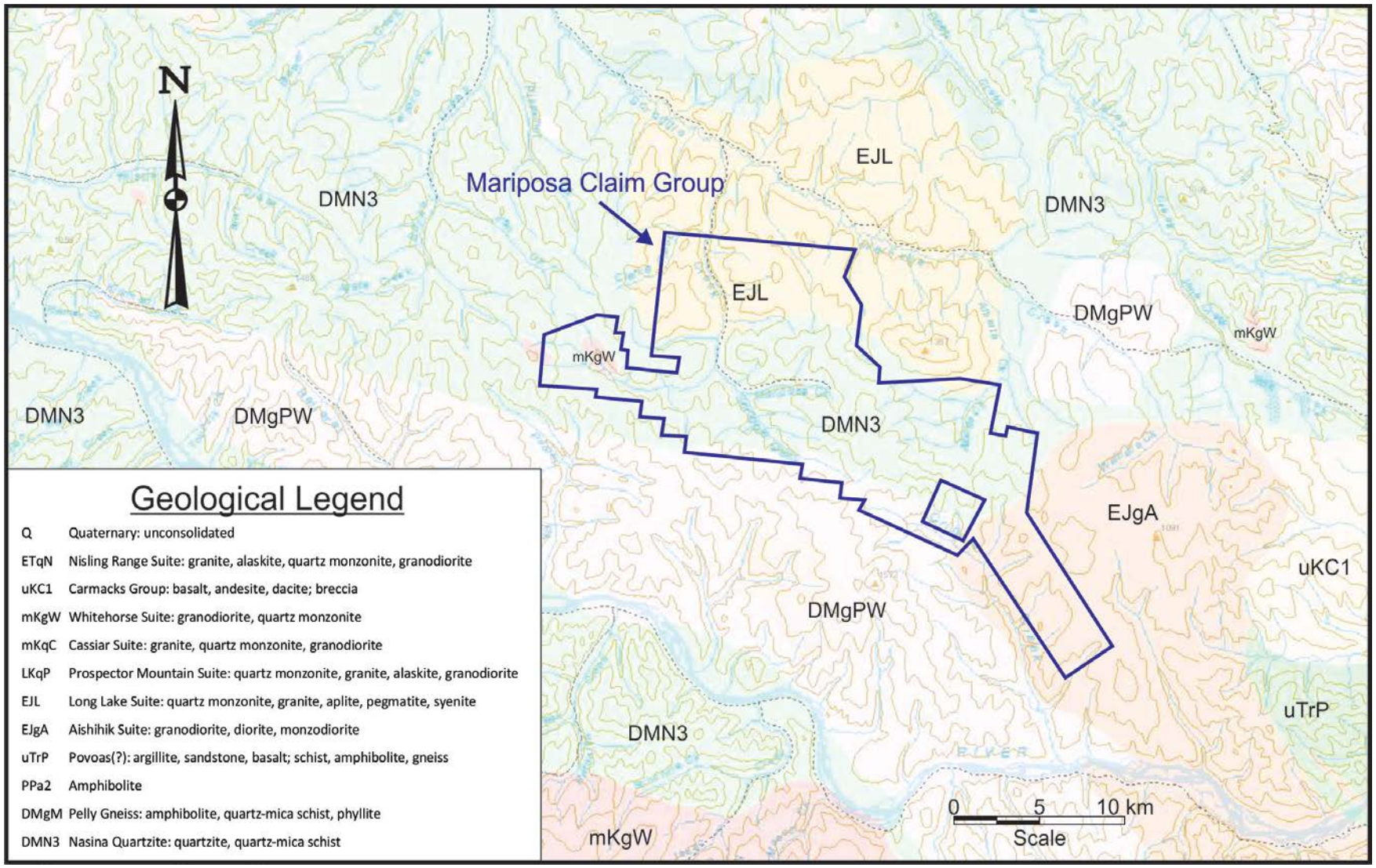


**Figure 5. Mariposa property regional geology.**

# PROPERTY GEOLOGY

The Mariposa property is underlain by a polydeformed sequence of Permian through to Jurassic age metasedimentary and metaplutonic rocks that have been intruded by (i) discontinuous bodies of mafic – ultramafic intrusions, (ii) Cretaceous quartz monzonite and granite intrusions, and (iii) feldspar porphyry dykes and small intrusive plugs (Figure 6). The Permian to Jurassic rocks are considered to be 'basement' and host gold mineralization on the Property where they form a NW-striking, variably NE-dipping homoclinal sequence. Polyphase ductile deformation is responsible for the intercalation of Permian gneiss and schist packages of diverse compositions, in addition to foliation development within Jurassic intrusions that occur within the basement terrain. Metamorphism associated with ductile deformation attained at least mid- amphibolite facies as evidenced by the kyanite-muscovite ± garnet, ± magnetite ± staurolite assemblage that has been reported on both sides of Scroggie Creek at the south end of the airstrip (Richards, 2005). At least two episodes of brittle faulting have been observed to post-date the ductile deformation on the Property; the older of the two brittle events is associated with gold mineralization. A geological map with significant gold zones outlined within the Property is presented in Figure 6. The map represents integration of field traverses by Pacific Ridge employees in the Skookum West and Skookum Main zones, historical mapping by Gordon Richards, fault and lineament interpretations derived from high resolution aeromagnetic data flown for the property and available regional government geological mapping.

## Devono – Mississippian Basement

Several schist and gneiss units have been mapped on the Property where they form part of the Devono – Mississippian YTT basement. Mappable units of surface exposures and recognized in drill core include:

- Mafic-intermediate hornblende gneiss – Compositionally banded gneiss package varying from locally ultramafic (hornblendite) to pegmatitic granitic-granodioritic horizons. The mafic-intermediate gneiss package is transitional into banded quartz diorite gneiss.

- Banded quartz diorite gneiss consists of centimetrically layered felsic, intermediate and mafic (biotite-rich) intervals but is often dominated by the presence of a moderately foliated quartz-diorite (McIntosh, 2012a). Locally, narrow bands of fine (≤ 2 mm) pink garnets have been noted in this unit and mafic bands may show (sometimes intense) epidote alteration ± secondary biotite and minor chalcopyrite (McIntosh, 2012a).

- Granodioritic biotite gneiss is characterized by textures that vary from gneissose to weak to moderately foliated and is a medium grained, leucocratic rock. The granodioritic gneiss is intimately interleaved with biotite rich mafic-intermediate hornblende gneiss unit. The granodiorite often exhibits distinctive sericite alteration clots when in the sericite alteration zone (McIntosh, 2012a).

- Biotite Gneiss - Strongly foliated, melanocratic, fine-grained biotite-rich unit with variable biotite content, commonly in the 40% - 50% range. Biotite gneiss is often banded, with leucocratic units of foliated granodiorite.

- Granitic gneiss

- Felsic gneiss – quartz-sericite+/-talc gneiss unit exhibiting granoblastic textures and locally hosting early stage chalcopyrite-pyrite mineralization. The bleached colour of the gneiss package distinguishes it from other gneisses on the property.

- Quartz-muscovite-garnet schist – Strongly foliated, silvery- grey quartz muscovite schist with garnet porphyroblasts up to 2cm in diameter. This schist unit occurs immediate south of the Skookum West target and is associated with multi-element soil anomalies

- Marble – occurs as discontinuous lenses within felsic gneiss in the Alberta Creek target area

Of these map units, the granodioritic biotite gneiss to foliated biotite granodiorite represents the most important host lithology for gold mineralization.

## Jurassic Intrusives

Jurassic intrusive rocks occur north of the Skookum Main Zone and east of the Big Alex target and vary from monzonite to granite in composition. Pegmatite is common and perthite is often observed. Jurassic intrusions are locally observed to cut Devono-Mississippian basement rocks; however they have also undergone penetrative deformation and have variably developed mineral fabrics. These intrusions are not an important host to gold mineralization. A minor amount of gabbro to pyroxenite occurs at the eastern boundary of the property. The unit is continuous with exposures of ultramafic rocks that constitute Pyroxene Mountain. The age of this map unit is currently not known, however, weak to moderately developed mineral fabrics in the unit imply they pre-date at least some phase of ductile deformation.

## Cretaceous and Younger Intrusives

Several small plugs of Cretaceous quartz monzonite to granodiorite are shown on the geological map of the Mariposa property; however their occurrence needs to be verified. Quartz feldspar porphyry dykes and small intrusive bodies are located towards the eastern end of the property, in close proximity to the Sizzler target (Figure 6). In the vicinity of the Sizzler target, a NNW-trending dyke swarm is locally associated with anomalous gold. Dykes occurring in the swarm range from fine-grained, equigranular dacite with 1-2% disseminated pyrite to localized rhyolitic breccia.

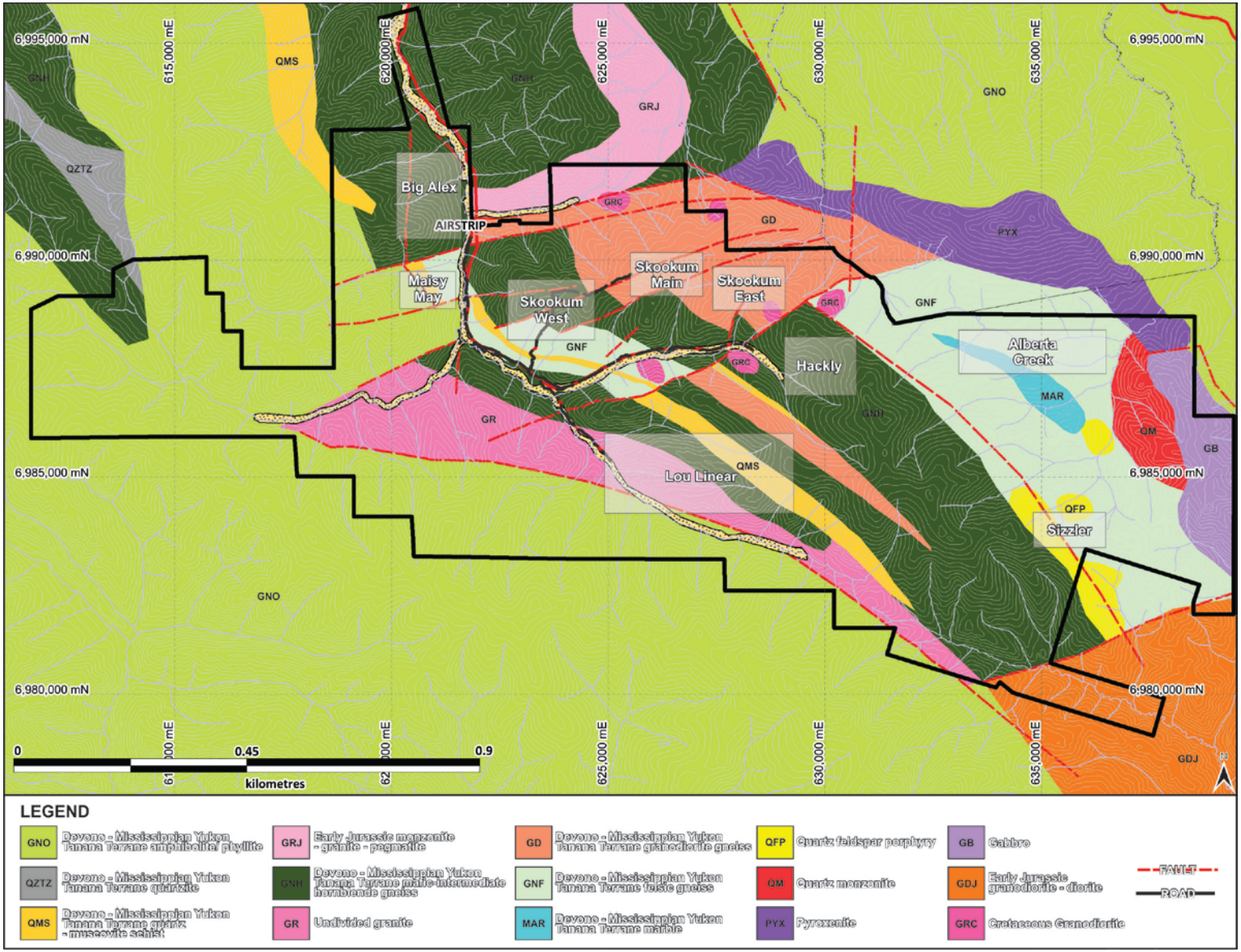


**Figure 6. Mariposa property geology.**

## Structure

Ductile deformation of basement lithologies is expressed as planar and linear metamorphic mineral fabric alignment (both schist and gneissose lithological units), leucosome formation and alkali feldspar augen development in more porphyroclastic units. The general geometry of the metamorphic basement rocks consists of a NW-striking, variable NE dipping homoclinal sequence, which is readily identified in the high resolution aeromagnetic data.

At least two episodes of brittle faulting are recognized to post-date ductile deformation on the Mariposa property, including an ENE-trending sinistral fault system associated with gold mineralization, and a NE to NNE striking fault set that may offset the mineralized structures. A more detailed examination of gold mineralizing structures in the Skookum West and Skookum Main zones indicates that two primary orientations of structures are present and include N- to NNW and E- to ENE trending fault structures. This geometry is replicated on the Coffee property (Chartier, 2012) and also within the Golden Saddle deposit (Weiershäuser et.al., 2010). Brittle faults are expressed as fault breccia, gouge and cataclasite development associated with sericite-alkali feldspar-pyrite and quartz alteration.

A macroscopic structural study by Bennett (2012a) and a study of thin section offcuts by Bennett (2012b) indicate a riedel shear fault system can account for the geometry and order of structures hosting alteration and mineralization. R faults host all stages of alteration and mineralization, including gold bearing mineral phases. R' faults also host alteration and mineralization, however they typically represent linking structures between bounding R faults. Phase 3 brecciation and late-stage, gold-bearing veining deviates from predictable riedel shear geometry.

## Mineralization

Bennett (2012b) studied 10 polished thin sections from the 2011 drill program by binocular and petrographic microscopy. Six additional samples were selected and prepared for scanning electron microscope (“SEM”) modal mapping and mineral analysis. The purpose of this work was to provide a description of the Skookum Main Zone mineralization and provide a paragenesis of the mineralization.

Bennett identified four main phases within the mineralized zone:

- Phase 1 (PRE AU ORE) - Pervasive, non-destructive sericite alteration
- Phase 2A (PRE AU ORE) - Destructive albitization that immediately preceded alkali -feldspar alteration and occurring in close proximity to alkali feldspar zones.
- Phase 2B (SYN AU ORE -1) - Focused (vein hosted) and pervasive destructive alkali feldspar + ankerite + pyrite (Py 1) - accessory hematite alteration + hydrothermal monazite associated with economic Au values
- Phase 3 (SYN AU ORE -2) - Progressive silicification initiated as silica -flooding, followed by minor brecciation and multistage quartz veining that is associated with growth of pyrite 2 (Py 2) and deposition of visible gold.
- Phase 4 (POST AU ORE) - Carbonate, quartz +/- clay veins that crosscut Phases 1 - 3 alteration.

The SEM analyses demonstrated that gold occurs as both electrum in Py 1 (Phase 2B) and native gold in latest stage Phase 3 quartz veins, while silver occurs as i) Phase 2B electrum and ii) Phase 2B Ag sulfosalts in Py 1. Lead occurs as Pb sulphosalts in Py 1 and as galena in Phase 4 calcite, antimony occurs as Phase

2B tetrahedrite in Py 1, copper occurs and Phase 2B chalcopyrite in Py 1, barium occurs as Phase 2B and Phase 3 barite and zinc is hosted in rare occurrences of sphalerite occurring within Phase 2B ankerite.

# 2011 to 2012 EXPLORATION PROGRAM

In April, 2011, the Company completed a 900 line km high resolution aeromagnetic survey along 100 metre spaced lines over the Skookum Zone and adjacent areas, in the west central part of the Property. The survey was carried out by Precision GeoSurveys Inc. of Vancouver, BC, using a helicopter-mounted cesium vapor magnetometer (Fingler, 2011). The 2011 exploration program also included 6,903 soil samples, collected largely over the Skookum Main and Alberta Creek target areas. In addition, between 19 June and 15 September, 6,011 metres of core drilling was completed in 41 holes. In June 2011, The Company added an additional 387 claims by staking, to bring the total to over 1,400 claims covering 295 contiguous $km^2$.

The 2012 exploration program included the collection of 2,635 soil samples, 175 line km of ground magnetic surveying, approximately 1650 metres of excavation in 19 trenches and 2,450 metres of diamond drilling in 14 holes. Results of the 2011 and 2012 programs are described in detail below.

The 2011 and 2012 programs were carried out under the direction of Janice Fingler, P.Geo., Vice President of Exploration for Pacific Ridge from 2010 to September 2012.

## Soil Geochemical Program

The soil geochemical program commenced in the Skookum Main Zone area in 2010. Over the next two years, it expanded to more fully define Skookum Main while new grids were developed to investigate new targets at Skookum West, Skookum North and Skookum East, Gertie, Maisy May, Big Alex, Hackly and Alberta Creek. For the sake of completeness, all soil samples collected during the period 2010 to 2012 are included in this discussion.

In all, 12,461 soil samples were collected over three years. Two types of sample were collected over the main target areas. Traditional “C” horizon samples were collected using a one metre long Edelman Dutch hand auger and were gathered from depths ranging from 20 to 60 cm. However, where anomalies extended into permafrost areas, in particular at Skookum North and portions of Skookum East and Alberta Creek, organic “A” horizon samples were collected. “A” horizon samples were collected from within a few cm of surface. In the following graphical presentations, the “C” Horizon and “A” horizon samples are shown with different symbols. Statistics used to establish threshold values were calculated separately as well. The samples collected are summarized by year in Tables I and II and Figure 7. Threshold values, calculated as $50^{th}$, $70^{th}$, $90^{th}$, $95^{th}$, $97.5^{th}$ and $99^{th}$ percentiles, are shown for the key elements in Table III for “A” horizon samples and Table IV for “C” horizon samples.

Samples were collected by personnel of the Company and contractor All-In Exploration Solutions Inc. of Whitehorse. Crews were transported by ATVs and helicopter to the sample grids. For safety and for support carrying samples during longer traverses, crews worked in teams.

In most cases, samples were collected at 50 m intervals along 100 m spaced lines, except where no sample could be collected due mainly to permafrost. In areas of greater interest, sample spacing was

reduced to 25 m. In the central Skookum grid, samples were collected at 25 m intervals on 50 m spaced lines.

The coordinates of planned grid stations (UTM NAD 83, Zone7) were uploaded to handheld Garmin 60C GPS units prior to traverses and were then used by crews to navigate in the field. All sample sites were marked in the field with flagging and tyvex tags.

The sample numbers used are shortened versions of the actual GPS coordinates, assigning only the last 5 digits of both the east and the north UTM coordinate. Sample numbers therefore had 10 digits, with a space separator. 400 to 500 grams of soil was collected and placed in well- marked kraft soil bags. These were packaged into sealed rice bags, flown to Dawson City by charter, and were delivered to the Acme Analytical freight service by Small's Expediting. Soil samples were received and processed by the Acme Lab facility in Whitehorse and pulps were forward to Vancouver for analysis. "C" horizon soil samples were analyzed for 36 elements using an Aqua Regia digestion and an ICP-MS finish (1DX). "A" horizon soil samples were analyzed for 36 elements using an ICP-MS finish e after Aqua Regia digestion for low to ultra-low determinations (1F2). Acme Analytical Labs is an ISO9001 accredited facility which conducted full internal QA-QC with the insertion and monitoring of standards, blanks and duplicates.

**Table I. "C" Horizon Samples by Area and Year.**

| Grid/Year | 2010 | 2011 | 2012 | Totals |
|---|---|---|---|---|
| Skookum Zone | 2,923 | 0 | 349 | **3,272** |
| Alberta Creek | 0 | 520 | 1,463 | **1,983** |
| Big Alex | 0 | 264 | 0 | **264** |
| Cigar | 0 | 0 | 145 | **145** |
| Cripple Creek | 0 | 0 | 217 | **217** |
| Gertie | 0 | 476 | 0 | **476** |
| Lou Linear | 0 | 108 | 0 | **108** |
| Maisy Mae | 0 | 440 | 0 | **440** |
| Skookum East | 0 | 913 | 461 | **1,374** |
| Skookum Main | 0 | 401 | 0 | **401** |
| Skookum West | 0 | 1,585 | 0 | **1,585** |
| Stevens Creek | 0 | 208 | 0 | **208** |
| **Totals** | **2,923** | **4,915** | **2,635** | **10,473** |

**Table II. "A" Horizon Samples by Area.**

| Grid/Year | 2011 |
|---|---|
| Alberta Creek | 113 |
| Skookum North | 1,875 |
| **Total** | **1,988** |

**Table III - "A" Horizon Sample Thresholds (n = 1,988)**

| Percentile | Au (ppb) | Ag (ppb) | Mo (ppm) | Cu` (ppm) | Pb (ppm) | Zn (ppm) | As (ppm) | Sb (ppm) | Bi (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| Maximum | 70.1 | 6856.0 | 26.7 | 319.1 | 458.5 | 1585.4 | 18.4 | 7.1 | 1.9 |
| 99th | 19.1 | 2705.2 | 7.7 | 77.3 | 32.1 | 219.6 | 6.6 | 0.7 | 0.4 |
| 97.5th | 10.8 | 1630.6 | 5.8 | 60.1 | 17.3 | 149.4 | 5.5 | 0.6 | 0.3 |
| 95th | 8.1 | 1221.0 | 3.5 | 46.0 | 13.0 | 113.1 | 4.7 | 0.5 | 0.3 |
| 90th | 5.2 | 897.0 | 2.1 | 35.4 | 10.1 | 81.1 | 4.0 | 0.4 | 0.2 |
| 70th | 2.4 | 373.0 | 1.2 | 22.3 | 7.3 | 48.4 | 2.7 | 0.3 | 0.1 |
| 50th | 1.4 | 227.0 | 0.9 | 16.8 | 6.1 | 35.6 | 2.0 | 0.2 | 0.1 |

**Table IV - "C" Horizon Sample Thresholds (n = 10,473)**

| Percentile | Au (ppb) | Ag (ppm) | Mo (ppm) | Cu (ppm) | Pb (ppm) | Zn (ppm) | As (ppm) | Sb (ppm) | Bi (ppm) |
|---|---|---|---|---|---|---|---|---|---|
| Max | 3948.5 | 129.0 | 138.9 | 750.8 | 2649.0 | 1508.0 | 642.7 | 18.4 | 62.3 |
| 99th | 113.2 | 1.1 | 7.9 | 137.6 | 185.9 | 265.3 | 59.9 | 2.3 | 6.3 |
| 97.5th | 58.7 | 0.6 | 4.9 | 90.7 | 96.3 | 189.0 | 36.3 | 1.3 | 2.7 |
| 95th | 30.9 | 0.4 | 3.5 | 66.2 | 47.3 | 143.4 | 22.7 | 0.9 | 1.0 |
| 90th | 15.2 | 0.3 | 2.6 | 48.4 | 21.0 | 111.0 | 13.0 | 0.6 | 0.4 |
| 70th | 4.8 | 0.1 | 1.4 | 28.6 | 11.0 | 81.0 | 7.4 | 0.4 | 0.2 |
| 50th | 2.8 | 0.1 | 1.0 | 21.7 | 8.8 | 68.0 | 5.7 | 0.3 | 0.1 |

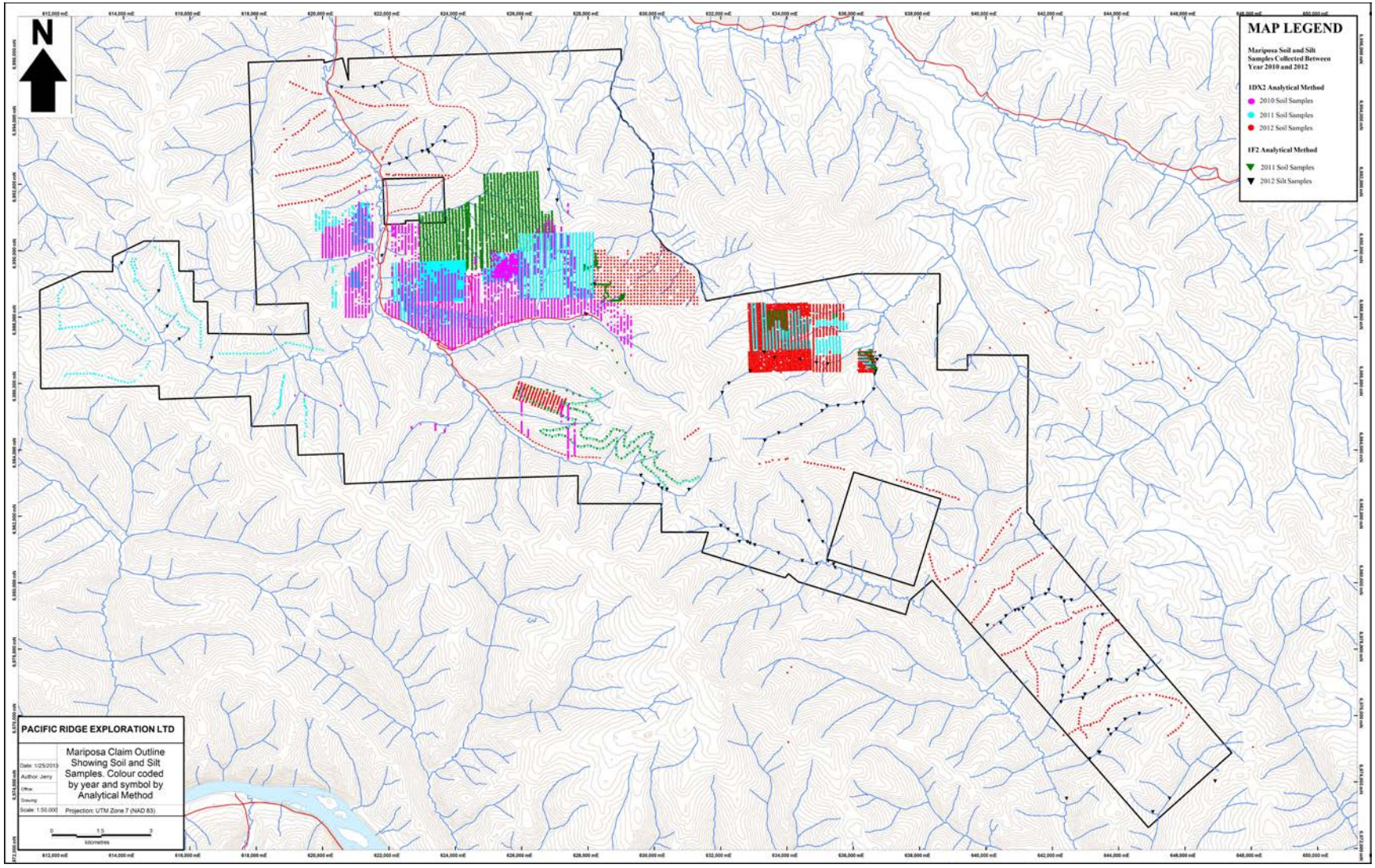


**Figure 7. Mariposa soil grids colour coded by year and sample type.**

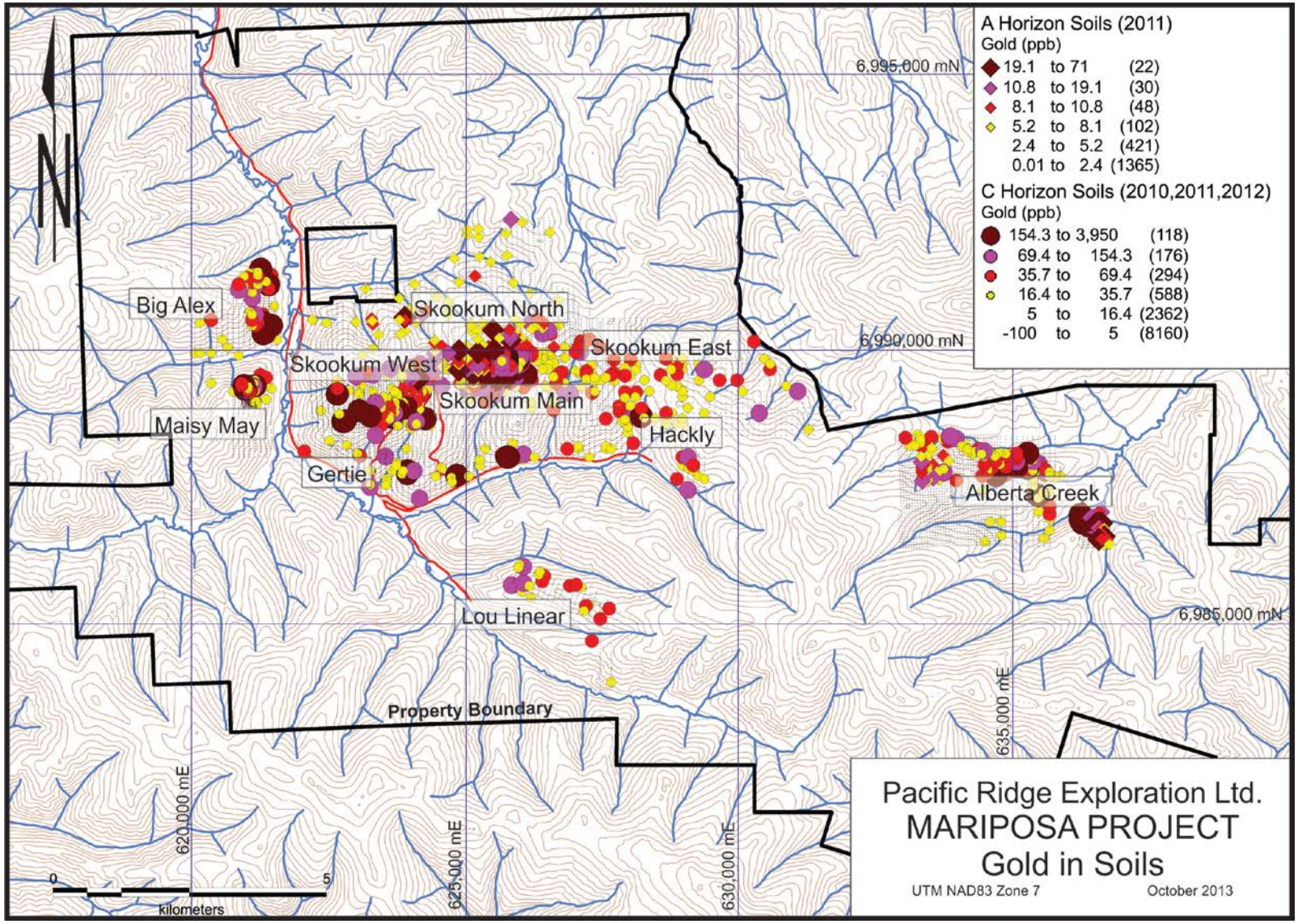


**Figure 8. Mariposa Project – Gold in Soils, C and Ah Horizon.**

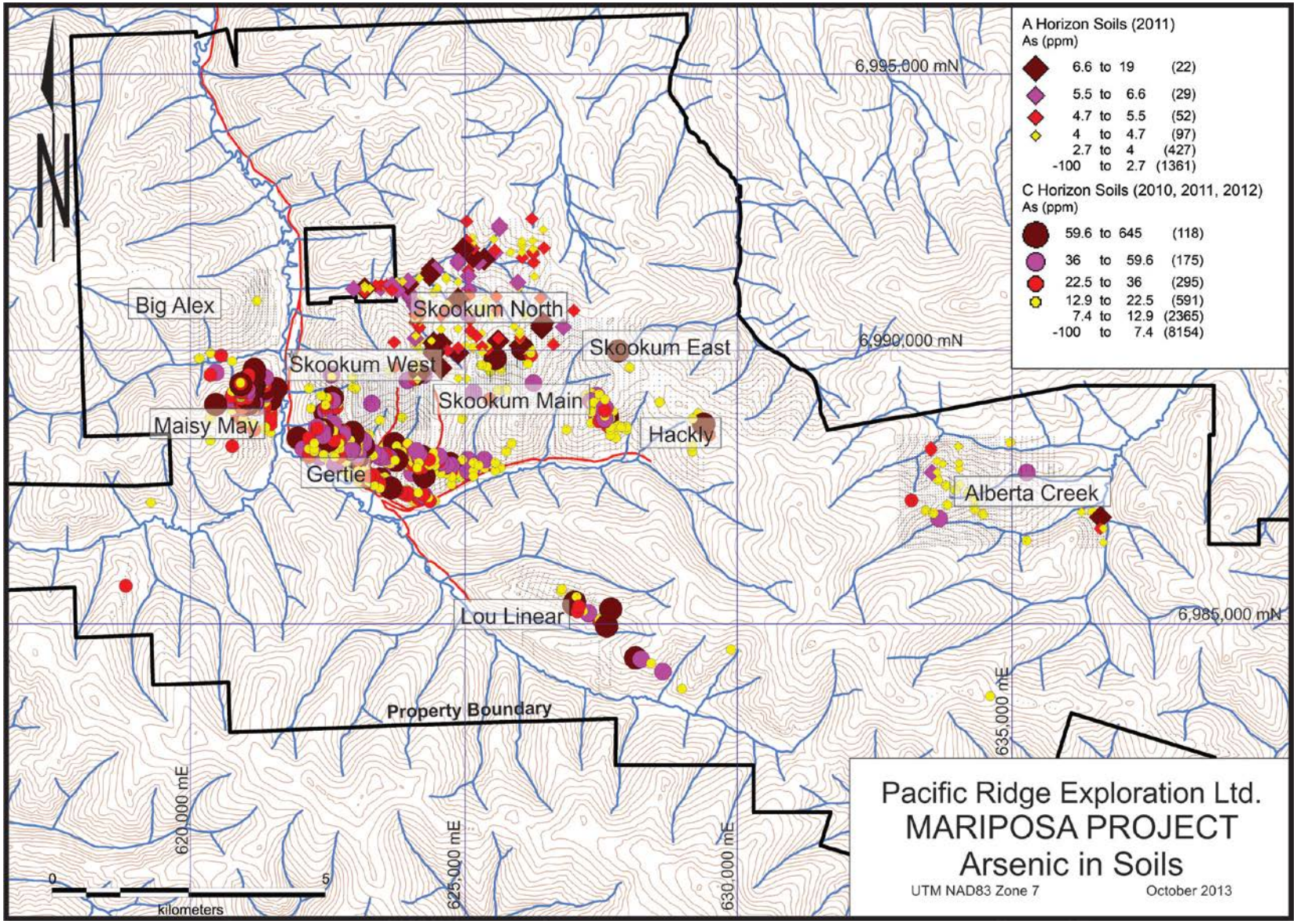


**Figure 9. Mariposa Project – Arsenic in Soils, C and Ah Horizon.**

In general in the White Gold and Klondike Gold districts, gold values from "C" horizon soils above 30 ppb are taken to be anomalous and above 50 ppb as significantly anomalous. In this study, the 95$^{th}$ percentile value for the 1DX gold analysis is 30.9 ppb Au and the 97.5$^{th}$ percentile is 58.7 ppb Au. Any values above these numbers are taken to be "anomalous" and "strongly anomalous", respectively. The 70$^{th}$ and 99$^{th}$ percentile values are included as separate symbols on the maps in order to provide better anomaly definition. In the case of grid sampling, where several "strongly anomalous" samples occur in a cluster, the resulting soil anomaly is recommended for follow-up exploration. In the case of reconnaissance ridge and spur sampling or other more widely spaced sampling patterns, isolated "strongly anomalous" samples are worthy of follow-up.

The same percentile levels, symbols and colours have been used for all other elements compared in this presentation. Correlations among the various metals can be observed when comparing the various maps. Such correlations can sometimes provide further support for a defined anomaly and may also provide clues as to the possible style of mineralization being reflected by the anomaly.

All soil results for samples registering above the 70$^{th}$ percentile value for gold and arsenic are shown in Figures 8 and 9 respectively. These elements were selected for presentation because they demonstrate the two main trends observed on the property. The first are the "Gold Trends" and include the Skookum Main and West Zones, Alberta Creek and Big Alex, characterized by anomalous gold with locally anomalous molybdenum and antimony. The second are the "Base Metal" trends and include Skookum North, Gertie and Maisy May, with anomalous silver, bismuth, lead and zinc, with locally anomalous gold samples. These anomaly trends are described in greater detail below.

## Skookum Zone Results

Two strong gold anomalies were defined at the Skookum Zone, Skookum Main and Skookum West, with peripheral anomalies at Skookum East and Skookum North. A third, linear anomaly, the Maisy Mae trend, may be stratigraphically controlled and has a base metal signature without significant gold. Other anomalous areas are discussed in the text, below. The results from the Skookum Zone are shown as bubble plots in Figures 10 to 17.

### Skookum Main

The Skookum Main Zone is defined by a strong cluster of anomalous gold in soil results (Figure 10), 1,500 m long by 1,000 m wide, where almost 50% of the samples are greater than 50 ppb Au and range up to 1,946 ppb. Most of the soils that define the anomaly are "C" horizon, but the northern edge of the anomaly is defined by "A" horizon soils, with values up to 52.4 ppb Au. The fact that the "A" horizon anomaly complements and fills out the adjacent "C" horizon anomaly suggests that "A" horizon sampling can be an effective way to define soil anomalies in permafrost areas.

The Skookum Main anomaly is also defined by silver (Figure 11), but the values are weak (<3 ppm) and the anomalous values cover only about half the area of the gold anomaly. There is a good correlation with molybdenum (Figure 12), which appears to extend the anomaly farther to the northeast than the gold values, in an area of "A" horizon sampling. Copper in soils supports the gold anomaly in part and shows a trend that is similar to silver. Antimony and bismuth (Figures 13 & 14) are weakly anomalous at Skookum Main. Both lead and zinc (Figures 15 and 16) are anomalous in the western portion of Skookum Main, somewhat similar to silver and copper. There is virtually no arsenic response (Figure 16).

Assuming that the soils are reflecting metal values in bedrock that are in reasonable proximity to their bedrock source in this area of residual soils, the anomaly pattern suggests at least two metal sources in the area of the Skookum Main Zone. The first is an east-northeast trending structurally controlled zone with an Au-Mo+/-Ag+/-Sb signature. This is intersected by a likely stratigraphically controlled, northwest trending Ag-Cu+/-Bi+/-Pb+/-Zn base metal signature. This latter zone is parallel to but less well defined than the Gertie-Maisy Mae trend to the southwest, described below, with the same signature. There is also an antimony association, but the strongest Sb is an east-northeast trending linear anomaly southeast of the main zone, possibly reflecting a stibnite-bearing vein or structure.

### Skookum West

This is a less intense gold anomaly, up to 606 ppb Au, it is smaller than Skookum Main, and it appears to have two structural trends; a main east-northeast trend and a secondary north-northwest trend at its eastern end. It has a weaker correlation with silver and antimony and virtually no anomalous arsenic, bismuth, lead or zinc. Strong molybdenum values are associated with this anomaly, but they are localized, in the core of the anomaly and in the extreme northeast corner.

There does not appear to be an intersecting base metal association with this anomaly, but this may be due in part to the lack of sampling, particularly to the southeast of the zone.

The Skookum West anomaly is secondary in terms of strength, size and supporting metals when compared with Skookum Main.

### Skookum East

This anomaly is an extension of the Skookum Main Zone, but is weaker and less continuous. Part of the reason for this may be that the trend is largely within a north-facing slope with difficult sampling conditions due to permafrost. The association is Au-Mo.

### Skookum North

This zone is entirely within permafrost soils and is defined by “A” horizon sampling. The association is mainly Ag-Pb-Zn with less Bi and As and weak Au and Cu. The zone appears to have most in common with the base metal associated Gertie Trend.

### Gertie & Maisy May

Gertie (see Figures 8 & 9) is a one to two km, northwest trending linear anomaly that has the same metal associations and is along trend with the Maisy May Zone, a further one km to the northwest. The metal association is Ag-Bi-Pb-Zn-As with weakly anomalous Mo. However, Maisy May (see Figures 8 & 9) also has Au, Sb, Cu, and stronger Mo, which are lacking at Gertie. In other words, Maisy May could be a target similar to Skookum Main with intersecting, stratigraphically controlled, NW trending base metal mineralization and structurally controlled Au mineralization. In this case, the key structure may be north-south, trending towards Big Alex, 1.5 km to the north.

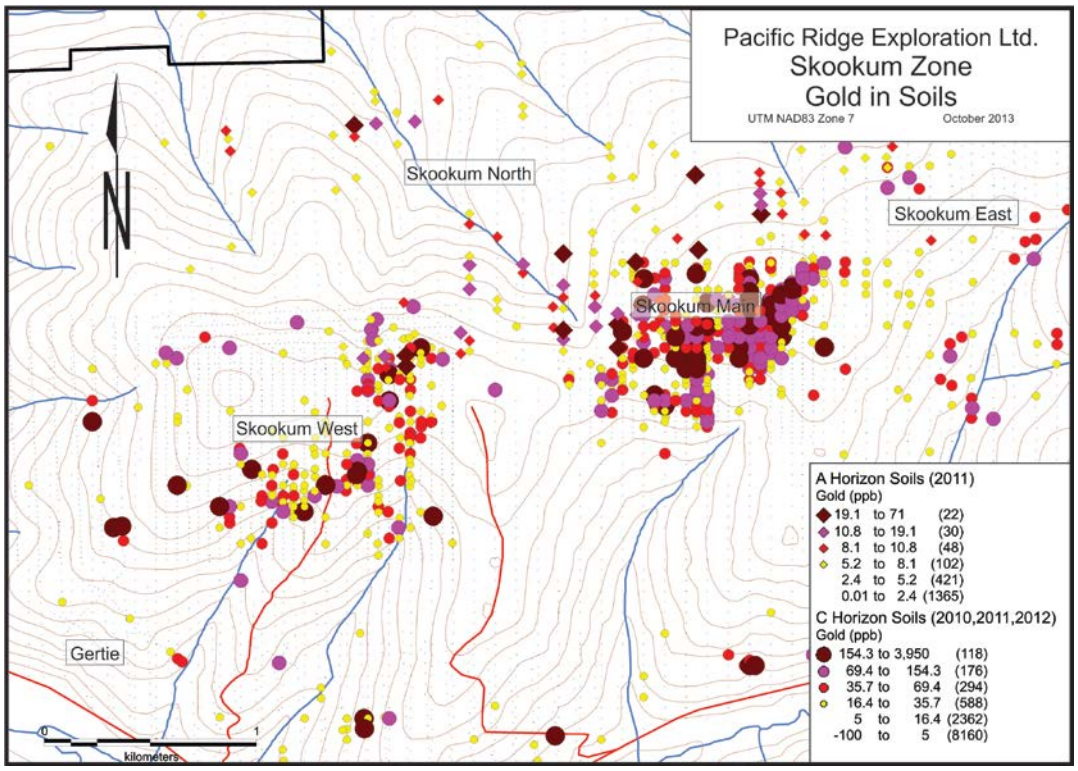


**Figure 10. Skookum Zone – Gold in soils.**

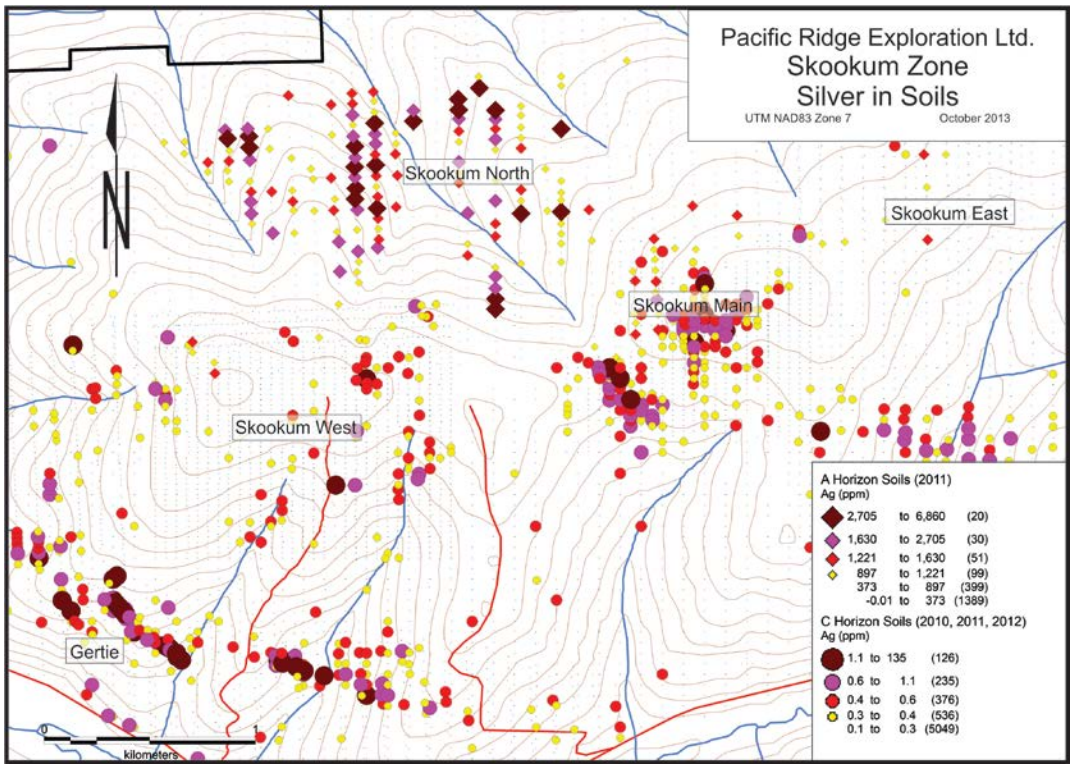


**Figure 11. Skookum Zone – Silver in soils.**

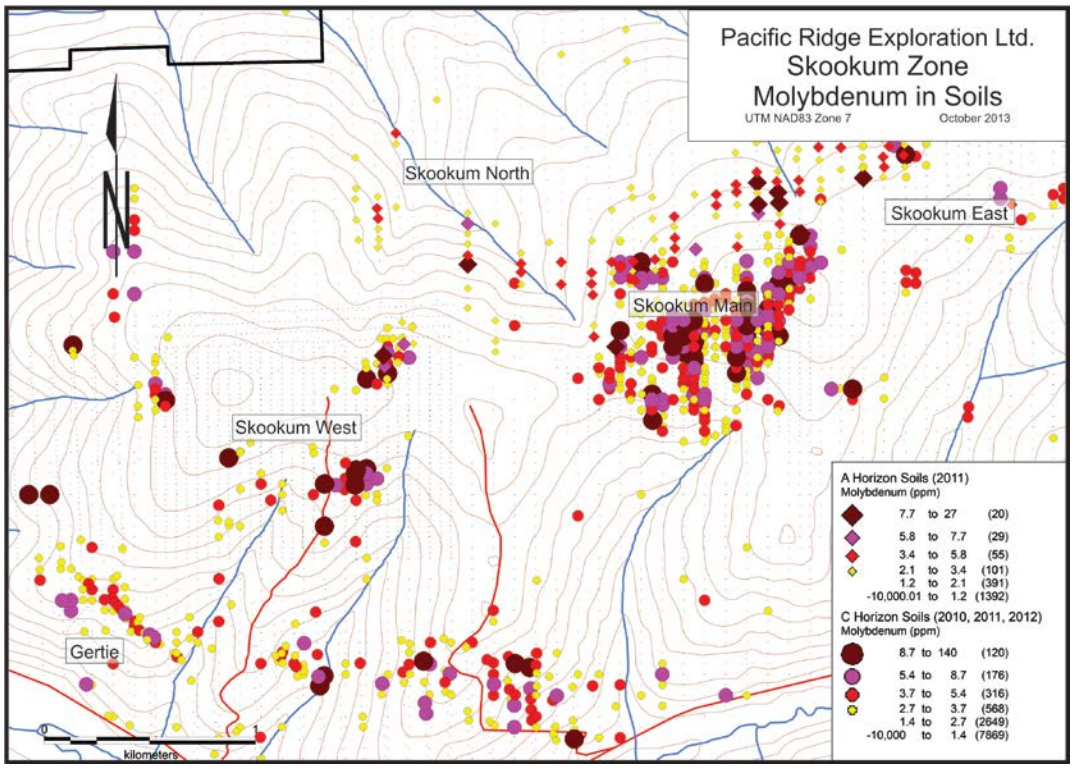


**Figure 12. Skookum Zone – Molybdenum in soils.**

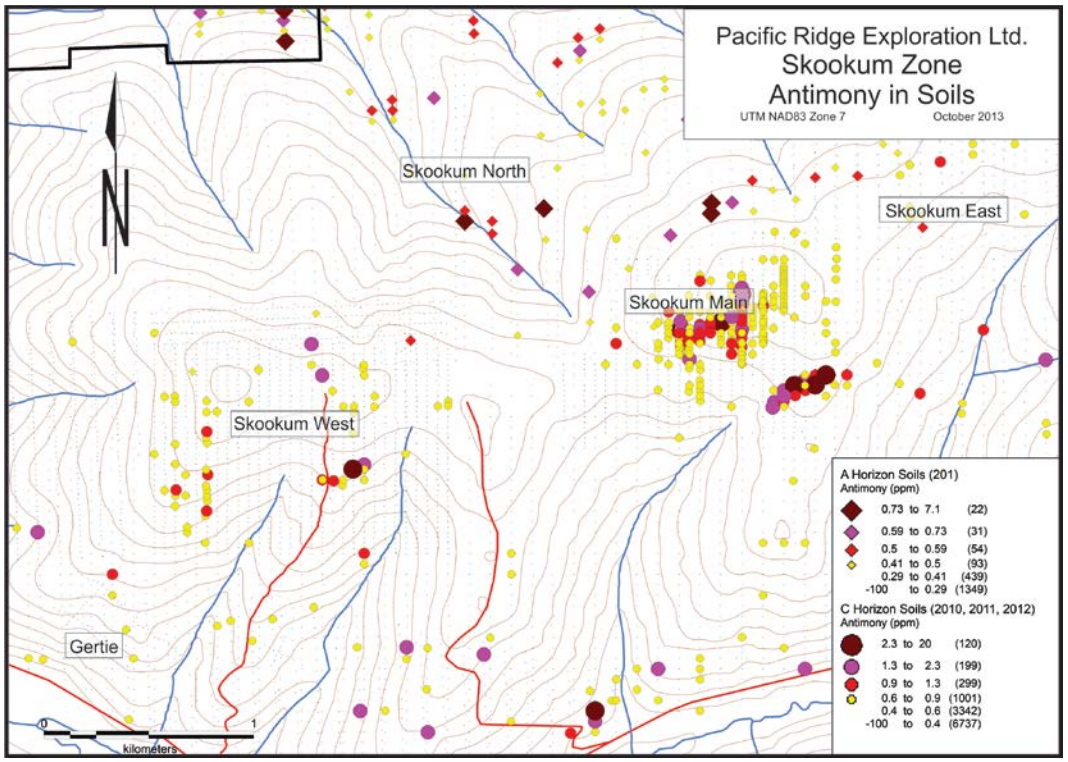


**Figure 13. Skookum Zone – Antimony in soils.**

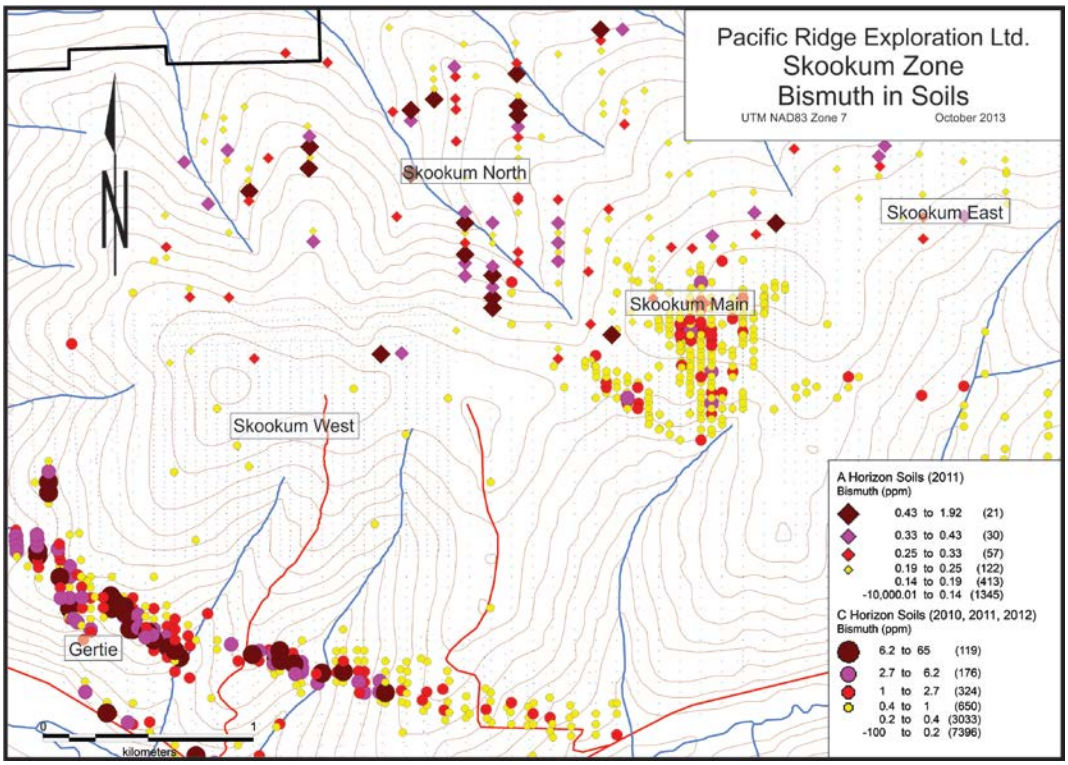


**Figure 14. Skookum Zone – Bismuth in soils.**

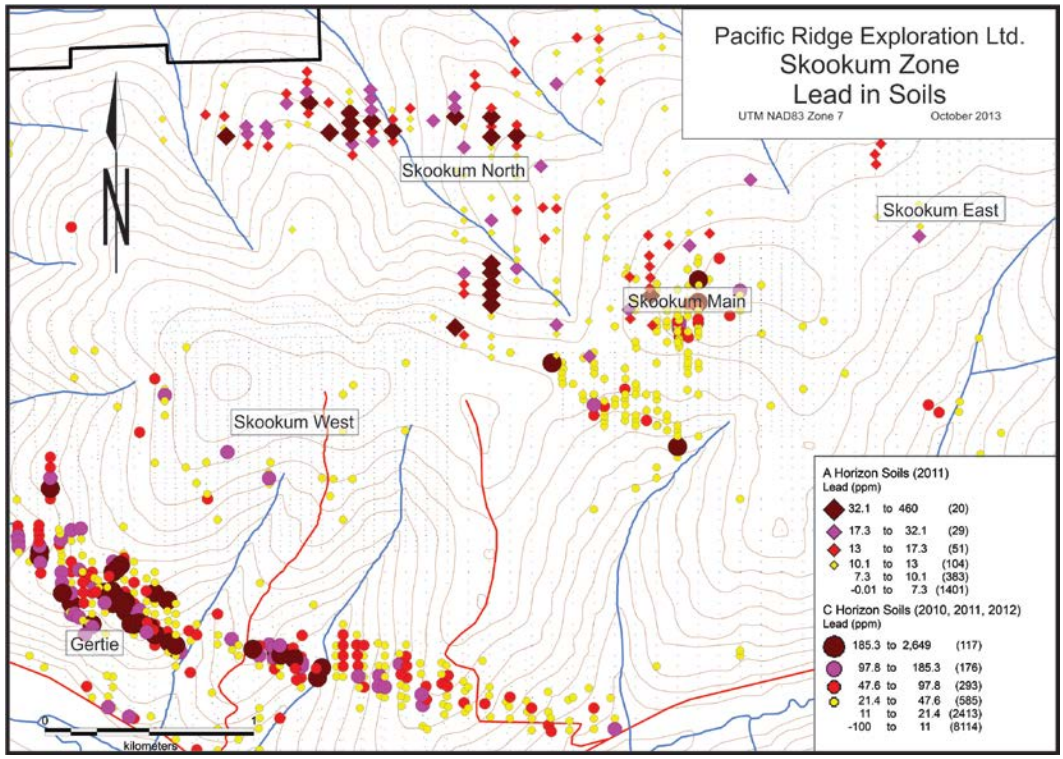


**Figure 15. Skookum Zone – Lead in soils.**

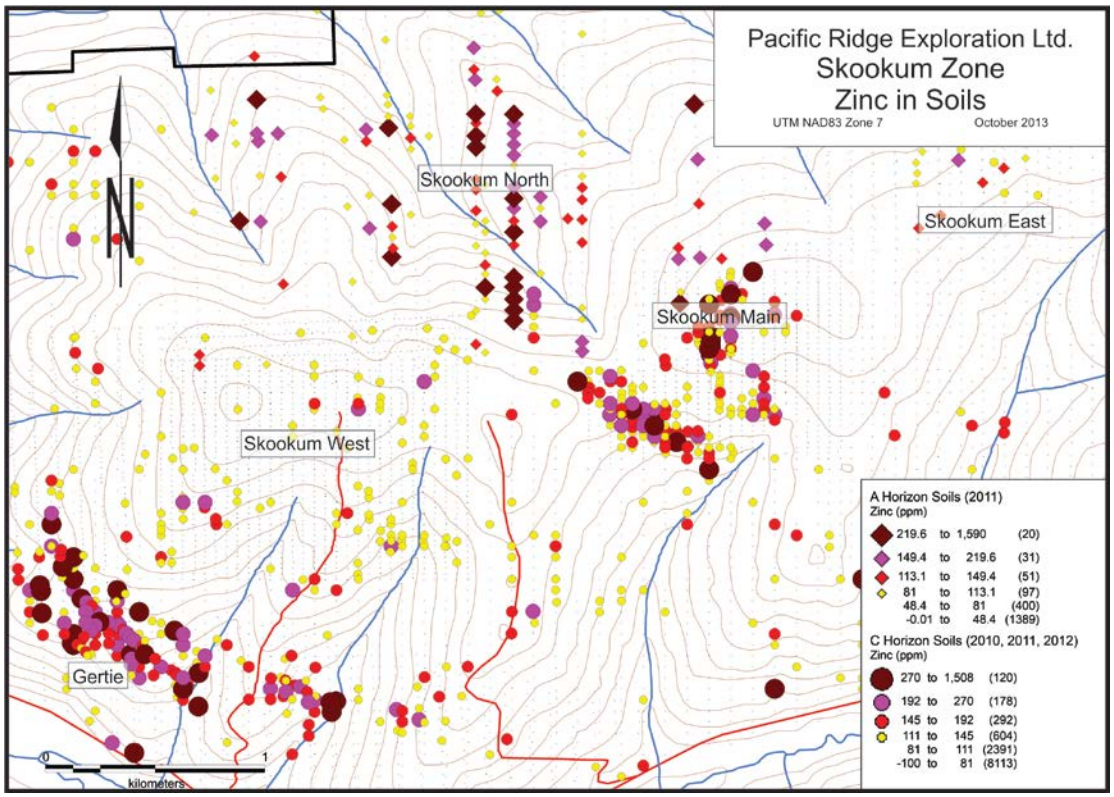


**Figure 16. Skookum Zone – Zinc in soils.**

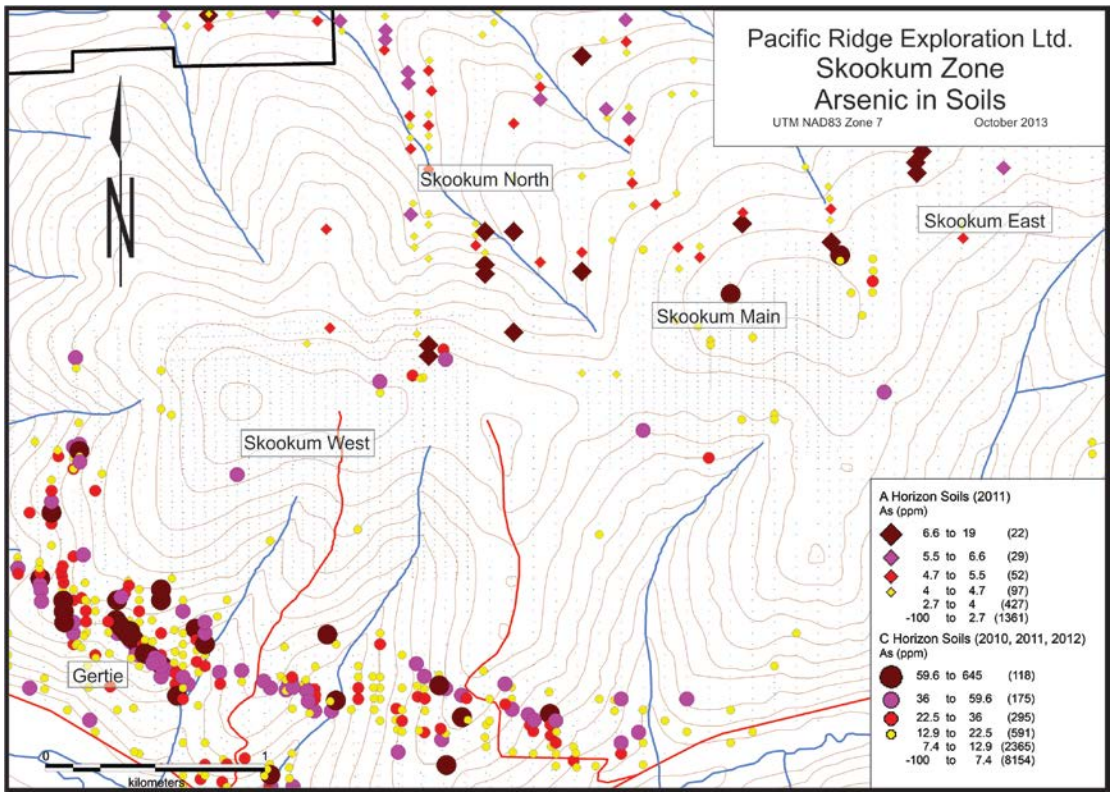


**Figure 17. Skookum Zone – Arsenic in soils.**

In summary, at Skookum Main, the strongest portion of the gold anomaly correlates with the intersection of the structural gold trend and the stratigraphically controlled base metal trend, suggesting that the point of intersection of these two styles of anomaly may have been an important influence on the control of the stronger zones of gold mineralization on the Property.

## Alberta Creek Results

Alberta Creek is located ten kilometres east-southeast of Skookum Main. This area of interest was first identified by widely spaced soils collecting during regional prospecting in 2010. During 2011, the results of more than 500 grid-based soil auger samples identified three open-ended gold-in-soil anomalies of up to 900 m in length. Soil results in the three target areas, Alberta West, Alberta Creek NW, and Alberta Creek Main (see Figures 18-20), returned up to 450 ppb Au and 54 ppm Mo.

With the results from additional grid sampling in 2012, a strong gold soil anomaly was partially defined at Alberta Creek Main and NW. Threshold values were calculated based on all samples from the entire Mariposa property and are based on 99$^{th}$ (dark purple), 97.5$^{th}$ (purple), 95$^{th}$ (red) and 90$^{th}$ (yellow) percentile values.

Alberta Creek Main is one of the strongest and most tightly defined gold anomalies on the property, with values ranging from detection (0.5 ppb Au) to 450 ppb Au, with a mean value of 11.28 ppb Au over a northwest-trending strike length of approximately 750 m and with a width of 200 to 400 m. The Alberta Creek NW gold anomaly appears to be on strike. The NW Zone is not as strong or continuous, but it has a potential strike length of close to 1 km. This is a predominantly a gold-only anomaly, with weak support from silver and antimony and scattered anomalous Mo. Due to poor outcrop exposure and the lack of prior trenching or drilling, the bedrock source of this anomaly is unknown.

Also shown are the soil geochemical maps for Mo (Figure 19) and Cu (Figure 20). These metals form a second, twin linear anomaly parallel to but west of the gold anomaly. This anomaly also has a weak gold expression. Within the north limb of this anomaly is a strong Mo-Cu zone. The core of this zone, 400 m by 500 m, is defined by Mo values ranging from 9 ppm to 54.9 ppm Mo, Cu values from 25 to 114 ppm and Au values rom 7 ppb to 149 ppb. Again, due to a lack of outcrop and any trenching or drilling, the source of the anomalies remains unexplained.

Figure 21 shows the total field airborne magnetics over the central and eastern portion of the Property, with gold soil geochemistry values overlain. There is a strong magnetic low centred on the gold anomaly at Alberta Creek Main, extending beyond it to the northwest and southeast. Another interesting feature that can be seen in this figure (dashed blue line) is a discontinuity in the magnetic features, trending northeast to southwest that may represent an important cross structure cutting through the centre of the Alberta Creek gold anomaly.

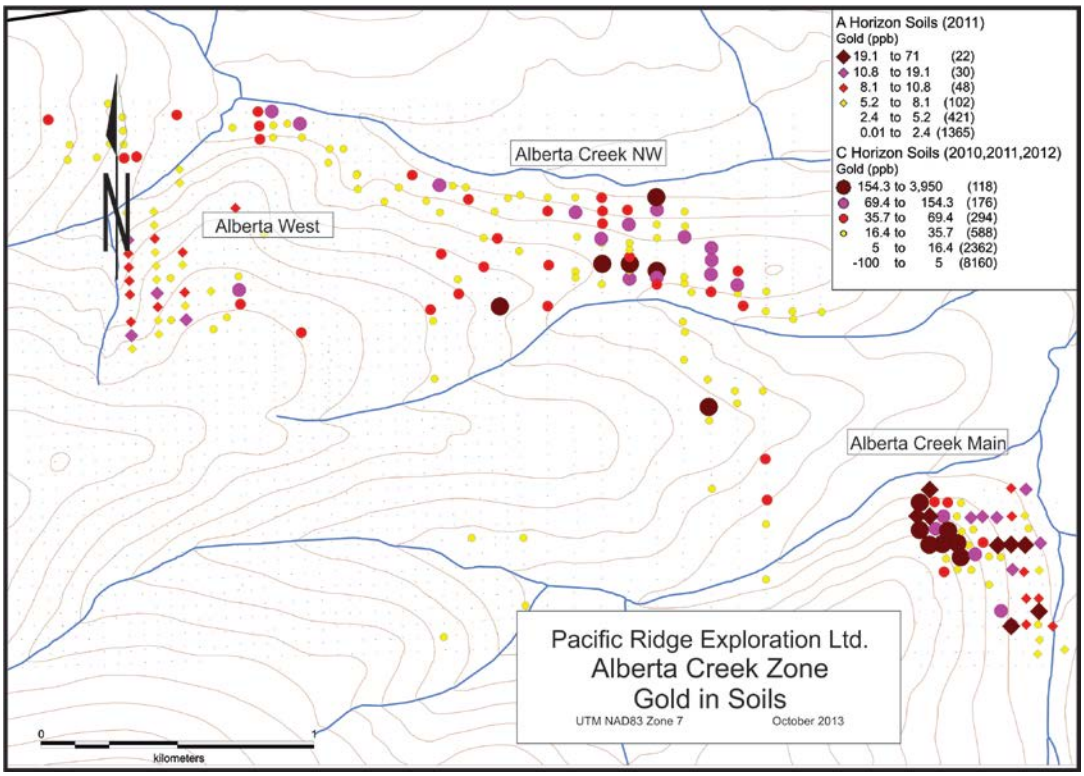


**Figure 18. Alberta Creek - Gold in soils.**

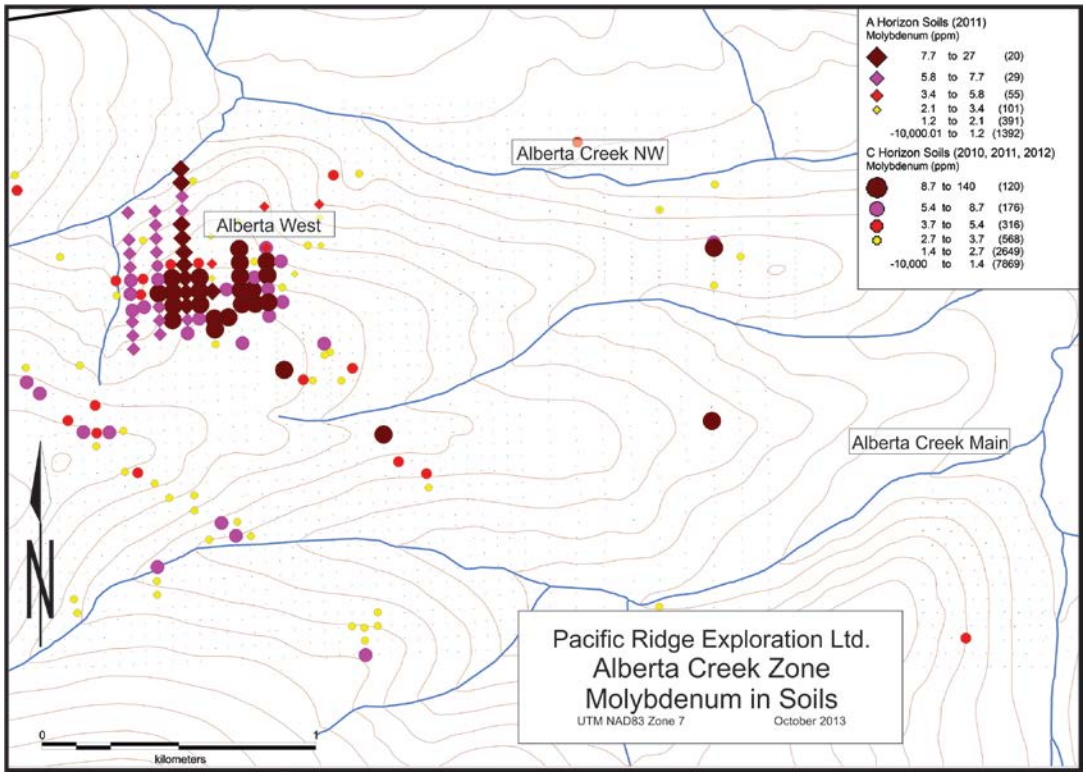


**Figure 19. Alberta Creek – Molybdenum in soils**

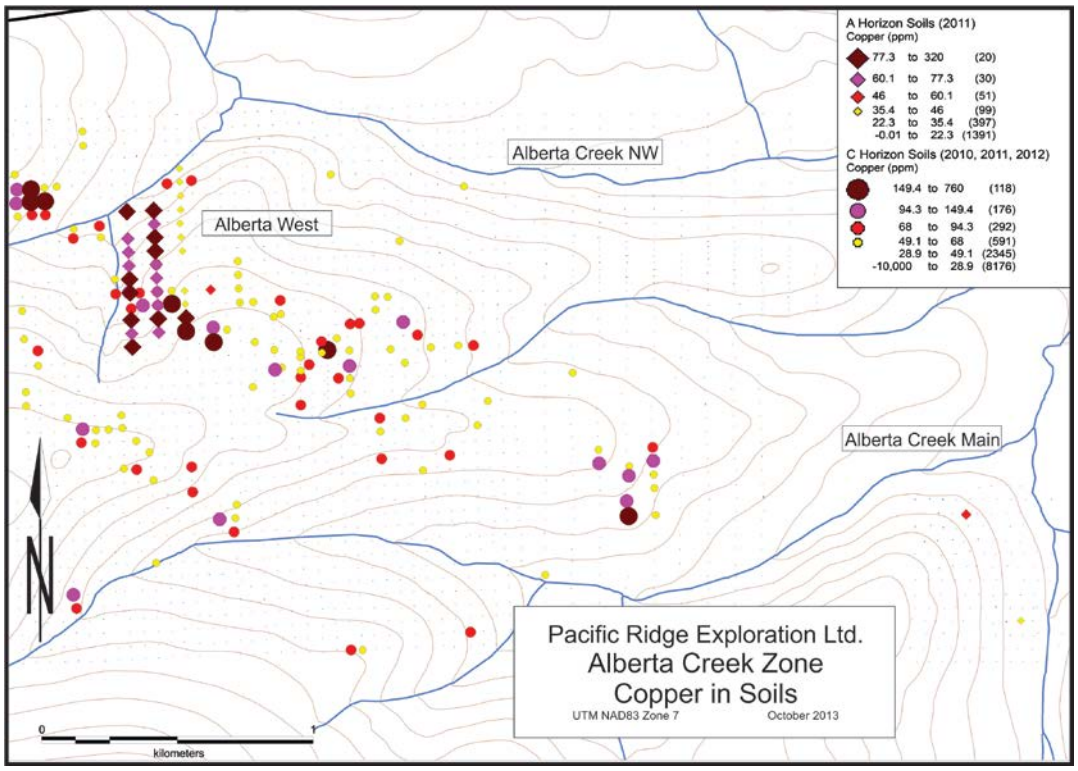


**Figure 20. Alberta Creek – Copper in soils.**

## Geophysical Surveys

Government 1:50,000 scale aeromagnetic data (Kiss et. al. 2009a, 2009b) were used to identify major structures within and around the Property (Figure 21). The main features observed are the northwest-trending linear features that parallel the regional stratigraphic trend, distinguishing mafic and felsic units, and predominantly east-northeast to northeast cross structures that disrupt the stratigraphic trend. The most important of these is the structure that cuts through or along the southern boundary of the Skookum and Maisy May trend. A second, parallel structure to the north defines a two km wide structural corridor within which the stratigraphic units have been disrupted and rotated to north-south. A second, parallel corridor to the south contains the Gertie, Hackly and Skookum East zones. A series of north-northeast structures cut both of these zones. The magnetic lows within these corridors may be important in outlining potential mineralized zones where key structures potentially focused the flow of magnetite-destructive hydrothermal fluids.

The Alberta Creek Zone is also associated with a northeast trending structure as well as a broad magnetic low.

In March and April of 2011, a 910 line km airborne magnetic survey was flown by Precision GeoSurveys Inc. of Vancouver (Fingler, 2011). The survey lines were flown at 100 meter spacings at a 015°/285° heading, with a nominal bird height of 34 m. This survey covered the Skookum Main Zone and adjacent target areas, but it did not extend east to the Alberta Creek area (see Figure 22).

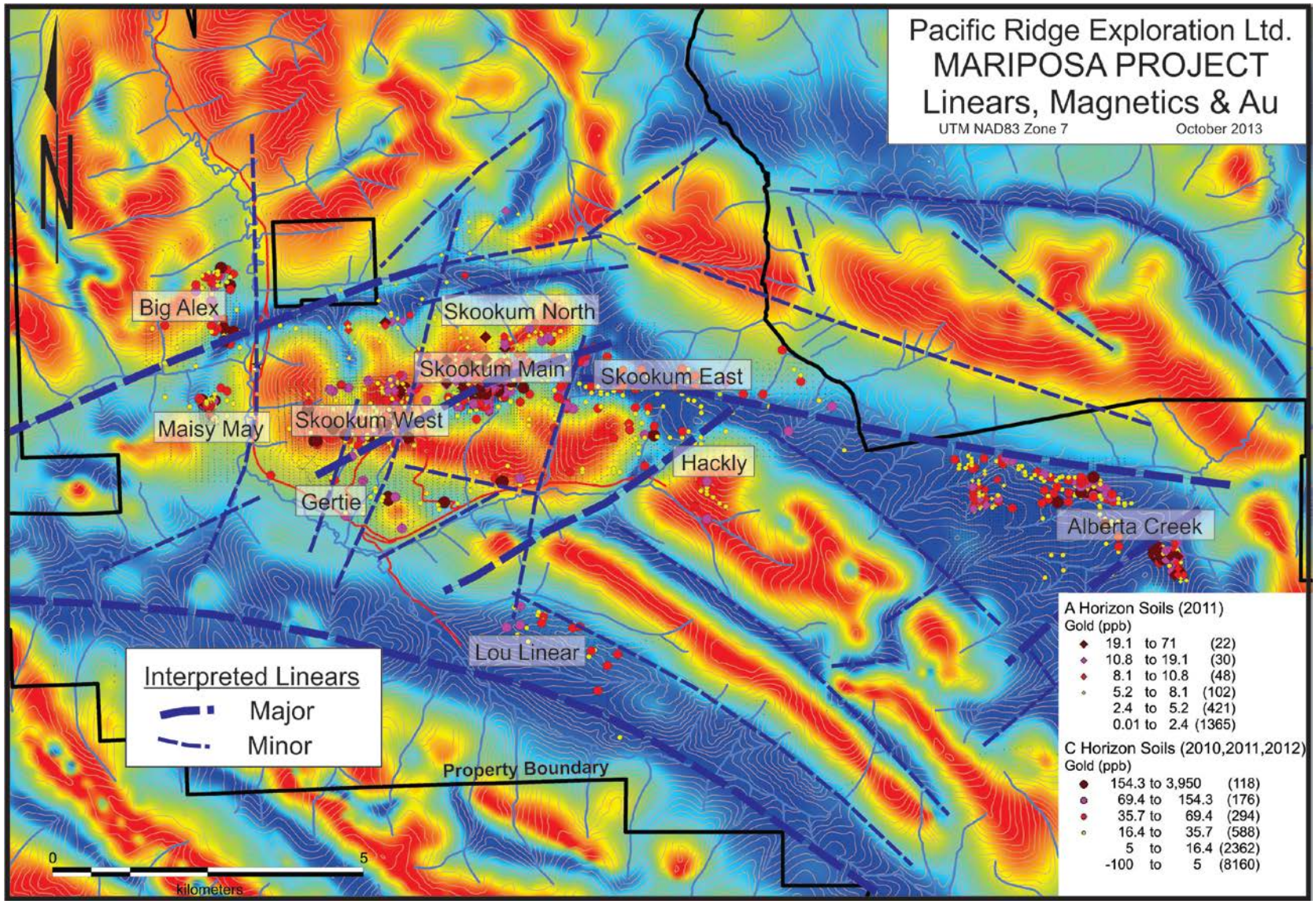


**Figure 21. Regional aeromagnetics showing interpreted structural trends.**

The survey was effective in outlining the northwest trending stratigraphic trends, distinguishing between the felsic schists and gneisses and the more magnetic mafic units. The magnetic map also clearly picks out the north-northeast trending cross structures that offset this stratigraphy, and in particular the 2,000 m wide, complexly deformed structural corridor that contains the Skookum and Maisy May mineralized zones. Bennett (2012a) links individual mineralized veins and stringers to these property-wide cross structures as part of a Reidel shear zone.

During the period June 7 to July 1, 2011, 175 line kilometres of VLF-EM and mag survey and 16.4 line kilometres of walkmag survey were completed by Aurora Geosciences of Whitehorse. The survey work was focused on the Skookum Main and West Zones (see Figure 22 for location).

These surveys were successful in defining greater structural detail in the immediate area of the Skookum Main and Skookum West mineralized zones, but much of this structure remains unexplained due to the poor outcrop exposure in the area. The VLF survey (Figure 23), in addition to defining possible boundaries to the east-northeast trending structural corridor, identified a number on parallel northeast trending features that could be fault zones or dikes.

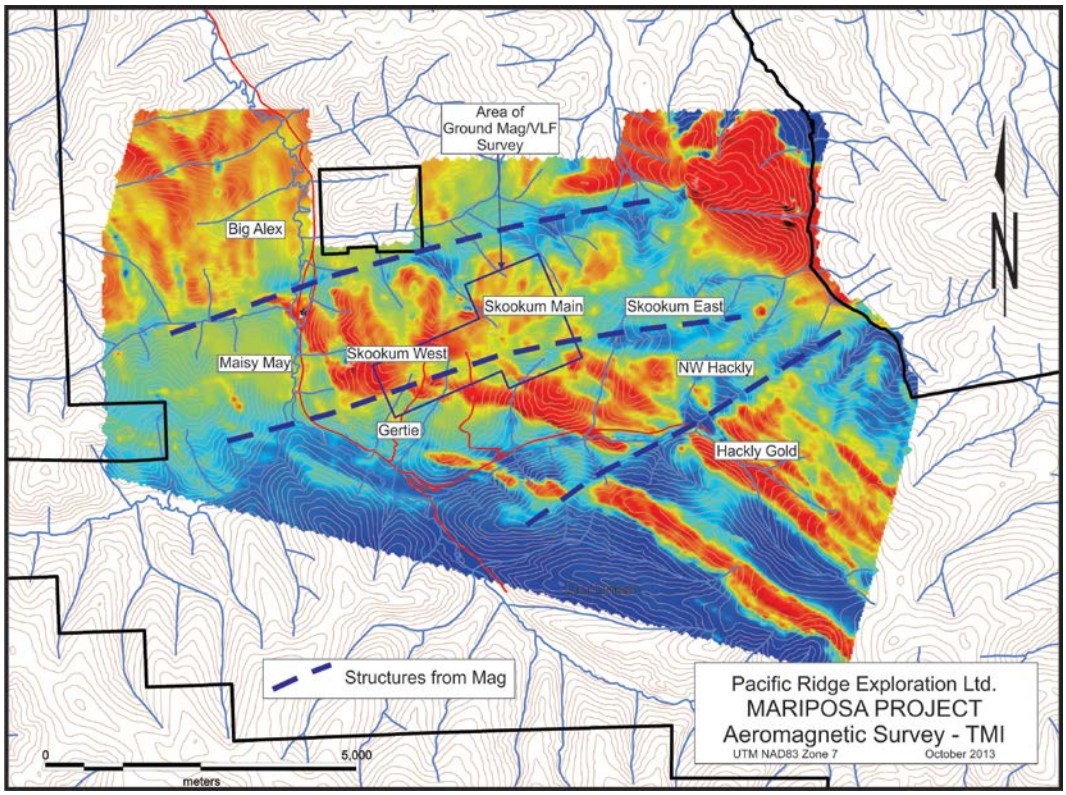


**Figure 22. Skookum Zone aeromagnetic survey (TMI) showing inset with area of ground survey.**

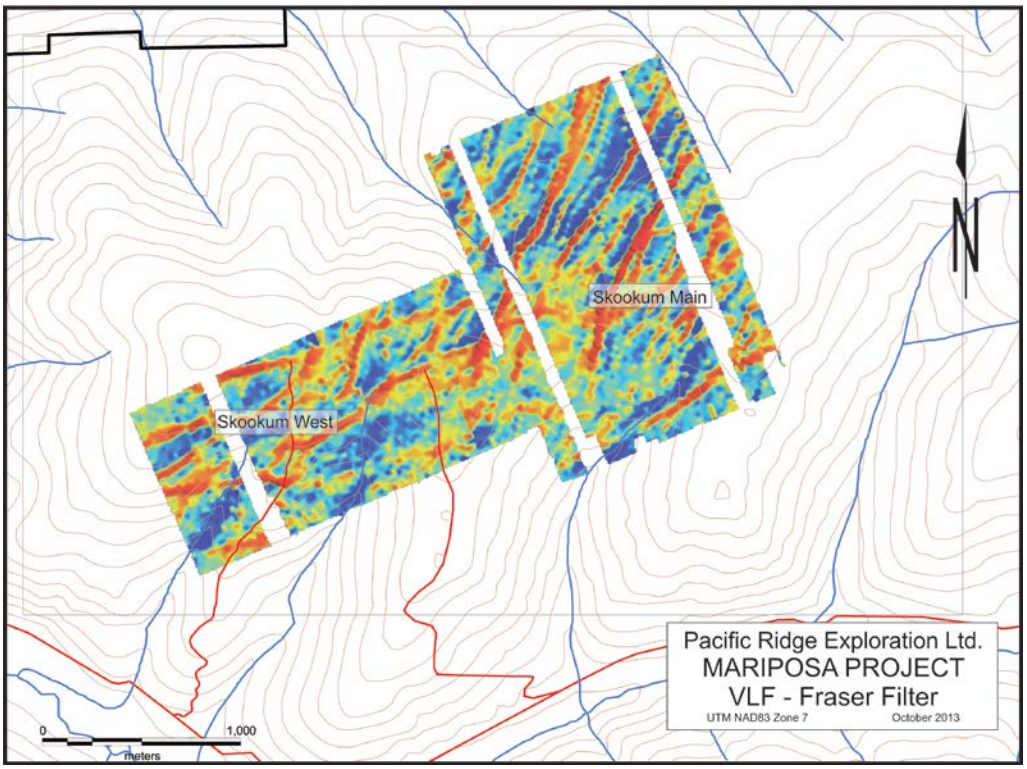


**Figure 23. Skookum Zone Fraser filtered VLF survey results.**

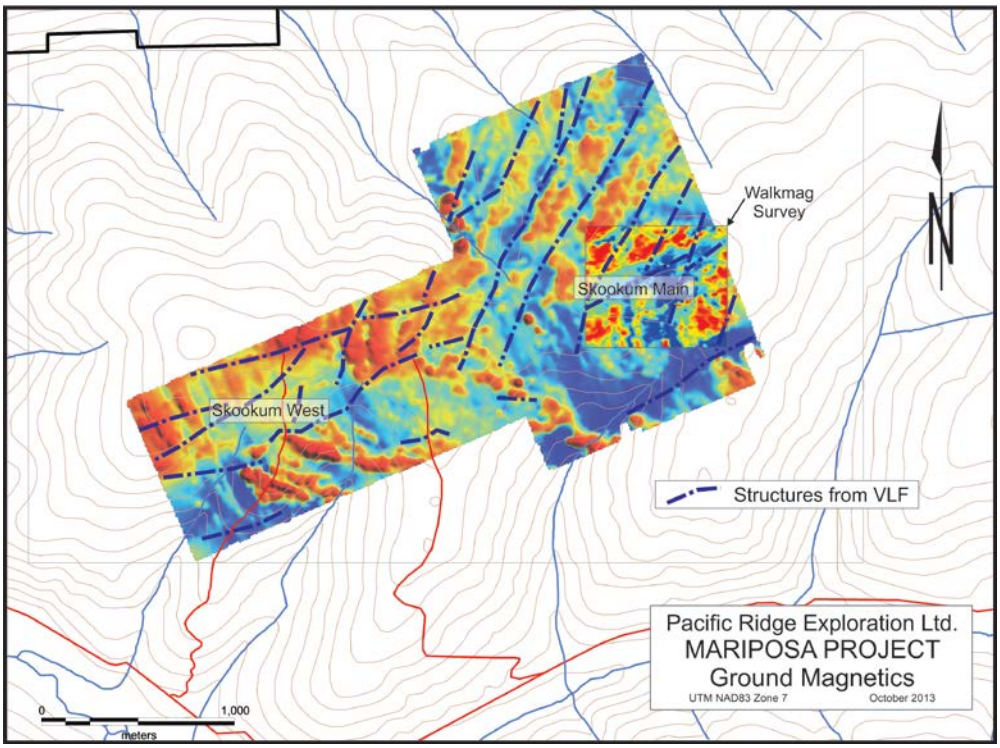


**Figure 24. Skookum Zone ground magnetic survey (TMI) with linear structures interpreted from VLF.**

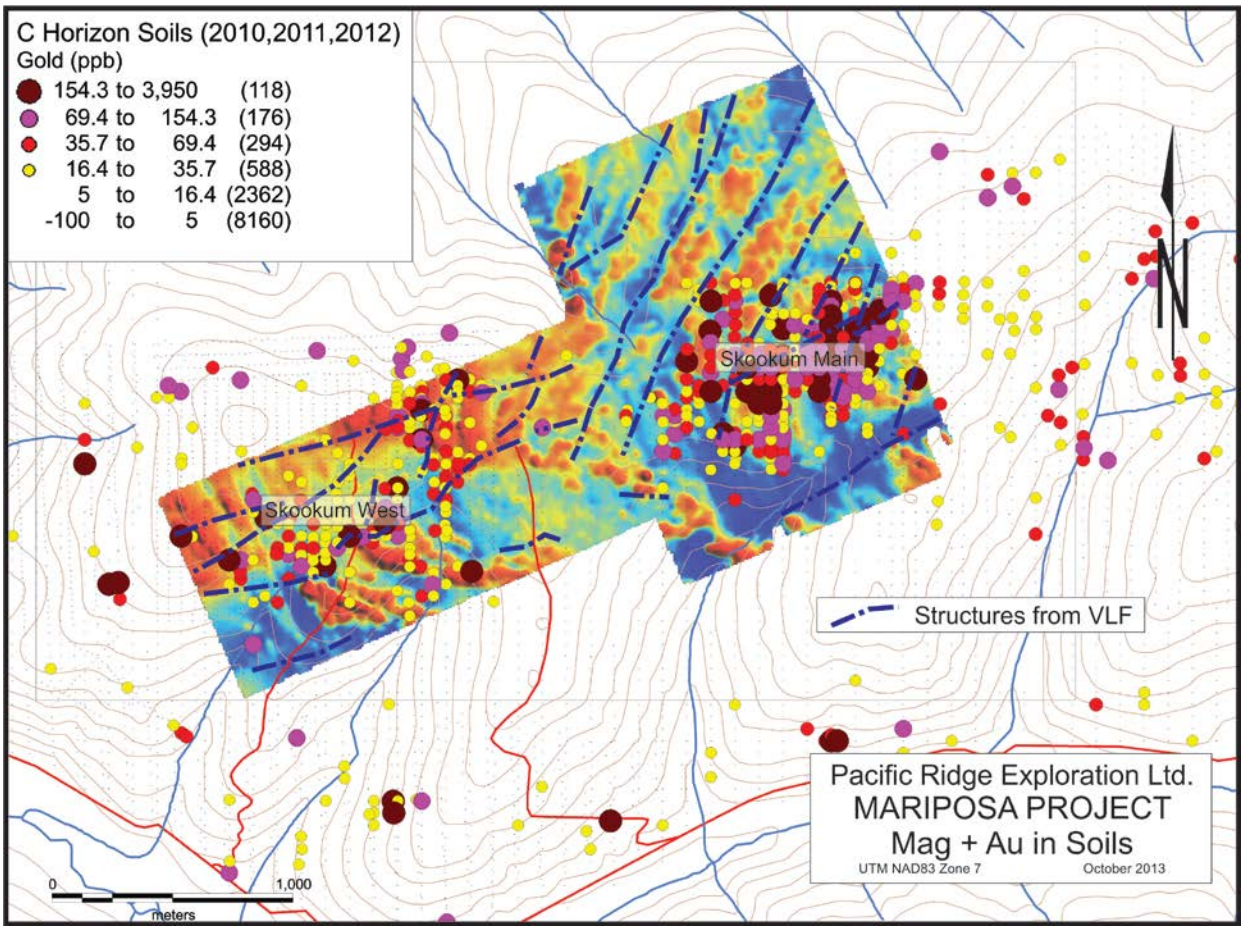


**Figure 25. Gold soil geochemistry superimposed on VLF-interpreted structures and ground magnetics.**

McIntosh (2012b) demonstrated that, within the Skookum Main Zone, the highest gold values occur within an east-northeast trending corridor, preferentially within felsic units. This corridor is evident in Figure 24 as a mag low. Linear magnetic low features that cut across the stratigraphy suggest the presence of structural dislocations that have potentially been the focus of magnetite-destructive hydrothermal fluids. Figure 25 shows the "C" horizon gold values superimposed on the ground magnetics and interpreted VLF structure. Both the Skookum Main and West Zones can be seen to fall along an interpreted east-northeast trending VLF structure and a related magnetic low, which is most particularly evident at Skookum Main.

## Trenching Program

The Skookum Main Zone is the largest and strongest gold anomaly defined so far on the property. The core of the anomaly was defined by the 2010 soil grid. Later that season, five north-south trenches, SJ-01 to SJ-05, totalling 1,640 m of trenching, were cut across the strongest portions of the soil anomaly (Figures 26 & 27). The purpose of the program was to assist in the definition of drill targets.

The summary trench results are shown in Table V.

Anomalous gold values from the Skookum Main Zone trenching are more aerially restricted than the soil results, suggesting that dispersion of gold in the surface soils is significant relative to the bedrock source. On the other hand, trench SJ-02 has anomalous gold values over greater than 350 m along the trench. The richest portion of this trench ran 1,250 ppb gold over 30 m within 150 m of 493 ppb Au. This proved to be the primary target for the 2011 drill program.

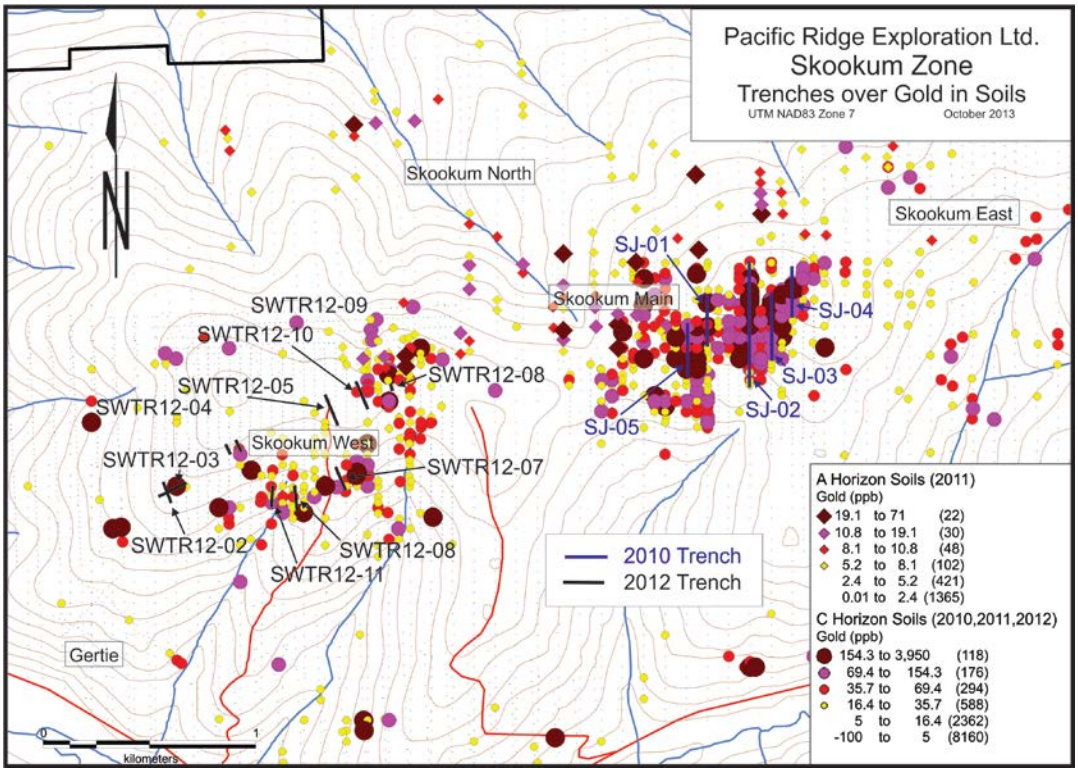


**Figure 26. Skookum Zone trenches on gold soil geochemistry.**

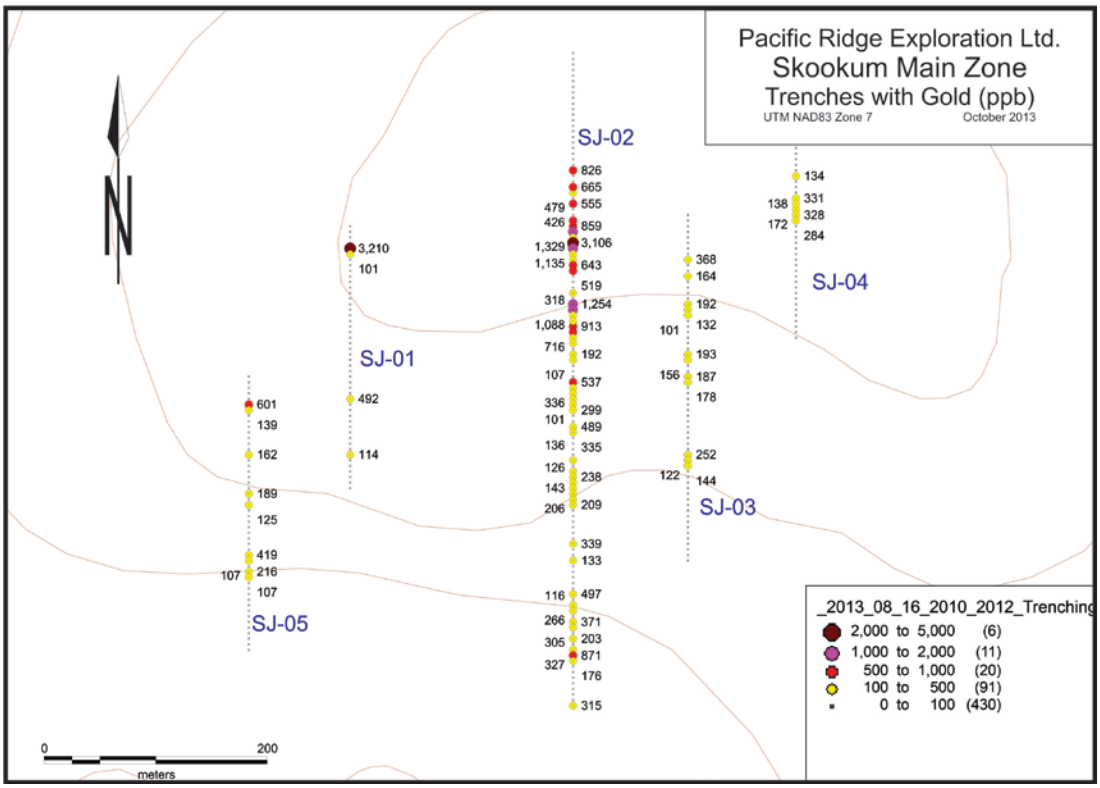


**Figure 27. Skookum Main Zone trenches (2010) showing gold values (ppb) greater than 100 ppb.**

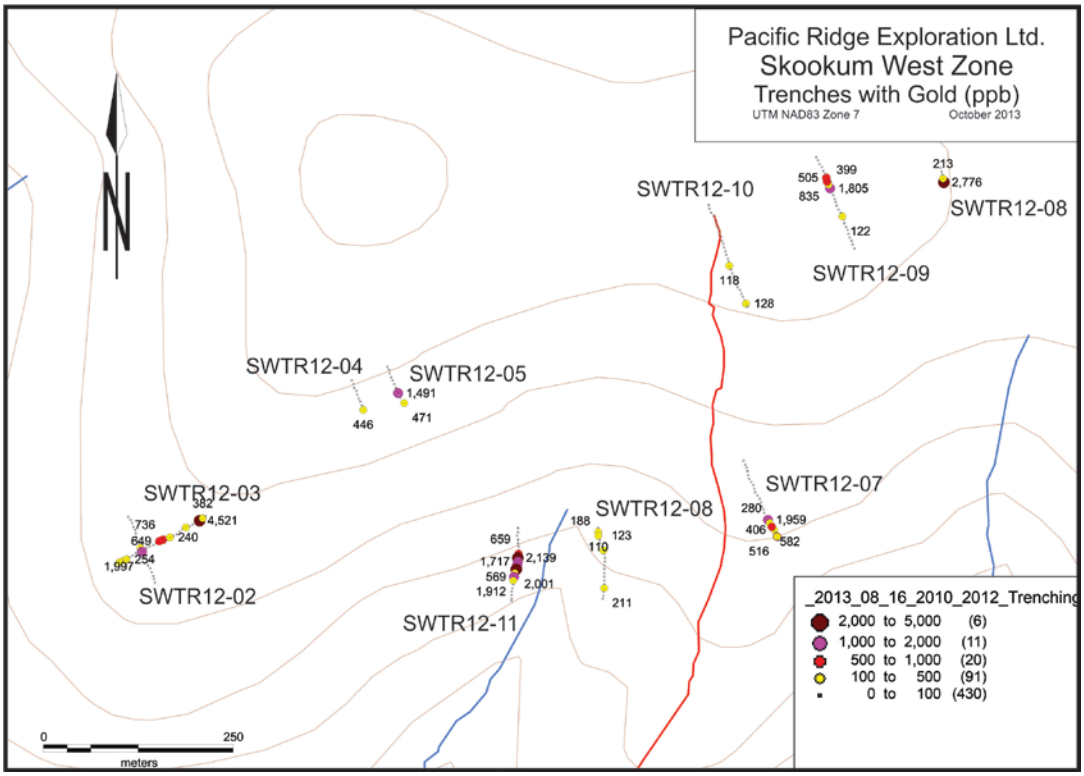


**Figure 28. Skookum West Zone trenches showing gold values (ppb) greater than 100 ppb.**

The 2012 trenching program (Figure 28) focused on the Skookum West Zone. This trenching was completed in September, 2012, after the drilling program had terminated. The best result was trench SWTR12-11 that encountered 40 m grading 1,404 ppb Au, including 20 m of 1,834 ppb Au. Trench 12-03 encountered 10 m of 2,451 ppb Au, while three other 2012 trenches intersected values greater than 1,000 ppb Au over at least 4 m (Table V).

**Table V. Highlights from 2010 and 2012 trenching programs.**

| Trench ID | From (m) | To (m) | Length (m) | Au (ppb) |
|---|---|---|---|---|
| SJ-01 | 20 | 30 | 10 | 1,655.5 |
| SJ-02 | 105 | 410 | 305 | 360.9 |
| - includes | 150 | 180 | 30 | 1,250.2 |
| - and | 105 | 255 | 150 | 492.9 |
| SJ-02 | 485 | 550 | 65 | 253.5 |
| SJ-04 | 105 | 130 | 25 | 250.6 |
| SJ-05 | 25 | 35 | 10 | 370.0 |
| SJ-05 | 160 | 185 | 25 | 173.2 |
| SWTR12-02 | 45 | 55 | 10 | 1,058.0 |
| SWTR12-03 | 65 | 75 | 10 | 692.5 |
| SWTR12-03 | 125 | 135 | 10 | 2,451.5 |
| SWTR12-05 | 38 | 42 | 4 | 1,491.0 |
| SWTR12-07 | 85 | 115 | 30 | 692.2 |
| SWTR12-08 | 0 | 10 | 10 | 1,494.5 |
| SWTR12-09 | 85 | 105 | 20 | 886.0 |
| SWTR12-11 | 35 | 75 | 40 | 1,404.5 |
| - includes | 40 | 60 | 20 | 1,834.3 |

Hole 11MP-38 is northerly directed and cuts under the strong gold interval in trench SWTR12-11 (see Figure 28). If the high trench values represent underlying bedrock mineralization, then this result suggests that the gold zone must be dipping to the north and, if this is the case, hole 11MP-38 would have been drilled beneath the zone.

## 2011-2012 Core Drilling Program

The 2011 drill program commenced June 21 and was completed September 15, utilizing two drill contractors, Ridgeline and Elite. Drill statistics, including hole location, target, orientation and depth, are included in Table VI. The 2012 drill program commenced July 12 and was completed by August 9. The program included 2,625 m of drilling in 14 holes. Hole 3 was lost at 78 m and was re-drilled as 3A. Drill hole locations and related statistics are shown in Table VII. All drill hole collar locations are shown in Figure 29, with detailed drill hole locations within the Skookum Main and Skookum West Zones shown in Figures 30 and 31, respectively.

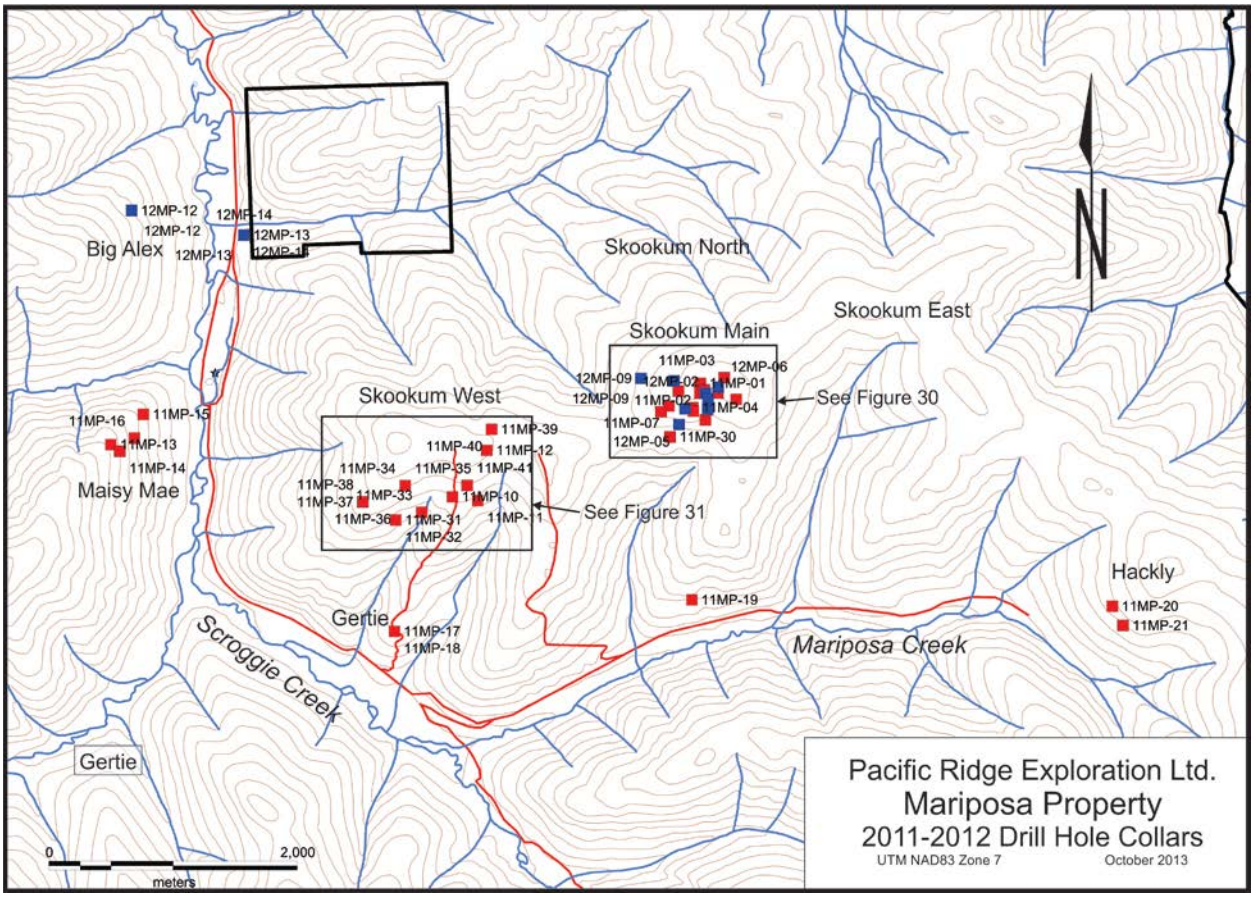


**Figure 29. Mariposa Project showing 2011 and 2012 drill hole collar locations.**

The initial 2011 drill program was designed to test the strongest gold anomalies on the Property, Skookum Main (18 holes - 3,005 m) and, secondarily, Skookum West (14 holes - 1,671 m). The first drill holes tested the strongest parts of these anomalies, in particular as defined by trench SJ-02 from the 2010 program (see Figure 30). Subsequent holes were guided by trends defined by the soil geochemistry and linear magnetic lows, believed to reflect mineralized structures. During the 2011 program, drill holes also tested peripheral targets, including Maisy May (4 holes - 754 m), Gertie (2 holes - 282 m) and Hackly (2 holes - 299 m).

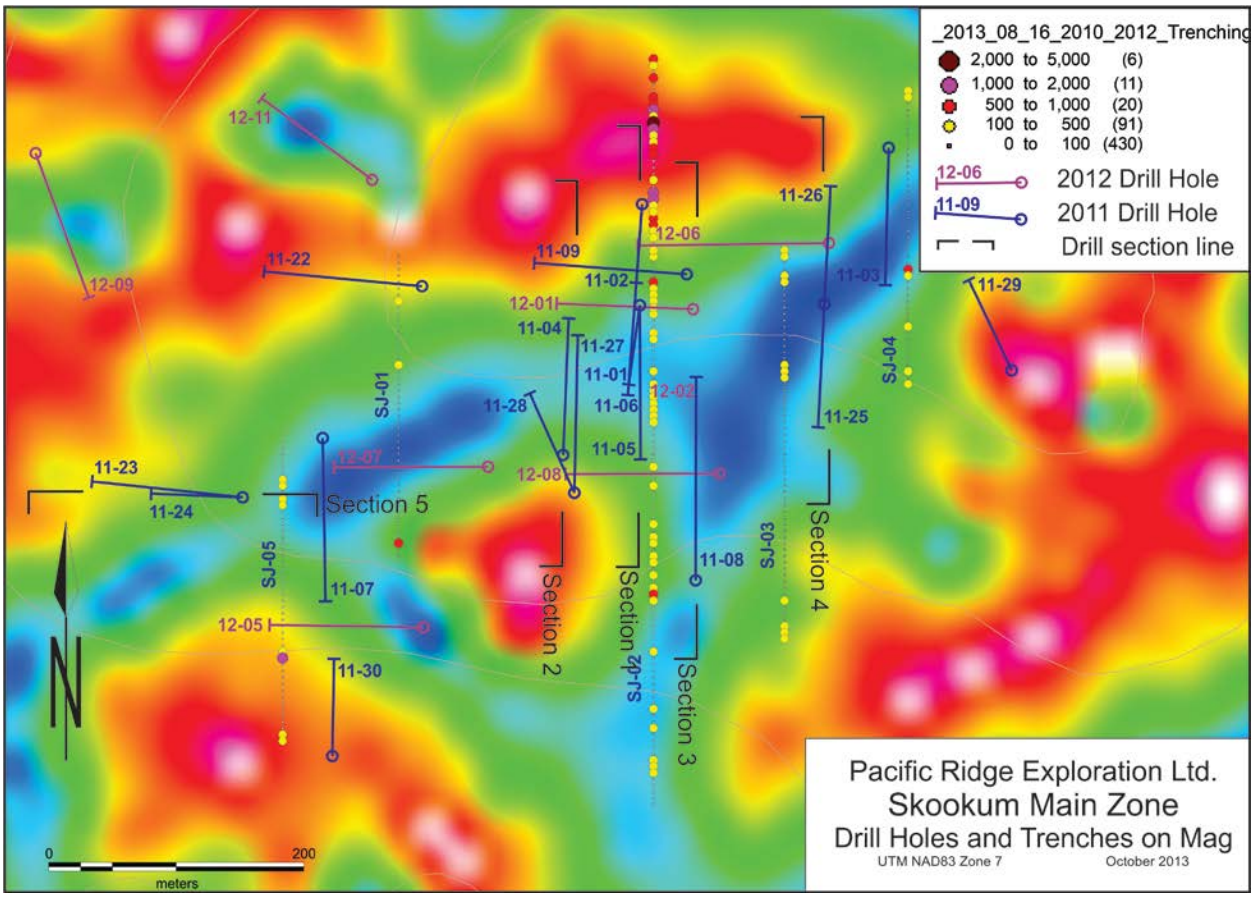


**Figure 30. Skookum Main Zone drill hole locations with 2010 trenches and total field magnetics.**

The 2012 drill program focused on the Skookum Main Zone (11 holes – 2,202 m), in particular testing possible north-south controls on mineralized structures and defining the geometry of the mineralized zone. It should be noted that the Skookum West drilling took place in 2011, before the trenches were completed in that area, late in the 2012 field season.

Three additional holes were drilled in 2012 at Big Alex (423 m).

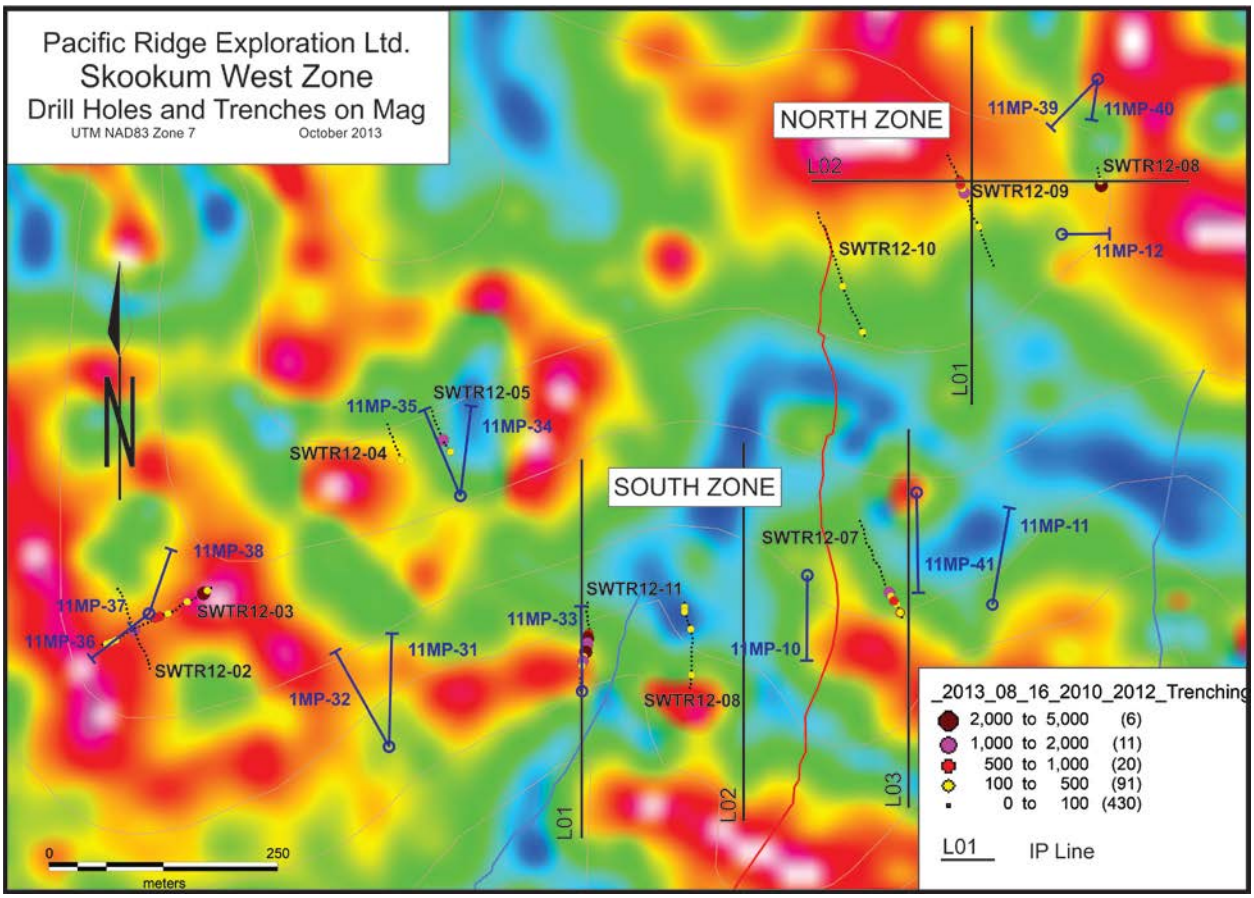


**Figure 31. Skookum West Zone drill hole locations with 2012 trenches and total field magnetics, showing North Zone and South Zone IP lines.**

**Table VI. 2011 Drill Hole Statistics**

| Hole ID | Target | Easting* | Northing* | Eleva. | Azimuth | Dip | Length (m) | Date Started | Date Ended |
|---|---|---|---|---|---|---|---|---|---|
| 11MP-01 | Skookum Main | 625691 | 6989791 | 1089 | 178 | -50 | 237 | 20-Jul-2011 | 21-Jul-2011 |
| 11MP-02 | Skookum Main | 625691 | 6989791 | 1089 | 178 | -67 | 167 | 21-Jul-2011 | 21-Jul-2011 |
| 11MP-03 | Skookum Main | 625885 | 6989835 | 1092 | 178 | -50 | 170 | 22-Jul-2011 | 22-Jul-2011 |
| 11MP-04 | Skookum Main | 625629 | 6989594 | 1067 | 358 | -50 | 173 | 23-Jul-2011 | 24-Jul-2011 |
| 11MP-05 | Skookum Main | 625689 | 6989711 | 1086 | 178 | -50 | 192 | 25-Jul-2011 | 26-Jul-2011 |
| 11MP-06 | Skookum Main | 625689 | 6989711 | 1086 | 178 | -65 | 149 | 26-Jul-2011 | 28-Jul-2011 |
| 11MP-07 | Skookum Main | 625440 | 6989607 | 1065 | 178 | -45 | 182 | 28-Jul-2011 | 7-Aug-2011 |
| 11MP-08 | Skookum Main | 625732 | 6989496 | 1042 | 358 | -45 | 231 | 7-Aug-2011 | 8-Aug-2011 |
| 11MP-09 | Skookum Main | 625725 | 6989736 | 1086 | 268 | -45 | 170 | 8-Aug-2011 | 9-Aug-2011 |
| 11MP-10 | Skookum West | 623695 | 6988876 | 982 | 178 | -50 | 142 | 9-Aug-2011 | 10-Aug-2011 |
| 11MP-11 | Skookum West | 623898 | 6988846 | 957 | 358 | -45 | 155 | 10-Aug-2011 | 12-Aug-2011 |
| 11MP-12 | Skookum West | 623973 | 6989250 | 1027 | 88 | -45 | 76 | 12-Aug-2011 | 13-Aug-2011 |
| 11MP-13 | Maisy Mae | 620944 | 6989296 | 803 | 223 | -45 | 105 | 13-Aug-2011 | 15-Aug-2011 |
| 11MP-14 | Maisy Mae | 621017 | 6989243 | 778 | 223 | -45 | 222 | 15-Aug-2011 | 17-Aug-2011 |
| 11MP-15 | Maisy Mae | 621206 | 6989540 | 703 | 223 | -45 | 145 | 18-Aug-2011 | 18-Aug-2011 |
| 11MP-16 | Maisy Mae | 621133 | 6989347 | 733 | 223 | -45 | 283 | 29-Aug-2011 | 31-Aug-2011 |
| 11MP-17 | Gertie | 623228 | 6987792 | 767 | 223 | -45 | 102 | 31-Aug-2011 | 2-Sep-2011 |
| 11MP-18 | Gertie | 623228 | 6987792 | 750 | 198 | -55 | 59 | 2-Sep-2011 | 4-Sep-2011 |
| 11MP-19 | Gertie | 625625 | 6988046 | 850 | 123 | -50 | 121 | 4-Aug-2011 | 6-Aug-2011 |
| 11MP-20 | Hackly | 629012 | 6987995 | 1000 | 268 | -50 | 183 | 6-Aug-2011 | 7-Sep-2011 |
| 11MP-21 | Hackly | 629098 | 6987840 | 1022 | 48 | -50 | 115 | 7-Sep-2011 | 8-Sep-2011 |
| 11MP-22 | Skookum Main | 625518 | 6989727 | 1079 | 268 | -45 | 176 | 8-Sep-2011 | 9-Sep-2011 |
| 11MP-23 | Skookum Main | 625377 | 6989561 | 1060 | 268 | -45 | 169 | 10-Sep-2011 | 11-Sep-2011 |
| 11MP-24 | Skookum Main | 625377 | 6989561 | 1060 | 268 | -60 | 148 | 11-Sep-2011 | 12-Sep-2011 |
| 11MP-25 | Skookum Main | 625834 | 6989713 | 1089 | 358 | -45 | 134 | 12-Sep-2011 | 15-Sep-2011 |
| 11MP-26 | Skookum Main | 625834 | 6989713 | 1089 | 178 | -45 | 136 | 19-Jun-2011 | 21-Jun-2011 |

| Hole ID | Target | Easting* | Northing* | Eleva. | Azimuth | Dip | Length (m) | Date Started | Date Ended |
|---|---|---|---|---|---|---|---|---|---|
| 11MP-27 | Skookum Main | 625637 | 6989565 | 1059 | 358 | -50 | 197 | 21-Jun-2011 | 22-Jun-2011 |
| 11MP-28 | Skookum Main | 625637 | 6989565 | 1059 | 333 | -50 | 132 | 22-Jun-2011 | 24-Jun-2011 |
| 11MP-29 | Skookum Main | 625981 | 6989661 | 1081 | 333 | -50 | 121 | 24-Jun-2011 | 26-Jun-2011 |
| 11MP-30 | Skookum Main | 625448 | 6989358 | 1000 | 358 | -50 | 121 | 26-Jun-2011 | 28-Jun-2011 |
| 11MP-31 | Skookum West | 623238 | 6988690 | 919 | 358 | -45 | 176 | 28-Jun-2011 | 29-Jun-2011 |
| 11MP-32 | Skookum West | 623238 | 6988690 | 919 | 328 | -45 | 157 | 29-Jun-2011 | 1-Jul-2011 |
| 11MP-33 | Skookum West | 623448 | 6988750 | 915 | 358 | -45 | 135 | 1-Jul-2011 | 3-Jul-2011 |
| 11MP-34 | Skookum West | 623315 | 6988965 | 996 | 358 | -45 | 136 | 3-Jul-2011 | 5-Jul-2011 |
| 11MP-35 | Skookum West | 623315 | 6988965 | 996 | 328 | -45 | 139 | 6-Jul-2011 | 7-Jul-2011 |
| 11MP-36 | Skookum West | 622973 | 6988834 | 988 | 228 | -45 | 105 | 8-Jul-2011 | 9-Jul-2011 |
| 11MP-37 | Skookum West | 622973 | 6988834 | 988 | 228 | -67 | 51 | 9-Jul-2011 | 10-Jul-2011 |
| 11MP-38 | Skookum West | 622975 | 6988835 | 990 | 18 | -45 | 63 | 11-Jul-2011 | 11-Jul-2011 |
| 11MP-39 | Skookum West | 624012 | 6989420 | 1006 | 218 | -50 | 107 | 12-Jul-2011 | 14-Jul-2011 |
| 11MP-40 | Skookum West | 624012 | 6989420 | 1006 | 188 | -50 | 66 | 14-Jul-2011 | 16-Jul-2011 |
| 11MP-41 | Skookum West | 623815 | 6988968 | 1003 | 178 | -50 | 162 | 16-Jul-2011 | 19-Jul-2011 |
| | | *NAD83, Zone 7 | | | **Total** | | **6011** | | |

**Table VII. 2012 Drill Hole Statistics.**

| Hole ID | Target | Easting* | Northing* | Eleva | Azimuth | Dip | Length (m) | Date Started | Date Ended |
|---|---|---|---|---|---|---|---|---|---|
| 12MP-01 | Skookum Main | 625723 | 6989684 | 1088 | 270 | -50 | 177 | 12-Jul-2012 | 14-Jul-2012 |
| 12MP-02 | Skookum Main | 625338 | 6989543 | 1041 | 90 | -50 | 168 | 14-Jul-2012 | 16-Jul-2012 |
| 12MP-03 | Skookum Main | 625758 | 6989671 | 1081 | 270 | -50 | 78 | 14-Jul-2012 | 15-Jul-2012 |
| 12MP-03A | Skookum Main | 625758 | 6989671 | 1081 | 270 | -48 | 228 | 16-Jul-2012 | 17-Jul-2012 |
| 12MP-04 | Skookum Main | 625758 | 6989671 | 1081 | 240 | -65 | 186 | 18-Jul-2012 | 20-Jul-2012 |
| 12MP-05 | Skookum Main | 625509 | 6989453 | 1081 | 270 | -50 | *180* | 20-Jul-2012 | 23-Jul-2012 |
| 12MP-06 | Skookum Main | 625837 | 6989760 | 1097 | 270 | -50 | 225 | 23-Jul-2012 | 25-Jul-2012 |
| 12MP-07 | Skookum Main | 625570 | 6989585 | 1075 | 270 | -50 | 201 | 25-Jul-2012 | 27-Jul-2012 |
| 12MP-08 | Skookum Main | 625752 | 6989580 | 1067 | 270 | -50 | 204 | 27-Jul-2012 | 29-Jul-2012 |
| 12MP-09 | Skookum Main | 625215 | 6989829 | 1017 | 160 | -50 | 186 | 29-Jul-2012 | 31-Jul-2012 |
| 12MP-10 | Skookum Main | 625837 | 6989760 | 1097 | 80 | -50 | 198 | 31-Jul-2012 | 1-Aug-2012 |
| 12MP-11 | Skookum Main | 625480 | 6989810 | 1065 | 310 | -50 | 171 | 2-Aug-2012 | 3-Aug-2012 |
| 12MP-12 | Big Alex | 621110 | 6991180 | 730 | 270 | -45 | 162 | 5-Aug-2012 | 7-Aug-2012 |
| 12MP-13 | Big Alex | 622015 | 6990983 | | 325 | -50 | 150 | 7-Aug-2012 | 8-Aug-2012 |
| 12MP-14 | Big Alex | 622015 | 6990983 | | 325 | -70 | 111 | 8-Aug-2012 | 9-Aug-2012 |
| | | *NAD83, Zone 7 | | | **Total** | | **2625** | | |

## Drill Results

The highlights from assay results for the 2011 and 2012 drill programs are shown in Tables VIII and IX. Assay certificates are included in Appendices IIID and IIIH, gold assay results from all drill hole samples are included in Appendices IVA and IVB, and drill logs are included in Appendices VA and VB.

**Table VIII. 2011 Drill Highlights.**

| Hole | From | To | Width | Au | Zone |
|---|---|---|---|---|---|
| 11MP-01 | 24.5 | 106.0 | 81.5 | 1.51 | Skookum Main |
| includes | 31.8 | 65.5 | 33.7 | 2.74 | |
| includes | 31.8 | 40.2 | 8.4 | 8.34 | |
| includes | 32.9 | 35.0 | 2.1 | 26.58 | |
| includes | 52.0 | 65.5 | 13.5 | 1.53 | |
| and | 204.0 | 213.6 | 9.6 | 2.59 | |
| includes | 210.4 | 213.6 | 3.2 | 6.51 | |
| 11MP-04 | 4.0 | 8.9 | 4.9 | 1.46 | Skookum Main |
| 11MP-05 | 3.1 | 22.9 | 19.8 | 1.13 | Skookum Main |
| and | 49.5 | 50.4 | 0.9 | 3.01 | |
| 11MP-06 | 3.7 | 49.0 | 45.3 | 0.63 | Skookum Main |
| includes | 3.7 | 25.8 | 22.1 | 0.81 | |
| 11MP-07 | 121.8 | 133.3 | 11.5 | 0.58 | Skookum Main |
| 11MP-08 | 182.7 | 222.7 | 40.0 | 0.93 | Skookum Main |
| includes | 182.7 | 198.9 | 16.3 | 1.40 | |
| includes | 213.5 | 222.7 | 9.2 | 1.39 | |
| 11MP-09 | 21.1 | 22.5 | 1.4 | 2.24 | Skookum Main |
| and | 73.0 | 74.1 | 1.1 | 1.87 | |
| and | 85.0 | 86.5 | 1.5 | 1.60 | |
| 11MP-11 | 17.0 | 19.1 | 2.1 | 1.69 | Skookum West |
| 11MP-12 | 23.4 | 24.9 | 1.5 | 1.32 | Skookum West |
| 11MP-15 | 6.5 | 8.1 | 1.6 | 1.48 | Maisy May |
| and | 82.5 | 84.0 | 1.5 | 1.28 | |
| 11MP-16 | 189.2 | 193.3 | 4.1 | 0.94 | Maisy Mae |
| 11MP-22 | 138.3 | 140.3 | 2.0 | 1.32 | Skookum Main |
| 11MP-24 | 3.1 | 7.5 | 4.5 | 1.08 | Skookum Main |
| includes | 3.1 | 4.5 | 1.5 | 2.80 | |
| and | 79.0 | 80.5 | 1.5 | 1.26 | |
| 11MP-25 | 41.5 | 51.3 | 9.8 | 0.78 | Skookum Main |
| includes | 48.0 | 51.3 | 3.3 | 1.56 | |
| and | 96.0 | 117.5 | 21.5 | 0.54 | |

**Table VIII (continued)**

| Hole | From | To | Width | Au | Zone |
|---|---|---|---|---|---|
| includes | 113.5 | 116.0 | 2.5 | 1.86 | |
| 11MP-27 | 22.2 | 25.5 | 3.3 | 0.86 | Skookum Main |
| includes | 23.5 | 24.5 | 1.0 | 1.67 | |
| and | 77.6 | 79.0 | 1.4 | 1.31 | |
| and | 101.3 | 102.4 | 1.1 | 1.29 | |
| and | 119.5 | 138.7 | 19.2 | 0.88 | |
| includes | 134.0 | 138.7 | 4.7 | 1.93 | |
| includes | 138.0 | 138.7 | 0.7 | 5.88 | |
| 11MP-28 | 24.5 | 26.5 | 2.0 | 1.52 | Skookum Main |
| 11MP-30 | 25.0 | 30.0 | 5.0 | 1.58 | Skookum Main |
| 11MP-31 | 24.5 | 28.0 | 3.5 | 0.98 | Skookum West |
| includes | 24.5 | 26.0 | 1.5 | 1.65 | |
| 11MP-33 | 46.0 | 47.2 | 1.3 | 3.74 | Skookum West |
| 11MP-34 | 85.6 | 86.9 | 1.3 | 2.00 | Skookum West |

**Table IX. 2012 Drilling Highlights.**

| Hole | From | To | Width | Au | Target |
|---|---|---|---|---|---|
| 12MP-01 | 17.90 | 18.40 | 0.50 | 2.15 | Skookum Main |
| and | 31.80 | 42.50 | 10.70 | 0.45 | |
| includes | 31.80 | 33.00 | 1.20 | 1.31 | |
| and | 63.70 | 68.20 | 4.50 | 0.61 | |
| includes | 65.20 | 66.70 | 1.50 | 1.05 | |
| and | 90.00 | 109.70 | 19.70 | 0.53 | |
| includes | 90.00 | 92.50 | 2.50 | 1.22 | |
| includes | 109.20 | 109.70 | 0.50 | 2.20 | |
| and | 144.80 | 149.40 | 4.60 | 0.79 | |
| includes | 144.80 | 146.30 | 1.50 | 1.43 | |
| 12MP03A | 32.30 | 37.50 | 5.20 | 1.06 | Skookum Main |
| and | 141.40 | 142.20 | 0.80 | 1.30 | |
| and | 154.10 | 162.00 | 7.90 | 1.47 | |
| includes | 159.50 | 162.00 | 2.50 | 3.14 | |
| includes | 204.00 | 206.80 | 2.80 | 4.76 | |
| 12MP-04 | 138.34 | 138.81 | 0.47 | 6.77 | Skookum Main |
| and | 162.28 | 162.62 | 0.34 | 13.01 | |
| and | 182.55 | 183.00 | 0.45 | 6.41 | |
| 12MP-05 | 90.00 | 103.40 | 13.40 | 0.69 | Skookum Main |
| includes | 92.60 | 96.00 | 3.40 | 1.37 | |

**Table IX (continued)**

| Hole | From | To | Width | Au | Target |
|---|---|---|---|---|---|
| 12MP-12 | 27.60 | 33.00 | 5.40 | 1.61 | Big Alex |
| 12MP-06 | 68.80 | 70.10 | 1.30 | 5.85 | Skookum Main |
| and | 92.36 | 122.32 | 29.96 | 0.57 | |
| includes | 92.36 | 95.00 | 2.64 | 2.04 | |
| includes | 116.70 | 122.32 | 5.62 | 0.90 | |
| includes | 116.70 | 119.31 | 2.61 | 1.36 | |
| 12MP-08 | 29.50 | 33.00 | 3.50 | 0.78 | Skookum Main |
| includes | 29.50 | 31.00 | 1.50 | 1.31 | |
| 12MP-09 | 79.85 | 80.66 | 0.81 | 1.57 | Skookum Main |
| 12MP-10 | 26.40 | 27.00 | 0.60 | 1.53 | Skookum Main |
| and | 38.90 | 79.50 | 40.60 | 0.72 | |
| includes | 48.50 | 54.40 | 5.90 | 0.91 | |
| includes | 64.80 | 79.50 | 14.70 | 1.40 | |
| includes | 66.70 | 78.00 | 11.30 | 1.71 | |
| includes | 66.70 | 72.35 | 5.65 | 2.17 | |
| and | 94.00 | 120.50 | 26.50 | 0.32 | |
| includes | 94.00 | 99.60 | 5.60 | 0.69 | |
| includes | 99.00 | 99.60 | 0.60 | 1.01 | |
| and | 168.00 | 168.51 | 0.51 | 1.11 | |
| includes | 27.60 | 29.40 | 1.80 | 4.10 | |
| 12MP-13 | 42.80 | 55.20 | 12.40 | 0.81 | Big Alex |
| includes | 42.80 | 48.00 | 5.20 | 1.64 | |
| 12MP-14 | 37.50 | 39.00 | 1.50 | 1.43 | Big Alex |
| and | 43.90 | 48.73 | 4.83 | 0.55 | |
| includes | 46.00 | 47.20 | 1.20 | 1.29 | |

## Skookum Main

The Skookum Main gold zone is a 75 to 100 metre wide (drilled section), steeply dipping corridor of strongly limonitic fractures and breccias with local quartz veining. This brittle deformation cuts a diffuse contact zone between granodiorite and quartz-biotite gneiss. Both lithologies have been variably altered and cut by local pegmatite and quartz-feldspar +/- pyrite veinlets.

Anomalous gold values are typically associated with potassium feldspar flooding and veinlets, as well as quartz breccias and pyrite as disseminations and/or stringers. Elevated gold values are commonly associated with higher pyrite content. Also of importance is the identification of a 15 kilometre-long brittle deformation zone, referred to as the Mariposa Fault, which includes the Skookum Main and West zones.

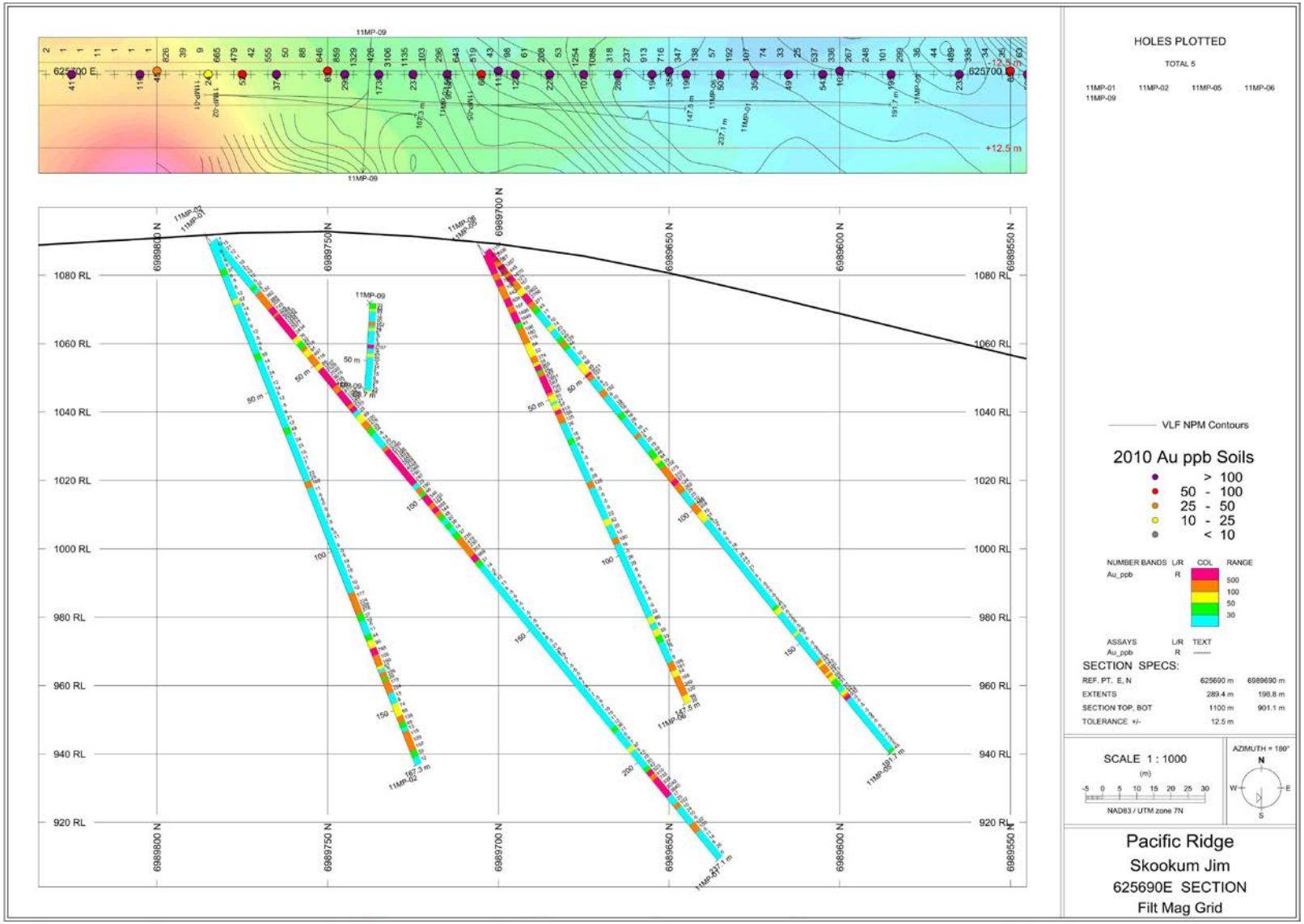


**Figure 32. Section 1 (looking E) below Trench SJ-02, including drill holes 11MP-02, -02, -05, -06 and -09.**

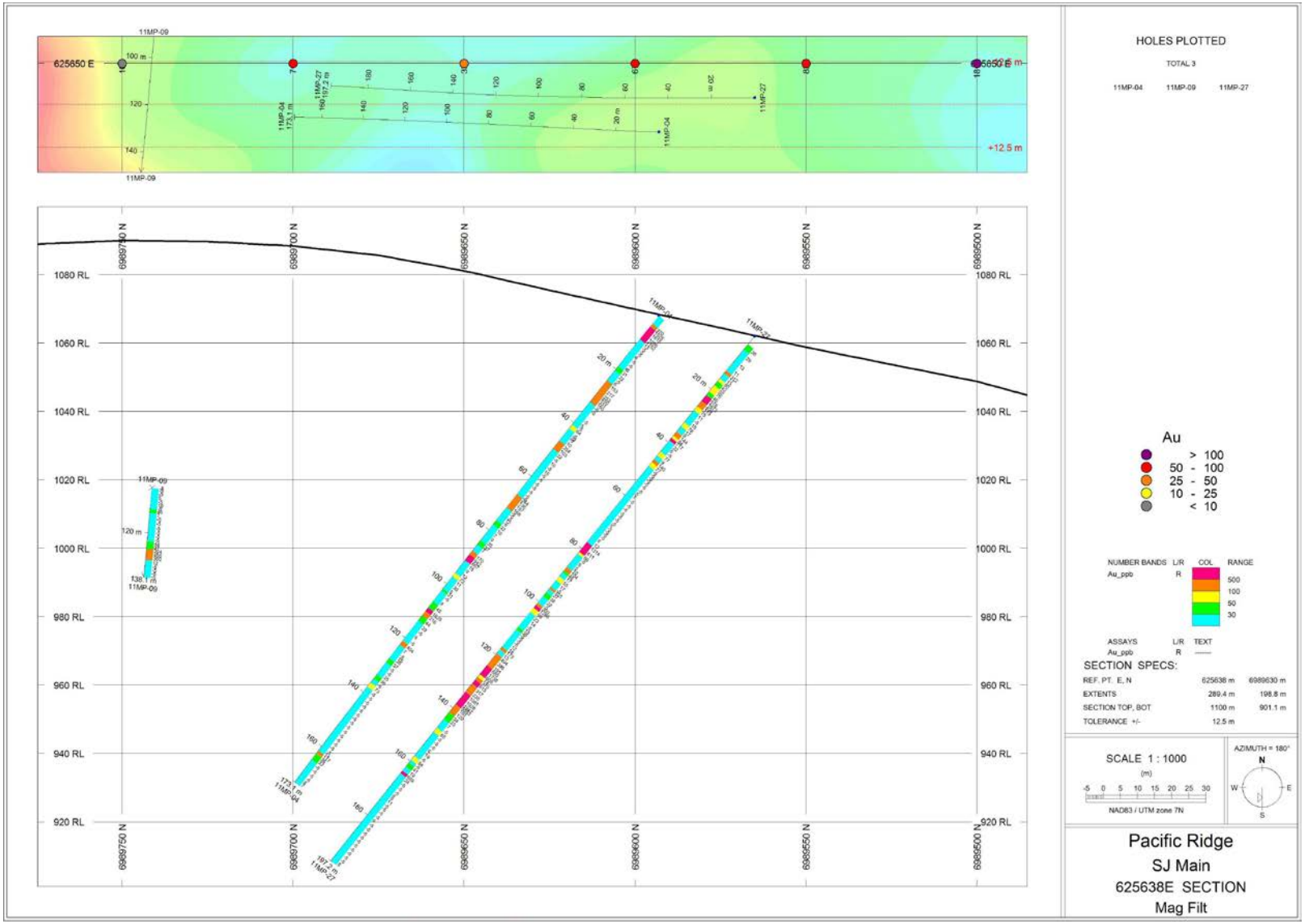


**Figure 33. Section 2 (looking E), including drill holes 11MP-04 and -27.**

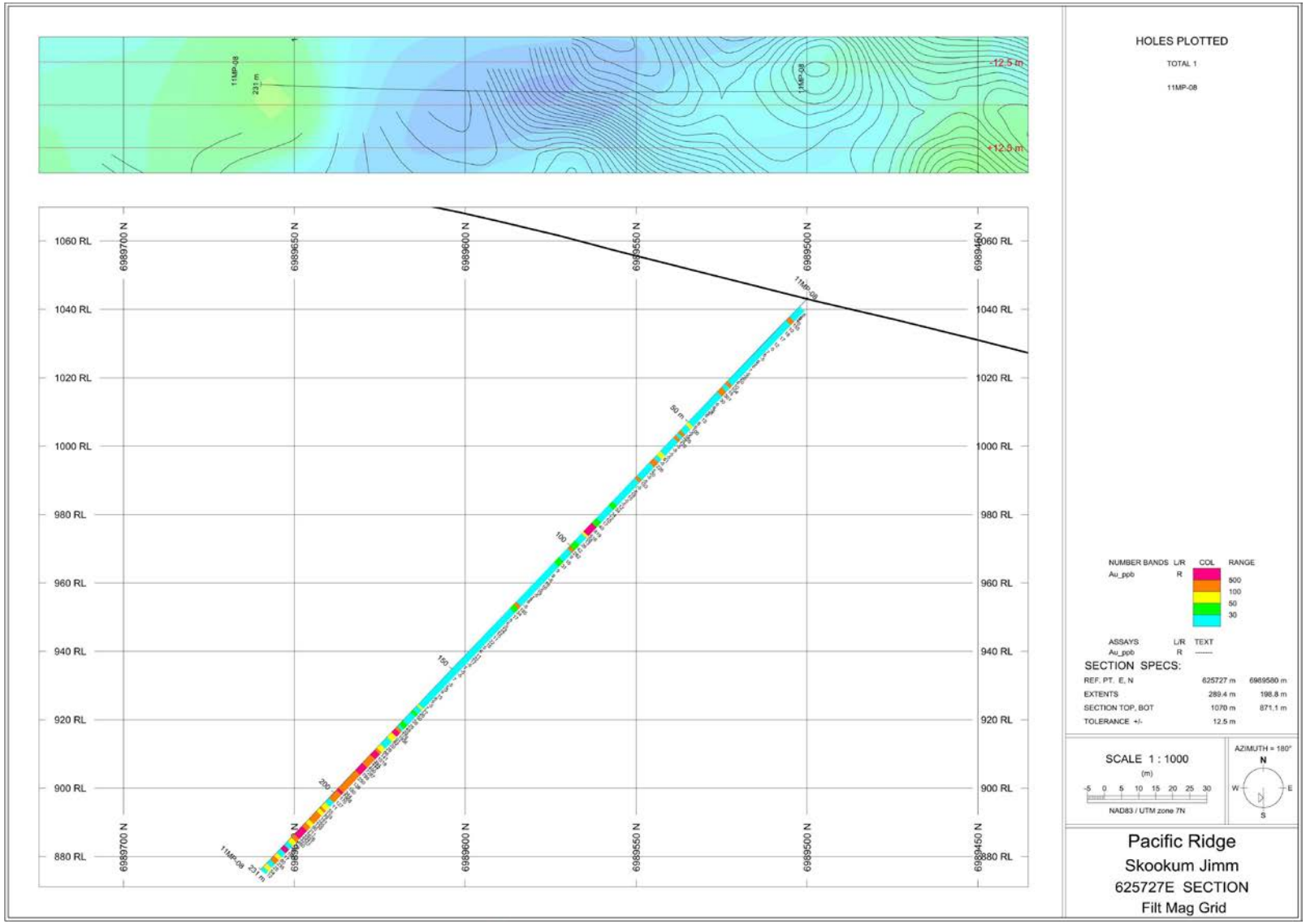


**Figure 34. Section 3 (looking E), including drill hole 11MP-08.**

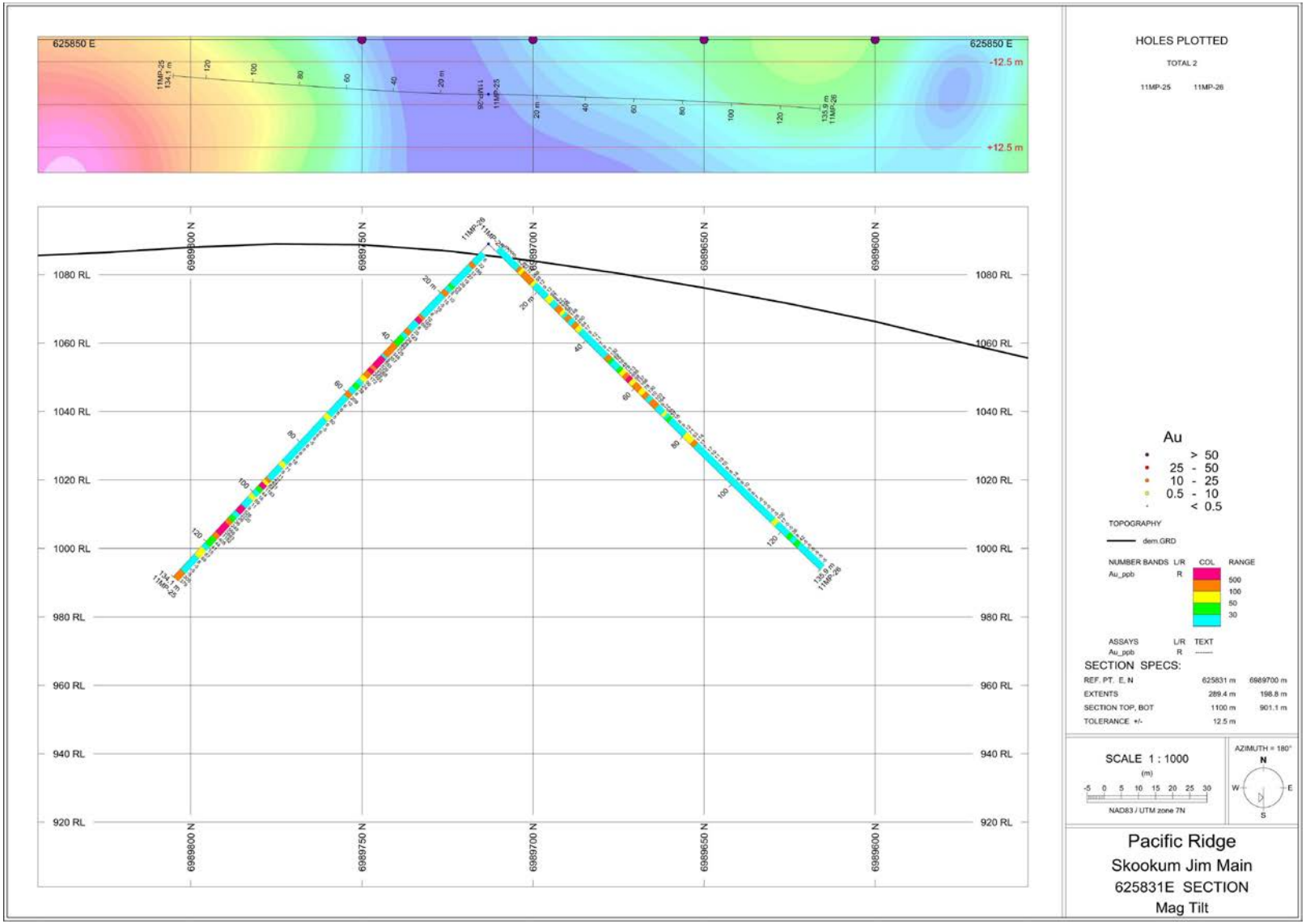


**Figure 35. Section 4 (looking E), including drill holes 11MP-25 and -26.**

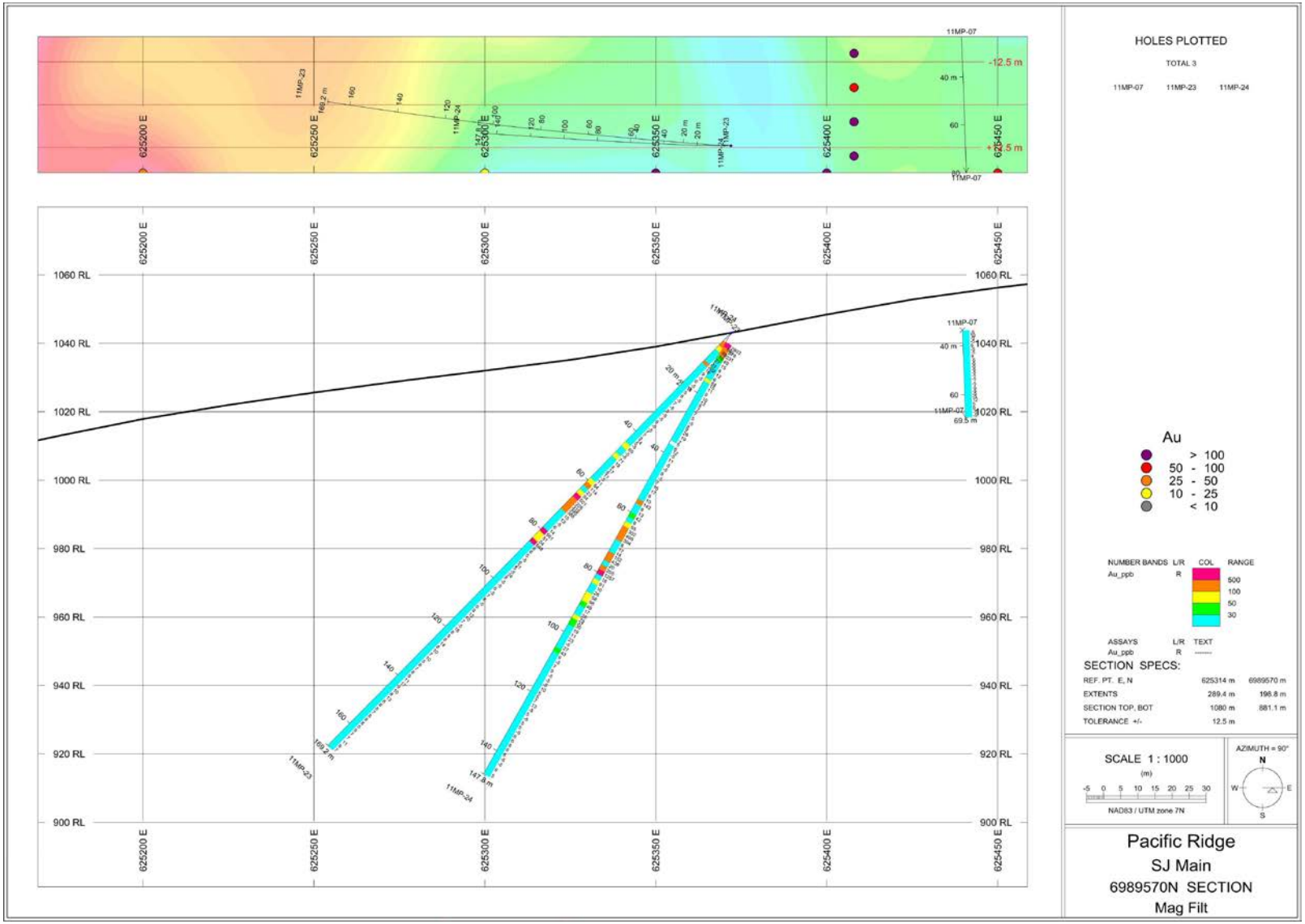


**Figure 36. Section 5 (looking N), including drill holes 11MP-23 and-24.**

At Skookum Main (see Figure 30), 14 of 18 drill holes intersected gold mineralization within brittle structures that are interpreted to be steeply dipping and hosted by strongly sericite and quartz K-feldspar altered rock. Gold bearing structures are coincident with linear magnetic lows and elevated gold-in-soil results ranging from 30 ppb Au to 1.95 gpt Au. Rare visible gold occurrences were noted both in near surface intersections (hole 11MP-01) and at depth (hole 11MP-27), with elevated gold results associated with increased pyrite mineralization, as well as quartz and K-feldspar breccias.

Selected sections from Skookum Main Zone, Figures 32 to 36 (see Figure 30 for section locations), show gold values along the length of each hole.

Section 1 (Figure 32), includes drill hole 11MP-01 that tested beneath the highest gold values in trench SK-02 and intersected 2.44 gpt Au over 38.9 m (including 6.44 gpt Au over 11.1 m), within an 81.5 m intersection grading 1.51 gpt Au. Hole 11MP-02, from the same set-up but with a steeper inclination, intersected anomalous gold results at the bottom of the hole, suggesting that the zone intersected near the top of hole 01 must dip steeply to the south.

Hole 11MP-05 was located 80 metres south of Hole 11MP-01 and was drilled under another interval in trench SJ-2 which returned 1.13gpt gold over 19.8 metres. Drill hole 11MP-06 was drilled from the same location as 11MP-05 to undercut Hole 5 and intersected 45.3 m of 0.63 gpt Au. Both of these intersections could be part of a second, parallel zone also dipping steeply to the south. Hole 9, drilled obliquely to the section, suggests that the intersections in holes 1 and 2 are not continuous with the zones in holes 5 and 6.

Section 2 (Figure 33) includes holes 11MP-04 and 11MP-27, drilled 75 m west of Section 1. Hole 27 tested the Skookum Main anomaly to its greatest vertical depth (180m) and encountered similar mineralization, with an intersection of 1.03 gpt gold over 14.7 metres. However, hole 4 hit only spotty values over relatively narrow intervals, with the best intersection being 1.46 gpt Au over 4.9 m at the top of the hole. This may correlate with an intersection of 0.86 gpt Au over 3.3 m near the top of hole 27, again suggesting a steep south dip to gold-bearing structures.

Section 3 (Figure 34) shows drill hole 11MP-08, drilled 50 m east of Section 1. Between 182.7 and 222.7 m, the hole hit 0.93 gpt Au over 40 m, including 1.4 gpt over 16.3 m and 1.39 gpt Au over 9.2 m. This is likely an eastern extension of the Skookum Main Zone at depth.

Section 4 (Figure 35), 150 m east of Section 1, shows drill hole 11MP-25 that intersected 0.78 gpt Au over 9.8 m, including 1.56 gpt Au over 3.3 m, starting at 41.5 m, and a lower interval of 0.54 gpt Au over 21.5 m, including 1.86 gpt Au over 2.5 m, starting at 96 m. Hole 11MP-26, drilled in the opposite direction, to the south, hit only narrow intervals of anomalous gold values, but no significant intervals. The intersections in hole 25 are likely along strike from the main Skookum Zone mineralized structure from the previous three sections.

Section 5 (Figure 36) is an east-west section approximately 300 m west of Section 1. Although the values are low (1.26 gpt over 1.5 m in hole 11MP-24), the anomalous values at about 75 m depth in both holes suggest a possible north-south striking and east dipping mineralized structure. Bennett (2011) suggested the possibility of north-south as well as east-west trending structures within the Skookum Zone.

## Nature of the Skookum Main Gold Zone

McIntosh (2012a, Appendix X) examined the chemistry of this mineralized zone utilizing a variety of scatter plots. He found that a plot of log Zn vs. log (K + Al) (Figure 37) separated the data into three discrete populations. These populations correlated with three basic lithologies; mafic units (dark rocks), felsic units (light rocks), and a hybrid felsic to intermediate banded unit.

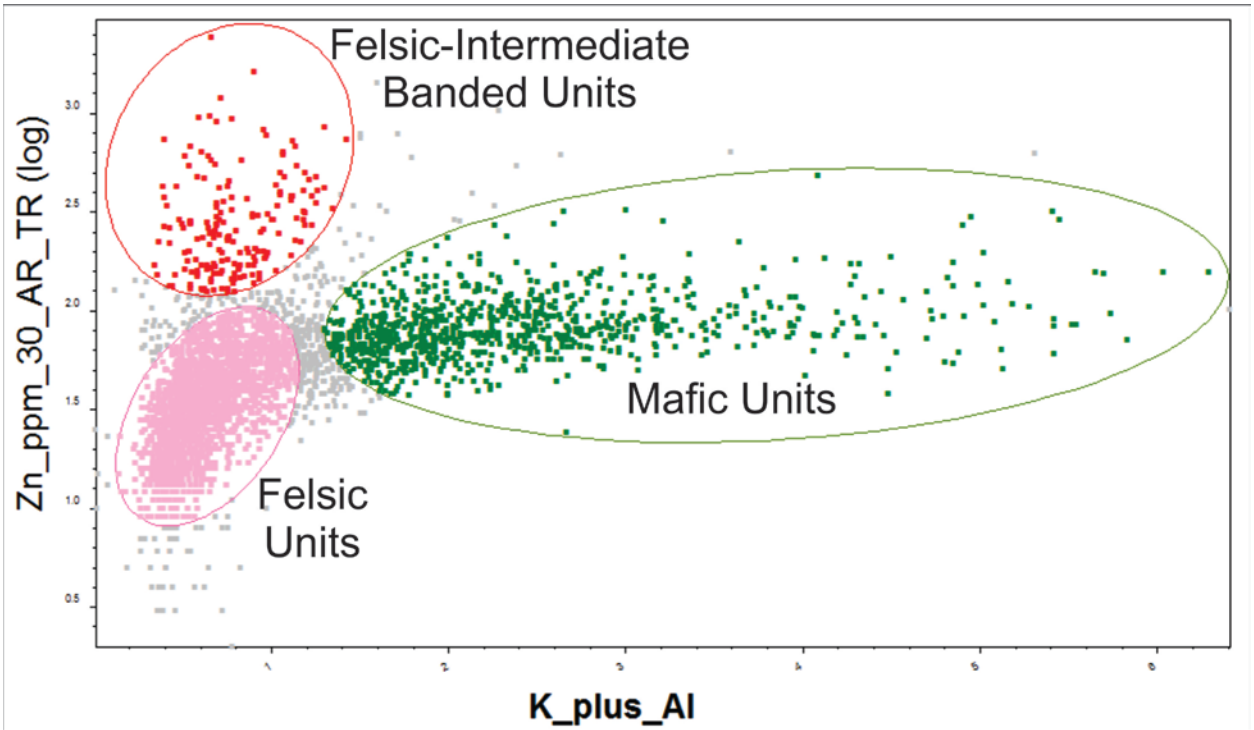


**Figure 37. Scatter plot of Zn vs. K+Al for Skookum Main Zone drill samples (from McIntosh, 2012).**

He then used these criteria to look at the distribution of gold values and found a strong correlation between higher gold values and the felsic units and an almost total lack of anomalous gold (+500 ppb) in the mafic units. The top half of Figure 38 shows a lognormal histogram for gold using all the values from the 2011 assays of Skookum Main Zone drill core. All values greater than 500 ppb gold are in the area coloured solid blue. The lower half of the figure is the same plot as figure 37, log Zn vs. log (K + Al), except that the larger blue squares are all those samples containing +500 ppb gold. It can be seen that most of the +500 ppb gold samples fall within the "Felsic Units" area, with some scatter towards the hybrid of mixed "Felsic-Intermediate Banded Units" lithology.

This is a significant observation, as it may explain some of the lack of continuity of gold mineralization within the Skookum Main Zone. While the main mineralized structure is trending east-northeast, with a steep southerly dip, stratigraphic units that cut across this trend strike north-northwesterly and dip to the east. In particular, a mafic unit cuts through the central portion of the Skookum Main trend. (Refer to Figures 5 and 6 in McIntosh 2012a, included as Appendix X to this report, for a graphical representation of the three main lithologies within the Skookum Main Zone.)

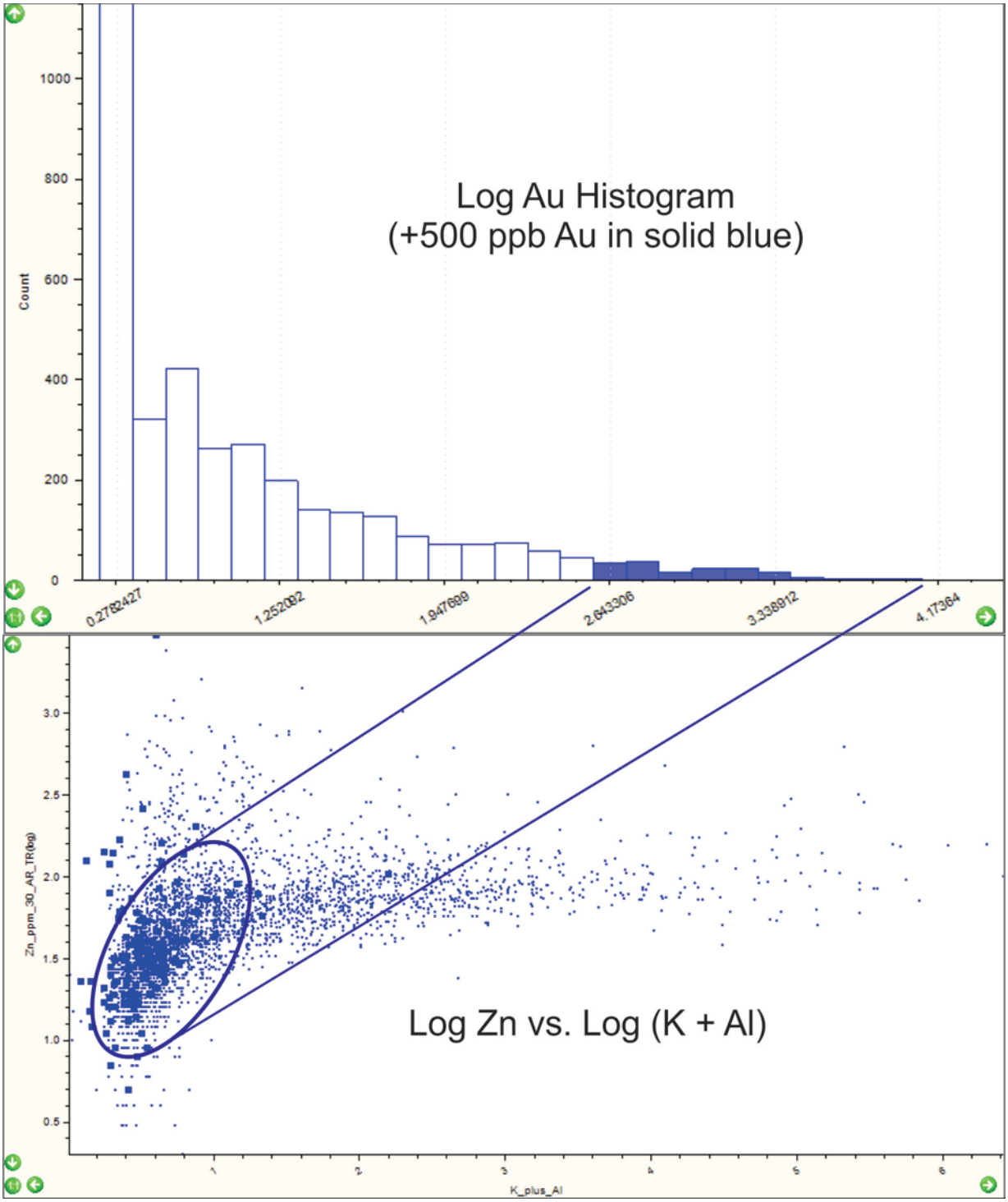


**Figure 38. Gold histogram and distribution of anomalous gold values on the Zn vs. K+Al scatter plot (from McIntosh, 2012).**

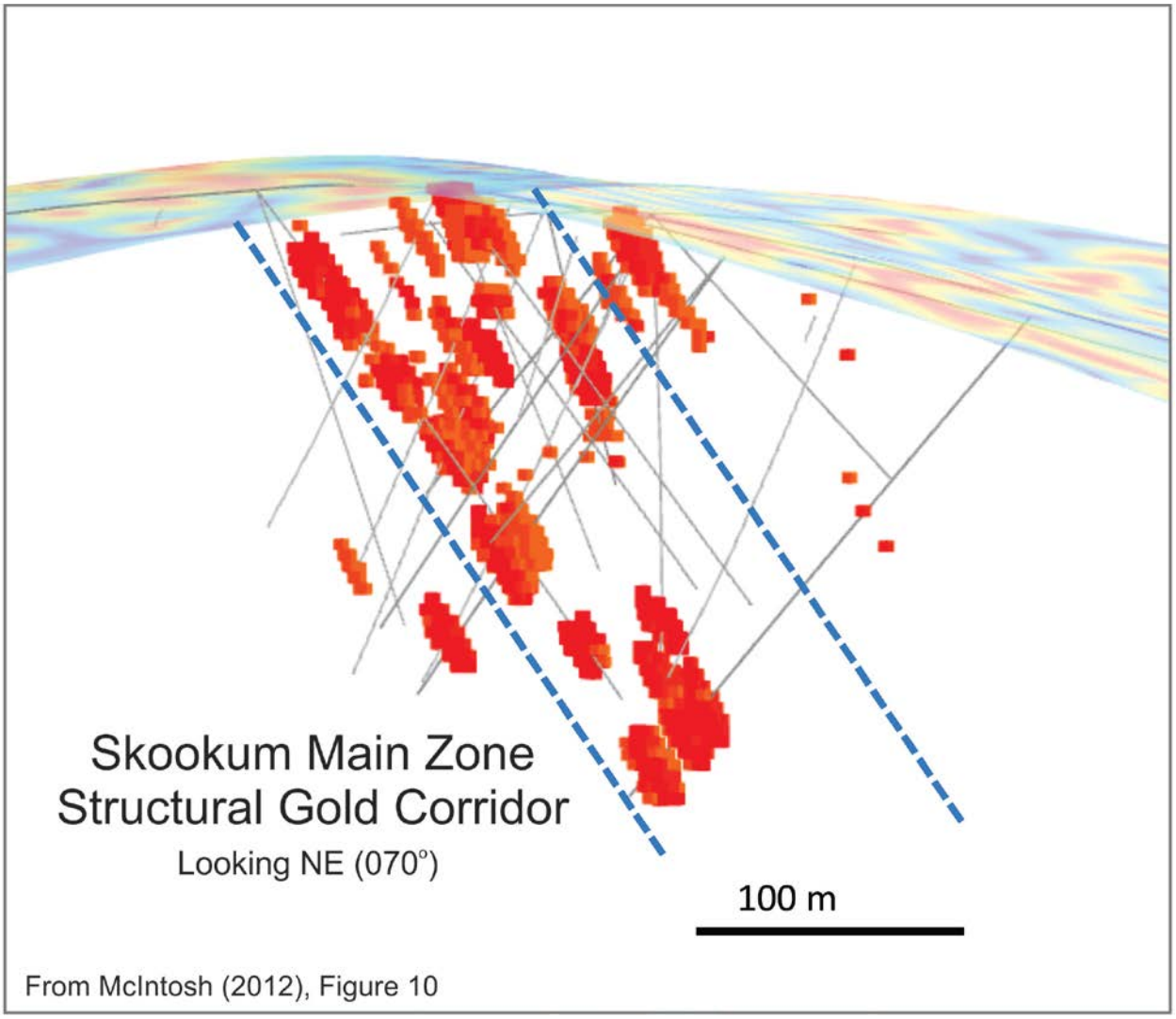


**Figure 39. Skookum Main Zone showing +500 ppb Au in all 2011 & 2012 drill holes.**

Figure 39 shows a 3-D model created by McIntosh looking along the strike of the Skookum Main Gold Zone, to the northeast. His 3-D modelling of the gold values in drilling has led to the definition of a steeply south dipping, east-northeast striking (070°) gold mineralized zone. Some of the non- or weakly mineralized portion of this zone is occupied by mafic units.

### Skookum West

At Skookum West (see Figure 31), 14 holes (1,672 metres) were drilled within an area of anomalous gold-in-soil results, float samples ranging up to 19.9 gpt gold and geophysical signatures suggesting the presence of favourable geologic structures. The Skookum West Zone is defined by an open-ended 1.5 kilometre-long trend of greater than 50 ppb gold, to a peak result of 514 ppb. Alteration similar to that at Skookum Main was encountered in drill holes 11MP-10, -11, -32, -33, and -41. The 2011 drilling encountered gold intersections in the range of 1 to 2 gpt Au over 1 to 4 m (Table VIII).

As noted above, hole 11MP-38, with no significant gold values, cuts under the strong gold interval in trench SWTR12-11. Therefore, if the trench values extend to depth, the gold zone must be dipping to the north, above the projected drill hole.

### Maisy May, Gertie and Hackly Gold

At Maisy May, 4 holes were drilled (774 metres) to test a broad multi-element soil geochemical anomaly with elevated gold, silver, antimony, and mercury values. The drill results identified minor, narrow sections with anomalous (>100 ppb) gold, to a high of 2.2 gpt gold for an individual sample in hole 11MP-16. The holes intersected a section of variably oxidized, quartz-sericite-chlorite +/-pyrite schist. The source of the soil anomaly has not yet been determined.

No significant results were returned from 3 holes (774 metres) drilled at Gertie, and 2 holes (300 metres) drilled at Hackly Gold. The first 2 holes, 11MP-17 and -18, in the Gertie area were abandoned due to poor ground conditions and failed to reach the target depth.

### Big Alex

Three holes were drilled at Big Alex to test the coincidence of soil a geochemical anomaly with structures interpreted from airborne geophysics. Results ranged from 4.1 gpt Au over 1.8 m to 1.61 gpt Au over 5.4 m. The Big Alex target remains an attractive exploration target at Mariposa.

# CONCLUSIONS AND RECOMMEDATIONS

The Mariposa Property, located 30 kilometres southeast of the Underworld/Kinross White Gold discovery and 40 kilometres east-northeast of Kaminak's Coffee property, has a long history of gold exploration and contains two placer creeks with over a century of active mining, among the longest histories in the Klondike. The geological setting of the Property is similar to the White Gold, Coffee and QV properties in terms of the host lithologies, the structural controls and brittle style of deformation and related gold mineralization. Recent exploration by Pacific Ridge identified an open-ended 7 km long horizon of altered sulphide bearing quartz mica schist in the Skookum Zone area of the Property. This unit is locally flanked by intrusive and mafic rock units, a setting favorable for hosting a gold mineralizing system.

The history of gold exploration within the Property dates to 1898, when gold was first discovered in Scroggie and Mariposa Creeks. It has been estimated that approximately 100,000 ounces of gold with a fineness of 905 has been produced from Mariposa and Scroggie Creeks.

The first lode gold exploration in the area was reported in 1917, and has continued sporadically to the present. Interest in the lode gold potential around Scroggie Creek intensified in the mid 2000's and reached a climax during the period 2009 to 2012, when the Company spent approximately $6 million exploring the Property. Soil sampling and trenching led to a core drilling program in 2011 as well as additional soil sampling, an aeromagnetic survey, ground magnetics and VLF surveys. In 2012, additional trenching, drilling and soil sampling surveys were carried out. The total 2011-2012 program included the collection of 9,538 soil samples, 175 km of ground magnetics and VLF surveying, an additional 16.4 km of walkmag surveying, 900 km of high resolution aeromagnetic surveying, 1,650 m of trenching and 8,461 m of core drilling in 55 holes.

Soil geochemistry has proven to be the most effective gold exploration tool, utilizing initial reconnaissance ridge and spur traverses to define potential target areas, followed by grid sampling to define anomaly strength, size and limits. Geophysical surveys, in particular magnetics, have proven useful for defining lithologies and structure in areas with limited outcrop exposure. Finally, trenching is an effective tool to further refine targets prior to drilling.

The 2010 to 2012 soil geochemical surveys outlined several targets within the Property, the most important of which is the Skookum Main trend, with Skookum West and Maisy May along strike to the west and Skookum East to the east. Other key targets include Big Alex, Hackly and Alberta Creek along with second tier anomalies that include Skookum North, Gertie and Lou's Linear.

Trenching at Skookum Main Zone outlined a strong anomaly in Trench SZ-02 (1,250 ppb gold over 30 m within 150 m of 493 ppb Au), which was undercut by drill hole 11MP-01, the best intersection during the 2011-2012 drill campaign (2.44 gpt Au over 38.9 m, including 6.44 gpt Au over 11.1 m, within an 81.5 m intersection grading 1.51 gpt Au). Subsequent drilling outlined an east-northeast trending ($70^{o}$) gold-enriched structural zone, approximately 100 m wide and at least 300 m in strike length. Continuity of gold mineralization within the zone appears to be an issue, but McIntosh (2012) has shown that this is due at least in part to cross-cutting mafic units that are a poor host for gold mineralization. Most of the 2012 drilling was oriented in a westerly direction, parallel to the trend of the structure, and was therefore not effective in defining average grade or mineralization limits.

Additional drilling is required at Skookum Main Zone to better define the orientation and distribution of the strongest gold mineralization. This would include mainly shallow holes with modest (25 m) step-outs, directed towards the north-northwest to cross-cut the defined structure.

At Skookum West, drilling in 2011 failed to intersect significant mineralization, although a number of narrow gold intersections were encountered. Additional trenching is recommended to further define the location and orientation of mineralized structures, prior to additional drill testing.

Several other zones on the Property have been defined by soil geochemistry, magnetic surveying, prospecting for high grade gold in float and, in some cases, preliminary drilling. These zones include Skookum East, Skookum North, Hackly, Gertie, Maisy May, Big Alex and Alberta Creek. It is felt that the limited drilling completed so far at Big Alex, Maisy May and Hackly has not provided an adequate test for these zones. Further exploration is recommended, beginning with trenching over the strongest portions of the soil geochemical anomalies and followed by drill testing.

# STATEMENT OF EXPENDITURES

| 2011 Field Season Expenditures* | |
|---|---|
| **Item** | **Amount** |
| Salaries | $566,047 |
| Geological Consultants | $36,753 |
| Contract Soil Sampling | $87,700 |
| Contract Geophysics | $33,465 |
| Contract Pad Building | $80,447 |
| Contract Drilling | $634,583 |
| Geochemical Analysis & Assaying | $339,759 |
| Expediting & Consumables | $229,314 |
| Helicopter Support | $295,027 |
| Fixed Wing Support | $346,875 |
| **Total** | **$2,649,971** |

| 2012 Field Season Expenditures* | |
|---|---|
| Item | Amount |
| Salaries | $277,060 |
| Geological Consultants | $203,227 |
| Contract Soil Sampling | $57,463 |
| Contract Geophysics | $35,086 |
| Contract Pad Building | $67,220 |
| Contract Drilling | $298,966 |
| Geochemical Analysis & Assaying | $146,004 |
| Expediting & Consumables | $88,240 |
| Helicopter Support | $243,779 |
| Fixed Wing Support | $167,119 |
| **Total** | **$1,584,163** |

* These cover the major project expenditures, but the tables are not comprehensive.

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# CERTIFICATE OF QUALIFICATIONS

I, Gerald G. Carlson, hereby certify that:

1. I am a consulting mineral exploration geologist and Vice President of Exploration for Pacific Ridge Exploration Ltd., 11th Floor – 1111 Melville St., Vancouver, B.C. V6E 3V6.

2. I am a graduate of the University of Toronto, with a degree in Geological Engineering (B.A.Sc., 1969). I attended graduate school at Michigan Technological University (M.Sc., 1974) and Dartmouth College (Ph.D., 1978). I have been involved in geological mapping, mineral exploration and the management of mineral exploration companies continuously since 1969, with the exception of time between 1972 and 1978 for graduate studies in economic geology.

3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Registration No. 12513 and of the Association of Professional Engineers of Yukon, Registration No. 0198.

4. I am the author of this report on the Mariposa – Skookum Zone Project, YMIP Project 13-074.

5. The report is based on a literature review, on private company reports and on the 2013 work program.

6. I am Vice President of Exploration for Pacific Ridge Exploration Ltd. and I own shares in the company.

7. I was personally involved in the planning, execution and interpretation of the exploration programs discussed in this report.

**Dated at Vancouver, B.C. this 21st day of November, 2013,**

**Gerald G. Carlson, Ph.D., P. Eng.**

# APPENDICES

See Data Folder

for Appendices