

12-039

## Listwaenite Studies Report

# Geological Mapping and Geochemical Sampling of the Marsh Lake and Judas Creek Claims and Sampling of Listwaenite Sequences Along the Alaska Highway

Jakes Crossing-Judas Creek Region, Yukon, 2012 Exploration Season

NTS Map Sheets: 105D-08 and 105D-09

UTM Coordinates (approximate property centre)

**Marsh Lake:** Easting – 541574/Northing - 6702843

**Judas Creek:** Easting – 554000/Northing - 6698000

# Table of Contents

	Page
Introduction	1
Location and Access	1
Physiography	2
Climate	2
Vegetation	2
Ecoregion	3
Property and Claims Information	3
Regional Geology	3
Surficial Geology, Geomorphology and Glacial History	4
Listwanite – Lode Gold Related Deposits	5
Economic Significance and Deposit Setting	5
Exploration History	6
Exploration Guidelines	7
Property Geology	7
Judas Creek Property	8
Marsh Lake Property	8
Alaska Highway – Jakes Corner Area	8
Geological Mapping and Prospecting	9
Soils	9
Geochemistry	9
Discussion of Results	10
Marsh Lake Claims	10
Judas Creek Claims	11
Alaska Highway	12
Recommendations	12
Judas Creek Property	12
Marsh Lake Property	12
Alaska Highway – Judas Creek to Jakes Corner	13
References	14
Appendices	
1. Certificate of Qualifications	
2. Expenditure Summary	
3. Maps and Figures	
A. Judas Creek	
• Claims Location	
• Aero-Magnetic Map	
• Regional Geology	
• Regional Geophysics (FVD)	
• Regional Geophysics (RTF)	
• Sample Locations	
• Au in Soils – Highlights	

- Sample Description Table
- Assay Sheets

B. Marsh Lake

- Claims Location
- Regional Geology
- Regional Geophysics (FVD)
- Regional Geophysics (RTF)
- Sample Assays

C. Jakes Corner Area

- Regional Geology
- Regional Geophysics (RTF)
- Highway Sampling Locations
- Sample Assay

## Introduction

The potential of listwaenite sequences to host lode-style gold mineralization was evaluated in this study funded through the Yukon Mineral Incentive Program. Three areas were initially proposed for examination, and as a result of recent staking work was conducted on only two of the areas supplemented with additional work on listwaenitic exposures along the Alaska Highway. The three areas studied included the (i) Marsh Lake claims; (ii) Judas Creek claims; and (iii) listwaenitic sequences exposed along the Alaska Highway extending from 250 meters east of Jakes Crossing and thence northwestwards to Judas Creek.

Changes in the direction of the studies were discussed and approved with Mr. Derek Torgerson, Manager-YMIP prior to any work activities being conducted. The field studies were completed during the period June-October, 2012. In addition as part of this work, the author has completed a comprehensive compilation of works completed relating to studies on listwaenites with a focus on studies completed throughout the North American Cordillera and a local focus on the Atlin Gold Camp, as this will provide guidance for current and future exploration efforts in the Marsh Lake-Jakes Crossing-Squanga Lake area on properties being explored by the author and by related companies.

This report provides a summary of exploration work completed on the claims and the altered listwaenites during the 2012 exploration season which included geological mapping, prospecting and geochemical sampling (soil and rock). The author is a Director/President and the Chief Project Geologist of 39627 who conducted all of the exploration work and has worked on several nearby exploration properties. He was accompanied by a field assistant Ms. Jocelyn Costello.

## Location and Access

Access to all of the study areas was generally excellent as they were all in immediate or close proximity to roads. A location map of the study areas is attached (see Map 1).

The Marsh Lake 1-10 claims are located immediately proximal east of the Judas Creek Subdivision on the Alaska Highway and 80 km south of Whitehorse, the capital city of Yukon. The claims were staked by 39627 Yukon Inc. ("39627") to cover the boundary of an airborne magnetic low anomaly with a high magnetic anomaly.

The Judas Creek 1-6 claims are located approximately 6km east-northeast of the Alaska Highway and near a forestry road (turnoff 90 km south of Whitehorse) proximal to an area that has been previously explored by various companies/prospectors since the early 1980's with mixed results. The claims were staked by 39627 Yukon Inc. ("39627") to cover the boundary of an airborne magnetic low anomaly with a high magnetic anomaly.

The listwaenitic sequences are well exposed along the Alaska Highway and are not all covered by claims at the current time. They exhibit varying degrees of alteration.

## **Physiography**

The study areas lie on the east side of the Whitehorse Trough, a northwesterly trending depression extending from Marsh Lake through Whitehorse and thence northwards to Lake Laberge. Elevations average 700 meters (2,500 feet).

The Marsh Lake Property comprises primarily of a gently to moderately rolling landscape which starts to increase in elevation in the easternmost claims. The property overlies relatively flat lying ground incised by tributaries including Judas Creek.

The Jakes Property comprises of an alcove within a broad valley that is incised by Judas Creek and localized small tributaries. Thick glacial sands and gravel deposits cover most of the area with less than 1% of the property comprising of outcrop exposures with the large majority of the area characterized with occasional glacial erratics exposed in the areas of small streams or on the edges of steep slopes (less than 50 meters in overall height and comprising of glacial gravels) in valley bottoms.

Numerous outcrops of altered listwaenites are exposed immediately adjacent to the Alaska Highway extending from Jakes Crossing to Judas Creek and that winds primarily through gently rolling landscape at lower elevations and parallel to Marsh Lake.

## **Climate**

The southwestern Yukon has a dry subarctic climate with average summer temperatures of 15 degrees Celsius and winter minimum of -45 degrees Celsius. As the Jakes property is located in lower elevations in the region, it provides an opportunity for slightly better climatic conditions as compared to most of the Yukon, it enables work to begin a couple of weeks earlier and a few weeks later in the spring and fall, respectively. Snow cover is generally in place from late October to mid-April. The climate tends to be dry (precipitation range 200-325 mm per annum) and cool.

## **Vegetation**

The vegetation of the Yukon Southern Lakes Ecoregion is dominantly open coniferous and mixed woodland, reflecting the rain shadow climate of the area and the pattern of forest fires. Medium shrubs dominate the higher elevation slopes, while mountain summits are usual dry dwarf shrub.

Pine is the dominant tree species, because it quickly regenerates in burned areas. Black spruce has limited distribution in this ecoregion. On dry upland sites, the understory vegetation is dominated by a mixture of ground shrubs including twinflower, kinnikinnick, lingonberry and lichen, with abundant litter. Mixed aspen and white spruce are common on fine soils with a variable cover of ground shrubs, lichen and litter. Aspen is also found on steep south-facing slopes, often with small pockets of spruce occupying the moister sites. Balsam poplar is found on roadsides and along creeks and rivers.

Open areas at lower elevations include grasslands on steep south-facing slopes and alkaline lacustrine depressions.

### **Ecoregion**

The Yukon Southern Lakes, Boreal Cordillera Ecozone, Ecoregion 177 is characterized by broad valleys and large lakes set within the rain shadow of the St. Elias Mountains (Smith, C.A.S. et. Al, 2004). This ecoregion lies in the sporadic discontinuous permafrost zone, where permafrost underlies less than one quarter of the landscape. Soils tend to be alkaline and wetlands (mainly fens) are dominated by marl formation. The ecoregion supports the highest mammalian diversity in the Yukon, with at least 50 of the 60 species known to occur in Yukon at present.

### **Property and Claims Information**

As a result of the study effort, 39627 Yukon Inc. decided to stake the Marsh 1-10 claims and the Jakes 1-6 claims in Yukon (see attached list of claims). No staking was conducted over the areas on the Alaska Highway due to the poor results received.

### **Regional Geology**

The study areas lie south of a northwest trending contact between Lower and Middle Jurassic clastics to the west of Marsh Lake and are fault bounded to the west by Mississippian to Upper Triassic Cache Creek oceanic volcanic and sediments and to the east by Upper Triassic Lewes River inter-arc clastics believed to be part of the Cache Creek Terrain (Wheeler, 1987).

The Laberge Group consists of greywacke, arkose, quartzite, conglomerate, siltstone, argillite and hornfels. The Tuku Group consists mainly of volcanic tholeiitic to alkaline basalts.

Of significance to the geology in the region, and believed to be present within the property, is the occurrence of oceanic ultramafic units of dunites, harzburgites and pyroxenites that occur within the Cache Creek Terrane rocks. These have been well documented in the Atlin Gold camp of Northwestern British Columbia (Bloodgood et. al, 1989; Ash, 2000) and are also known to host California mother lode gold style deposits which was a primary motivator for the

selection of the study areas. These ultramafic bodies are known within the region to range from linear bodies many tens of kilometers long, to pods and slivers a few meters in length and it has been suggested that these bodies represent oceanic basement (Ash, 2000). Many of the gold bearing veins in the Atlin camp are related to these ultramafic rocks. Figure 1 illustrates the network of tectonic lineaments throughout the region, the ribbon lakes emphasize this feature in particular and of notable mention is the northwesterly trending Teslin Fault system which may have influenced the setting for gold mineralization in the region (Ballantyne, 1986):

## **Surficial Geology, Geomorphology and Glacial History**

(Excerpts from Smith et. al, 2004)

Due to the lack of rock exposure, and hence the heavy reliance on soil/till geochemistry sampling methods to provide indications of potential mineral anomalies, it is critical to understand the surficial geology, geomorphology and glacial history of the region.

The main sources of surficial geology information for the Yukon Southern Lakes Ecoregion are several surficial geology and soil maps (Rostad et. al., 1977; Morison and McKenna, 1981; Klasen and Morison, 1987; Morison and Klasen, 1991; Mougeot and Smith, 1992 and 1994). The surface deposits in this ecoregion are associated with the most recent Cordilleran glaciations, the McConnell, believed to have covered the south and central Yukon between 26,500 and 10,000 years ago. Most of the ecoregion was covered by ice that flowed towards the northwest from the Cassiar Mountains. Ice flowed into the area from the Cassiar Mountains to the southeast and the eastern Coast Mountains to the southwest. Trunk glaciers followed the major valleys and flowed northwestward across this region to terminate in the central Yukon. After the maximum extent of McConnell ice, deglaciation produced disruptive drainage systems and large glacial lakes as a result of a complex assemblage of ice lobes, which were restricted to valley bottoms and controlled by local topography. The streamlined topography of this region was shaped by the glacial flow directions.

Quaternary deposits are distributed in a general pattern throughout the Yukon River valley. High elevation slopes and summits are covered with a discontinuous colluviums or moraine veneer over bedrock. Where exposed, the bedrock is weathered or frost-shattered. Glacial till, often gullied, covers most mid-elevation slopes mixed with colluvial fans or aprons. The general composition of the till matrix in the region, noted by Jackson (1994), indicates a wide range of sand content (20-70%), silt (20-80%), and usually a lower clay content (5-30%).

Glaciofluvial sand and gravel terraces flank the valley sides while pitted or hummocky deposits of sand and gravel line the bottom of some valleys. These deposits are free of permafrost and have stable surfaces.

## **Listwanite - Lode Gold Related Deposits**

**(Excerpt from Ash et. al, 1991)**

Listwanite is a term applied to an alteration assemblage generated by carbon dioxide metasomatism of serpentized ultramafic rocks. This alteration type is associated with most of the major mesothermal vein deposits in British Columbia and is also found to be associated with many major mesothermal vein deposits in Phanerozoic and Archaean gold camps worldwide. This relationship appears to be due primarily to similarities in tectonic history and involves using ultramafic and related plutonic rocks to delineate major structural breaks which act as "first order control" for the development of mesothermal gold deposits (Groves, 1990).

The term "listwanite" (or "listwaenite") is loosely characterized as a carbonated ultramafic rock (Buisson and Leblanc, 1986). The process of listwanization produces a varying sequence of alteration products caused by differences in the intensity of alteration. This suite commonly includes (in order of increasing intensity of alteration): talc-altered serpentinite; talc-carbonate; quartz-talc carbonate; quartz-carbonate-mariposite; and quartz-carbonate-mariposite-sulphides +/- gold.

### **Economic Significance and Deposit Setting**

The economic significance of this deposit type in the western Cordillera is demonstrated by historic gold production (Schroeter et al., 1989). In British Columbia, a total of six gold camps have produced more than one million ounces of gold and have accounted for approximately 80% of the province's historical gold production. Three of these gold camps have been classified as mesothermal vein deposits with a defined ophiolitic association. In addition, of added economic significance for this deposit type is the fact that a majority of placer gold camps in British Columbia are closely associated with accreted oceanic terranes (Hodgson et al., 1982).

These gold deposits are hosted by structures within or marginal to ophiolitic crustal and/or mantle lithologies. Having formed at oceanic crustal depths of 6 to 12 kilometers, the tectonic setting suggests the presence of deep crustal structures along which reverse movement must have occurred (Ash et al, 1991). These crustal structures were most likely active during collision and ophiolitic obduction processes and account for major vertical displacements that are observed within these gold camps. These crustal rocks appear to be significant as they provide competent lithologies suitable for the development of dilational fractures during the ore deposition process. In most of the areas throughout British Columbia it has been observed (Ash et al, 1991) that there is a spatial and temporal association between mineralization and syn- to primarily post-accretionary felsic magmatism.

In the Atlin area, lode-gold mineralization is hosted by structures either within or marginal to a relatively flat-lying, dismembered and imbricated ophiolitic complex. This complex overlies with marked structural discordance, a lithologically variable imbricated package of oceanic metasedimentary and metavolcanic rocks, interpreted to represent a remnant subduction accretionary complex (Ash et. al., 1991). Furthermore the timing of the lode-gold mineralization reflects both the timing of oceanic closure and ophiolitic obduction, evidenced by the ending of oceanic crustal formation (Monger, 1984; Cordey, 1990) arc volcanism (Tipper, 1984), and the shedding of oceanic material into the Bowser Basin (Monger, 1984). Felsic magmatism is spatially and temporally related to mineralization and tectonism. Throughout most of the Atlin gold camp, areas of listwaenitic alteration with anomalous gold values are in close proximity or immediately adjacent to a felsic dyke or stock.

## **Exploration History**

Geological mapping at a scale of 1:250,000 for the Teslin 105C sheet was completed by the Geological Survey of Canada (Mulligan, 1963, Gordey and Stevens, 1994) and the Whitehorse 105D sheet (Wheeler, 1961). A geological atlas of the NTS 105/115 sheets was later compiled at a 1:1,000,000 scale (H. Gabrielse et al, 1980). Hunt et al., (1995) completed the most recent work that included a geological interpretation of an airborne geophysical survey. This work inferred the presence of thrust faults and associated ultramafic rocks of ophiolitic origin, within Permian- to Triassic-aged volcanic and sedimentary rocks of the Cache Creek Terrane.

Reconnaissance-level stream silt sampling was conducted by the Geological Survey of Canada on NTS map sheets 105C and 105D (Friske et. al., 1985). Results in the area by other exploration companies have demonstrated anomalous values of gold, silver and copper in soils and in localized shear zones that relate to ophiolitic thrust sequences.

Exploration interest in the region then spurred governments to complete a high-quality airborne geophysical (DIGHEM) survey over Cache Creek Group rocks in the Jakes Corner area which included coverage over Judas Creek. The survey comprised of approximately 2764 line kilometers, at a line spacing of 200 meters covering approximately 500 square kilometers. This survey identified more than 500 bedrock conductors (Smith, 1994; Power, 1995).

Based on the listwaenite gold model and related publications on that topic including Ash et al., (1991) and Ash (2001), and the presence of aeromagnetic anomalies in the region (that are potential target areas as they exhibit possible magnetic destruction processes contiguous with the boundary areas between continental edge sediments and ophiolitic thrust sequences oceanic slices), 39627 Yukon Inc. undertook this study. It was hoped that study results would further expand the understanding of these listwaenite sequences in the area, possible structural and mineralogical analogies, and determine the best approaches in sampling and

exploration methods that could be undertaken in the region to best define areas most likely to host gold mineralization.

## **Exploration Guidelines**

(Excerpt from Ash et al, 1991)

Ash et al., have provided some exploration guidelines that were considered in this study effort and are worthy of any exploration effort that is focused on identifying lode-gold deposits in the Marsh Lake-Jakes Corner-Squanga Lake area.

Their first suggestion was to conduct systematic surface mapping focusing on the tectonic setting and the spatial distribution of the listwanite alteration suite. Unfortunately due to the extensive glacial cover in the area, systematic mapping was impossible but use of techniques such as trenching or systematic drill programs that are designed to define the setting as well as try to encounter mineralization may provide an opportunity to help define the tectonic setting and determine both the presence and understanding of the listwaenitic sequences.

Such a program should also contemplate further suggestions by Ash et al, (1991). These include:

- Understanding the alteration mineralogy and intensity as it can vary systematically away from the controlling structure and the focus of significant mineralization is typically associated with silicified zones (veins or stockworks) at the core of the structural zone or its related splays; and
- Distinguish pre-accretionary, allochthonous, ophiolitic mantle and metamorphic or crustal plutons from those plutonic rocks which are syn- to post-collisional and intrude the accreted oceanic package as this will help to evaluate the tectonic setting. An example provided was that of the “Bralorne diorite” or “Bralorne intrusion” which through a systematic examination was determined to be an obducted, dismembered ophiolitic assemblage that was subsequently tectonically transported to its current position and not intruded into its present position as implied by its name.

## **Property Geology**

Due to the lack of rock exposures, with the exception of the sequences along the highway, the property geology is inferred and remains as previously described in the region by Hunt et. al (1995).

The Marsh Lake-Jakes Corner area is considered to be a structurally complex zone in which rocks of Stikinia and the Cache Creek Terranes are juxtaposed. Within 2 kilometers of the

property, the author observed this relationship in trenches completed by the previous exploration efforts of Dunvegan Exploration Co. Ltd. and also within rock exposures on the Alaska Highway.

The Cache Creek rocks in the area represent a Mississippian to Jurassic tectonically dismembered sea floor (ophiolitic) assemblage dominated by volcanic ultramafic and sedimentary rocks.

Stikinia in the area represent a late Triassic to Middle Jurassic package of arc-derived sedimentary rocks with a minor volcanic component.

### **Judas Creek Property**

The existence of a significant and sharp geophysical gradient on the property is currently interpreted by the author to represent a fault or intrusive contact possibly between serpentinized ultramafic rocks that are highly magnetic with units such as pyroxene gabbro or other mafic units that are relatively non-magnetic. As with listwaenitic lode-gold targets, the area of interest is that of the magnetic low. The reason for this is that during hydrothermal alteration of serpentinized ultramafic wall rocks, magnetite is destroyed and subsequently these areas are demonstrated by narrow low-magnetic zones that contrast with the highly magnetic country rocks. This is to be further investigated in future exploration efforts. As well one should be cognizant that graphitic horizons are commonly associated with these type of fault zones and this may be partly identified through resistivity surveys as the presence of graphite will create a zone of high resistivity coincident with the magnetic low.

### **Marsh Lake Property**

Northeastern portions of the property comprise of mafic gabbros cut by minor veinlets of milky white quartz. The southern portion of this property is covered by thick clays and silty clays. The thickness of these units is thought to be at least 50-75 feet as demonstrated on the erosional banks along Judas Creek which traverses this portion of the property.

### **Alaska Highway – Jakes Corner Area**

This area comprises of orange to red rustily weathered silicified and carbonatized serpentinites and dunites that are massive to foliated, and variably cut by white and waxy quartz veins. Sulphide mineralization was suspected but not observed in the veins which are typically variable in thickness from millimeters to up to 20 centimeters and with poor continuity.

## **Geological Mapping and Prospecting**

The author and his field assistant conducted extensive mapping and prospecting of the property areas. Three day traverses were conducted on the Marsh Lake Property. On Judas Creek, soil geochemical sampling and several traverses were completed over a 4 day period and the author spent one day locating all of the numerous road trails in the area and a half day visit of the trenches completed by Dunvegan Exploration Co. Ltd. And one day of prospecting and sampling was completed along the Alaska Highway exposures. A total of 9 days of field work was conducted during this study effort.

### **Soils** (Excerpt from Smith et. al, 2004)

Soils in the Southern Lakes ecoregion have formed under a relatively mild, semi-arid climate within the rain shadow of the Elias Mountains. Mineral soils tend to be weathered and peat accumulations are generally less than 1m in thickness.

Numerous surveys including Rostad et. al (1977), Davis et al (1983a) and Mougeot and Smith (1992 and 1994) have described the soils as being predominantly Eutric Brunisols that formed on a variety of glacial parent materials. In the major valleys they are typically comprised of glaciolacustrine deposits of calcareous silt and clay. Soils are also typically alkaline. South-facing slopes may support grassland communities and the associated soils may have surface A horizons rich in humus. Most wetlands are alkaline fens due to the base-rich nature of the geologic materials and rest on mineral soil or marl at less than 50 cm depth.

### **Geochemistry**

Previous geochemical sampling in the region has had mixed results. Davidson (1987) reported that "geochemical results (on the Phil Claims) are confusing" as anomalous gold samples found in initial sampling efforts could not be repeated in follow-up surveys. This is further complicated by the extensive glacial deposits which have been previously described in this report.

The initial intention of this study effort was to test a variety of geochemical testing methods in an effort to try and determine which variables such as sampling method, sample depth, horizon type, and/or testing techniques (ICP, MMI etc.,) would be most productive. However field efforts found little variability in soil material at various depths especially in areas where it was evident that glacial deposits were thick and the material collected had a very high clay content. We also collected both till size samples versus conventional soil size samples and assayed both using ICP testing methods and Au fire assay which again produced little results. As a result of the lack of both soil colour/horizon/textural variability it was thought by the author that MMI testing would be equally unproductive as the glacial cover is clearly masking the underlying

geology and the occasional rock fragments are generally well rounded and hence likely transported long distances and were also resultant from glacial events in the region.

Where we have obtained good results is in areas where the glacial cover is significantly thinner at the bottom of slopes adjacent to valley floors but sampling is again hampered in these regions by boulder terrains or wet marshy organic rich areas.

It is therefore suggested by the author that one be quite selective over where any sampling is undertaken as in areas of evident thick glacial cover despite possible promising underlying geology, geochemical sampling will likely be ineffective in providing any evidence of underlying sequences. Sampling can be more effective in areas with thinner glacial cover and other techniques such as test pits and/or trenching techniques have the potential to produce some meaningful geochemical studies.

## **Discussion of Results**

### **Marsh Lake Claims**

Sampling at the Marsh Lake claims was limited but to date has not shown any positive results. Due to the soil characteristics in the region it was generally felt that further testing using possible techniques such as Mobile Metal Ion (MMI) would not be productive. In particular March claims 1-6 are covered with thick clay sequences with no rock exposures although small rusty and angular pebbles were found within the till sample pits and when tested demonstrated elevated iron content. But other concentrations of mineralization and/or indicator elements of precious metal mineralization (such as Bi, As, Co, Ni, Hg) were minimal and not anomalous. This is also discouraging as it was hoped that as one approached the magnetic high-low boundary one would possibly see a transition (gradual or sharp) in indicator element concentration levels. The degree of glacial cover and its possible significant thickness as evidenced by small quarries along the Alaska Highway, road cuts, and localized stream valleys, is thought to be masking underlying geology. This is a major challenge to any exploration in the area.

Rock exposures were only found the northeasternmost portion of the property, in an area that topographically may be demonstrating a series of thrust faults. This is highly speculative as there is no evidence of faults in the area within the outcrops and with the exception of localized minor veinlets of quartz, the outcrops display limited to no alteration, although they are slightly rustily weathered. There is a need to further prospect and map the northeastern area beyond the claim blocks to determine if altered listwaenitic sequences exist in the area as the higher elevations in the area hold better promise for mapping and interpretation of the geology on the area.

## Judas Creek Claims

Results from conventional soil geochemical sampling on the Judas Creek claims are very promising. A total of six samples provided anomalous values of gold ranging from 21 ppb to 426 ppb (See Table 1 and assays in Appendix I). With the exception of one sample, the anomalous values were all found at the edge of the steep sided hills with the valley floor. Sampling in the valley itself was not deemed possible due to both the boulder nature of the area and the high level of organic content. Rock exposures were practically nonexistent and the few exposures found within the claims provided little or no evidence of alteration and/or mineralization and it was also difficult to conclude whether they actually were outcrops or exposed large boulders. The challenges in sampling may also be impacting the ability to identify possible connections between anomalous samples and will require additional sampling to (i) test sample repeatability which has been problematic in other exploration efforts within the region (i.e., Dunvegan Exploration Co. Ltd, 1987 report on the Mart claims); (ii) enhance conventional soil sampling through 25 meter spacing intervals in an attempt to better identify anomalous zones and possible connectivity between existing anomalous results; and (iii) require the use of trenching/sample pits on the sides of slopes and on the valley floor using a Candig to further investigate geology and provide for sampling opportunities where soil hand augers were unsuccessful in obtaining a sample or the organic cover needs to be removed to access "C" horizon material. This will be particularly important to test the area around sample 1527466 which provided the highest result of 426 ppb.

There were no elevated concentrations of indicator elements (As, Bi, Ni, Co, Fe, Hg, other) coincident with the anomalous samples obtained. This further complicates abilities to identify anomalies in the regions and/or ascertain geochemical relationships with the possible underlying geology. The sampling horizon depth was generally in the 30 cm depth range and samples taken at greater depth where possible did not show anomalous results. However the limited investigations to date cannot draw any solid conclusions as to the impact on sampling depth on an ability to identify anomalies at this time. Neither can one draw any conclusions or possible relationships between the soil colours and/or textures to anomalous versus non-anomalous samples at this time. The only note is that all anomalous samples were taken from a transition of B-C soil horizon.

It is encouraging that the anomalous samples are found to be coincident with the magnetic low identified from regional aeromagnetic surveys. Geophysical surveys including both ground magnetic and IP surveys would be useful to further determine a relationship between the anomalous results with possible structural features and ground electromagnetics possible demonstrative of magnetic destruction associated with ophiolitic sequences.

## **Alaska Highway**

Chip samples taken from several large outcrops displaying high degrees of alteration including silicification, carbonatization and hematization, and in places extensive veining associated with small shear zones did not provide any anomalous values of gold or other precious/base metal mineralization. Elevated iron levels were present and this was expected as a majority of the outcrops and chips taken were rustily weathered. Unfortunately prospecting around the outcrops away from the immediate roadside exposures in a majority of instances failed to provide any further exposures and in instances where outcrops did exist there was little evidence of any continuation of localized alteration. The "poddy nature" and limited extent of alteration was also observed by the author in large trenches that were established by Dunvegan Exploration Co. Ltd in the late 1980's on the Phil Claims that are a couple of kilometers from these roadside sequences and possibly within the same/similar stratigraphic horizon. The trenches by Dunvegan served to expose altered serpentinites containing minor magnetite and chromite and localized shears highly silicified and carbonatized that provided anomalous gold values but with limited extent.

## **Recommendations**

### **Judas Creek Property**

Further work is recommended on this property to follow up on the identified geochemical gold-in-soil anomalies. This work should include:

- Follow up soil testing to be conducted to both determine repeatability of the gold assay, and on a tighter line spacing (25 meters) with 25 meter sampling stations to possibly link current anomalies and/or distinguish possible narrow zones of altered serpentinites;
- Trenching and or test pitting to both collect deeper samples, expose rock sequences, and/or establish a better understanding of the depth of glacial cover; and
- Ground magnetic and resistivity geophysical surveys to compliment regional aeromagnetic surveys and provide better definition of drill target areas.

With continued positive results a drill program would then be recommended to provide a better understanding of the local geology and tectonic setting and to follow up on identified coincident soil and geophysical anomalies.

### **Marsh Lake Property**

No further work is recommended on Marsh Lake claims 1-10. Further traverses northeast of the property are recommended as rock exposures are expected to exist in areas of increased elevation and current efforts have failed to explain the broad magnetic gradient which may

represent a gradational contact between serpentized and fresh mafic and ultramafic and volcanic rocks.

**Alaska Highway – Judas Creek-Jakes Corner**

No further work is recommended in this area. Assaying failed to identify any prospective gold samples despite some interesting rock exposures.

## References

- Ash, C. H., (2001). **Relationship Between Ophiolites and Gold Quartz Veins in the North American Cordillera**. Bulletin 108, British Columbia Ministry of Energy and Mines.
- Ash, C. H., Macdonald, R.W.J., and Arksey, R.L., (1991). **Towards a deposit model for Ophiolite-Related Mesothermal Gold in British Columbia**. Paper 1992-1, British Columbia Ministry of Energy and Mines.
- Ballantyne, S.B., (1986). Technical report to G. Mcleod.
- Beauregard, M.A., 1998. **1997 Gold Exploration, Mart 1-44 Claim Group**. High Valley Explorations Ltd. Assessment Report 093841.
- Bloodgood, M.A., Rees C.J., and Lefebvre, D.V., (1989). **Geology and Mineralization of the Atlin Area, Northwestern British Columbia**. BC Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1988, Paper 1989-1.
- Buisson, G. and Leblanc, M. (1986) **Gold-bearing Listwanites (Carbonated Ultramafic Rocks) from Ophiolite Complexes**. In Metallogeny of Basic and Ultrabasic rocks, The Institution of Mining and Metallurgy, Pages 121-131.
- Cordey, F., (1990). **Radiolaria Age Determinations from the Canadian Cordillera**. In Current Research, Part E, Geological Survey of Canada, Paper 90-1E, Pages 121-126.
- Coutts, R. (1980): **Yukon: Places & Names**, Gray's Publishing Limited, Sidney, B.C., pp. 76-78.
- Davidson, G.A. (1988). **PHIL 1-12 Claims, non-confidential Yukon Mining Assessment Report #092134** Dunvegan Exploration Co. Ltd.,
- Friske, P.W.B. et al (1985). **Regional Stream and Water Geochemical Reconnaissance Data, NTS 105C**, Geological Survey of Canada Open File 1217; Regional Stream and Water Geochemical Reconnaissance Data, NTS 105D, Geological Survey of Canada Open File 1218.
- Gabrielse, H., Tempelman-Kluit, D.J., Blusson, S.L. and Campbell, R.B. (1980) MacMillan River **1:1,000,000 Geological Atlas**, Geological Survey of Canada Map 1398A.
- Gordey, S.P. and Stevens, R.A. (1994) **Tectonic framework of the Teslin Region, southern Yukon Territory**, Geological Survey of Canada, Current Research Paper 1994-1A, p. 11-18.
- Gordey, S.P. and Stevens, R.A. (1994). **Preliminary interpretation of bedrock geology of the Teslin area (NTS 105C)**, Geological Survey of Canada Open File 2886, 1 map at 1:250,000 scale.

Groves, D.I. (1990). **Structural setting and control of gold deposits.** In Greenstone gold and crustal evolution, The NUNA Conference Volume, pages 32-45.

Hodgson, C. J., Chapman, R.S.G. and MacGeehan, P.J. (1982). **Application of Exploration Criteria for Gold Deposits in the Superior Province of the Canadian Cordillera.** In Precious Metals in the Northern Cordillera, Association of Exploration Geochemists, pages 174-206.

Hunt, J.A., Hart, C.J.R. and Gordey, S.P. (1995). **Interpretive geology of the Jakes Corner geophysical survey area (NTS 105C15, 105D/8 and 9),** Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada Open File Report 1995-7(G).

Jackson, L.E. Jr., 1994. **Terrain inventory and Quaternary history of the Pelly River area, Yukon Territory.** Geological Survey of Canada Memoir 437, 41p.

Klassen, R.W. and Morison, S.R., 1987. **Surficial Geology, Laberge, Yukon Territory.** Geological Survey of Canada Map 8-1985 (1:250,000 scale).

Mihalynuk, M.G., Smith, M.T., Gabites, J.E., Runkle, D. and Lefebure, D. (1992). **Age of emplacement and basement character of the Cache Creek terrane as constrained by new isotopic and geochemical data,** Canadian Journal of Earth Sciences, Vol. 29, p. 2463-2477.

Monger, J.W.H. (1984). **Cordilleran Tectonics: A Canadian Perspective.** Bulletin de la Societe Geologique de France, Volume 7A, XXVI, No. 2, pages 255-278.

Morison, S.R. and Klassen, R.W., 1991. **Surficial geology, Whitehorse, Yukon Territory.** Geological Survey of Canada, Map 1891A (1:250,000 scale).

Morison, S.R. and McKenna, K., 1981. **Surficial geology and Soils, Southern Lakes study.** Department of Renewable Resources, Yukon Government.

Mougeot, C.M. and Smith, C.A.S, 1992. **Soil Survey of the Whitehorse area, Vol 1. Takhini Valley.** Centre for Land and Biological Resources research, Research Branch, Agriculture Canada, 3 maps (1:20,000 scale)

Mougeot, C.M. and Smith, C.A.S, 1994. **Soil Survey of the Whitehorse area, Vol 2. Carcross Valley.** Centre for Land and Biological Resources research, Research Branch, Agriculture Canada, 2 maps (1:20,000 scale).

Mulligan, R. (1963). **Geology of Teslin Map Area, Yukon (NTS 105C),** GSC Memoir 326 and Map 1125A.

Power, M. (1995). **Notes to Prospectors - Jakes Corner DIGHEM Survey Interpretation**, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada Open File Report 1995-5(G).

Rostad, H.P.W., Kozak, L.M., and Acton, D.F., 1977. **Soil Survey and Land Evaluation of the Yukon Territory**. Saskatchewan Institute of Pedology, Publication S 174, 495p. and maps.

Schroeter, T.G., Lund C., and Carter, G., (1989). **Gold Production and Reserves in British Columbia**. B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1989-22, 86 pages.

Smith, P.A. (1994). **DIGHEM V Survey for Yukon Prospectors Association, Jakes Corner Project, Yukon Territory (NTS 105C/5, 12, 105D/8,9)**, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada Open File Report 1994-10(0).

Smith, C.A.S., Meikle, J.C., and Roots, C.F., 2004. **Ecoregions of the Yukon Territory, Biophysical Properties of Yukon Landscapes**, PARC Technical Bulletin 04-01, 313p.

Tipper, H.W. (1984). **The Allochthonous Jurassic – Lower Cretaceous Terranes of the Canadian Cordillera and Their Relation to Correlative Strata of the North American Craton**. In Jurassic-Cretaceous Biochronology and Paleogeography of North America, Geological Association of Canada, Special Paper 27, pages 113-120.

Wheeler, J.O. (1961). **Geology of Whitehorse Map Area, Yukon (NTS 105D)**, GSC Memoir 312 and Map 1093A.

Wheeler, J.O. and McFeely, P. (1987). **Tectonic Assemblage map of the Canadian Cordillera**, G.S.C. Open File 1565.

Appendix 1:

Certificate of Qualifications

## Certificate of Qualification

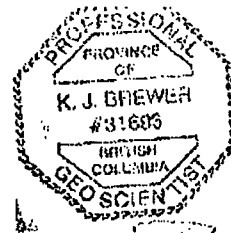
I, Kevin J. Brewer, PGeo, hereby certify that:

- 1) I am a self-employed Consulting Geologist and sole proprietor of:  
39627 Yukon Inc, 6 Carnelian Court, Whitehorse, Yukon Y1A 6A3
- 2) I graduated with a Bachelor of Science (Honours) Degree in geology from Memorial University Of Newfoundland (MUN), St. John's, Newfoundland, in 1984,
- 3) I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) and the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador (APEGNL).
- 4) I have worked as a geologist for more than 25 years since my graduation from MUN.
- 5) I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 6) I am responsible for preparation of all sections of this assessment report.
- 7) I am not aware of any material facts or material changes with respect to the subject matter of the assessment report not contained within the report, of which the omission to disclose makes the report misleading.
- 8) I have read National Instrument 43-101 and form 43-101F1; however, this Assessment Report has not been prepared in compliance with that instrument and form,
- 9) I consent to the filing of this Report with the Department of Energy, Mines and Resources, Government of Yukon.
- 10) The effective date of this report is February 18, 2013.

Dated this 18th' day of February, 2013,

*"Kevin Brewer"*

Kevin Brewer, MBA, BSc (Hons), PGeo  
Address: 6 Carnelian Court  
Whitehorse, Yukon Y1A 6A3  
Telephone: 867-633-4260  
Fax: 867-668-7127  
E-mail: kbrewer80@hotmail.com



Appendix 2:

Expenditure Summary

39627 Yukon Inc. - Listwaenitic Studies 2012 - YMIP Expenditure Summary

**Judas Creek**

geologist	5 days			\$ 2,500.00
field assistant	5 days			\$ 1,250.00
truck		800	0.61	\$ 488.00
daily	10 person days			\$ 1,000.00
atv				\$ 200.00
tub trailer				\$ 50.00
transport trailer				\$ 80.00

**Marsh Lake**

geologist	3 days			\$ 1,500.00
field assistant	3 days			\$ 750.00
truck		240	0.61	\$ 146.40
daily	6 person days			\$ 600.00

**Alaska Highway**

geologist	1 day			\$ 500.00
field assistant	1 day			\$ 250.00
truck		250	0.61	\$ 152.50
assays			33.8	\$ -
daily	2 person days			\$ 200.00

**Research and Reporting**

geologist	3 days			\$ 1,500.00
-----------	--------	--	--	-------------

**Assays**

Marsh Lake

WH12224090	\$ 292.75
WH12228128	\$ 281.04
WH12228127	\$ 141.32
WH12224029	\$ 616.74

Alasks Hwy

WH12224028	\$ 290.00
------------	-----------

Judas Creek

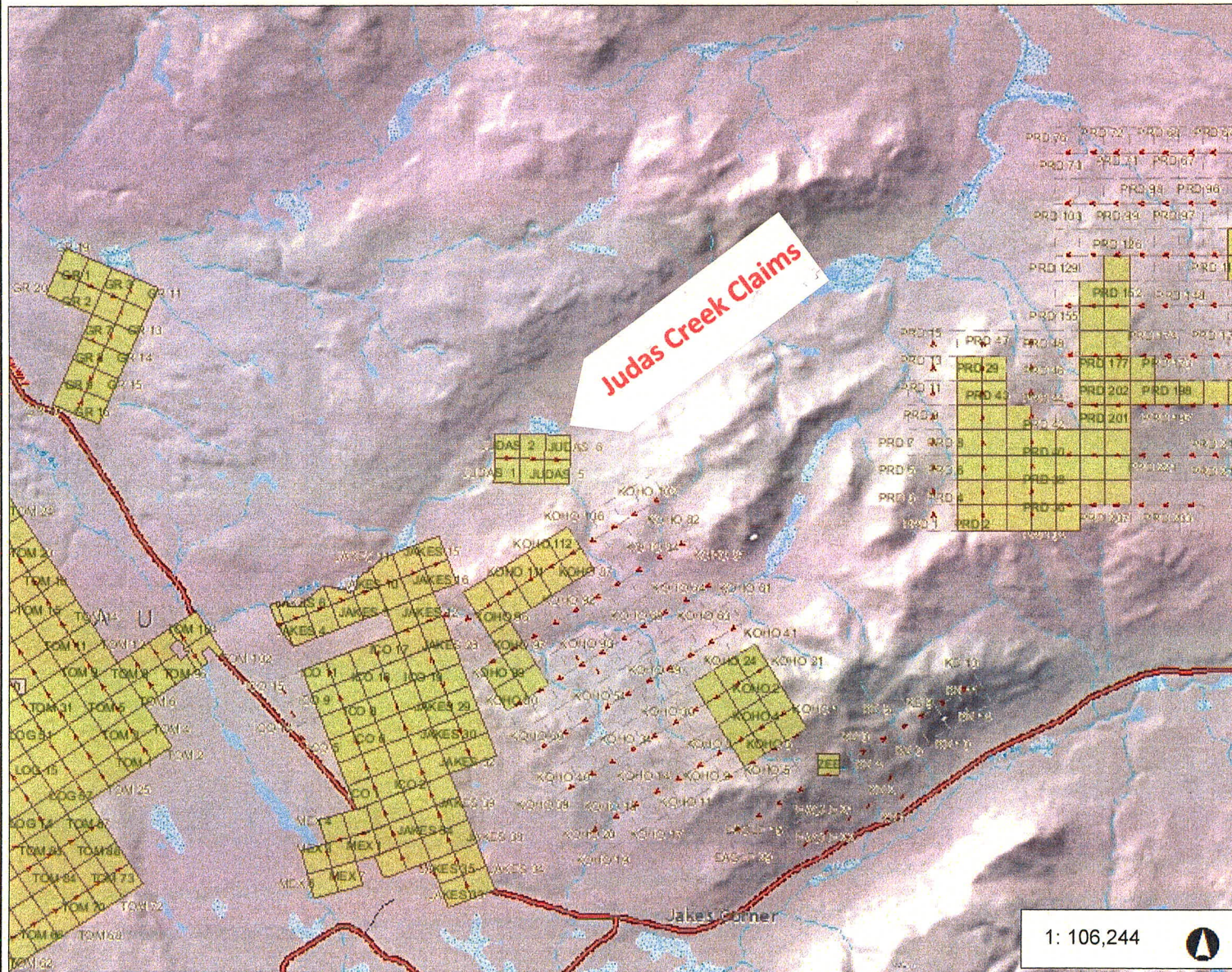
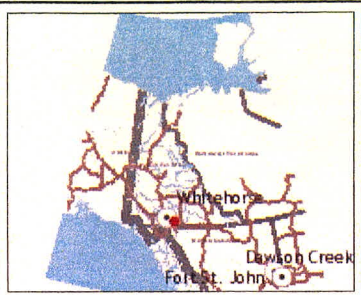
WH1225089	\$ 1,646.01
-----------	-------------

Total	\$ 14,434.76
-------	--------------

Total YMIP	75% of total	\$ 10,826.07
------------	--------------	--------------

## Appendix 3:

### A. Judas Creek Claims



**Judas Creek Claims**

- ### Legend
- Quartz Claims (50K)
    - Active and Pending
    - Expired
  - Quartz Leases (50K)
  - Adjoin Quartz
  - Quartz Mining Land Use Perm
    - Class 3
    - Class 4
  - Quartz Staking Direction
  - Surveyed Mineral Claims

1: 106,244

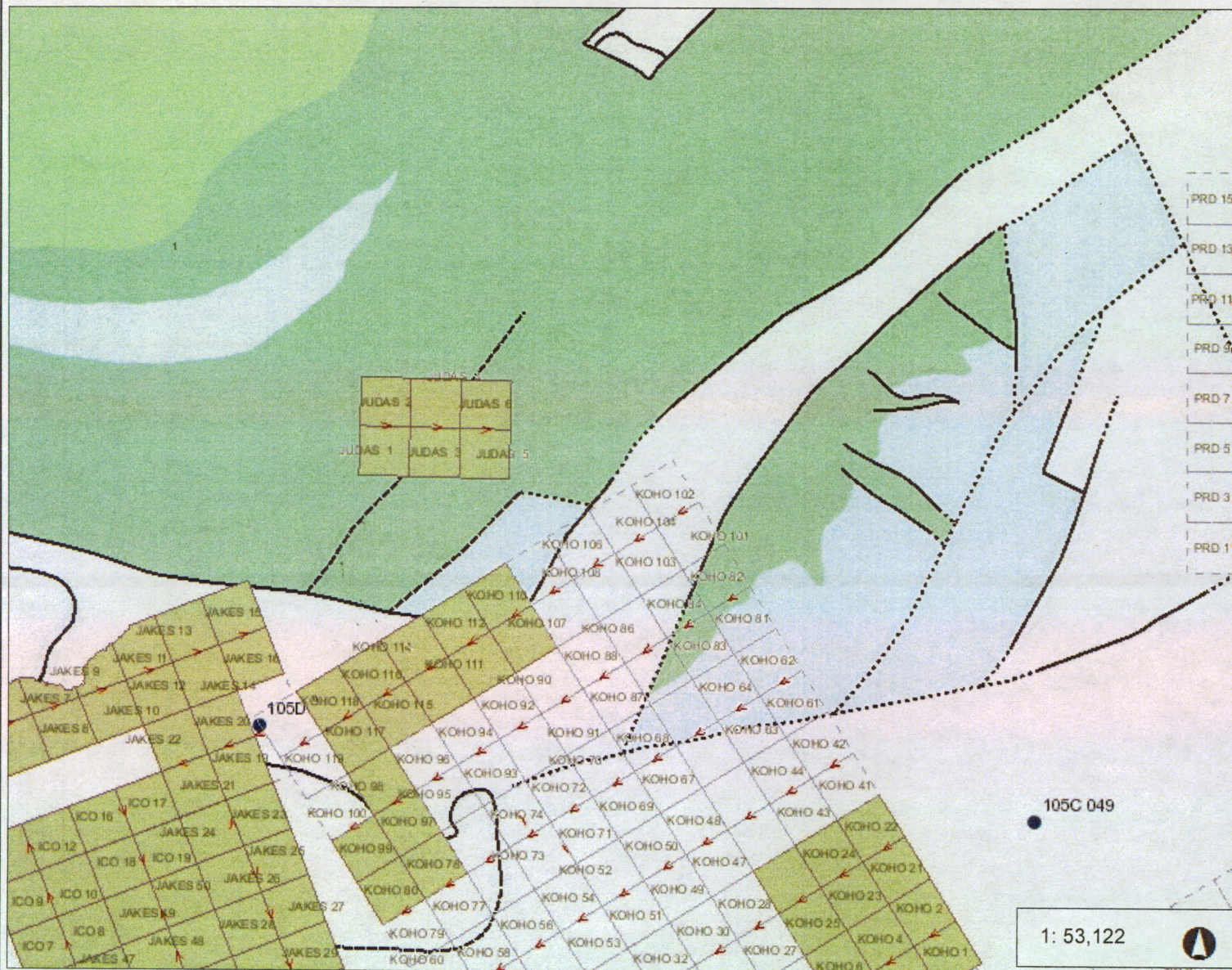
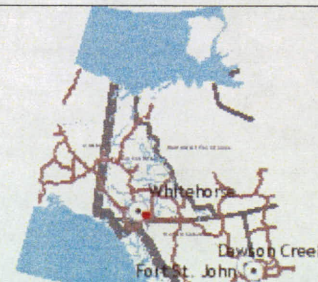
5.4 0 2.70 5.4 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 15-Feb-2013

**Notes**  
39627 Yukon Inc. YMIP Grant - 2012





### Legend

- Quartz Claims (50K)**
  - Active and Pending
  - Expired
- Quartz Leases (50K)**
- Adjoin Quartz**
- Quartz Mining Land Use Perm**
  - Class 3
  - Class 4
- Quartz Staking Direction**
- Surveyed Mineral Claims**
- Mineral occurrences (MINFILE)**
  - Anomaly
  - Deposit
  - Drilled Prospect
  - Open Pit Past Producer
  - Open Pit Producer
  - Prospect
  - Showing
  - Staked - No Work Recorded
  - Underground Past Producer
  - Unknown
- Faults (250k)**
  - defined
  - approximate
  - assumed
  - extrapolated
  - defined

2.7 0 1.35 2.7 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

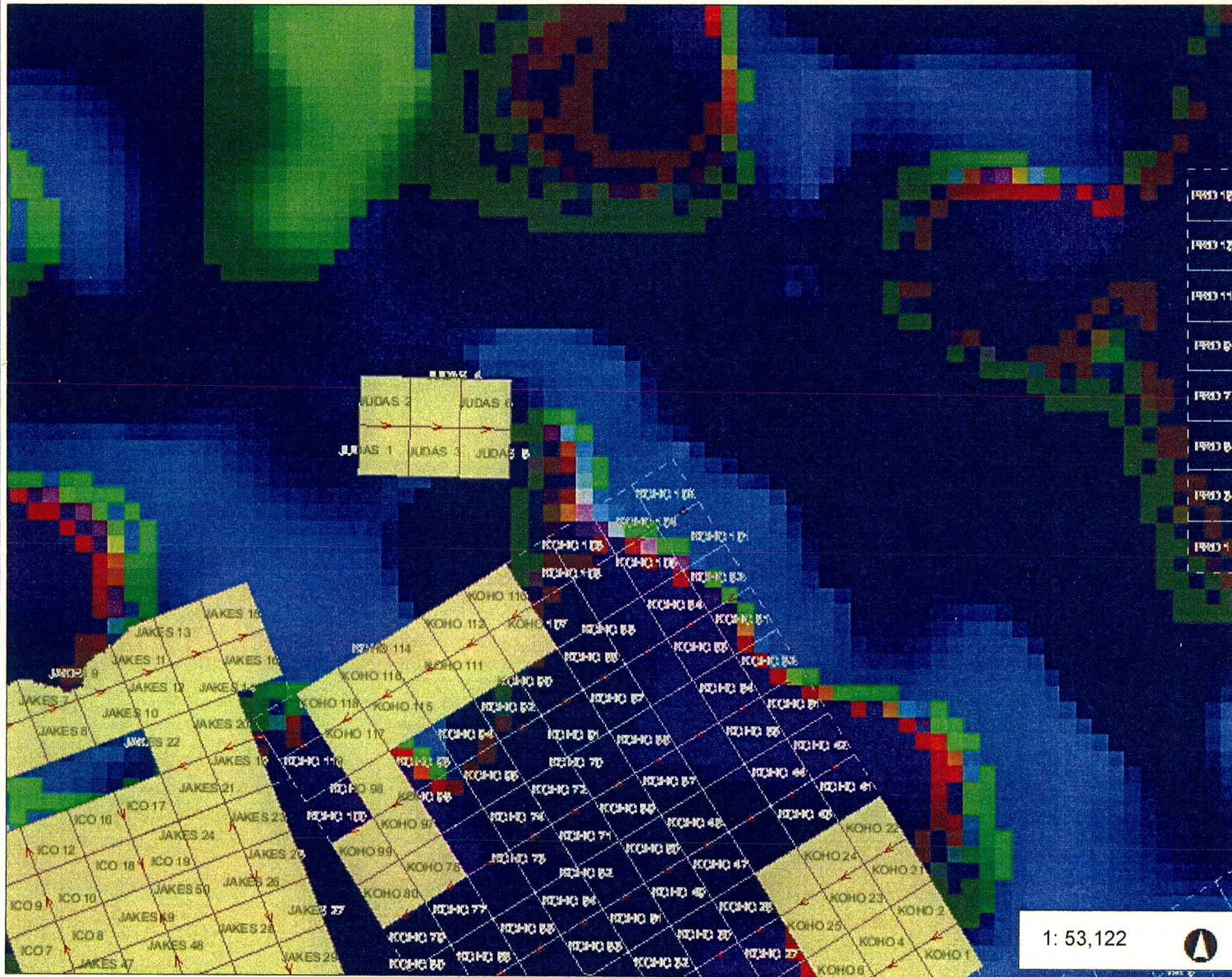
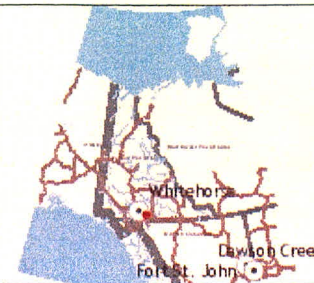
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 15-Feb-2013

1: 53,122

**Notes**  
39627 Yukon Inc. YMIP Grant - 2012



# Listwaenite Study - Regional Geophysics (FVD) in Judas Creek Area



## Legend

- Quartz Claims (50K)
  - Active and Pending
  - Expired
- Quartz Leases (50K)
- Adjoin Quartz
- Quartz Mining Land Use Perm
  - Class 3
  - Class 4
- Quartz Staking Direction
- Surveyed Mineral Claims
- First Vertical Derivative (200m)
  - Red: Band\_1
  - Green: Band\_2
  - Blue: Band\_3

1: 53,122



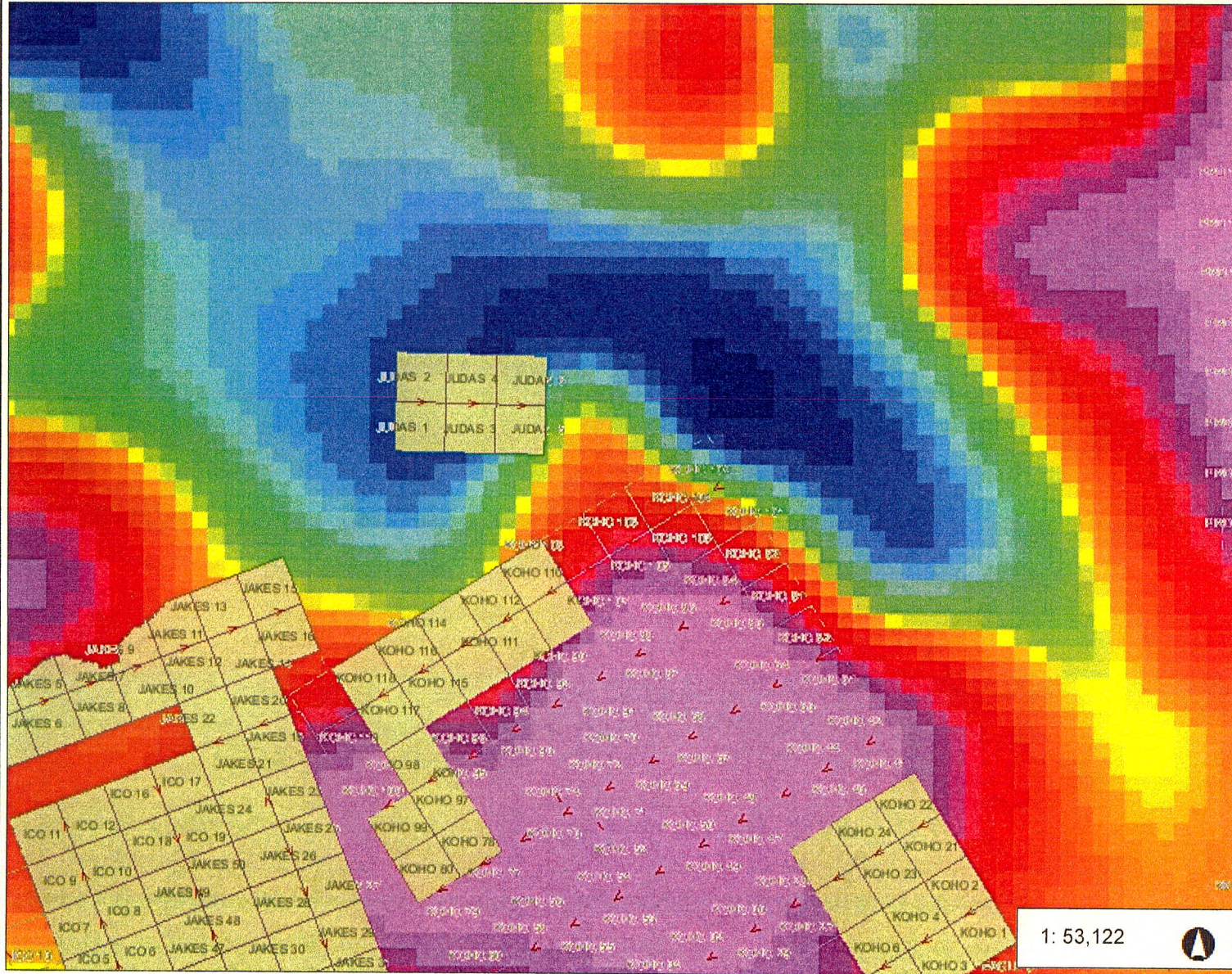
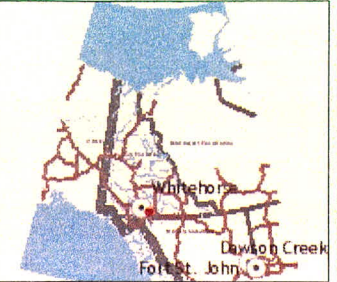
2.7 0 1.35 2.7 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 15-Feb-2013

## Notes

39627 Yukon Inc. YMIP Grant - 2012



### Legend

- Quartz Claims (50K)
  - Active and Pending
  - Expired
- Quartz Leases (50K)
  - Adjoin Quartz
- Quartz Mining Land Use Perm
  - Class 3
  - Class 4
- Quartz Staking Direction
  - Red: Band\_1
  - Green: Band\_2
  - Blue: Band\_3
- Residual Total Field (200m)
  - Red: Band\_1
  - Green: Band\_2
  - Blue: Band\_3

1: 53,122

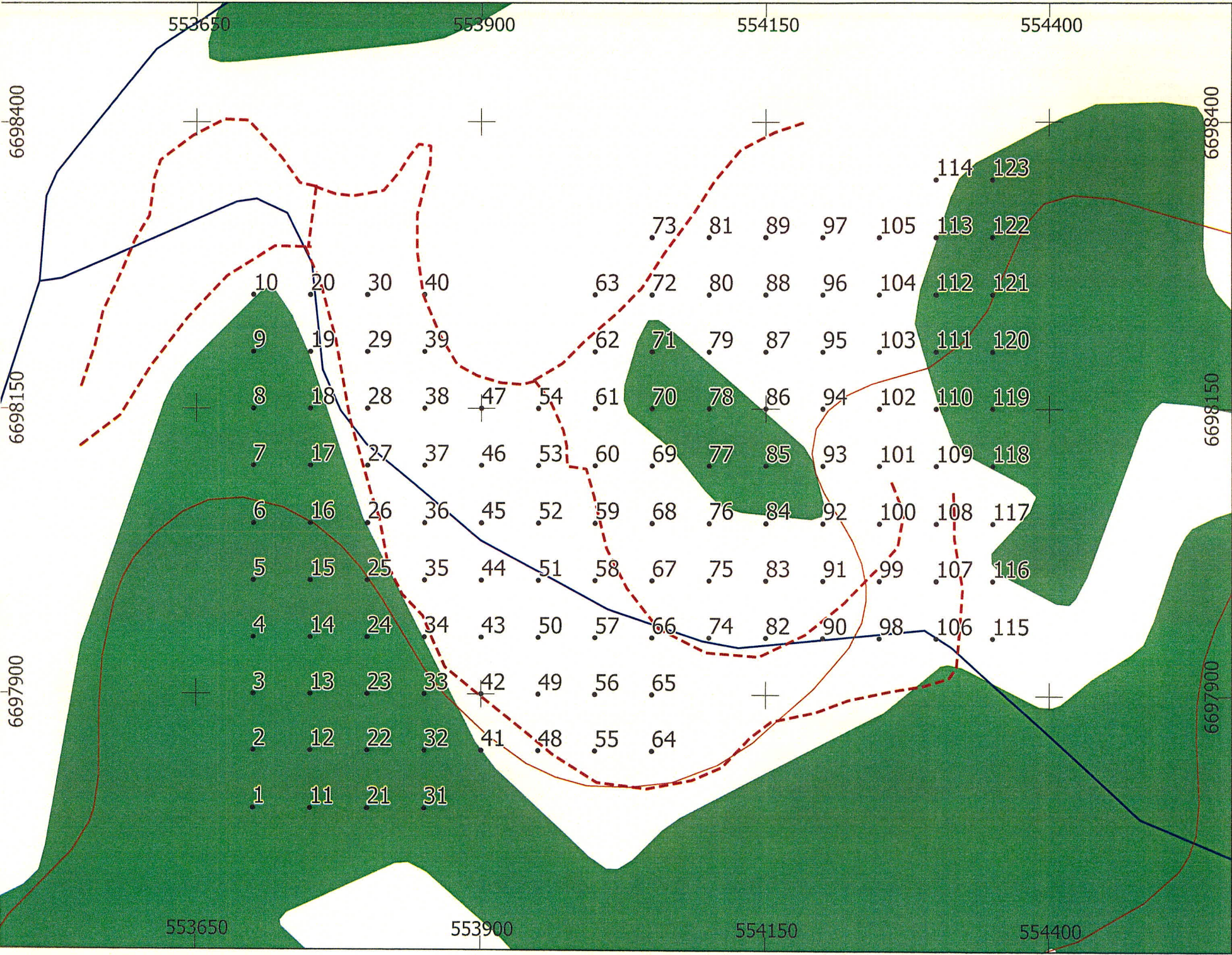
2.7 0 1.35 2.7 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

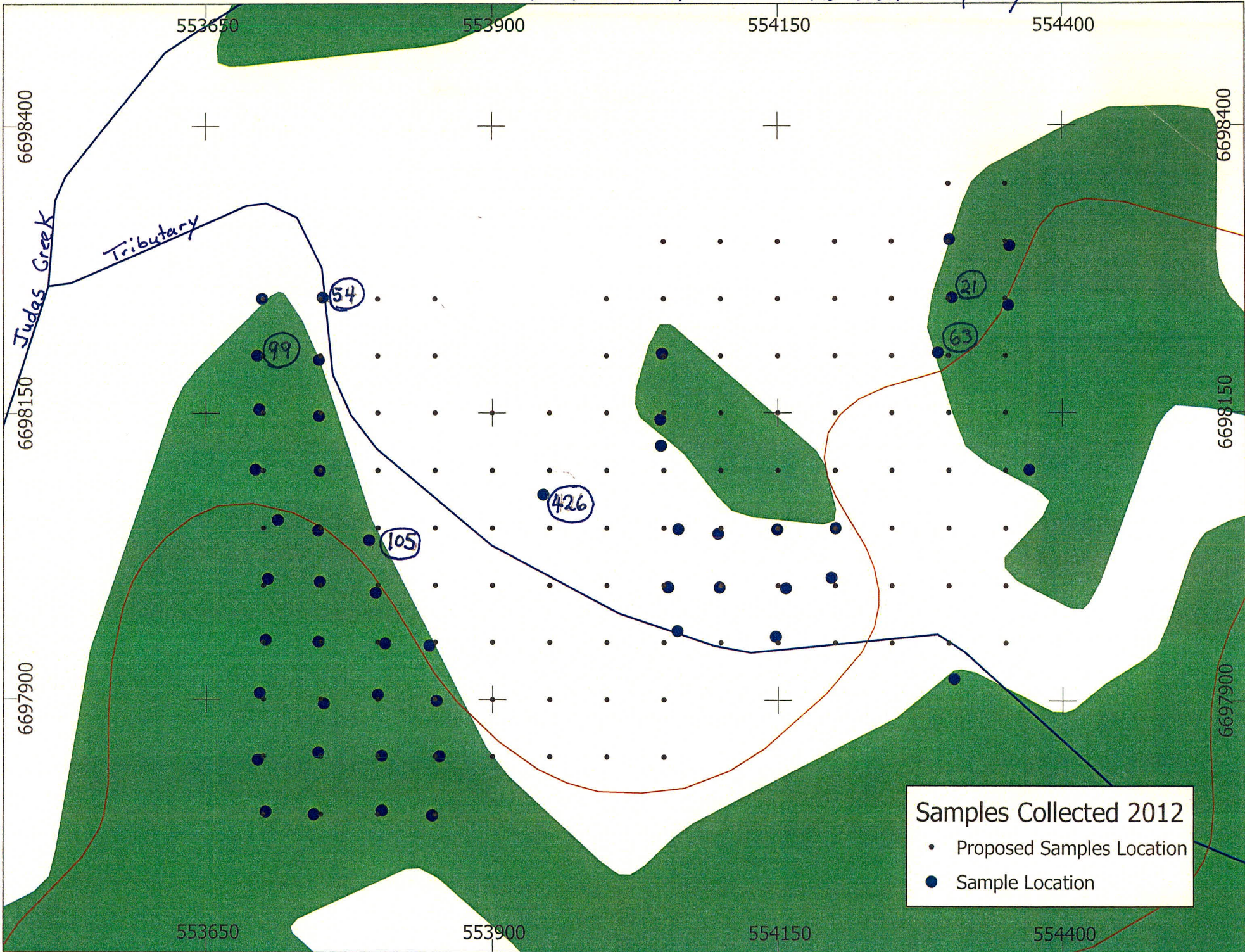
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 16-Feb-2013

### Notes

Listwaenite Study - 39627 Yukon Inc.  
YMIP Grant - 2012



run in 2012 11 Judas Creek Property



Samples Collected 2012

- Proposed Samples Location
- Sample Location

### Soil Sampling Summary Table - Judas Creek Property

SampleNo	Sample Date	Sampler	Project	Longitude	Latitude	Elevation	Eastings	Northing	Terrain	Colour	Texture	Horizon	Depth	Molsture	Clast%	Clast_Shape	Quality	Comments
1527451	Soil 10/21/2012	KB	Judas	-134.024	60.413	841.2	553744	6697800	Flat	Grey	Sandy Silt	C	50	Damp	10-30	Subangular	Excellent	
1527452	Soil 10/21/2012	KB	Judas	-134.024	60.413	836.2	553748	6697853	Flat	Grey	Sandy Silt	C	70	Damp	<10	Subangular	Excellent	
1527453	Soil 10/21/2012	KB	Judas	-134.024	60.414	841.6	553753	6697896	Flat	Brown	Silty Sand	B/C	30	Moist	30-50	Subrounded	Fair	glaciofluvial ?
1527454	Soil 10/21/2012	KB	Judas	-134.024	60.414	842.6	553748	6697951	Gentle	Grey	Gravel	C	50	Damp	30-50	Subangular	Excellent	
1527455	Soil 10/21/2012	KB	Judas	-134.024	60.415	821.6	553749	6698003	Steep	Grey	Silty Sand	C	100	Damp	10-30	Subangular	Excellent	
1527456	Soil 10/21/2012	KB	Judas	-134.024	60.415	804.7	553748	6698048	Flat	Grey	Sand	B/C	40	Damp	10-30	Subangular	Good	
1527457	Soil 10/21/2012	KB	Judas	-134.024	60.416	794	553749	6698100	Flat	Brown	Silty Sand	B/C	30	Damp	30-50	Subrounded	Good	
1527458	Soil 10/21/2012	KB	Judas	-134.024	60.416	798.3	553749	6698147	Flat	Brown	Gravel	B/C	30	Damp	30-50	Subrounded	Good	
1527459	Soil 10/21/2012	KB	Judas	-134.024	60.417	800.4	553749	6698197	Flat	Grey	Sand	C	40	Dry	30-50	Subrounded	Good	
1527460	QAQC 10/22/2012	KB	Judas															Duplicate of 1527461
1527461	Soil 10/22/2012	KB	Judas	-134.024	60.417	800	553752	6698251	Flat	Brown	Silty Sand	B/C	30	Damp	30-50	Subangular	Good	
1527462	Soil 10/22/2012	KB	Judas	-134.022	60.414	798.1	553845	6697947	Moderate	Grey	Silty Sand	C	110	Damp	<10	Angular	Good	moved to avoid alluvial
1527463	Soil 10/22/2012	KB	Judas	-134.022	60.413	818	553851	6697899	Steep	Grey	Silty Sand	C	110	Damp	<10	Subangular	Excellent	
1527464	Soil 10/22/2012	KB	Judas	-134.022	60.413	824.6	553854	6697850	Steep	Grey	Sand	C	110	Dry	<10	Fair	no rocks in sample, glaciofluvial??	
1527465	Soil 10/22/2012	KB	Judas	-134.022	60.413	823.7	553847	6697799	Flat	Grey	Sandy Silt	C	110	Damp	<10	Subangular	Good	
1527466	Soil 10/22/2012	KB	Judas	-134.020	60.415	787.3	553945	6698079	Flat	Grey	Sand	B/C	30	Damp	30-50	Subrounded	Fair	alluvial ?
1527467	Soil 10/22/2012	KB	Judas	-134.018	60.414	794.7	554062	6697960	Flat	Brown	Silty Sand	B	40	Damp	30-50	Subrounded	Good	moved to avoid alluvium
1527468	Soil 10/22/2012	KB	Judas	-134.018	60.415	799.1	554063	6698049	Gentle	Grey	Silty Sand	C	40	Damp	30-50	Subangular	Excellent	moved to avoid alluvium
1527469	Soil 10/22/2012	KB	Judas	-134.019	60.416	802.7	554047	6698144	Steep	Grey	Silty Sand	C	40	Dry	10-30	Subrounded	Good	
1394401	Soil 10/21/2012	JC	Judas	-134.025	60.413	842	553702	6697802	Flat	Grey	Sandy Silt	C	60	Damp	<10	Subangular	Excellent	
1394402	Soil 10/21/2012	JC	Judas	-134.025	60.413	844.3	553695	6697847	Flat	Grey	Gravel	C	60	Damp	30-50	Subangular	Fair	
1394403	Soil 10/21/2012	JC	Judas	-134.025	60.414	838.7	553697	6697906	Flat	Brown	Sandy Silt	B/C	60	Damp	30-50	Subangular	Excellent	
1394404	Soil 10/21/2012	JC	Judas	-134.025	60.414	848.8	553702	6697952	Gentle	Grey	Sandy Silt	C	60	Damp	10-30	Subangular	Excellent	
1394405	Soil 10/21/2012	JC	Judas	-134.025	60.415	825	553704	6698006	Moderate	Grey	Sandy Silt	C	70	Damp	10-30	Subangular	Fair	
1394406	Soil 10/21/2012	JC	Judas	-134.025	60.415	802.4	553713	6698057	Flat	Grey	Sandy Silt	C	30	Dry	30-50	Subangular	Excellent	
1394407	Soil 10/21/2012	JC	Judas	-134.025	60.416	799.7	553693	6698101	Flat	Brown	Sand	B/C	30	Dry	30-50	Subangular	Excellent	
1394408	Soil 10/21/2012	JC	Judas	-134.025	60.416	796.5	553697	6698153	Flat	Brown	Sandy Silt	B/C	20	Dry	30-50	Subangular	Excellent	
1394409	Soil 10/21/2012	JC	Judas	-134.025	60.417	794.1	553695	6698200	Gentle	Brown	Sandy Silt	B/C	30	Damp	<10	Subangular	Excellent	
1394410	Soil 10/21/2012	JC	Judas	-134.025	60.417	800.2	553699	6698250	Gentle	Brown	Sandy Silt	B/C	30	Dry	<10	Subangular	Excellent	
1394411	Soil 10/21/2012	JC	Judas	-134.023	60.415	798.8	553792	6698039	Moderate	Brown	Sandy Silt	B/C	60	Dry	<10	Subangular	Excellent	
1394412	Soil 10/22/2012	JC	Judas	-134.023	60.415	803.5	553798	6697994	Moderate	Grey	Sandy Silt	C	60	Dry	<10	Subangular	Excellent	
1394413	Soil 10/22/2012	JC	Judas	-134.023	60.414	815.4	553806	6697949	Moderate	Grey	Sandy Silt	C	60	Damp	<10	Subangular	Excellent	
1394414	Soil 10/22/2012	JC	Judas	-134.023	60.414	819.2	553800	6697904	Gentle	Grey	Sandy Silt	C	50	Damp	<10	Subangular	Excellent	
1394415	Soil 10/22/2012	JC	Judas	-134.023	60.413	831.9	553803	6697851	Flat	Grey	Sandy Silt	C	60	Dry	<10	Subangular	Excellent	
1394416	Soil 10/22/2012	JC	Judas	-134.023	60.413	835.8	553804	6697803	Flat	Grey	Sandy Silt	C	70	Damp	<10	Subangular	Excellent	
1394417	Soil 10/22/2012	JC	Judas	-134.019	60.415	823.9	554054	6697999	Flat	Brown	Gravel	B/C	40	Dry	30-50	Subrounded	Fair	alluvial ?
1394418	Soil 10/22/2012	JC	Judas	-134.019	60.416	808.7	554048	6698121	Gentle	Brown	Sandy Silt	B/C	50	Damp	30-50	Subangular	Excellent	
1394419	Soil 10/22/2012	JC	Judas	-134.019	60.417	807.6	554049	6698202	Moderate	Grey	Sand	C	80	Damp	<10	Subrounded	Fair	glaciofluvial ?
1394420	QAQC 10/22/2012	JC	Judas															Duplicate of 1394420
1527470	Soil 10/22/2012	JC	Judas	-134.017	60.414	809.3	554148	6697955	Gentle	Grey	Sand	B/C	70	Dry	10-30	Subrounded	Fair	alluvial ?
1527471	Soil 10/22/2012	JC	Judas	-134.017	60.415	816.3	554157	6697998	Moderate	Grey	Silty Sand	C	60	Dry	10-30	Subangular	Excellent	
1527472	Soil 10/22/2012	JC	Judas	-134.017	60.415	827.2	554149	6698049	Flat	Green	Sand	B/C	110	Dry	10-30	Subrounded	Good	
1527473	Soil 10/22/2012	JC	Judas	-134.016	60.415	801.6	554197	6698007	Gentle	Grey	Sandy Silt	C	80	Damp	<10	Angular	Excellent	moved to avoid alluvium
1527474	Soil 10/22/2012	JC	Judas	-134.013	60.415	795.2	554371	6698101	Gentle	Grey	Sandy Silt	C	60	Dry	10-30	Subangular	Excellent	
1527475	Soil 10/22/2012	JC	Judas	-134.013	60.417	793.7	554353	6698244	Gentle	Brown	Sandy Silt	B	30	Damp	30-50	Subrounded	Fair	
1527476	Soil 10/22/2012	JC	Judas	-134.013	60.417	799.3	554354	6698296	Gentle	Brown	Sand	B/C	30	Dry	30-50	Subrounded	Fair	
1394421	Soil 10/23/2012	KB	Judas	-134.018	60.415	809.8	554099	6697998	Gentle	Grey	Sandy Silt	C	50	Damp	10-30	Subangular	Excellent	

1394422	Soil	10/23/2012	KB	Judas	-134.018	60.415	820.6	554098	6698045	Flat	Grey	Sand	B/C	70	Damp	<10	Subrounded	Fair	glaciofluvial ?
1394423	Soil	10/23/2012	KB	Judas	-134.016	60.415	810.9	554200	6698050	Moderate	Brown	Sandy Silt	B/C	50	Dry	10-30	Subangular	Good	
1394424	Soil	10/23/2012	KB	Judas	-134.014	60.414	810.8	554305	6697919	Gentle	Grey	Sand	C	50	Damp	<10	Subrounded	Fair	alluvial ?
1394425	Soil	10/23/2012	KB	Judas	-134.014	60.416	807.8	554291	6698203	Flat	Brown	Sandy Silt	B/C	20	Damp	10-30	Subangular	Good	
1394426	Soil	10/23/2012	KB	Judas	-134.014	60.417	798.1	554303	6698251	Gentle	Grey	Silt	B/C	30	Damp	<10	Subrounded	Good	glaciofluvial ?
1394427	Soil	10/23/2012	KB	Judas	-134.014	60.417	789.6	554301	6698302	Flat	Grey	Sand	C	20	Dry	<10	Subrounded	Good	glaciofluvial ?

WH12250089 - Finalized

CLIENT : "YUKIN - 39627 Yukon Inc"

# of SAMPLES : 53

DATE RECEIVED : 2012-10-31 DATE FINALIZED : 2012-11-09

PROJECT : "Judas"

CERTIFICATE COMMENTS : "\*\*\*\*Corrected copy with Project name Jakes corrected to Judas\*\*\*\* "

PO NUMBER : " "

	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
SAMPLE	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	
DESCRIPTI	(ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	
1394401	<0.2	1.23	6	<10	200	<0.5	<2		2.64	<0.5	12	91	31
1394402	<0.2	1.58	<2	<10	160	<0.5		3	0.65	<0.5	12	73	28
1394403	<0.2	0.97	3	<10	120	<0.5		2	0.45	<0.5	7	61	11
1394404	<0.2	1.06	5	<10	130	<0.5		4	0.43	<0.5	10	77	19
1394405	<0.2	1	5	<10	160	<0.5		2	0.75	<0.5	9	75	23
1394406	<0.2	1.81	5	<10	260	<0.5	<2		0.36	<0.5	13	71	16
1394407	<0.2	1.52	5	<10	330	<0.5	<2		0.34	<0.5	10	60	12
1394408	<0.2	1.67	4	<10	310	<0.5		2	0.32	<0.5	17	79	15
1394409	<0.2	1.46	4	<10	260	<0.5		3	0.36	<0.5	12	56	14
1394410	<0.2	1.86	3	<10	320	<0.5		2	0.42	<0.5	13	67	14
1394411	<0.2	1.32	3	<10	180	<0.5		3	0.36	<0.5	7	63	13
1394412	<0.2	0.78	4	<10	120	<0.5	<2		0.59	<0.5	8	65	18
1394413	<0.2	0.71	3	<10	110	<0.5		2	0.55	<0.5	7	58	12
1394414	<0.2	0.94	3	<10	130	<0.5	<2		0.55	<0.5	9	80	20
1394415	<0.2	0.93	6	<10	160	<0.5	<2		3.23	<0.5	9	69	25
1394416	<0.2	1.32	5	<10	260	<0.5	<2		5.15	<0.5	15	103	36
1394417	<0.2	1.86	3	<10	230		0.5	3	0.39	<0.5	17	97	19
1394418	<0.2	0.97	3	<10	150	<0.5		2	0.39	<0.5	8	73	10
1394419	<0.2	0.58	4	<10	90	<0.5		2	1.4	<0.5	4	29	11
1394420	<0.2	0.57	3	<10	110	<0.5		2	2.12	<0.5	5	30	12
1394421	<0.2	1.41	8	<10	220	<0.5		2	1.35	<0.5	17	91	39
1394422		0.3	0.78	4	<10	90	<0.5	<2	0.36	<0.5	7	54	9
1394423	<0.2	1.42	7	<10	200	<0.5	<2		0.56	<0.5	12	98	15
1394424	<0.2	0.89	5	<10	110	<0.5	<2		1.2	<0.5	10	98	19

1394425 <0.2	1.52	4 <10	250 <0.5	<2	0.27 <0.5	9	66	6				
1394426 <0.2	1.23	6 <10	220 <0.5	<2	0.39 <0.5	13	75	15				
1394427 <0.2	1.48	5 <10	210 <0.5	<2	0.32 <0.5	12	81	12				
1527451 <0.2	0.87	5 <10	110 <0.5	<2	0.45 <0.5	8	71	16				
1527452 <0.2	0.75	4 <10	120 <0.5	<2	2.54 <0.5	7	56	16				
1527453 <0.2	1.43	5 <10	170 <0.5	<2	0.43 <0.5	8	71	15				
1527454 <0.2	1.37	5 <10	190 <0.5	<2	0.41 <0.5	11	83	11				
1527455 <0.2	0.85	4 <10	100 <0.5	<2	0.55 <0.5	8	60	13				
1527456 <0.2	1.14	2 <10	200 <0.5	<2	0.3 <0.5	7	50	7				
1527457 <0.2	1.9	6 <10	260 <0.5	<2	0.31 <0.5	10	81	12				
1527458 <0.2	1.69	5 <10	300 <0.5	<2	0.31 <0.5	11	70	12				
1527459 <0.2	1.49	7 <10	210 <0.5	<2	0.34 <0.5	14	80	16				
1527460 <0.2	1.3	6 <10	190 <0.5	<2	0.31 <0.5	8	46	9				
1527461 <0.2	1.28	2 <10	310 <0.5	<2	0.33 <0.5	8	44	7				
1527462 <0.2	0.71	4 <10	120 <0.5	<2	1.15 <0.5	7	57	15				
1527463 <0.2	0.73	4 <10	130 <0.5	<2	2.03 <0.5	7	52	15				
1527464 <0.2	0.65	4 <10	110 <0.5	<2	2.64 <0.5	7	59	13				
1527465 <0.2	0.8	5 <10	140 <0.5	<2	3.13 <0.5	8	59	19				
1527466 <0.2	1.06	4 <10	130 <0.5	<2	0.46 <0.5	7	55	9				
1527467 <0.2	1.48	6 <10	270 <0.5	<2	0.47 <0.5	15	90	16				
1527468 <0.2	0.96	4 <10	170 <0.5	<2	0.34 <0.5	7	63	6				
1527469 <0.2	0.71	5 <10	90 <0.5	<2	1.36 <0.5	5	38	17				
1527470 <0.2	0.59	5 <10	90 <0.5	<2	2.08 <0.5	7	53	13				
1527471 <0.2	0.78	5 <10	90 <0.5	<2	0.34 <0.5	7	64	11				
1527472 0.2	1.29	9 <10	180 <0.5	<2	1.83 <0.5	18	82	42				
1527473 <0.2	0.75	4 <10	80 <0.5	<2	0.36 <0.5	7	67	12				
1527474 <0.2	0.78	2 <10	90 <0.5	<2	1.38 <0.5	9	86	15				
1527475 <0.2	1.57	6 <10	220 <0.5	<2	0.27 <0.5	11	76	11				
1527476 <0.2	1.25	6 <10	150 <0.5	<2	0.35 <0.5	11	94	9				
total	0.5	61.05	240	0	9310	0.5	34	50.37	0	517	3647	831
samples	76	76	76	76	76	76	76	76	76	76	76	76
average	0.006579	0.803289	3.157895	0	122.5	0.006579	0.447368	0.662763	0	6.802632	47.98684	10.93421

ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	
%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	
2.33	<10	<1		0.06	10	1.44	428	<1	0.03	108	720	5	<0.01
2.17	<10	<1		0.07	10	1	228	1	0.03	97	830	3	<0.01
1.64	<10		1	0.03	10	0.64	172	<1	0.01	56	270	2	<0.01
2.01	<10		1	0.05	10	0.96	246	<1	0.01	101	340	3	<0.01
1.93	<10		2	0.04	10	1.13	241	<1	0.02	101	510	3	<0.01
2.93	10		1	0.07	10	0.64	509	<1	0.01	78	670	6	<0.01
2.47	<10		2	0.06	10	0.58	458	1	0.01	63	490	4	<0.01
2.71	10		2	0.06	10	1.37	620	<1	0.01	161	790	6	<0.01
2.32	10		1	0.05	10	0.64	763	<1	0.01	69	910	5	<0.01
2.83	10		1	0.05	10	0.82	309	<1	0.02	80	460	6	<0.01
1.91	<10		1	0.05	10	0.64	172	<1	0.01	57	450	5	<0.01
1.62	<10	<1		0.03	10	0.91	224	<1	0.02	85	360	2	<0.01
1.59	<10	<1		0.04	10	0.91	230	<1	0.02	64	500	4	<0.01
1.96	<10		1	0.04	10	1.02	235	<1	0.02	98	410	3	<0.01
1.92	<10		1	0.04	10	1.21	329	<1	0.02	85	700	3	<0.01
2.42	<10		1	0.07	10	1.92	447	<1	0.03	133	680	4	<0.01
2.59	<10		1	0.06	10	1.04	413	1	0.01	157	590	5	<0.01
1.95	<10	<1		0.07	10	0.66	208	<1	0.01	66	250	3	<0.01
1.24	<10		1	0.04	10	0.56	194	<1	0.01	27	480	2	<0.01
1.38	<10		1	0.04	10	0.6	202	<1	0.02	27	550	3	<0.01
2.71	<10		1	0.1	10	1.15	574	<1	0.02	147	530	6	0.01
1.73	<10	<1		0.04	10	0.72	213	<1	0.01	61	470	4	0.01
2.52	<10	<1		0.08	10	0.83	339	<1	0.02	95	330	5	0.01
1.88	<10	<1		0.04	10	1.49	303	<1	0.02	137	620	3	0.01

2.37	10 <1	0.04 <10		0.49	460 <1	0.01	52	390	5	0.01		
2.27 <10	<1	0.06	10	0.86	472 <1	0.02	94	610	6	0.01		
2.38 <10	<1	0.05	10	0.96	363 <1	0.02	98	340	5	0.01		
1.73 <10	<1	0.03	10	0.93	213 <1	0.02	92	410	3	0.01		
1.55 <10	<1	0.03	10	1.02	249 <1	0.02	74	580	3	0.01		
1.97 <10	<1	0.06	10	0.69	223 <1	0.01	57	300	3	0.01		
2.31 <10	<1	0.08	10	0.9	296 <1	0.01	78	380	4	0.01		
1.59 <10	<1	0.03	10	0.79	176 <1	0.02	71	180	2	0.01		
1.93 <10	<1	0.04	10	0.54	265 <1	0.01	42	530	4	0.01		
2.46	10 <1	0.07	10	0.74	281 <1	0.02	58	520	4	0.01		
2.56	10 <1	0.05	10	0.74	382 <1	0.01	88	530	6	0.01		
2.43 <10	<1	0.07	10	1.02	489 <1	0.02	109	730	6	0.01		
2.05 <10	<1	0.06	10	0.43	286 <1	0.01	57	690	5	0.01		
1.99 <10	<1	0.06 <10		0.44	539 <1	0.01	43	590	4	0.01		
1.51 <10	<1	0.03	10	0.96	236 <1	0.02	73	630	3	0.01		
1.58 <10	<1	0.05	10	1.04	265 <1	0.02	70	620	4	0.01		
1.53 <10	<1	0.03	10	1.2	250 <1	0.02	81	630	2	0.01		
1.67 <10	<1	0.04	10	1.15	294 <1	0.03	76	640	3	0.01		
1.71 <10	<1	0.05	10	0.66	193 <1	0.02	66	410	3	0.01		
2.35 <10	<1	0.07	10	1	483 <1	0.02	132	410	5	0.01		
1.67 <10	<1	0.04 <10		0.49	205 <1	0.01	49	240	3	0.01		
1.43 <10	<1	0.03	10	0.58	182 <1	0.02	45	340	3	0.01		
1.38 <10	<1	0.03	10	1.04	213 <1	0.02	73	550	3	0.01		
1.51 <10	<1	0.03	10	0.67	154 <1	0.01	71	130	3	0.01		
2.52 <10	<1	0.09	10	1.27	552 <1	0.04	140	570	7	0.03		
1.54 <10	<1	0.03	10	0.68	186 <1	0.01	70	430	2	0.01		
1.66 <10	<1	0.04	10	1.46	215 <1	0.02	104	580	3	0.01		
2.46	10 <1	0.04	10	0.75	234 <1	0.01	86	630	5	0.01		
2.65 <10	<1	0.04	10	0.91	228 <1	0.01	105	520	5	0.01		
107.52	80	19	2.65	500	47.29	16641	3	0.89	4407	27020	209	0.35
76	76	76	76	76	76	76	76	76	76	76	76	76
1.414737	1.052632	0.25	0.034868	6.578947	0.622237	218.9605	0.039474	0.011711	57.98684	355.5263	2.75	0.004605

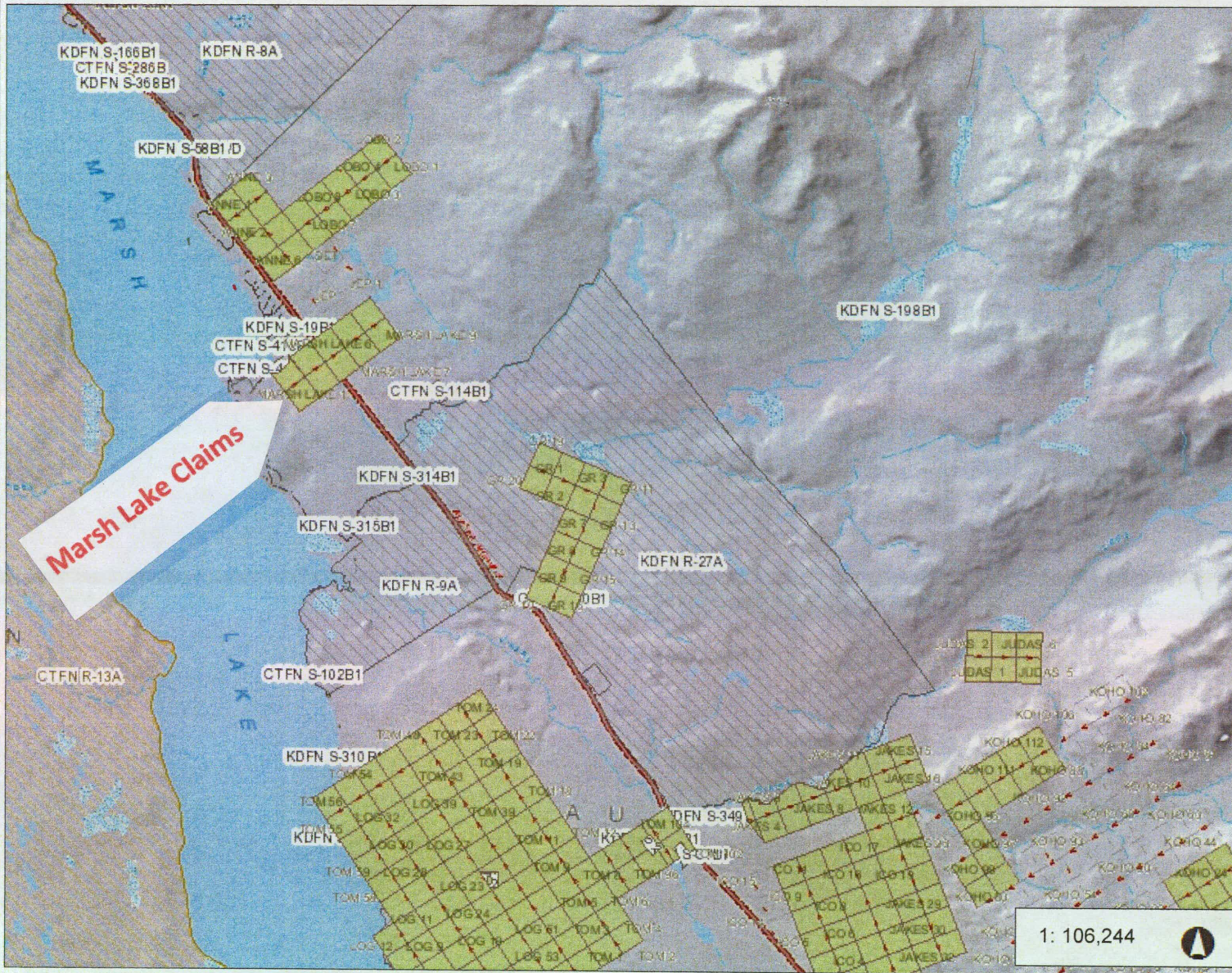
ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-TL43	
Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn	Au	Au	
ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb	
<2		5	60 <20		0.11 <10	<10		54 <10		39	0.004	4
<2		4	28 <20		0.12 <10	<10		56 <10		32	0.003	3
<2		4	18 <20		0.09 <10	<10		43 <10		21	0.005	5
<2		5	20 <20		0.08 <10	<10		46 <10		24	0.002	2
<2		4	27 <20		0.07 <10	<10		45 <10		27	0.002	2
<2		4	17 <20		0.09 <10	<10		69 <10		70	0.007	7
<2		3	17 <20		0.1 <10	<10		61 <10		59	0.003	3
<2		3	16 <20		0.09 <10	<10		57 <10		85	0.002	2
<2		3	18 <20		0.08 <10	<10		54 <10		92	0.099	99
<2		4	23 <20		0.1 <10	<10		68 <10		73	0.001	1
<2		3	16 <20		0.07 <10	<10		49 <10		26	0.005	5
<2		4	23 <20		0.07 <10	<10		40 <10		18	0.004	4
<2		3	22 <20		0.07 <10	<10		38 <10		22	0.008	8
<2		5	24 <20		0.09 <10	<10		46 <10		23	0.004	4
<2		4	57 <20		0.1 <10	<10		47 <10		29	0.005	5
<2		5	102 <20		0.11 <10	<10		55 <10		44	0.003	3
<2		5	20 <20		0.11 <10	<10		60 <10		44	0.004	4
<2		4	17 <20		0.08 <10	<10		45 <10		24	0.001	1
<2		2	31 <20		0.05 <10	<10		31 <10		21	0.001	1
<2		2	38 <20		0.05 <10	<10		34 <10		21	0.007	7
<2		6	55 <20		0.08 <10	<10		60 <10		46	0.003	3
<2		3	17 <20		0.06 <10	<10		41 <10		21	0.001	1
<2		6	27 <20		0.09 <10	<10		56 <10		28	0.001	1
<2		4	37 <20		0.08 <10	<10		42 <10		28	0.003	3

<2	3	14 <20	0.08 <10	<10	53 <10	66	0.063	63
<2	4	21 <20	0.07 <10	<10	51 <10	35	0.021	21
<2	4	18 <20	0.07 <10	<10	52 <10	38	0.001	1
<2	4	21 <20	0.07 <10	<10	38 <10	21	0.003	3
<2	3	54 <20	0.07 <10	<10	36 <10	23	0.003	3
<2	4	21 <20	0.08 <10	<10	44 <10	28	0.001	1
<2	4	19 <20	0.09 <10	<10	51 <10	27	0.001	1
<2	4	24 <20	0.06 <10	<10	36 <10	18	0.002	2
<2	3	17 <20	0.06 <10	<10	44 <10	31	0.105	105
<2	3	20 <20	0.09 <10	<10	61 <10	48	0.003	3
<2	3	17 <20	0.1 <10	<10	59 <10	70	0.001	1
<2	4	20 <20	0.07 <10	<10	53 <10	51	0.002	2
<2	2	18 <20	0.07 <10	<10	49 <10	47	0.002	2
<2	2	17 <20	0.06 <10	<10	44 <10	60	0.054	54
<2	3	32 <20	0.07 <10	<10	35 <10	20	0.002	2
<2	3	51 <20	0.07 <10	<10	35 <10	26	0.002	2
<2	3	55 <20	0.07 <10	<10	34 <10	23	0.002	2
<2	3	64 <20	0.08 <10	<10	38 <10	28	0.004	4
<2	3	23 <20	0.06 <10	<10	41 <10	26	0.426	426
<2	5	27 <20	0.08 <10	<10	50 <10	48	0.002	2
<2	3	16 <20	0.06 <10	<10	39 <10	20	0.001	1
<2	3	32 <20	0.05 <10	<10	32 <10	19	0.003	3
<2	2	49 <20	0.05 <10	<10	30 <10	19	0.002	2
<2	4	17 <20	0.06 <10	<10	34 <10	16	0.001	1
<2	7	65 <20	0.08 <10	<10	53 <10	37	0.004	4
<2	4	19 <20	0.06 <10	<10	35 <10	18	0.006	6
<2	3	37 <20	0.07 <10	<10	38 <10	25	0.003	3
<2	3	14 <20	0.08 <10	<10	56 <10	52	0.004	4
<2	3	15 <20	0.08 <10	<10	63 <10	31	0.004	4

0	194	1547	0	4.1	0	0	2481	0	1888	0.906	906
76	76	76	76	76	76	76	76	76	76	76	76
0	2.552632	20.35526	0	0.053947	0	0	32.64474	0	24.84211	0.011921	11.92105

Appendix 3:

B. Marsh Lake Claims



## Legend

- Quartz Claims (50K)
  - Active and Pending
  - Expired
- Quartz Leases (50K)
  - Adjoin Quartz
- Quartz Mining Land Use Perm
  - Class 3
  - Class 4
- Quartz Staking Direction
  -
- Surveyed Mineral Claims
  -
- Settlement Lands (Surveyed)
  - A: Surface and Subsurface Rights
  - B: Surface Rights
  - FS: Fee Simple
- Settlement Lands (Unsurveyed)
  - A
  - B
  - FS
- Interim Protected Lands (Unsu)
  -

## Notes

39627 Yukon Inc. YMIP Grant - 2012

5.4 0 2.70 5.4 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 15-Feb-2013

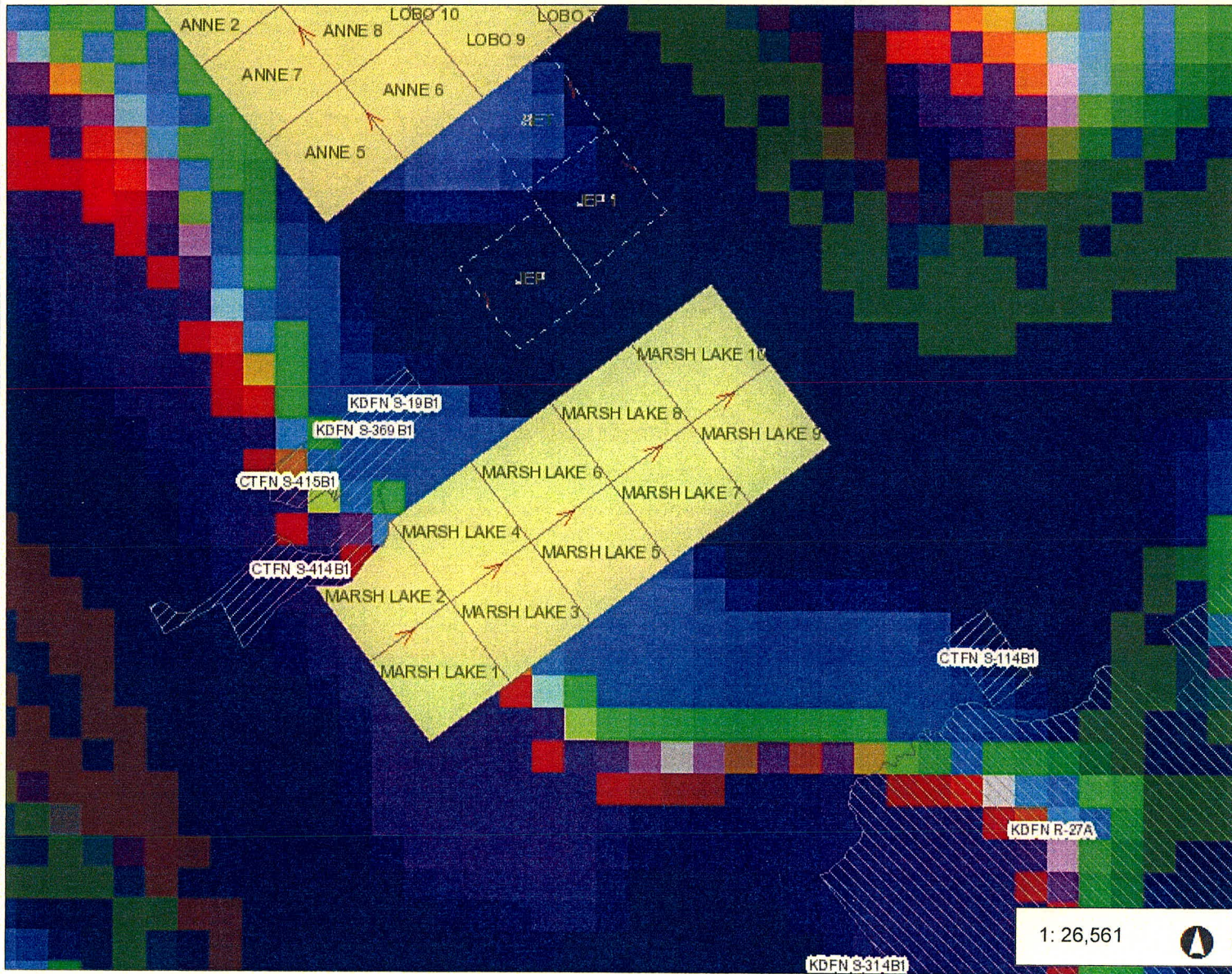
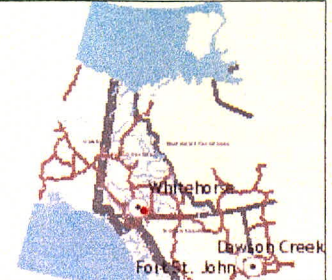
1: 106,244







# Listwaenite Study - Regional Geophysics (FVD) - Marsh Lake Claims



## Legend

- Quartz Claims (50K)
  - Active and Pending
  - Expired
- Quartz Leases (50K)
  - Adjoin Quartz
- Quartz Mining Land Use Perm
  - Class 3
  - Class 4
- Quartz Staking Direction
  -
- Surveyed Mineral Claims
  -
- Settlement Lands (Surveyed)
  - A: Surface and Subsurface Rights
  - B: Surface Rights
  - FS: Fee Simple
- Settlement Lands (Unsurveyed)
  - A
  - B
  - FS
- Interim Protected Lands (Unsurveyed)
  - First Vertical Derivative (200m)
    - Red: Band\_1
    - Green: Band\_2
    - Blue: Band\_3

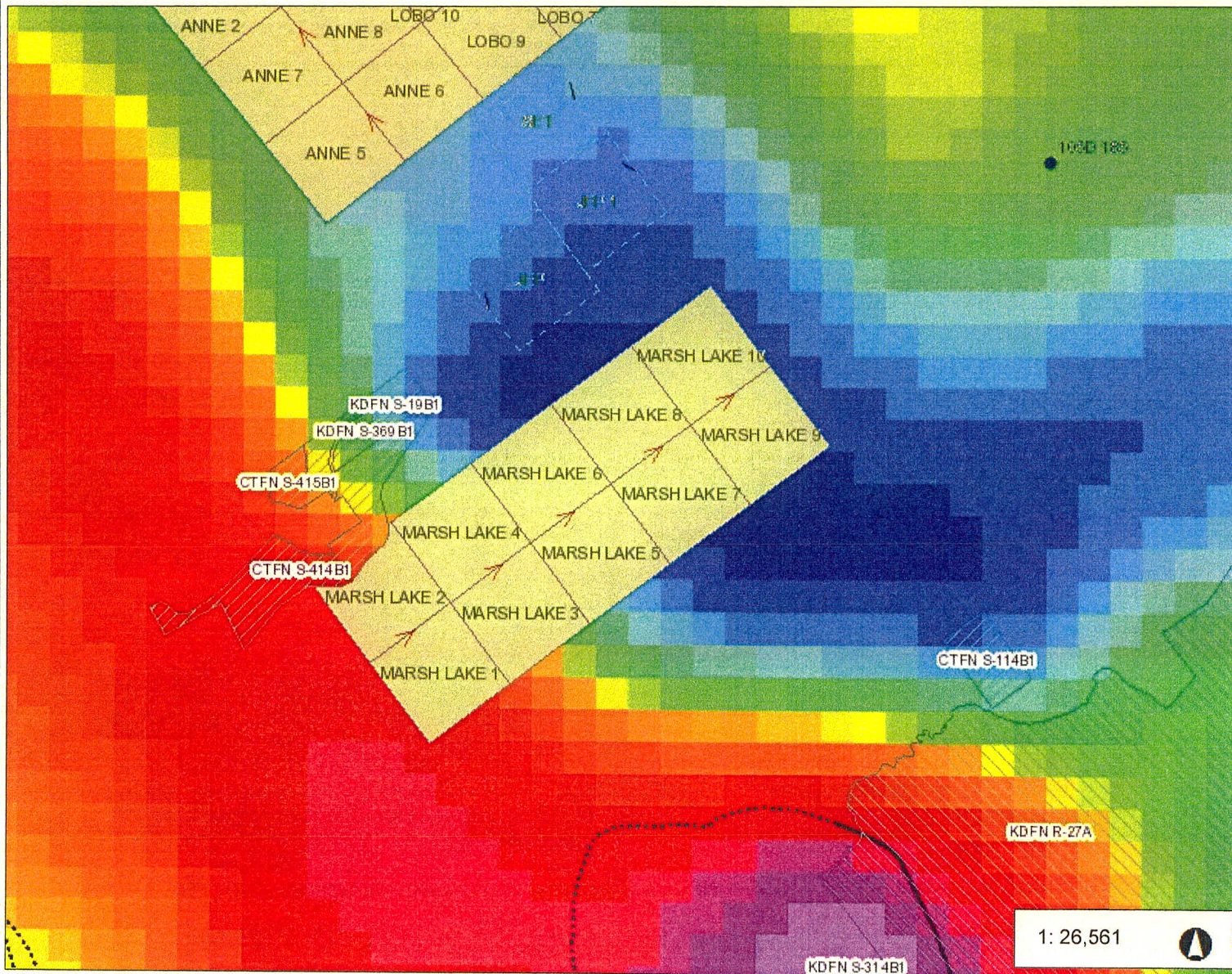
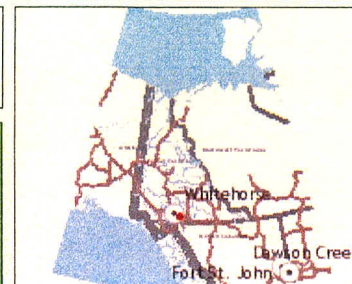
## Notes

39627 Yukon Inc. YMIP Grant - 2012

1.3 0 0.67 1.3 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 15-Feb-2013



### Legend

- Quartz Claims (50K)
  - Active and Pending
  - Expired
- Quartz Leases (50K)
  - Adjoin Quartz
- Quartz Mining Land Use Perm
  - Class 3
  - Class 4
- Quartz Staking Direction
  -
- Surveyed Mineral Claims
  -
- Settlement Lands (Surveyed)
  - A: Surface and Subsurface Rights
  - B: Surface Rights
  - FS: Fee Simple
- Settlement Lands (Unsurveyed)
  - A
  - B
  - FS
- Interim Protected Lands (Unsurveyed)
  -
- Mineral occurrences (MINFILE)
  - Anomaly
  - Deposit
  - Drilled Prospect
  - Open Pit Past Producer
  - Open Pit Producer
  - Prospect
  - Showing
  - Staked, No Work Permitted

1: 26,561



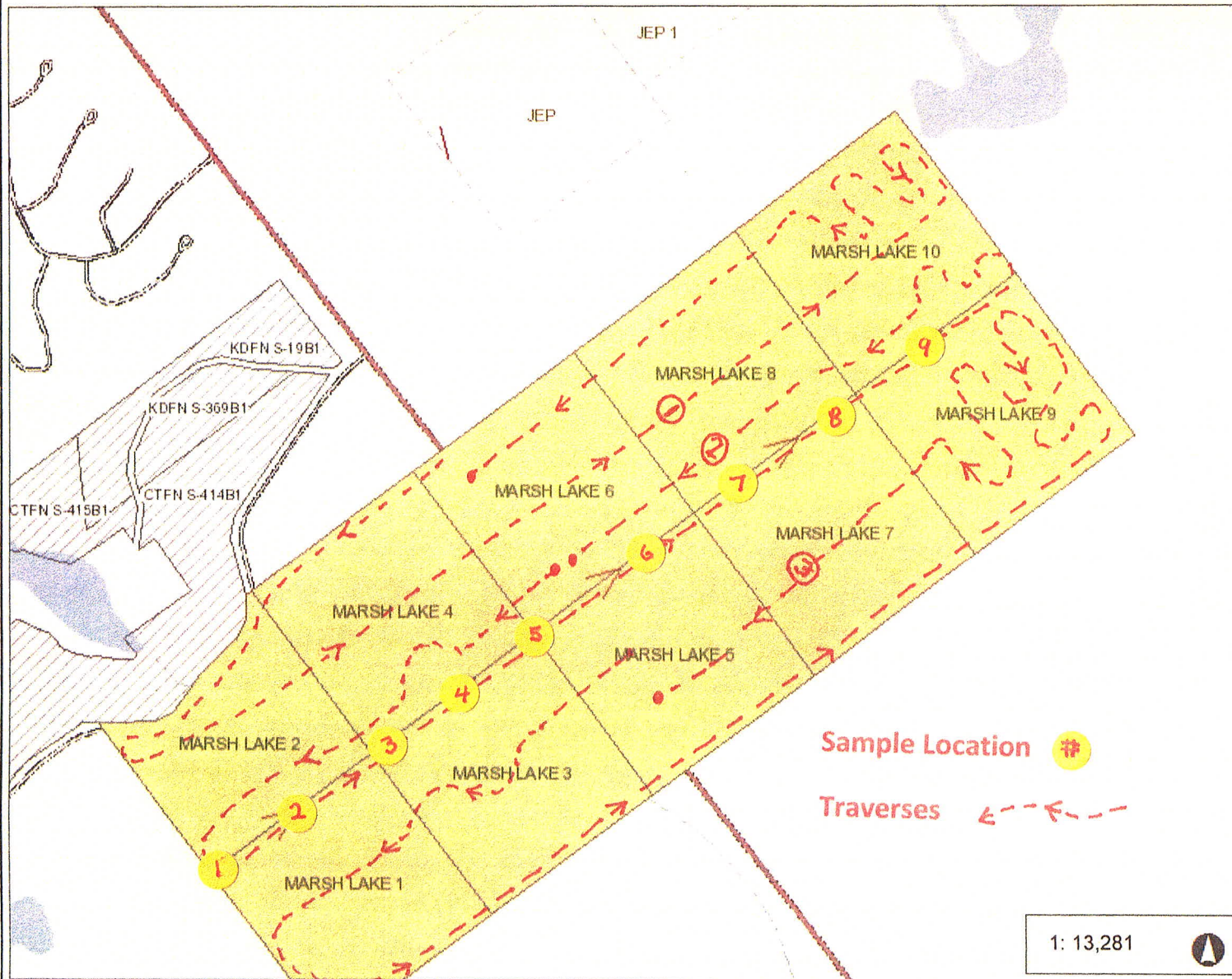
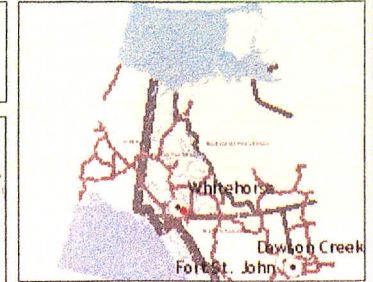
1.3 0 0.67 1.3 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 15-Feb-2013

### Notes

39627 Yukon Inc. YMIP Grant - 2012



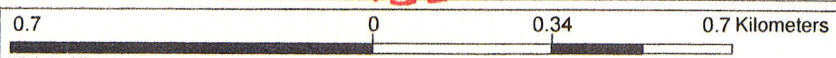
### Legend

- Quartz Claims (50K)
  - Active and Pending
  - Expired
- Quartz Leases (50K)
- Adjoin Quartz
- Quartz Mining Land Use Perm
  - Class 3
  - Class 4
- Quartz Staking Direction
- Settlement Lands (Surveyed)
  - A: Surface and Subsurface Rights
  - B: Surface Rights
  - FS: Fee Simple
- Settlement Lands (Unsurveyed)
  - A
  - B
  - FS
- Interim Protected Lands (Unsu...)

Sample Location #

Traverses

1: 13,281



Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 15-Feb-2013

### Notes

39627 Yukon Inc. YMIP Grant - 2012

WH12228127 - Finalized

CLIENT : "YUKIN - 39627 Yukon Inc"

# of SAMPLES : 3

DATE RECEIVED : 2012-09-28 DATE FINALIZED : 2012-10-17

PROJECT : "Marsh Lake"

CERTIFICATE COMMENTS : ""

PO NUMBER : " "

	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
SAMPLE	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	
DESCRIPTION	(ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	
ML 12R	<0.2		3.76	3	20	50	<0.5	<2	3.93	<0.5	31	95	119
ML 13R	<0.2		3.64	5	20	60	<0.5	<2	3.25	<0.5	44	160	55
ML 14R	<0.2		1.72	5	<10	50	0.8	<2	1.36	<0.5	9	55	39

ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S
%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%
4.86	10 <1		0.04 <10		2.14	622 <1		0.06	78	360 <2		0.01
7.61	20 <1		0.09 <10		1.99	1320 <1		0.06	100	1130 <2		<0.01
2.64	10 <1		0.1	10	0.72	383 <1		0.07	17	680	8	0.01

ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-TL43
Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn	Au	
ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
<2		8	29 <20		0.27 <10	<10		153 <10		64	0.003
<2		24	29 <20		0.51 <10	<10		256 <10		119	0.002
<2		8	44 <20		0.17 <10	<10		91 <10		66	0.01

WH12228128 - Finalized

CLIENT : "YUKIN - 39627 Yukon Inc"

# of SAMPLES : 9

DATE RECEIVED : 2012-09-28 DATE FINALIZED : 2012-10-10

PROJECT : "Marsh Lake"

CERTIFICATE COMMENTS : ""

PO NUMBER : " "

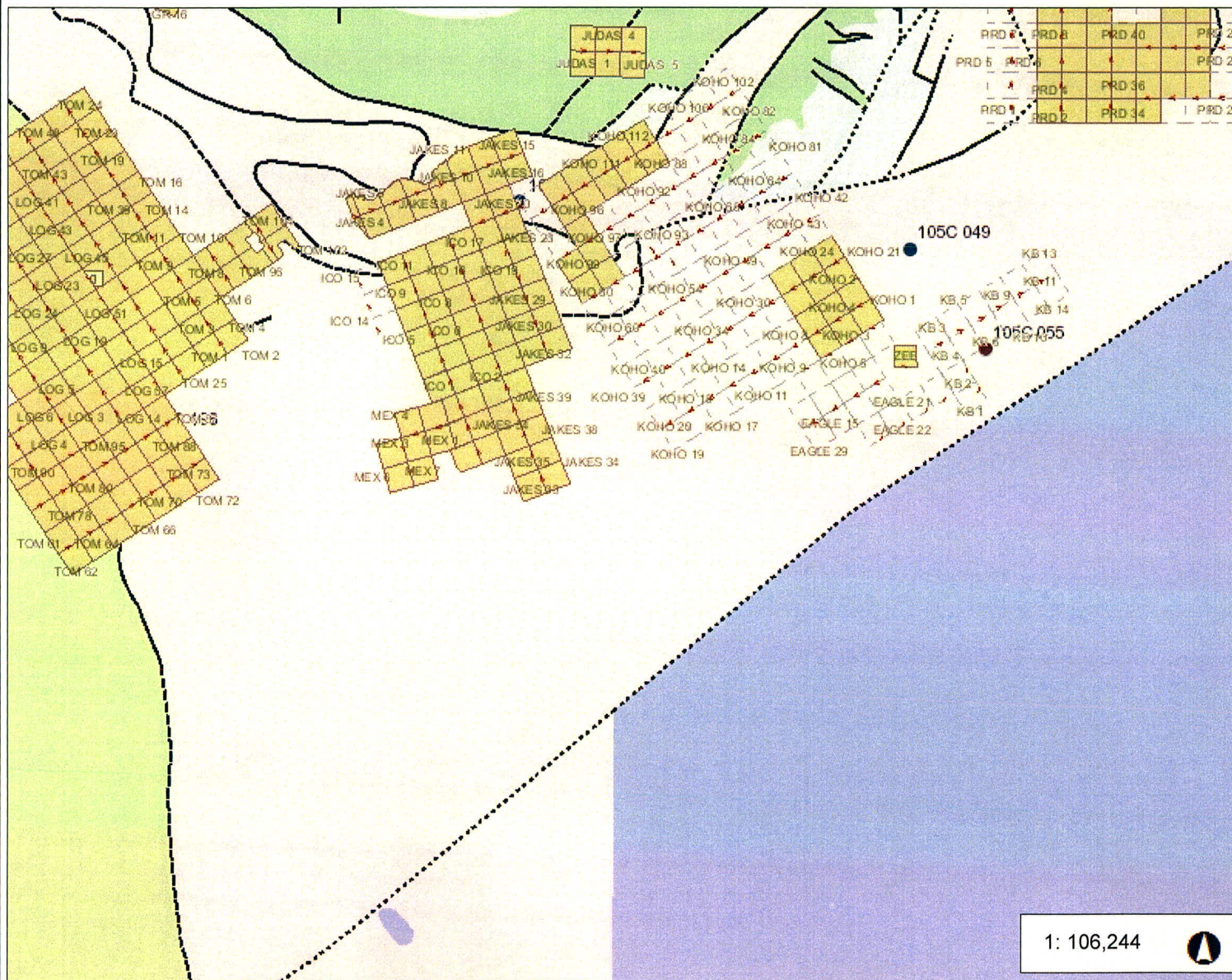
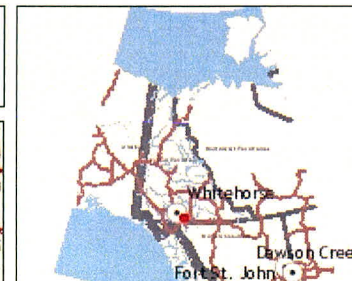
	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
SAMPLE	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	
DESCRIPTION	(ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	
ML-9		0.2	2.33	15 <10		360	0.8	2	0.67 <0.5		14	74	67
ML-10	<0.2		1.65	10 <10		360	0.5 <2		1.08 <0.5		10	58	44
ML-11		0.3	1.8	8 <10		260	0.6 <2		0.62 <0.5		8	58	36
ML-12	<0.2		1.52	6 <10		210	0.5 <2		0.38 <0.5		8	56	26
ML7	<0.2		0.75	7 <10		330 <0.5	<2		2.96 <0.5		7	38	23
ML9		0.2	2.55	17 <10		390	0.9	3	0.72 <0.5		14	79	74
ML10	<0.2		1.67	9 <10		360	0.5 <2		1.07 <0.5		10	61	45
ML11		0.2	1.94	7 <10		260	0.6 <2		0.56 <0.5		9	63	38
ML12	<0.2		1.29	4 <10		170 <0.5	<2		0.32 <0.5		7	49	20

ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	
%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	
3.64	10 <1		0.37	20	1.44	513 <1		0.05	75	540	11	0.02	
2.75	10 <1		0.22	20	1.3	384	1	0.04	66	760	8	0.01	
2.53	10 <1		0.24	20	1.06	285	1	0.03	48	380	6	0.02	
2.37 <10	<1		0.14	10	0.75	312	1	0.03	39	240	8	0.01	
1.75 <10	<1		0.05	10	0.76	305	1	0.04	37	930	5	0.03	
3.94	10 <1		0.41	20	1.6	566	1	0.06	80	570	13	0.02	
2.83	10 <1		0.22	20	1.34	382 <1		0.04	69	760	7	0.01	
2.77	10 <1		0.26	10	1.08	314	1	0.03	50	320	9	0.01	
2.15 <10		1	0.12	10	0.65	283 <1		0.02	33	170	6 <0.01		

ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-TL43
Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn	Au	
ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
<2		9	57 <20		0.12 <10	<10		75 <10		85	0.006
<2		6	67 <20		0.11 <10	<10		57 <10		61	0.006
	2	7	56 <20		0.1 <10	<10		51 <10		59	0.005
<2		6	30 <20		0.1 <10	<10		54 <10		46	0.003
<2		3	101 <20		0.07 <10	<10		40 <10		34	0.005
<2		10	63 <20		0.13 <10	<10		81 <10		91	0.006
	2	6	67 <20		0.11 <10	<10		59 <10		61	0.006
<2		7	52 <20		0.1 <10	<10		53 <10		60	0.009
<2		5	26 <20		0.1 <10	<10		48 <10		39	0.003

Appendix 3:

C. Highway Sampling – Jakes Corner Area



### Legend

- Quartz Claims (50K)**
  - Active and Pending
  - Expired
- Quartz Leases (50K)
- Adjoin Quartz
- Quartz Mining Land Use Perm**
  - Class 3
  - Class 4
- Quartz Staking Direction
- Surveyed Mineral Claims
- Mineral occurrences (MINFILE)**
  - Anomaly
  - Deposit
  - Drilled Prospect
  - Open Pit Past Producer
  - Open Pit Producer
  - Prospect
  - Showing
  - Staked - No Work Recorded
  - Underground Past Producer
  - Unknown
- Faults (250k)**
  - defined
  - approximate
  - assumed
  - extrapolated
  - defined

1: 106,244

5.4 0 2.70 5.4 Kilometers

Yukon Albers  
Produced from: Yukon Geological Survey MapMaker Online

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.  
Date Printed: 15-Feb-2013

**Notes**  
39627 Yukon Inc. YMIP Grant - 2012





WH12224090 - Finalized

CLIENT : "YUKIN - 39627 Yukon Inc"

# of SAMPLES : 7

DATE RECEIVED : 2012-09-21 DATE FINALIZED : 2012-10-02

PROJECT : "Marsh Lake" - *Jakes Corner Region*

CERTIFICATE COMMENTS : "\*\*\*\*Corrected copy with sample IDs ML50010047 to ML51010040 corrected to 10047 to 10040 for samples #1-6\*\*\*\*"

PO NUMBER : " "

Highway Samples

	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
SAMPLE	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	
DESCRIPTI	(ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	
10047	<0.2		3.49 <2	<10		120 <0.5	<2		3.08 <0.5		28	45	131
10049	<0.2		2.95 <2		10	60 <0.5	<2		2.73 <0.5		21	36	123
10046	<0.2		2.36	2	10	20 <0.5		2	5.04 <0.5		21	34	74
10043	<0.2		2.76 <2		10	30 <0.5	<2		4.42 <0.5		28	39	62
10042	<0.2		2.31 <2	<10		50 <0.5	<2		1.84 <0.5		15	40	50
10040	<0.2		2.5 <2	<10		20 <0.5	<2		2.12 <0.5		17	90	67
ML4R	<0.2		0.96	4	10	200 <0.5	<2		0.72 <0.5		15	29	53

10047 : 60° 20' 314" / 133° 58' 195"  
10049 : 60° 20' 348" / 133° 58' 586"  
10046 : 60° 20' 452" / 134° 00' 225"  
10043 : 60° 20' 484" / 134° 00' 519"  
10042 : 60° 20' 496" / 134° 00' 627"  
10040 : 60° 20' 507" / 134° 00' 716"

ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	
%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	
5.29	10 <1		0.03	<10	2.16	677	<1		0.05	45	450	<2	0.02
4.5	10 <1		0.08	<10	1.83	1070	<1		0.04	52	330		2 0.06
4.83	10 <1		0.07	<10	1.6	1270	<1		0.03	31	430	<2	<0.01
6.43	10 <1		0.09	<10	2.3	873	<1		0.03	42	580	<2	0.38
3.64	10 <1		0.1	<10	1.43	564	<1		0.08	21	380	<2	0.09
2.76	10 <1		0.06	<10	1.79	407	<1		0.05	60	250	<2	0.03
3.12	<10	<1	0.16	<10	0.82	347	<1		0.01	106	210	<2	0.05

ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-AA23
Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn	Au
ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
<2		9	47 <20		0.36 <10	<10		154 <10		59 <0.005
<2		6	30 <20		0.28 <10	<10		117 <10		58 <0.005
<2		11	133 <20		0.4 <10	<10		175 <10		62 <0.005
<2		15	47 <20		0.37 <10	<10		209 <10		89 <0.005
<2		11	26 <20		0.18 <10	<10		117 <10		48 <0.005
<2		6	35 <20		0.13 <10	<10		74 <10		26 <0.005
	3	10	28 <20	<0.01	<10	<10		38 <10		29 <0.005