

BC Geological Survey  
Assessment Report  
29704

Assessment Report for the

**SAWYER Property**

**Soil Sampling**

Fort Steele Mining Division  
N.T.S. 82 F/ 10E, 15E  
Latitude 49° 45' N, Longitude 116° 34' W

for

Jasper Mining Corporation  
1020, 833 - 4<sup>th</sup> Avenue S.W.  
Calgary, Alberta  
T2P 3T5

Submitted by:

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of

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V1C 7H3

Submitted: February 22<sup>nd</sup>, 2008

## **SUMMARY**

The Sawyer property is located approximately 65 kilometres northwest of Cranbrook, east of Kootenay Lake in the Purcell Mountains. The property can be reached by utilizing the St. Mary's River Forestry Service Road network west of Marysville. A reasonably well maintained forestry road follows the St. Marys River to the property, with access to the eastern margin of the property available along the Sawyer Creek Forestry Road.

The property covers a mapped exposure of felsic intrusive material interpreted to correlate to the Bayonne Magmatic Belt, comprised of Cretaceous age felsic intrusions extending from the Baldy Batholith north of Kamloops to the International Boundary with the United States south of Creston. The Sawyer Creek Stock may represent an apophyse of the Fry Creek Batholith, a large intrusive complex located eight kilometres to the northwest. Alternatively, it may represent a separate intrusion similar to the Hall Lake Stock, located 14 kilometres to the southeast.

The 2007 program completed by Jasper Mining Corporation was comprised of surface soil sampling. Additional soil sampling was undertaken in an attempt to better define apparent anomalies evident from the 2005 program. A second objective to obtain soils to assist in constraining the surface location of a geophysical anomaly, identified previously on a UTEM survey and subsequently confirmed on an Aeroquest airborne geophysical survey completed in 2006 (Walker 2006). A total of four contour soil lines were sampled along both the St. Mary River and Sawyer Creek. In addition, four short traverses were completed on either side of Sawyer Creek to assess the effect of downslope creep and for comparative purposes to soil results along the road.. Soil sampling was completed between May 16<sup>th</sup> and July 20<sup>th</sup>, with collection of 115 soil samples.

All samples were submitted to Acme Analytical Laboratories for processing using SS80 (for soils) or R80 (for chip and core samples) preparation and 39 element Group 1DX (ICP) analysis.

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## **INTRODUCTION**

The Sawyer property is located approximately 65 kilometres northwest of Cranbrook, east of Kootenay Lake in the Purcell Mountains (Fig. 1 and 2). The property can be reached by utilizing the St. Mary's River Forestry Service Road network west of Marysville. A reasonably well maintained forestry road follows the St. Marys River to the property, with access to the eastern margin of the property available along the Sawyer Creek Forestry Road.

The property (Fig. 3) covers a mapped exposure of felsic intrusive material interpreted to correlate to the Bayonne Magmatic Belt, comprised of Cretaceous age felsic intrusions extending from the Baldy Batholith north of Kamloops to the International Boundary with the United States south of Creston. The Sawyer Creek Stock (Fig. 4) may represent an apophyse of the Fry Creek Batholith, a large intrusive complex located eight kilometres to the northwest. Alternatively, it may represent a separate intrusion similar to the Hall Lake Stock, located 14 kilometres to the southeast.

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# DYNAMIC EXPLORATION LTD

## REGIONAL LOCATION MAP

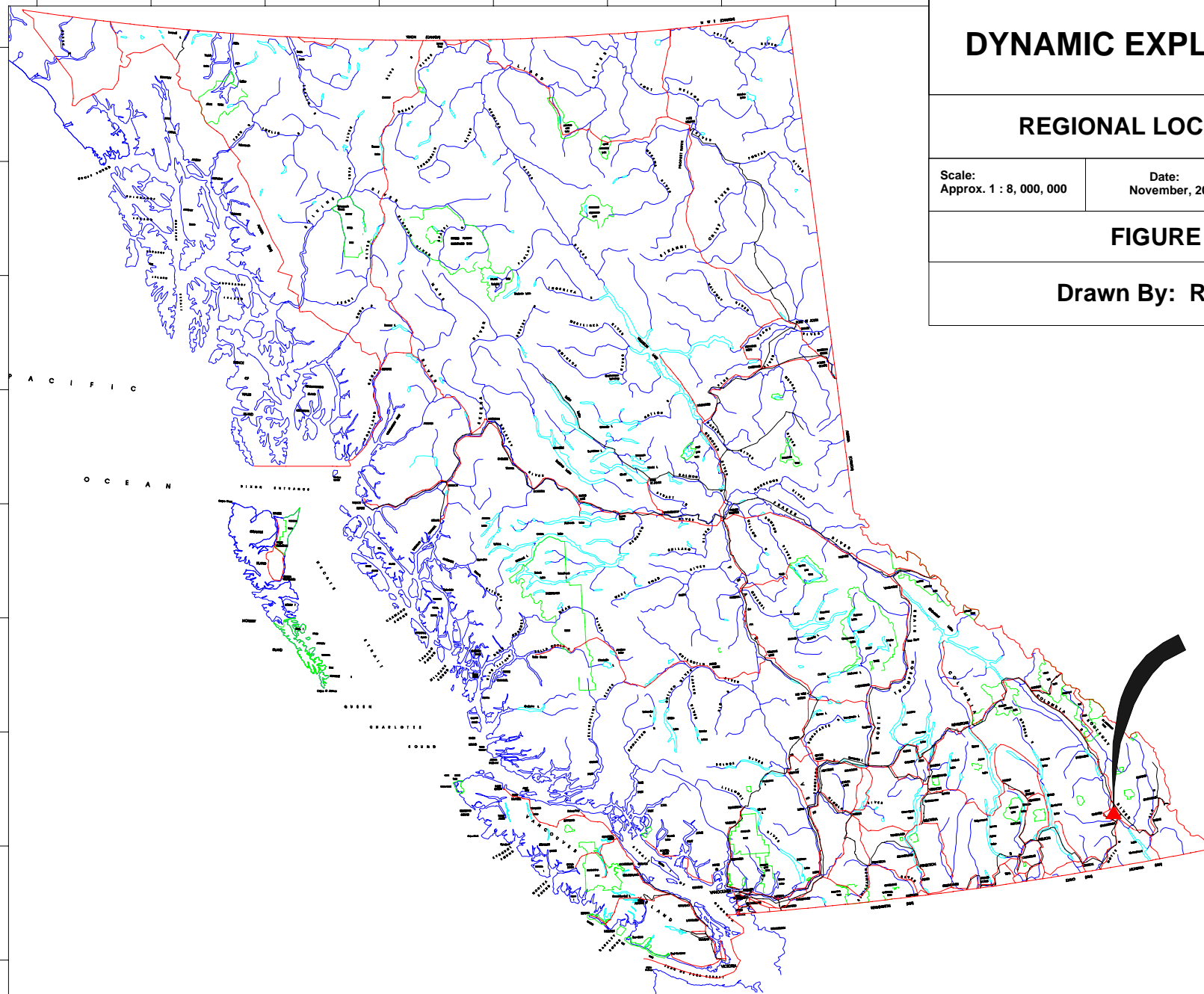
Scale:  
Approx. 1 : 8, 000, 000

Date:  
November, 2005

Mapsheet:  
N.T.S. 82G / 12E  
BCGS: 082G052

### FIGURE 1

Drawn By: Rick Walker



Property  
Location

# DYNAMIC EXPLORATION LTD

## PROPERTY LOCATION MAP

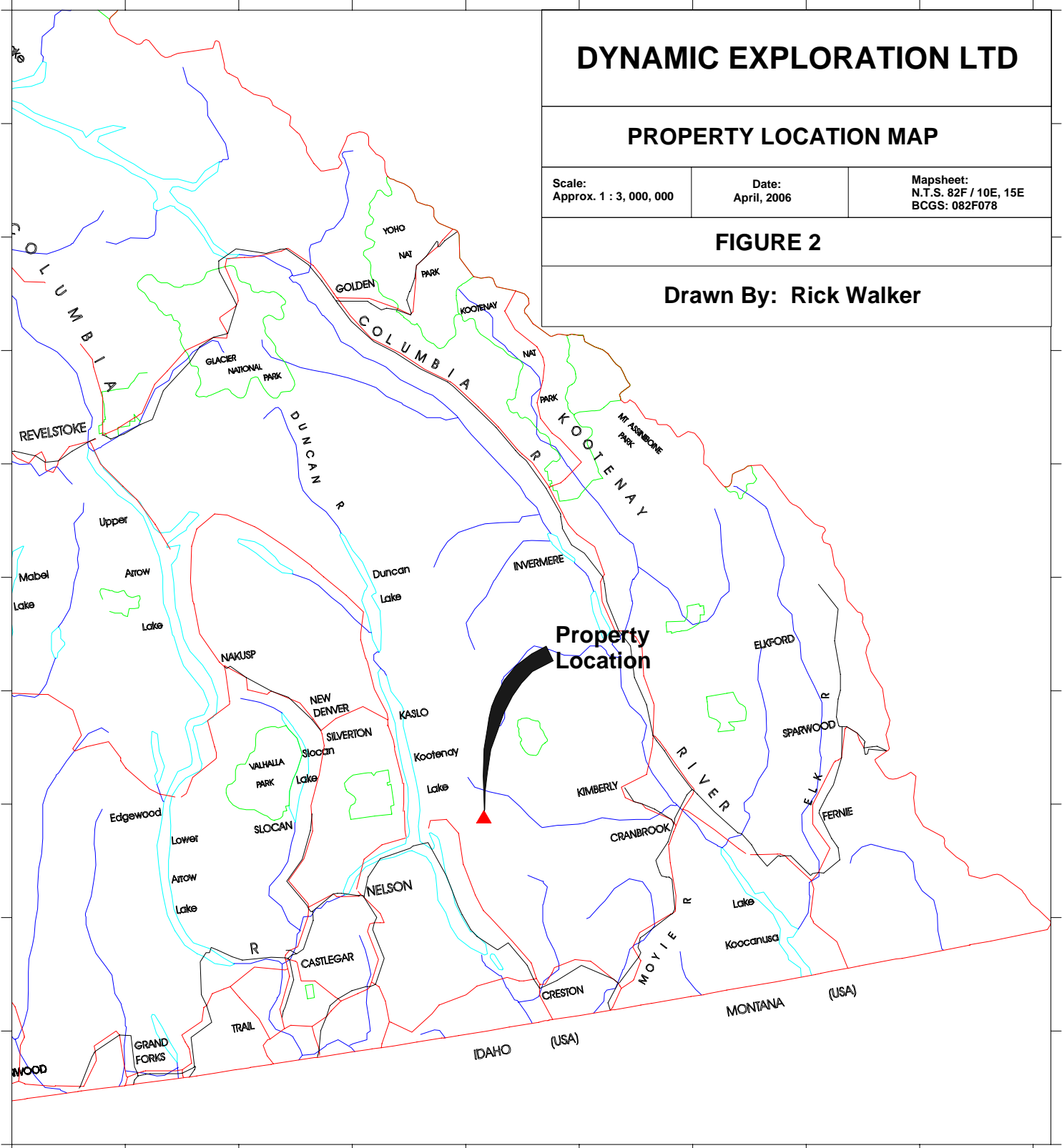
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Approx. 1 : 3,000,000

Date:  
April, 2006

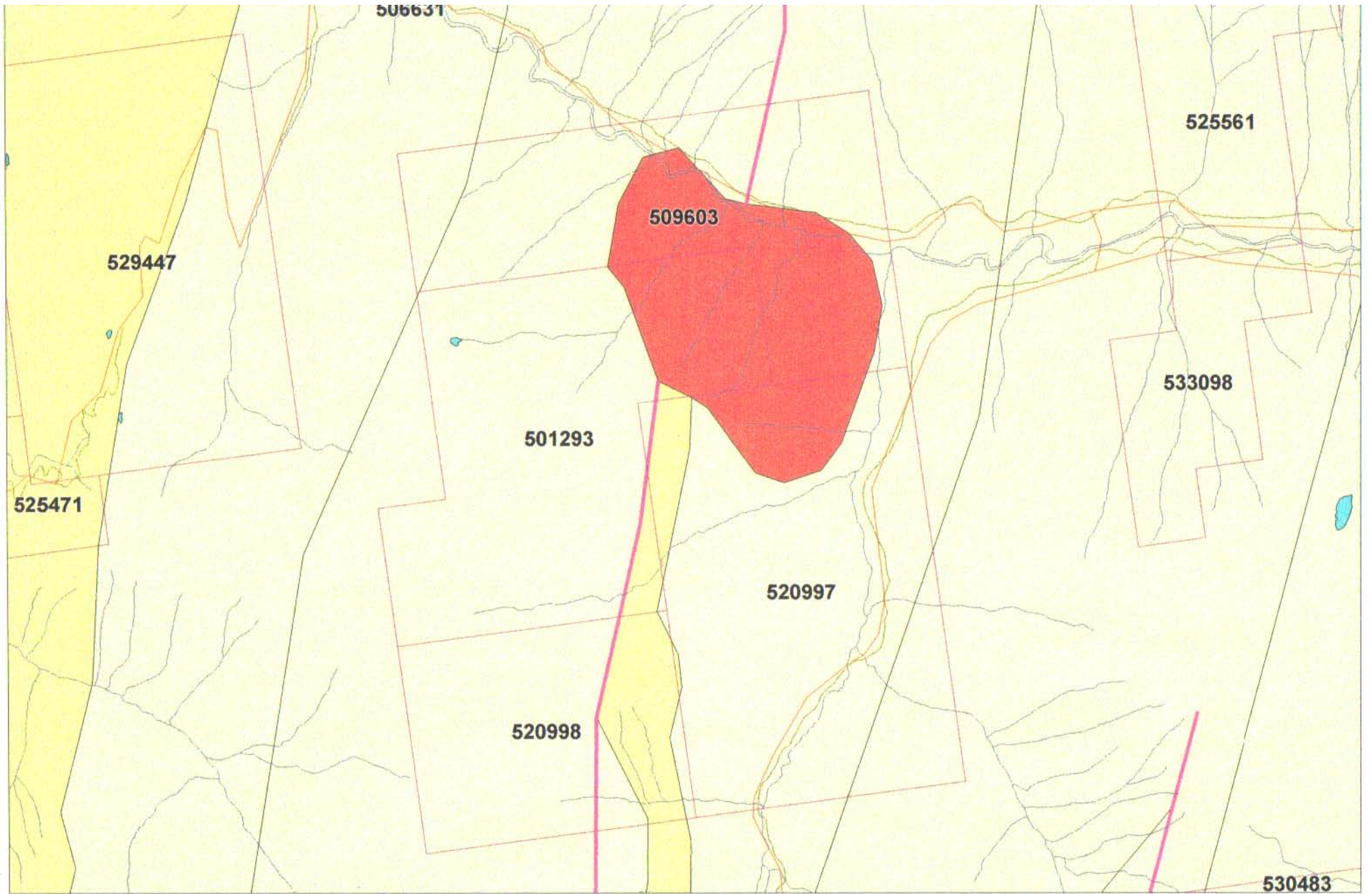
Mapsheet:  
N.T.S. 82F / 10E, 15E  
BCGS: 082F078

### FIGURE 2

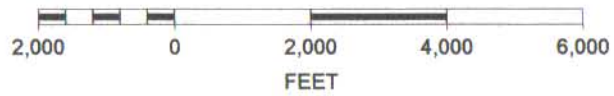
Drawn By: Rick Walker







SCALE 1 : 34,210





## **LOCATION AND ACCESS**

The SAWYER property is located in the western Purcell Mountains (Latitude 49° 45' N, Longitude 116° 34' W), approximately 65 kilometres northwest of Cranbrook, B.C. on N.T.S. mapsheet 82 F/10E, 15E ( Fig. 1 and 2). The property consists of 4 Mineral Tenures acquired through Mineral Tenures Online (Fig. 3).

The property can be accessed by gravel Forest Service Roads (FSR) from Cranbrook / Kimberley along the St. Mary's Road. The road is well maintained west of St. Mary's Lake to Km 42. At km 45, continue north along the St. Mary's FSR for approximately 12 km to a fork in the road. Take the left fork and cross over the bridge, then the left fork again, crossing over another bridge. Approximately 3 km farther along, the road crosses another bridge to the south side of the St. Mary's River. Approximately 6 km further along the road, there is a branch road on the south side of the road which provides vehicle access to the east side of the Sawyer property. Continuing along the main logging road, continuing along the St. Mary's River, one crosses another bridge to the north side of the St. Mary's River and vehicle access to the northern portion of the property. All roads are negotiable using a 2WD vehicle although 4WD is recommended for better clearance.

Helicopter access is recommended for the western and central portions of the property.

## **PHYSIOGRAPHY AND CLIMATE**

The SAWYER property is located slightly east of Rose Pass (Fig. 2), approximately 65 km northwest of Cranbrook, on the east side of Kootenay Lake (Fig. 1). Relief in the area varies from 1200 metres (3,930 feet) along the St. Mary's River to approximately 2320 metres (7,611 feet) on an unnamed peak in the core of the property.

The claims are generally characterized by moderately to very steep topography, with generally north and south facing slopes along east-west oriented valleys. Sawyer Creek, along the eastern edge of the property is oriented roughly north-south.

Vegetation in the area consists predominantly coniferous, with deciduous trees preferentially located along the valley bottom. Undergrowth consists largely of small deciduous shrubs, with Devil's Club along watercourses and wet areas.

The claims are located east of Kootenay Lake along a regional topographic high, comprising the local drainage divide, and are therefore subject to heavier precipitation. As a result, the region is characterized by heavy snowfall during the winter months. The property is available for vehicle based, geological exploration from June to late October.

## CLAIM STATUS

The property consists of 4 Mineral Tenure On-line (MTO) mineral tenures (Fig. 3), acquired in accordance with existing government claim location regulations. Significant tenure information is summarized below:

<b>Tenure Name</b>	<b>Area (ha)</b>	<b>Tenure #</b>	<b>Expiry Date*</b>
Sawyer East	501.055	520997	Dec. 31, 2011
Sawyer North	375.644	509603	Dec. 31, 2011
Sawyer West	250.551	520998	Dec. 31, 2011
Intrusive	<u>438.339</u>	501293	Dec. 31, 2011
<b>Total:</b>	<b>1,565.589</b>		

\*After 2007 assessment credit applied.

## HISTORY

1990 - Geological Development Report on the Lapointe Creek Property, M.B. Bapty, 50 pp. (unpub.)

1993 - Nelson (East Half) mapsheet, Geological Survey of Canada Open File 2721, Scale 1:100,000

1994 - Report on Sawyer Property, M.B. Bapty and Walker, R.T., 19 pp. (unpub.)

1994 - 1996 - Limited exploration undertaken on Sawyer property by Focal Resources under the direction of M.B. Bapty

1996 - Geology, Kootenay Lake, British Columbia. Geological Survey of Canada, Map 1864A, scale 1: 100 000

- Focal Resources Ltd. completed a limited exploration program with 2 BQ drill holes. The claims comprising the Sawyer property were subsequently allowed to lapse.

2005 - Initial Sawyer claims acquired through Mineral Tenure Online.

2006 - Two additional Mineral tenures acquired

## **REGIONAL GEOLOGY**

The only previous work undertaken pertaining to the general area of the Sawyer claims was that of Reesor (1996, 1993) for the east side of Kootenay Lake. The stratigraphy of the Purcell Supergroup (Fig. 4) strata has been well described to the east by Höy (1993) and the Purcell and Windermere Supergroup to the north by Pope (1990).

### **Stratigraphy**

#### **Proterozoic**

##### **Belt-Purcell Supergroup**

The following has been modified from Höy (1993).

##### **Sheppard Creek Formation (Lower Dutch Creek Formation)**

The Sheppard Formation includes up to several hundred metres of stromatolitic dolomite, quartz arenite, siltstone and argillite lying above the Nicol Creek Formation. A dramatic increase in thickness in the Skookumchuk area is accompanied by prominent facies changes in the Sheppard Formation and in the overlying Gateway and Phillips formations.

The Sheppard Formation is characterized by an assemblage of green siltite, sandy dolomite, quartz wacke, distinctive stromatolitic dolomite and oolitic dolomite layers.

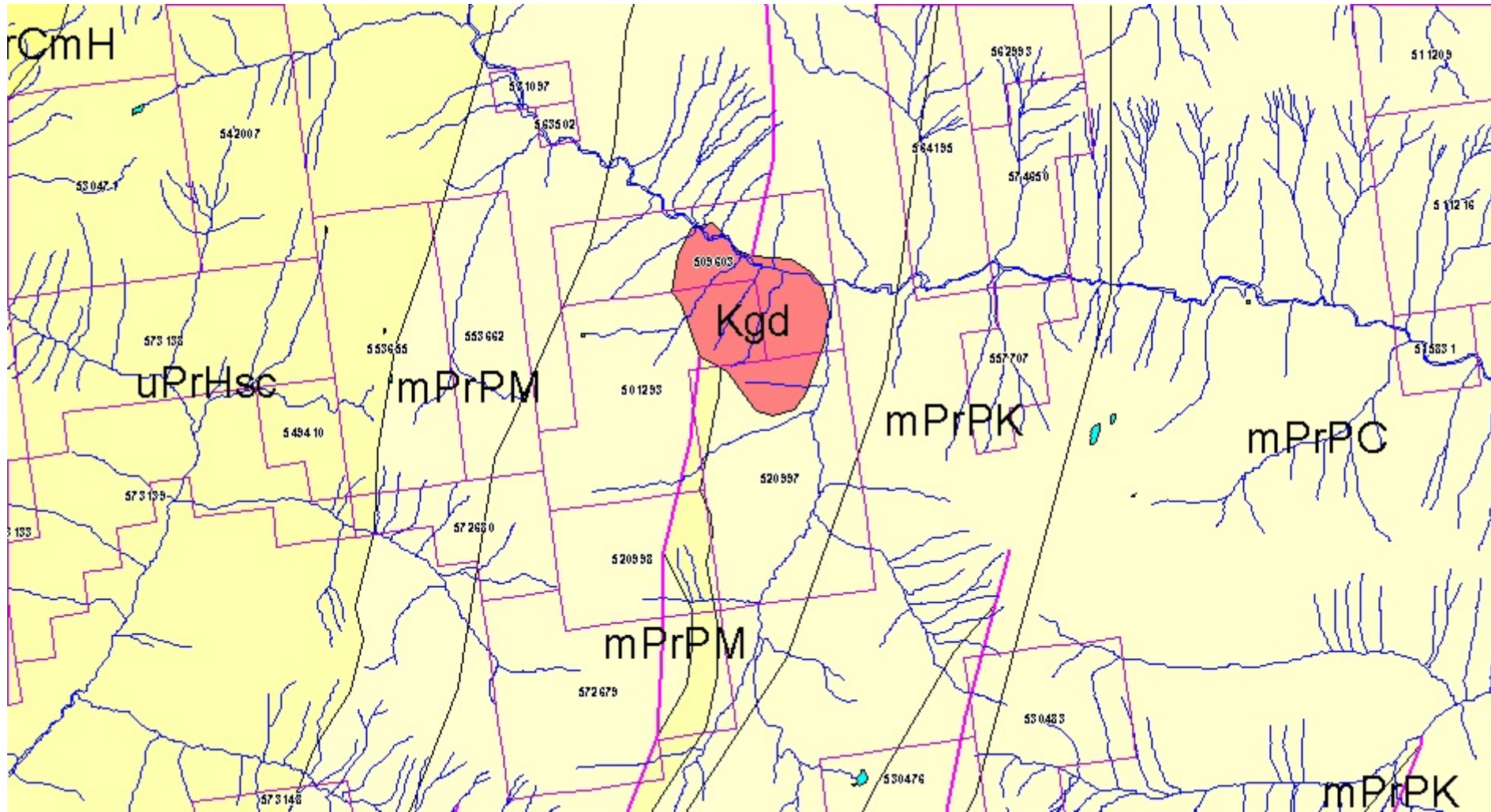
West of Skookumchuk, the formation is still recognizable but is referred to as the lower Dutch Creek Formation. It comprises green siltstone and argillite with minor dolomitic siltstone and, near the top, stromatolitic dolomite. This stromatolitic sequence can be traced north of Bradford Creek and marks the contact between the lower and upper Dutch Creek. It comprises cycles of rounded and gritty quartz wackestone, overlain by oolitic, stromatolitic or massive dolomite. These cycles may contain a few thin purple argillite beds with mud cracks and locally, rip-up clasts. They are overlain by and interbedded with light green siltstone-argillite couplets, usually lenticular, laminated and graded.

##### **Gateway Formation (Upper Dutch Creek Formation)**

The Gateway Formation is defined to include siltite, argillite, arenite and dolomite between the Sheppard Formation and red and maroon siltstone and argillite of the overlying Phillips Formation. It correlates with the lower part of the upper Dutch Creek Formation northwest of Skookumchuk.

The Gateway Formation comprises dominantly pale green siltstone and minor dolomitic or argillaceous siltstone.

... Salt casts and symmetrical ripples throughout the Gateway Formation suggest deposition in shallow water; dessication cracks, mud-chip breccias and oxidized facies indicate periods of



**Figure 4** - Geological map of the Sawyer area. Property underlain by Cretaceous granodiorite and Upper Proterozoic Mount Nelson Formation. Approximate scale 1: 50,000. (Taken from The MapPlace)

subaerial exposure. ... The formation thickens rapidly to the north in the Skookumchuk area primarily as the result of an increase in the pale green siltstone component. The absence of the overlying Phillips Formation, sparse outcrop and the similarity between lithologies in the upper Gateway and lower Roosville formations make it difficult to determine the thickness and extent of the Gateway Formation to the north and west. ...

### **Dutch Creek Formation**

The Dutch Creek Formation is defined as a group of rocks between the Purcell lavas (Nicol Creek Formation) and the Mount Nelson Formation. The lavas are not exposed in the Lardeau and Nelson east-half map areas and hence it is difficult to determine the exact thickness and extent of the Dutch Creek Formation there. It is estimated to be between 1200 and 1500 metres thick in the Windermere area and a 1300-metre section has been measured east of Kootenay Lake at Rose Pass.

In the Fernie west-half map area, the Dutch Creek Formation is only exposed northwest of Skookumchuck. The lower part of the formation is described in the section on the Sheppard Formation. The upper part includes the Gateway Formation the Roosville Formation and overlying rocks beneath the Mount Nelson Formation. The maximum thickness of the Dutch Creek Formation in the Bradford Creek area is estimated to be 4800 metres, including approximately 3300 metres of upper Dutch Creek.

The upper Dutch Creek is discontinuously exposed north of Skookumchuck. A carbonate marker bed approximately 200 metres thick occurs within the formation some 3000 metres above the Nicol Creek lavas. It is a massive, cream to tan-weathering, thick to medium-bedded dolomite and limestone unit. Crypto-algal features are present locally. The top and the base of the unit consist mainly of argillaceous silty dolomite. It is included within the Dutch Creek rather than the Mount Nelson Formation as the basal quartzite typical of the Mount Nelson is not exposed below it. Furthermore, green siltstone, black argillite and thin oolitic dolomite interbeds higher in the section probably correlate with similar facies in the Roosville Formation at Larchwood Lake.

### **Mount Nelson Formation**

The Mount Nelson Formation comprises a thick sequence of quartzite, dolomitic argillite and siltstone that conformably overlies the Dutch Creek Formation. It was restricted to include only the lower part of the formation. The upper part, informally named the Frances Creek Formation, is separated from the Mount Nelson Formation (new) by a disconformity.

The lower Mount Nelson Formation is divisible into three members in the Mount Forster map: a basal white orthoquartzite 100 to 200 metres thick, 100 to 300 metres of buff and grey dolomites and an upper unit, to 370 metres thick, of purple and red shale with buff dolomite interbeds. The overlying Frances Creek Formation comprises thick-bedded orthoquartzite, grey dolomite and interbedded sandstone and shale.

The total thickness of the Mount Nelson Formation (new) in the Mount Forster area varies from 500

metres to 1950 metres, due partly to erosion prior to deposition of the Frances Creek Formation or Windermere Supergroup and partly to syndepositional tectonics. The Frances Creek Formation varies in thickness from 750 metres to 1020 metres. At Rose Pass east of Kootenay Lake, the entire Mount Nelson Formation is approximately 750 metres thick.

In Fernie west-half map area, the Mount Nelson Formation is only exposed at Lookout Mountain along the northern edge of the map area. It has a gradational contact with the underlying Dutch Creek Formation; phyllitic black argillite-siltstone rocks become increasingly more quartzitic and the interbeds of quartz wacke become cleaner up-section. The basal quartzite of the Mount Nelson is a clean, well-rounded and well-sorted, medium-bedded orthoquartzite containing a few thin beds of sandy dolomite. The basal quartzite is overlain by a mixture of white, green and purple quartz arenite and dolomitic sandstone, locally gritty, as well as some purplish dolomite and argillite. Locally, the diagenetic character of these maroon beds is clearly demonstrated as the colouring crosscuts bedding planes and leaves spotty remnants of light green argillite. A buff weathering sequence of dolomite overlies these quartzwacke, siltstone and argillaceous dolomite beds. This package is overlain by more green siltstone and minor purple siltstone and argillite. The total exposed thickness of the Mount Nelson Formation is approximately 400 metres.

The following has been summarized from Aitken and McMechan (1991).

### **Middle carbonate division**

A distinctive carbonate unit comprises the middle division of the Purcell (Belt) Supergroup. To the east, in the Rocky and eastern Purcell mountains, the middle division consists of the well known Kitchener Formation. In the west the middle carbonate division consists of the more basal facies of the thick, lower subdivision of the Coppery Creek Group. The thick (1400 m) lower unit consists of dolomite interbedded with green, grey or black phyllite which grades upward to silvery and green phyllite, siltite and some carbonate.

### **Upper division**

The strata comprising the Van Creek Sheppard, Gateway and Roosville formations of the Rocky and eastern Purcell Mountains pass laterally into a succession of grey and green siltite, argillite and phyllite, quartzite, argillaceous dolomite and dolomite. The volcanic (Nicol Creek) and red quartzite marker (Phillips) units thin and disappear to the west, making subdivision of the upper division impractical. Therefore, the upper two units of the 'Coppery Creek' and 'La France Creek' groups are interpreted to comprise the upper division along the western Purcell Mountains.

The upper two divisions of the Coppery Creek group consists of a middle unit approximately 200 m thick comprised of thinly laminated black phyllite and grey siltite. The upper unit consists of silvery phyllite, calcareous dark grey phyllite and dolomite, with a sequence of interbedded dolomite and quartzite at the top and is approximately 300 metres thick.

The 'La France Creek group' of the western Purcell is approximately 1000 m thick, comprised of intensely deformed and metamorphosed sediments dominated by siltite, quartzite and phyllite. The group has been subdivided into a lower unit consisting of thinly interbedded, black phyllite and grey siltite and an upper unit of grey siltite and quartzite with black phyllite and carbonate-bearing siltite and phyllite near the top. The 'La France Creek group' gradationally overlies the upper unit of the 'Coppery Creek group'. In most areas, strata of the 'La France Creek group' grade into thicker-bedded quartzite at the base of the Mount Nelson Formation.

The Mount Nelson Formation consists of a cliff-forming, basal unit of white, grey or green orthoquartzite with rare argillaceous laminae and partings, overlain by brownish red to grey-weathering impure carbonate interbedded with black, purple or red argillite and grey siltite. Stromatolites and lenses or nodules of chert occur locally within the carbonate unit. The basal orthoquartzite, up to 70 m thick, thins gradually to the south. Interbeds of green, black or red argillite are common within the upper quartzite unit and green and black argillite and siltite form the top of the preserved formation. The carbonate unit is thicker in western exposures, where it is overlain by interbedded black phyllite and grey siltite. Cream-weathering dark-coloured dolomite and brown-weathering, white dolomite, locally interbedded with black phyllite, occur at the top of the formation as preserved. Mud cracks in argillite, ripple marks in quartzite and solution-breccias in dolomite are locally common in both area.

The Mount Nelson Formation, whose maximum preserved thickness is about 1000 m is unconformably overlain by conglomerate of the Toby Formation of the Upper Proterozoic Windermere Supergroup. Evidence for small-scale, pre-Toby block faulting is found locally. Regionally, the unconformity cuts out progressively older Purcell strata southward along the western Purcell Mountains ”.

The following has been modified from Pope (1990):

### **Van Creek Formation**

The Van Creek Formation consists of coarse to medium-grained, light-grey or green to dark-green quartzites, siltstones and silty argillites. The beds have consistent thicknesses of between 20 to 50 centimetres with slightly undulose bases and truncated tops, together with internal cross and planar lamination and grading. Van Creek quartzites grade upward into thinly bedded pale green quartzites and then into thinly interbedded 2 to 20 centimetre pale green quartzites, silts and buff weathering dolomitic silts of the Lower Gateway Formation, Hg 1 member.

### **Lower Gateway Formation**

The Lower Gateway Formation is subdivided into two members Hg1 and Hg2.

**Hg 1:** The contact between the Van Creek and Lower Gateway formations is gradational and in the absence of the Nicol Creek Formation can only be roughly estimated. The lowermost units



of the Lower Gateway Formation are identified as where carbonate first occurs in the succession. The thin bedded quartzites in this transitional sequence are characterized by weathered pyrite, which imparts a distinctive red spotted appearance.

The Hgl member is estimated ... to be well in excess of 1000 metres thick. It consists of interbedded packages of quartzite, green siltstone and buff dolomitic siltstone and dolomite. Sedimentary structures such as cross lamination, grading, channelling and dewatering structures, are well preserved and compositional differences frequently enhance exposures. Siltstones in the dolomitic packages usually show an upwards gradation from dolomite free, finely cross-laminated silt and sand to dolomitic cross-laminated siltstone and cryptalgal to stromatolitic-laminated micritic dolomite. Bed thicknesses vary from generally 2 to 10 centimetres in the fine grained quartzite dominated lower part, to 10 to 50 centimetres in the upper dolomite dominated part of the Hg 1 member.

**Hg2:** The dolomite dominated upper part of the Hgl member passes into a 90-metres thick, cream to buff weathering dolomite unit. The dolomite displays cryptalgal and stromatolitic laminations, cream chert intercalations, rare halite casts and silty and sandy cross lamination. Bed thickness varies between 50 centimetres to 2 metres, and grain size varies from micrite, which is typically blue-grey, to coarse sucrose-textured, light coloured recrystallized dolomite.

### **Dutch Creek Formation**

The boundary between the Lower Gateway Formation and the Dutch Creek Formation is characterized by a narrow zone of rusty weathering. The contact is interpreted as a parallel unconformity and the rusty weathering zone marking a hiatus.

Within the Dutch Creek Formation there is not a clearly defined stratigraphy, but four basic lithofacies (A to D) have been distinguished. Beds are usually between 2 to 20 centimetres thick and consist of fine grained quartzite and argillite in graded couplets. Sedimentary structures include fine herringbone ripple and channel cross-laminations. The Dutch Creek Formation has a marked lack of carbonate.

**Lithofacies A** - Finely interlaminated green and dark grey to black graded siltstone-argillite couplets. Beds 1 - 10 cm thick.

**Lithofacies B** - Drab green to grey silt to fine sand quartzite and grey green to black silty argillite interbeds 5 - 20 cm thick.

**Lithofacies C** - Grey black argillite and siltstone with buff dolomitic siltstones.

**Lithofacies D** - Dark grey limestone and limey siltstone interbedded with argillite beds 10 cm to 1 m thick.

There is a great variation in thickness of the Dutch Creek Formation from an estimated 1000 metres to less than 300 metres over a lateral distance of 5 kilometres. Although the observed contact with

the overlying Mount Nelson Formation is always paraconformable, the contact is very sharp and represents a major change in facies, hydrodynamic energy and sedimentary processes, and is therefore interpreted as an unconformity.

### **Mount Nelson Formation**

The Mount Nelson Formation has been subdivided into the:

- a) lower quartzite, a useful 50 to 150 metre thick marker horizon consisting of white, well-sorted, fine- to medium-grained pure quartz arenites,
- b) lower main dolomite - an approximately 400 metre thick sequence which conformably overlies and is gradational with the lower quartzite, comprised of cryptalgal to stromatolitic laminated, pale grey weathering dolomites with interbedded carbonaceous argillites capped by a cream-coloured stromatolitic, crystalline cherty-dolomite unit approximately 20 metres thick overlain in sharp contact by,
- c) the middle quartzite - an apple green coloured sequence consisting of massive, fine- to coarse-grained quartz arenites, impure sandstones and argillites having A-B to A-E Bouma sequences evident,
- d) orange dolomite sequence - approximately 180 metres thick consisting of varicoloured buff weathering dolomitic siltstones, argillites and impure sandstones underlying bright orange-buff weathering silty and sandy crystalline dolomites with abundant cryptalgal and stromatolitic laminations and intercalated chert.
- e) white markers conformably overlie the orange dolomite and are up to 70 metres thick. The white markers consist of cream, buff and silver-grey dolomites with purple, green and buff dolomitic mudstones and local interbeds of pure white magnesite up to 1 metre thick,
- f) purple sequence - gradationally overlies the white markers, consisting of purple weathering dolomitic sandstones and siltstones which grade upward into purple weathering argillite. Mudchip breccias and monomict pebble conglomerates are interbedded with siltstones and argillites and the sequence is overlain by a pebble to boulder conglomerate with a purple weathering sandy argillitic matrix in sharp contact with the purple shales. The pebble to boulder conglomerate is interpreted as the locus of an intraformational unconformity with a thickness between 2 and 10 metres thick,
- g) upper middle dolomite - approximately 80 metres thick and similar to the lower main dolomite. It is distinguished by abundant algal allochems which are typically replaced by black chert,
- h) upper quartzite - a distinctive cliff-forming unit consisting of white quartzites more than 260 metres thick (equivalent to the upper Mount Nelson Quartzite (Atkinson 1975)). The upper quartzite consists of well sorted medium- to coarse-grained, essentially pure arenites. They

are distinguished from the lower quartzite on the basis of massive bedding and poorly preserved sedimentary structures.

- i) upper dolomite - the uppermost unit in the Belt-Purcell exposed below the Windermere unconformity. The upper dolomite is gradational with the underlying quartzite over 10 metres consisting of interbedded purple argillite, quartzite and dolomite. The upper dolomite is comprised of pale to dark grey dolomite interbedded with quartz and dolomite pebble conglomerates with dolomitic quartz sands.

### **Windermere Supergroup**

The Windermere Supergroup varies in thickness in the Toby Creek area, from 80 metres to over 3 kilometres and is in sharp contact with the underlying Belt-Purcell Supergroup across an unconformity with considerable topography, interpreted as a result of a local basement high, the "Windermere High" (Reesor 1973). The Windermere Supergroup was deposited above this unconformity and consists of a basal conglomeratic unit, the Toby Formation, and the overlying argillite and pebble conglomerate dominated Horsethief Creek Formation.

#### **Toby Formation**

The Toby Formation is the basal unit of the Windermere Supergroup and overlies different levels of the Belt-Purcell stratigraphy in the separate fault panels, interpreted to indicate active faulting during sedimentation (Pope 1990). Four distinct facies have been identified in the Toby Creek area but their stratigraphic position relative to one another is uncertain due to rapid lateral facies changes.

The Toby Formation consists of:

- a) a basal boulder breccia lithofacies consisting of monomict clast-supported boulder breccias.
- b) a diamictite lithofacies - the most commonly developed facies consisting of rounded quartzite and subangular dolomite boulders (derived from the immediately underlying Mount Nelson Formation) in a sandy argillite matrix.
- c) a sparse clast diamictite lithofacies consisting of graded fine to coarse-grained, poorly sorted arenites and argillites with a minor component of rounded quartzite pebbles or cobbles.
- d) a siltstone-argillite lithofacies which comprises the bulk of, and is the dominant lithology in, the upper portion of the Toby Formation, consisting of well-sorted and graded fine quartz arenites and argillites which typically exhibit complete Bouma sequences.

The Toby volcanics are the oldest igneous rocks identified in the Toby Creek area and are believed to be altered submarine basalts related to regional Hadrynian extension. The flows are holocrystalline and glomeroporphyritic basaltic andesites, having plagioclase phenocrysts in a fine-grained plagioclase groundmass.

Green metadiabase dykes have also been identified and have been interpreted as the metamorphic equivalent to the Toby volcanics. They are the most common igneous rocks and are always intruded at a high angle to bedding. They are typically altered, consisting of anhedral masses of chlorite, anhedral to euhedral carbonate and sericite and skeletal opaques. Chlorite pseudomorphs after pyroxene and amphibole have been identified. Bulk mineralogical proportions indicate these dykes were most probably originally basaltic in composition and have been subsequently hydrated.

### **Horsethief Creek Group**

The Toby Formation is gradational into the overlying Horsethief Creek Formation, in which five lithofacies have been identified. These lithofacies define a rudimentary stratigraphy of facies within the Horsethief Creek Formation as individual lithological units are inconsistent due to rapid lateral thickness and facies variations.

The lithofacies identified in the Horsethief Creek Formation are as follows:

- a) siltstone-argillite - dominant in the lower half of the Horsethief Creek Formation and separate the remaining lithofacies throughout the formation. This lithofacies consists of thick sequences of thin bedded (1 to 10 cm), graded siltstone and argillite and finely laminated (1 to 5 mm), black, green and grey argillite.
- b) black carbonate - an easily traced marker used to identify and map the base of the Horsethief Creek Formation consisting of thin bedded (5 to 20 cm), dark grey to black limestone, with variable quartz sand and silt in a calcitic matrix, and thin calcareous quartz-arenite beds.
- c) dolomite - buff weathering dolomite, up to 30 metres thick, dolomite pebble-conglomerate beds and dolomite supported quartzite occur throughout the Horsethief Creek Formation.
- d) quartz feldspar arenites and pebble conglomerates - consist of pebble conglomerates comprised of grain-supported, moderately sorted crystalline quartz and quartz feldspar clasts with variable red jasper, green to grey argillite, quartzite and dolomite clasts in a quartz, feldspar, carbonate, sericite and chlorite matrix. Clasts are generally 1 to 2 centimetres in diameter but may exceed 10 centimetres in length. Coarse arenite beds are similar to the pebble conglomerates but have a greater proportion of matrix and are generally poorly sorted.
- e) red and varicoloured argillites - are present at the top of the Horsethief Creek Formation and consist of variably coloured argillites with interbedded pink carbonate, and varicoloured impure arenites.

## Mesozoic

### Granitic Intrusions

Cretaceous intrusives of broadly “granitic” composition are present in a belt extending from the westernmost Rocky Mountains to Kootenay Lake, northward to the Baldy Batholith. Intrusions range from small dykes and sills to larger intrusive complexes such as the Mt. Skelly Batholith and are collectively referred to as the Bayonne Magmatic Belt (or Suite).

“Intrusive rocks ... include a number of small post kinematic mesozonal quartz monzonite, monzonite and syenitic plutons, numerous small quartz monzonite to syenite dikes and sills probably related to these stocks, and late mafic dikes. The Kiakho and Reade Lake stocks, two of the larger of the mesozonal plutons, cut across and apparently seal two prominent east-trending faults that transect the eastern flank of the Purcell anticlinorium, and hence place constraints on the timing of latest movement on these faults.

The Kiakho stock is exposed on the heavily wooded slopes of Kiakho Creek approximately 10 kilometres (west-southwest) ... of Cranbrook ... Exposures consist mainly of large, fresh angular boulders of boulder fields. Although contacts with country rock were not observed, regional mapping indicates that it intrudes clastic rocks of the Aldridge and Creston formations. The distribution of outcrops and a pronounced aeromagnetic anomaly indicate that it cuts the east-trending Cranbrook normal fault with no apparent offset. ...

The Kiakho stock is similar to the Reade Lake stock with the dominant phase being a light grey, medium-grained quartz monzonite. It is generally equigranular but grades into a hypidiomorphic granular porphyritic phase with prominent plagioclase and light grey to flesh-coloured potassic feldspar phenocrysts; both are up to several centimetres in diameter in a granular groundmass of white subhedral plagioclase, light grey potassic feldspar, quartz and black hornblende” (Höy 1993).

The Bayonne Granitic Suite is a composite batholith comprised of a number of smaller Jurassic to Cretaceous age granitoid stocks and plutons which extends from near the International Boundary across Kootenay Lake. On the east side of the Kootenay Lake, the Bayonne Granitic Suite locally includes the Mount Skelly Pluton, a biotite (hornblende) monzogranite with megacrysts of potassium feldspar (Reesor 1996). Rice (1941) grouped these granitoids under the broad heading of the Bayonne Batholith, as described below.

“The Bayonne batholith varies in composition from a granite to a calcic granodiorite; the average composition is that of a fairly alkaline granodiorite. ... Much of the rock has an equigranular texture, but a porphyritic phase occurs in many places, at some of which phenocrysts of potash feldspar 2 or 3 inches long are present. The potash feldspar may be orthoclase or microcline and in some specimens both occur. The plagioclase is oligoclase, generally well twinned and frequently in zoned crystals. Dark brown biotite is the only ferromagnesian mineral abundant, but grains of hornblende

occur in rare instances. The usual accessories are present. Sericite and epidote are the commonest secondary minerals, but neither occur in significant amounts except where the rock has been altered.

A marked feature of the Bayonne batholith is its highly variable nature. This is observable not only in the range of composition but in the appearance of the rock. Coarse-grained and fine-grained, porphyritic and non-porphyritic, pink and light or dark grey phases may occur in a single exposure, in some places in streaks and patches. Masses of pegmatite and dykes of pegmatite and aplite occur everywhere. Some of the pegmatite dykes are over 100 feet wide. A few large crystals of blue-green beryl, pink garnet, magnetite, and a little black tourmaline were seen in these pegmatites.

Large inclusions of granitized sediments are locally abundant. ... These inclusions vary in size from a foot to some hundreds of feet. Alteration is severe, but the sedimentary nature of the original rock is, in most cases, still recognizable and the boundary between the granite and the inclusion is generally fairly sharp. Other inclusions or xenoliths (sic.) from a few inches to a foot long also occur, which can readily be distinguished from the first type mentioned. They parallel one another, are darker coloured, their original texture and composition has been more or less completely altered, they are fairly uniform in size, and they usually grade imperceptibly into the granite. They are more widely distributed, indeed very few exposures of any size were examined that did not contain some of these xenoliths (sic.), and in places they are extremely abundant. The xenoliths (sic.) are often most common in the porphyritic phases and scarcer in the non-porphyritic phases of the granite ...“.

### **Structure**

Four major phases of deformation have been identified in the Toby Creek area, Helikian-Devonian extension (D1), Jurassic-Paleocene contraction (D2-D3) and Eocene extension (D4).

The first phase of deformation resulted in unconformities at the base of the Dutch Creek and Mount Nelson Formations (D1a) and the unconformity at the base of the Windermere Supergroup (D1b). Thinning of Paleozoic strata onto the Windermere High is interpreted to reflect the effects of D1c deformation together with the development of small fault-bounded sub-basins.

Contraction during the Columbian (D2) and Laramide (D3) orogenies resulted in a series of northeast vergent thrust faults and the development of a regional foliation (S1). Three major thrust sheets are evident in the Toby Creek area with one, the Mount Nelson thrust sheet, comprised of four smaller fault panels. The three major thrust sheets represent out-of-sequence faults, having propagated toward the hinterland, carried in the hanging wall of the Purcell Thrust.

Contraction during D2 and D3 produced east-vergent imbricate thrust faults and west vergent backthrusts. Many of these faults were subsequently reactivated during the fourth phase (D4) of deformation. High angle brittle faults are also a result of D4.

## **LOCAL GEOLOGY**

### **Stratigraphy**

The SAWYER property is underlain by south striking, moderately steeply west dipping panel of overturned Late Proterozoic age strata (Fig. 4) correlated to the uppermost Purcell Supergroup and lower Windermere Supergroup on the western limb of the Purcell Anticlinorium (Fig. 3). Correlations interpret the strata as belonging to the Dutch Creek and Mount Nelson formations, overlain by the Horsethief Creek Group, overthrust onto a continuous panel extending from the Creston Formation to the Horsethief Creek Group (Massey et al. 2005). In detail, displacement along the fault separating the two panels diminishes to the north, dying out into the Dutch Creek Formation.

Given the presence of the large Fry Creek Batholith approximately 8 km to the northwest, the Sawyer Creek Stock (Logan 2002) may be a small related satellite intrusion of apophyse. Alternatively, it may be a small unrelated Cretaceous intrusion, having been intruded during a regional Mesozoic intrusive event.

No geological mapping was undertaken on the property during the 2005 field season. As such, the author is not in a position to address possible stratigraphic correlations. The field data (soil sample) have been plotted on the digital geology for the property (Fig.4 - Massey et al. 2005).

### **Structure**

The structure of the SAWYER area is dominated by its position on the western flank of the Purcell Anticlinorium, a north plunging fold of regional significance. The Purcell Anticlinorium is allochthonous with respect to North American cratonic basement, having been transported northeastward in the hanging wall of the Purcell Thrust. This major structure has been complicated slightly by a number of regional and local faults, discussed below with reference to the Kootenay Lake mapsheet of Reesor (1996). An early folding event has been proposed for early structures interpreted to have developed in the Late Proterozoic during the Goat River Orogeny (Höy 1993).

The prominent faults in the SAWYER area are interpreted to be predominantly the result of the Laramide orogeny, characterized by east-verging, west-dipping thrust faults. The major fault system of the area is the St. Mary / Hall Lake fault system, interpreted to be a long lived fault initiated in the Late Proterozoic as a growth fault and periodically active at least into the Laramide orogeny. Eastward directed movement across the St. Mary / Hall Lake fault resulted in steeply dipping strata on the western limb of the Purcell Anticlinorium being juxtaposed against relatively shallowly to moderately dipping strata closer to the hinge axis.

Significant dip displacement is indicated across the fault east of Sanca Creek where Proterozoic lower Creston strata has been juxtaposed against early Paleozoic Cambrian Eager Formation strata.



Later thrust faults are evident in the hanging wall of the St. Mary / Hall Lake fault. The Redding Creek fault is locally significant fault. It is a west dipping, east verging thrust fault that juxtaposes middle Creston strata against the lower member of the Coppery Creek group. A number of smaller, normal faults are indicated in the hanging wall of the Redding Creek Fault, all of which appear to have minor dip (and probably strike-slip) movement. All of the faults in the hanging wall of the St. Mary / Hall Lake fault are interpreted to be older than the Cretaceous Mount Skelly Pluton (Bayonne Magmatic Belt) as all are truncated at the contact of the pluton.

## 2007 PROGRAM

The 2007 program was intended to build upon the geochemical database initiated in 2006 for use in assessing the property. Additional soils (Fig. 5) were taken in an attempt to help constrain the surface location of a geophysical anomaly, identified previously on a UTEM survey and subsequently confirmed on an Aeroquest airborne geophysical survey completed in 2006 (Walker 2006). A total of four contour soil lines were sampled along both the St. Mary River and Sawyer Creek (Fig. 6). An additional four short traverses were completed on either side of Sawyer Creek to assess the effect of downslope creep and for comparative purposes to soil results along the road.

Soil sampling was completed between May 16<sup>th</sup> and July 20<sup>th</sup>, 2007. Samples were taken at a 50 m spacing, resulting in collection of 115 soil samples. Soil samples were all recovered from the “B” Horizon. Holes were dug by hand using a mattock to a depth generally between 10 and 25 cm below surface. Samples were placed in Kraft soil envelopes, air dried to eliminate excess water content and shipped to Acme Analytical Laboratories Ltd in Vancouver, BC for analysis using SS80 preparation and Group 1DX analysis. Copies of the analytical results are included in Appendix B.

## RESULTS

Comparative statistical analyses was performed on the 2006-07 composite geochemical database., comprising a total of 326 samples. Results for molybdenum, copper, lead and zinc have been tabulated below.

	<b>Mo</b>	<b>Cu</b>	<b>Pb</b>	<b>Zn</b>
<b>Mean</b>	3.272	26.616	31.282	119.33
<b>Std. Deviation</b>	5.926	17.849	27.468	97.051
<b>Minimum</b>	0.1	5.6	5.0	23
<b>Maximum</b>	63.7	135.1	242.8	1,061

## **Molybdenum**

Of the 351 analyses available, 326 returned values above the minimum detection limit for molybdenum. Analysis of the available database returned a mean value of 3.272, a median value of 1.60 and a standard deviation of 5.9256 and a range between 0.1 and 63.7 ppm.

Based on cumulative analytical results, 75% of the data falls below 3.2 ppm, representing background values. Weakly anomalous values are qualitatively interpreted to be those between 75% (3.28 ppm) and 90% (6.7 ppm). Moderately anomalous values are qualitatively interpreted to be those between 90 % (6.7 ppm) and 95% (10.5 ppm) with highly anomalous values those in excess of 10.5 ppm

**(Note:** Bismuth, tungsten and tin were also elevated above background levels over the property but were not plotted).

Moderately to highly anomalous molybdenum values were documented both within and surrounding the Sawyer Stock. Values to 41.3 ppm were documented along the short contour line completed within the intrusion.

Values to 13.1 ppm were documented within a creek drainage immediately south of the intrusion. Molybdenum results within the drainage are spatially restricted to immediately adjacent to the contact.

Multiple anomalous values to 23.1 ppm were documented immediately north of the northern contact and the St. Mary River. Both the road samples and the contour line above it returned anomalous values, although restricted to that portion of the lines northeast of the contact.

Additional anomalous values to 63.7 ppm were documented from the samples immediately east of the intrusion. However, anomalous values do not extend much farther east beyond the road.

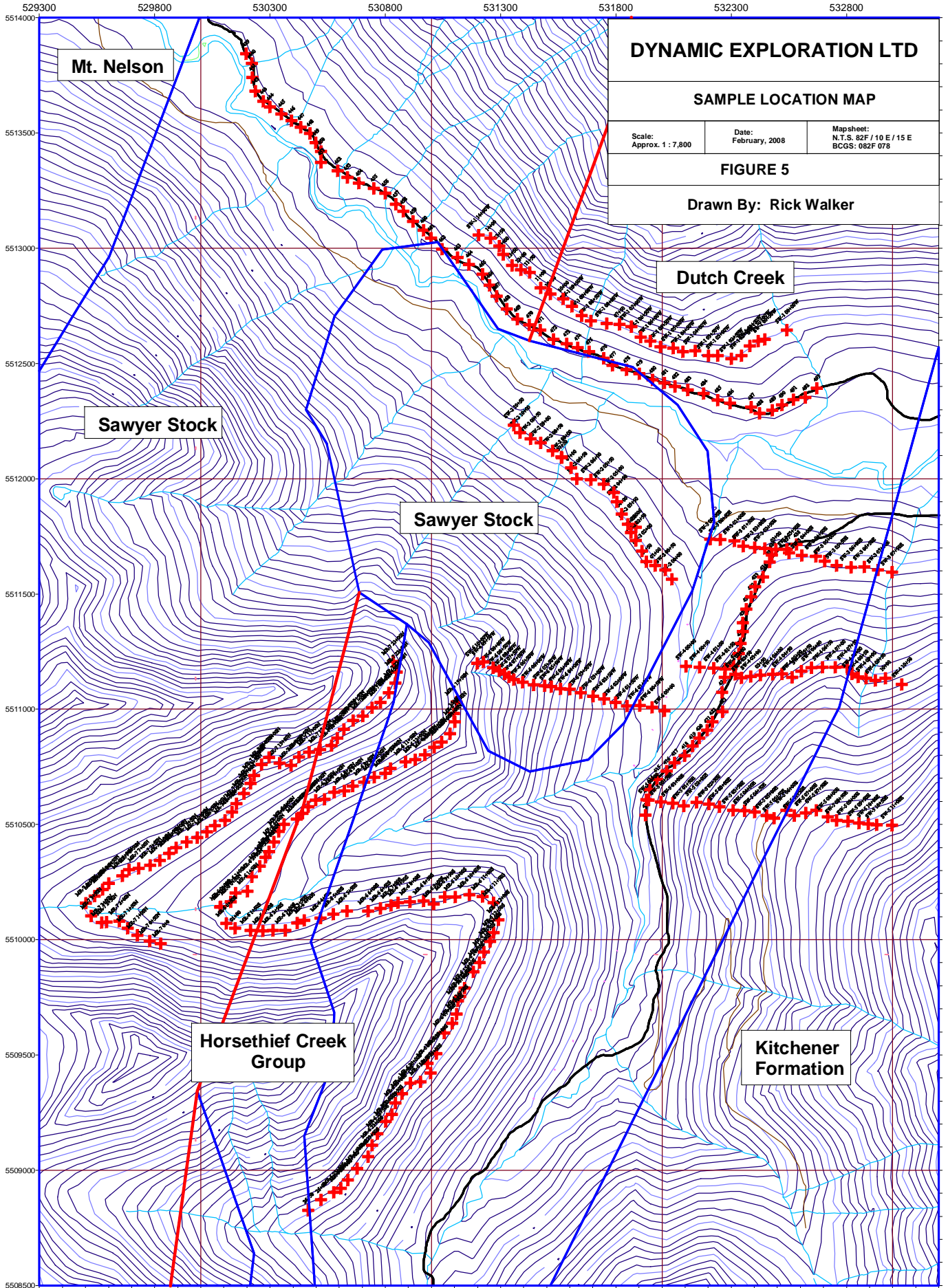
## **Copper**

Of the 351 analyses available, 326 returned values above the minimum detection limit for copper. Analysis of the available database returned a mean value of 26.616, a median value of 22.40 and a standard deviation of 17.849 and a range between 5.6 and 135.1 ppm.

Based on cumulative analytical results, 75% of the data falls below 30.8 ppm, representing background values. Weakly anomalous values are qualitatively interpreted to be those between 75% (30.8 ppm) and 90% (44.8 ppm). Moderately anomalous values are qualitatively interpreted to be those between 90 % (44.8 ppm) and 95% (60.8 ppm) with highly anomalous values those in excess of 60.8 ppm.

A large number of weakly anomalous copper values was documented surrounding the Sawyer Stock,

# SAWYER Property



with a minor number within the mapped boundaries of the intrusion. Moderately anomalous values were documented along a creek drainage at the southern contact of the intrusion, with a second anomalous area along the northern contact, both spatially associated with a fault and/or the uppermost Purcell Supergroup stratigraphy (Toby Formation).

### **Lead**

Of the 351 analyses available, 326 returned values above the minimum detection limit for molybdenum. Analysis of the available database returned a mean value of 31.282, a median value of 23.40 and a standard deviation of 27.468 and a range between 5.0 and 242.8 ppm.

Based on cumulative analytical results, 75% of the data falls below 33.3 ppm, representing background values. Weakly anomalous values are qualitatively interpreted to be those between 75% (33.3 ppm) and 90% (58.6 ppm). Moderately anomalous values are qualitatively interpreted to be those between 90 % (58.6 ppm) and 95% (77.6 ppm) with highly anomalous values those in excess of 77.6 ppm

A plot of lead values (Fig. 8) documents a large number of moderately to highly anomalous values over the soil lines completed, predominantly surrounding, but also within, the Sawyer Stock..

Relatively abundant moderately to highly abundant lead values to 106.4 ppm were documented on both sides of the creek drainage, predominantly at lower elevations and at the western end.

A second moderately to highly anomalous area is evident along the northern contact of the Sawyer Stock, immediately north of the St. Mary River. Anomalous values to 106.4 ppm were documented on the contour line, with slightly lower values documented along the road. Moderately anomalous values were documented along the contour lines to both the east and west.

### **Zinc**

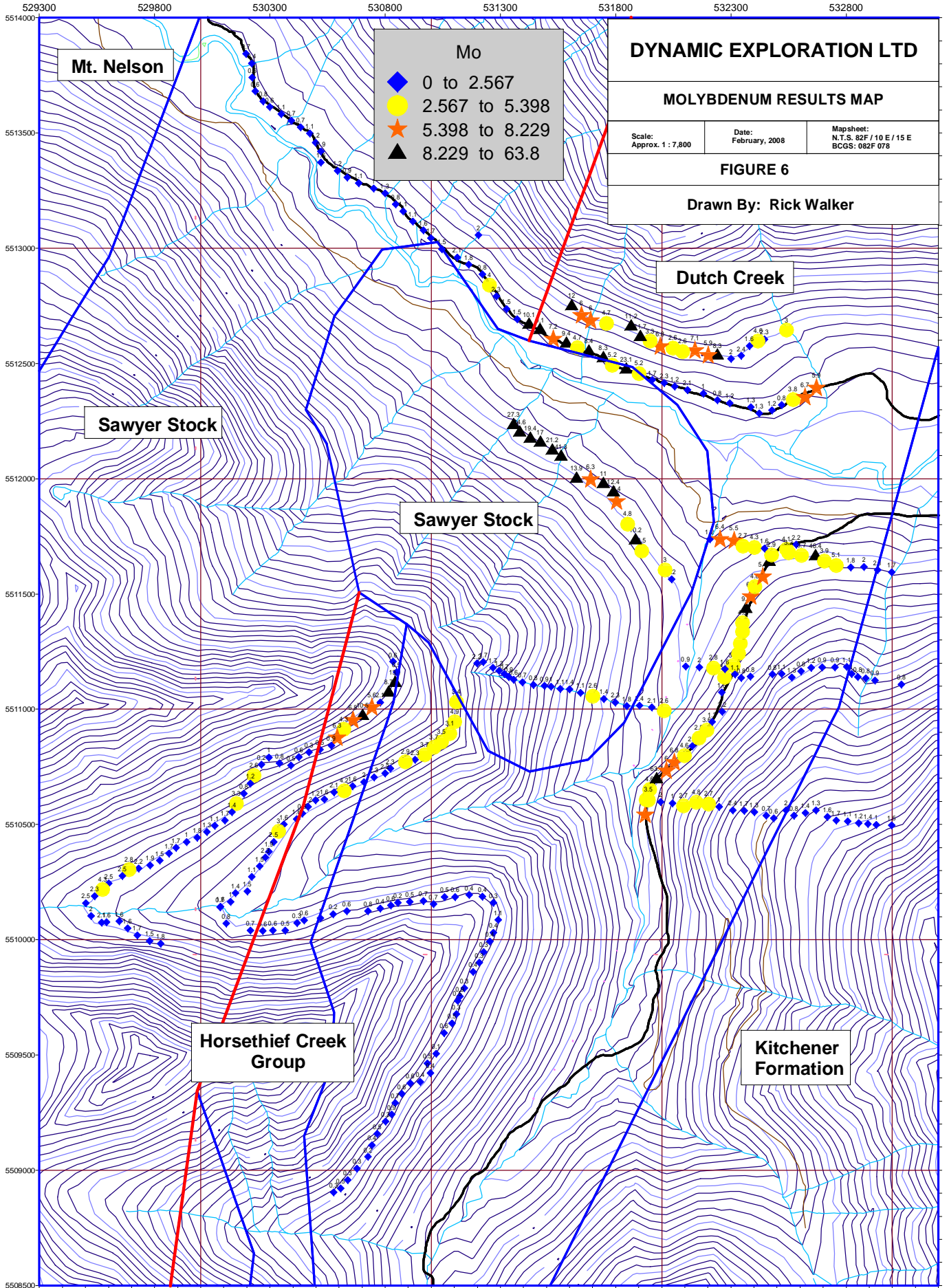
Of the 351 analyses available, 326 returned values above the minimum detection limit for molybdenum. Analysis of the available database returned a mean value of 119.33, a median value of 93.50 and a standard deviation of 97.051 and a range between 23 and 1,061 ppm.

Based on cumulative analytical results, 75% of the data falls below 135 ppm, representing background values. Weakly anomalous values are qualitatively interpreted to be those between 75% (135 ppm) and 90% (219 ppm). Moderately anomalous values are qualitatively interpreted to be those between 90 % (219 ppm) and 95% (274 ppm) with highly anomalous values those in excess of 274 ppm

A plot of zinc results (Fig. 9) again documents a number of anomalous areas comprised of sequential samples. The majority of the moderately to highly anomalous samples lie outside of the Sawyer Stock contact and are probably indicative of re-mobilization associated with local convection of



SAWYER Property



**DYNAMIC EXPLORATION LTD**

**MOLYBDENUM RESULTS MAP**

Scale:  
Approx. 1 : 7,800

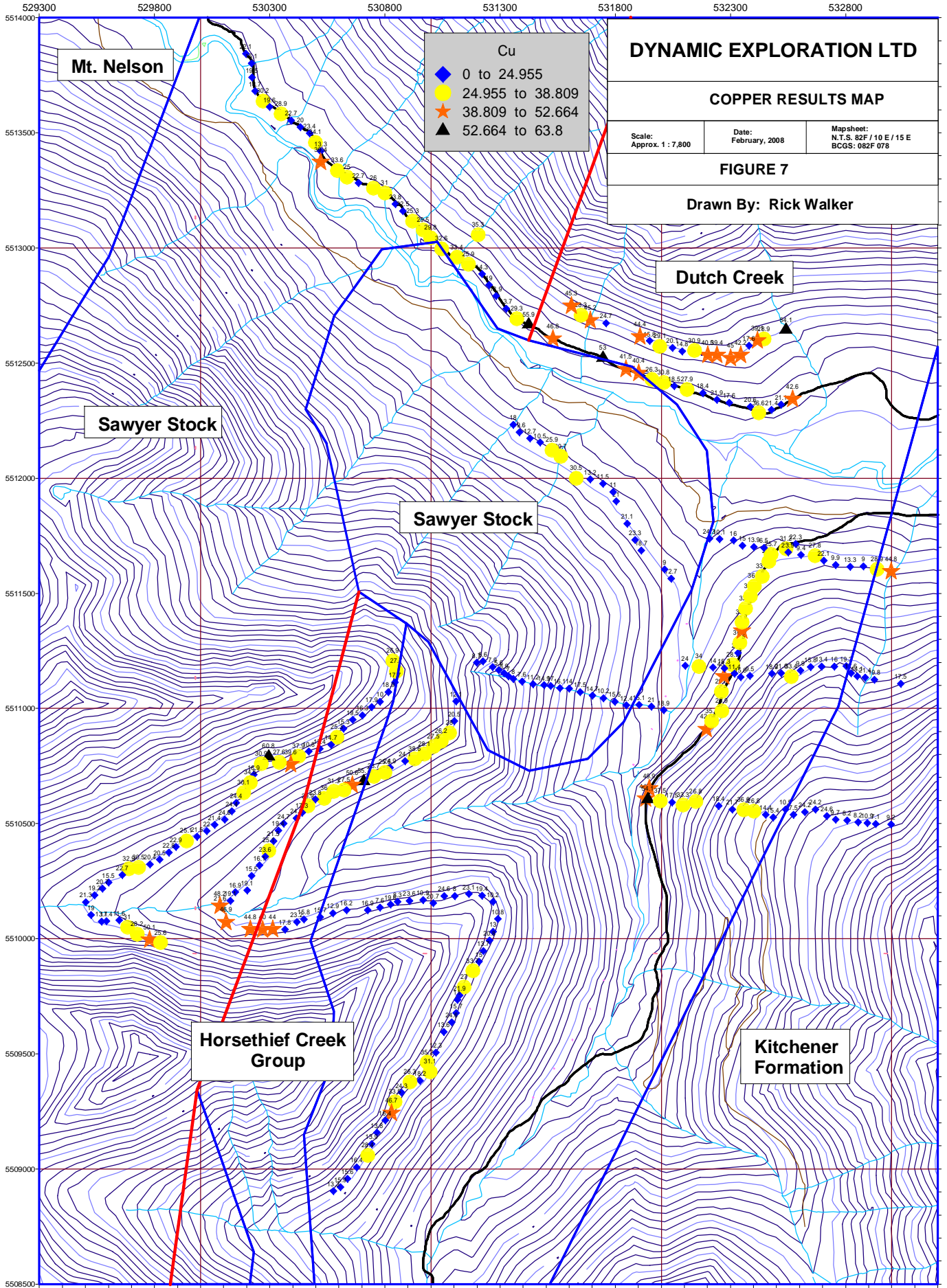
Date:  
February, 2008

Mapsheet:  
N.T.S. 82F / 10 E / 15 E  
BCGS: 082F 078

**FIGURE 6**

Drawn By: Rick Walker

# SAWYER Property



Mt. Nelson

**Cu**

- ◆ 0 to 24.955
- 24.955 to 38.809
- ★ 38.809 to 52.664
- ▲ 52.664 to 63.8

**DYNAMIC EXPLORATION LTD**

**COPPER RESULTS MAP**

Scale:  
Approx. 1:7,800

Date:  
February, 2008

Mapsheet:  
N.T.S. 82F/10 E/15 E  
BCGS: 082F 078

**FIGURE 7**

**Drawn By: Rick Walker**

Dutch Creek

Sawyer Stock

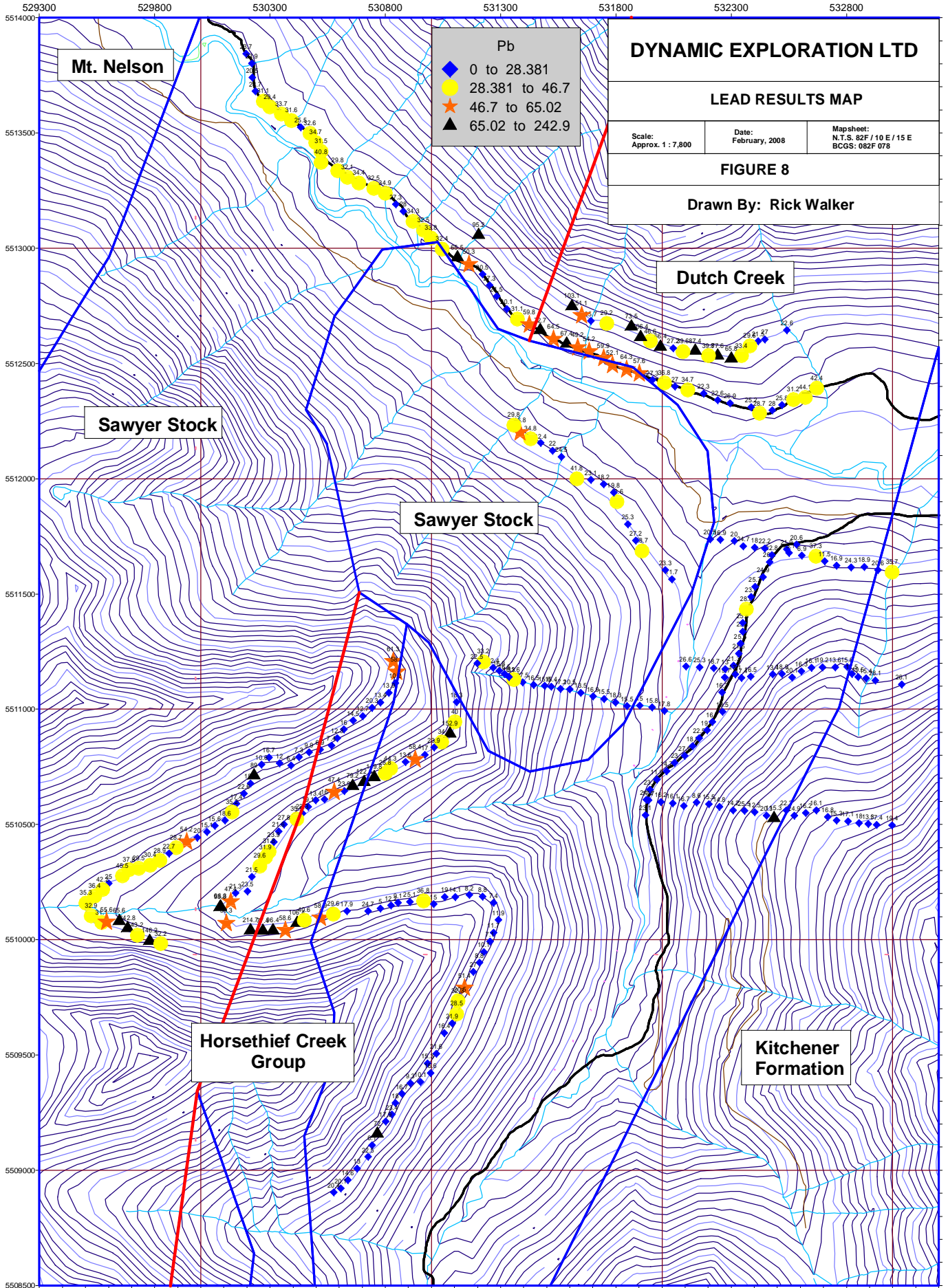
Sawyer Stock

Horsethief Creek  
Group

Kitchener  
Formation



# SAWYER Property



Mt. Nelson

Sawyer Stock

Sawyer Stock

Horsethief Creek Group

Kitchener Formation

Dutch Creek

Pb

- 0 to 28.381
- 28.381 to 46.7
- 46.7 to 65.02
- 65.02 to 242.9

**DYNAMIC EXPLORATION LTD**

**LEAD RESULTS MAP**

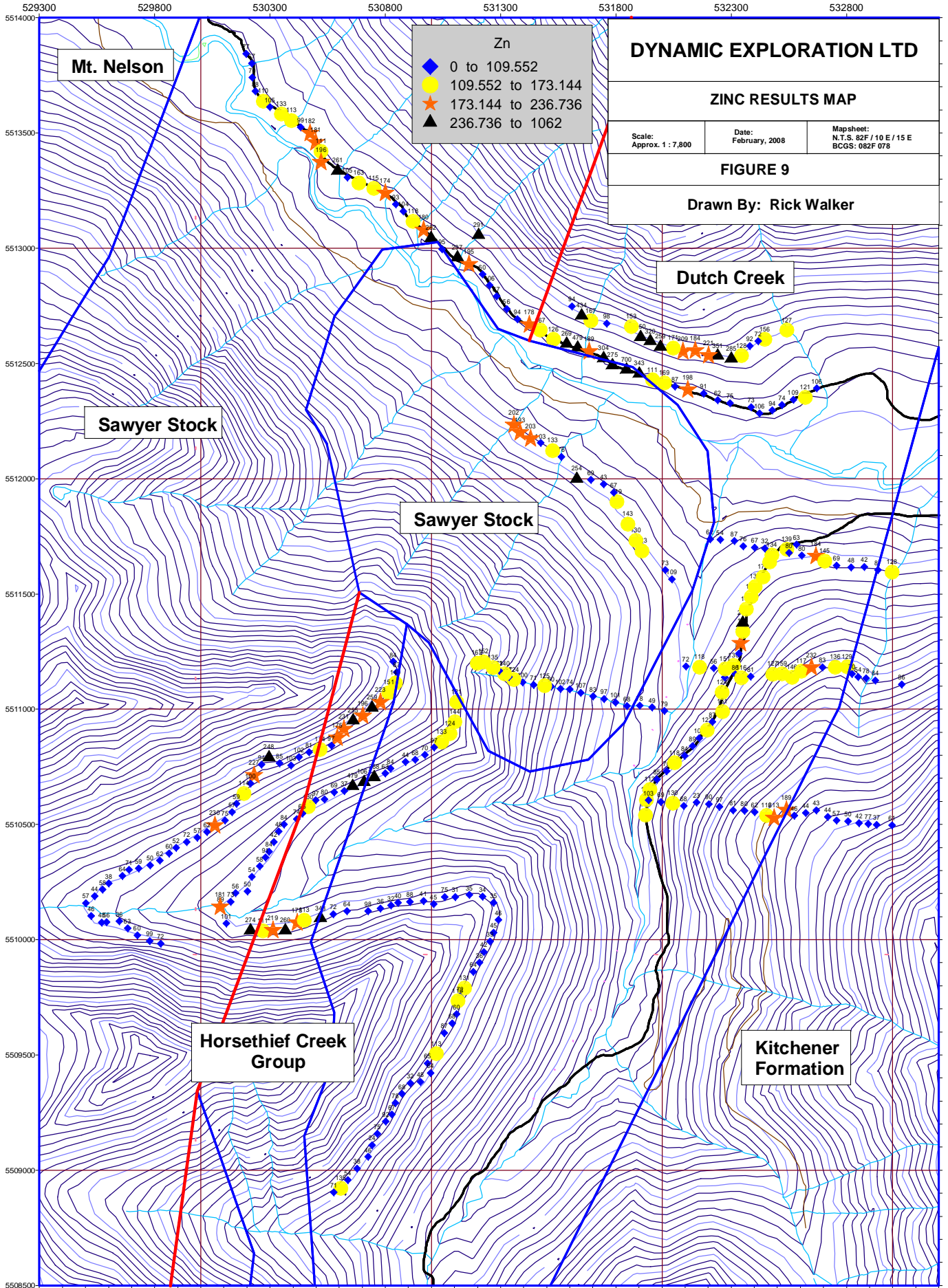
Scale: Approx. 1:7,800	Date: February, 2008	Mapsheet: N.T.S. 82F/10 E/15 E BCGS: 082F 078
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**FIGURE 8**

Drawn By: Rick Walker



# SAWYER Property



hydrothermal fluids..

A sequential series of soil anomalies is evident along the southern contact of the Sawyer Stock. Moderately to highly anomalous zinc values to a maximum of 1,061 were documented in soil samples taken along a pair of contour soil samples extending around the creek drainage. A single line was completed on the south side due to the steep topography, yet documented several highly anomalous values.

A second moderately to highly anomalous area occurs immediately north of the mapped contact of the Sawyer Stock and the St. Mary River. Moderately to highly anomalous zinc values to 700 ppm were documented from soils taken along the road, with values to 434 ppm documented along the contour line above. A large number of moderately anomalous values were documented around and, to a limited degree within, the Sawyer Stock.

## **DISCUSSION**

Previous work (Bapty and McLachlan 1996, Bapty and Walker 1994) documented base metal mineralization spatially associated with a fault mapped on either side of the Sawyer Stock and the regionally reactive uppermost Purcell Supergroup. This association is evident along the southern contact of the Sawyer Stock.

On the basis of mapping by Reesor (1996), the Toby Formation is present in the footwall of the Redding Creek Fault south of the Sawyer Stock and has been cut-out along trend to the north (i.e. north of the Sawyer Stock). Previous mapping on the Sawyer property (Bapty and Walker 1994) located evidence of massive galena + sphalerite mineralization on a ridge top traverse and descent through north facing cliffs on the south side of a small tributary into Sawyer Creek. In a subsequent program, Bapty and MacLachlan (1996) described a pod and/or lens of massive galena, sphalerite and tetrahedrite in one of the chutes within the cliffs. The pod described by Bapty and MacLachlan (1996) is probably the source of mineralization described in 1994.

Geochemical evidence for mineralization north of the Sawyer Stock, located in the footwall of the Redding Creek Fault, suggests additional pods, or perhaps larger bodies of galena + sphalerite + tetrahedrite mineralization may be present. The mineralization was described in 1996 as being "... a small limestone-replacement deposit with a sedimentary-exhalative origin". The author believes a replacement (manto) style deposit is possible, given the presence of carbonate-bearing intervals (limestone and dolomite) in the Mount Nelson and Dutch Creek formations. Intrusion of the Sawyer Stock along the Redding Creek Fault, given that Reesor (1996) does not extend the fault trace through the stock (indicating the intrusion post dates the fault), would provide a proximal heat source, both to dissolve carbonate-bearing intervals and provide possible metalliferous fluids to precipitate within the resulting void space along, and adjacent to, the Redding Creek Fault.

An Aeroquest survey was flown in order to provide data for initial evaluation of the property (Walker 2006). Previous work undertaken by Jasper Mining Corporation has been limited to soil sampling and an airborne geophysical survey.

In 2006, the author stated, “Ideally, surface soil anomalies would correspond to sub-surface anomalies identified from the airborne survey.

“In particular, a series of prominent anomalies are evident along the northern boundary of the Sawyer Stock, where the Cretaceous intrusive lithologies are in contact with host sedimentary strata of the upper Purcell and lower Windermere Supergroups” (Walker 2006). Geochemical data from the 2007 program do, indeed, document a number of anomalies coincident with the northern contact between the Sawyer Stock and the host metasediments. Moderately to highly anomalous molybdenum was documented within the northern portion of the intrusion and along the northern to northeastern intrusive contact. In addition, moderately to highly anomalous lead and zinc, as well as subordinate copper, were also documented along the northeastern contact. Data collected to date are not sufficient to determine if geochemical trends are evident which might correspond to sub-surface geophysical anomalies. However, the presence of anomalous geochemical results may be sufficiently supportive to allow an aggressive drill program to test the geophysical conductors.

In addition, anomalous lead and zinc values documented within the drainage immediately south of the Sawyer Stock are spatially coincident with a pair of EM conductors documented by both UTEM (ground based horizontal loop) and Aeroquest airborne geophysical surveys.

“The Electromagnetic data document a number of small EM anomalies on both Z- and X-axis data, although the Z-axis data appears to document several larger anomalies on the south side of the tributary, south of the magnetic anomalies and the interpreted location of the intrusive phases. Of particular interest is the correlation of coincident Z- and X-axis EM anomalies with a UTEM anomaly identified by previous operators in 1997. A ground based UTEM survey identified “... two conductors or conductive zones striking across the small survey grid. The westerly (weak) conductor ... appears to be dipping shallowly to the east ... and has a depth extent of approximately 200 m.

The second conductor ... shallow to the east and appears to have a conductance more than 50 siemens and a depth extent of at least 500 m” (Walker 2006).

In addition, previous, rather limited, exploration programs resulted in identification of lead-zinc mineralization, from which small hand samples returned grades up to 9.06% lead, 19.87% zinc and 10.05 oz/ton silver. Float “... samples from scree indicate the mineralized horizon is broadly segregated into a lead rich band, combined lead and zinc, and a zinc rich band. The sulphides are contained within well defined bedding planes, with evidence of minor remobilization”.

On the basis of three separate surveys (geochemical, UTEM and Aeroquest EM), as well as high grade grab samples interpreted to be sourced in the cliffs to the south and on trend, this pair of anomalies is strongly recommended as a drill target for subsequent testing.

## CONCLUSIONS

Several vein-type mineralized occurrences have been identified and/or documented within, or in the immediate vicinity of, the Sawyer property. These may be polymetallic veins, having low tonnage - high grade potential. Alternatively, they may be veins consistent with an Intrusion-Related Gold model and part of a high tonnage - low grade system with local high grade to bonanza grade gold veins. The preliminary deposit type under consideration in this program is that of a low tonnage, high grade vein type deposit. The narrow sheeted veins characterizing this type of mineralization are not expected to respond to the types of exploratory surveys undertaken to date.

The results of both the geochemical and Aeroquest surveys in the drainage south of the intrusive contact with the Sawyer Stock are very interesting, particularly with respect to the previous small UTEM survey results. In addition, previous, rather limited, exploration programs resulted in identification of lead-zinc mineralization, from which small hand samples returned grades up to 9.06% lead, 19.87% zinc and 10.05 oz/ton silver. Float "... samples from scree indicate the mineralized horizon is broadly segregated into a lead rich band, combined lead and zinc, and a zinc rich band. The sulphides are contained within well defined bedding planes, with evidence of minor remobilization" (Bapty and McLachlan 1996).

In addition, EM conductors identified from the Aeroquest airborne survey (Walker 2006) are spatially associated with moderately to highly anomalous base metal (molybdenum, copper, lead and zinc) mineralization at the northern contact of the intrusion. Further work is strongly recommended along the northern contact.

Finally, anomalous molybdenum values were documented immediately surrounding the Sawyer Stock, probably associated with the thermal aureole in the metasediments. In addition, a short contour soil line within the intrusion returned anomalous molybdenum, suggesting potential within the igneous and immediately surrounding metasediments. Molybdenum potential is, however, interpreted to be limited due to the level of erosion into the Sawyer Stock. Optimum potential is interpreted to have been present in the uppermost levels of the intrusion and immediately **overlying** measediments.

Further evaluation of the Sawyer property is strongly recommended.

## RECOMMENDATIONS

1. Compilation of results from previous programs should be undertaken to build an initial database of with which to continue evaluation of the property;
2. Continue the soil sampling program. Additional sampling should include acquisition of additional contour samples throughout the intrusion and adjacent metasediments;
3. Additional soil samples should be taken to better delineate potential mineralization in two areas, specifically, a) the footwall of the Redding Creek Fault, particularly north of the Sawyer Stock and b) along the thermally aureole associated with the intrusive contact along the east and southeast portion of the Sawyer Stock;
- 4) Geological mapping should be undertaken to:
  - a) identify and/or re-establish known mineralized horizons,
  - b) identify and/or confirm the stratigraphy present on the property,
  - c) provide better structural control for the property, specifically whether the Redding Creek Fault pre- or post-dates the Sawyer Creek Stock, and
  - d) obtain rock and/or chip samples of mineralized horizons identified on the property;
5. Undertake diamond drilling to test EM conductors and geochemical anomalies in the creek drainage south of the Sawyer Stock; and
6. Consider aggressive drill testing of the EM conductors and spatially associated geochemical anomalies north to northeast of the Sawyer Stock.

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## **Appendix A**

### Statement of Qualifications



## STATEMENT OF QUALIFICATIONS

I, Richard T. Walker, of 2601 - 42<sup>nd</sup> Avenue South, Cranbrook, B.C., hereby certify that:

- 1) I am a graduate of the University of Calgary of Calgary, Alberta, having obtained a Bachelors of Science in 1986,
- 2) I obtained a Masters of Geology at the University of Calgary of Calgary, Alberta in 1989;
- 3) I am a member in good standing with the Association of Professional Engineers and Geoscientists of the Province of British Columbia;
- 4) I am the Vice President of Exploration for Jasper Mining Corporation, with offices at 1020, 833 - 4<sup>th</sup> Ave South, Calgary, Alberta;
- 5) I am the author of this report which is based on a soil sampling program completed between May 16<sup>th</sup> and July 20<sup>th</sup>, 2007;
- 6) I have a direct interest in Jasper Mining Corporation; and
- 7) I hereby grant my permission to Jasper Mining Corporation to use this report, or any portion of it, for any legal purposes normal to the business of the firm, provided the excerpts used do not materially deviate from the intent of this report as set out in the whole.

Dated at Cranbrook, British Columbia this 22<sup>nd</sup> day of February, 2008.



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Richard T. Walker, P.Ge

**APPENDIX B**

**SOIL SAMPLE RESULTS**

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT  
 To Jasper Mining Corporation PROJECT SAWYER  
 Acme file # A706439 Page 1 Received: AUG 22 2007 \* 123 samples in this disk file.  
 Analysis: GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.

ELEMENT SAMPLES	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe ppm	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Te ppm	Sn ppm	Zr ppm
G-1	0.6	2.6	2.7	43	<.1	7.2	4.4	531	1.77	<.5	2.6	0.9	4.6	48	<.1	<.1	0.1	35	0.39	0.086	7	76	0.61	205	0.116	4	0.91	0.06	0.49	0.1	<.01	2.3	0.4	<.05	4	<.5	<.1	<.1	1.2
SW-1 14+50W	2	35.3	95.2	291	0.2	20.6	16.5	1895	2.87	11.1	2.6	1.3	4	63	3.7	0.86	0.089	30	0.13	0.086	11	23	0.62	72	0.101	1	1.74	0.01	0.35	0.4	0.02	2.4	0.5	0.09	6	<.5	<.1	1	6.9
SW-1 09+50W	12	45.3	103.1	94	0.2	11.6	4.4	144	5.17	16.6	1.6	1.9	7.7	18	0.1	0.2	1.3	30	0.07	0.062	11	23	0.62	72	0.101	1	1.74	0.01	0.35	0.4	0.02	2.4	0.5	0.09	6	<.5	<.1	1	6.9
SW-1 09+00W	6	28.3	51.1	434	0.2	27	20.3	1248	3.62	13.3	2.5	2.9	5.6	20	1.4	0.3	0.8	31	0.13	0.17	15	17	0.37	179	0.135	3	2.84	0.012	0.21	0.3	0.03	2.9	0.4	<.05	8	<.5	<.1	1	13.3
SW-1 08+50W	6	45.2	25.7	167	0.1	34.3	20	347	4.9	10.7	2.2	<.5	8.6	13	0.3	0.3	1	26	0.1	0.059	19	21	0.59	67	0.091	1	2.04	0.008	0.25	0.2	0.01	2.4	0.4	<.05	6	<.5	<.1	1	1.9
SW-1 08+00W	4.7	24.7	29.2	98	0.1	18	6.5	484	2.08	6.4	1.2	0.9	4.7	15	0.3	0.3	0.6	16	0.11	0.05	11	10	0.27	78	0.062	1	1.35	0.005	0.2	0.4	0.01	1.4	0.3	<.05	4	<.5	<.1	1	1
SW-1 07+00W	11.2	68.9	73.5	153	0.3	16.7	9	296	7.66	27.1	1.3	3.3	3.6	10	0.2	0.5	1.1	50	0.04	0.101	6	33	0.56	86	0.198	1	2.28	0.01	0.42	0.4	0.03	5.3	0.8	0.1	10	<.5	<.1	2	8.8
SW-1 06+50W	11.7	44.4	106.4	450	0.2	31.5	15.2	437	4.18	23.4	1.5	1.2	7.5	16	0.4	0.4	2.1	31	0.06	0.138	16	17	0.42	218	0.098	1	2.22	0.009	0.16	0.7	0.02	2.1	0.3	<.05	8	<.5	<.1	1	5.1
SW-1 06+00W	3.3	15.3	44.5	315	<.1	19.6	11.3	739	1.93	11.5	0.9	16.5	4.4	19	0.5	0.3	3.7	20	0.08	0.034	15	9	0.33	175	0.079	1	1.37	0.006	0.15	0.7	0.01	1.6	0.3	<.05	5	<.5	<.1	1	0.9
RE SW-1 06+00W	3.3	15.8	46.6	320	<.1	19.7	11.3	760	1.96	11.8	0.9	1.3	4.6	19	0.5	0.3	3.6	22	0.08	0.035	15	9	0.34	181	0.081	1	1.37	0.006	0.15	0.7	0.01	1.6	0.3	<.05	5	<.5	<.1	1	0.9
SW-1 05+50W	6.8	29.1	66.4	259	0.2	17.5	9.3	936	3.6	14.3	1	2.8	5.8	29	0.4	0.4	1.6	30	0.11	0.099	11	15	0.39	166	0.111	2	2.04	0.008	0.22	0.5	0.02	2.1	0.4	<.05	8	<.5	<.1	1	6.1
SW-1 05+00W	2.6	20.1	27.2	171	0.2	19.8	9.6	369	1.95	5.2	1.4	1.3	6.5	12	0.3	0.3	1.4	19	0.06	0.059	15	9	0.28	120	0.073	1	1.71	0.007	0.13	0.6	0.02	1.7	0.2	<.05	5	<.5	<.1	1	4.8
SW-1 04+50W	2.6	14.8	39.6	209	0.1	22.5	12.6	706	2.33	9.4	0.8	1	4.9	14	0.2	0.4	1.7	23	0.06	0.116	13	11	0.29	127	0.082	1	1.63	0.009	0.12	0.4	0.02	1.5	0.3	<.05	7	<.5	<.1	1	2.9
SW-1 04+00W	7.1	30.9	87.4	284	0.2	23.4	12.3	658	3.15	14	1.7	3	6.2	20	0.3	0.6	1.4	29	0.11	0.066	12	14	0.28	138	0.095	1	2.25	0.008	0.14	0.4	0.02	2.2	0.3	<.05	8	<.5	<.1	1	9.4
SW-1 03+50W	5.9	40.5	39.8	221	0.1	34.5	14.4	579	2.95	8.1	1.6	1	7.7	10	0.2	0.3	2.4	24	0.07	0.052	18	15	0.4	98	0.078	1	2.21	0.006	0.16	1.1	0.02	1.9	0.3	<.05	6	<.5	<.1	1	2.1
SW-1 03+00W	8.3	39.4	77.6	351	0.6	47.1	27.9	580	2.94	9.1	3.5	2.6	8.5	9	0.4	0.5	2.8	28	0.07	0.065	15	14	0.34	116	0.08	1	2.62	0.009	0.14	0.7	0.06	2.2	0.4	<.05	8	<.5	<.1	1	7.4
SW-1 02+50W	2	45	65.8	285	0.1	48.5	24.9	615	3.16	7.6	4.1	4.6	10.4	9	0.4	0.8	1	35	0.06	0.084	20	16	0.41	102	0.146	2	3.66	0.011	0.15	0.5	0.03	4	0.4	<.05	10	<.5	<.1	1	33
SW-1 02+00W	2.4	42.2	33.4	128	0.2	30.9	50	984	2.9	6.3	3.9	2.5	8.3	8	0.2	0.4	1.1	28	0.06	0.139	27	14	0.34	114	0.111	1	2.64	0.01	0.14	0.5	0.05	2.9	0.4	<.05	8	0.5	<.1	1	8.8
SW-1 01+50W	1.6	17.6	29.6	92	<.1	16.1	8.9	511	2.07	6.7	1	1.6	5.7	6	0.2	0.4	0.7	20	0.04	0.038	14	9	0.23	85	0.057	1	1.49	0.006	0.1	0.5	0.03	1.4	0.2	<.05	5	<.5	<.1	1	5.4
SW-1 01+00W	4.6	39.1	21.5	72	0.2	11.1	6	409	4.51	8.3	1.4	1.4	8.9	10	0.1	0.3	1.1	23	0.06	0.088	16	16	0.41	81	0.069	1	1.68	0.008	0.16	0.3	0.03	1.8	0.3	<.05	6	<.5	<.1	1	8.6
SW-1 00+50W	2.3	28.9	27	156	0.3	15.5	11.4	716	4.07	8.5	1.2	1.7	7.2	32	0.5	0.3	1.6	23	0.19	0.187	15	14	0.34	170	0.073	1	1.65	0.01	0.14	0.3	0.03	1.6	0.2	0.06	6	<.5	<.1	1	2.6
SW-1 00+00W	3	54.1	22.6	127	0.3	19.3	26.7	1669	3.37	7.7	2.5	1.5	1.1	39	1	0.6	1.5	17	0.5	0.148	24	11	0.33	173	0.021	4	1.08	0.008	0.15	0.2	0.05	4.0	0.6	<.1	<.1	0.3			
SW-2 00+00	1.2	12.7	11.7	109	0.1	13.8	10.3	266	2.55	3.3	1.2	1.2	8.3	8	0.3	0.6	1	19	0.07	0.045	19	14	0.6	133	0.055	<.1	2.07	0.004	0.11	1.3	0.04	1.9	0.2	<.05	5	<.5	<.1	1	1.9
SW-2 00+50	3	9	23.3	73	0.1	6	4.3	917	1.82	4.6	0.8	2.8	4	15	0.3	0.7	0.8	27	0.05	0.108	9	8	0.16	122	0.095	1	2.12	0.011	0.06	0.8	0.06	1.6	0.2	<.05	9	<.5	<.1	1	13.4
SW-2 02+00	4.5	18.7	28.7	123	0.2	16.2	10.6	899	2.73	5.1	14.1	<.5	5	58	0.5	0.4	2.6	33	0.31	0.047	39	18	0.79	365	0.097	1	2.65	0.01	0.23	5.5	0.04	2.7	0.3	<.05	9	<.5	<.1	1	1.5
SW-2 02+50	10.2	23.3	27.2	130	0.2	22.3	12.2	667	3.35	5.8	18.2	0.8	12.1	35	0.2	0.3	3.9	37	0.15	0.063	41	20	0.88	415	0.112	1	3.69	0.013	0.3	7.5	0.04	3.4	0.4	<.05	10	<.5	<.1	2	3.2
SW-2 03+50	4.8	21.1	25.3	143	0.4	16.1	10.9	1267	4.92	4.4	15.1	<.5	5.6	57	0.8	0.4	4.6	32	0.34	0.047	31	18	0.76	385	0.117	1	2.81	0.012	0.26	18.1	0.05	2.6	0.4	<.05	9	<.5	<.1	1	2
SW-2 04+50	7.4	21	40.6	119	0.2	16.2	9.1	1051	2.41	4.8	25.6	<.5	5.3	75	1.1	0.5	3.4	26	0.37	0.079	45	14	0.6	276	0.098	1	2.43	0.012	0.21	17.9	0.04	2.5	0.3	<.05	7	0.5	<.1	1	2.4
SW-2 05+00	12.4	11	19.8	67	<.1	9	4.1	135	1.76	3.8	1.6	<.5	3.7	27	0.3	0.3	3	25	0.08	0.042	12	9	0.27	128	0.077	1	1.08	0.006	0.1	7	0.01	1.2	0.2	<.05	7	<.5	<.1	1	0.8
SW-2 05+50	11	11.5	18.2	43	0.1	8.5	4.2	111	1.47	3.4	10.8	0.7	4.5	71	0.3	0.4	1.4	15	0.19	0.052	39	9	0.25	189	0.049	1	1.39	0.006	0.11	3	0.1	1.6	0.1	0.08	5	<.5	<.1	1	2.5
SW-2 06+00	6.3	13.2	23.1	69	0.2	11.4	7.4	282	2.02	4.9	6.7	0.8	3.5	22	0.4	0.5	2.6	21	0.08	0.035	54	12	0.39	172	0.065	1	1.84	0.007	0.15	3.7	0.05	1.7	0.2	<.05	7	<.5	<.1	1	0.9
SW-2 06+50	13.9	30.5	41.8	254	0.5	16.2	10.5	1423	2.75	6	7.9	0.6																											

SW-5 06+50E	0.8	7.5	24.9	46	0.2	8.4	4.6	986	1.73	4.2	0.7	<.5	3.6	5	0.4	0.6	0.6	34	0.12	0.051	12	25	1.52	81	0.122	1	1.7	0.008	0.07	0.2	0.04	1.9	0.2	<.05	9	<.5	<.1	1	1.6
SW-5 07+00E	1.4	24.2	16.2	44	0.2	13.3	7.5	274	2.93	3.2	1.4	2.1	6.7	4	0.1	0.2	1.5	46	0.03	0.064	17	16	0.32	64	0.118	1	2.66	0.014	0.08	0.3	0.06	2.7	0.2	<.05	13	<.5	<.1	2	13
SW-5 07+50E	1.3	24.2	16.1	43	0.2	14.1	7.5	233	3	3.5	1.5	2	6.8	4	0.1	0.2	1.4	41	0.03	0.057	17	15	0.33	61	0.11	2	2.6	0.012	0.08	0.3	0.05	2.5	0.2	<.05	12	<.5	<.1	2	12.4
SW-5 08+00E	1.6	24.6	16.8	44	0.2	15.6	8	225	3.28	4.3	1.5	1.9	7.3	5	0.1	0.2	1.5	46	0.03	0.06	17	16	0.35	64	0.126	2	2.75	0.014	0.08	0.3	0.05	2.6	0.3	<.05	13	<.5	<.1	2	13.3
SW-5 08+50E	1.7	9.7	15.3	57	0.1	6.7	3.7	796	2.23	4.8	0.7	2	3.2	3	0.1	0.5	1.6	47	0.03	0.042	16	10	0.29	50	0.113	1	1.12	0.007	0.05	0.4	0.03	1.4	0.3	<.05	12	<.5	<.1	2	1
SW-5 09+00E	1.1	8.2	17.1	50	0.1	5.9	2.9	268	2.97	7.4	0.6	0.8	3.5	4	0.6	1.2	1.2	47	0.05	0.053	13	10	0.28	35	0.126	1	1.2	0.008	0.06	0.4	0.05	1.3	0.1	<.05	14	<.5	<.1	2	1.7
SW-5 09+50E	1.2	8.2	18	42	0.1	6.3	2.7	224	2.49	7	0.5	1.1	3	4	0.5	1.2	1.2	49	0.05	0.053	14	10	0.25	32	0.123	1	1.07	0.008	0.06	0.4	0.05	1.2	0.1	<.05	13	<.5	<.1	2	1.1
SW-5 10+00E	1.4	10.9	13.3	77	0.1	8.3	4.7	1101	2.39	4.6	0.8	1.6	2.9	3	0.2	0.4	1.4	38	0.03	0.054	18	11	0.4	58	0.095	1	1.4	0.008	0.07	0.3	0.04	1.7	0.4	<.05	11	<.5	<.1	2	0.6
SW-5 10+50E	1	7.1	17.4	37	<.1	4.4	2.2	235	2.04	6.5	0.5	1	2.6	3	0.4	1.2	1.1	42	0.04	0.043	13	8	0.2	29	0.092	2	0.96	0.007	0.05	0.3	0.05	1.2	0.1	<.05	11	<.5	<.1	2	1
SW-5 11+00E	1.5	9.2	19.4	61	0.2	7.3	3.7	360	4.14	9.8	0.7	0.8	4.3	4	0.7	1.6	1.2	61	0.05	0.066	12	13	0.34	39	0.177	1	1.45	0.01	0.07	0.4	0.09	1.4	0.2	<.05	18	<.5	<.1	2	2.8
SW-6 10+00W	2.2	8.7	22.5	162	0.1	12.3	6.5	290	2.16	4	1.2	2	7.2	14	1	0.5	5.7	29	0.08	0.048	17	13	0.67	120	0.118	1	2.6	0.008	0.13	12.8	0.03	2.6	0.2	<.05	8	<.5	<.1	1	14.1
SW-6 09+50W	1.7	6.6	33.2	152	0.2	10.1	6.3	643	2.27	4.4	0.9	1.2	5.6	20	1.6	1	5.6	34	0.1	0.052	17	13	0.55	160	0.135	1	1.94	0.009	0.15	14.8	0.03	2	0.3	<.05	9	<.5	<.1	2	3.6
SW-6 09+00W	1.7	7.9	22.4	135	0.1	10.2	5.8	899	2.27	3.5	1	1.5	5.8	22	0.6	0.5	5.4	33	0.11	0.111	16	12	0.5	183	0.134	2	2.37	0.011	0.14	9.8	0.03	2.4	0.3	<.05	10	<.5	<.1	1	6.3
SW-6 08+50W	1.3	5.6	16.8	73	<.1	8.1	4.7	223	2.27	2.4	0.8	0.5	5.3	34	0.2	0.3	2.5	38	0.13	0.063	16	12	0.48	118	0.149	1	1.62	0.012	0.12	5	0.02	1.9	0.2	<.05	10	<.5	<.1	2	2.7
SW-6 08+00W	0.7	8.9	16.5	140	<.1	10.4	6.2	557	2.35	5.3	0.9	1.6	6.4	25	0.2	0.3	1.3	35	0.14	0.224	13	13	0.63	227	0.161	1	2.16	0.011	0.15	1.8	0.02	2.6	0.3	<.05	10	<.5	<.1	2	8.9
SW-6 07+50W	0.9	7	16.3	87	<.1	10.9	5.8	453	1.97	2.4	1	2.3	5.9	29	0.2	0.3	2.1	30	0.15	0.042	17	13	0.66	171	0.124	1	1.75	0.014	0.13	2.9	0.01	2	0.2	<.05	8	<.5	<.1	1	2.6
SW-6 07+00W	0.6	8	31.6	124	<.1	8.2	6	1127	1.65	4.6	0.7	0.7	3.4	28	0.5	0.6	1.3	26	0.17	0.145	12	11	0.48	157	0.132	1	1.51	0.015	0.13	1.4	0.02	1.8	0.2	<.05	9	<.5	<.1	2	3.3
SW-6 06+50W	0.7	7.6	27.5	100	<.1	6.2	5.1	862	2	4.1	0.8	0.7	4.8	22	0.3	0.6	1.3	32	0.11	0.086	15	9	0.31	182	0.135	1	1.5	0.011	0.13	1.4	0.02	2.2	0.2	<.05	10	<.5	<.1	2	2.7
SW-6 06+00W	0.8	11.2	16.5	71	0.2	16	8.6	537	2.1	3.9	0.8	1.4	5	16	0.3	0.7	0.9	28	0.13	0.074	10	13	0.43	144	0.151	1	3.03	0.017	0.09	1.7	0.05	2	0.2	<.05	9	<.5	<.1	1	18.2
SW-6 05+50W	0.9	14.9	15.6	125	0.1	18.4	9.5	786	2.34	4.8	0.8	0.7	5.9	13	0.3	0.5	0.9	27	0.12	0.132	15	22	0.69	153	0.113	1	2.07	0.009	0.12	1.2	0.03	2.1	0.2	<.05	8	<.5	<.1	1	3.4
SW-6 05+00W	1	17	15.4	60	<.1	15.8	8.1	368	2.23	5	0.9	0.6	7.3	15	0.1	0.5	1	24	0.11	0.024	22	16	0.11	87	0.097	1	1.59	0.011	0.13	1.4	0.01	2	0.2	<.05	6	<.5	<.1	1	0.7
SW-6 04+50W	1.1	16.1	17.2	102	<.1	12.4	7.7	628	1.9	3.4	1.4	<.5	7.2	21	0.1	0.2	2.5	25	0.22	0.044	24	16	1.45	116	0.107	1	1.79	0.011	0.15	3	0.01	2.4	0.3	<.05	6	<.5	<.1	1	0.9
SW-6 04+00W	1.4	14	10.5	74	<.1	13.2	7.1	273	1.89	2.4	1.3	<.5	6.7	25	0.1	0.1	2.6	26	0.32	0.058	21	17	1.58	117	0.109	1	1.67	0.01	0.18	4.8	0.01	2.3	0.3	<.05	5	<.5	<.1	1	0.8
SW-6 03+50W	1.1	17.5	13.5	107	<.1	16.7	9.2	295	2.23	3.4	0.9	<.5	7.3	14	0.2	0.2	1.1	26	0.12	0.049	20	18	1.03	122	0.114	1	1.96	0.007	0.22	2.1	0.01	2.3	0.3	<.05	6	<.5	<.1	1	2.7
STANDARD DS7	20.2	112.5	73.9	413	0.9	57.9	9.6	632	2.43	50.8	5.4	66.9	5.3	83	7	6.7	5	85	0.97	0.081	16	205	1.08	383	0.13	42	1.03	0.104	0.43	4.3	0.18	3	4.3	0.19	5	3.6	1	5	6.2
G-1	0.7	2.6	2.8	46	<.1	6.9	4.4	535	1.82	<.5	2.5	1.3	4.5	57	<.1	<.1	0.1	36	0.44	0.079	7	79	0.59	207	0.122	1	0.93	0.088	0.51	0.1	<.01	3.9	0.4	<.05	5	<.5	<.1	<.1	1.3
SW-6 03+00W	2.6	14.7	16.9	83	0.2	14.9	7.8	261	2.39	3.7	4.7	0.8	5.4	25	0.3	0.3	1.5	30	0.15	0.036	16	16	0.71	139	0.128	1	2.22	0.013	0.12	2.4	0.04	2.4	0.2	<.05	8	<.5	<.1	1	4.6
SW-6 02+50W	1.4	10.2	15.5	97	<.1	11.1	6.1	423	1.97	2.7	1	<.5	4.1	14	0.2	0.3	1.4	27	0.1	0.061	12	13	0.62	115	0.108	1	1.63	0.008	0.11	1.9	0.02	1.7	0.2	<.05	8	<.5	<.1	1	2.2
SW-6 02+00W	2.3	15.5	18.3	101	<.1	16.6	8.8	684	2.44	3.4	4.3	<.5	6.7	16	0.2	0.4	2.3	31	0.09	0.04	16	18	0.81	189	0.112	1	2.56	0.009	0.13	3.1	0.04	2.6	0.3	<.05	8	<.5	<.1	1	3.8
SW-6 01+50W	1.8	12.4	15.5	68	<.1	12.4	5.7	184	2.02	3.5	1.2	<.5	4.3	21	0.5	0.4	1.4	25	0.15	0.031	16	14	0.78	90	0.093	1	1.55	0.009	0.11	2.5	0.02	1.8	0.2	<.05	6	<.5	<.1	1	0.7
SW-6 01+00W	2.4	15.1	15	78	<.1	15	8.1	267	2.3	4.5	2.1	<.5	6.7	34	0.2	0.2	1.8	25	0.28	0.032	20	19	1.16	112	0.104	1	1.69	0.016	0.23	2.3	0.01	2.6	0.3	<.05	6	<.5	<.1	1	1.6
SW-6 00+50W	2.1	21	15.8	49	<.1	16.1	9.3	379	2.16	5	2.2	<.5	8.4	17	0.1	0.2	1	19	0.19	0.049	24	15	0.92	84	0.064	<.1	1.23	0.006	0.19	1.5	0.02	2.4	0.2	<.05	4	<.5	<.1	<.1	0.8
SW-6 00+00	2.6	18.9	17.8	79	0.1	18.5	7.8	347	2.52	4.9	3.5	0.6	4.8	25	0.2	0.3	2	27	0.18	0.045	22	18	0.84	163	0.088	1	1.99	0.008	0.19	2.9	0.03	2.6	0.3	<.05	6	<.5	<.1	1	0.9
STANDARD DS7	19.8	113.3	72.4	412	0.9	55.8	9.5	620	2.36	50.1	5.2	83.6	4.9	80	6.8	5.9	4.9	82	0.93	0.08	15	197	1.03	374	0.124	41	1.02	0.097	0.43	4.2	0.2	2.9	4.1	0.16	5	3.3	1	5	5.3

From ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 @ CSV TEXT FORMAT

To Jasper Mining Corporation PROJECT SAWYER

Acme file # A706440 Received: AUG 22 2007 \* 5 samples in this disk file.

Analysis: GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Sn	Zr
SAMPLES	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
G-1	0.9	2.5	2.5	43	<.1	7.2	4.2	504	1.77	<.5	2.5	<.5	4.5	64	<.1	<.1	0.1	37	0.47	0.078	8	99	0.57	196	0.127	1	0.9	0.073	0.49	0.1	<.01	2.4	0.4	<.05	5	<.5	<.1	<.1	1.4
GCS-001	0.5	20	28	64	<.1	13.4	8.2	617	2.25	5.7	2.4	<.5	1.3	30	0.6	0.5	0.8	19	0.87	0.081	8	11	0.72	43	0.03	1	1.08	0.006	0.04	1	0.04	1.6	0.1	0.08	3	1	<.1	<.1	0.9
GCS-002	1	22.3	37.2	374	0.3	11.5	6.5	483	1.84	4.3	8.9	<.5	0.9	43	1.2	0.8	1.4	18	1.03	0.086	10	10	0.47	43	0.038	1	1.21	0.008	0.04	1.8	0.07	1.8	0.1	0.15	3	2.5	<.1	<.1	2.2
GCS-003	0.8	25.2	67.2	307	0.4	13.3	7.5	749	1.71	8.4	8	<.5	1.8	11	2.3	0.7	1.9	17	0.45	0.069	16	10	0.33	220	0.026	2	0.98	0.005	0.12	2.4	0.07	1.3	0.2	0.11	2	1.4	<.1	<.1	0.5
STANDARD DS7	19.7	113.4	68.9	381	0.8	57.4	9.3	627	2.46	50.4	5.7	62.3	5.2	79	6.6	6.6	5.3	88	0.95	0.081	15	216	1.06	383	0.128	41	1.03	0.1	0.45	4.4	0.17	2.9	4.4	0.23	5	4	1	5	5.3

**Appendix C**

**STATEMENT OF EXPENDITURES**

## STATEMENT OF EXPENDITURES

The following expenses were incurred on behalf of the Sawyer property between May 16<sup>th</sup> and July 20<sup>th</sup>, 2007.

### PERSONNEL

Field Crew - 16 days @ \$250 / day \$ 4,000.00

### EQUIPMENT RENTAL

4WD Truck - mileage - 687 km @ \$0.75 / km \$ 343.70

Mobile radios (Trucks) - 4 days at \$20 / day \$ 80.00

Hand-held Radios - 16 man-days at \$10 / day \$ 160.00

Quads - 21 man-days at \$100 / day \$ 100.00

Quad Trailer - 1 days at \$25 / day \$ 25.00

Satellite Phone - \$ 42.00

**Sub-Total** \$ **750.70**

### FIELD SUPPLIES (Flagging, KRAFT bags, etc.)

16 man-days @ \$20 / day \$ 320.00

### DISBURSEMENTS

Analyses - 115 soil samples at \$25 / sample \$ 2,875.00

Fuel \$ 250.00

Shipping \$ 88.00

**Sub-Total** \$ **3,213.00**

### REPORT/REPRODUCTION

R. T. Walker, P.Geo.: 1 days report writing / drill logs at \$500/day \$ 500.00

3 days analysis / drafting at \$500 / day \$ 1,500.00

**Sub-Total** \$ **2,000.00**

**Total** \$ **10,283.70**