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# TARANIS RESOURCES INC.

# TECHNICAL REPORT ON THE THOR PROJECT, BRITISH COLUMBIA, CANADA

## NI 43-101 Report

**Qualified Person:**
**Barry McDonough, P.Geo.**

**June 3, 2013**

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***Report Control Form***

| | | | |
|---|---|---|---|
| ***Document Title*** | Technical Report on the Thor Project, British Columbia, Canada | | |
| ***Client Name & Address*** | Taranis Resources Inc.<br>14247 West Iliff Avenue<br>Lakewood, Colorado<br>80228-5421 | | |
| ***Document Reference*** | Project #2002 | ***Status & Issue No.*** | FINAL Version **0** |
| ***Issue Date*** | June 3, 2013 | | |
| ***Lead Author*** | Barry McDonough | (Signed) | |
| ***Peer Reviewer*** | Deborah McCombe<br>William Roscoe | (Signed)<br>(Signed) | |
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# 1 SUMMARY

## EXECUTIVE SUMMARY

Roscoe Postle Associates Inc. (RPA) was retained by Taranis Resources Inc. (Taranis) to produce an initial Mineral Resource estimate and supporting independent Technical Report on the Thor Project (the Project or Thor), located near Trout Lake, British Columbia (BC), Canada. The purpose of this report is the disclosure of an initial Mineral Resource estimate. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects. RPA visited the property on October 25, 2012.

The Thor Project is located north of Trout Lake, and south of Revelstoke, BC. The property covers an area of approximately 1,821 ha and lies within the Revelstoke Mining District.

RPA has prepared an initial Mineral Resources estimate for the Project. The Mineral Resources are classified as Indicated and Inferred and are summarized in Table 1-1.

**TABLE 1-1 THOR MINERAL RESOURCE ESTIMATE SUMMARY AT APRIL 25, 2013**
**Taranis Resources Inc. - Thor Project**

| Zone | Category | NSR Cut-off | Tonnes | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|---|---|---|
| Potential Open Pit | | | | | | | | |
| | Indicated | $50 | 471,000 | 0.91 | 204 | 0.14 | 2.77 | 3.68 |
| Potential Underground | | | | | | | | |
| | Indicated | $100 | 168,000 | 0.81 | 141 | 0.13 | 1.78 | 3.03 |
| Potential Open Pit | | | | | | | | |
| | Inferred | $50 | 189,000 | 1.28 | 218 | 0.16 | 2.70 | 3.83 |
| Potential Underground | | | | | | | | |
| | Inferred | $100 | 235,000 | 0.74 | 143 | 0.13 | 1.90 | 2.69 |
| **Total Potential Open Pit and Underground Indicated** | | | **640,000** | **0.88** | **187** | **0.14** | **2.51** | **3.51** |
| **Total Potential Open Pit and Underground Inferred** | | | **424,000** | **0.98** | **176** | **0.14** | **2.26** | **3.20** |

Notes:
1. CIM definitions were followed for Mineral Resources classification.

2. Mineral Resources are estimated at a net smelter return (NSR) cut-off value of US$50/t for potential open pit and US$100/t for potential underground.
3. A preliminary Whittle pit was applied to constrain the potential open pit resource.
4. Mineral Resources are estimated using an average long-term gold price of US$1,650 per ounce, a silver price of US$27 per ounce, a copper price of US$3.50 per pound, a lead price of US$1.15 per pound, a zinc price of US$1.25 per pound, and a US$/C$ exchange rate of 1:1.
5. Minimum mining width of 1.5 m was used.
6. Totals may not represent the sum of the parts due to rounding.

## CONCLUSIONS

RPA draws the following conclusions:

- Mineral Resources potentially mineable by open pit were estimated within a preliminary Whittle pit shell and Mineral Resources potentially mineable by underground methods were estimated outside of the pit shell.
    - Potential open pit Mineral Resources are estimated as follows, at a US$50 net smelter return (NSR) cut-off:
        - Indicated Mineral Resources of 471,000 t grading 0.91 g/t Au, 204 g/t Ag, 0.14% Cu, 2.77% Pb, and 3.68% Zn
        - Inferred Mineral Resources of 189,000 t grading 1.28 g/t Au, 218 g/t Ag, 0.16% Cu, 2.70% Pb, and 3.83% Zn
    - Potential underground Mineral Resources are estimated as follows, at a US$100 NSR cut-off:
        - Indicated Mineral Resources of 168,000 t grading 0.81 g/t Au, 141 g/t Ag, 0.13% Cu, 1.78% Pb, and 3.03% Zn
        - Inferred Mineral Resources of 235,000 t grading 0.74 g/t Au, 143 g/t Ag, 0.13% Cu, 1.90% Pb, and 2.69% Zn

- The mineralization observed at Thor is consistent with exhalative-type deposits. Exhalative deposits include both sedimentary exhalative (SEDEX) and volcanogenic massive sulphide (VMS). The presence of the "gold-bearing cherty-exhalite cap", which forms the Scab Zone, indicates that mineralization is consistent with a VMS-type model.

- Precious and base metal mineralization at Thor has a strong stratigraphic control and is emplaced along a major stratigraphic contact between the Lower Carbonaceous Series (LCS) and Upper Greywacke Series (UGS). Tuffaceous green volcanic rocks lie along this contact and commonly accompany the sulphide mineralization (Combined Metals Unit (CMU)).

- The known mineralization occurs along a major structural feature referred to as the Thor Antiform, including a small outlier called the Thor North Antiform. This is bounded to the east by the Thor Synform and to the west by the Great Northern Synform.

- Exploration done at Thor to date has been systematic and designed using sound geological principles. The work has generally been conducted in a manner consistent with industry standards.

- Ground magnetic surveys are useful in mapping out geological formations, such as tuffaceous sedimentary rocks, which are spatially associated with mineralization.

Very low frequency electromagnetic (VLF-EM) surveys successfully identified the mineralized contact between the UGS and the LCS and other geological features. The potential chargeability of the carbonaceous sediments carries the risk of limiting the effectiveness of induced polarization (IP) and conventional EM surveys.

- Magnetic surveys identified tuffaceous sediments in the north and west parts of the Project. Anomalies were coincident with magnetic anomalies, soil geochemistry anomalies, trenched and pitted zones, faults, gossanous material, and the Thor Antiform and its contacts.

- Soil geochemical sampling appears to be an effective exploration tool at Thor. Results generally support geophysical and geological information.

- The diamond drilling conducted on the Project was done in a manner consistent with industry standards. Despite some early core recovery issues, the results generated from the exploration and drilling programs are suitable for use in a Mineral Resource estimate.

- The sampling methods, sample security, and chain of custody protocols followed by Taranis are adequate. The assay procedures and protocols employed by the independent laboratories are industry standard and are sufficient to produce reasonable results which are appropriate for use in Mineral Resource estimation.

- RPA took verification core samples and confirmed the presence of Au, Ag, Cu, Pb, and Zn on the property. RPA was also able to independently confirm the presence of precious and base metal mineralization on the True Fissure stockpile.

- Quality assurance/quality control (QA/QC) did not include the insertion of blanks, certified reference materials (CRM), or duplicate samples into the assay sample stream. RPA and Taranis attempted to ameliorate the situation by conducting duplicate analyses on 195 sample pulps stored by ACME Laboratories in Vancouver, BC. These pulps were sent to another independent laboratory for analysis. The results of this program, despite a few outlier values, were reasonable and provided a check on the accuracy of the original assay results in the drill hole database.

- In RPA's opinion, the method used to calculate the densities of each sample based on analytical data, overall, provides a reasonable way to density weight samples in the database for use in a Mineral Resource estimate.

- There is potential for additional mineralization to be discovered at Thor. Additional diamond drilling is warranted to both expand and upgrade the present Mineral Resource estimate. There are numerous exploration targets on the property that warrant further drilling.

## RECOMMENDATIONS

RPA makes the following recommendations:

- In addition to interpretation as a VMS model, continue evaluation of exploration data with respect to other potential deposit models.

- Conduct a soil sampling program between the Great Northern Zone area and the Meadow Grid and the Mega-Gossan target area on the Westmin portion of the property.

- Carry out follow-up work on the Little Grid to find the source of the widespread low-grade gold mineralization as it may be an extension of the mineralization observed in a parallel zone located 150 m northeast of Blue Bell (Ridge Target).

- Conduct trenching and drilling on the SIF Zone and between the Great Northern Grid and the Meadow Grid to verify geophysical and soil geochemistry targets and investigate the unique “cherty-exhalite” style of gold mineralization found there.

- As a means of systematically assessing mineralization at the topographically challenging Scab Zone, conduct a sampling program using a hand-operated breaker (plugger holes).

- Carry out a rock quality designation (RQD) program on available core and any subsequent drilling.

- Conduct an oriented drill core program to better understand the orientation of major and minor structures and assist in pit slope and/or underground mine design.

- Enhance drill core management by building core racks. The core, once centralized, can be more easily secured. RPA also recommends that three-tag drill core sampling books be employed so that one tag may be stapled to the core box at the start of each sample interval. Metal tape embossed with relevant hole data should also be stapled to the end of each core box to assist in future core reference.

- Implement an industry standard QA/QC program consisting of regular core, reject, and pulp duplicate analysis at a secondary independent laboratory. In addition, commercially available CRMs that represent the polymetallic nature of the mineralization and include blanks should be inserted into the sample stream. Results from this program should be scrutinized immediately upon receipt and any discrepancies reported to the primary laboratory.

- Conduct a metallurgical test program to assess recoverability of gold, silver, copper, lead, and zinc from the mineralization at Thor. Investigate the basic mineralogical characteristics, grindability characteristics, potential gravity concentration of silver and gold, flotation response to a typical polymetallic flowsheet conditions, and environmental characteristics of the flotation tailings.

- Consider conducting a study on the age of the host lithologies and the mineralization at Thor to gain greater insight into the host geological environment and processes of sulphide deposition.

- Complete further bulk density measurements on existing drill core and any new core to better understand the distribution of density at Thor. Further work should also be done to refine the stoichiometric density calculations and assess if it is reasonable to apply a correction factor.

Taranis has prepared the following program and budget on the Project (Table 1-2). A total of 26 trenches, 14 diamond drill holes, and 44 plugger holes are planned. RPA concurs with the proposed program and budget.

Any further work on the Project will be contingent upon the results of this program.

**TABLE 1-2 PROPOSED EXPLORATION BUDGET**
**Taranis Resources Inc. - Thor Project**

| Activity | Cost Estimate (C$) |
|---|---|
| Diamond drilling (14 holes) 5,000 m @ C$175/m | 875,000 |
| Mobilization and Demobilization | 75,000 |
| Trenching 200 hrs @ C$50/hr | 10,000 |
| Assays 8,000 @ C$30/sample | 240,000 |
| Plugger Holes (44, Scab Zone) 2,200 m @ C$125/m | 275,000 |
| Labour | 50,000 |
| Reports | 25,000 |
| Travel and related | 30,000 |
| Camp Costs | 40,000 |
| Equipment Rental | 5,000 |
| Metallurgy Study (Lakefield) | 59,500 |
| Update NI 43-101 with Scab Zone Results | 50,000 |
| **Subtotal** | **1,734,500** |
| Contingency (10%) | 173,450 |
| **Total** | **1,907,950** |

# TECHNICAL SUMMARY

## PROPERTY DESCRIPTION AND LOCATION

The Thor Project is located north of Trout Lake, and south of Revelstoke, British Columbia. The property covers an area of approximately 1,821 ha and lies within the Revelstoke Mining Division.

The Project area includes five mineralized zones discovered in the late 1800s and early 1900s which were historically mined, and are located on the eastern slope of Great Northern Mountain. These include Broadview, Great Northern, True Fissure, Blue Bell, and St. Elmo Zones.

The Project area is accessed by travelling north of Trout Lake by an all-weather secondary road to the historic mining town of Ferguson, BC which is located approximately three kilometres to the south of Thor. From Ferguson, the Thor claim group is accessible by a four-wheel drive or all-terrain vehicle via a seasonal gravel road. Excessive snow in the winter would require that this road be maintained, but year-round access can be achieved.

## LAND TENURE

Taranis acquired Thor from Vanada Resources Inc. in 2007 and owns 100% of the Project. The Project area includes 27 Crown Grant Mining Claims (273 ha) and eleven Mineral Tenures.

Taranis commissioned a title search and learned that all 27 Crown Grants have mineral title and ten have surface title. The surface rights of the remaining 17 had reverted back to the Crown. Annual taxes are C$1.25 per ha and Taranis reports all Crown Grants are in good standing.

RPA is not aware of any outstanding royalties, agreements, or obligations associated with the Project. The sole requirement to retain the property consists of filing of reports of work with the BC Ministry of Energy, Mines and Petroleum Resources (BCMEMPR). Alternatively, an annual fee in lieu of exploration work may also be paid to BCMEMPR.

## HISTORY

The first showing in the area was found on the Great Northern claim in 1890. Other discoveries soon followed, and the entire lode system was located before the turn of the twentieth century. Small-scale exploration and development was carried out for a number of years.

Mr. Hugh McPherson shipped 5.4 t of hand-picked material from the St. Elmo Zone in 1899, yielding 19.4 kg of silver and 1,098 kg of lead. The Blue Bell claim was Crown Granted to John Stauber and Associates, in 1904, also was known as the "Silver Queen". In 1917, Conaway Mining Company shipped 24 t yielding 40.4 kg of silver and 9,435 kg of lead from the "Silver Queen". The Blue Bell workings were established by 1921 and developed the northern extension of the True Fissure lode. The two properties were worked together after the mid-1920s.

The True Fissure, St. Elmo, and Blue Bell Crown Grants and four adjacent claims were bonded by G.F. Park and Associates of Cincinnati, Ohio, who incorporated Ohio Mines Development Company Limited in October 1906.

In 1925, the True Fissure operation was described as having 610 m of drifts and 550 m of crosscuts. The workings were distributed between four adits, covering a vertical range of 150 m on the True Fissure claim and two tunnels, with 36 m of separation, on the adjacent Blue Bell claim. Intermittent exploration and development work was carried out until around 1930 when Latonia Milling Company built a 91 tpd mill. In 1937, the New True Fissure Mining & Milling Company Limited was formed to develop the True Fissure property and the Great Northern property was optioned later in the year. The mill operated during the winter of 1937 and 1938 and produced and shipped 5,510 t of lead concentrate. Smaller amounts of zinc concentrate were also produced at the same time, but not all of it was shipped. Further development work was carried out in 1939, but the company ceased operations in 1940.

Codan Lead & Zinc Company Limited shipped “ore” from the dumps in 1943 and 1944. In 1945, Comara Mining & Milling Company Limited (Comara) acquired 43 claims on Great Northern Mountain and completed 670 m of surface diamond drilling on the True Fissure and St. Elmo claims. In 1949, Comara's holdings were transferred to Columbia Metals Corporation Limited (Columbia Metals), and Granby Consolidated Mining, Smelting and Power Company Limited (Granby) was engaged to carry out exploration work in 1952. By that time, the True Fissure mine included four adit levels and two raises connecting the No. 2 and No. 3 levels. Granby drilled 914 m on the True Fissure No. 2 and 3 levels.

No further development was undertaken until 1966, when an IP survey revealed an anomaly which more or less coincided with the projection of the main True Fissure lode toward Broadview. A program of drifting and diamond drilling was begun in the True Fissure No. 2 adit. This program was resumed late in 1967 and continued through 1968. A 115 tpd mill was installed but only operated for a few days. It was closed down due to poor mill installation and ecological problems related to tailings disposal. Components of the plant were either later destroyed or sold as scrap.

Exploration in 1972 included EM and self-potential surveys covering the St. Elmo, Blue Bell, True Fissure, and Great Northern claims, and 1,102 m of diamond drilling in 54 holes. A study was commissioned by Columbia Metals in 1973 that concluded that bulk mining could be done on a season basis with concentration done year-round. It was also recommended that a production decision be made to exploit the high metal prices of the day. No other work was recorded and later the property was held by Sibola Mines Limited in the mid-1980s.

Work started on the Broadview property between 1895 and 1897. No further work was reported until intermittent operations occurred between 1905 and 1909. Development at that time comprised five adits, a 30 m shaft, and a second shaft with an associated 18 m drift on the Old Sonoma claim. Comara acquired 21 claims, including Broadview and True Fissure, in 1946. The combined property was then passed to Columbia Metals. In 1955, Yellowknife Bear Mines Limited drilled four diamond drill holes, totalling 457 m, from surface. Control of the property, however, reverted to Columbia Metals the following year.

In 1968, an IP survey was carried out and considerable drilling was done from the No. 3 level in an attempt to find parallel lodes. A further five holes were drilled adjacent to the Broadview shaft in 1972, but two were abandoned before their target depths. The remaining three holes intersected a mineralized quartz-carbonate zone in the footwall of one of the old stopes.

## GEOLOGY AND MINERALIZATION

The Trout Lake area is underlain by a thick succession of sedimentary and volcanic rocks of the Badshot Formation and Lardeau Group near the northern end of the Paleozoic- and Mesozoic-age Kootenay Arc. These rocks were deformed during the Antler orogeny and were re-folded and faulted during the Columbian orogeny. The Selkirk Allochthon, composed of several highly deformed tectonic slices including the Lardeau, Milford, and Hamill groups, was later offset to the northeast by dip-slip motion along the Columbia River Fault.

Lardeau Group rocks comprise limestone, calcareous, graphitic, and siliceous argillite and siltstone, sandstone, quartzite and conglomerate, and also mafic volcanic flows, tuffs and breccias. These are underlain by Badshot limestone and subsequently underlain by Hamill Group quartzite rocks. Lardeau Group rocks are isoclinally folded and intensely deformed, but only weakly metamorphosed. They occur as intercalated beds of marble, quartzite, and grey, green, and black phyllite and schist. They have been subdivided into six formations:

Index, Triune, Ajax, Sharon Creek, Jowett, and Broadview. The lowermost (Index) and uppermost (Broadview) are the most widespread rock formations in the region.

The mineralized bodies at Thor are hosted by the greywacke and phyllite of the middle division of the Broadview Formation in the core of a major antiform that is believed to be a large drag feature on the southwest limb of the main Silver Cup Anticline. The Project is on the southwest side of the Cup Creek Fault, near the axis of the drag fold antiform, which strikes and plunges to the northwest. The area has been subdivided into four structural blocks by later faults.

The property has numerous parallel stratigraphic horizons that extend approximately two kilometres along strike in a northwest-southeast direction. The stratigraphy is simple, but it has been subjected to complex folding and faulting and has up to 50% colluvium cover. Lithologically, the Project area can be grouped into three main units: the UGS, the CMU sulphide horizon commonly including Tuffaceous Sediments, and the LCS. To date, no intrusives or contact metamorphism has been identified at Thor. No fossils have been identified and no age dating of the rocks has been done. Taranis' geological mapping suggests that the stratigraphy is upright and has not been overturned so it uses the terms antiform/synform in its structural descriptions rather than anticline/syncline. The sedimentary rocks have been deformed into major northwest trending folds, with a secondary set of folds trending southeast.

The VMS-style silver-lead-zinc-gold-copper mineralization is spatially located on the east limb of the Thor Antiform (or western limb of the Thor Synform) and is sulphide dominated. The mineralization in the antiform apex and western side is characterized by quartz-dominated cap rocks with primarily gold and silver mineralization with only minor amounts of copper, lead, and zinc. The quartz-dominated cap rock appears to have been partially eroded and may have provided a large component of the placer gold deposits in the valley of Ferguson Creek downstream to the east.

## EXPLORATION

Since its acquisition of the property in 2007, Taranis has drilled 152 drill holes, excavated 35 trenches, soil sampled, mapped, and undertaken numerous geophysical surveys. All of the drill holes and 35 trenches are located on the east side of the Thor Antiform.

### *2006 EXPLORATION*

As part of its initial due diligence of the Thor property in the fall of 2006, Taranis collected a number of samples from both the underground and the surface of the property. These samples were taken over the full surface exposure of the hydrothermal system and comprised chip, channel, and grab samples.

Underground chip samples were taken from the Lower and Middle Broadview tunnels to the southeast and the Blue Bell adit to the northwest. Anomalous base and precious metal values were encountered in all excavations.

Surface trenches and pits established by previous explorers were also sampled by Taranis and encouraging results were similarly obtained.

A number of surface zones were investigated by systematically selecting hand specimens from stockpiles where present. The sampling procedure involved collecting a diverse array of mineral-bearing rocks from the surface dump and preparing sample descriptions of the samples. Anomalous results were obtained from Great Northern, Blue Bell, True Fissure, Broadview, and to a lesser extent, Morgan Tunnel zones.

Five lines of test geophysics were completed over the mineralized horizon and consisted of a total field magnetic (Mag) survey and VLF-EM survey using a Scintrex ENVI Mag/VLF Unit. Lines were generally 100 m long and were placed over areas of interest with five metre station spacings directly over the mineralized zone. The data from these surveys suggested mineralization could be traced along a stratigraphic contact.

### *2007 EXPLORATION*

A total of 29.1 line-km of grid cutting and a fixed loop transient EM (TEM) geophysical was done by Quantec Geoscience Inc. (Quantec). Quantec delineated six anomalies, however, upon the conclusion of the program, it was discovered that the grid upon which the geophysical work had been conducted had not been accurately surveyed. In 2012, Taranis personnel located many of the stations on the original grid. Taranis was then able to incorporate the 2007 and 2008 data into the geophysical database.

The surface ground magnetic program delineated sulphide mineralization along a north-northwest-striking contact which dips moderately to the east and encompasses the area detailed in this report. A 700 m by 150 m coincident magnetic and electromagnetic anomaly was identified between the Broadview Zone and the True Fissure Zone.

A VLF-EM survey was conducted during the 2007 and 2008 field seasons.

Two zones that had been previously grab sampled were exposed using an excavator and were channel sampled using a gas-powered diamond saw. The Galena Pocket Zone is located at the up-dip extent of the True Fissure Zone. A cross section of the CMU was exposed by the overburden stripping and a true thickness of 3.75 m was sampled. One channel sample was also taken at the St. Elmo Zone where the CMU was sampled over a true width of 1.80 m.

Additional underground sampling was done on the Blue Bell Zone that returned elevated gold and silver values.

Taranis also completed 3,545.0 m of NQ-diameter (45 mm) drilling in 60 holes on a systematic grid targeting the CMU in the vicinities of the Great Northern and True Fissure zones.

***2008 EXPLORATION***

A systematic mechanical trenching program at the south end of the Great Northern Zone exposed continuous silver and gold mineralization in outcrop within the CMU. A total of 30 channel samples were cut using a diamond saw, and the trench was photographed and mapped.

Taranis drilled 8,849.7 m of NQ-diameter core in 92 holes. Drilling in this program was primarily targeted toward the Blue Bell, St. Elmo, Great Northern, and Broadview zones with some drilling on the True Fissure Zone.

***2009 EXPLORATION***

In July and August 2009, Taranis completed a stream sediment sampling program on the ODIN1 and ODIN2 claims on the south end of the Project. Taranis found that the stream sediment sampling program showed no anomalous levels of copper, lead, or silver. Taranis, however, did observe anomalous results for zinc, cadmium, barium, strontium, and manganese in some samples.

***2012 EXPLORATION***

Line cutting and gridding was completed using a Brunton compass and hip chain. Lines were marked with fluorescent flagging tape. Stations were later located using differential Global Positioning System (GPS) at five metre to ten metre spacings along lines which were 25 m to 50 m apart.

Taranis conducted total field and gradiometer and VLF-EM geophysical surveys along 12.95 line-km of newly established exploration grid from June to August 2012. Ground magnetic surveys were carried out in the vicinity of the historical True Fissure Mine and in an area where Westmin had previously explored in the 1980s.

The same areas covered by the ground geophysics were surveyed with the VLF-EM. Conductive responses from this survey were related to features such as sulphide mineralization, concentrations of graphite, or highly altered rocks.

Taranis completed two detailed “B-horizon” soil sampling grids on the west limb of the Thor Antiform between the known mineralization occurrences of the SIF Zone and the Gold Pit Occurrence. A total of 340 samples were taken over the Meadow Grid and 232 samples from the Great Northern Grid. The soil samples were measured for pH prior to shipment to the assay laboratory. On the Meadow Grid, soil sample anomalies for gold, silver, copper, lead, and zinc correspond well with known mineralized occurrences. Lead and silver appear to show a second trend of mineralization located on the southwest side of the grid trending to the northwest. Gold, silver, copper, and zinc results from the Great Northern Grid correlated well with the known mineralization from the Great Northern Zone. This same relationship was not observed with the lead results. Some anomalies were also coincident with geophysical anomalies.

Taranis also conducted detailed geological and structural mapping programs. About 130 outcrops and 218 “geological points”, i.e., geological features deemed to be too small to be outcrops, were mapped and measured. The mapping revealed that two main lithological features have close spatial relationships with the mineralization at Thor. The first is a large exposure of northwest-trending, tightly folded Lower Series (Thor Antiform) carbonaceous rocks which can be traced for the length of the property. The second is a smaller exposure of Lower Series carbonaceous rock, referred to as the Thor North Antiform, found north of the True Fissure Zone. The structural mapping program proved useful in gaining understanding of the complex structural features on the Project. Based on this work, Taranis suggests that the five zones at Thor could be the result of post-mineralization displacement of a single mineralized body.

A surface grab sample program was conducted at the SIF Zone, Gold Pit Occurrence, Scab Zone, Antiform Zone, and Great Northern Footwall Zone. The sampling at the SIF Zone appeared to reveal a unique style of gold-enriched mineralization at Thor. Gold Pit mineralization displays some geological similarities to SIF Zone mineralization but is silver-rich in comparison. The gold- and silver-enriched Scab zone lies southeast of the St. Elmo Zone, northwest of the True Fissure Zone, and within the same mineralized horizon as the SIF Zone. Mineralization occurs with sulphide-poor quartz-ankerite and/or quartz-siderite veins with carbonaceous material at the Antiform Zone. This zone returned anomalous gold and silver values as did the newly discovered Great Northern Footwall Zone.

## MINERAL RESOURCE ESTIMATE

The Mineral Resource estimate is summarized in Table 1-1. Mineral Resources are classified based on the density of drill hole data and the continuity of the mineralized zones.

The Mineral Resource estimates were prepared using a three dimensional (3D) block model. Mineral Resources potentially mineable by open pit are constrained within a preliminary Whittle pit shell and Mineral Resources potentially mineable by underground methods are reported outside of the pit shell.

The database that was provided to RPA comprises a total of 152 surface drill holes and 185 current and historical surface and underground channel samples.

Grade was interpolated using the Inverse Distance Cubed method, and check estimates were carried out using Inverse Distance Squared and Nearest Neighbour interpolation methods. There are five mineralized zones on the Thor property and RPA interpreted each of these zones separately with the exception of Blue Bell – St. Elmo which were in very close proximity and interpreted within the same domain.

# 2 INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by Taranis Resources Inc. (Taranis) to produce an initial Mineral Resource estimate and supporting independent Technical Report on the Thor Project (the Project or Thor), located near Trout Lake, British Columbia (BC), Canada. The purpose of this report is the disclosure of an initial Mineral Resource estimate. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects. RPA visited the property on October 25, 2012.

Taranis is a publicly traded exploration company listed on the Toronto Venture Stock Exchange (TSX-V) with principal projects in Canada and Finland. The Project lies southeast of Revelstoke, BC and incorporates silver-zinc-lead-gold-copper (Ag-Zn-Pb-Au-Cu), highly deformed, sediment-hosted volcanogenic massive sulphide (VMS) mineralization.

## SOURCES OF INFORMATION

A site visit was carried out by Barry McDonough, P. Geo., Senior Geologist, RPA.

Discussions were held with personnel from Taranis:

- Mr. John Gardiner, P. Geo., President and CEO.

Mr. McDonough is responsible for all sections of this report.

The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27 References.

***LIST OF ABBREVIATIONS***

Units of measurement used in this report conform to the Metric (S.I.) system. All currency in this report is Canadian dollars (C$) unless otherwise noted.

| | |
|---|---|
| a | annum |
| A | ampere |
| bbl | barrels |
| btu | British thermal units |
| °C | degree Celsius |
| C$ | Canadian dollars |
| cal | calorie |
| cfm | cubic feet per minute |
| cm | centimetre |
| $cm^2$ | square centimetre |
| d | day |
| dia | diameter |
| dmt | dry metric tonne |
| dwt | dead-weight ton |
| °F | degree Fahrenheit |
| ft | foot |
| $ft^2$ | square foot |
| $ft^3$ | cubic foot |
| ft/s | foot per second |
| g | gram |
| G | giga (billion) |
| Gal | Imperial gallon |
| g/L | gram per litre |
| Gpm | Imperial gallons per minute |
| g/t | gram per tonne |
| $gr/ft^3$ | grain per cubic foot |
| $gr/m^3$ | grain per cubic metre |
| ha | hectare |
| hp | horsepower |
| hr | hour |
| Hz | hertz |
| in. | inch |
| $in^2$ | square inch |
| J | joule |
| k | kilo (thousand) |
| kcal | kilocalorie |
| kg | kilogram |
| km | kilometre |
| $km^2$ | square kilometre |
| km/h | kilometre per hour |
| kPa | kilopascal |
| kVA | kilovolt-amperes |
| kW | kilowatt |
| kWh | kilowatt-hour |
| L | litre |
| lb | pound |
| L/s | litres per second |
| m | metre |
| M | mega (million); molar |
| $m^2$ | square metre |
| $m^3$ | cubic metre |
| µ | micron |
| MASL | metres above sea level |
| µg | microgram |
| $m^3/h$ | cubic metres per hour |
| mi | mile |
| min | minute |
| µm | micrometre |
| mm | millimetre |
| mph | miles per hour |
| MVA | megavolt-amperes |
| MW | megawatt |
| MWh | megawatt-hour |
| oz | Troy ounce (31.1035g) |
| oz/st, opt | ounce per short ton |
| ppb | part per billion |
| ppm | part per million |
| psia | pound per square inch absolute |
| psig | pound per square inch gauge |
| RL | relative elevation |
| s | second |
| st | short ton |
| stpa | short ton per year |
| stpd | short ton per day |
| t | metric tonne |
| tpa | metric tonne per year |
| tpd | metric tonne per day |
| US$ | United States dollar |
| USg | United States gallon |
| USgpm | US gallon per minute |
| V | volt |
| W | watt |
| wmt | wet metric tonne |
| wt% | weight percent |
| $yd^3$ | cubic yard |
| yr | year |

# 3 RELIANCE ON OTHER EXPERTS

This report has been prepared by Roscoe Postle Associates Inc. (RPA) for Taranis Resources Inc. (Taranis). The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to RPA at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by Taranis and other third party sources.

For the purpose of this report, RPA has relied on ownership information provided by Taranis. RPA has not researched property title or mineral rights for the Project and expresses no opinion as to the ownership status of the property.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.

# 4 PROPERTY DESCRIPTION AND LOCATION

The Thor Project is located north of Trout Lake and approximately 80 km south of Revelstoke, BC. The property covers an area of approximately 1,821 ha (approximately five kilometres by five kilometres) and lies within the Revelstoke Mining District (Figure 4-1).

Taranis acquired the Thor property in 2007 and owns 100% of the Project. The Project area includes 27 Crown Grant Mining Claims (273 ha) (Figure 4-2) and eleven Mineral Tenures. The Mineral Tenure details are shown in Table 4-1.

**TABLE 4-1 MINERAL TENURES**
**Taranis Resources Inc. – Thor Project**

| Tenure Number | Claim Name | Tenure Type | Tenure Sub Type | Map Number | Issue Date | Expiry Date | Area (ha) |
|---|---|---|---|---|---|---|---|
| 549308 | Great Northern | Mineral | Claim | 082K | 2007/Jan/14 | 2017/Dec/30 | 409.29 |
| 549336 | True Fissure#2 | Mineral | Claim | 082K | 2007/Jan/14 | 2017/Dec/30 | 40.94 |
| 554832 | Em Gold Zone- T.F. | Mineral | Claim | 082K | 2007/Mar/21 | 2017/Dec/30 | 102.33 |
| 573734 | Odin1 | Mineral | Claim | 082K | 2008/Jan/14 | 2017/Dec/30 | 20.47 |
| 573737 | Odin2 | Mineral | Claim | 082K | 2008/Jan/14 | 2017/Dec/30 | 266.15 |
| 573746 | True Fissure #1 & #3 | Mineral | Claim | 082K | 2008/Jan/14 | 2017/Dec/30 | 225.06 |
| 573781 | Odin4 | Mineral | Claim | 082K | 2008/Jan/15 | 2017/Dec/30 | 429.55 |
| 574332 | Northernlight | Mineral | Claim | 082K | 2008/Jan/23 | 2017/Dec/30 | 81.87 |
| 597899 | True Fissure Extra-Ext | Mineral | Claim | 082K | 2009/Jan/23 | 2017/Dec/30 | 143.21 |
| 854397 | Mjolnir1 | Mineral | Claim | 082K | 2011/May/11 | 2017/Dec/30 | 81.87 |
| 1015600 | Plamka | Mineral | Claim | 082K | 2012/Dec/31 | 2013/Dec/31 | 20.46 |
| **Total** | | | | | | | **1,821.21** |

Source: Gardiner, 2012

Taranis acquired the Crown Grants from Vanada Resources Inc. (Vanada) in 2006. As part of its due diligence Taranis reports it retained Tupper, Jonsson and Yeadon of Vancouver, BC to research the Crown Grant titles. The search revealed that all 27 Crown Grants have mineral title and that ten have surface title (Figure 4-3). The remaining 17 do not have surface title as the surface rights have reverted to the Crown. RPA has not independently verified this information. Details of the title search are shown in Table 4-2 and Figure 4-4.

Taxes levied on the Crown Grants are C$1.25 per ha and Taranis reports all payments are current and the titles are in good standing. Crown Grant mineral claims have no expiry date.

The Project area includes five mineralized zones (Figure 4-2) discovered in the late 1800s and early 1900s which were historically mined, located on the eastern slope of Great Northern Mountain, namely, Broadview, Great Northern, True Fissure, Blue Bell, and St. Elmo.

**Broadview** is located at an elevation of 1,920 MASL at 50° 41' 55" N latitude/117° 29' 33" W longitude (UTM 5616426 N/465218 E). The Broadview Group was originally known as the Great Northern Group and/or the Alpha Group.

**Great Northern** is situated between 1,550 MASL and 1,850 MASL elevation at 50° 42' 14" N latitude/117° 29' 58" W longitude (UTM 5617016 N/464732 E), about 3.2 km northwest of Ferguson. It is situated to the southeast of the True Fissure, which is likely the same lode.

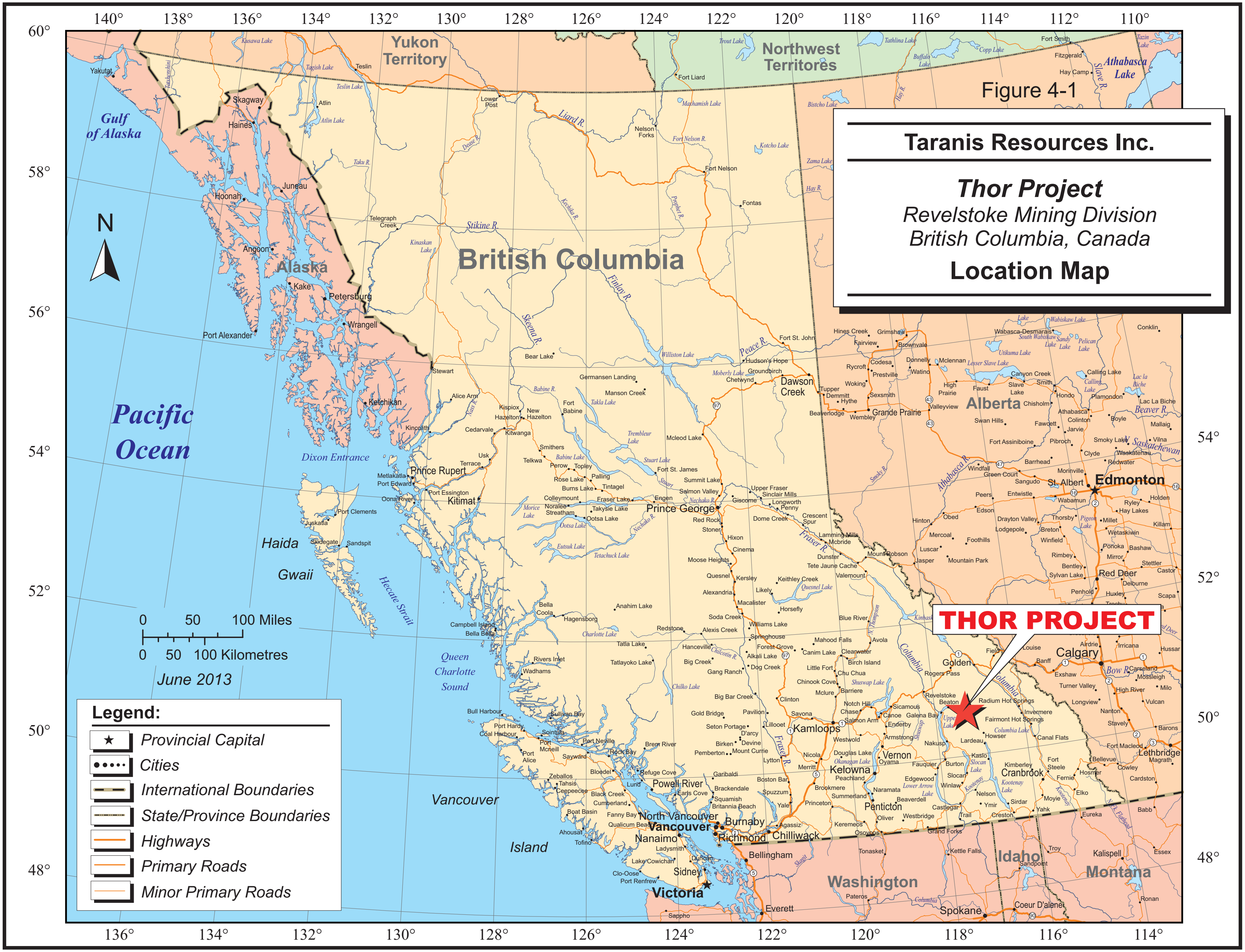
**True Fissure** is at an elevation of 1,750 MASL at 50° 42' 24" N latitude/117° 29' 59" W longitude (UTM 5617325 N/464714 E), at the head of Fissure Creek, a minor tributary that flows to the east into Ferguson Creek.

**Blue Bell** is located approximately 3.2 km northwest of Ferguson. It lies at an elevation of 1,633 MASL at 50° 42' 43" N latitude 117° 29' 59" W longitude (UTM 5617912 N/464718 E), on the north side of Fissure Creek above its headwaters.

**St. Elmo** is situated at an elevation of 1,710 MASL at 50° 42' 27" N latitude/117° 30' 19" W longitude (UTM 5617420 N/464322 E), at the head of Fissure Creek, which drains to the east into Ferguson Creek upstream from Ferguson. It is immediately to the east of True Fissure Zone.

Taranis is not aware of any protected archeological sites in the vicinity of the Project.

RPA is not aware of any outstanding royalties, agreements, or obligations associated with the Project. The sole requirement to retain the property consists of filing of reports of work with the BC Ministry of Energy, Mines and Petroleum Resources (BCMEMPR). Alternatively, an annual fee in lieu of exploration work may also be paid to BCMEMPR.




www.rpacan.com

3D Image of Thor Property

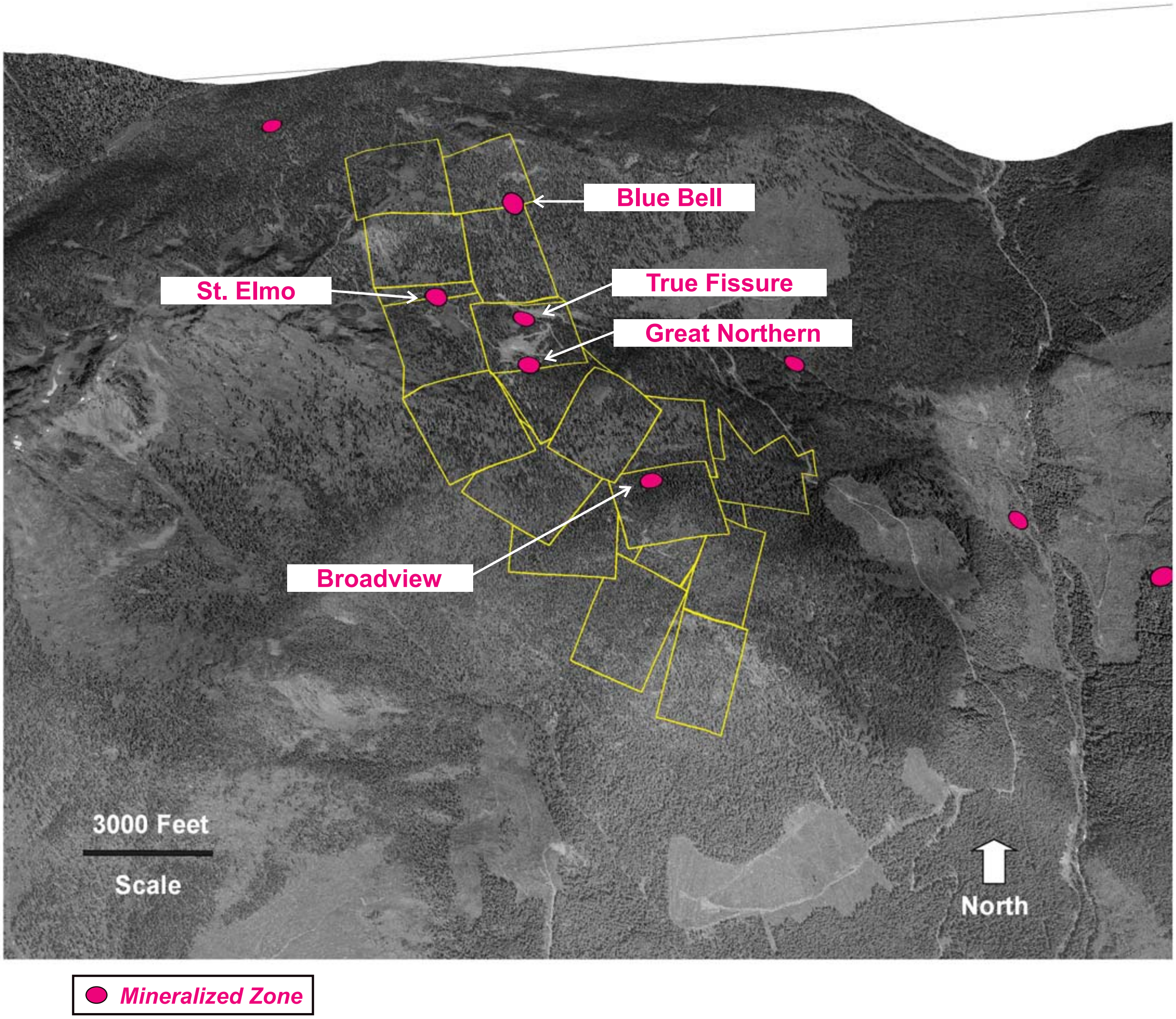



Figure 4-2

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Mineralized Zones and Crown Grants at Thor**

*June 2013*

***Source: Taranis Resources Inc., 2006.***

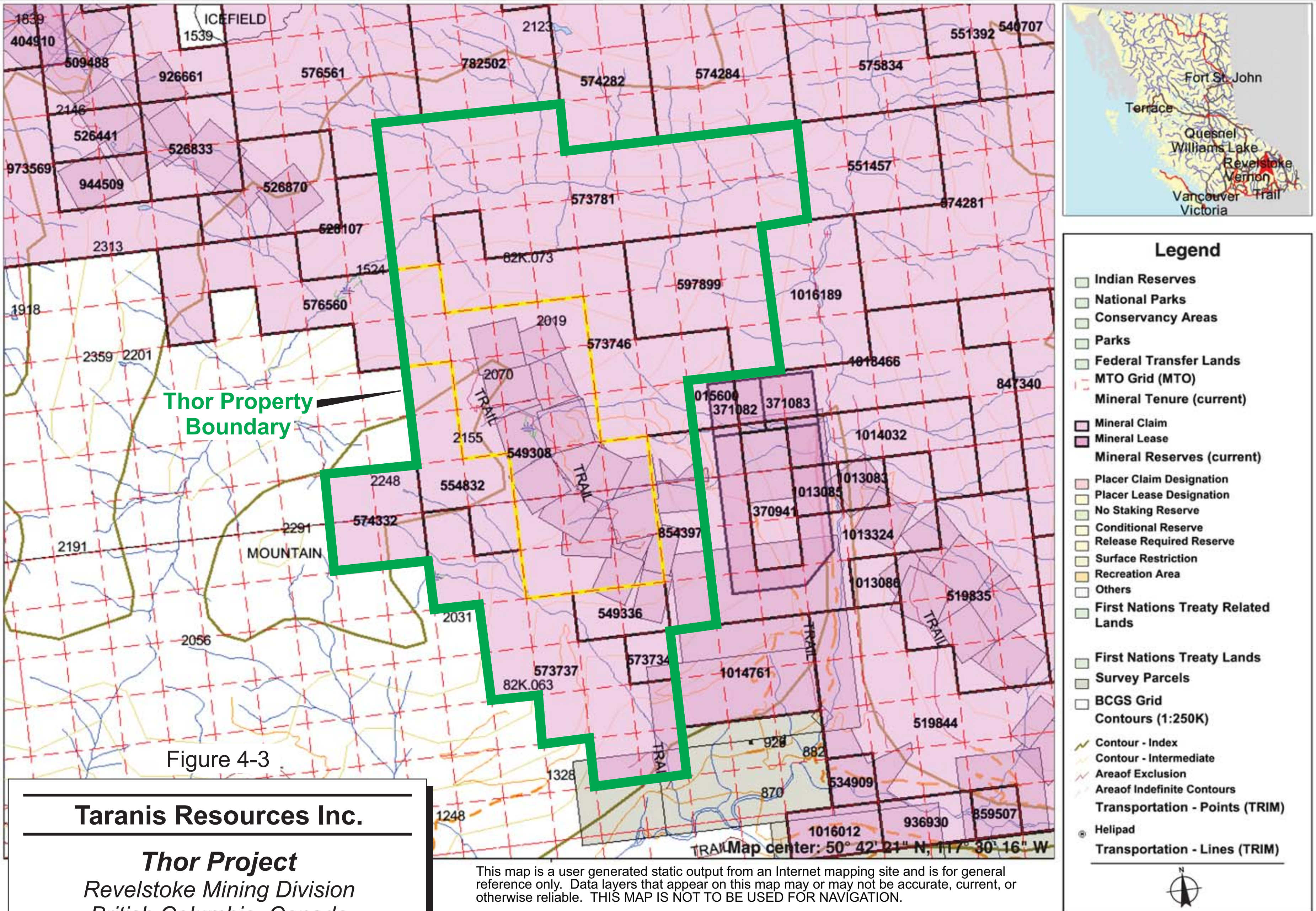



Figure 4-3

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Mineral Tenure Map**

This map is a user generated static output from an Internet mapping site and is for general 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.

*June 2013*

***Source: B.C. Mineral Titles Online, 2013.***

RPA

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## TABLE 4-2 CROWN GRANTED MINERAL CLAIMS
### Taranis Resources Inc. – Thor Project

| Claim Name | District Lot Number | Registered Owner of Fee Simple[1] | Registered Owner of Under-Surface Rights | Surface Rights Title |
|---|---|---|---|---|
| Spenlow | 10649 | Crown[2] | Vanada | - |
| Jorkins | 10650 | Crown[2] | Vanada | - |
| Yankee | 4582 | Crown[2] | Vanada | - |
| Blue Bell | 5707 | Crown[2] | Vanada | - |
| Don Fractional | 4583 | Crown[2] | Vanada | - |
| Park Fractional | 10648 | Crown[2] | Vanada | - |
| St. Elmo | 4581 | Crown[2] | Vanada | - |
| True Fissure | 1097 | Vanada | Vanada | Yes |
| Northland | 1100 | Donald MacPherson[3] | Vanada | - |
| Grace Fractional | 2640 | Crown[2] | Vanada | - |
| Great Western Fractional | 1102 | Donald MacPherson[3] | Vanada | - |
| Great Northern | 1099 | Donald MacPherson[3] | Vanada | - |
| Great Eastern Fractional | 1103 | Donald MacPherson[3] | Vanada | - |
| Northern Lights | 1101 | Donald MacPherson[3] | Vanada | - |
| Hillside | 1098 | Donald MacPherson[3] | Vanada | - |
| Alpha | 1553 | Vanada | Vanada | Yes |
| Clipper Fractional | 1554 | Vanada | Vanada | Yes |
| Cutter Fractional | 1555 | Vanada | Vanada | Yes |
| Broadview Fractional | 6019 | Crown[2] | Vanada | - |
| L. H. | 6018 | Crown[2] | Vanada | - |
| Indiana | 6017 | Crown[2] | Vanada | - |
| Colonial | 1589 | Vanada | Vanada | Yes |
| Old Sonoma | 1551 | Vanada | Vanada | Yes |
| Skiff Fractional | 1556 | Vanada | Vanada | Yes |
| Phillipsburg | 1552 | Vanada | Vanada | Yes |
| Confederation | 2868 | Vanada | Vanada | Yes |
| Broadview | 1550 | Vanada | Vanada | Yes |

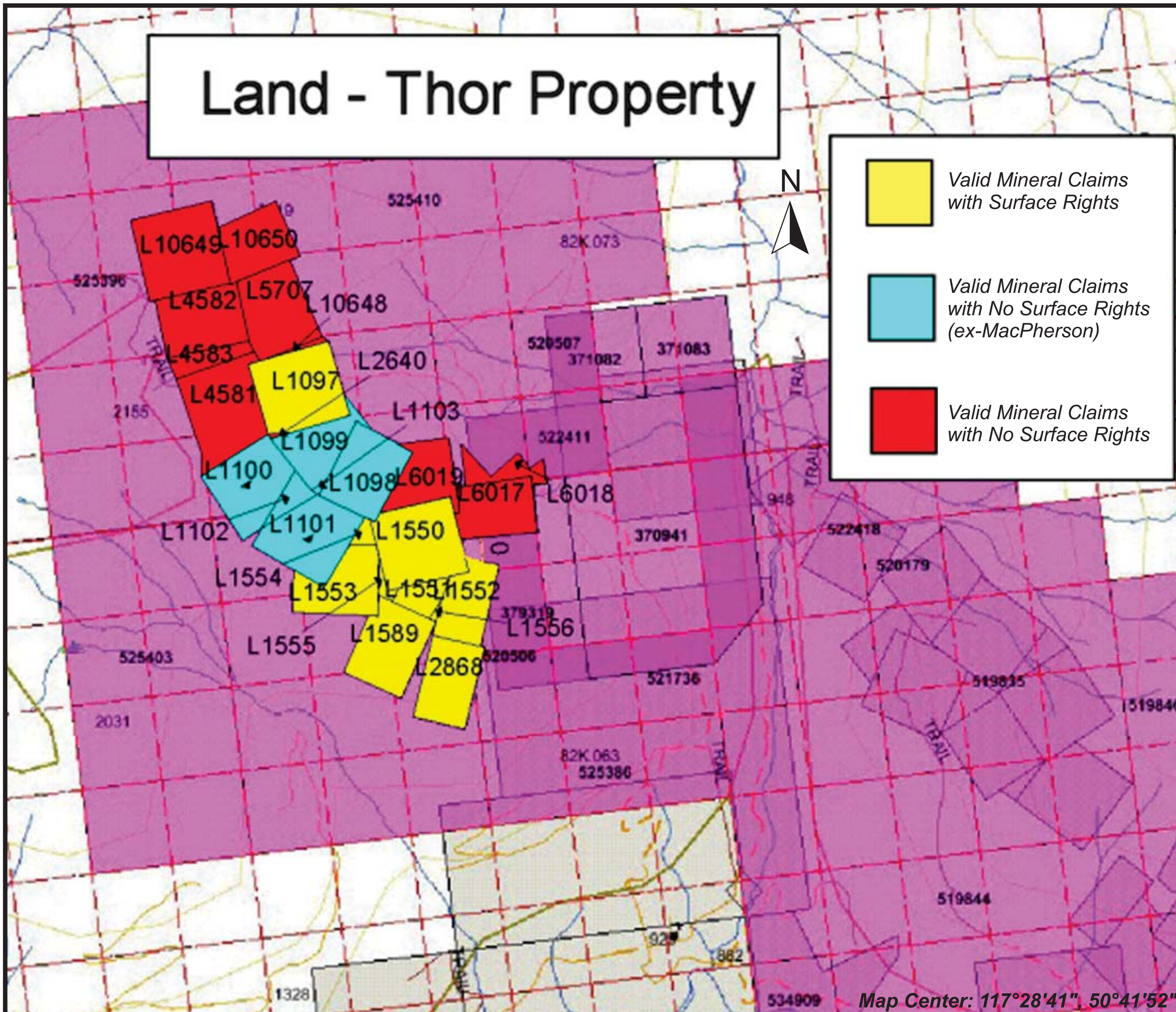
Notes:

1 All Base and Precious Minerals (save Coal and Petroleum)

2 Her Majesty the Queen in Right of the Province of British Columbia

3 Certificate of Forfeiture under Taxation (Rural Area) Act of 15890 (3) dated October 19, 1939

Source: Gardiner, 2006




0 100 200 300 400 500

Metres

Figure 4-4

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Crown Granted Mineral Claims**

*June 2013*

***Source: B.C. Mineral Titles Online, 2013.***

# 5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Trout Lake is a ribbon lake located 80 km southeast of the city of Revelstoke in the interior of British Columbia, Canada and the town of Trout Lake is found at its northwest end. The community was established in the early 1900s to support the burgeoning mining activity in the area but now only has a small population (predominantly summer cabin owners). The Trout Lake area lies in the Lardeau District in the West Kootenay Region of southeastern BC.

## ACCESSIBILITY

Trout Lake is located along the Balfour-Kaslo-Galena Bay Highway (BC Provincial Highway 31). Revelstoke is located on the main east-west transportation corridor through BC, including the Canadian Pacific Railway and the Trans-Canada Highway No. 1. The city is serviced by the Revelstoke Airport. Revelstoke is 641 km northeast of Vancouver, BC or 415 km west of Calgary, Alberta.

Revelstoke Airport has a 1,460 m paved runway with charter plane and helicopter services; it does not have a scheduled commercial airline service. Scheduled flights are available from Kelowna.

The Project area is accessed by travelling north of Trout Lake by an all-weather secondary road to the historic mining town of Ferguson, BC which is located approximately three kilometres to the south of Thor. From Ferguson, the Thor claim group is accessible by a four-wheel drive or all-terrain vehicle via a seasonal gravel road. Excessive snow in the winter would require that this road be maintained but year-round access can be achieved.

## CLIMATE

The daily average temperature for Revelstoke, the closest weather station, is 25$^{o}$C in July and -8$^{o}$C in January. Revelstoke has an annual precipitation average of 945 mm (expressed in mm of water), with the winter months being slightly wetter. Precipitation as snow is common from October until April. The elevation of Revelstoke is approximately 450 MASL while the Project area is higher by about 1,000 m. As a consequence, temperature ranges at

Thor are on average, lower than those at Revelstoke and the amount of precipitation falling as snow is higher.

Periods of heavy snowfall in the winter months could potentially impact short term production but is not likely to adversely affect year-round operations.

## LOCAL RESOURCES

The city of Revelstoke has a population of approximately 8,000. The principal industries in the area are forestry, transport (predominately rail), tourism, government services, mining, and water (hydroelectric dams and power generation). The winter sports resort of Revelstoke Mountain Resort is located on the slopes of Mount MacKenzie nearby. Historically, mining was an important economic activity in the region and other exploration is being conducted in the area.

Trout Lake has limited services including a hotel, gas station, and a small grocery store. Many seasonal cabins can be rented to house workers so an on-site camp is not required. Other exploration and mining activities are based out of Trout Lake, most notably the past-producing Max Molybdenum Mine owned by Roca Mines Inc.

Revelstoke Dam, constructed on the Columbia River, is a hydroelectric dam five kilometres north of Revelstoke, with an installed capacity of 2,480 MW operated by BC Hydro.

## INFRASTRUCTURE

There is no infrastructure on the Project other than road access.

## PHYSIOGRAPHY

The Project lies on the eastern slopes of Great Northern Mountain approximately seven kilometres from Trout Lake. Great Northern Mountain has an average elevation of 2,028 MASL. Topography is rugged with steep sloping valleys. The Project elevation ranges from approximately 1,400 MASL to 2,150 MASL.

The Project area is close to the 815 ha Lew Creek Ecological Reserve which was established in 1972 and is assumed to have similar biogeoclimatic characteristics. A continuous forest of hemlock-western red cedar-western yew is found at elevations below

1,450 MASL. Above this, extensive subalpine forests comprise much of the Project area and contain subalpine fir, spruce and tall pine many of which are broken up by avalanche paths. Alder and low shrubs are present in the undergrowth. The Alpine Tundra zone is also present at higher elevations. There are no wetlands on the property due to its elevation and no glaciers are present.

The Project Area is drained by Fissure Creek to the east which empties into the south flowing Ferguson Creek.

RPA is not aware of any other factors or risks that may affect the access, title, or Taranis' ability to perform work on the property. Taranis has all the necessary permits to conduct the proposed work on the property.

# 6 HISTORY

This section is derived from Gardiner (2006).

The Trout Lake area was first explored in the early 1890s as prospectors moved into the area from the Slocan and Kootenay Lake areas. Three principal centres of gold and silver-lead mineralization were identified and mining camps were established at Camborne (east of Beaton), Ferguson, and Poplar (south of Trout Lake). Major mines were active in the early 1900s but had all ceased production prior to the 1950s. Most of the significant deposits and showings in the area were interpreted as polymetallic, post-tectonic, epigenetic vein, and/or replacements controlled by structure and stratigraphy.

The Project area includes five known mineralized bodies: Broadview, Great Northern, True Fissure, Blue Bell, and St. Elmo. Underground drifting, limited diamond drilling, and minimal mining activity were carried out on these mineralized zones in the late 1890s.

## PRIOR OWNERSHIP AND PAST PRODUCTION

### *GREAT NORTHERN*

The first showing in the area was found on the Great Northern claim in 1890. Other discoveries soon followed, and the entire lode system was located before the turn of the twentieth century. Small-scale exploration and development was carried on by the locators or bondholders for a number of years. The Great Northern claim was bonded to a Montana company in 1896. An adit was driven the following year and at least one bulk sample was shipped to a smelter. According to Gunning (GSC MEM 161), 33.5 t worth "$47 per ton" were shipped, however, only 15 t were recorded as being processed at the smelter. The Great Northern (L.1099), Hillside (L.1098), and Great Western Fr. (L.1102) were Crown Granted to Hugh McPherson and Associates in 1898. After a period of closure, the adit was reopened in 1906 and more work was done on the claim in 1913, 1917, and from 1928 to 1930. In 1928, there were four adits on the property but the upper three, which were short, had already caved. The lower adit, No. 4, was still open for 103 m and exposed the lode for approximately 75 m. In the 1950s, the Great Northern Group was owned by the D. McPherson Estate. By 1958, all of the workings had collapsed.

***BROADVIEW***

The Lillooet, Fraser River and Cariboo Gold Fields Company Limited worked on the Broadview property between 1895 and 1897. No further work was reported until 1905, when it was bonded by a local syndicate. In September 1906, Broadview was acquired by Ohio Mines Development Company Limited (Ohio Mines) and small-scale, intermittent operations were carried on by the company, or lessees, until 1909. At that time, the developments appear to have comprised 150 m of tunnel in five adits between elevations of 1,680 MASL and 1,800 MASL, a 30 m deep shaft, and, on the Old Sonoma claim, a shaft with 18 m of drift. Ohio Mines shipped 66 t of hand-picked mineralized material grading 1.71 g/t Au, 1,371 g/t Ag, and 38.0% Pb from the upper shaft in 1909 and 1910 (Minfile No. 082KNW030).

Comara Mining & Milling Company Limited (Comara) acquired 21 claims, including Broadview and True Fissure, in 1946. The combined property was then passed to Columbia Metals Corporation Limited (Columbia Metals), upon its incorporation, in March 1949. The land package was later extended to 43 claims. In 1955, Yellowknife Bear Mines Limited drilled four diamond drill holes, totaling 457 m, from surface. Control of the property, however, reverted to Columbia Metals the following year. In 1968, an induced polarization (IP) survey was carried out and considerable drilling was done in an attempt to find parallel lodes. A further five holes were drilled adjacent to the Broadview shaft in 1972, but two were abandoned before their target depths. The remaining three holes intersected a mineralized quartz-carbonate zone in the footwall of one of the old stopes.

The Broadview shaft, at an elevation of 1,830 MASL, was sunk 36.5 m on a structure of coarse-grained galena-sphalerite-chalcopyrite-pyrite mineralization in a weathered and sinter-textured, honeycombed vein of milky white quartz, ankerite, and/or siderite. The shoot appeared to follow the footwall of a tight fissure near the middle of the lode. It was reported to be 5.5 m long and 1.52 m wide on the 60-ft level and was mined from that level to surface, and for a short distance below. The galena mineralization was hand-picked and the sphalerite and chalcopyrite-rich mineralization was left on the dump where it remains today. There is an open-cut besides the No. 1 adit that exposed mineralized stringers in quartz veins in silicified green phyllite. The adit itself cuts sheared phyllite for 24 m and intersects a ragged quartz-carbonate vein with strike of 120$^{o}$ and dips steeply northeast. A short winze was sunk from the adit to explore sulphides found in the footwall of the lode. This lode has been referred to as the "Copper Vein" by Emmens and others. The No. 2 adit was 67 m long and followed a sulphide-rich shoot that is ten metres long and approximately 0.6 m wide. A sample across 0.51 m of the most prospective material assayed 0.34 g/t Au, 253.7 g/t Ag, 4.09% Cu, 5.83% Pb, and 4.5% Zn (BC MinFile 82KNW031). The mineralized structure followed a tight fissure that has a 171$^o$ strike and 70$^o$ dip to the east. Erratic mineralization was observed elsewhere in the adit. Adit No. 3 is 7.6 m long but appears to be largely unmineralized. There were reported pockets or shoots of sulphide in the No. 4 and No. 5 adits, however, they were inaccessible and consequently not described. The two historical workings on the Old Sonoma (L.1551) Crown Grant, immediately to the south of the Broadview, were active at the same time as those of Broadview and showed a similar style of mineralization. These excavations intersected quartz-carbonate vein material with disseminated sulphide and rare localized concentrations of sulphide.

Columbia Metals controlled the True Fissure, Great Northern, and Broadview properties in the mid-1960s and conducted an IP survey that suggested that the True Fissure lode could be traced onto the Broadview claim. In 1968, Columbia Metals undertook a substantial diamond drill program in an attempt to find parallel lodes or splits. The results of this program are not known.

***TRUE FISSURE, ST ELMO, AND BLUE BELL***

Subsequent to the first discovery of mineralization on the Great Northern claim in 1890, explorers found numerous other showings in the area. Mr. Hugh McPherson shipped 5.4 t of hand-picked material from the St. Elmo in 1899, yielding 19.4 kg of silver and 1,098 kg of lead.

Small-scale exploration and development was carried out for several years before the Blue Bell (L.5707) claim was eventually Crown Granted to John Stauber and Associates, in 1904. The Blue Bell was known as the "Silver Queen" in the early 1900s.

The True Fissure, St. Elmo and Bluebell Crown Grants and four adjacent claims were bonded by G.F. Park and Associates of Cincinnati, Ohio, who incorporated Ohio Mines in October 1906. The claims were later transferred to the True Fissure Mining and Milling Company, Limited (True Fissure Mining) which was incorporated by Park and Associates in September 1907.

In 1917, Conaway Mining Company shipped 24 t yielding 40.4 kg of silver and 9,435 kg of lead from the Silver Queen. The Blue Bell workings were established by 1921 and developed the northern extension of the True Fissure lode. The two properties were worked together after the mid-1920s.

In 1925, the True Fissure operation was described as having 610 m of drifts and 550 m of crosscuts. The workings were distributed between four adits, covering a vertical range of 150 m on the True Fissure claim and two tunnels, with 36 m of separation, on the adjacent Blue Bell claim.

In 1925, Starr (EMPR PF: Starr Report, 1925) sampled the Blue Bell lode in the Upper and Lower adits. In the upper adit, he collected fifteen samples from the drift and three from small stopes adjacent to it, and determined an average value of 184.5 g/t Ag, 3.1% Pb, and 9.8% Zn over a width of 1.37 m and length of 45.7 m. In the lower adit, he collected nine samples 3.1 m apart and obtained an average of 161 g/t Ag, 3.1% Pb, and 11.2% Zn over 0.46 m width and 24.4 m of length. Also, in the raise above this level, the first 12.2 m averaged 219 g/t Ag, 5.1% Pb, and 16.9% Zn over 0.76 m width. The zone, however, pinched out above the 12.2 m mark. Starr also sampled what he describes as the Blue Bell lode in the "C" tunnel of the True Fissure Mine. There, he found that the mineralized portion of the lode averaged 216 g/t Ag, 3.7% Pb and 10.2% Zn over a length of 10.7 m and width of 0.49 m.

Intermittent exploration and development work was carried out by the owners or lessees until around 1930 when Latonia Milling Company was formed by the Park interests to install a 91 tpd mill at the level of the True Fissure C (No. 3) adit. The mill was completed under the terms of G.F. Park's Estate; although at that time there was no mineralized material ready to mine. True Fissure Mines Limited optioned 22 claims in 1936 but no work was reported. The following year, New True Fissure Mining & Milling Company Limited was formed to develop the True Fissure property and the Great Northern (MineFile No. 082KNW061) was optioned later in the year. The mill operated during the winter of 1937 and 1938 and produced and shipped 5,510 t of lead concentrate. It produced a small amount of zinc concentrate at the same time, but not all of it was shipped. Further development work was carried out in 1939, but the company ceased operations in 1940.

Codan Lead & Zinc Company Limited shipped mineralized material from the dumps in 1943 and 1944. In 1945 Comara acquired 43 claims on Great Northern Mountain and completed 670 m of surface diamond drilling on the True Fissure and St. Elmo claims. In 1949 the company's holdings were transferred to Columbia Metals, and Granby Consolidated Mining, Smelting and Power Company Limited (Granby) was engaged to carry out exploration work in 1952. Granby conducted a major review of the camp and established a small resource in the Upper Blue Bell adit. By that time, the True Fissure mine included four adit levels and two raises connecting the No. 2 and No. 3 levels. Granby drilled 914 m on the True Fissure No. 2 and 3 levels.

The Blue Bell workings consisted of two adits and a connecting raise. The St. Elmo workings comprised two unconnected adits and a winze from the upper adit, and the Great Northern workings included six adits. The St. Elmo workings were badly caved by 1929 and consisted of a drift 53 m long, a 12.2 m raise to surface, and a 6.1 m deep winze (MinFile No.082KNW062).

No further development was undertaken until 1966, when an IP survey revealed an anomaly which more or less coincided with the projection of the main True Fissure lode toward Broadview. A program of drifting and diamond drilling was begun in the True Fissure No. 2 adit. This program was resumed late in 1967 and continued through 1968.

Following the recommendations of a Feasibility Study conducted by GHD Consultants Ltd. for Columbia Metals in 1970, a 115 tpd mill was installed at the portal of the Morgan (True Fissure No. 4) adit and overburden was stripped from a portion of the True Fissure lode in preparation for open pit mining. The mill only operated for a few days between June and September 1971. It closed down due to poor mill installation and ecological problems related to tailings disposal. Components of the plant were either later destroyed or sold as scrap.

Exploration in 1972 included electromagnetic (EM) and self-potential surveys covering the St. Elmo, Blue Bell, True Fissure, and Great Northern claims, and 1,102 m of diamond drilling in 54 holes. It is not clear where the drilling was located, however, Hudson's Bay Oil and Gas Limited reportedly derived a resource figure for the historical True Fissure deposit (Table 6-1).

In 1973, Columbia Metals engaged HB&O Engineering Ltd. (HB&O) to provide general economic guidelines and investigate the most efficient means of exploiting the resources on the Crown Grants. HB&O concluded that the resources at the time could be bulk mined on a seasonal basis with broken rock stockpiled so concentration could occur year-round. HB&O recommended that a production decision be made to exploit the high metal prices of the day

(HB&O, 1973). No other work was recorded and later the property was held by Sibola Mines Limited (Sibola) in the mid-1980s.

In 1925, Starr described and sampled higher-grade sections of the True Fissure lode in a number of crosscuts in the "B" and "C" adits. At the face of the tunnel in the “B” adit, he obtained an assay of 230 g/t Ag, 4.8% Pb, and 11.2% Zn over 1.3 m and in a crosscut in the “C” adit, he obtained four samples, representing a width of 4.3 m, that assayed 175 g/t Ag, 4.1% Pb, and 8.9% Zn. Similar but more erratic values were obtained when Goldfever Resources Limited sampled the dumps in the late 1980s. At that time, the company was particularly interested in the gold values which ranged from 0.6 g/t Au to 87.8 g/t Au (Stockwatch June 16, 1987).

## HISTORICAL RESOURCE ESTIMATES

A number of resource estimates were compiled for the historical True Fissure “deposit”, as summarized in Table 6-1. These estimates are considered to be historical in nature and should not be relied upon, however, they give an indication of mineralization on the property.

### TABLE 6-1 TRUE FISSURE HISTORICAL RESOURCE ESTIMATES
**Taranis Resources Inc. – Thor Project**

| Date | Company | Tonnes | g/t Au | g/t Ag | % Pb | % Zn |
|---|---|---|---|---|---|---|
| 1942 | Sargent[1] | 63,500 | 1.47 | 236.6 | 6.0 | 6.7 |
| 1971 | Columbia Metals[2] | “Probable” 19,700 | - | 332 | 6.8 | 6.4 |
| | | “Possible” 52,225 | - | 355 | 7.4 | 7.1 |
| 1972 | Hudson’s Bay Oil & Gas[3] | “Proven” 33,560 | - | 308.6 | 6.3 | 7.4 |
| | | “Probable” 51,700 | - | 325.7 | 6.0 | 7.6 |

Notes: 1 Sargent Report 1942, EMPR:PF
2 Stockwatch December 15, 1987
3 Northern Miner June 21, 1973

A qualified person has not done sufficient work to classify the historical estimates as current mineral resources. RPA and Taranis are not treating the historical estimate as current since additional sampling and drilling would be required.

# 7 GEOLOGICAL SETTING AND MINERALIZATION

## REGIONAL GEOLOGY

The Trout Lake area is underlain by a thick succession of sedimentary and volcanic rocks of the Badshot Formation and Lardeau Group near the northern end of the Kootenay Arc, an arcuate, north to northwest trending belt of Paleozoic- and Mesozoic-age strata classified as a distinct, pericratonic, terrane. Bordered by Precambrian-age quartzite in the east, the arc rocks young to the west where they are bounded by Jurassic-age intrusive complexes. They were deformed during the Antler orogeny in the Devonian-Mississippian and were re-folded and faulted during the Columbian orogeny during the Middle Jurassic. A large panel, the "Selkirk Allochthon", was later offset to the northeast by dip-slip motion along the Columbia River Fault.

The allochthon is composed of several, highly deformed tectonic slices comprising parts of the Lardeau, Milford, and Hamill groups. The Ferguson area contains a thick succession of these highly deformed sedimentary and rare volcanic rocks that are locally intruded by small bodies of diorite.

The Badshot Formation is composed of a thick succession of Cambrian-age limestone, which is a distinctive marker horizon in the Trout Lake area. It is underlain by Hamill Group quartzite and overlain by a younger assemblage of limestone, calcareous, graphitic, and siliceous argillite and siltstone, sandstone, quartzite and conglomerate, and also mafic volcanic flows, tuffs and breccias, all of which belong to the Lardeau Group. The rocks are isoclinally folded and intensely deformed, but only weakly metamorphosed. They occur as intercalated beds of marble, quartzite, and grey, green and black phyllite and schist. The Lardeau Group has been subdivided into six formations as shown in Table 7-1.

**TABLE 7-1 THOR STRATIGRAPHY**
**Taranis Resources Inc. – Thor Project**

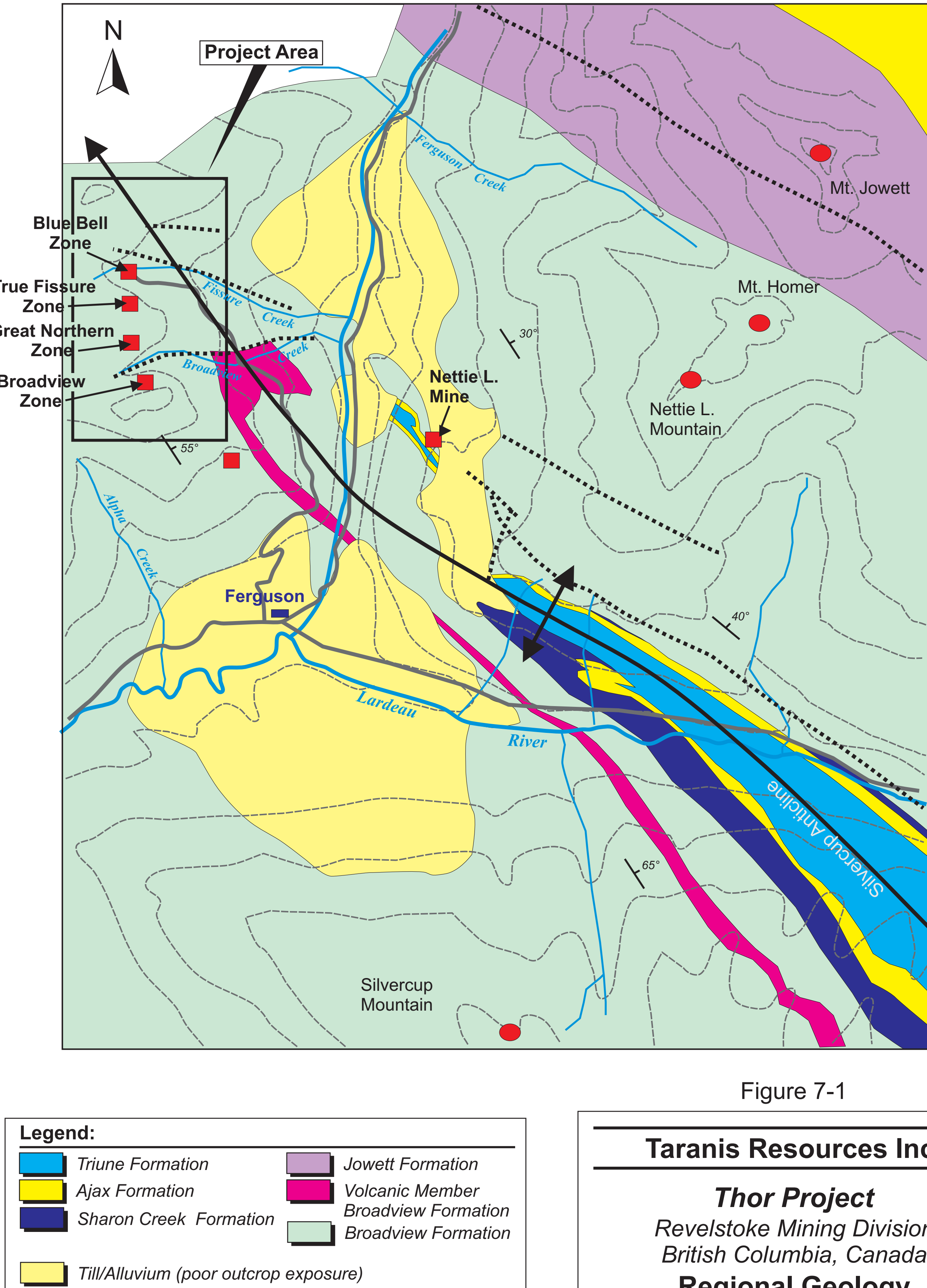
| Group | Formation | Rocks |
|---|---|---|
| Milford Group | | meta-conglomerate, meta-sandstone, marble |
| Lardeau Group | Broadview | phyllite, calcareous phyllite, limestone, siliceous argillite, gritty sandstone, and schistose mafic volcanics |
| | Jowett | metamorphosed basalt, tuff, phyllite |
| | Sharon Creek | siliceous argillite, chert, phyllite |
| | Ajax | quartzite (“Cromwell Dyke”) |
| | Triune | siliceous argillite, chert, phyllite |
| | Index | phyllitic schist, siliceous argillite, calcareous phyllite and limestone, schistose metabasalt, mafic tuff, quartzite (rare) |
| | Badshot Formation | limestone |
| Hamill Group | | quartzite |

The lowermost (Index) and uppermost (Broadview) formations are the most widespread in the region. The folded nature of the stratigraphy, however, has resulted in considerable repetition and it is possible that the Index and the Broadview formations are the same unit. The Triune (siliceous argillite), Ajax (quartzite), and Sharon Creek (siliceous argillite) formations are restricted to the Trout Lake area. The Jowett Formation is a mafic volcanic unit.

The Index Formation consists of a thick, mixed sequence of grey, green, and black phyllitic schist, siliceous argillite, calcareous phyllite and limestone, schistose metabasalt, mafic tuff and rare quartzite. It appears to be overlain by black siliceous argillite, chert, and phyllite of the Triune Formation, and subsequently by massive quartzite of the Ajax Formation. The latter was referred to as the "Cromwell Dyke" by early prospectors. This quartzite is overlain by the Sharon Creek Formation, another black siliceous argillite, chert, and phyllite unit and that, in turn, is overlain by metamorphosed basalt, tuff, and phyllite of the Jowett Formation The Broadview Formation includes grey, green, and black phyllite, calcareous phyllite and limestone, siliceous argillite, gritty sandstone and schistose mafic volcanic rocks. The Lardeau Group is unconformably overlain by meta-conglomerate, meta-sandstone, and marble of the Milford Group.

The layered rocks are highly deformed and Fyles and Eastwood (EMPR BULL 45) identified a major "N-shaped" fold structure east of Trout Lake in 1962. On its southwest side, the fold consists of the Silver Cup Anticline, which underlies much of Silver Cup Ridge. To the northeast of this antiform is the Finkle Creek Syncline, the northeast limb of which is disrupted into a collage of fault-bounded fragments near the Badshot Formation limestone. The folds are isoclinal and mimicked by numerous satellite structures. The fold axes are sub-horizontal and there is a regionally extensive axial plane schistosity which is sub-parallel to bedding. The folds are disrupted by younger faults, some of which are close to axial in orientation and others are weakly to strongly discordant. These late faults, which include the Cup Creek Fault that cuts the Silver Cup Anticline, are important controls on mineralization.

Regional geology is shown in Figure 7-1.




June 2013

Source: Taranis Resources Inc., 2013.

Figure 7-1

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Regional Geology**

## LOCAL GEOLOGY

The mineralized bodies at Thor are hosted by the greywacke and phyllite of the middle division of the Broadview Formation in the core of a major antiform that is believed to be a large drag feature located on the southwest limb of the main Silver Cup Anticline. The Project is on the southwest side of the Cup Creek Fault, near the axis of the drag fold antiform, which strikes and plunges to the northwest. A major north-northwest trending structure, the Great Northern Fault, extends through much of the Thor Project area and has a close spatial relationship with precious and base metal mineralization. Taranis, through its detailed mapping program, has confirmed the presence of this structure and believes that it post-dates the emplacement of the lodes. Offset along this structure is thought by Taranis to be sinistral strike-slip.

## PROPERTY GEOLOGY

The Thor property has numerous parallel stratigraphic horizons that extend two kilometres along strike in a northwest-southeast direction. The stratigraphy is simple, but it has been subjected to complex folding and faulting and has up to 50% colluvium cover. A schematic geological map of the property illustrating the relationship of some of the major features in the area is shown in Figure 7-2.

Lithologically, the Project area can be grouped into three main units:

- Upper Greywacke Series (UGS or Upper Series)
- Combined Metals Unit (CMU) sulphide horizon and/or Tuffaceous Sediments
- Lower Carbonaceous Series (LCS or Lower Series)

To date, no intrusives or contact metamorphism has been identified at Thor. A number of volcanic outcrops have been mapped at the contact of the UGS and the LCS. An idealized stratigraphic section with the main rock units found in the Project Area is shown in Figure 7-3. No fossils have been identified and no age dating of the rocks has been done. Taranis has interpreted that the stratigraphy is upright and has not been overturned. The lack of any evidence of directional orientation from the sedimentary units has led Taranis to use the terms antiform/synform rather than anticline/syncline. This nomenclature has been adopted for structural descriptions at Thor. The sedimentary rocks have been deformed into major northwest trending folds with a secondary set of folds trending southeast.

The VMS-style silver-lead-zinc-gold-copper mineralization is currently spatially restricted to the east limb of the Thor Antiform (or west limb of the Thor Synform) and is sulphide dominated. The mineralization in the antiform apex and west side is characterized by quartz-dominated cap rocks with primarily gold and silver mineralization with only minor amounts of copper, lead, and zinc. The quartz-dominated cap rock appears to have been partially eroded and may have provided a large component of the placer gold deposits in the valley of Ferguson Creek downstream to the east. A schematic cross section through the Thor Antiform is shown in Figure 7-4.

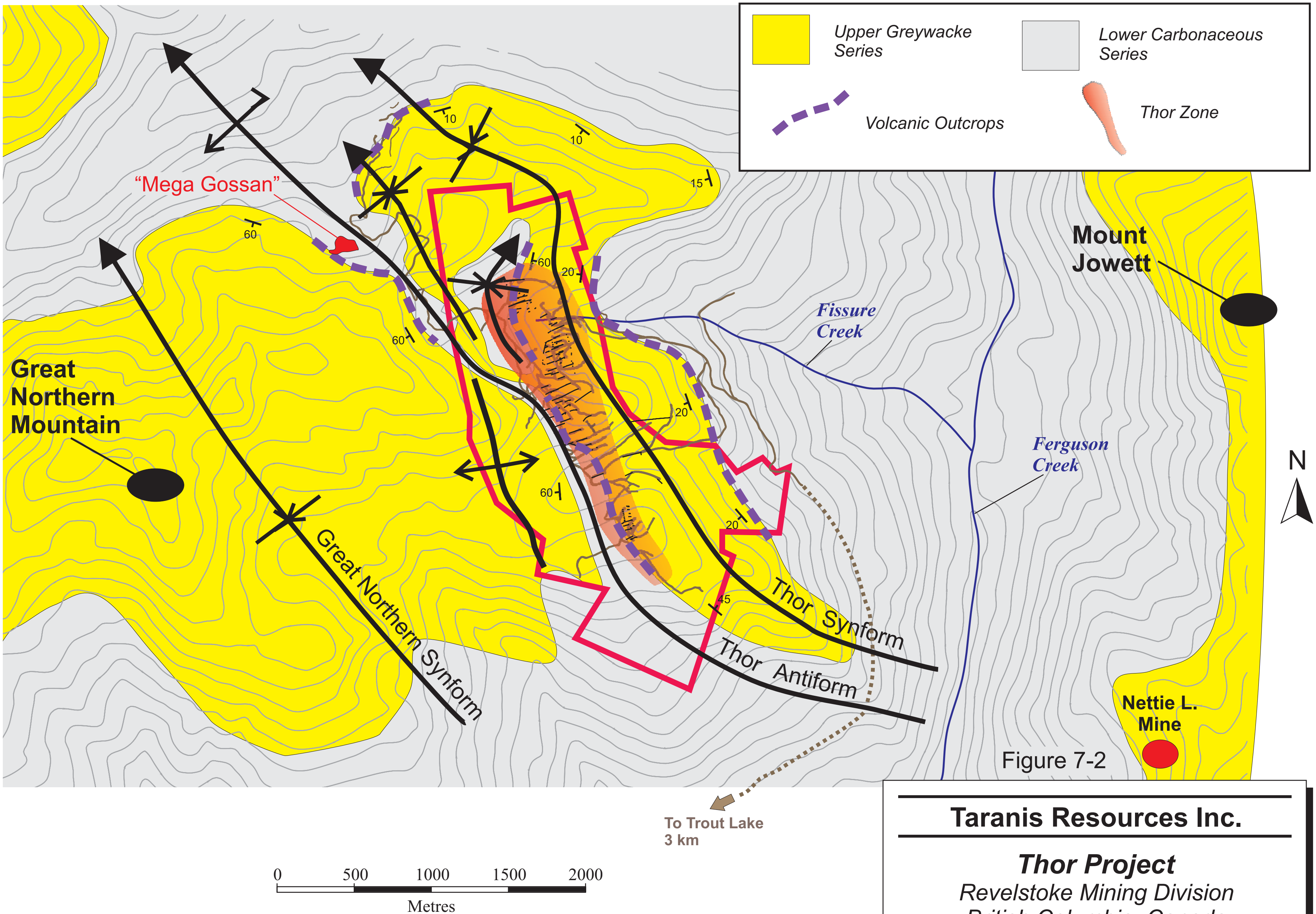



Figure 7-2

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Property Geology**

*June 2013*

***Source: Gardiner 2012.***

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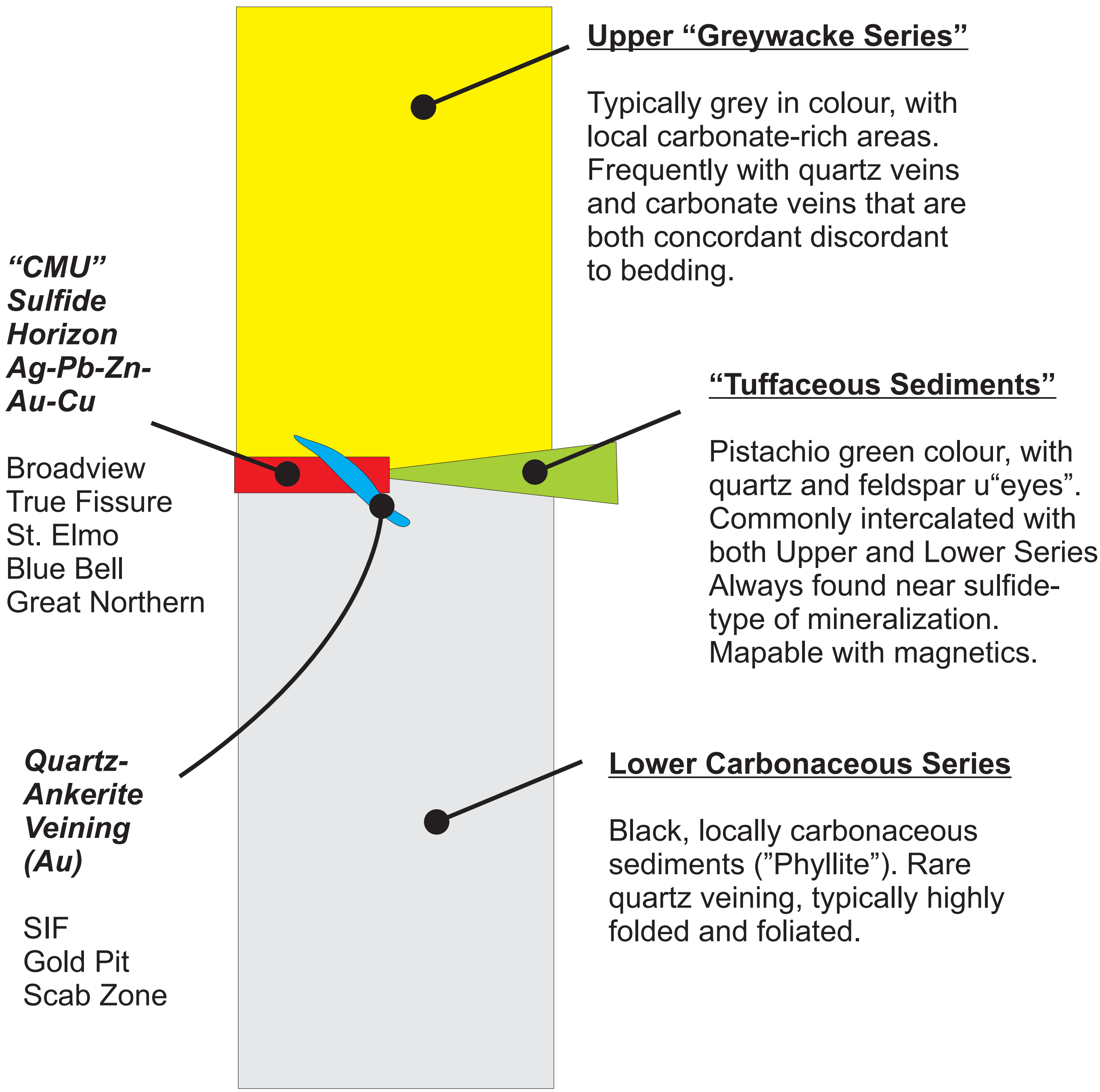



Figure 7-3

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Idealized Stratigraphic Column**

*June 2013*

***Source: Gardiner 2012.***

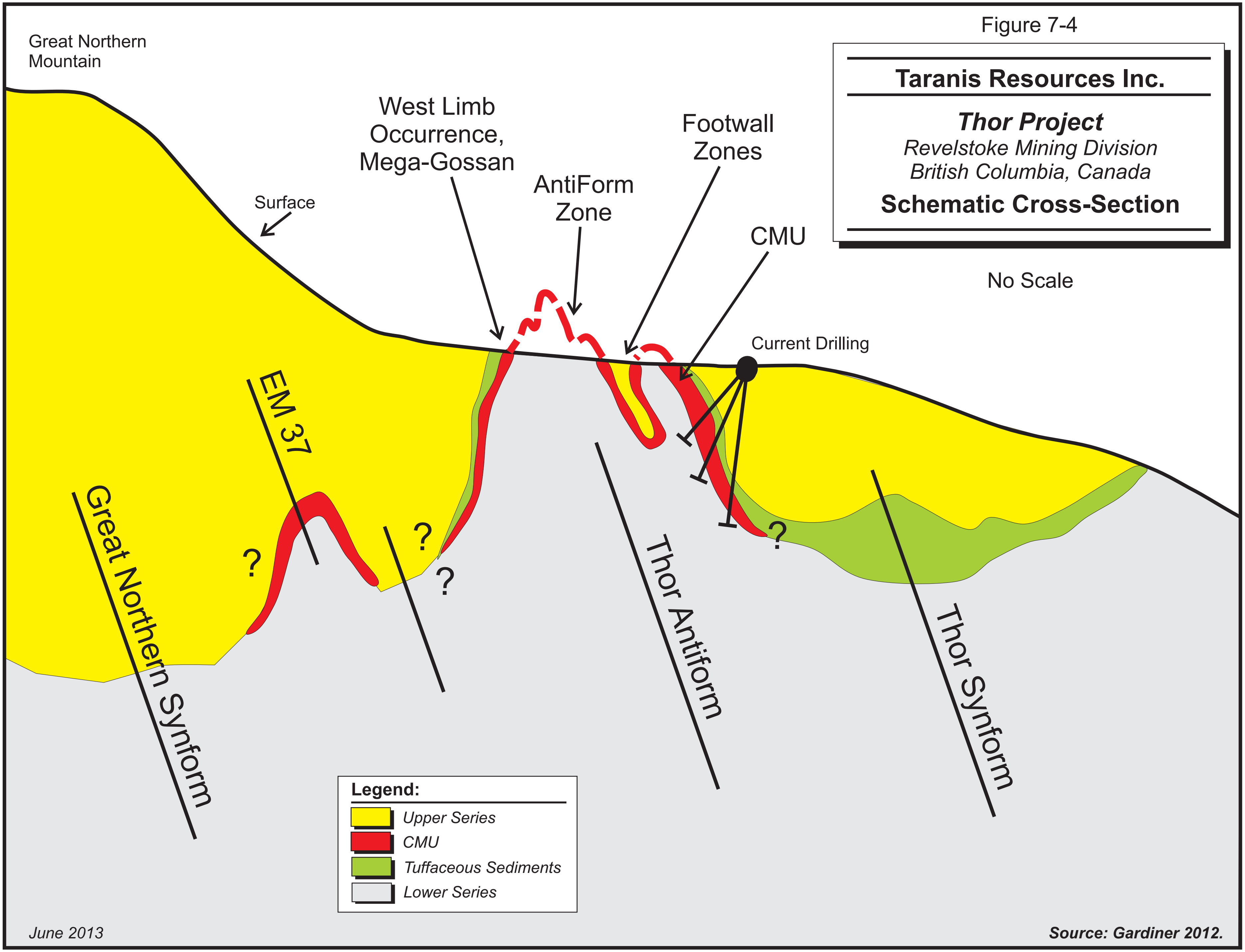



Figure 7-4

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Schematic Cross-Section**

### STRUCTURE

Primary bedding ($S_0$) is orientated northwest and folded about northwest-trending fold structures. The axial plane typically dips steeply to the northeast.

Folds ($F_1$) plunge at a shallow angle (approximately 25$^o$) to the northwest. Secondary folding plunges moderately to the southeast, possibly indicating “crumple” folds.

Foliation ($S_1$) is aligned to the northwest and is typically very steep. It is frequently crosscuts the primary bedding surfaces. On the east limb of the Thor Antiform, along the UGS/LCS contact, this structure forms the Great Northern Fault and is characterized by intensive foliation.

The original sulphide lodes are thought to predate structural deformation events and consequently they have been strongly affected as evidenced by shearing and the development of a strong foliation fabric.

### QUARTZ AND QUARTZ-ANKERITE (QUARTZ-SIDERITE) VEINS

The 2012 geological mapping program conducted by Taranis examined the relationship of major host rocks to mineralization. Taranis observed that large silicified zones, such as the Scab Zone, are located in close proximity to massive sulphide mineralization and appear to post-date sulphide emplacement. Some quartz veins contain coarse-grained “clots” of sulphides up to several metres in size. This type of sulphide mineralization is consistent with post-deposition deformation and re-crystallization and its presence within the quartz veins indicates earlier emplacement.

Mineralized quartz veins are found close to areas of sulphide mineralization and tend to be barren when found away from the mineralized zones. Extensive quartz veining can be seen cross-cutting original bedding in these barren areas and are clearly post-deformation.

## MINERALIZED ZONES

### BROADVIEW

The Broadview Zone is underlain by greywacke and black phyllite of the middle division of the Broadview Formation. The rocks are broken and cut by numerous shears and faults that strike in several different directions. The rocks are injected and cemented by lenses and veins of quartz with a minor amount of carbonate, mainly ankerite and/or siderite. Diamond drill core shows that there is abundant vein quartz over an interval of 122 m, but the greatest concentration is in the central part of the section. Massive quartz, ankerite, and/or siderite is well exposed in the old workings, however, the area lacks the well-defined continuity of shear zone and gouge found at the historical True Fissure Mine.

Broadview is a wide zone of recurrent fracturing and veining that has a strike of 160° and dips at 70° northeast. The zone can be traced for a surface distance of 300 m with an elevation difference of 100 m. It has a fairly well defined hanging wall and a diffuse footwall. Within it, there are numerous large and small veins, some of which are mineralized. The main shoot lies in the plane of the structure and pitches at approximately 45° northwest.

## BLUE BELL

The Blue Bell vein varies in width up to ten metres or more but is rarely mineralized for more than 1.2 m. At the foot of the raise on the Blue Bell No. 2 level, there is a well-defined lens of sphalerite and minor galena approximately 7.6 m long and 0.61 m wide that passes laterally into pockets of sulphide along strike to the northwest and southeast. On the Blue Bell No. 1 level, the southeast part of the drift follows a 0.3 m to 0.62 m wide zone of galena and sphalerite along the footwall of a shear, and near the face of the drift, a crosscut in the footwall exposes a second mineralized lens of about the same thickness. Together with sparse mineralization in between, the two bands form a mineralized zone approximately two metres thick.

## GREAT NORTHERN

In 1928, the Great Northern lode was described by Starr (EMPR PF: Starr Report, 1928) as being similar to the True Fissure, which lies to the northwest and occurs in graphitic schist. The lode in the No. 4 adit was wider than the drift, so the actual width is unknown. It was recorded as having a strike of 145° and a dip of 35° to the northeast. It was described by Starr as having varying amounts of quartz and lesser carbonate occurring in stringers, as considerable bodies replacing slates, and between beds of partially silicified slate. The lode contains pyrite, galena, sphalerite, and minor chalcopyrite with little gold and moderate silver values. The No. 1 adit was a short crosscut through the lode and there was some quartz and mineralized sulphide on the stockpile. The No. 2 adit was also a crosscut to the lode, although it also drifted along it for a few metres. A small concentration of high-grade sulphide was reportedly found at the intersection of the main lode with a small cross vein, but the dump suggests that most of the lode was low in grade. The No. 3 adit appears to have been intended to crosscut the lode, but little quartz was observed. The No. 4 adit encountered and followed the lode and had a short crosscut on visible mineralization. The zone was 1.37 m wide and assayed 2.74 g/t Au, 970 g/t Ag, 10.6% Pb, 5.7% Zn, and 1.25% Cu. It was approximately three metres in strike length, but its depth extent was uncertain.

Three grab samples collected by Sibola along the surface trace of the lode, over 24.38 m of strike length, returned the following values (Stockwatch, 1987):

- 6.86 g/t Au, 2,839 g/t Ag, 28.3% Pb and 2.50% Zn
- 5.48 g/t Au, 1,762 g/t Ag, 28.5% Pb and 4.56% Zn
- 3.77 g/t Au, 1,447 g/t Ag, 15.0% Pb and 0.75% Zn

## ST. ELMO

The St. Elmo lode is found in black silty phyllite in the footwall of the True Fissure and Blue Bell lodes. The upper adit was excavated to surface and can be traced by a series of depressions. The vein has a strike of 130° and a dip of 40° to the northeast. It is reported to have been from a few centimetres to 1.8 m wide and composed of quartz, minor carbonate, pyrite, sphalerite, galena, and tetrahedrite. The upper part of the raise was reported to be rich in galena and tetrahedrite, whereas below that, sphalerite and pyrite were more abundant. According to Gunning (GSC MEM 161), a 182 t sample was shipped from the upper zone but the exact date is unknown. The sample yielded average values of 3.08 g/t Au, 2,720 g/t Ag, 26.6% Pb, and 9.07% Zn. At the same time, a solid sample of "grey copper" (silver-rich tetrahedrite) assayed 17,657 g/t Ag and 10.37% Pb. The lower adit evidently passed to the southeast of the main St. Elmo lode and encountered a different lode striking 070° and dipping 50° to the north. The 0.61 m wide lode is in the hanging wall of a shear and consists of quartz and a minor pyrite mineralization.

## TRUE FISSURE

In the True Fissure - Blue Bell Zone, there is a broad mineralized zone located in the hanging wall part of the lode. It has a proposed length of about 400 m, from the True Fissure No. 1 adit to the Blue Bell No. 1 drift. This lode has been exposed at different levels in several workings in both workings. It is erratically mineralized and individual mineralized shoots vary in length, width, and grade. The True Fissure part of the lode is similar to that at Blue Bell but contains less, and finer-grained, quartz and more siderite. Fyles and Eastwood (EMPR BULL 45) state that the depth down-dip ranges from zero metres west of the True Fissure No. 3 portal to 110 m near the south end of the True Fissure No. 2 level, and 137 m at the Blue Bell raise.

On the True Fissure No. 3 level, the mineralized zone is split into two lenses, one on the hanging wall surface of the lode and the other within the lode, 1.52 m to 3.65 m down from the hanging wall. The upper lens is narrow (up to 0.1 m wide) and consists of sparse sphalerite and galena. It pinches out to the north and becomes pyritic and thins to the south. The lower zone has been traced for 64 m. It pinches and swells from a few centimetres up to 1.8 m in width and consists of pockets, lenses, disseminations, and veinlets of sulphide in a quartz-carbonate gangue. The lens may be associated with a tight, smooth-walled fissure that cuts the lode parallel to the main fault. On the True Fissure No. 2 level, there is a single zone between 1.82 m and 4.27 m wide between hanging wall gouge and a tight structure. Galena, sphalerite, and pyrite occur as lenses, pockets, veinlets, and disseminations in the lode. A sample across 1.37 m of visible mineralization assayed 4.1 g/t Au, 312 g/t Ag, 0.59% Cu, 4.75% Pb, 6.3% Zn, and 0.05% Sn.

### THE SIF OCCURRENCE

The SIF occurrence occurs within the upper portion of the unexplored quartz-rich Scab Zone, and covers an area over 300 m in strike length between the Great Northern Zone to the south and the St. Elmo Zone and Blue Bell Zone to the north. The siliceous nature of this zone forms a major hillside “plated” with the quartz-rich, weathering-resistant zone. This gold-bearing, siliceous style of mineralization is unique compared to the other zones at Thor. Assays from this zone range from less than 1 g/t Au to approximately 90 g/t Au.

## MINERALIZATION

Four types of mineralization have been identified at Thor to date, as presented in Table 7-2 and Figure 7-5.

## TABLE 7-2 PRIMARY AND STRUCTURAL TYPES OF MINERALIZATION
### Taranis Resources Inc. – Thor Project

| Mineralization Type | Control | Occurrence |
|---|---|---|
| Quartz-Sulphide Breccia | Structural | Scab Zone |
| Primary Hosted ($S_0$) | Primary (bedding) | True Fissure, St. Elmo and Blue Bell |
| Structurally Hosted ($S_1$ ) | Structural | Lower Broadview, Morgan Tunnel and SIF Zone |
| Repeated Bedding ($S_0$ & $S_1$) | Primary & Structural | Great Northern and Gold Pit |

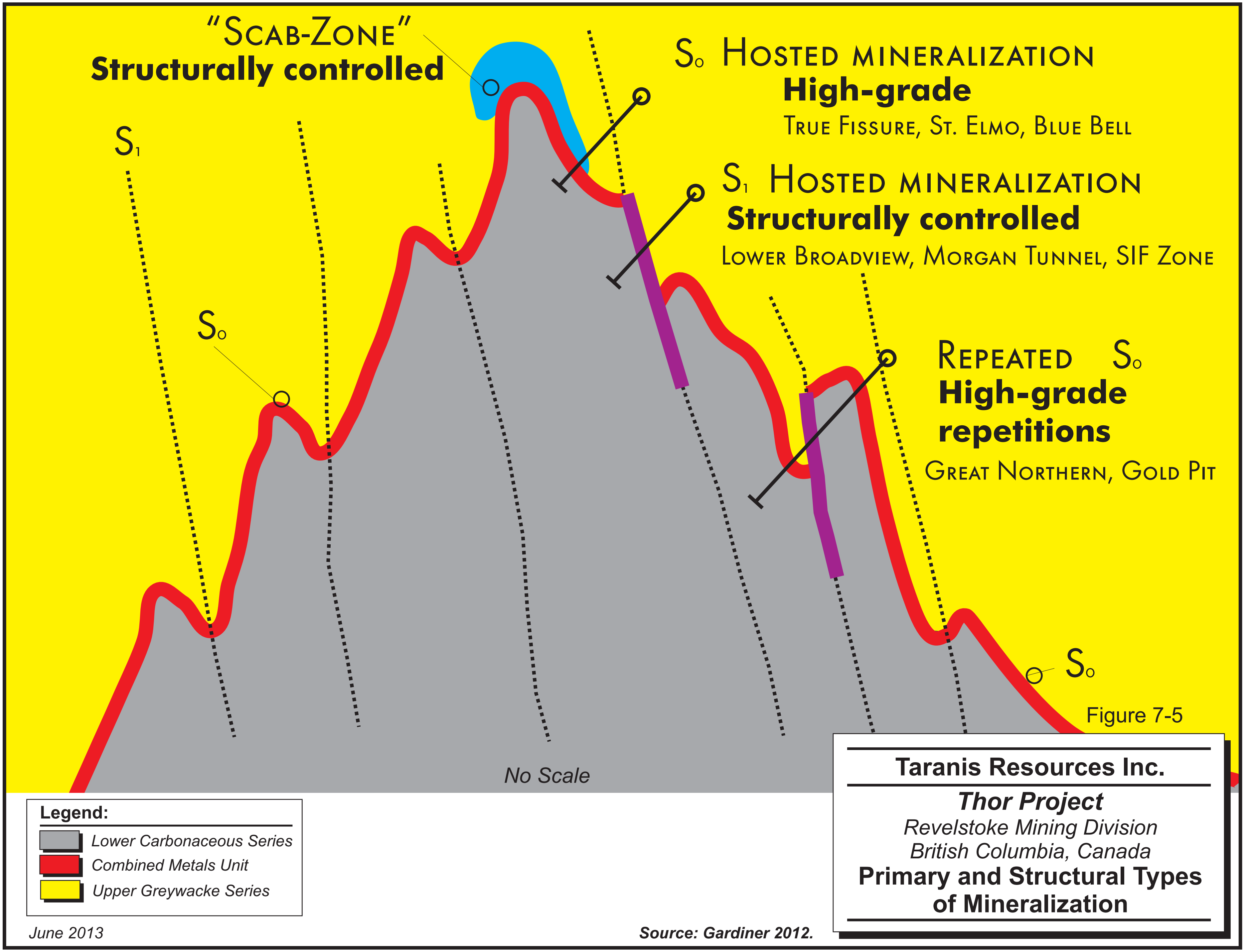



Figure 7-5

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*

*British Columbia, Canada*

**Primary and Structural Types of Mineralization**

The CMU can be subdivided into three types of sulphide dominated mineralization:

- Primary (or "proto-ore") mineralization
- Structurally deformed mineralization
- Quartz-Sulphide Breccia (or "annealed ore") mineralization

The CMU is essentially stratabound with the exception of the Quartz-Sulphide Breccia and the structurally hosted mineralization. The Primary mineralization is generally parallel to bedding within the antiform.

The structurally hosted mineralization like that found at the SIF Zone (Figure 7-6) is associated with the $S_1$ surface and strikes northwest and dips steeply to the east. It has been traced by ground very low frequency electromagnetic (VLF-EM) and EM-37 surveys. At the SIF Zone, visible gold was found in vugs thought to have been previously occupied by ankerite and/or siderite.

**FIGURE 7-6 STRUCTURALLY HOSTED VISIBLE GOLD-BEARING SIF ZONE MINERALIZATION**

The Quartz-Sulphide Breccia variety of mineralization is found within massive quartz bodies located near the top of the Thor Antiform (also referred to as the Scab Zone). It contains assimilated massive pieces of sulphide including sphalerite, pyrite, galena, and gold. It has not been drilled or trenched to date.

## MASSIVE SULPHIDE MINERALIZATION STYLES

Taranis has categorized massive sulphide mineralization into two different styles. This type of mineralization is typically thin ranging between 0.5 m and two metres in width but can expand to up to 4.5 m wide. Taranis designates massive sulphide mineralization as either "proto-ore" or "annealed ore". Both mineralization styles have similar metal content but "proto-ore" tends to have higher grades associated with it. A brief description of each style is given below.

### *PROTO-ORE*

This type is fine grained and contains up to 100% mineralized material. It is characterized by millimetre- to centimetre-scale banding and makes up less than 5% of the total massive sulphides found at Thor but is the precursor to the other type of mineralization (Figure 7-7).

Isolated areas of "proto-ore" are found within the "annealed-ore" zones and are thought to represent pre-deformation deposition. The finely banded, stratiform "proto-ore", and its spatial relationship to the Tuffaceous Sediments, serves as support for Taranis' VMS deposition model.

### *ANNEALED ORE*

This type is a re-crystallized derivative of the finer-grained "proto-ore". Galena, sphalerite, and pyrite form centimetre-scale masses and the coarse grained sulphides often have interstitial growths of quartz, carbonate, and other gangue minerals (Figure 7-8). It is thought that this mineralization style formed as a result of intense structural deformation and quartz-flooding associated with regional processes.

**FIGURE 7-7 PRIMARY ("PROTO-ORE") MINERALIZATION**

**FIGURE 7-8 QUARTZ-SULPHIDE ("ANNEALED ORE") MINERALIZATION**

# 8 DEPOSIT TYPES

Mineralization at Thor displays some characteristics of metasediment-hosted silver-lead-zinc vein-type deposit. This type of polymetallic deposit is common in the Trout Lake area and the Slocan-New Denver-Ainsworth district of British Columbia and the Mayo district of the Yukon. The polymetallic mineralized veins can also be hosted by volcanic or intrusive rocks, and it is the most common deposit type in British Columbia with over 2,000 recorded occurrences.

The polymetallic vein model, however, does not explain the elevated gold values in the Thor mineralization. A gold-rich end member of a submarine VMS deposit shares some characteristics with the mineralization at Thor. Thor also shares some characteristics with sedimentary exhalative (SEDEX) deposits. Although distinctly different, recent work has recognized that these two models exist on a continuum and Taranis is of the opinion that the Thor Project falls between the two end members. Both of these models will be briefly discussed as analogues for mineralization at Thor.

## VOLCANOGENIC MASSIVE SULPHIDE

This section is derived from Gardiner (2006).

VMS deposits form at or near the seafloor through the focused discharge of hot, metal-rich hydrothermal fluids and are classified under the general heading of "exhalative" deposits. These exhalative deposits also include sub-types such as SEDEX and sedimentary nickel deposits sub-types.

There are nearly 350 known VMS deposits in Canada and over 800 worldwide. These volcanic-hosted, and volcano-sedimentary-hosted massive sulphide deposits, are major sources of zinc, copper, lead, silver, and gold. The most common feature among all types of VMS deposits is that they are formed in extensional tectonic settings, including both oceanic seafloor spreading and arc environments.

Worldwide VMS deposits range in size from 200,000 t to those with reserves of approximately 300 Mt and Canada has four deposits (Windy Craggy, Brunswick No. 12, Kidd

Creek, and Horne) which are defined as being in the upper one percent globally with respect to total original reserves.

Proximal alteration zones in VMS deposits may form, in planar view, a halo up to twice the diameter of the massive sulphide lens. In some deposits, however, footwall alteration can be volumetrically extensive and many times larger than the diameter of the massive sulphide lens. The morphology of proximal alteration zones can vary widely, but generally they tend to widen in proximity to the paleo-seafloor surface suggesting more intensive interaction between shallowly circulating, or connate, seawater and an ascending hydrothermal fluid. The internal mineralogical zonation of the alteration zones is indicative of these mixing phenomena. In shallow-water environments (i.e., less than 1,500 m water depth), boiling may have occurred either in the up-flow zone or in the immediate sub-seafloor. Depending on the extent of boiling, this can result in vertically extensive pyritic stockwork zones, possibly with widespread and intense sericite-quartz-pyrite alteration.

Most VMS deposits have two components. There is typically a mound-shaped to tabular, stratabound body composed principally of massive (greater than 40%) sulphide, quartz and subordinate phyllosilicates and iron oxide minerals, and altered silicate wall rock. These stratabound bodies are typically underlain by discordant to semi-concordant stockwork veins and disseminated sulphides. The stockwork vein systems, or "pipes", are enveloped in distinctive alteration halos, which may extend into the hanging wall strata above the VMS deposit.

Classification of VMS deposits are according to base metal content, gold content and host-rock lithology. Deposits are divided into copper-zinc, zinc-copper and zinc-lead-copper groups according to their contained ratios of these three metals. Further research has indicated a more complex spectrum of conditions for the generation of gold-rich VMS related to water depth, oxidation state, the temperature of the metal-depositing fluids and possible magmatic contributions.

Exploration models for VMS systems have several common themes despite the large variety of submarine environments in which the deposits can form. The generation of a VMS-hosting volcanic complex is a response to focused heat flow caused by tectonic extension, mantle depressurization, and the resultant formation of high-temperature mantle melts, crustal partial melts, and common bimodal volcanic succession.

Most VMS-hosting arc terrains are characterized by bimodal volcanic successions that have a tholeiitic to transitional tholeiitic-calc-alkaline composition and are characterized by high-level sill-dike swarms, discrete felsic extrusive centers, and large (greater than 15 km long and 2,000 m thick) subvolcanic composite intrusions. The absence of substantial subvolcanic intrusions in some camps may be due to poor preservation as a result of folding and faulting. In the case of Thor, the sedimentary host rock and lack of intrusive bodies make this model less applicable.

## SEDEX MODEL

This section is derived from Gardiner (2006).

Sedimentary exhalative (SEDEX) deposits are typically sphalerite and galena (zinc+lead+silver) mineralized tabular bodies which occur interbedded with iron sulphides and basinal sedimentary rocks. Mineralization was deposited on the seafloor and is associated with sub-seafloor vent complexes where mineral-rich hydrothermal fluids were vented into reduced sedimentary basins in continental rifts.

The bulk of the mineralization in most SEDEX deposits resides in the bedded mineralized facies. The sulphide minerals in this facies are in many cases fine-grained and intergrown, which results to low recoveries during ore beneficiation. Recrystallization of fine-grained sedimentary sulphides by metamorphism or by hydrothermal reworking in the vent complex can produce coarser grained ores from which higher recovery rates are obtained. Recovery rates for SEDEX deposits, generally, are lower than for other types of lead-zinc deposits.

The internal architecture of SEDEX deposits is controlled by the proximity of seafloor sulphides to fluid discharge vents. Vent-proximal deposits typically form from buoyant hydrothermal fluids whereas vent-distal deposits form from fluids that are denser than seawater and pool in depressions on the seafloor that may be remote from the vent site. As a result, vent-proximal deposits are characteristically zone-refined due to the reaction of hydrothermal fluids with the stratiform sulphides overlying the vents. Vent-proximal deposits are characterized by four distinct facies:

- Bedded sulphides
- Vent complex

- Sulphide stringer zone
- Distal hydrothermal sediments

Vent-distal deposits however are typically weakly zoned, well bedded and conform to the basin morphology. There is no evidence of the type of zone refining that accompanies veining, infilling and replacement of bedded sulphides by a typically higher temperature assemblage that characterizes vent-proximal deposits.

The main economic constituents of SEDEX ores are zinc, lead, and silver, and these are hosted primarily by sphalerite and galena in the bedded mineralized facies. Grades of lead + zinc are commonly highest near the transition between the zone refined vent complex and the lateral bedded ore facies. In some deposits, copper is an important economic resource. Other ore-forming elements including antimony and gold are found at some deposits but, generally, gold content in SEDEX deposits is low.

SEDEX deposits most likely formed from oxidized and therefore $H_2S$-poor fluids generated in pressurized hydrothermal reservoirs within syn-rift clastic (and evaporitic) sediments sealed by fine-grained marine sediment or carbonates. During the post-rift phase of basin formation, zinc and lead were probably leached from iron oxide coatings in minerals and homogenized by convecting fluids in the hydrothermal reservoir. The large variability in the temperature, salinity, metal content, and reduction-oxidation conditions of SEDEX fluids was controlled by a number of localized parameters

A mineralizing episode was probably triggered by a tectonic event that re-activates major rift faults that generate rapidly subsiding graben or half-graben second- and third-order basins. The reactivated rift faults breach the post-rift phase sediment cap succession, leading to discharge of metal-rich saline fluids up along the faults to the basin floor. For most SEDEX deposits, metal sulphides are precipitated at or above the seafloor by reaction with $H_2S$ in the overlying reduced water column. Continued fluid discharge from the reservoir was driven by free convection, as cold marine water descended into the basin along recharge faults. The marine waters mix with the basinal saline fluids and permeate the aquifer clastics at the top of the rift succession, leading to further leaching of metal from the aquifer sediments and volcanic rocks.

Because most fluids that formed SEDEX deposits were probably depleted in reduced sulphur, an essential requirement for this deposit-type is a sufficient supply of reduced sulphur at the site of deposition. In the case of well-bedded deposits that formed at the seafloor, the most likely sulphur source is biogenic $H_2S$ that is typically enriched in anoxic water columns.

## CONCLUSIONS

Taranis currently favours the VMS model for mineralization at Thor. Factors favouring a VMS model include:

- the high levels of copper and gold that are uncharacteristic of a SEDEX deposit;
- the presence of primary thinly bedded massive sulphide “proto-ore” within highly deformed and quartz-flooded “annealed ore” zones;
- the presence of a pervasive gold-bearing “cherty-exhalite” cap that overlies the massive sulphide horizon;
- the presence of a distinctive green tuffaceous unit which is spatially associated with the main sulphide and carbonate-rich horizon in the stratigraphy.

Taranis views Thor as a potential analog to the Lower Cambrian-age Goldstream deposit, which is located approximately 70 km north of Revelstoke.

# 9 EXPLORATION

Since its acquisition of the property, Taranis has drilled 152 drill holes, excavated 35 trenches, soil sampled, stream sampled, mapped and undertaken numerous ground geophysical surveys. All of the drill holes and 35 trenches are located on the east side of the Thor Antiform. The diamond drilling work is summarized separately in Section 10 of this report.

This section was derived from Gardiner 2006, 2009, 2012, and 2013.

## 2006 EXPLORATION

As part of its initial due diligence of the Thor property in 2006, Taranis collected a number of samples from both the underground and surface of the property. These samples were taken over the approximately two kilometre surface exposure of the hydrothermal system.

The purpose of the sampling was to verify the presence of previously reported precious and base metal mineralization and support the decision to acquire the property. This information aided in understanding the trace-element composition of the mineralized material, identified which rock types host mineralization, and revealed the continuity and zonation of the mineralization (Gardiner, 2006).

### UNDERGROUND SAMPLING

Chip samples were taken in the adits that accessed the Lower and Middle Broadview tunnels on the south end of the property and the Blue Bell adit on the north end of the property. A standard measuring tape was used to locate and map the main underground features on each level. Strikes and dips of veins were measured with a Brunton compass.

Chip sample locations were marked on the back of the drifts/crosscuts with fluorescent orange spray paint and were measured from a known (surveyed) point with a tape measure. Sample lines ran normal to the strike of the mineralized structures. In the case of the Blue Bell Zone, it was not possible to get samples of the back. In this case, samples were taken from the drift walls. As with the back samples, the wall samples were taken at normal to the strike of the lode and consisted of a number of segments that represented the true thickness of the mineralization. Each sample bag was marked with the name of the crosscut and the interval of the sample. Not all of the zones on the property were accessible, and two of the largest zones (True Fissure and Great Northern) had no underground access since the portals were blocked by landslide material (Gardiner, 2006).

***BROADVIEW ZONE***

The Broadview zone has access on two underground levels from the Lower Broadview adit and the Middle Broadview adit.

Taranis reports that the Lower Broadview workings are in good condition and consist of 245 m of main drift and seven crosscuts. The drift was driven along the footwall contact of the mineralized zone so that the hanging wall was not exposed in the drift, only in the crosscuts. Sampling was done on the crosscuts and a total of 43 samples were taken. Assay statistics from this sampling are summarized in Table 9-1.

**TABLE 9-1 LOWER BROADVIEW CHIP SAMPLING**
**Taranis Resources Inc. – Thor Project**

| Statistic | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| Minimum | 0.005 | 0.250 | 0.000 | 0.000 | 0.000 |
| Maximum | 1.970 | 191.300 | 0.350 | 1.210 | 7.040 |
| Average | 0.118 | 13.803 | 0.044 | 0.133 | 0.449 |
| Std. Dev. | 0.314 | 38.142 | 0.074 | 0.275 | 1.307 |
| CV | 2.670 | 2.763 | 1.688 | 2.060 | 2.915 |
| Count | 43 | 43 | 43 | 43 | 43 |

Source: Gardiner, 2006

Very little massive sulphides were seen in the Lower Broadview drift and most of the values returned were sub-economic. The most distal crosscut from the entrance to the drift returned the best values and accounted for the highest values of silver, lead, and zinc from all samples.

The Middle Broadview drift located at a higher elevation and appeared to predate the Lower Broadview workings. No crosscuts were found so a series of panel chip samples were taken at nominal ten metre intervals along the 64 m length starting at the access. Assay statistics from the 29 samples obtained are shown in Table 9-2.

**TABLE 9-2 MIDDLE BROADVIEW CHIP SAMPLING**
**Taranis Resources Inc. – Thor Project**

| Statistic | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| Minimum | 0.005 | 1.000 | 0.010 | 0.010 | 0.020 |
| Maximum | 2.070 | 87.100 | 0.810 | 2.340 | 5.240 |
| Average | 0.237 | 14.200 | 0.168 | 0.254 | 0.521 |
| Std Dev | 0.413 | 21.165 | 0.240 | 0.491 | 1.024 |
| CV | 1.744 | 1.490 | 1.433 | 1.930 | 1.966 |
| Count | 29 | 29 | 29 | 29 | 29 |

Source: Gardiner, 2006

As with the results observed from the Lower Broadview, the assays values increase toward the south (Figure 9-1).

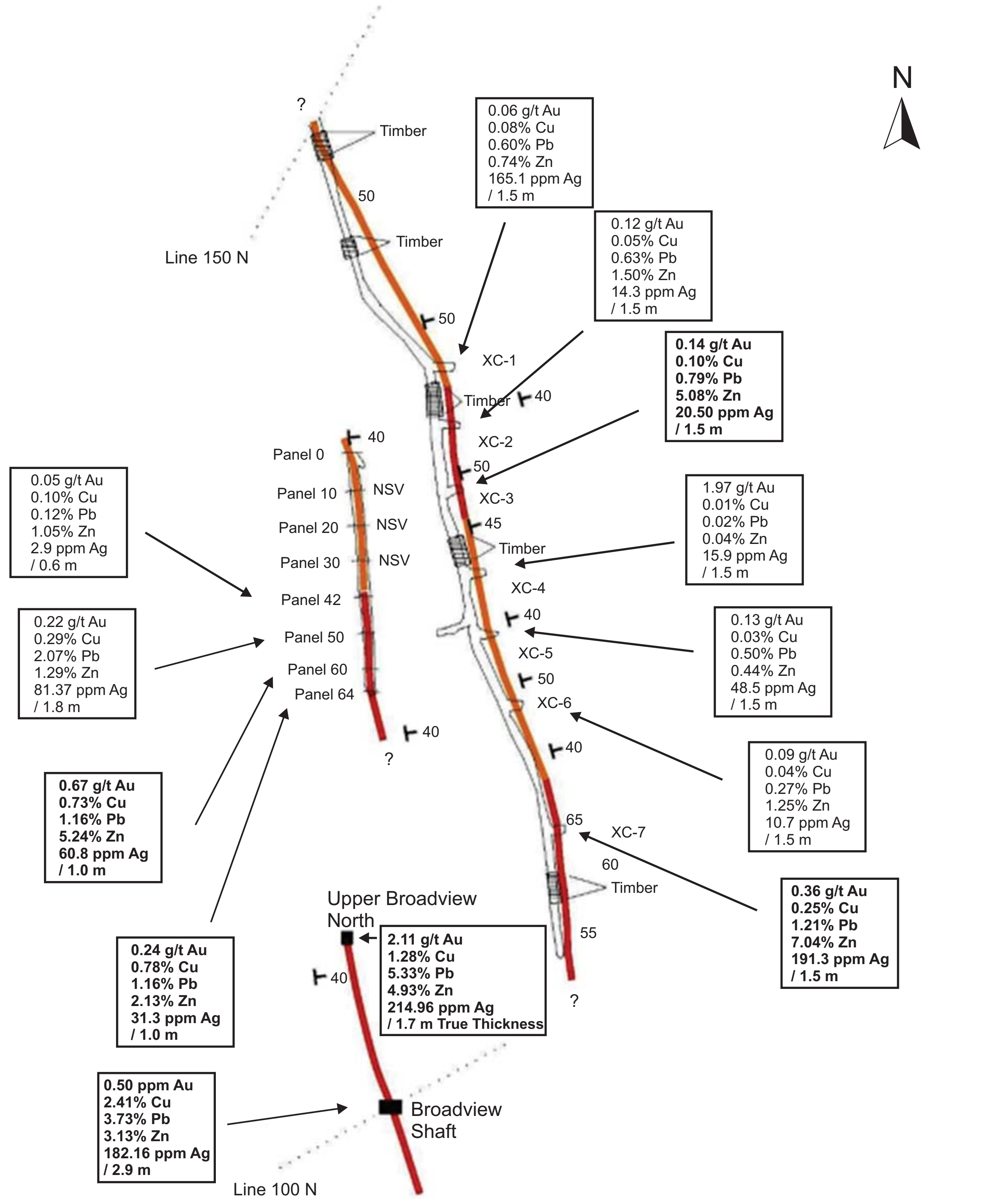



Figure 9-1

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**2006 Underground Chip Sampling Program - Broadview**

*June 2013*

***Source: Taranis Resources Inc., 2006.***

***BLUE BELL ZONE***

The Blue Bell zone is located at the northwest end of the property and is accessed at a higher elevation. A westward trending 66 m drift and two north-south 87 m crosscuts comprise the workings and are referred to historically as the "A Level". Historical maps show a raise that intersects the lower "B Level", but Taranis could not safely access these workings. Above the "A Level" is the St. Elmo adit which also accesses the zone, but these workings could not be entered safely. Samples were taken from the Blue Bell Upper "A Level" crosscuts and summaries of the results are shown in Tables 9-3 and 9-4.

**TABLE 9-3 BLUE BELL CHIP SAMPLING CROSS CUT #1**
**Taranis Resources Inc. – Thor Project**

| Statistic | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| Minimum | 0.030 | 1.200 | 0.000 | 0.010 | 0.030 |
| Maximum | 4.310 | 209.100 | 0.220 | 2.840 | 9.160 |
| Average | 1.095 | 47.133 | 0.043 | 0.508 | 1.955 |
| Std Dev | 1.697 | 81.191 | 0.087 | 1.143 | 3.636 |
| CV | 1.550 | 1.723 | 2.005 | 2.249 | 1.860 |
| Count | 6 | 6 | 6 | 6 | 6 |

Source: Gardiner, 2006

The mineralized zone exposed in Cross Cut #1 had 3.7 m in true thickness and graded 3.03 g/t Au, 129.12 g/t Ag, 0.12% Cu, 1.52% Pb, and 5.80% Zn.

**TABLE 9-4 BLUE BELL CHIP SAMPLING CROSS CUT #2**
**Taranis Resources Inc. – Thor Project**

| Statistic | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| Minimum | 0.320 | 4.600 | 0.010 | 0.030 | 0.040 |
| Maximum | 3.500 | 129.300 | 0.170 | 1.000 | 9.970 |
| Average | 1.250 | 62.900 | 0.058 | 0.440 | 2.972 |
| Std Dev | 1.288 | 45.257 | 0.065 | 0.478 | 4.288 |
| CV | 1.030 | 0.720 | 1.127 | 1.087 | 1.443 |
| Count | 5 | 5 | 5 | 5 | 5 |

Source: Gardiner, 2006

The mineralized zone exposed in Cross Cut #2 had 2.3 m in true thickness and graded 2.26 g/t Au, 92.69 g/t Ag, 0.12% Cu, 0.96% Pb, and 7.49% Zn.

## SURFACE CHIP SAMPLING

Trenches and pits excavated by previous explorers exposed some of the zones on surface. These were sampled using a similar methodology as the underground chip samples.

### *BROADVIEW ZONE*

The Upper Broadview Zone is exposed around the historical shaft where a cut normal to the zone is found. Chip sampling was done along this south-facing exposure. Taranis was not able to sample the entire length of the exposure due to the presence of a large shaft that cut into the face. A summary of these samples is shown in Table 9-5.

**TABLE 9-5 UPPER BROADVIEW SURFACE CHIP SAMPLING**
**Taranis Resources Inc. – Thor Project**

| Statistic | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| Minimum | 0.005 | 8.900 | 0.020 | 0.090 | 0.020 |
| Maximum | 1.840 | 197.900 | 4.320 | 6.290 | 4.890 |
| Average | 0.596 | 78.300 | 0.862 | 1.550 | 1.167 |
| Std Dev | 0.655 | 83.111 | 1.703 | 2.391 | 1.908 |
| CV | 1.100 | 1.061 | 1.976 | 1.543 | 1.635 |
| Count | 6 | 6 | 6 | 6 | 6 |

Source: Gardiner, 2006

The exposed mineralized zone had 2.9 m in true thickness and graded 0.50 g/t Au, 182.16 g/t Ag, 2.41% Cu, 3.73% Pb, and 3.13% Zn.

A small pit was discovered about 30 m north of the main Upper Broadview exposure that is likely a collapsed adit. The exposed outcrop at this location was also sampled and the results are summarized in Table 9-6.

## TABLE 9-6 UPPER BROADVIEW NORTH SURFACE CHIP SAMPLING
### Taranis Resources Inc. – Thor Project

| Statistic | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| Minimum | 0.020 | 7.500 | 0.080 | 0.150 | 0.490 |
| Maximum | 3.350 | 323.300 | 1.940 | 7.300 | 6.970 |
| Average | 0.703 | 74.817 | 0.483 | 1.918 | 2.200 |
| Std Dev | 1.303 | 123.198 | 0.720 | 2.777 | 2.463 |
| CV | 1.852 | 1.647 | 1.490 | 1.448 | 1.119 |
| Count | 6 | 6 | 6 | 6 | 6 |

Source: Gardiner, 2006

The exposed mineralized zone at the Upper Broadview North had 1.7 m in true thickness and graded 2.11 g/t Au, 214.96 g/t Ag, 1.28% Cu, 5.33% Pb, and 4.93% Zn.

***TRUE FISSURE ZONE***

A small open pit was identified at the top of the True Fissure Zone that exposes the top part of the zone. The lower part of the zone was not accessible so the true width was not represented by the chip sampling. Historical level plans show the mineralized zone exposed at surface extends down to the “C Level” of the underground workings displaying a vertical depth of approximately 75 m.

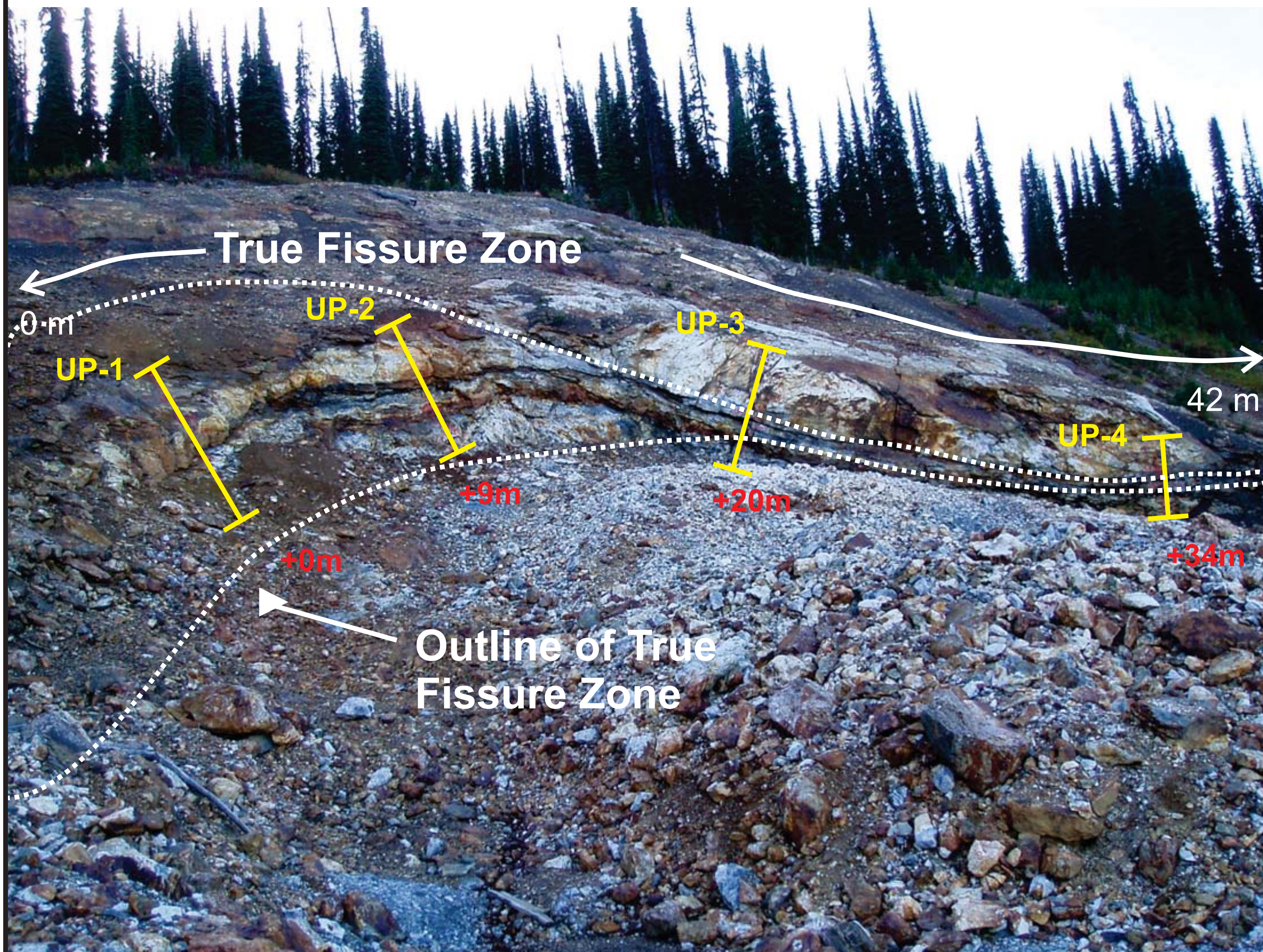
Four vertical to steeply dipping lines were set up for sampling along the horizontal extent of the exposure as shown in Figure 9-2. A summary of the results is shown in Table 9-7.

## TABLE 9-7 TRUE FISSURE OPEN PIT SURFACE CHIP SAMPLING BY LINE
### Taranis Resources Inc. – Thor Project

| Line | True Thickness (m) | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|---|
| UP-1 | 3.70 | 1.00 | 165.29 | 0.14 | 2.47 | 9.18 |
| UP-2 | 1.30 | 4.45 | 488.51 | 0.23 | 2.79 | 2.52 |
| UP-3 | 0.60 | 0.75 | 128.30 | 0.03 | 2.47 | 0.51 |
| UP-4 | 0.80 | 1.86 | 141.40 | 0.08 | 0.08 | 0.01 |

Source: Gardiner, 2006

(Looking North-West)




**Explanation**

*All Units in meters*

*Zone Outline*

UP-1 *Chip Sample with Number*

0 1 2 3 4 5
Metres

Figure 9-2

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**2006 True Fissure Open Pit**
**Chip Sampling Program**

*June 2013*

***Source: Taranis Resources Inc., 2006.***

## SURFACE GRAB SAMPLING

A number of the zones were sampled by selecting hand specimens, or grab samples, of surface stockpiles where present. This includes some zones where there was no longer any underground access.

The sampling procedure involved collecting a diverse array of mineral-bearing rocks from the surface dump and preparing sample descriptions of the samples.

The samples were analyzed by ACME Laboratories (ACME), an ISO/IEC 17025 accredited laboratory in Vancouver, BC.

### *GREAT NORTHERN ZONE*

The Great Northern workings are now completely obscured by vegetation and all that remains is a large rock dump. There is evidence of trenching and underground development, but there is no access. Geophysical survey results indicated that a mineralized contact may exist below the overburden. In the absence of any bedrock exposure, Taranis took a number of grab samples that returned average values of 3.07 g/t Au, 1,166.1 g/t Ag, 1.45% Cu, 3.50% Pb, and 4.95% Zn. The presence of the mineralized contact was later confirmed by the 2007 and 2008 trenching and diamond drilling work.

### *MORGAN TUNNEL ZONE*

At the lowermost level of the True Fissure Zone is an alluvium covered underground adit known as the Morgan Tunnel or Adit Number 4 which served primarily as a staging area. Outside of these workings are piles of waste development material and some mineralized material. Taranis sampled this mineralized material and the grades returned were 0.34 g/t Au, 2.30g/t Ag, 0.02% Pb, and 0.03% Zn.

### *BLUE BELL ZONE*

North of the True Fissure Zone is a small open pit with a number of piles of broken mineralized material. Taranis assigned these piles to the Blue Bell Zone. The grab samples from this area had average assays of 5.73 g/t Au, 86.26 g/t Ag, 0.13% Cu, 0.18% Pb, and 13.15% Zn.

***TRUE FISSURE ZONE***

Near the open pit are a number of piles of broken and mineralized rock. These piles were systematically sampled and returned average values of 1.79 g/t Au, 533.60 g/t Ag, 0.21% Cu, 6.19% Pb, and 6.46% Zn.

In addition to grab samples, a systematic program of sampling the open pit stockpile was employed. A number of grab samples were taken along the lines that were laid out by Taranis across the stockpile (Figure 9-3). This sampling program yielded the results shown in Table 9-8.

**TABLE 9-8 TRUE FISSURE STOCKPILE SAMPLING AVERAGE GRADES LINES 1 & 2**
**Taranis Resources Inc. – Thor Project**

| Line | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| UPB-Line 1 | 0.94 | 69.44 | 0.04 | 0.83 | 1.01 |
| UPB-Line 2 | 0.87 | 111.53 | 0.07 | 1.74 | 3.25 |
| Cross Line Average | 0.89 | 97.50 | 0.06 | 1.44 | 2.51 |

## BROADVIEW ZONE

There were two areas sampled in the Upper Broadview Zone. The first was the main dump and the second a small pit adjacent to the Upper Broadview North. The Upper Broadview samples had average assay values of 2.06 g/t Au, 494.43 g/t Ag, 1.38% Cu, 14.44% Pb, and 6.29% Zn. The Upper Broadview North grab samples returned average values of 0.46 g/t Au, 622.27 g/t Ag, 5.90% Cu, 12.36% Pb, and 9.98% Zn.

Another stockpile near the Upper Broadview area had systematic grab samples collected on a five metre spacing that averaged 1.12 g/t Au, 411.45 g/t Ag, 2.79% Cu, 10.16% Pb, and 9.72% Zn. The sample lines are shown in Figure 9-4.

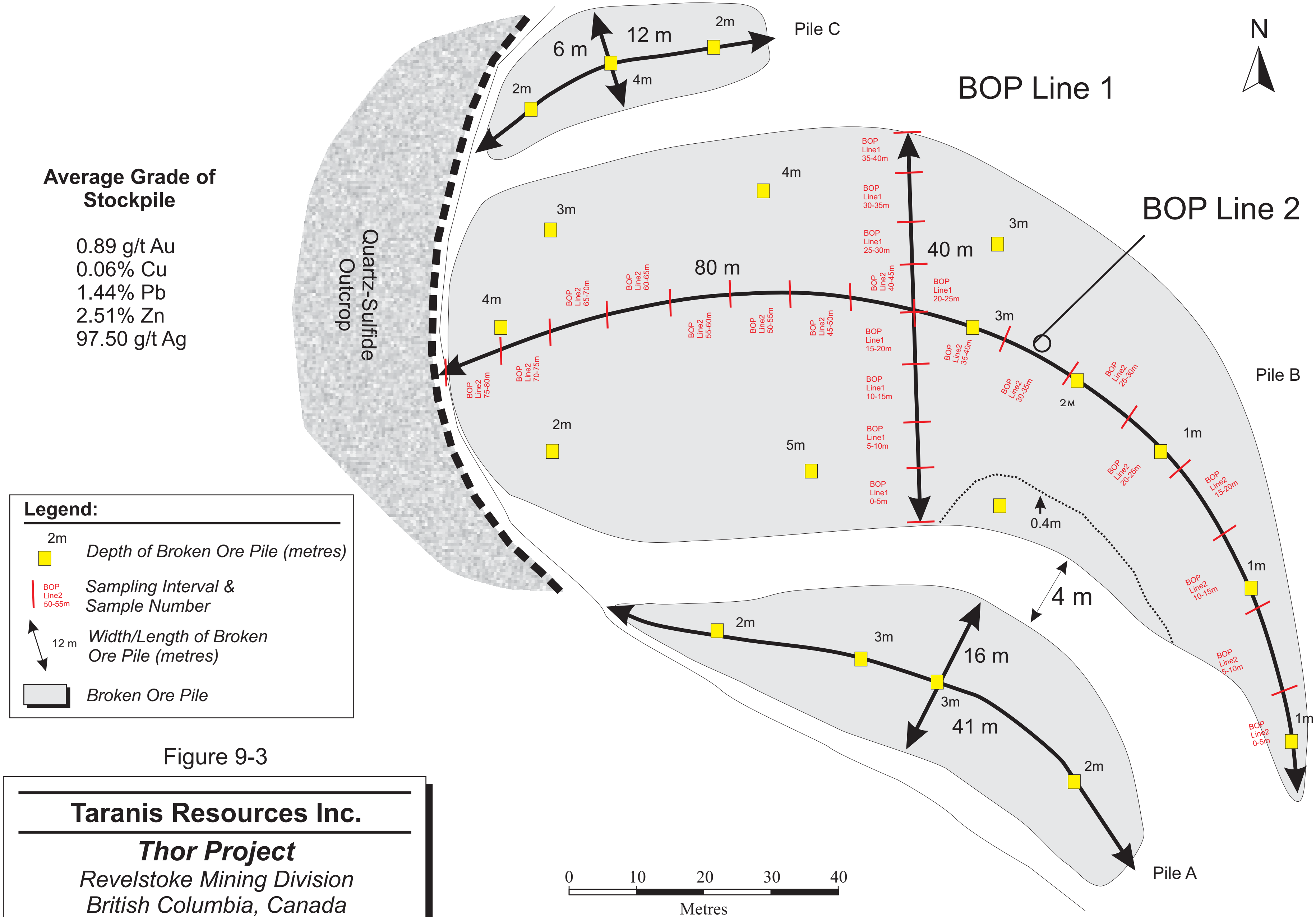



Figure 9-3

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**True Fissure**
**"Broken Ore Pile" Sampling**

*June 2013*

***Source: Taranis Resources Inc., 2006.***

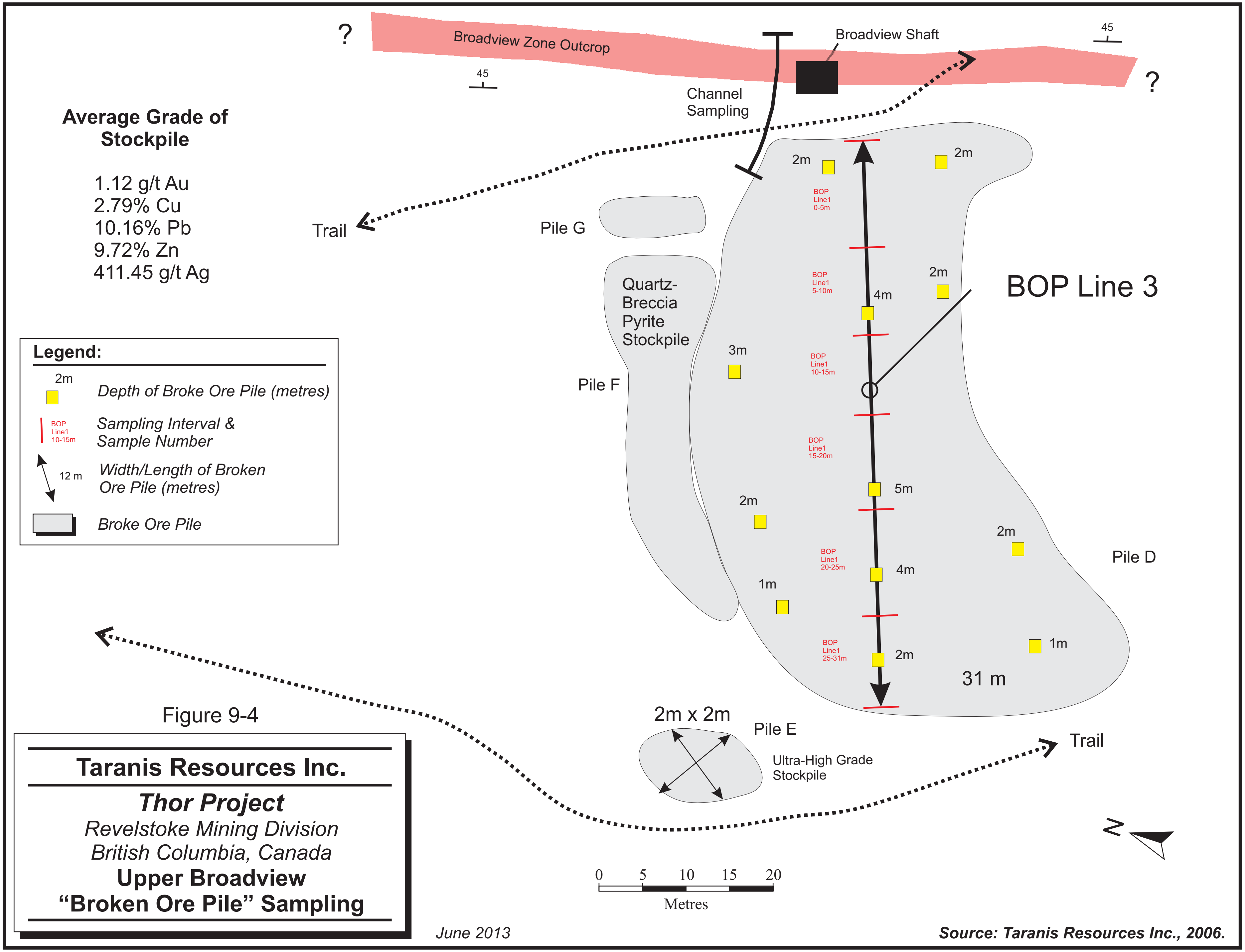



Figure 9-4

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Upper Broadview**
**"Broken Ore Pile" Sampling**

*June 2013*

***Source: Taranis Resources Inc., 2006.***

## GEOPHYSICAL SURVEYS

Five lines of test geophysics were completed over the mineralized horizon and consisted of a total field magnetic and gradiometer survey and VLF-EM survey using a Scintrex ENVI Mag/VLF Unit. Lines were generally 100 m long and were placed over areas of interest with five metre station spacings directly over the mineralized zone. A separate base station was set up to perform corrections on the survey readings.

### *GROUND MAGNETIC SURVEY*

Lines were run over the Broadview, Upper Broadview, Great Northern, and True Fissure Zones. The survey appeared to work well in distinguishing mineralized horizons (magnetic highs) from non-mineralized horizons (magnetic low) such as the cherty exhalite interval found at the Upper Broadview Zone.

Taranis also concluded that surveys worked well in differentiating the mineralized zone from the host rocks regardless of whether the hosts were magnetic or not. Mineralization was located along a major contact between relatively non-magnetic rocks to the west and more magnetic rocks to the east. A magnetic low was also defined in the footwall that may correspond to carbonaceous sediments or a zone of hydrothermal alteration which resulted in magnetite destruction.

Taranis further concluded that the station spacings greater than ten metres would miss subtle changes in mineralization and lithology. This observation was used to design the later property-wide ground magnetic and VLF-EM surveys.

### *GROUND ELECTROMAGNETIC (VLF-EM) SURVEY*

This survey was conducted at the same time as the magnetic survey at identical station spacings. In-Phase and Out-of-Phase data was collected, and the In-Phase component was Fraser filtered.

Taranis concluded that the VLF-EM survey worked well in identifying the sulphide-bearing contact but the presence of a conductive sulphide-barren horizon in the footwall could lead to spurious results. In Taranis' opinion, the use of conventional EM surveys such as Max-Min or airborne EM, would not be able to distinguish sulphide-bearing horizons from carbonaceous sediment horizons in the footwall with little or no mineralization. The potential chargeability of the carbonaceous sediments carries the risk of limiting the effectiveness of IP surveys.

# 2007 EXPLORATION

## GEOPHYSICAL SURVEYS

A total of 29.1 line-km of grid cutting was done to support this work. The lines were oriented at 060° azimuth at 100 m line spacings. Readings were taken at 25 m to 50 m intervals.

Upon conclusion of the program, it was concluded that the grid upon which the geophysical work had been conducted had not been surveyed with sufficient accuracy to integrate the results with other data. In 2012, Taranis personnel located many of the stations on the original grid enabling Taranis to spatially establish the geophysical data with respect to the drilling, trenching, and mapping databases (Gardiner, 2013).

### *DEEP PENETRATING EM-37 SURVEY*

Taranis contracted Quantec Geoscience Inc. (Quantec) to conduct 30.5 line-km of deep penetrating fixed loop transient EM (TEM) geophysical survey from July 21 to August 17, 2007. The objective of the program was to identify any targets associated with conductive sulphide mineralization and to discover any previously undetected geophysical anomalies. Initially, the fixed loops were located on the western portion of the Project but later loops were located to the east. Lines were read both inside and outside the loops. The in-loop responses from the western readings returned abnormally high amplitude. Taranis believes that the survey response was impacted by the presence of LCS rocks located in the axis of the Thor Antiform and the non-conductive UGS rocks located on the east side of the Thor Antiform.

Quantec delineated six anomalies named Conductor A through Conductor F (Figure 9-5). The most extensive anomaly, Conductor A, was detected near the edge of the east loop. Quantec concluded that the likely cause of this response was a large, flat to shallow west-dipping conductive plate located below the transmission loops. Quantec, however, noted that Conductor A was coincident with total field magnetic survey anomaly that indicated a geological contact. Other readings west of the loop returned similar responses indicating the presence of a conductive host, but Quantec did not dismiss a possibility that mineralization along the geological contact was the cause of the anomaly.

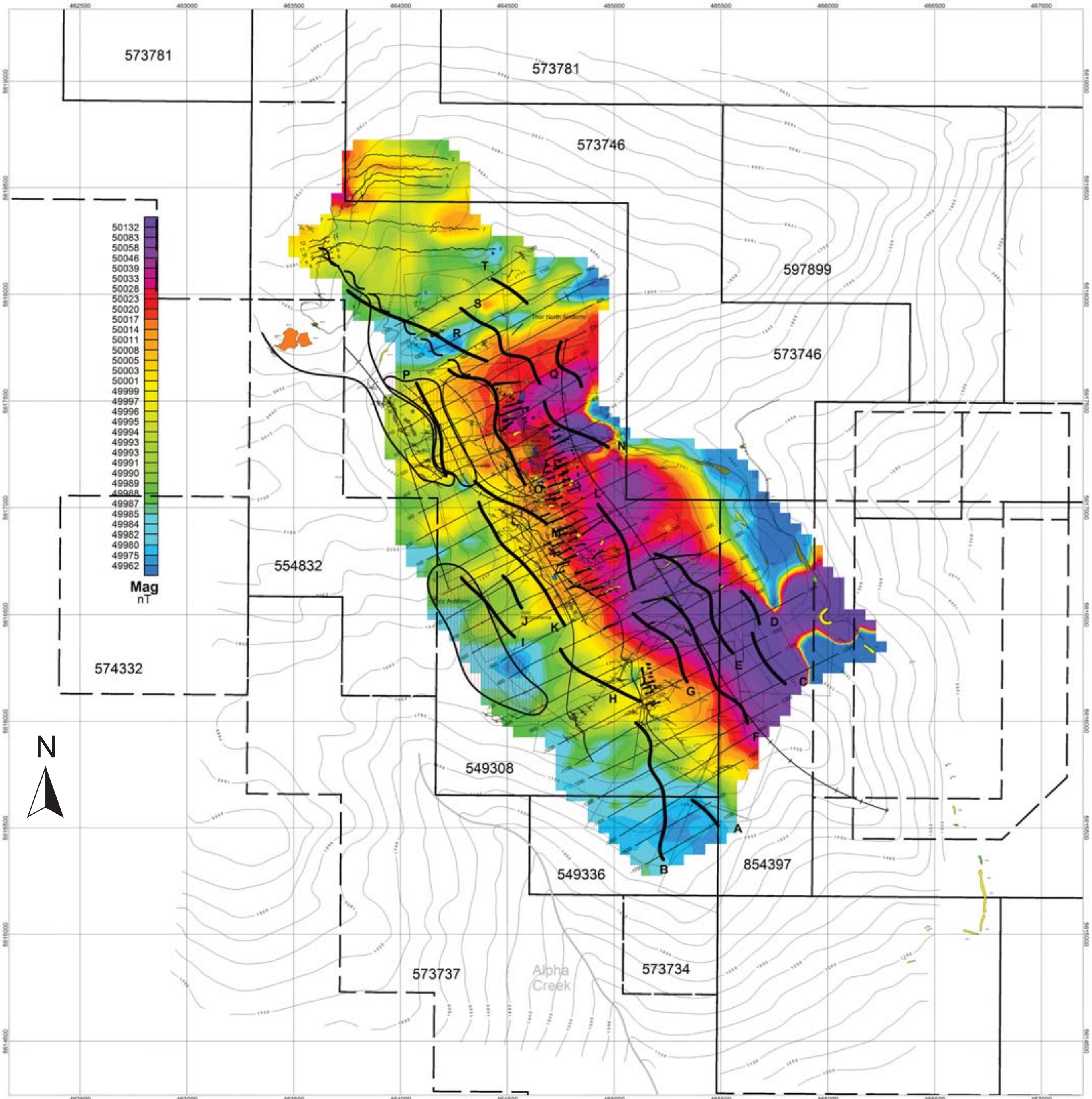



Figure 9-5

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**2007/2008 VLF Survey**

*June 2013*

***Source: John Gardiner, 2013.***

The other conductors were observed to have shorter strike lengths with lower amplitude readings than Conductor A but strong multi-channel responses. Quantec was able to correlate some the anomalies with known mineralization and highlighted them as targets of further investigation. Quantec concluded the TEM survey was successful in delineating zones of significant conductivity which may be related to mineralization (Quantec, 2007).

#### *GROUND MAGNETIC SURVEY*

The surface ground magnetic program delineated sulphide mineralization along a north-northwest-striking contact which dips moderately to the east. A 700 m by 150 m coincident magnetic and electromagnetic anomaly was identified between the Broadview Zone and the True Fissure Zone (Taranis News Release, September 5, 2007).

#### *GROUND ELECTROMAGNETIC (VLF-EM) SURVEY*

A VLF survey was conducted over the main zones at Thor in 2007 and 2008. The results are discussed later in this section.

### SURFACE CHANNEL SAMPLING

Two zones that had been previously grab sampled were exposed using an excavator and were channel sampled using a gas-powered diamond saw.

The Galena Pocket Zone is located at the up-dip extent of the True Fissure zone. Massive sulphides and/or quartz sulphide mineralization occur within the CMU. A mineralized fault zone is frequently found overlying the True Fissure zone. A cross section of the CMU was exposed by the overburden stripping and a true thickness of 3.75 m was sampled returning values of 2.25 g/t Au, 330.42 g/t Ag, 0.22% Cu, 7.86% Pb, and 7.80% Zn.

One channel sample was taken at the St. Elmo Zone. The CMU was sampled over 1.80 m of true thickness and assayed 0.17 g/t Au, 421.55 g/t Ag, 0.26% Cu, 4.18% Pb, and 4.32 % Zn (Taranis News Release, November 26, 2007).

### UNDERGROUND CHANNEL SAMPLING

Additional underground channel sampling was conducted on the Blue Bell Zone.

***BLUE BELL NORTH AND BLUE BELL SOUTH***

This zone generally returned elevated gold and silver values compared to the mineralization found on the other parts of the property.

Underground sampling was conducted on Level 2 along the 89 m drift which exposes massive sulphide mineralization. Six crosscuts off of this drift were chip sampled.

**TABLE 9-9 BLUE BELL NORTH CHIP SAMPLING**
**Taranis Resources Inc. – Thor Project**

| Section | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) | True Width (m) |
|---|---|---|---|---|---|---|
| 590 m N | 4.61 | 233.0 | 0.09 | 1.33 | 0.26 | 1.90 |
| 547m N | 0.48 | 58.24 | 0.03 | 0.29 | 0.10 | 2.40 |
| 517m N | 0.16 | 18.91 | 0.13 | 0.02 | 0.15 | 0.80 |
| 501m N | 1.00 | 242.65 | 0.51 | 0.05 | 0.11 | 1.50 |
| 475 m N | no significant mineralization | | | | | |

Source: Taranis News Release, January 2, 2008

A raise connects the Upper Blue Bell adit to the Lower Blue Bell adit, exposing mineralization for over 60 m on the dip-slope where sampling returned trace gold, 60.0 g/t Ag, 0.60% Pb and 39.70% Zn over 0.97 m (Section 418 m North). Underground chip sampling located immediately down-dip of the raise that connects to the Blue Bell Level 1 in the Blue Bell South zone (Level 2) returned the following values over a true thickness of 3.10 m: 0.24 g/t Au, 260.96 g/t Ag, 0.09% Cu, 1.07% Pb, and 0.12% Zn (Taranis News Release, January 2, 2008).

## PETROGRAPHIC STUDY

A suite of eight samples were collected from the Thor property for detailed petrographic study. The study had three objectives:

- To determine if the tuffaceous rocks have a felsic volcanic component
- To determine the paragenetic sequence of sulphides and silicates
- To determine the if tetrahedrite is rich in silver

The samples were examined using a petrographic microscope using transmitted and reflected light. Selected minerals were analyzed by an ETEC electron microprobe, an electron microscope dedicated to the elemental analysis of solid specimens by wavelength-dispersive X-ray spectroscopy.

On the basis of mineralogy and texture, three distinct rock types were identified within the eight samples:

- Tuffaceous Sediment
- Phyllite
- Mineralized quartz "veins"

The study concluded that based on the mineralogy and texture of the Tuffaceous Sediments, these rocks were likely derived from felsic volcanic or felsic intrusive rocks.

The abundance of sericite-rich domains in the samples indicated that the rocks were hydrothermally altered and the kink-banding of these domains suggest that potassic metasomatism predated both deformation and shearing.

The study of the mineralized quartz veins resulted in the estimated the paragenetic sequence of sulphide mineralization.  This sequence is:

pyrite →sphalerite → galena → silver-rich tetrahedrite ± chalcopyrite

Pyrite occurs as large, relict grains included by sphalerite and galena or rimmed by galena. Some pyrite grains have resorbed boundaries and most of these are partially replaced by galena.  Coarse grained sphalerite contains inclusion of fine-grained chalcopyrite and, where fractured, some of the fractures are filled by galena.  Chalcopyrite aggregates are often associated with tetrahedrite and these two minerals are the last to form in the quartz veins. Tetrahedrite always occurs as partial replacement of galena.  Silver content in tetrahedrite ranges from 1% up to 12%.

# 2008 EXPLORATION

## 2008 TRENCHING PROGRAM

A systematic trenching program at the south end of the Great Northern Zone exposed continuous silver and gold mineralization, previously known as the Switchback Zone, in outcrop within the CMU. The presence of thick colluvium prevented the following of this zone through to the historical workings of the Great Northern zone.

A backhoe was employed to excavate this material exposing mineralization for a strike length of 99 m. A total of 30 channel samples were cut using a diamond saw and the trench was photographed and mapped. Results from this work ranged from channels with no significant assays to an intersection of 0.33 g/t Au, 818 g/t Ag, 0.20% Cu, 23.90% Pb, and 0.90% Zn over a true thickness of 2.07 m. Detailed significant assays were tabulated in the Taranis News Release dated December 19, 2008.

### 2008 GEOPHYSICAL SURVEYS

#### *2007 AND 2008 GROUND ELECTROMAGNETIC (VLF-EM) SURVEYS*

The data from 2007 and 2008 VLF-EM surveys were not comprehensively analyzed until 2012 due to the uncertainty relating to grid location. Once completed, Taranis was able to correlate the identified anomalous responses with a number of geological features such as sulphide mineralization, highly altered rock units (such as those containing sericite schist), and graphite-bearing host rocks.

This work was followed up by additional surveys conducted in 2012 and described later in this section.

## 2009 EXPLORATION

In July and August 2009, Taranis completed a stream sediment sampling program on the ODIN1 and ODIN2 claims on the south end of the Project. The stream sediment sampling program was designed to test the area for gold and base metal potential and was focused on Alpha Creek. Alpha Creek drained in a southeasterly direction through the property.

A sample of approximately two kilograms was taken from the drainage and placed in cotton bags which had been pre-labelled with a unique sample number. The sample locations were marked in the field using fluorescent flagging tape and the recorded using a handheld global position system (GPS) instrument.

The samples were taken directly to ACME by Taranis personnel. Samples were sieved using a 100 Mesh screen and the minus fraction was analyzed using the IDX15 package which consisted of aqua regia digestion on a 15 g aliquot.

Taranis found that the stream sediment sampling program showed no anomalous levels of copper, lead, or silver. One anomalous gold value was encountered near the bottom of Alpha Creek but its source is not known. Taranis, however, did observe elevated results for zinc, cadmium, barium, strontium, and manganese in some samples.

## 2012 EXPLORATION

### 2012 GRID ESTABLISHMENT

Line cutting and gridding was done in three areas, Meadow, Great Northern, and Westmin. Grids were installed using a Brunton compass and hip chain. Lines were marked with fluorescent flagging tape. Grid stations were located using differential GPS at five metre to ten metre spacings along lines which were 25 m to 50 m apart.

At the Meadow and Great Northern, grids with 100 m line spacings had been established in 2008. The baselines were rehabilitated, existing lines were extended, and new intermediate lines were added to increase grid density.

Two smaller grids at different orientations comprise the Westmin Grid which was previously established on a topographically challenging ridge. The southern portion of the grid was located on the south side of a prevalent topographic ridge and has northeast oriented lines that had been cut in 2007 but not surveyed by geophysics. To the north of the prevalent topographic ridge, lines were oriented east-west along a steep surface that overlies the exposed contact between the Lower Series and Upper Series rocks. A small grid (Little Grid) was established on the northwest extent of the grid over an area to the west which is underlain by gold-bearing, vuggy quartz veins. The Thor North grid is a continuation of the grid that was surveyed in 2007 and 2008.

### 2012 GEOPHYSICAL SURVEYS

Taranis conducted detailed magnetic and VLF-EM geophysical surveys along 12.95 line-km of newly established exploration grid from June to August using an ENVI gradiometer and

VLF-EM unit. A dedicated base station which measured the diurnal variations in the ambient magnetic field was used daily to correct the data. During the survey, the gradiometer malfunctioned and consequently only the total field magnetic data was acquired.

***GROUND MAGNETIC SURVEY***

There were two major areas covered by the ground magnetometer survey. The first was located west of the historical True Fissure Mine and included the Meadow and Great Northern Grids and the area between the two grids. The second was located north of this area on what is referred to as the old Westmin Property.

The ground magnetometer survey proved useful in identifying the tuffaceous sedimentary rock sequence but was not helpful in identifying sulphide mineralization. The rocks hosting sulphide mineralization have low magnetic susceptibility and, as a result, the contrast between units is minimal. The Total Field Ground Magnetic map for the Meadow and Great Northern Grid area is shown in Figure 9-6. Results for the Westmin, Little, and Thor North grids are shown in Figure 9-7.

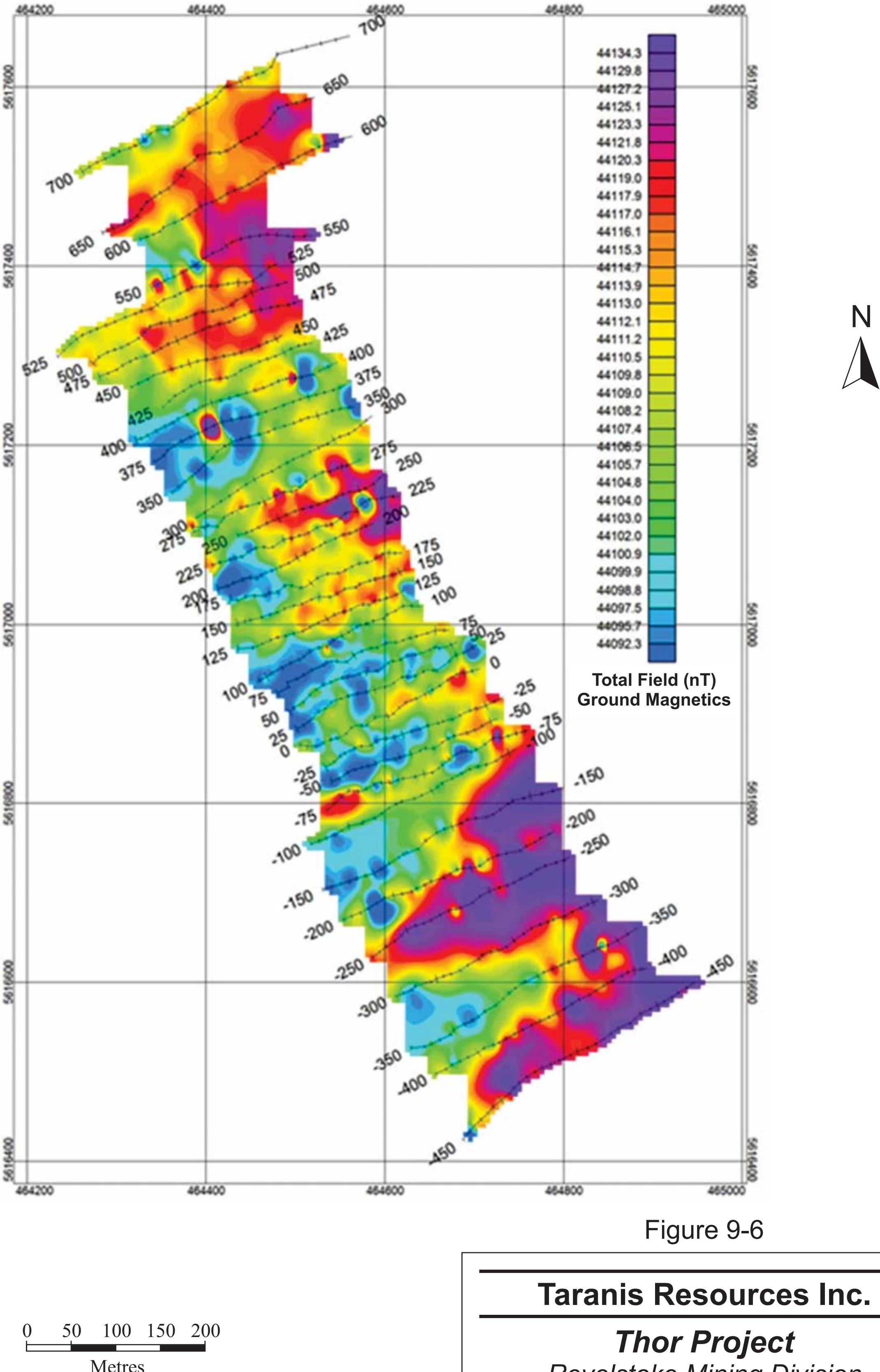



Figure 9-6

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Total Field Ground Magnetics Interpretation for Meadow and Great Northern Grids**

*June 2013*

***Source: Gardiner 2012.***

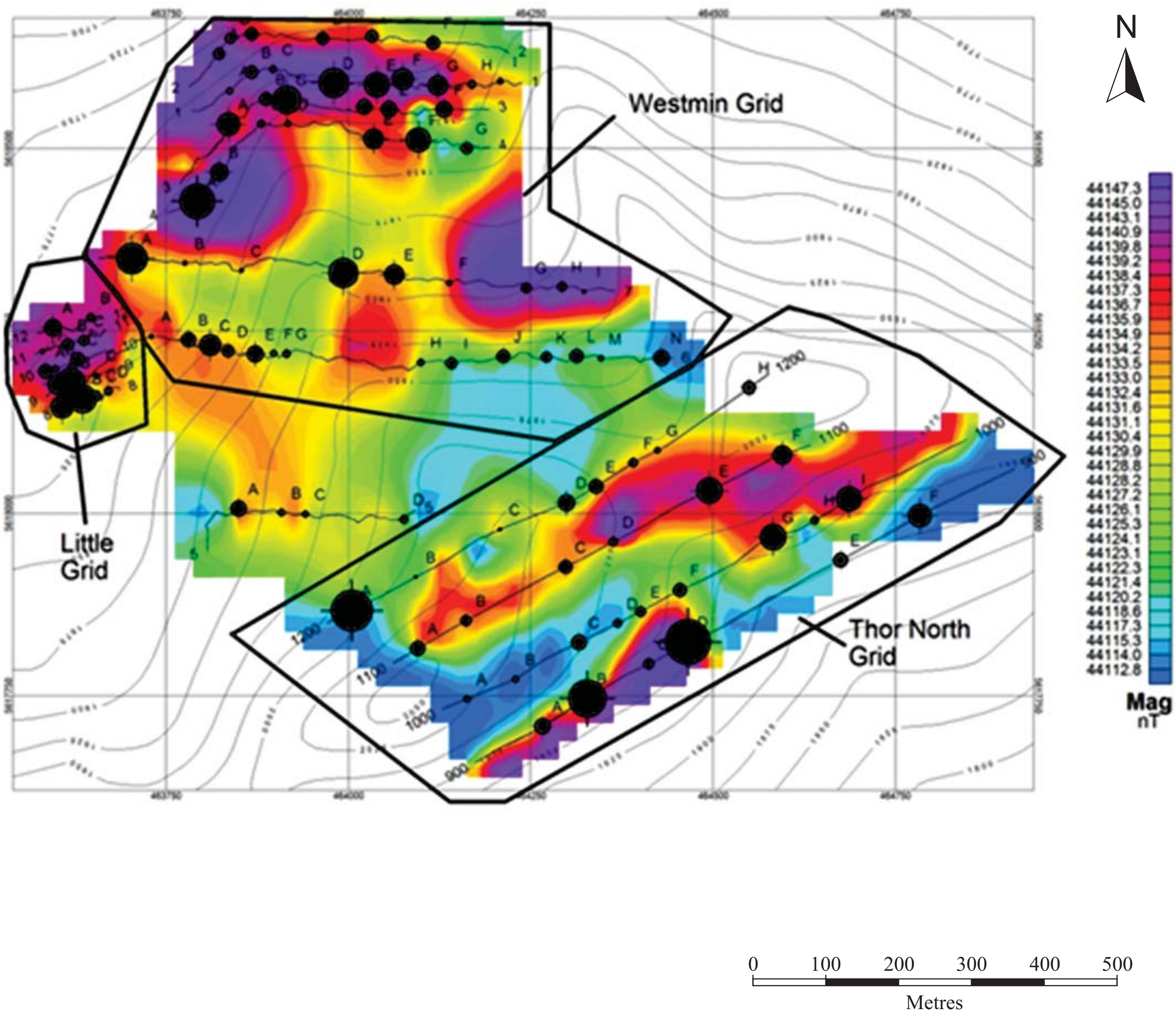



Figure 9-7

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Total Field Ground Magnetic Interpretation for Westmin, Little and Thor North Grids**

*June 2013*

***Source: Gardiner 2012.***

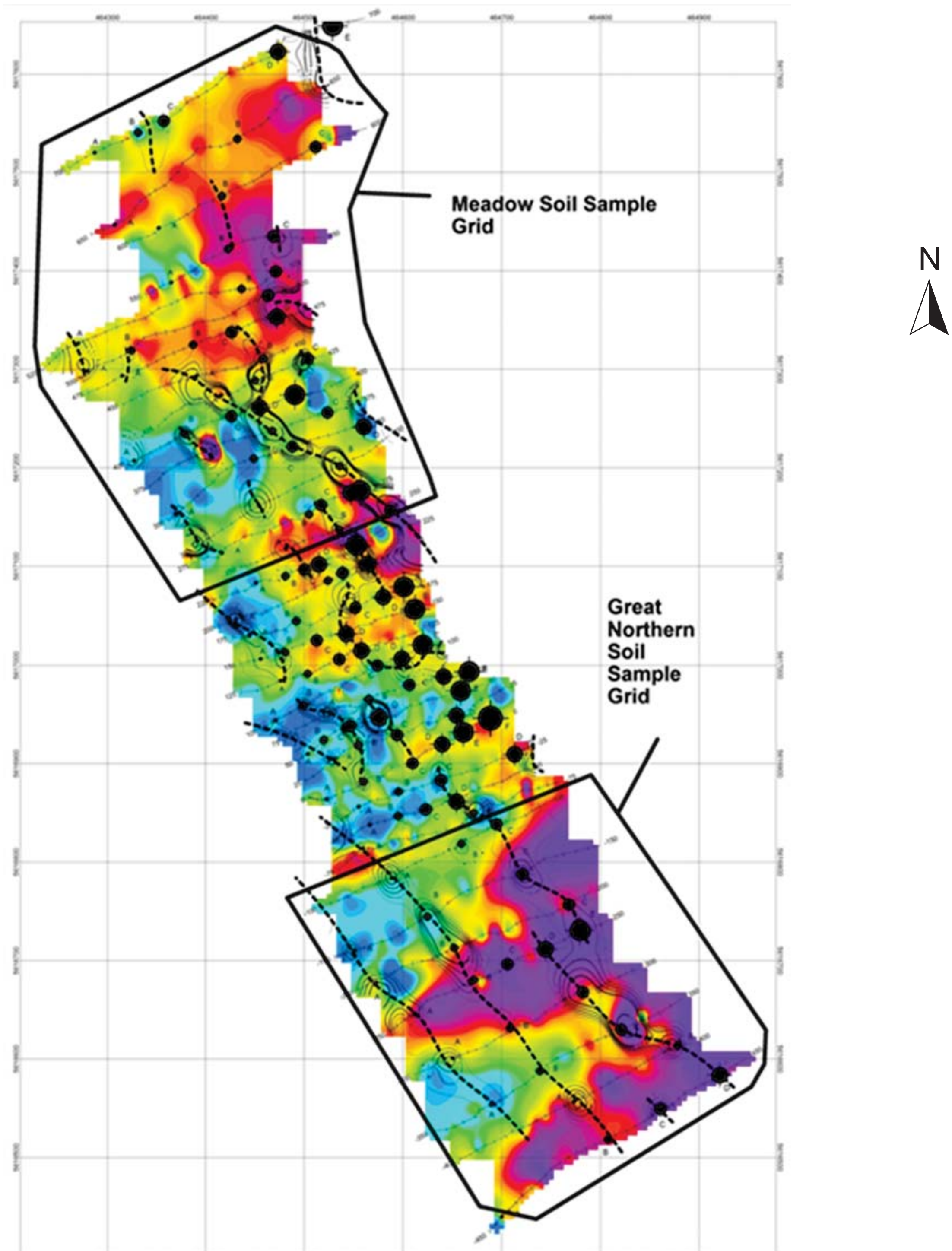
*GROUND ELECTROMAGNETIC (VLF-EM) SURVEY*

The same areas covered by the ground magnetic survey were surveyed with the VLF-EM. The results were reported using a Fraser Filter which is effectively the first derivative of the data. The steep topography on the Westmin, Thor North, and Little Grids made conducting the VLF-EM survey difficult.

On the Great Northern and Meadow Grids, numerous VLF-EM anomalies were identified many of which were associated with magnetic anomalies, soil geochemistry anomalies, the Thor Antiform and its contacts, and trenched and pitted zones. Other VLF-EM anomalies were along strike of known zones of mineralization, under dumps, or completely covered by colluvium. The major northwest-trending anomaly on Meadow Grid in Figure 9-8 corresponds to the SIF Fault which hosts the gold-bearing SIF Zone.

On the Westmin Grid, Taranis interpreted the conductors to be associated with gossanous material and iron oxide seeps. Many of the anomalies were isolated or unknown and required field follow-up. On the Little Grid, conductors were found in the in the area around where gold-bearing float had been previously discovered. Anomalies identified on the Thor North grid were located in the vicinity of the Thor North Antiform and associated with Lower Series rocks. Conductors were also found near prospect pits, trenches, exposed quartz veins, and along strike of Blue Bell Zone mineralization. A compilation of the results is shown in Figure 9-9.

The magnetometer data was useful in distinguishing the Tuffaceous Sedimentary unit due to its higher magnetic susceptibility. The VLF-EM survey was successful in identifying sulphide mineralization and fault structures.




NOTE: Geophysical Data is Superimposed on Colour Image of Ground Magnetics.

0 50 100 150 200
Metres

Figure 9-8

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Fraser Filtered VLF Electromagnetic Results for Meadow and Great Northern Grids**

*June 2013*

***Source: Gardiner 2012.***

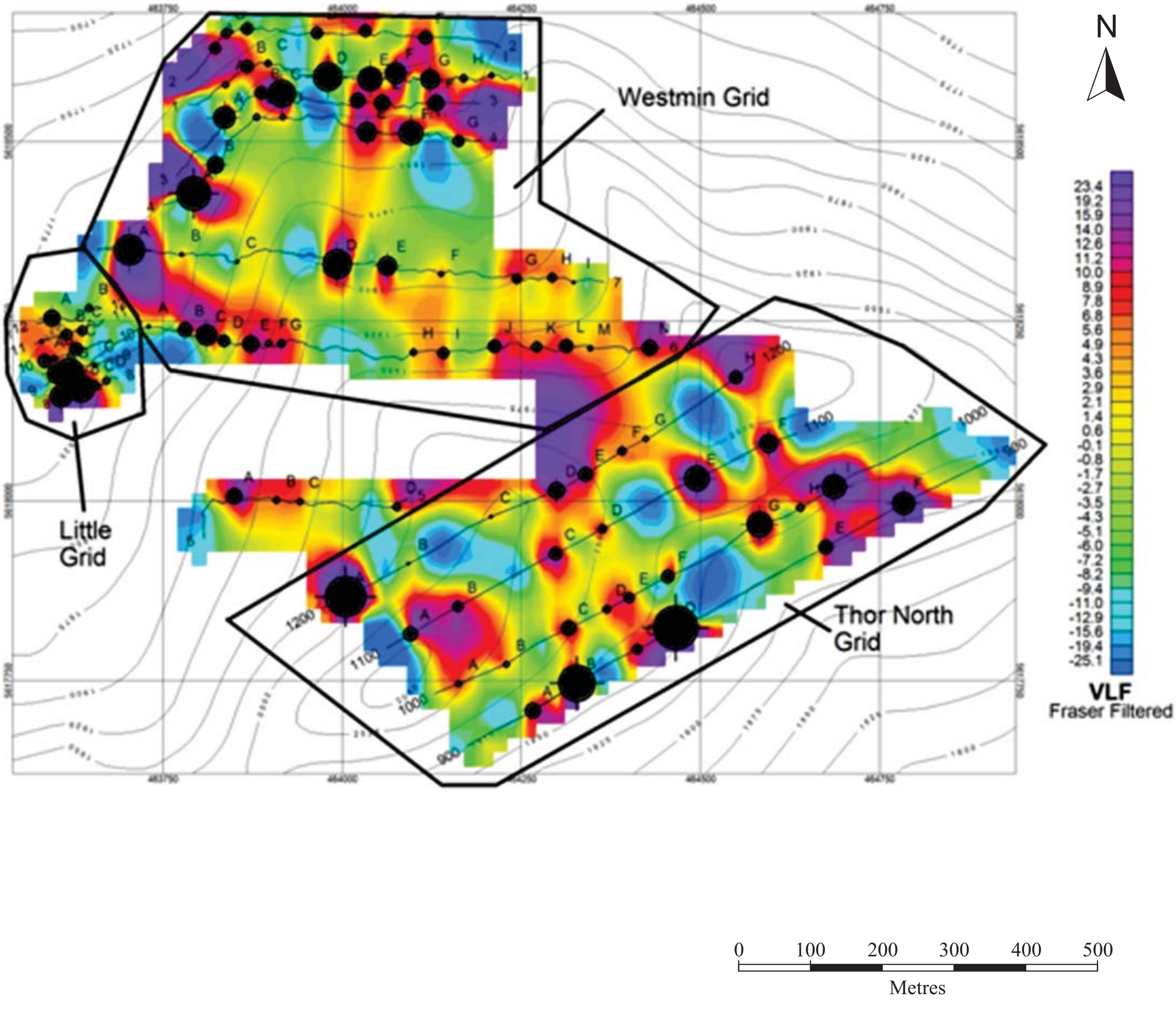



Figure 9-9

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Fraser Filtered VLF Electromagnetic Results for Westmin, Little and Thor North Grids**

*June 2013*

***Source: Gardiner 2012.***

## 2012 SOIL SAMPLING

Taranis completed detailed soil sampling on the Meadow and Great Northern grids located on the west limb of the Thor Antiform between the SIF Zone and the Gold Pit Occurrence. Approximately 340 B-Horizon samples were collected on the Meadow Grid (11.5 ha) and 232 on the Great Northern Grid (9.5 ha).

Soil samples were taken every ten metres along lines with line spacings of 25 m in most areas. Sample locations were recorded using a GPS. A gasoline powered auger was used to drill a 60 mm diameter hole to a typical depth of 30.5 cm to 71 cm depending on the material encountered. Each sample was placed in a kraft paper bag which was marked in permanent ink with its line number and station number.

Soil pH was measured by mixing a 50 g of the sample with de-ionized water in a plastic beaker. The resultant slurry was tested with a pH meter. The probe was washed with de-ionized water between readings to prevent cross-contamination. The results were manually recorded and later entered digitally into an electronic spreadsheet. Samples were then shipped to ACME for analysis by Induced Coupled Plasma Mass Spectrometry (ICP-MS).

### *MEADOW GRID*

The Meadow Grid occurs along the apex of the Thor North Antiform. All of the significant mineralization in this area occurs along the contact between the Upper Series and Lower Series rocks on the east side of the Thor North Antiform. The soil sample anomalies for gold, silver, copper, lead, and zinc correspond well with known mineralized occurrences. Lead and silver appear to show a second trend of mineralization located on the southwest side of the grid trending to the northwest. This trend is also detected in copper and zinc results but further to the northwest. Gold results show good correlation with the SIF Zone where the highest values were recorded. The results from this grid are shown in Appendix 1.

### *GREAT NORTHERN GRID*

The Great Northern Grid also occurs along the apex of the Thor North Antiform. Gold, silver, copper, and zinc results have direct correlation with the Great Northern Zone while lead results do not correlate as well.

One multi-element anomaly is located at the northeast extent of the grid coincident with an EM anomaly in an area with no exposed mineralization. A second anomaly was identified on the west limb of the Thor North Antiform and is also coincident with an EM conductor. This anomalous trend continues into the Gold Pit anomaly. A third zone was also identified between the first two, along a northeast trend, west of the exposed Great Northern mineralization. Taranis notes, however, that these values are in the vicinity of the Great Northern dump and may be related to surface weathering of mineralized material in the dump. The results from this sampling program are shown in Appendix 1.

## 2012 SURFACE GEOLOGICAL AND STRUCTURAL MAPPING PROGRAMS

Prior to 2012, no detailed geology map had been available at Thor. The main mineralized areas were mapped as well as bedrock exposures along roads, toward the ridge north of the Crown Grant Claims, and into the valley to the north (Mountain Goat Creek).

### *GEOLOGICAL MAPPING*

A GeoXH handheld GPS was used to locate either the entire perimeter of the outcrop, or one side of the outcrop. Outcrop features were sketched and measurements recorded.

The mapping revealed that two main lithological features have close spatial relationships with the mineralization at Thor. The first is a large exposure of northwest-trending, tightly folded Lower Series (Thor Antiform) carbonaceous rocks which can be traced for the length of the Project area and are readily observed in outcrop as darkly coloured phyllitic rocks. The second is a smaller exposure of Lower Series carbonaceous rock, referred to as the Thor North Antiform, found north of the True Fissure zone. This feature has an apparent plunge to the north below the steepening topography and re-emerges on the north side of the ridge in the Mountain Goat Creek valley. Other exposures of Lower Series rocks are observed on the property, but these are generally flat-lying and do not contain the mineralization that is usually found when these rocks are tightly folded.

### *STRUCTURAL MAPPING*

The structural mapping program aided in understanding of the complex structural features at Thor. The area is complexly folded and faulted in places, and there is a limited amount of outcrop. Four main structural features were measured in the field and these included primary bedding, fold plunges and orientation, lineation plunges and orientation and finally a foliation surface. Based on this work, Taranis suggests that the five zones at Thor could be the result of post-mineralization displacement of a single mineralized body.

Structural data was compiled using GEOrient Version 9.5.0, a software package developed by Rod Holcombe (University of Queensland, Australia).

## 2012 SURFACE GRAB SAMPLING PROGRAMS

A representative number of grab samples were collected from each outcrop and placed in large two gallon plastic sample bags. Uniquely numbered sample tags were then added to the bags and the samples were shipped to ACME in Vancouver.

### SIF Zone

In 2012, seven samples were taken from an outcrop measuring 20 m by 15 m in the SIF Zone. Although visible gold was noted, samples were selected in areas without visible gold. The gold assays ranged from 0.74 to 90.1 g/t Au, as summarized in Table 9-10.

The visible gold occurred as flaked lining within vugs and nucleation growing within and adjacent to unidentified black sulphide minerals within massive white quartz veins.

The SIF Zone mineralization represents a new mode of mineralization at Thor. The gold is restricted to large, white quartz veins exceeding three metres in thickness that appear to be devoid of any other minerals of economic interest.

The SIF outcrop is also associated with a strong VLF-EM anomaly that extends northwest and southeast of the outcrop and has not been drilled or trenched to date.

### Gold Pit Occurrence

The Gold Pit Occurrence is located 750 m southeast of the SIF Zone and 90 m west of the Great Northern Zone. It lies along a prominent VLF-EM conductor that strikes northwest (similar to the SIF occurrence but not within the same conductive anomaly). Gold and silver values occur within areas of strong quartz veining associated with low levels of sulphide mineralization. This target is geologically similar to the SIF Zone but is enriched in silver (Table 9-10).

The Gold Pit Occurrence is located in the structural footwall of the main Great Northern Zone that was extensively drilled by Taranis in 2009.

**Scab Zone**

The Scab Zone lies topographically below and east of the SIF Zone within the same mineralized horizon. The St. Elmo silver-rich mineralized body lies to the northwest and the True Fissure Zone to the southeast. Grab samples were taken in 2012 over an area approximately 230 m by 290 m which included the SIF Zone. The majority of the mineralization was found with quartz-sulphide breccia and quartz-rich rock. Table 9-10 shows the Scab Zone grab sample results.

Other sampling was done in the area up to 160 m away from the SIF Zone. Ten samples were taken that ranged between trace gold and 0.98 g/t Au and trace silver and 195 g/t Ag (Taranis News Release, October 11, 2012).

**TABLE 9-10 2012 GRAB SAMPLE RESULTS FOR SIF, GOLD PIT, AND SCAB ZONES**
**Taranis Resources Inc. – Thor Project**

| Zone | Sample No. | Weight (kg) | Gold Grade (g/t Au) | Silver Grade (g/t Ag) |
|---|---|---|---|---|
| SIF Zone[1] | 862384 | 1.33 | 2.71 | 92.0 |
| | 862370 | 3.01 | 28.0 | 4.9 |
| | 862369 | 1.20 | 0.74 | 3.3 |
| | 862385 | 1.88 | 90.1 | 12.2 |
| | 862368 | 1.81 | 44.7 | 9.7 |
| | 862383 | 4.82 | 25.2 | 2.9 |
| | 862367 | 1.78 | 1.33 | 1.3 |
| Gold Pit Occurrence[2] | 862151 | | 29.1 | 3,173 |
| | 862152 | | 25.4 | 4,439 |
| | 862153 | | 58.1 | 211 |
| | 862154 | | 22.2 | 2,241 |
| Scab Zone[3] | 862394 | | 6.27 | 269 |
| | 862393 | | 1.54 | 201 |
| | 862391 | | 4.78 | 32 |
| | 862392 | | 2.96 | 2,793 |
| | 862390 | | 0.85 | 205 |
| | 862102 | | 0.09 | 127 |
| | 862101 | | 0.76 | 89 |
| | 862399 | | 2.31 | 120 |
| | 862400 | | 1.06 | 35 |
| | 862175 | | 0.01 | |

Sources: 1. Gardiner, 2012
2. Taranis News Release, September 11, 2012
3. Taranis News Release, September 18, 2012

**Antiform Zone**

The Antiform Zone covers an area due northwest of the Gold Pit Occurrence. The mineralization occurs with sulphide-poor quartz-ankerite and/or quartz-siderite veins with carbonaceous material. Significant assays are shown in Table 9-11.

**Great Northern Footwall Zone**

A new area of surface mineralization was found north of the Great Northern adit which occurs about 50 m further west of any Taranis drill holes that previously outlined sulphide mineralization.

**Top of the World Zone (Little Grid)**

This area is located 1.1 km northwest of furthest extent of known mineralization at Thor (St. Elmo Zone). Sampled mineralization occurs in a unit stratigraphically above the rocks at Thor that is characterized by high amounts of quartz veining. Results are shown in Table 9-11.

**TABLE 9-11 2012 GRAB SAMPLE RESULTS FOR ANTIFORM, GREAT NORTHERN FOOTWALL, AND TOP OF THE WORLD ZONES**
**Taranis Resources Inc. – Thor Project**

| Zone | Sample No. | Gold Grade (g/t Au) | Silver Grade (g/t Ag) |
|---|---|---|---|
| Antiform Zone[1] | 862103 | 1.7 | > 300 |
| | 862104 | 0.27 | 14.5 |
| | 862105 | 0.81 | 84.8 |
| | 862106 | 0.01 | 3.6 |
| | 862107 | 0.25 | 3.6 |
| | 862108 | 6.57 | 146 |
| | 862188 | 7.9 | > 300 |
| | 862189 | 11.8 | 215 |
| | 862200 | 0.65 | 294 |
| | 862372 | 3.11 | 0.4 |
| | 862378 | 2.57 | 327 |
| | 862379 | 1.64 | 218 |
| | 862380 | 1.87 | 64.1 |
| | 862381 | 6.03 | 15.9 |
| | 862382 | 1.18 | 99.4 |
| | 862386 | 2.98 | 15.5 |
| | 862387 | 10.6 | 131 |
| | 862388 | 0.42 | 57.1 |

| Zone | Sample No. | Gold Grade (g/t Au) | Silver Grade (g/t Ag) |
|---|---|---|---|
| Great Northern Footwall Zone[2] | 862104 | 0.27 | 14.5 |
| | 862105 | 0.81 | 84.8 |
| | 862194 | 6.60 | >300.0 |
| | 862196 | 2.14 | 139.0 |
| | 862197 | 0.19 | 8.8 |
| | 862198 | 0.07 | 1.2 |
| | 862199 | 0.78 | 60.5 |
| Top of The World Zone[3] | 862167 | 0.24 | 0.4 |
| | 862169 | 0.03 | <0.3 |
| | 862170 | <0.002 | <0.3 |
| | 862171 | 0.02 | <0.3 |
| | 862172 | 0.60 | 0.9 |

Sources: 1. Taranis News Releases, September 18 and October 11, 2012
2. Taranis News Releases, October 11, 2012
3. Taranis News Releases, October 11, 2012

Note: Highlighted samples overlap zones

## EXPLORATION POTENTIAL

The 2012 exploration program revealed areas of anomalies that warrant further surface exploration work in addition to drilling. Potential targets are discussed by zone.

### ST. ELMO/BLUE BELL (RIDGE TARGET)

The area north of and between the St. Elmo/Blue Bell and the Little Grid is likely a continuation of known mineralization. A number of gossanous boulders with gold values up to 0.6 g/t Au were found approximately two kilometres north of previously known mineralization. Bedrock exposure is absent in this area but gold and base metal bearing outcrop is found two kilometres to the southeast. Diamond drill hole Thor-110 intersected a small, high-grade zone that coincides with this mineralization which lies stratigraphically 100 m above the previously recognized extent of mineralization. It is also coincident with a VLF-EM anomaly.

Mechanical stripping of overburden and trenching is proposed to expose bedrock for sampling and geological mapping. If successful, further exploration can be conducted to the north, but additional work will need to be done with a diamond drill owing to a challenging topographic feature. Taranis believes that this zone may be the fault-displaced extension of the Blue Bell/St. Elmo/True Fissure mineralized trend obscured by the large topographic ridge.

## GOLD PIT TARGET

This target mimics Thor mineralization but on the west side of the Thor Antiform. This area has no bedrock exposure and is untested by drilling. In July 2012, four grab samples were obtained at the Gold Pit which returned a range of anomalous precious metal values from 22.2 g/t Au to 58.1 g/t Au and 211 g/t Ag to 3,173 g/t Ag (Table 9-10). Taranis notes that the mineralized trend extends to the northwest into the Bunker Zone where 31 samples returned average values of 2.15 g/t Au and 145 g/t Ag. The trend is coincident with a VLF-EM conductor which extends more than 500 m and may continue further north to intersect another conductor. Taranis notes that this zone is also on-trend with the Mega-Gossan Zone located one kilometre to the northwest.

## MEGA-GOSSAN ZONE

This zone has seen only minor exploration. A soil geochemistry grid and survey is recommended for this area on the west side of the Thor Antiform.

## SCAB ZONE

Located between the True Fissure and St. Elmo/Blue Bell zones, this target is undrilled due to the steep terrain and the silicified nature of the exposed rocks which restricts access by heavy equipment and skid-mounted diamond drills. This zone has the potential to be tested by a small portable drill or hand-operated rock breaker (plugger). Outcrop is almost completely exposed and, if suitably delineated using a portable drill, this zone can be easily bulk mined.

## SIF ZONE

This visible gold-bearing structural zone associated with a strong VLF-EM anomaly is unique due to the lack of silver or base metal mineralization. Trenching can expose the SIF Zone to the northwest and southeast and increase its known extents.

### GREAT NORTHERN

No diamond drilling is proposed for the subsequent phase of exploration but some potential targets are available when drilling resumes. Sections of this zone are relatively untested and additional drilling will help identify more resources. One shallow target lies on the extreme northwest extent of the zone. Further drilling is also warranted on the southeast part of the zone at relatively shallow depths.

### COINCIDENT GEOPHYSICAL CONDUCTORS AND GEOCHEMICAL ANOMALIES

Trenching can be used to expose and test the source of the coincident geophysical anomaly and the geochemical anomaly on the west limb of the Thor Antiform.

### DRILL TARGETS

Potential drill targets on the property include coincident geophysical/geochemical targets, conductors on the west side of the Thor Antiform, SIF Zone mineralization, geophysical anomalies northwest of the Blue Bell Zone, geophysical conductors below the Ridge Zone, the area north of the Great Northern adit, the Little Grid area, and the Mega-Gossan target.

Additional drill holes can also be done to help better define the existing mineralized bodies. The Great Northern Zone could benefit from additional drilling at depth, to the southeast, and to further define shallow-lying mineralization to the northwest. Drill holes are widely spaced in this vicinity and additional information would be beneficial in defining any potential structure in that area.

The True Fissure zone would also benefit from increased data density especially at the south end of the mineralized body.

## CONCLUSIONS

The following conclusions were drawn by Taranis.

- The base and precious metal mineralization seen at Thor appears exhalative in origin. Exhalative deposits include both SEDEX and VMS. Thor mineralization exhibits hybrid characteristics of both of these deposit types

- Exhalative deposits typically exhibit a tabular geometry which is consistent with the greater than 1,800 m strike length of base/precious metal mineralization at Thor.

These deposits also exhibit “geochemical zonation” which has also be documented at Thor

- Owing to shearing and folding, surface mineralization exhibits many of the characteristics of a classic “vein” deposit, but do not exhibit the discontinuous nature frequently found in vein deposits.

# 10 DRILLING

Taranis has drilled 152 drill holes and completed 35 trenches which are located on the east side of the Thor Antiform. Drill hole collar, backsight, and foresight locations were located using a differential GPS unit.

## CORE LOGGING PROCEDURES

In the 2007 and 2008 drill programs, the diamond drill core was delivered daily by the drillers to the core logging facility located on site. RPA notes that core photos and rock quality designation (RQD) measurements were not taken. RPA recommends these practices be implemented in the next phase of drilling to supplement the database and help in future planning of extraction methods. Taranis, however, assiduously recorded intervals of lost core.

The core logging was done by Taranis geologists under the supervision of John Gardiner, P.Geo. Drilling was done in imperial measurements so core was logged in feet and later converted to metric. Alteration, mineralization, structure, colour, mineralogy details, and descriptions of contacts were recorded.

Sample intervals were marked by the logging geologist and honoured geological and structural contacts. Unmineralized sections of core were often not sampled and numerous intervals of lost core were encountered in and out of the mineralized zones. As a result, the frequent lost core intervals resulted in gaps in sample footages within the mineralized zones

The start of every sample interval was marked with a piece of orange flagging tape. Once designated, the core was cut in half longitudinally using a diamond saw. One half of the sawn core was replaced in the core box for reference and the other half was placed inside a plastic sample bag with a uniquely numbered sample tag. RPA recommends the use of three stub sample assay ticket books so that one of the stubs can be stapled to the core box at start of the respective sample interval. This will allow the information to be preserved even if the core shifts due to transport.

Diamond drill core from the 2007 program was transported to Revelstoke and stored in a locked container in a public storage facility. The core from the 2008 program is stacked on pallets on-site. While the site is only accessible via seasonal gravel roads, and its remote location diminishes the risk of any security issues, incidents of core vandalism have occurred. RPA recommends the secure centralization of core from all drill programs and considers this action to be beneficial in maintaining existing data integrity and facilitating authorized access to the information.

## 2007 DIAMOND DRILLING PROGRAM

Taranis completed 3,545.0 m of NQ-diameter (45 mm) drilling in 60 holes on a systematic grid targeting the CMU. Drilling was done by DeLorme Diamond Drilling of Vernon, British Columbia. Drill holes were cored at a nominal drill spacing of approximately 30 m to 60 m in the vicinity of the True Fissure zone and approximately 150 m apart over the Great Northern Zone.

Initially, Taranis personnel observed higher than anticipated core loss and concluded the operator was responsible. The operator was instructed to alter its drilling methods and materials to improve core recovery.

Significant results from the drilling were publically disclosed in news releases. The results are tabulated in Table 10-1.

## 2008 DIAMOND DRILLING PROGRAM

Taranis drilled 8,849.7 m of NQ-diameter core in 92 holes. The drilling was conducted by Atlas Diamond Drilling Limited of Kamloops, BC. Drilling in this program was primarily targeted toward the Blue Bell, St. Elmo, Great Northern, and Broadview zones with some additional drilling done on the True Fissure Zone. Drill holes were generally done systematically at approximately 30 m to 120 m intervals. Other step-out holes were also drilled.

Significant results from the drilling were publically disclosed in news releases. The results are tabulated in Table 10-2.

## TABLE 10-1 SIGNIFICANT 2007 DIAMOND DRILL INTERSECTIONS

### Taranis Resources Inc. – Thor Project

| Hole ID | From (m) | To (m) | Dip | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) | Thickness (m) | Approximate True Thickness (m) | Target Zone |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thor-1 | 34.38 | 34.66 | -45.00 | 3.04 | 7.80 | 0.01 | 0.03 | 0.01 | 0.27 | 0.27 | True Fissure |
| Thor-2 | 29.87 | 31.70 | -65.00 | 0.72 | 86.12 | 0.14 | 1.32 | 4.03 | 1.83 | 1.77 | True Fissure |
| Thor-3 | 36.64 | 38.40 | -85.00 | 1.20 | 416.66 | 0.38 | 5.42 | 7.48 | 1.76 | 1.44 | True Fissure |
| Thor-4 | 88.70 | 90.53 | -51.65 | 0.95 | 11.98 | 0.04 | 0.16 | 2.81 | 1.83 | 1.83 | True Fissure |
| Thor-6 | 24.38 | 27.13 | -45.00 | 0.37 | 96.91 | 0.04 | 0.67 | 2.65 | 2.75 | 2.74 | True Fissure |
| Thor-7 | 26.82 | 28.65 | -65.00 | 0.27 | 89.48 | 0.05 | 1.47 | 2.19 | 1.83 | 1.77 | True Fissure |
| Thor-8 | 33.01 | 38.40 | -85.00 | 0.53 | 118.53 | 0.08 | 0.93 | 2.86 | 5.39 | 4.42 | True Fissure |
| Thor-9 | 22.98 | 28.96 | -43.67 | 0.58 | 73.43 | 0.08 | 1.83 | 4.44 | 5.98 | 5.94 | True Fissure |
| including | 23.68 | 24.54 | | 1.70 | 310.79 | 0.21 | 9.92 | 14.57 | 0.86 | 0.85 | |
| Thor-10 | 23.99 | 27.43 | -64.13 | 1.26 | 273.87 | 0.19 | 6.51 | 6.89 | 3.44 | 3.34 | True Fissure |
| Thor-11 | 29.26 | 35.36 | -84.86 | 1.09 | 104.04 | 0.13 | 2.05 | 2.41 | 6.10 | 5.10 | True Fissure |
| Thor-12 | 13.41 | 16.46 | -43.19 | 0.49 | 82.09 | 0.06 | 0.40 | 4.89 | 3.05 | 3.03 | True Fissure |
| Thor-13 | 14.57 | 16.28 | -65.00 | 1.31 | 176.17 | 0.21 | 2.83 | 4.54 | 1.71 | 1.65 | True Fissure |
| Thor-14 | 18.44 | 23.10 | -85.16 | 0.71 | 100.74 | 0.08 | 2.26 | 2.00 | 4.66 | 3.81 | True Fissure |
| including | 19.32 | 20.84 | | 1.77 | 264.81 | 0.17 | 6.21 | 5.00 | 1.62 | 1.32 | |
| Thor -15 | 55.60 | 61.17 | -46.46 | 1.14 | 23.58 | 0.07 | 0.13 | 8.04 | 5.57 | 5.56 | True Fissure |
| including | 57.60 | 61.17 | | 1.26 | 13.87 | 0.06 | 0.10 | 11.17 | 3.57 | 3.56 | |
| Thor-18 | 22.65 | 34.72 | -45.89 | 0.53 | 7.93 | 0.01 | 0.02 | 0.01 | 12.07 | 12.04 | |
| Thor-22 | 51.36 | 52.64 | -47.63 | 0.24 | 25.24 | 0.01 | 1.19 | 0.90 | 1.28 | 1.28 | True Fissure |
| | 54.44 | 56.91 | | 1.02 | 45.99 | 0.02 | 1.15 | 1.73 | 2.47 | 2.47 | |
| Thor-31 | 40.54 | 42.43 | -46.22 | 0.94 | 92.16 | 0.04 | 1.85 | 0.93 | 1.89 | 1.89 | True Fissure |
| Thor-32 | 42.09 | 44.59 | -51.82 | 0.43 | 11.77 | 0.02 | 0.10 | 3.29 | 2.50 | 2.50 | True Fissure |
| Thor-33 | 29.41 | 31.00 | -47.17 | 0.61 | 43.78 | 0.41 | Trace | 0.02 | 1.59 | 1.59 | True Fissure |

| Hole ID | From (m) | To (m) | Dip | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) | Thickness (m) | Approximate True Thickness (m) | Target Zone |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thor-34 | 6.10 | 7.62 | -48.05 | 0.63 | 17.07 | 0.02 | 0.31 | 0.23 | 1.52 | 1.52 | True Fissure |
| Thor-35 | 3.72 | 6.10 | -53.22 | 0.02 | 12.17 | 0.02 | 0.62 | 0.20 | 2.38 | 2.38 | |
| Thor-36 | 5.27 | 6.64 | -47.39 | 0.60 | 16.14 | 0.10 | 0.01 | 0.01 | 1.37 | 1.37 | |
| Thor-37 | 28.35 | 30.85 | -46.42 | 0.43 | 57.49 | 0.22 | Trace | 0.02 | 2.50 | 2.50 | |
| Thor-38 | 22.37 | 26.46 | -71.34 | 0.54 | 18.79 | 0.08 | Trace | 0.01 | 4.09 | 3.81 | |
| Thor-41 | 39.35 | 42.76 | -43.52 | 0.49 | 249.84 | 0.17 | 3.38 | 7.88 | 3.41 | 3.39 | True Fissure |
| including | 41.36 | 42.76 | | 0.49 | 225.06 | 0.13 | 3.44 | 8.42 | 1.40 | 1.39 | |
| Thor-42 | 53.04 | 54.13 | -45.00 | 0.95 | 30.17 | 0.03 | 0.02 | 0.07 | 1.10 | 1.10 | True Fissure |
| Thor-43 | 47.24 | 50.29 | -65.00 | 0.29 | 23.26 | 0.02 | 0.65 | 1.23 | 3.05 | 2.95 | True Fissure |
| Thor-44 | 55.17 | 56.39 | -85.00 | 1.78 | 65.58 | 0.12 | 0.99 | 1.88 | 1.22 | 1.00 | True Fissure |
| Thor-45 | 36.52 | 37.04 | -45.00 | 5.49 | 577.09 | 0.40 | 13.83 | 3.80 | 0.52 | 0.51 | Great Northern |
| Thor-47 | 19.35 | 20.39 | -45.00 | 0.23 | 292.47 | 0.36 | 5.15 | 1.11 | 1.04 | 1.03 | Great Northern |
| Thor-48 | 6.10 | 6.55 | -72.00 | 2.58 | 172.56 | 0.04 | 4.66 | 8.93 | 0.45 | 0.43 | Great Northern |
| and | 7.62 | 8.02 | | 0.59 | 95.07 | 0.50 | 4.02 | 15.57 | 0.40 | 0.38 | |
| and | 19.81 | 20.24 | | 0.27 | 134.03 | 0.13 | 1.34 | 1.10 | 0.43 | 0.41 | |
| Thor-49 | 23.16 | 30.18 | -90.00 | 0.20 | 42.60 | 0.23 | 0.05 | 0.04 | 7.02 | 5.61 | Great Northern |
| Thor-50 | 17.34 | 20.45 | -45.00 | 0.37 | 18.74 | 0.09 | 0.27 | 2.95 | 3.11 | 3.08 | Great Northern |
| including | 19.66 | 20.45 | | 1.19 | 39.66 | 0.28 | 0.05 | 9.64 | 0.79 | 0.78 | Great Northern |
| Thor-51 | 17.37 | 19.20 | -65.00 | 1.56 | 409.41 | 0.34 | 5.69 | 10.77 | 1.83 | 1.79 | Great Northern |
| and | 20.73 | 21.98 | | 0.08 | 28.84 | 0.04 | 0.96 | 0.68 | 1.25 | 1.22 | |
| and | 22.68 | 24.11 | | 0.39 | 43.10 | 0.02 | 0.29 | 2.03 | 1.43 | 1.40 | |
| Thor-52 | 17.98 | 18.41 | -85.00 | 2.45 | 162.77 | 0.02 | 4.36 | 1.37 | 0.43 | 0.36 | Great Northern |
| and | 19.81 | 21.64 | | 3.29 | 305.80 | 0.03 | 3.92 | 7.84 | 1.83 | 1.55 | |
| and | 22.55 | 23.16 | | 2.71 | 773.67 | 0.04 | 1.97 | 6.85 | 0.61 | 0.52 | |
| Thor 53 | 17.74 | 24.99 | -70.00 | 1.13 | 88.58 | 0.01 | 2.29 | 3.44 | 7.25 | 6.93 | Great Northern |
| including | 23.19 | 24.99 | | 0.46 | 61.05 | 0.01 | 2.10 | 5.69 | 1.80 | 1.72 | |
| and | 31.70 | 41.85 | | 0.14 | 60.80 | Trace | 0.42 | 0.51 | 10.15 | 9.71 | |

| Hole ID | From (m) | To (m) | Dip | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) | Thickness (m) | Approximate True Thickness (m) | Target Zone |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thor-54 | 35.36 | 38.26 | -50.00 | 0.50 | 366.95 | 0.01 | 3.45 | 2.74 | 2.90 | 2.90 | Great Northern |
| including | 37.67 | 38.25 | | 2.37 | 1,659.78 | 0.05 | 12.16 | 11.05 | 0.58 | 0.58 | |
| Thor-56 | 88.57 | 89.09 | -85.00 | 0.88 | 217.31 | 0.07 | 1.55 | 5.34 | 0.52 | 0.44 | Great Northern |
| Thor-57 | 74.13 | 76.08 | -65.00 | 1.59 | 296.12 | 0.26 | 4.07 | 5.07 | 1.95 | 1.91 | Great Northern |
| and | 79.55 | 80.28 | | 0.58 | 180.74 | 0.05 | 2.84 | 3.84 | 0.73 | 0.71 | |
| Thor-58 | 77.48 | 78.49 | -51.00 | 1.09 | 284.60 | 0.17 | 3.57 | 12.32 | 1.01 | 1.01 | Great Northern |
| and | 83.15 | 84.19 | | 0.41 | 337.70 | 0.12 | 2.96 | 3.36 | 1.04 | 1.04 | |
| Thor-59 | 78.94 | 81.17 | -70.00 | 1.22 | 89.43 | 0.09 | 1.39 | 1.47 | 2.23 | 2.13 | Great Northern |
| Thor-60 | 91.47 | 92.08 | -90.00 | 3.23 | 248.79 | 0.13 | 1.90 | 2.08 | 0.61 | 0.49 | Great Northern |
| and | 93.60 | 94.24 | | 0.55 | 105.39 | 0.09 | 2.11 | 2.29 | 0.64 | 0.51 | |
| and | 107.84 | 111.01 | | 0.11 | 29.49 | 0.01 | 1.15 | 1.39 | 3.17 | 2.53 | |

Source: Taranis News Releases

## TABLE 10-2 SIGNIFICANT 2008 DIAMOND DRILL INTERSECTIONS

### Taranis Resources Inc. – Thor Project

| Hole ID | From (m) | To (m) | Dip | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) | Thickness (m) | Approximate True Thickness (m) | Target Zone |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thor-61 | 72.06 | 79.13 | -90.00 | 0.56 | 179.0 | 0.12 | 2.90 | 2.75 | 7.07 | 5.65 | Great Northern |
| Thor-62 | 62.95 | 63.31 | -70.00 | 0.75 | 517.0 | 0.34 | 4.94 | 4.23 | 0.36 | 0.34 | Great Northern |
| Thor-63 | 63.10 | 64.53 | -50.00 | 0.82 | 873.7 | 1.55 | 7.22 | 3.88 | 1.43 | 1.43 | Great Northern |
| Thor-64 | 43.89 | 45.94 | -50.00 | 0.56 | 136.80 | 0.13 | 3.12 | 8.84 | 2.05 | 2.05 | Great Northern |
| Thor-65 | 45.99 | 51.39 | -70.00 | 0.63 | 74.80 | 0.06 | 1.52 | 1.26 | 5.40 | 5.16 | Great Northern |
| Thor-66 | 54.41 | 57.76 | -90.00 | 1.47 | 252.10 | 0.13 | 1.90 | 2.98 | 3.35 | 2.68 | Great Northern |
| and | 96.08 | 96.63 | | 0.43 | 459.47 | 0.01 | 13.16 | 6.55 | 0.55 | 0.33 | |
| Thor-67 | 23.10 | 23.90 | -45.00 | 3.70 | 83.60 | 0.06 | 1.06 | 0.52 | 0.80 | 0.79 | Great Northern |
| Thor-68 | 121.01 | 131.87 | -90.00 | 0.57 | 63.71 | 0.05 | 1.57 | 3.48 | 10.86 | 8.67 | Great Northern |
| including | 122.08 | 125.13 | | 1.09 | 64.63 | 0.08 | 2.71 | 6.95 | 3.05 | 1.84 | |
| and | 130.46 | 131.87 | | 1.64 | 328.88 | 0.18 | 5.24 | 8.29 | 1.41 | 0.85 | |
| Thor-69 | 19.11 | 20.79 | -70.00 | 0.06 | 19.12 | 0.07 | 0.59 | 1.59 | 1.68 | 1.61 | Great Northern |
| Thor-71 | 163.31 | 163.68 | -73.00 | 4.48 | 165.50 | 0.21 | 2.21 | 0.04 | 0.37 | 0.35 | Great Northern |
| Thor-72 | 6.10 | 7.20 | -90.00 | 4.84 | 310.9 | 0.14 | 4.11 | 4.80 | 1.10 | 0.88 | Great Northern |
| and | 32.92 | 34.14 | | 1.81 | 780.80 | 0.55 | 4.73 | 13.83 | 1.22 | 0.73 | |
| Thor-73 | 163.31 | 163.68 | -90.00 | 4.48 | 165.50 | 0.21 | 2.21 | 0.04 | 0.37 | 0.30 | Great Northern |
| Thor-76 | 133.21 | 135.71 | -90.00 | 1.01 | 15.41 | 0.04 | 0.19 | 1.14 | 2.50 | 2.00 | Great Northern |
| Thor-78 | 9.60 | 12.19 | -70.00 | 2.72 | 667.34 | 0.02 | 1.63 | 0.07 | 2.59 | 2.48 | Broadview |
| Thor-79 | 108.21 | 112.54 | -90.00 | 2.01 | 667.35 | 0.19 | 6.37 | 9.09 | 4.33 | 3.46 | Great Northern |
| Thor-85 | 17.37 | 18.78 | -70.00 | 2.09 | 178.00 | 0.60 | 2.99 | 0.28 | 1.41 | 1.16 | Broadview |
| Thor-86 | 17.47 | 18.11 | -45.00 | 0.34 | 91.00 | 0.06 | 1.68 | 0.14 | 0.64 | 0.63 | Broadview |
| Thor-90 | 93.98 | 95.78 | -90.00 | 1.22 | 1,008.00 | 0.34 | 8.67 | 10.60 | 1.80 | 1.44 | Broadview |
| Thor-92 | 29.57 | 33.56 | -45.00 | 1.36 | 227.00 | Trace | 0.07 | Trace | 3.99 | 3.93 | Broadview |

| Hole ID | From (m) | To (m) | Dip | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) | Thickness (m) | Approximate True Thickness (m) | Target Zone |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thor-94 | 81.69 | 83.37 | -45.00 | 0.53 | 84.00 | 0.04 | 0.89 | 0.18 | 1.68 | 1.66 | Great Northern |
| Thor-99 | 78.58 | 81.05 | -75.00 | 2.00 | 108.00 | 0.23 | 0.83 | 0.40 | 2.47 | 2.29 | Great Northern |
| Thor-104 | 156.20 | 161.89 | -55.00 | 0.86 | 54.2 | 0.06 | 0.01 | 0.02 | 5.67 | 5.67 | Blue Bell |
| Thor-105 | 40.63 | 41.06 | -90.00 | 2.50 | 172.00 | 0.07 | 1.04 | 2.60 | 0.43 | 0.34 | Great Northern |
| Thor-106 | 77.85 | 79.04 | -45.00 | 1.85 | 352.80 | 0.16 | 7.94 | 14.68 | 1.19 | 1.18 | Great Northern |
| Thor-107 | 44.32 | 49.84 | -90.00 | 0.16 | 46.80 | 0.02 | 1.07 | 0.49 | 5.52 | 4.41 | Great Northern |
| Thor-108 | 28.20 | 28.96 | -70.00 | 8.00 | 348.00 | 0.48 | 8.06 | 16.26 | 0.76 | 0.73 | Great Northern |
| and | 78.95 | 81.02 | | 0.82 | 5.30 | 0.04 | 0.03 | 6.26 | 2.07 | 1.98 | |
| Thor-111 | 36.91 | 39.23 | -45.00 | 1.44 | 246.40 | 0.27 | 3.49 | 6.14 | 2.32 | 2.30 | Great Northern |
| Thor-112 | 86.57 | 89.62 | -90.00 | 0.51 | 48.4 | 0.18 | 0.19 | 0.63 | 3.05 | 2.44 | Great Northern |
| Thor-113 | 116.53 | 118.27 | -90.00 | 1.53 | 92.0 | 0.29 | 2.30 | 6.66 | 1.74 | 1.39 | Great Northern |
| Thor-114 | 63.95 | 65.63 | -76.00 | 1.63 | 119.2 | 0.08 | 2.32 | 9.75 | 1.68 | 1.55 | Great Northern |
| Thor-116 | 22.89 | 26.95 | -70.00 | 0.23 | 115.70 | 0.11 | 2.79 | 3.33 | 4.06 | 3.88 | Great Northern |
| Thor-117 | 26.52 | 27.28 | -90.00 | 1.44 | 147.00 | 0.20 | 3.26 | 4.68 | 0.76 | 0.61 | Great Northern |
| Thor-118 | 91.69 | 93.43 | -70.00 | 0.32 | 179.00 | 0.32 | 2.73 | 6.15 | 1.74 | 1.66 | Great Northern |
| Thor-120 | 85.04 | 89.01 | -45.00 | 0.17 | 75.7 | 0.03 | 1.16 | 1.93 | 3.97 | 3.93 | Great Northern |
| Thor-122 | 67.76 | 69.50 | -90.00 | 0.37 | 10.50 | 0.03 | 0.07 | 1.57 | 1.74 | 1.39 | Great Northern |
| Thor-123 | 59.29 | 60.05 | -70.00 | 2.31 | 30.30 | 0.02 | 0.38 | 0.31 | 0.76 | 0.73 | Great Northern |
| Thor-125 | 12.80 | 13.90 | -90.00 | 0.43 | 670.08 | 0.44 | 10.19 | 13.83 | 1.10 | 0.88 | Blue Bell |
| Thor-126 | 56.42 | 57.00 | -45.00 | Trace | 53.60 | 0.03 | Trace | 0.14 | 0.58 | 0.57 | Great Northern |
| Thor-127 | 11.77 | 12.59 | -70.00 | 5.25 | 789.90 | 0.81 | 7.87 | 7.38 | 0.82 | 0.78 | Blue Bell |
| Thor-128 | 12.22 | 13.23 | -55.00 | 2.22 | 477.55 | 1.01 | 15.10 | 3.66 | 1.01 | 1.01 | Blue Bell |
| Thor-129 | 31.09 | 32.62 | -45.00 | 10.51 | 80.19 | 0.04 | 1.41 | 2.00 | 1.53 | 1.52 | Great Northern |
| Thor-130 | 13.20 | 15.09 | -70.00 | 2.36 | 906.30 | 0.68 | 8.83 | 21.14 | 1.89 | 1.83 | Blue Bell |
| Thor-131 | 15.36 | 17.53 | -60.00 | 3.13 | 737.92 | 1.17 | 10.26 | 46.89 | 2.17 | 2.16 | Blue Bell |
| Thor-132 | 23.47 | 26.52 | -55.00 | 5.70 | 190.40 | 0.16 | 3.46 | 5.75 | 3.05 | 3.05 | Blue Bell |
| Thor-136 | 31.55 | 35.12 | -45.00 | 3.34 | 880.50 | 0.45 | 9.38 | 5.53 | 3.57 | 3.52 | Blue Bell |

| Hole ID | From (m) | To (m) | Dip | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) | Thickness (m) | Approximate True Thickness (m) | Target Zone |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thor-137 | 40.48 | 40.69 | -88.00 | 7.52 | 886.0 | 0.82 | 22.81 | 25.09 | 0.21 | 0.18 | Blue Bell |
| Thor-138 | 46.39 | 48.77 | -45.00 | 0.76 | 486.61 | 0.46 | 0.47 | 0.82 | 2.38 | 2.34 | Great Northern |
| Thor-140 | 52.22 | 56.70 | -70.00 | 0.09 | 20.40 | 0.06 | 1.18 | 1.35 | 4.48 | 4.43 | Blue Bell |
| and | 62.85 | 63.43 | | 1.56 | 692.20 | 0.57 | 3.19 | 2.41 | 0.58 | 0.33 | |
| Thor-142 | 88.55 | 88.82 | -56.00 | 2.64 | 113.00 | 0.05 | 2.72 | 5.92 | 0.27 | 0.27 | Blue Bell |
| Thor-144 | 159.90 | 168.43 | -47.00 | 0.69 | 160.30 | 0.34 | 4.59 | 10.65 | 8.53 | 8.45 | Blue Bell |
| Thor-145 | 24.39 | 24.60 | -45.00 | 1.25 | 271.00 | 0.09 | 9.78 | 11.38 | 0.21 | 0.21 | True Fissure |
| Thor-146 | 3.66 | 8.17 | -90.00 | 1.56 | 367.30 | 0.19 | 7.29 | 10.17 | 4.51 | 3.45 | True Fissure |
| Thor-147 | 4.57 | 6.37 | -70.00 | 3.13 | 536.30 | 0.29 | 11.44 | 6.19 | 1.80 | 1.69 | True Fissure |
| Thor-148 | 4.57 | 6.25 | -45.00 | 1.94 | 444.50 | 0.23 | 9.64 | 6.95 | 1.68 | 1.67 | True Fissure |
| Thor-150 | 54.20 | 55.42 | -45.00 | 1.91 | 659.50 | 0.35 | 22.68 | 8.65 | 1.22 | 1.20 | Blue Bell |
| Thor-151 | 25.76 | 26.00 | -57.00 | 0.61 | 221.00 | 0.23 | 3.99 | 6.68 | 0.24 | 0.24 | Blue Bell |
| Thor-152 | 19.17 | 19.33 | -87.00 | 3.90 | 3,901.00 | 4.09 | 13.62 | 8.04 | 0.16 | 0.14 | Blue Bell |

Source: Taranis News Releases

### LOST CORE ANALYSIS

RPA conducted a study to examine Taranis' observation that drill core loss was more prevalent in the 2007 diamond drilling campaign compared to the 2008 campaign. Taranis diligently logged missing and broken core intervals so RPA was able to extract the information from the database.

RPA found that approximately 70% of lost core intervals were logged during the 2007 campaign compared to 30% of the fault logged intervals. A more detailed analysis was done on the largest zone, the Great Northern Zone, comparing total core length versus the amount of lost or fault-logged intervals. RPA found that fault zone lengths were found in roughly equal proportions for both drill campaigns. Lost core intervals, however, were approximately 2.5 times higher in the holes cored in 2007.

RPA's work supports Taranis' observations. The missing core intervals, especially in the mineralized areas, will result in more conservative grade in a Mineral Resource estimate since all elements over those distances are assigned zero grade values.

## CONCLUSIONS

Drill collars are most commonly oriented at –45° and range from –43.2° to –90°. Drill holes intersect the shallow to moderately dipping zones at slightly oblique angles so that the true thicknesses of the mineralized intersections vary locally. RPA measured the true thickness of the intersections tabulated in Table 10-1 and 10-2 and found, generally, that downhole intersection thicknesses are approximately 10% greater than the true thickness.

In RPA's opinion, the diamond drilling conducted by Taranis and its contractors was done in a manner consistent with industry standards. RPA has identified recovery issues with respect to drill core which will have a conservative effect on the grade and tonnage estimation. In RPA's opinion, however, Taranis has identified and attempted to ameliorate recovery issues so that the reliability of the data was maintained to the best of its ability. RPA is not aware of any recovery issues with respect to the surface and underground channel sampling. In RPA's opinion, the results generated from the exploration and drilling programs are suitable for use in a Mineral Resource estimate.

# RECOMMENDATIONS

RPA makes the following recommendation with respect to drilling:

- Core photos and RQD measurements should be taken starting with the next phase of drilling to supplement the database and help in future planning of extraction methods.
- RPA recommends the use of three stub sample assay ticket books so that one of the stubs can be stapled to the core box at start of the respective sample interval. This will allow the information to be preserved even if the core shifts due to transport.
- Steps should be taken to enhance core security. RPA considers the centralization of core from all drill programs to be beneficial in improving core security and facilitating access to the information.

# 11 SAMPLE PREPARATION, ANALYSES AND SECURITY

## HISTORICAL WORK

No information exists with respect to sample security, storage, and shipping arrangements for the historical operators. Most of the analytical information from this period is not available and has been periodically and inconsistently compiled on various plans, maps and figures found in historical data on the property.

## TARANIS SAMPLE SECURITY, STORAGE, AND SHIPMENT

Individual sawn core samples were collected by Taranis personnel and placed inside plastic sample bags together with unique sample numbers. Approximately 50 lb of sawn core was then collected inside pre-addressed poly-woven bags and secured using heavy duty plastic electrical “zip” ties. The poly-woven bags were stored on-site until sufficient volume was collected for a shipment to the designated laboratory. In the case of the 2007 drilling campaign where the samples were shipped to Accurassay, the samples were shipped via Greyhound commercial bus lines from Revelstoke to Thunder Bay, Ontario and also by commercial truck transport (Raymer Transport Ltd.). In the 2008 drilling program, samples were shipped by Greyhound commercial bus lines from Revelstoke to Vancouver, however, some of the samples were delivered directly by Taranis personnel directly to ACME in Vancouver. A copy of the chain of custody (COC) documentation was sent to the laboratory so samples could be checked upon receipt.

### ACCURASSAY

In 2007, analytical work was completed by the Accurassay Laboratories Ltd. (Accurassay) in Thunder Bay, Ontario, an ISO/IEC 17025 accredited laboratory.

Upon arrival, the samples were checked by Accurassay personnel against the COC sent by Taranis. The samples were then dried and crushed to 75% passing 10 mesh (2mm). A 250 g subsample was taken and pulverized to 85% passing -150 mesh (106 µm) and the remaining reject was stored.

Gold analysis was performed using a fire assay (FA) on a 30 g aliquot (methodology AL4Au3). Final analysis was done using a multi-acid digestion and Inductively Coupled Plasma Spectrometry (ICP). Geochemical analyses using multi-acid digestion and ICP finish were done for silver, copper, iron, lead, and zinc.

RPA notes that some of the procedures used are not ISO/IEC 17025 accredited. The same methodology was used for channel and trench samples as was used for the drill core by Accurassay and later by ACME.

Accurassay sample pulps were sent, at Taranis' request, to ACME in Vancouver for storage so that all samples would be available in the same facility at a future date.

**ACME**

In 2008, Taranis designated ACME as its principal laboratory. The same COC procedures used for Accurassay were followed. Upon arrival, the samples were checked by ACME personnel. The samples were then dried and crushed to 85% passing 10 mesh (two millimetre). A one kilogram subsample was taken and pulverized to 80% passing 150 mesh (104 µm) and the remaining reject was discarded (ACME Procedure R150).

A 0.5 g aliquot was leached in hot (95°C) aqua regia and analyzed using ICP Atomic Emission Spectroscopy (ICP-AES) (ACME Procedure 1D). For samples whose values exceeded the upper limit of the analysis, a 1.0 g aliquot was subjected to a hot aqua regia digestion and ICP-AES analysis (ACME Procedure 7AR). Gold analysis was done using FA on a 30 g aliquot with final analysis by ICP-AES (ACME Procedure 3B). Any original results outside of the assay limits were reanalyzed by FA on a 30 g aliquot with a gravimetric finish (ACME Procedure G6).

Taranis instructed ACME to store all sample pulps along with those that were shipped from Accurassay. A clerical error resulted in the discarding of the majority of the sample pulps. RPA later selected 195 of the combined Accurassay and ACME sample pulps for shipping to AGAT Laboratories Ltd. (AGAT), an ISO/IEC 17025 accredited laboratory, for independent reanalysis.

The soil samples taken during the 2012 exploration program were sent to ACME where they were dried and sieved to -80 mesh (ACME Procedure SS80). The samples were analyzed by ACME procedure 1DX15 using a 15 g aliquot which was digested in aqua regia and analyzed using ICP-MS.

Rock and channel samples were dried and crushed to 70% passing 10 mesh. A 250 g split was taken and pulverized to 85% passing 200 mesh. A 1 g aliquot was digested in hot aqua regia and analyzed using ICP-Emission Spectrometry (ES) and ICP-MS (ACME Procedure 7AX).

### AGAT

Sample pulps received from ACME did not require preparation. The 29 half core samples were dried and crushed to 75% passing 10 mesh (two millimetre) (AGAT Procedures 200010). A 1.2 kg subsample was taken and pulverized to 80% passing 200 mesh (75 µm) (AGAT Procedure 200016). The primary analysis method used consisted of a 3:1 hot mixture of hydrochloric and nitric acids (aqua regia) followed by ICP Optical Emission Spectroscopy (ICP-OES) analysis (AGAT Procedure 201073). Any results that exceeded the limits of this analysis were reanalyzed using a procedure consisting of ICP-OES calibrated for higher grades (AGAT Procedure 201273). Gold was analyzed by FA on a 30 g aliquot with final analysis by ICP-OES (AGAT Procedure 202052). Any gold or silver results that exceeded the limits of the original analysis were reanalyzed using FA with gravimetric final analysis (AGAT Procedure 202064).

Prior to crushing, the core samples were measured for specific gravity using AGAT Wet Immersion method (Procedure 201149). After the samples were pulverized, the samples were measured again using a pycnometer (Procedure 201149). The comparison of these data is discussed in Section 14.

## ASSAY QUALITY ASSURANCE/QUALITY CONTROL

Best practice, independent assay quality assurance/quality control (QA/QC) programs consist of the insertion of two kinds of certified reference materials (CRMs) into the sample stream, and the duplicate analysis of samples at each stage of sample reduction.

One kind of CRM is a certified barren sample, or blank, that is inserted once per batch submission of 20 samples, or 5%. The purpose of these CRM is to detect contamination of the samples during the preparation phase of analysis. The second kind of CRM usually consists of sample pulps that are commercially available from independent suppliers that have gone through round-robin testing at numerous independent laboratories. These sample pulps are "certified" as having "recommended best value" (RBV) which is the statistical mean of the independent analyses. Other statistical data are often included such as the sample's standard deviation and confidence intervals. These CRM are used to independently test the accuracy of assay laboratories and are inserted once per sample batch, or approximately 5%. The assays from the CRMs are also used to assess assay precision by evaluating each sample result against the statistical mean of all the samples. RPA notes that in practice each commercial CRM will have a limited number of elements for which it is certified and this can pose a challenge when dealing with polymetallic mineralization on projects such as Thor.

Duplicates consisted of field duplicates, reject duplicates, and two kinds of pulp duplicates. Field duplicates are a second split of the drill core (quarter core) or parallel channel sample. A reject duplicate is taken after crushing and at the sample reduction phase to the nominal amount sent for pulverization. A pulp duplicate is a second subsample taken from this pulverized material. Another, same-pulp duplicate, may also be analyzed from the original subsample. These are also done at a nominal rate of 5%. All these samples independently provided checks at different stages of the analysis and help identify laboratory issues.

RPA notes that no QA/QC program was in place for the 2007 diamond drill program. In 2008, due to Thor's polymetallic mineralization, Taranis chose to develop internal standards. The Taranis internal standards were derived from a range of samples that displayed anomalous results from all zones on the property.

## TARANIS INTERNAL STANDARDS

Approximately five kilograms of mineralized material was collected from surface dumps property-wide. The resulting composite sample was sent to ACME for crushing and then returned to Taranis. Taranis prepared five internal standards with a nominal weight of approximately 2.5 kg each. These were prepared by blending the crushed composite with successive dilutions of barren silica sand to produce 100 samples (Taranis, 2008). The relative dilutions are shown in Table 11-1.

## TABLE 11-1 DILUTION OF THOR INTERNAL STANDARDS
### Taranis Resources Inc. – Thor Project

| Standard Series | Crushed Composite to Silica Sand Ratio | Sample Number Series |
|---|---|---|
| 1 | 1:5 | 90000 to 90020 |
| 2 | 1:4 | 90051 to 90070- |
| 3 | 1:3 | 90101 to 90120 |
| 4 | 1:2 | 90151 to 90170 |
| 5 | 1:1 | 90201 to 90220 |

As a check, some of the internal standard material was submitted to Chemex Laboratories Ltd. (Chemex) in Reno, Nevada. These assays were used to verify the ACME analyses. The results were provided to RPA in the form of a table and RPA plotted the means from each laboratory for each element of interest on scatter diagrams. RPA examined the results from the two laboratories and found good agreement for all elements except gold. At grades greater than 2.0 g/t Au, the results from Chemex were on average 70% higher than the grades reported from ACME. For results less than 2.0 g/t Au the Chemex results were 20% higher. RPA notes that only a small number of checks were run at Chemex (ten, two of each standard), gold mineralization is often heterogeneous, and the ACME results were conservative compared to Chemex.

Due to the small number of results from the analysis of the standards, RPA chose to combine the assays from ACME and Chemex to define the recommended best values for each element. The results from the combined ACME and Chemex analyses are shown in Table 11-2.

## TABLE 11-2 THOR INTERNAL STANDARDS
### Taranis Resources Inc. – Thor Project

| Standard Series | Recommended Best Value | | | | | Standard Deviation | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Au g/t | Ag g/t | Cu % | Pb % | Zn % | Au g/t | Ag g/t | Cu % | Pb % | Zn % |
| 1 | 0.89 | 73.20 | 0.127 | 1.734 | 2.630 | 0.26 | 12.33 | 0.014 | 0.272 | 0.265 |
| 2 | 1.92 | 147.54 | 0.203 | 4.406 | 3.835 | 0.33 | 10.05 | 0.021 | 0.310 | 0.368 |
| 3 | 2.84 | 180.68 | 0.261 | 4.460 | 5.128 | 1.80 | 9.08 | 0.016 | 0.270 | 0.275 |
| 4 | 3.01 | 195.68 | 0.298 | 5.122 | 5.921 | 1.61 | 7.48 | 0.025 | 0.341 | 0.289 |
| 5 | 3.57 | 207.70 | 0.355 | 4.750 | 6.975 | 1.54 | 7.27 | 0.010 | 0.130 | 0.318 |

***BLANKS***

RPA notes that no blanks were inserted in the assay sample stream but Standard Series 1 was used for this purpose. The presence of mineralization in the standard makes the assessment of sample cross-contamination difficult. In the opinion of RPA, the results generated from the insertion of this standard should be used along with the other four standards in assessing assay precision. RPA recommends the use of a purchased, certified barren sample or commercially available crushed rock such as limestone. RPA recommends an insertion rate of approximately 5% or one sample per assay submission.

***STANDARD ACCURACY***

RPA notes that these standards do not meet the criteria of CRMs since they have not been analyzed sufficiently by independent accredited laboratories to give reasonable confidence in the RBV. RPA notes the results for lead are especially erratic and may be due to the change in assay methodology used by different laboratories that occurs once a sample reaches a nominal threshold. In RPA's opinion the internal standards are not acceptable for assessing assay precision. RPA recommends the use of independent commercial CRMs in all subsequent diamond drilling and channel sampling programs. The issue regarding multiple elements can be ameliorated by purchasing a variety of CRMs which will cover the major economic elements of interest. RPA recommends an insertion rate of approximately 5% or one sample per assay submission.

***STANDARD PRECISION***

RPA plotted the assays by standard number and compared the results. A total of 78 submissions were inserted into the sample stream. The number of samples, by standard series, is shown in Table 11-3.

**TABLE 11-3 SAMPLE SUBMISSIONS BY STANDARD SERIES**
**Taranis Resources Inc. – Thor Project**

| Standard Series | Number of Submissions |
|---|---|
| 1 | 17 |
| 2 | 15 |
| 3 | 16 |
| 4 | 14 |
| 5 | 16 |
| **Total** | **78** |

To assess assay precision, individual results are compared against the mean and standard deviations of the collective results. An individual assay that returned a value greater than two standard deviations (±2SD) from the assayed mean is considered to be out of specification (OOS) and a precision failure.

RPA inspected the assays for gold, silver, copper, lead, and zinc. The results were generally good but some failures were observed. The OOS results are summarized in Table 11-4.

**TABLE 11-4 ASSAY PRECISION FAILURES FOR INTERNAL STANDARD**
**Taranis Resources Inc. – Thor Project**

| Standard Series | OOS Results | Element |
|---|---|---|
| 1 | 2 | Au, Cu |
| 2 | 3 | Ag, Pb, Zn |
| 3 | 3 | Cu, Pb, Zn |
| 4 | 6 | Au, Ag, Cu, Pb |
| 5 | 3 | Au, Cu |
| **Total** | **17** | |

The failure rate for the five elements of interest is 4.4% with nine failures above the +2SD threshold and eight failures below the -2SD threshold. Gold values tended to fail high while lead assays were OOS below the lower threshold. The OOS results for the other elements were generally distributed evenly and, as such, RPA did not perceive any bias with respect to assay precision. In RPA's opinion assay precision, based on the 78 internal standards, was reasonable and did not display any bias.

## DUPLICATES

No independent duplicate QA/QC samples were analyzed during the 2007 or 2008 diamond drill programs. RPA recommends the insertion of field, reject, and pulp duplicates into the sample stream at a rate between one in 50 (2% each) to one in 20 (5% each) for a cumulative total of 6% to 15% of the total assay submissions.

## VERIFICATION DUPLICATES

To verify the assays in the database a program of pulp duplicate assaying was jointly developed by Taranis and RPA. Taranis had a policy in place with its principal laboratories, Accurassay and ACME, to store pulps and rejects. Due to a clerical error the majority of these from the 2008 drilling program were inadvertently discarded. There were, however, 195 pulp duplicates still in storage and available for reassaying. The majority of these (156 or 80%) were pulps analyzed by Accurassay in 2007 which had been shipped to ACME. The remaining 20% (39 pulps) were originally analyzed by ACME in 2008. No rejects had been saved. Diamond drill core and channel samples comprised the 2007 Accurassay pulps while the ACME pulps consisted of only drill core.

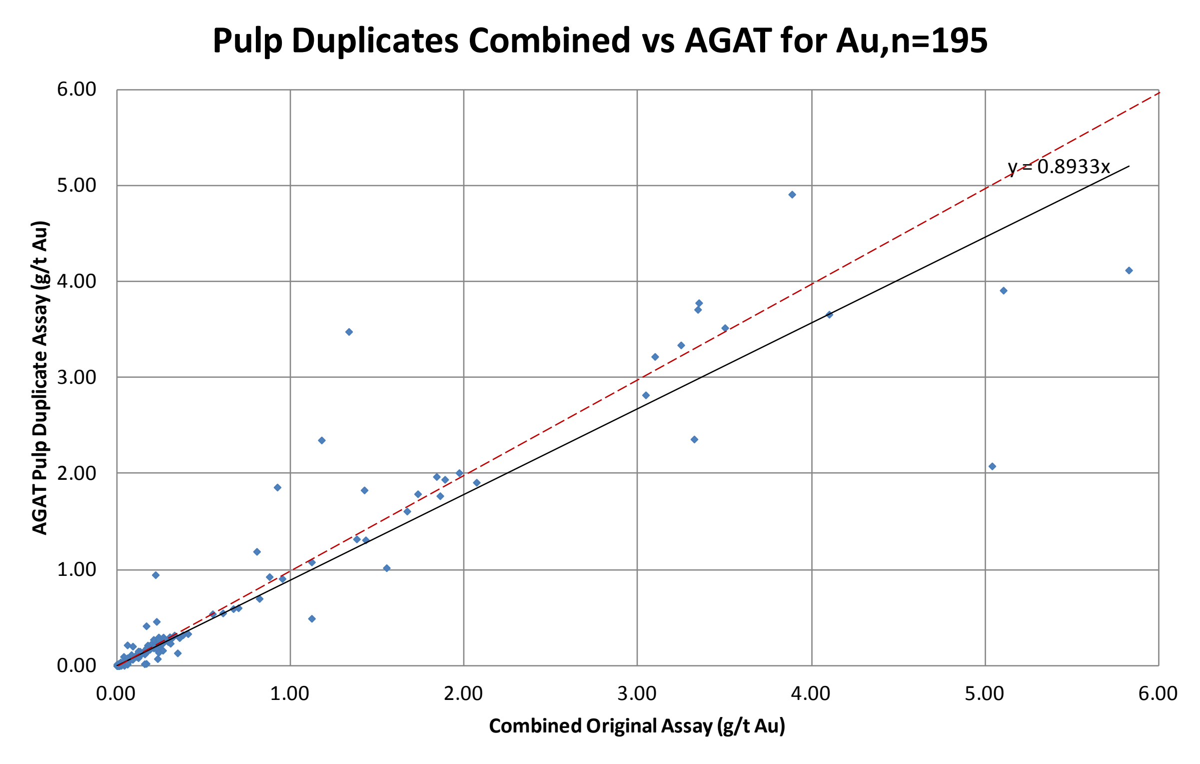
The inaccessibility of the property in winter due to snow and the lack of appropriate facilities in Revelstoke made it impractical to return and collect field duplicates (i.e., second split quarter core samples). Taranis had in its possession a quantity of display core labelled with original sample intervals. Taranis submitted 29 half-core samples to AGAT, an ISO/IEC 17025 accredited laboratory, leaving no reference core for those intersections. In addition to assaying the sample, specific gravity measurements were performed upon them.

***PULP DUPLICATE RESULTS***

RPA originally plotted the duplicate results on scatter plots and inspected the results for bias. RPA also plotted relative differences (Thompson-Howarth plots) and inspected them for any indication of grade bias. RPA then re-plotted the results by original laboratory and performed the same analyses. RPA notes the global results tend to reflect the Accurassay versus AGAT comparisons because of the high percentage of Accurassay samples in the dataset.

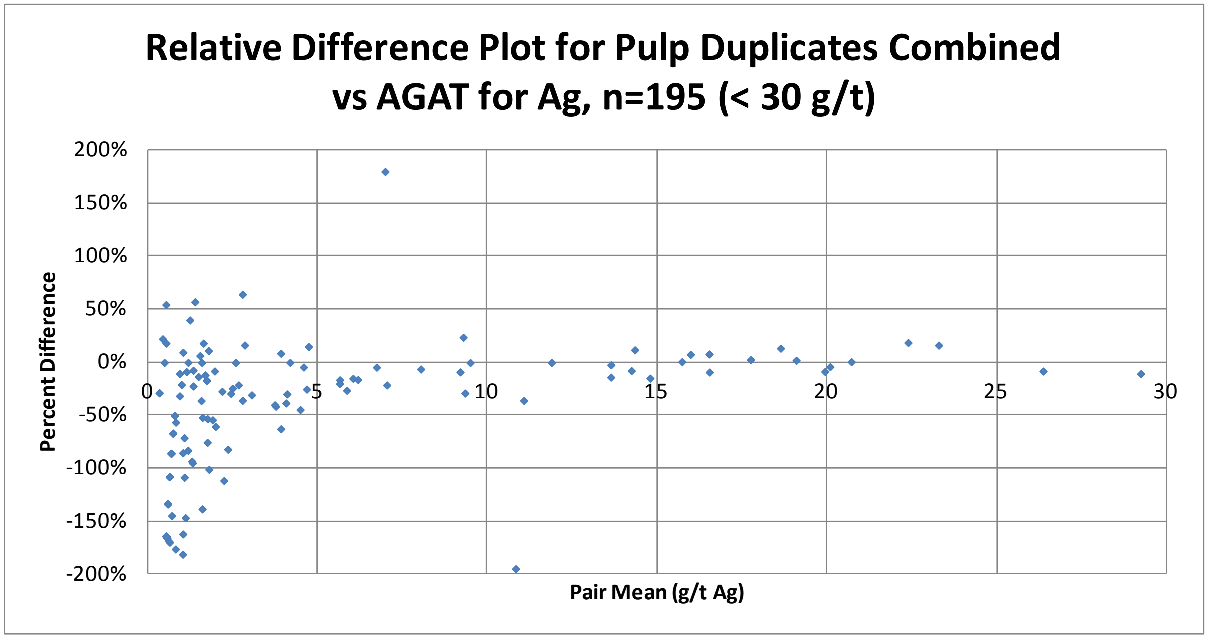
RPA found that, generally, reproducibility for gold was good. The global analysis showed slightly higher values from the original samples than those returned from AGAT as shown in Figure 11-1. When inspected by campaign, RPA observed that AGAT returned higher gold values than ACME but this was due to a small number of higher grade assays. The relative difference plots, however, indicate that ACME returned higher values at lower grades (less than 0.1 g/t Au). The Accurassay results compared to the AGAT showed slightly higher gold grades from Accurassay but no notable grade bias.

**FIGURE 11-1 PULP DUPLICATE GLOBAL RESULTS FOR GOLD**



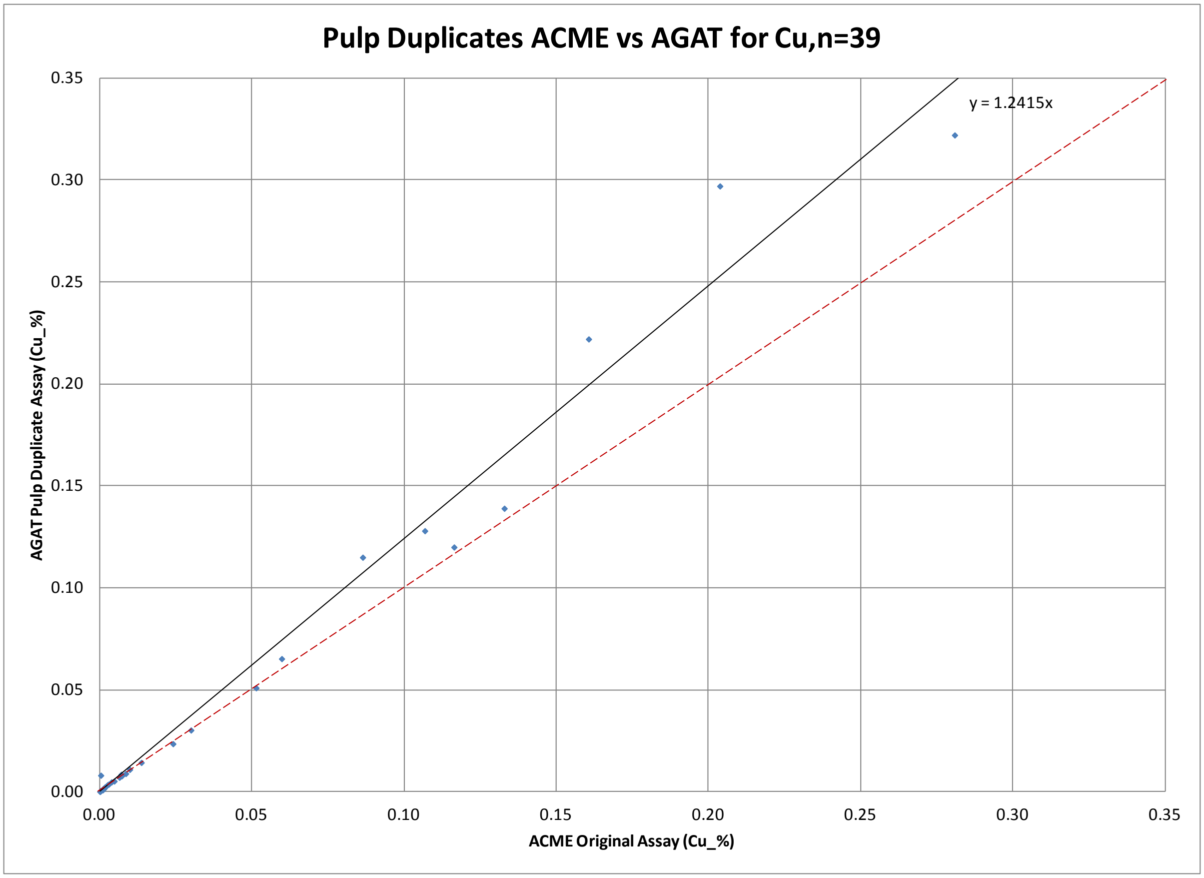

For the global comparison of silver assays, one high duplicate value from AGAT on an Accurassay original sample skewed the results. Once this outlier pair was removed, the results compared favourably. The global Thompson-Howarth plots showed a bias toward the original assays at grades below 2 g/t Ag as shown in Figure 11-2. This difference is especially pronounced in comparison on Accurassay and AGAT results. The lower detection limit at AGAT (0.2 g/t Ag) versus Accurassay (1.0 g/t Ag) is the main reason. The reproducibility of ACME samples was good and no grade bias was observed.

**FIGURE 11-2 RELATIVE DIFFERENCE PLOT FOR GLOBAL SILVER RESULTS LESS THAN 30 G/T AG**




Copper reproducibility was good and no grade bias was observed globally. The samples analyzed by ACME, however, tended to have lower values than the duplicate assays from AGAT for the 39 samples examined as shown in Figure 11-3. This is seen for all grades on the relative difference plots. The AGAT results for copper are also 7% higher than the results from Accurassay. RPA notes that the samples available for re-assay are relatively low grade (less than one percent copper) and reproducibility may be better at higher grades. RPA recommends that in future duplicate assay programs, the copper results be scrutinized closely to see if this trend continues.

**FIGURE 11-3 ACME VERSUS AGAT PULP DUPLICATE ASSAYS FOR COPPER**




As was observed with the silver duplicates, one high AGAT duplicate skews the global result for lead. The removal of this one data point results in a reasonable correlation between the sets of assays. The lower detection limit for lead at Accurassay is double that at AGAT so the Thompson-Howarth plots appears biased at low grades. Examining the results by individual laboratory reveals that, generally, AGAT results are higher than Accurassay results and ACME assays are higher than AGAT assays.

Zinc results show reasonable overall reproducibility globally and by individual laboratory. The relative difference plots do not reveal any grade bias of significance.

The available pulp duplicates show that, with exception of a small number of outlier pairs, assay reproducibility, at an independent third laboratory, for all elements of economic interest at Thor is reasonable.

***CORE DUPLICATE RESULTS***

Twenty-nine samples from two diamond drill holes were reanalyzed at AGAT. The sample intervals came from three diamond drill holes. Two of these holes (Thor-58 and Thor-59) were cored in 2007 and 17 samples were analyzed at Accurassay. The third hole was drilled in 2008 and the 12 drill core samples were assayed at ACME. Core duplicates, especially when mineralized, often have poorer reproducibility than reject and pulp duplicates due to the heterogeneous nature of the mineralization.

The reproducibility for gold was generally poor, with AGAT having consistently higher duplicate assays. One sample pair with a large discrepancy was removed from the global comparison and the results were more reasonable. No grade bias was evident as the AGAT results were consistently higher. In terms of the comparison between the original laboratories and AGAT, Accurassay had slightly higher grades for gold and ACME had lower gold assay results.

There was good reproducibility for silver globally, and a slight bias towards higher duplicate results was evident at lower grades. AGAT returned higher silver grades than Accurassay especially at higher grades but this was offset globally by ACME returning higher values than AGAT especially at lower grades.

Copper grades showed good reproducibility globally and no significant grade bias. The Accurassay results matched well with the AGAT result. The ACME results were slightly higher than the AGAT results, especially at lower grades, but the difference was not significant.

Global reproducibility for lead was good with a mild bias toward the AGAT results at low grades. The comparison between ACME and AGAT was very good. The results from Accurassay were generally higher than those from AGAT especially at low grades. RPA does not consider this difference to be significant.

The core duplicate samples analyzed for zinc at AGAT were close to the combined results from Accurassay and ACME. When compared to Accurassay, the AGAT results were higher especially at lower grades. The AGAT assays were reasonably comparable to the ACME results although slightly higher at all grades. Overall, there was no significant grade bias evident.

The core duplicates done on the available core showed good reproducibility for all economic elements except gold. Gold mineralization, especially in structurally controlled depositional environments, tends to be erratic. In RPA's opinion the core duplicate assay results are reasonable.

## CONCLUSIONS

RPA notes that the three assay laboratories employed are independent of Taranis. Taranis followed industry standard procedures for sampling, sample security, and chain of custody. Taranis reports that core storage will improve with the construction of new storage racks.

In RPA's opinion the assay procedures and protocols are industry standard and adequate to produce reasonable results which are appropriate for use in Mineral Resource estimation.

The drilling and exploration programs at Thor did not follow industry standard QA/QC procedures with respect to the insertion of CRMs, blanks, and duplicates into the sample assay stream. Taranis, however, made its best effort to ameliorate the situation by conducting an assay duplicate program using all available pulp duplicates and half-core (field duplicate) samples. Taranis reports that an industry-standard QA/QC program will be implemented in the next phase of exploration.

The results of this program showed that for pulp duplicates, the duplicate assays from AGAT were higher than the assays from the two original laboratories. Most of this difference can be attributed to a small number of outlier pairs. Once these outlier pairs are removed, the correlation between the samples improves. The only significant grade bias observed in the pulp assay was for silver at grades near the lower detection limit where the original assays were higher.

The reproducibility of results from core duplicates was good except for gold and no significant grade bias was observed for the elements of economic interest.

In RPA's opinion, the verification duplicate program demonstrates that the results in the Thor assay database are reasonable. The other verification steps taken by RPA show that the database is adequate, relatively free of errors, and suitable for use in the estimation of Mineral Resources.

# 12 DATA VERIFICATION

## SITE VISIT

A visit to the Project area was conducted by RPA on October 25, 2012, with John Gardiner, President and CEO of Taranis. At the time of the visit, there were large accumulations of snow. Access to the property was via ATV with the final few hundred metres traversed on foot due to heavy snow. The site inspection consisted of locating numerous drill hole casings using a Garmin e-Trek handheld GPS instrument, the locating and sampling of the True Fissure stockpile, and the inspection and verification sampling of diamond drill core from drill hole Thor-135. Despite the snow accumulation, drill hole collars were easily located and found to be in their expected location.

The drill core was placed on pallets and stacked in one direction and protected from the elements by plastic sheeting. The on-site core record is incomplete as only the core from the 2008 drill program is stored there. The drill record from 2007 is stored in Revelstoke. Access to the on-site core was limited by the accumulations of heavy snow and the lack of core racks. The core on-site is generally inaccessible but, for the most part, not secured. The stacked nature of the boxes makes tampering impossible, but some core had been previously disturbed. Taranis recognizes the need to store its core in a single secure location.

RPA inspected the core boxes and found them to be clearly labelled with indelible marker. RPA recommends the use of embossed metal tape or tags as indelible ink fades over time especially if exposed to the elements. Downhole footage markers are still visible and have been labeled with converted metric distances on the opposite side of the block. Sample locations were marked at the beginning of each interval with loosely placed pieces of flagging tape.

Snow prevented a thorough inspection of the True Fissure stockpile but RPA was able to take six grab samples where access was available. The results of the sampling program are shown in Table 12-1.

**TABLE 12-1 RPA TRUE FISSURE STOCKPILE SAMPLING**
**Taranis Resources Inc. – Thor Project**

| RPA Sample No. | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| 275870 | 0.20 | 18.10 | 0.029 | 0.109 | 0.101 |
| 275871 | 1.05 | 68.80 | 0.034 | 0.109 | 0.045 |
| 275872 | 0.15 | 8.00 | 0.002 | 0.055 | 0.329 |
| 275873 | 0.26 | 39.90 | 0.019 | 0.632 | 0.665 |
| 275874 | 0.32 | 9.00 | 0.003 | 0.048 | 0.008 |
| 275875 | 0.46 | 18.10 | 0.005 | 0.03 | 0.022 |
| | | | | | |
| RPA Average | 0.41 | 26.98 | 0.015 | 0.164 | 0.195 |
| Taranis Average | 0.89 | 97.5 | 0.060 | 1.440 | 2.510 |

RPA's results were generally well below the assays reported by Taranis in 2006 but RPA attributes the discrepancy to the limited number of areas available for sampling at the time of RPA's site visit. Taranis' average is based on 24 samples taken across two lines in the summer while RPA's values are based on six samples that were taken where the depth of snow permitted. RPA's results demonstrate, however, that anomalous mineralization is found within the True Fissure stockpile.

On October 26, 2012, RPA visited the storage facility in Revelstoke where Taranis houses drill holes Thor-1 to Thor-60. The purpose of the visit was to inspect this core and to take verification samples. As noted above, one verification sample was taken on October 25, 2012 from drill hole Thor-135 which is stored on the property.

The core was stored in locked sea containers along with other equipment. Taranis reported that these arrangements were temporary and that permanent storage is to be established on-site at the Project area. No core saw was available so the remaining half-core was sampled by RPA in its entirety leaving no reference core. The start and end of the removed core interval was scribed on the box using indelible marker. The results of this sampling program are shown in Table 12-2 and include the sample from drill hole Thor-135.

**TABLE 12-2 RPA VERIFICATION SAMPLING**
**Taranis Resources Inc. – Thor Project**

| | | | Taranis Results | | | | | RPA Results | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hole-ID** | **From (m)** | **To (m)** | **Au (g/t)** | **Ag (g/t)** | **Cu (%)** | **Pb (%)** | **Zn (%)** | **Au (g/t)** | **Ag (g/t)** | **Cu (%)** | **Pb (%)** | **Zn (%)** |
| Thor-135 | 197.22 | 198.41 | 0.10 | 0.40 | 0.000 | 0.001 | 0.002 | 0.08 | 1.00 | 0.001 | 0.002 | 0.004 |
| Thor-60 | 131.89 | 132.62 | 0.26 | 2.30 | 0.001 | 0.006 | 0.001 | 0.16 | 1.00 | 0.001 | 0.004 | 0.001 |
| Thor-9 | 23.68 | 24.54 | 1.70 | 310.79 | 0.213 | 9.923 | 14.566 | 1.59 | 367.00 | 0.217 | 9.200 | 13.500 |
| Thor-38 | 29.87 | 31.09 | 0.23 | 42.22 | 0.311 | 0.004 | 0.025 | 0.70 | 32.70 | 0.389 | 0.044 | 0.033 |
| Thor-60 | 91.78 | 92.08 | 3.21 | 93.39 | 0.070 | 3.408 | 2.351 | 3.77 | 77.50 | 0.094 | 3.650 | 2.270 |
| Thor-47 | 20.03 | 20.39 | 0.63 | 712.47 | 1.002 | 8.794 | 3.043 | 1.11 | 605.00 | 0.980 | 4.270 | 1.930 |
| Thor-4 | 89.00 | 89.31 | 4.08 | 23.96 | 0.167 | 0.233 | 13.008 | 4.66 | 31.50 | 0.176 | 0.462 | 14.900 |
| Thor-53 | 23.87 | 24.17 | 1.38 | 113.61 | 0.023 | 5.485 | 37.562 | 1.27 | 250.00 | 0.312 | 6.980 | 15.100 |

RPA plotted the sample pairs on a scatter diagram and inspected the results. RPA notes that, generally, agreement is good for gold, silver, and copper results. Zinc results are skewed by one sample pair from drill hole Thor-53 and lead results affected by a duplicate pair from Thor-47. If the outlier samples are removed from their respective data sets, agreement between the two sets if better. RPA notes that, generally, the verification core samples confirm the presence of gold, silver, copper, lead, and zinc on the property.

## DATABASE VALIDATION

The database was given to RPA in an electronic Surpac project file prepared and maintained by Taranis personnel. Surpac is an industry-standard off-the-shelf software modelling and database package that is owned by Gemcom Software International Inc. (now Dessault Systèmes Geovia (Geovia)). RPA extracted the salient collar, survey, assay, and lithology data from the Surpac database and imported them into GEMS (version 6.5), another industry-standard geological software package owned by Geovia.

Once imported, RPA ran the GEMS-integrated validation routine that noted minor errors that were immediately corrected.

### *DRILL COLLARS AND DOWNHOLE SURVEYS*

The imported collar data was checked against hardcopies of the diamond drill logs and some discrepancies were noted. The drill hole database collars were then checked against original output files from the down hole survey instrument and no errors were found. A total of 67 out of 152 (44.1%) drill hole collars and were checked and found to be error-free. Approximately 14.5% of the downhole survey database was checked and no major issues were noted. Any errors or discrepancies were corrected.

### *CHANNEL SAMPLES*

Two types of channel samples were taken at Thor. The first were surface channels cut with a diamond saw and chipped using a hammer and chisel. The second were underground channels taken as chips along the back of historical excavations.

Adits, drifts, and cross-cuts comprised the underground excavations done by previous operators. These were surveyed using a total station instrument and the files were provided to Taranis. Taranis input them into the Surpac database which was forwarded to RPA. RPA was not able to verify the underground survey information but considered it to be reasonable enough to use as correlation for underground chip sample locations. Historical underground channel samples were located using a historical map obtained from the National Archives in Ottawa, Ontario. Based on the surveyed openings, some back sample locations were adjusted. RPA notes underground channels were used for modelling the mineralization but were not used in the estimation of Mineral Resources. RPA was not able to verify the position of the surface samples due to the snow at the time of the site visit but the locations appear reasonable.

### *ASSAYS*

The Surpac assay file provided to RPA contained 2,855 records. Taranis also provided original hardcopy assay certificates that RPA used to verify the results for gold, silver, copper, lead, and zinc for 183 records. This number is approximately 6.4% of the overall sample database. No significant issues were noted and minor corrections were made where required before the Mineral Resources were estimated.

### *LITHOLOGY*

Taranis provided RPA with original assay logs that RPA used to verify entries against the electronic database. A total of 227 of 3,466 drill log entries (6.5%) from 11 of 152 drill holes (7.2%) were compared to those in the Surpac database. No errors were found.

## CONCLUSIONS

In RPA’s opinion, the data is adequate for the estimation of Mineral Resources.

# 13 MINERAL PROCESSING AND METALLURGICAL TESTING

In early 2009, Taranis submitted drill core from one hole (Thor-71) to the University of British Columbia Mining Program for inclusion in a student project (Veigo and Huloszko, 2009). Testwork was done to determine minerals of interest and to propose a preliminary flowsheet for recovery of copper, lead, and zinc.

Samples were sent to SGS Minerals for assay with the results shown in Table 13-1. Deleterious elements identified included arsenic (250 ppm to 300 ppm) in all samples and mercury (up to 33 ppm) in one sample.

**TABLE 13-1 METALLURGICAL SAMPLE ASSAY SUMMARY**
**Taranis Resources Inc. – Thor Project**

| Sample No. | Ag ppm | Cu % | Pb % | Zn % |
|---|---|---|---|---|
| G9-S3 | 823 | 0.93 | 14.8 | 15.9 |
| G9-S4 | 911 | 1.05 | 14.0 | 16.4 |
| G9-S9 | 799 | 0.88 | 12.1 | 13.6 |
| G9-S10 | 936 | 1.02 | 13.5 | 13.1 |
| G9-S11 | 1,130 | 1.08 | 18.4 | 12.2 |

X-ray diffraction was used to determine the mineralogical composition of two samples as presented in Table 13-2.

**TABLE 13-2 XRD MINERAL GRAIN COUNTS**
**Taranis Resources Inc. – Thor Project**

| Mineral | Sample 1 | Sample 2 |
|---|---|---|
| Quartz | >16,000 | 3,601500 |
| Muscovite | 375 | 150 |
| Pyrite | 300 | 1,050 |
| Chalcopyrite | 200 | 250 |
| Sphalerite | 600 | 3,700 |
| Galena | 800 | 2,100 |
| Siderite | 800 | 3,100 |
| Goethite | - | 100 |

In RPA's opinion, the testwork is very preliminary and would require additional work to propose a meaningful flowsheet.

# 14 MINERAL RESOURCE ESTIMATE

## SUMMARY

The Thor Mineral Resource estimate is summarized in Table 14-1. Mineral Resources are classified based on the density of drill hole data and the continuity of both the mineralized zones and the grades.

The Mineral Resource estimates were prepared using a three dimensional (3D) block model. Mineral Resources potentially mineable by open pit are constrained within a preliminary Whittle pit shell and Mineral Resources potentially mineable by underground methods are reported outside of the pit shell.

**TABLE 14-1 THOR MINERAL RESOURCE ESTIMATE SUMMARY AT APRIL 25, 2013**
**Taranis Resources Inc. - Thor Project**

| Zone | Category | NSR Cut-off | Tonnes | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|---|---|---|
| Potential Open Pit | | | | | | | | |
| | Indicated | $50 | 471,000 | 0.91 | 204 | 0.14 | 2.77 | 3.68 |
| Potential Underground | | | | | | | | |
| | Indicated | $100 | 168,000 | 0.81 | 141 | 0.13 | 1.78 | 3.03 |
| Potential Open Pit | | | | | | | | |
| | Inferred | $50 | 189,000 | 1.28 | 218 | 0.16 | 2.70 | 3.83 |
| Potential Underground | | | | | | | | |
| | Inferred | $100 | 235,000 | 0.74 | 143 | 0.13 | 1.90 | 2.69 |
| **Total Potential OP + UG Indicated** | | | **640,000** | **0.88** | **187** | **0.14** | **2.51** | **3.51** |
| **Total Potential OP + UG Inferred** | | | **424,000** | **0.98** | **176** | **0.14** | **2.26** | **3.20** |

Notes:
1. CIM definitions were followed for Mineral Resources classification.
2. Mineral Resources are estimated at an NSR cut-off value of US$50/t for potential open pit and US$100/t for potential underground.
3. A preliminary Whittle pit was applied to constrain the potential open pit resource.
4. Mineral Resources are estimated using an average long-term gold price of US$1,650 per ounce, a silver price of US$27 per ounce, a copper price of US$3.50 per pound, a lead price of US$1.15 per pound, a zinc price of US$1.25 per pound, and a US$/C$ exchange rate of 1:1.
5. Minimum mining width of 1.5 m was used.
6. Totals may not represent the sum of the parts due to rounding.

## DATABASE

The database that was provided to RPA comprises a total of 152 surface drill holes and 185 current and historical surface and underground channel samples. The database was received in a Surpac database and the relevant data was extracted by RPA using Microsoft Access. The database contains the following main tables and fields:

- Surface diamond drill hole collars coordinates. Surface channel samples and underground chip and channel sample coordinates.

- Deviation tests (azimuths and dips).

- Assays with the following fields for each assay record:
  - Hole ID, from, to.
  - Assay certificate number.
  - Sample number.
  - Original Assays: Au (ppb), Ag (ppm), Cu (ppm), Zn (ppm), Pb (ppb), Fe (%), S (%), Specific Gravity (SG), Cd (ppm), and Sb (ppm). Gold and silver assays were converted to g/t while Cu, Pb, and Zn assays in ppm were converted to %. Assays used for resource estimation were Au, Ag, Cu, Pb, and Zn.
  - Ten historical channel samples in the database (Morgan Tunnel Cross Cut) were noted to have no assay values. These ten channels, along with historical samples dating from the 1930s, were excluded from the mineral resource estimate.

- Lithology.

- Density based on measurements on selected samples from which a formula was derived to apply to all assays.

Table 14-2 summarizes data entries of the major elements of the database.

**TABLE 14-2 DATABASE ENTRIES AS OF APRIL 25, 2013**
**Taranis Resources Inc. – Thor Project**

| Item | | Taranis | Historical |
|---|---|---|---|
| Total | Collar and Trench Locations | 337 | |
| | Diamond Drill Holes | 152 | |
| | Trench and Channel Samples | 62 | 123 |
| Total | Drill Collar and Downhole Surveys | 2,789 | |
| | Diamond Drill Holes | 2,604 | |
| | Trench and Channel Samples | 62 | 123 |
| Total | Assays | 2,845 | |
| | Diamond Drill Holes | 2,407 | |
| | Trench and Channel Samples | 312 | 126 |
| Total | Lithological Descriptions | 3,466 | |
| | Drill Hole | 3,345 | |
| | Trench and Channel | 121 | |

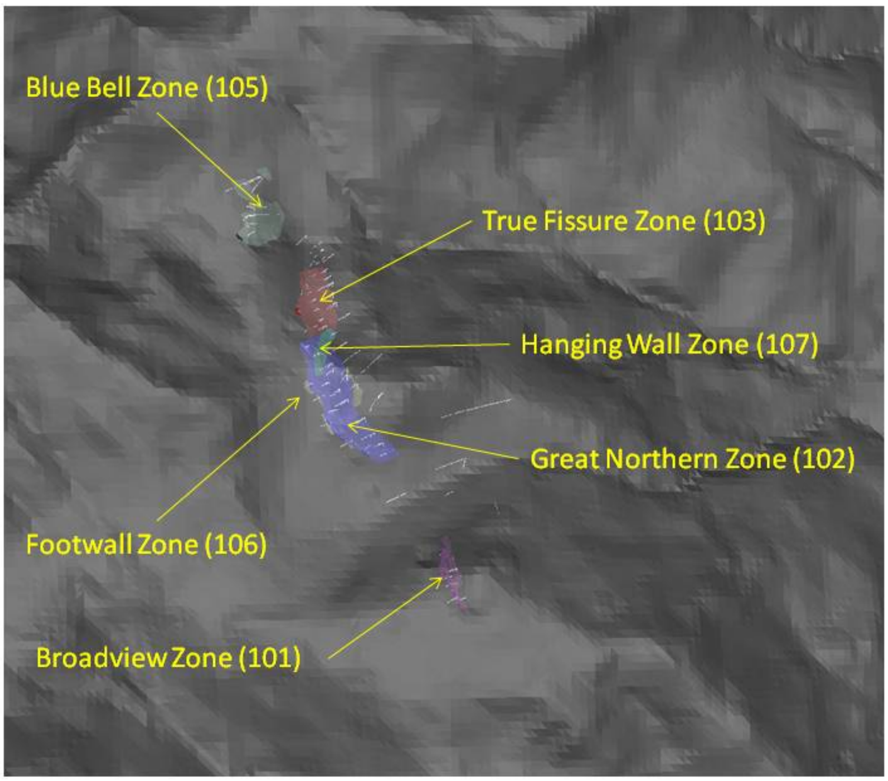
## INTERPRETATION OF MINERALIZED LENSES

There are five distinct historical mineralized zones on the Thor property. These are, from southeast to northwest, Broadview, Great Northern, True Fissure, Blue Bell, and St. Elmo. RPA interpreted each of these zones separately with the exception of Blue Bell – St. Elmo, which were in very close proximity and interpreted as the same mineralized domain. Some of these zones contain several distinct lenses and additional footwall and hanging wall lenses were identified and modelled. For convenience, each mineralized zone was assigned a numerical code, as follows:

| | |
|---|---|
| 101 | Broadview |
| 102 | Great Northern |
| 103 | True Fissure |
| 105 | Blue Bell / St. Elmo |
| 106 | Footwall |
| 107 | Hanging Wall |

Original assays from both surface drill holes and surface trenches were used for interpretation of the 3D mineralized lenses (domains). Copper, gold, silver, lead, and zinc grades for each sample were converted into dollar values based on general smelter parameters (see “Determination of NSR Values for Each Metal Unit”). Both geology and net smelter royalty (NSR) values were used for interpretation. The minimum mining width used for interpretation of the mineralized envelopes is 1.5 m. The mineralized domains were interpreted from drill holes projected on vertical cross-sections at every 25 m from approximately 1,875 MASL to 1,675 MASL, over a strike length of approximately 1,800 m (Figure 14-1). The assay database contains a number of historical channel samples. These data were used for wireframe interpretation but were not used in interpolation of grades for the Mineral Resource estimation.

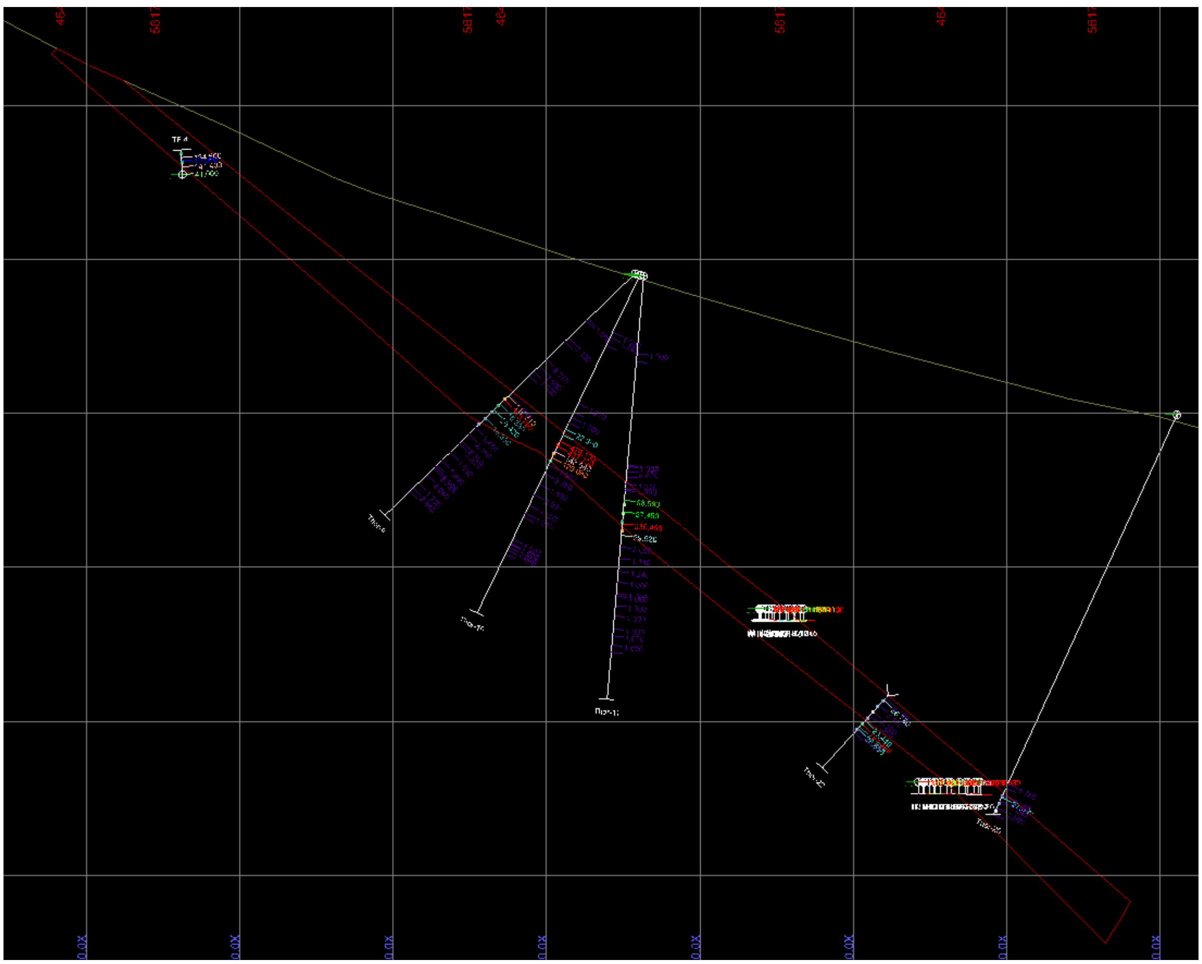
**FIGURE 14-1 THOR MINERALIZED DOMAIN MODELS WITH OVERLYING TOPOGRAPHY (LOOKING NORTH)**




RPA composited the drill hole and channel assays over a minimum 1.5 m width and constructed wireframes using a US$50 modelling cut-off value combined with lithological information. The wireframes were projected half the distance to the next drill hole or 25 m up and down dip and along strike from any intercept above the cut-off (Figure 14-2). Some areas below the modelling cut-off value were included in the wireframe envelopes to maintain geological continuity.

Due to the narrow high-grade nature of the mineralization, long intervals of unmineralized material were encountered in the drill holes. Taranis selectively sampled the drill core so that numerous non-sampled intervals are present both within and outside the wireframes. In addition to the missing sample intervals within the wireframes, faulted sections and zones of low core recovery and lost core were encountered. These intervals were included in the database and assigned zero grade for all elements but given a default density of 2.69 g/cm$^3$.

**FIGURE 14-2 VERTICAL SECTION OF THE GEOLOGICAL INTERPRETATION OF THE TRUE FISSURE ZONE LOOKING NORTH-NORTHWEST (SILVER GRADES DISPLAYED)**



The wireframes were clipped to the surface topography.

## DRILLING DENSITY

Drilling density varies significantly at Thor. Within the mineralized zones, the drill sections range from approximately 30 m apart to 120 m apart and drill hole spacing on section is in the order of 20 m to 50 m. Large gaps between zones exist and drill hole spacings are considerably wider in these areas. Due to some topographical constraints, some areas cannot be drilled.

In areas of higher drilling density, many of the sections have multiple holes drilled in a fan configuration. These holes were designed to intersect the target mineralization at different depths. Drilling efficiency is enhanced and potential environmental disturbance is minimized by using common collar locations.

## DETERMINATION OF NSR VALUES FOR EACH METAL UNIT

Since mineralization at Thor is polymetallic in nature, the gold, silver, copper, lead, and zinc assays have been combined into an NSR formula developed from general smelter parameters to obtain a dollar value for each assay (NSR $/t). It is RPA's opinion that the NSR $/t cut-off value is the most appropriate method for polymetallic Mineral Resources at Thor. The current Mineral Resource estimates are therefore based on the NSR US$50/t cut-off for resources within the mineralized zone.

In the absence of sufficient metallurgical testing, RPA used its experience in similar deposits to establish the parameters for the NSR calculations. The key assumptions and parameters of the NSR calculations are presented in Table 14-3.

## TABLE 14-3 NSR ASSUMPTIONS AND PARAMETERS
### Taranis Resources Inc. – Thor Project

| Parameter | Value |
|---|---|
| Net recovery in concentrate | Au: 90%<br>Ag: 60%<br>Cu: 78%<br>Pb: 94%<br>Zn: 95% |
| Treatment Charges | Cu: US$80/dry metric tonne<br>Pb: US$80/dry metric tonne<br>Zn: US$80/dry metric tonne |
| Refining | Au: US$5.00/oz<br>Ag: US$0.70/oz<br>Cu: US$0.08/lb<br>Pb: US$0.05/lb<br>Zn: US$0.00/lb |
| Concentrate Transport | Cu: US$200/t<br>Pb:US$80/t<br>Zn: US$80/t |
| **Metal** | **Metal Price (US$)** |
| Gold | 1,650/oz |
| Silver | 27.00/oz |
| Copper | 3.50/lb |
| Lead | 1.15/lb |
| Zinc | 1.25/lb |
| Exchange Rate | 1.0 (C$1.00 = US$1.00) |

Table 14-4 presents the metal unit values that were used to calculate the individual US$ NSR/t values for each sample interval.

## TABLE 14-4 NSR VALUE FOR EACH METAL UNIT
### Taranis Resources Inc. – Thor Project

| Elements | NSR Value per Unit |
|---|---|
| Au | $42.02 per g/t |
| Ag | $0.46 per g/t |
| Cu | $42.93 per % |
| Pb | $15.03 per % |
| Zn | $14.07 per % |

# NSR CUT-OFF VALUES

Metal prices used by RPA for Mineral Resources and Mineral Reserves are based on consensus, long term forecasts from banks, financial institutions, and other sources.

Mineral Resources are estimated using an average long-term gold price of US$1,650 per ounce, a silver price of US$27 per ounce, a copper price of US$3.50 per pound, a lead price of US$1.15 per pound, a zinc price of US$1.25 per pound, and a US$/C$ exchange rate of 1:1.

Mineral Resources potentially mineable by open pit are reported at an NSR cut-off value of US$50/t, which is rounded from the preliminary Whittle pit discard NSR cut-off value of US$54/t. RPA used an incremental NSR cut-off of US$100/t for reporting potential underground resources outside of the Whittle pit shell.

# STATISTICS

Statistical distributions of original assays within each mineralized domain were plotted using normal histograms and probability plots. Assay values within the individual lenses were grouped together. Basic statistics for uncut assays sorted by zone are summarized in Table 14-5. These data comprise surface and underground channel samples and diamond drill hole intersections and include intervals of lost core, which have been assigned zero grade values.

**TABLE 14-5 LENGTH AND DENSITY WEIGHTED UNCUT ASSAY STATISTICS WITHIN WIREFRAMES**
**Taranis Resources Inc. – Thor Project**

| Zone/Element | Min | Max | Mean |
|---|---|---|---|
| **Broadview (101)** | | | |
| Au g/t | 0.00 | 7.46 | 2.14 |
| Ag g/t | 206.00 | 1,170.69 | 540.85 |
| Cu % | 0.00 | 1.94 | 0.31 |
| Pb % | 0.00 | 23.49 | 9.48 |
| Zn % | 0.00 | 28.22 | 10.24 |
| SG t/m$^3$ | 2.69 | 4.74 | 3.16 |
| Sample Length | 0.01 | 2.56 | 0.92 |
| Count | 69 | 69 | 69 |

| Zone/Element | Min | Max | Mean |
|---|---|---|---|
| **Great Northern (102)** | | | |
| Au g/t | 0.00 | 25.22 | 0.89 |
| Ag g/t | 0.00 | 557.30 | 87.92 |
| Cu % | 0.00 | 4.32 | 0.12 |
| Pb % | 0.00 | 18.58 | 1.70 |
| Zn % | 0.00 | 45.28 | 2.11 |
| SG t/m$^3$ | 2.69 | 6.57 | 3.26 |
| Sample Length | 0.01 | 4.16 | 0.63 |
| Count | 365 | 365 | 365 |
| | | | |
| **True Fissure (103)** | | | |
| Au g/t | 0.00 | 6.25 | 0.71 |
| Ag g/t | 0.90 | 859.20 | 92.30 |
| Cu % | 0.00 | 2.12 | 0.14 |
| Pb % | 0.00 | 24.87 | 2.04 |
| Zn % | 0.00 | 41.43 | 2.25 |
| SG t/m$^3$ | 2.69 | 4.87 | 3.32 |
| Sample Length | 0.09 | 3.00 | 0.73 |
| Count | 211 | 211 | 211 |
| | | | |
| **Blue Bell/St. Elmo (105)** | | | |
| Au g/t | 0.00 | 5.88 | 0.73 |
| Ag g/t | 1.00 | 3914.00 | 378.84 |
| Cu % | 0.00 | 3.60 | 0.20 |
| Pb % | 0.00 | 67.10 | 4.11 |
| Zn % | 0.00 | 36.33 | 2.25 |
| SG t/m$^3$ | 2.69 | 5.50 | 3.45 |
| Sample Length | 0.02 | 7.46 | 0.93 |
| Count | 122 | 122 | 122 |
| | | | |
| **Footwall Zone (106)** | | | |
| Au g/t | 0.00 | 7.52 | 1.03 |
| Ag g/t | 0.80 | 438.00 | 159.73 |
| Cu % | 0.00 | 0.84 | 0.14 |
| Pb % | 0.00 | 22.81 | 3.08 |
| Zn % | 0.01 | 63.68 | 5.81 |
| SG t/m$^3$ | 2.69 | 4.71 | 3.12 |
| Sample Length | 0.15 | 4.22 | 0.87 |
| Count | 65 | 65 | 65 |
| | | | |
| **Hanging Wall Zone (107)** | | | |
| Au g/t | 0.00 | 3.57 | 0.53 |
| Ag g/t | 1.10 | 528.60 | 45.02 |
| Cu % | 0.00 | 0.24 | 0.04 |
| Pb % | 0.00 | 9.42 | 0.43 |
| Zn % | 0.00 | 3.17 | 0.26 |
| SG t/m$^3$ | 2.69 | 4.73 | 3.31 |
| Sample Length | 0.30 | 2.64 | 0.78 |
| Count | 18 | 18 | 18 |

## CAPPING OF HIGH GRADE ASSAYS

The statistics from the individual zones were compared and RPA considered them to be sufficiently statistically similar to examine capping assays on a global basis rather than on a zone by zone basis. Assay caps, or top cuts, are applied to the assay values to limit the effects of a small number of high-grade samples which may bias the average grade.

RPA employs a number of techniques in determining top cut values. For Thor, capping values were determined by examining histograms and also from statistical reports for gold, silver, copper, lead, and zinc. Capping levels are presented in Table 14-6.

**TABLE 14-6 TOP CUT CAPPING LEVELS**
**Taranis Resources Inc. - Thor Project**

| Element | Maximum Value | Capping Level | Number of Assays Capped | Reduction in Mean Grade (%) |
|---|---|---|---|---|
| Au g/t | 25.22 | 7.0 | 8 | 3.5 |
| Ag g/t | 3,914 | 1,800 | 10 | 4.0 |
| Cu % | 4.32 | 1.50 | 9 | 10.0 |
| Pb % | 67.10 | 23.0 | 9 | 4.2 |
| Zn % | 63.68 | 28.0 | 9 | 2.0 |

## BULK DENSITY

Since higher bulk density values are related to higher grades at Thor, it is important to weight assays and composites by density during the compositing process. Table 14-7 illustrates the effect of density weighting on the assay grades, whereby length weighted capped assay grades are approximately 20% to 25% higher when also weighted by density.

**TABLE 14-7 CAPPED ASSAY AVERAGES WITH AND WITHOUT DENSITY WEIGHTING (ALL ZONES)**
**Taranis Resources Inc. - Thor Project**

| Assay Mean | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| Length Weighted | 0.66 | 113.95 | 0.10 | 1.74 | 2.02 |
| Length and Density Weighted | 0.91 | 142.24 | 0.12 | 2.21 | 2.49 |
| Difference | 18.7% | 24.8% | 20.5% | 26.9% | 23.2% |

Taranis has carried out a number of bulk density determinations at two assay laboratories as well as 100 determinations on its own. All of the density determinations used the water immersion method, both with and without paraffin coating. Initial specific gravity determinations by the pycnometer method were considered to be unrepresentative of bulk density and were not used.

Of the 70 core samples with at least one density determination, 49 are mineralized with assay data and 21 are unmineralized with no assay data. For the mineralized samples, Taranis developed an algorithm to convert a combination of assay values into calculated density. The algorithm used assays for lead, zinc, copper, iron, and sulphur and was based on calculating the amounts of galena, sphalerite, chalcopyrite, and siderite and using their specific gravity values to calculate the average density of the sample. Calculated densities were compared with measured densities and correlated reasonably well overall.

Density values were calculated for all of the assayed sample intervals in the Thor database and used for compositing assays and in the resource estimation. For intervals without assays, an average density of 2.69 g/cm$^3$ was used, based on the average value of the 21 density determinations on unmineralized samples.

In RPA's opinion, the calculated densities are reasonable. Further work should be done to refine the calculations and assess if it is reasonable to apply a correction factor. The calculated densities, overall, provide a reasonable way to density weight samples in the database for use in a Mineral Resource estimate.

## COMPOSITING

Once wireframes were created, composites were generated inside the domains for resource estimation. Compositing starts down hole at the first contact with the wireframe and proceeds through at the prescribed length until the drill hole exits the domain. RPA used equal length composites based on a one metre composite length whereby composite lengths are adjusted to make all intervals for each drill hole equal if the last interval is less than the prescribed composite length. Composites were tagged according to encompassing wireframe and also tagged with the block codes that corresponded to the wireframe.

Composites were prepared from top cut assays and were density weighted. For breaks in the sample record, assay values of zero were assigned and a default density of 2.69 g/cm$^3$ was assigned.

The basic statistics for the length weighted and density weighted composites are shown in Table 14-8.

**TABLE 14-8 STATISTICS FOR LENGTH WEIGHTED AND DENSITY WEIGHTED COMPOSITES (ALL ZONES)**
**Taranis Resources Inc. - Thor Project**

| | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| Min | 0 | 0 | 0 | 0 | 0 |
| Max | 6.57 | 1,498.1 | 1.50 | 22.01 | 26.07 |
| Mean | 0.69 | 121.9 | 0.10 | 1.79 | 2.31 |
| Std Dev | 0.99 | 202.5 | 0.18 | 3.22 | 3.96 |
| C/V | 1.44 | 1.66 | 1.71 | 1.80 | 1.71 |
| Count | 541 | 541 | 541 | 541 | 541 |

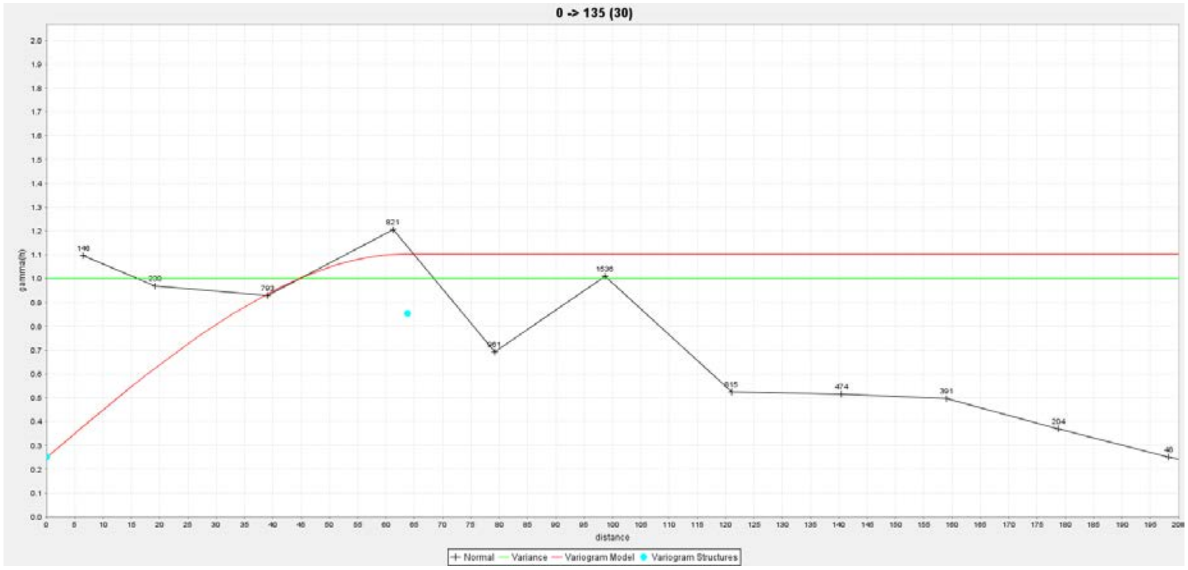
## VARIOGRAPHY AND SEARCH STRATEGY DETERMINATION

Variography was carried out on the equal length composites of all wireframes combined to determine if any anisotropy could be detected and to determine search ellipse dimensions. Two types of variograms were computed, downhole and 3D. Due to the similarity in the zone statistics, RPA concluded a single search ellipse would be adequate for all the zones.

Downhole variograms for silver were computed using one metre lags. The downhole variogram indicates a nugget effect of 25% and a range of approximately three metres.

Three dimensional variograms were computed at every 22.5° with the average attitude of the mineralized zones (strike 135°, dip -69° northeast). Variograms were not well developed, but the maximum range in the variograms was in the order of 60 m (Figure 14-3). The lack of coherent variography may be due to lack of sufficient sample pairs.

**FIGURE 14-3 THREE DIMENSIONAL VARIOGRAM IN DIP PLANE**




RPA oriented the search ellipse parallel to the general orientation of the mineralized zone wireframes, at a strike of 150° and dip of -40° northeast. Search ellipse dimensions are 60 m by 60 m in the plane of mineralization by 30 m across. A second pass ellipse was utilized to incorporate any blocks that might have been missed in the first interpolation, with dimensions of 90 m by 90 m by 30 m.

## BLOCK MODEL

To correspond to the strike of the mineralized zones, RPA rotated the block model 060° clockwise. The model comprised blocks six metres by three metres by six metres (vertical), and its geometry is summarized in Table 14-9. RPA used irregular cell dimensions due to the narrowness of the mineralized zone domains.

**TABLE 14-9 BLOCK MODEL GEOMETRY**
**Taranis Resources Inc. - Thor Project**

| | | |
|---|---|---|
| Origin | X | 463,950 |
| | Y | 5,617,700 |
| | Z | 2,200 |
| | Rotation | 60 |
| Block Size (m) | X | 6 |
| | Y | 3 |
| | Z | 6 |
| Blocks | Columns | 375 |
| | Rows | 250 |
| | Levels | 140 |
| Extent (m) | X | 2,250 |
| | Y | 750 |
| | Z | 840 |

## BLOCK CODING

Prior to grade interpolation, blocks were coded by geological wireframe based upon rock code and percentage model rule (i.e., mineralization percent inside block). The following block codes were assigned to the wireframes:

- Broadview (101)
  - Lens 1: 1011
  - Lens 2: 1012
  - Lens 3: 1013

- Great Northern Zone (102)
  - Lens 1: 102

- True Fissure Zone (103)
  - Lens 1: 103

- Blue Bell/St. Elmo Zone (105)
  - Lens 1: 1051
  - Lens 2: 1052
  - Lens 3: 1053
  - Lens 4: 1054
  - Lens 5: 1055
  - Lens 6: 1056
  - Lens 7: 1057

- Footwall Zone (106)
  - Lens 1: 1061
  - Lens 2: 1062
  - Lens 3: 1063

- Lens 4: 1064
- Lens 5: 1065
- Lens 6: 1066
- Lens 7: 1067
- Lens 8: 1068

- Hanging Wall Zone (107)
  - Lens 1: 107

- Waste (200)

## GRADE INTERPOLATION PARAMETERS

Block grade interpolation into the Thor bock model was carried out using the following parameters:

- Composite tagging: Composites tagged with a block code that corresponds to the same wireframe block code are used for grade interpolation of that wireframe. This approach is called “hard boundaries”.

- Number of drill hole composites (first pass):
  - Minimum: four composites
  - Maximum: twelve composites
  - Maximum number of composites per hole: three

- Number of drill hole composites (second pass):
  - Minimum: two composites
  - Maximum: twelve composites

    Maximum number of composites per hole: three

- Search ellipsoids:
  - RPA used an anisotropic search oriented along strike of the mineralized bodies for all zones with dimensions of 60 m by 60 m by 30 m.
  - The second search ellipse was 50% larger with dimensions of 90 m by 90 m by 30 m.

- Grade interpolation:
  - Inverse Distance Cubed ($ID^3$) method for Au, Ag, Cu, Pb, Zn, Cd, Sb, and density.
  - Parallel “nearest neighbour” and Inverse Distance Squared ($ID^2$) interpolations.
  - NSR of each block was calculated from the interpolated Au, Ag, Cu, Pb, and Zn grades. Cd and Sb were not included in the NSR calculation.

Diamond drill holes and surface and underground channel samples taken by Taranis were used in the grade interpolation. Historical channel samples from the 1930s were not used.

### UNDERGROUND EXCAVATIONS

Historical work on the Project included excavation of three adits with underground drifts and crosscuts. Some of the excavations have been surveyed while others have been digitized from maps and plans. In the case of the Broadview and Blue Bell/St. Elmo zones, mineralized domain wireframes intersect the 3D excavation solids. RPA inspected these intersections and estimated that the volume of excavations within the mineralized wireframes was in the order of 0.5%. Due to the small volume, no tonnage was deducted to account for the underground openings.

## BLOCK MODEL VALIDATION

RPA carried out validation of the block model as follows:

- Visual inspection of block grades against composite grades.
- Comparison of composite grade statistics against block model grade statistics.
- Comparison of estimate using alternate methods. RPA interpolated a "nearest neighbour" (NN) model and an $ID^2$ model and conducted a statistical comparison of results.
- Comparison of solids volume against block model volume for all domained material.

The inspection of block grades compared to drill hole composites was carried out on vertical sections. In RPA's opinion, the comparison was reasonable. Examples of block model results plotted on vertical section are shown in Appendix 2.

Table 14-10 compares the density weighted composite statistics against the $ID^3$ block statistics for all zones. RPA notes that the grades agree reasonably well.

**TABLE 14-10 COMPARISON OF DENSITY WEIGHTED COMPOSITES (ALL ZONES) TO $ID^3$ INTERPOLATION WITH ZERO CUT-OFF (ALL ZONES)**
**Taranis Resources Inc. - Thor Project**

| | Average Grade | | | | | |
|---|---|---|---|---|---|---|
| | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) | Density |
| Composite | 0.69 | 121.92 | 0.10 | 1.79 | 2.31 | 3.14 |
| Blocks | 0.72 | 129.22 | 0.11 | 1.70 | 2.41 | 3.15 |

Two alternate methods of grade interpolation were used for comparison purposes. An NN model was run in conjunction with the $ID^3$ model and then a separate $ID^2$ interpolation was done. The results of all three estimation methods are presented in Table 14-11.

## TABLE 14-11 COMPARISON OF $ID^3$, $ID^2$, AND NEAREST NEIGHBOUR INTERPOLATION RESULTS
### Taranis Resources Inc. - Thor Project

**Tonnage Weighted $ID^3$ Mean Block Model Grades (Zeros Included)**

| Zone | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| 101 | 0.52 | 92.18 | 0.16 | 0.92 | 1.39 |
| 102 | 0.68 | 168.82 | 0.12 | 2.19 | 2.87 |
| 103 | 0.64 | 88.72 | 0.07 | 1.36 | 2.55 |
| 105 | 1.24 | 154.66 | 0.14 | 1.97 | 2.64 |
| 106 | 0.32 | 81.77 | 0.08 | 0.87 | 1.22 |
| 107 | 1.34 | 90.38 | 0.08 | 2.11 | 2.19 |
| **Totals** | **0.72** | **129.22** | **0.11** | **1.70** | **2.41** |

**Tonnage Weighted NN Mean Block Model Grades (Zeros Included)**

| Zone | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| 101 | 0.63 | 103.24 | 0.17 | 0.99 | 1.42 |
| 102 | 0.71 | 201.86 | 0.14 | 2.47 | 3.21 |
| 103 | 0.65 | 93.24 | 0.08 | 1.25 | 2.74 |
| 105 | 1.32 | 142.68 | 0.12 | 1.98 | 2.23 |
| 106 | 0.35 | 79.58 | 0.07 | 0.96 | 1.34 |
| 107 | 1.31 | 114.60 | 0.10 | 2.70 | 2.27 |
| **Totals** | **0.76** | **141.70** | **0.11** | **1.82** | **2.53** |

**Tonnage Weighted $ID^2$ Mean Block Model Grades (Zeros Included)**

| Zone | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|
| 101 | 0.40 | 61.86 | 0.12 | 0.73 | 0.47 |
| 102 | 0.67 | 164.98 | 0.12 | 2.16 | 2.80 |
| 103 | 0.64 | 88.19 | 0.07 | 1.36 | 2.53 |
| 105 | 1.23 | 153.57 | 0.14 | 1.96 | 2.69 |
| 106 | 0.31 | 82.19 | 0.08 | 0.85 | 1.24 |
| 107 | 1.29 | 83.10 | 0.08 | 1.94 | 2.14 |
| **Totals** | **0.71** | **125.49** | **0.10** | **1.67** | **2.33** |

The grades agree relatively well among the three interpolation methods. The NN model, as expected, reports the highest grades. The $ID^3$ does show more smoothing of grades than the $ID^2$ estimate, but the results are acceptable.

As a final check, RPA compared the volumes reported from the block models to the cumulative volumes of the mineralized wireframes. The volumes were found to be within 0.5% of each other.

## MINERAL RESOURCE CLASSIFICATION

Mineral Resources at Thor have been classified into Indicated and Inferred categories. Classification is based on information collected as part of the grade interpolation and is based on the average distance of samples from the each block centroid. Interpolation profiles were configured to use one sample per drill hole for classification Blocks were classified using the following criteria:

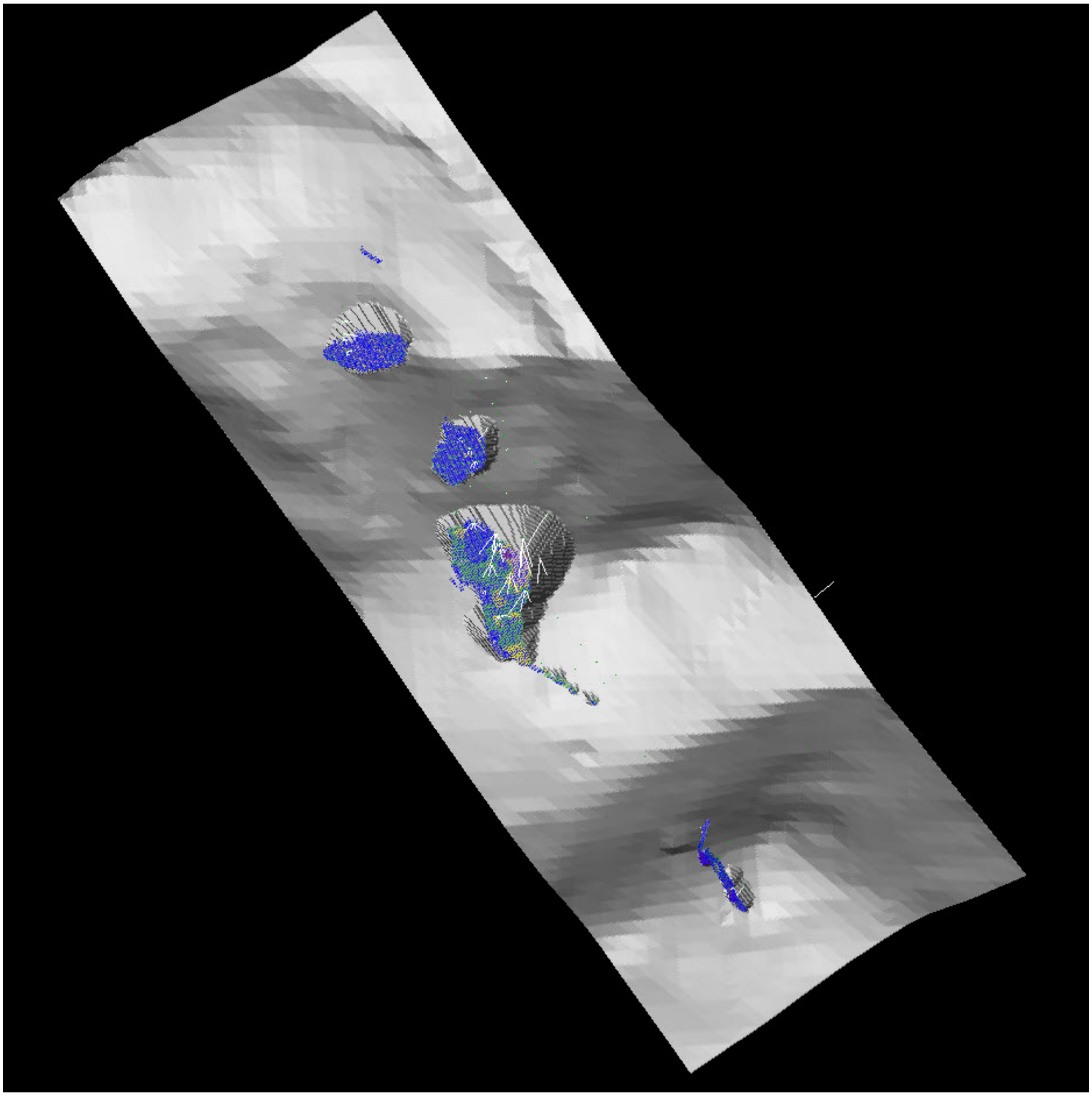
- Indicated
  - Blocks with an average distance of 25 m or less from the nearest two holes or trenches.
- Inferred
  - Blocks within 90 m of the nearest composite.

The boundaries between Indicated and Inferred were smoothed to make for more coherent areas, that is, within areas dominantly classified as Indicated under the above criteria, Inferred blocks were incorporated as Indicated, and vice versa.

## MINERAL RESOURCE ESTIMATE

In order to test for the CIM Definition Standards criteria of reasonable prospects for economic extraction required for Mineral Resources, RPA developed a preliminary Whittle open pit shell based on reasonable assumed parameters for dilution, recovery, pit slopes, and operating costs. A gold price of US$1,400 per ounce was used. Since the Gemcom block model uses a percent block approach, each partially mineralized block was diluted at zero grade to calculate the grades of a whole block. The Whittle pit shell was based on the resulting whole block model. The Whittle pit shell calculations resulted in several pit shells as shown in Figure 14-4.

**FIGURE 14-4 PRELIMINARY WHITTLE PITS WITH NSR BLOCK MODELS (LOOKING NORTH)**



Blocks inside the preliminary Whittle pit shell are considered to have reasonable prospects for economic extraction and are reported on an undiluted partial block basis at an NSR cut-off value of US$50 per tonne. This is rounded from the Whittle discard cut-off NSR value of US$54 per tonne, as noted previously.

Blocks outside the preliminary Whittle pit shell are reported at an incremental NSR cut-off value of US$100 per tonne, which RPA considers to be a reasonable assumption for potential underground mining. The boundaries of areas above the US$100 NSR cut-off value are smoothed for continuity and include some blocks with less than US$100 NSR. Similarly, isolated blocks and small clusters of blocks with NSR values above US$100 are not reported as Mineral Resource, since they are considered to be not potentially mineable underground.

Table 14-12 lists the Thor Mineral Resource estimate at an NSR cut-off value of US$50/t for potential open pit material and at an NSR cut-off of US$100/t for potential underground material for each mineralized zone. The effective date of the estimate is April 25, 2013.

**TABLE 14-12 THOR MINERAL RESOURCE ESTIMATE AT APRIL 25, 2013**
**Taranis Resources Inc. - Thor Project**

| Zone | Category | NSR Cut-off | Tonnes | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|---|---|---|
| Potential Open Pit | | | | | | | | |
| 101 | Indicated | $50 | 25,000 | 0.93 | 160 | 0.21 | 1.57 | 0.89 |
| 102 | Indicated | $50 | 269,000 | 0.78 | 231 | 0.15 | 2.99 | 3.59 |
| 103 | Indicated | $50 | 142,000 | 0.85 | 140 | 0.10 | 2.37 | 3.94 |
| 105 | Indicated | $50 | 34,000 | 2.19 | 290 | 0.21 | 3.61 | 5.38 |
| 106 | Indicated | $50 | 1,000 | 0.57 | 135 | 0.21 | 0.70 | 0.86 |
| 107 | Indicated | $50 | 1,000 | 0.64 | 57 | 0.05 | 1.31 | 2.72 |
| **Subtotal** | **Indicated** | **$50** | **471,000** | **0.91** | **204** | **0.14** | **2.77** | **3.68** |
| | | | | | | | | |
| Potential Underground | | | | | | | | |
| 101 | Indicated | $100 | 12,000 | 0.49 | 115 | 0.19 | 1.01 | 2.54 |
| 102 | Indicated | $100 | 83,000 | 0.68 | 133 | 0.09 | 1.97 | 2.68 |
| 103 | Indicated | $100 | 33,000 | 0.78 | 134 | 0.12 | 1.51 | 4.11 |
| 105 | Indicated | $100 | 39,000 | 1.20 | 172 | 0.20 | 1.86 | 3.01 |
| 106 | Indicated | $100 | 0 | - | - | - | - | - |
| 107 | Indicated | $100 | 0 | - | - | - | - | - |
| **Subtotal** | **Indicated** | **$100** | **168,000** | **0.81** | **141** | **0.13** | **1.78** | **3.03** |
| | | | | | | | | |
| Potential Open Pit | | | | | | | | |
| 101 | Inferred | $50 | 2,000 | 0.96 | 121 | 0.23 | 1.59 | 0.98 |
| 102 | Inferred | $50 | 57,000 | 0.93 | 230 | 0.15 | 2.60 | 3.25 |
| 103 | Inferred | $50 | 23,000 | 0.82 | 111 | 0.07 | 1.61 | 3.18 |
| 105 | Inferred | $50 | 53,000 | 2.21 | 309 | 0.23 | 4.68 | 5.16 |
| 106 | Inferred | $50 | 33,000 | 0.66 | 219 | 0.19 | 1.23 | 3.64 |
| 107 | Inferred | $50 | 19,000 | 1.44 | 66 | 0.09 | 1.49 | 3.31 |
| **Subtotal** | **Inferred** | **$50** | **189,000** | **1.28** | **218** | **0.16** | **2.70** | **3.83** |

| Zone | Category | NSR Cut-off | Tonnes | Au (g/t) | Ag (g/t) | Cu (%) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|---|---|---|
| Potential Underground | | | | | | | | |
| 101 | Inferred | $100 | 13,000 | 0.44 | 143 | 0.17 | 0.95 | 3.85 |
| 102 | Inferred | $100 | 108,000 | 0.61 | 136 | 0.11 | 1.82 | 3.05 |
| 103 | Inferred | $100 | 10,000 | 0.79 | 83 | 0.07 | 0.80 | 3.05 |
| 105 | Inferred | $100 | 43,000 | 1.04 | 153 | 0.17 | 1.40 | 2.46 |
| 106 | Inferred | $100 | 43,000 | 0.44 | 160 | 0.14 | 2.41 | 2.09 |
| 107 | Inferred | $100 | 18,000 | 1.62 | 151 | 0.11 | 3.59 | 1.57 |
| **Subtotal** | **Inferred** | **$100** | **235,000** | **0.74** | **143** | **0.13** | **1.90** | **2.69** |
| | | | | | | | | |
| **Total Potential OP + UG Indicated** | | | **640,000** | **0.88** | **187** | **0.14** | **2.51** | **3.51** |
| **Total Potential OP + UG Inferred** | | | **424,000** | **0.98** | **176** | **0.14** | **2.26** | **3.20** |

Notes:
1. CIM definitions were followed for Mineral Resources classification.
2. Mineral Resources are estimated at an NSR cut-off value of US$50/t for potential open pit and US$100/t for potential underground.
3. A preliminary Whittle pit was applied to constrain the potential open pit resource.
4. Mineral Resources are estimated using an average long-term gold price of US$1,650 per ounce, a silver price of US$27 per ounce, a copper price of US$3.50 per pound, a lead price of US$1.15 per pound, a zinc price of US$1.25 per pound, and a US$/C$ exchange rate of 1:1.
5. Minimum mining width of 1.5 m was used.
6. Totals may not represent the sum of the parts due to rounding

# 15 MINERAL RESERVE ESTIMATE

There are no Mineral Reserves at the Thor Project.

# 16 MINING METHODS

This section is not applicable.

# 17 RECOVERY METHODS

This section is not applicable.

# 18 PROJECT INFRASTRUCTURE

There is no infrastructure at the Project.

# 19 MARKET STUDIES AND CONTRACTS

This section is not applicable.

# 20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This section is not applicable.

# 21 CAPITAL AND OPERATING COSTS

This section is not applicable.

# 22 ECONOMIC ANALYSIS

This section is not applicable.

# 23 ADJACENT PROPERTIES

## SILVER DOLLAR

In April 2012, Happy Creek Minerals Ltd. (Happy Creek) acquired the BX Property which lies adjacent to the northern boundary of the Thor property. High grade values of lead, zinc, silver, and gold were discovered on the BX Property, formerly known as the Silver Dollar property. Numerous prospects, including the Silver Dollar and the Gillman, are part of the historical mining camp where development and limited production in the early 1900s. Road access to the property is good.

The property covers approximately nine kilometres of strike length along a 40 km-long Camborne fault and hosts numerous prospects, some of which have a history of production. In 1933, the Gillman prospect reportedly shipped between one and fourteen tonnes of mineralized material grading 62.0 g/t Au and 62.0 g/t Ag. In 1947 the Silver Pass Development Syndicate was reported to have processed six tonnes of mineralized material and recovered 9,860 g of silver, 1,378 kg of lead, and 1,009 kg of zinc from Silver Dollar.

Fragmented exploration and underground development work continued intermittently through the 1950s due to the presence of multiple small claim owners. Any material that was extracted was sent to Trail, BC or other smelters in the United States. In the early 1980s a diamond drill hole in the Silver Dollar Zone intersected 2.10 m of 1.0 g/t Au, 229 g/t Ag, 10.95% Zn, 4.04% Pb, and 0.29% Cu. A hole drilled a few years later intersected 0.70 m grading 38.0 g/t Au

Historical drilling is reported to be relatively shallow in depth and selectively sampled. Anomalous intersections remain open along strike and down dip. These holes also intersected mineralization that does not outcrop on surface.

Several styles of mineralization are present from gold-bearing iron sulphides to silver-rich galena and sphalerite. Happy Creek proposes two geological models for the area. One is a structurally controlled mineralization model and the other is a VMS-style model (Happy Creek, News Release, April 2, 2012). Mineralized zones and associated subparallel zones are related to structures that are identifiable using geophysics.

Additional claims were staked in 2012 to bring Happy Creek's current land tenure to approximately 4,690 ha. A 243 line-km Heli-GT three axis magnetic gradient and spectrometer survey was conducted by Tundra Airborne Surveys Ltd. of St. Catharines, Ontario (Happy Creek, News Release, August 21, 2012). Other reported work on the property included prospecting and LIDAR surveys (Happy Creek, News Release, December 27, 2012). Thirty-eight grab and chip samples were taken from surface and historical underground development (Happy Creek, News Release, May 16, 2013).

The spectral and magnetic airborne geophysical survey returned positive potassium signatures and encouraging thorium/potassium ratios which indicate a broad envelope around multiple northwest trending structures. Other structures were identified that are sub-parallel and oblique in orientation to the known mineralized zones.

The 2012 sampling program returned silver values ranging from 6.0 g/t Ag to 4,496 g/t Ag in grab samples and 9.0 g/t Ag over 0.5 m to 280.0 g/t Ag over 1.2 m in chip samples. Gold grades ranged from trace to 3.20 g/t Au in grab samples and 0.22 g/t Au over 1.5 m to 40.70 g/t Au over 0.4 m. Grades for grab samples for copper, lead, and zinc ranged from trace to 3.20%, 0.10% to 27.0%, and trace to 8.3% respectively. Copper channel and chip samples ranged from trace over 1.5 m to 0.30% over 1.2 m. For lead, results ranged from trace over 0.5 m to 4.10% over 1.2 m. Zinc channel chips returned values from trace over 1.5 m to 16.8% over 1.8 m (Happy Creek, News Release, May 16, 2013).

RPA has not independently verified this information and this information is not necessarily indicative of the mineralization on the property that is the subject of this technical report.

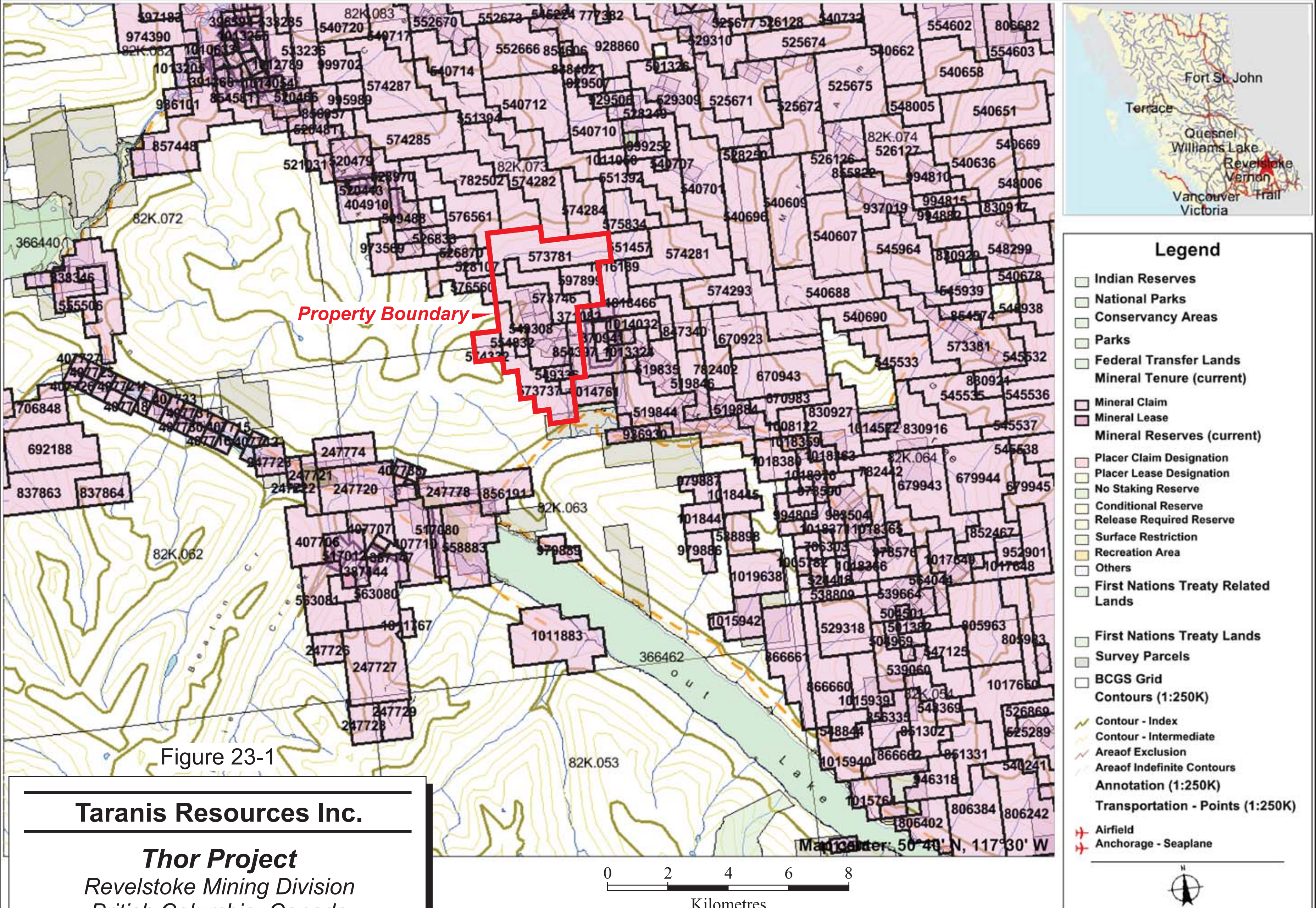



Figure 23-1

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Adjacent Properties**

This map is a user generated static output from an Internet mapping site and is for general 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.

*June 2013*

***Source: B.C. Mineral Titles Online, 2013.***

RPA

www.rpacan.com

# 24 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

# 25 INTERPRETATION AND CONCLUSIONS

RPA draws the following conclusions:

- Mineral Resources potentially mineable by open pit were estimated within a preliminary Whittle pit shell and Mineral Resources potentially mineable by underground methods were estimated outside of the pit shell.
  - Potential open pit Mineral Resources are estimated as follows, at a US$50 NSR cut-off:
    - Indicated Mineral Resources of 471,000 t grading 0.91 g/t Au, 204 g/t Ag, 0.14% Cu, 2.77% Pb, and 3.68% Zn
    - Inferred Mineral Resources of 189,000 t grading 1.28 g/t Au, 218 g/t Ag, 0.16% Cu, 2.70% Pb, and 3.83% Zn
  - Potential underground Mineral Resources are estimated as follows, at a US$100 NSR cut-off:
    - Indicated Mineral Resources of 168,000 t grading 0.81 g/t Au, 141 g/t Ag, 0.13% Cu, 1.78% Pb, and 3.03% Zn
    - Inferred Mineral Resources of 235,000 t grading 0.74 g/t Au, 143 g/t Ag, 0.13% Cu, 1.90% Pb, and 2.69% Zn

- The mineralization observed at Thor is consistent with exhalative-type deposits. Exhalative deposits include both SEDEX and VMS. The presence of the “gold-bearing cherty-exhalite cap”, which forms the Scab Zone, indicates that mineralization is consistent with a VMS-type model.

- Precious and base metal mineralization at Thor has a strong stratigraphic control and is emplaced along a major stratigraphic contact between the LCS and UGS. Tuffaceous green volcanic rocks lie along this contact and commonly accompany the sulphide mineralization (CMU).

- The known mineralization occurs along a major structural feature referred to as the Thor Antiform, including a small outlier called the Thor North Antiform. This is bounded to the east by the Thor Synform and to the west by the Great Northern Synform.

- Exploration done at Thor to date has been systematic and designed using sound geological principles. The work has generally been conducted in a manner consistent with industry standards.

- Ground magnetic surveys are useful in mapping out geological formations, such as tuffaceous sedimentary rocks, which are spatially associated with mineralization. VLF-EM surveys successfully identified the mineralized contact between the UGS and the LCS and other geological features. The potential chargeability of the carbonaceous sediments carries the risk of limiting the effectiveness of IP and conventional EM surveys.

- Magnetic surveys identified tuffaceous sediments in the north and west parts of the Project. Anomalies were coincident with magnetic anomalies, soil geochemistry anomalies, trenched and pitted zones, faults, gossanous material, and the Thor Antiform and its contacts.

- Soil geochemical sampling appears to be an effective exploration tool at Thor. Results generally support geophysical and geological information.

- The diamond drilling conducted on the Project was done in a manner consistent with industry standards. Despite some early core recovery issues, the results generated from the exploration and drilling programs are suitable for use in a Mineral Resource estimate.

- The sampling methods, sample security, and chain of custody protocols followed by Taranis are adequate. The assay procedures and protocols employed by the independent laboratories are industry standard and are sufficient to produce reasonable results which are appropriate for use in Mineral Resource estimation.

- RPA took verification core samples and confirmed the presence of Au, Ag, Cu, Pb, and Zn on the property. RPA was also able to independently confirm the presence of precious and base metal mineralization on the True Fissure stockpile.

- QA/QC did not include the insertion of blanks, CRM, or duplicate samples into the assay sample stream. RPA and Taranis attempted to ameliorate the situation by conducting duplicate analyses on 195 sample pulps stored by ACME Laboratories in Vancouver, BC. These pulps were sent to another independent laboratory for analysis. The results of this program, despite a few outlier values, were reasonable and provided a check on the accuracy of the original assay results in the drill hole database.

- In RPA's opinion, the method used to calculate the densities of each sample based on analytical data, overall, provide a reasonable way to density weight samples in the database for use in a Mineral Resource estimate.

- There is potential for additional mineralization to be discovered at Thor. Additional diamond drilling is warranted to both expand and upgrade the present Mineral Resource estimate. There are numerous exploration targets on the property that warrant further drilling.

# 26 RECOMMENDATIONS

RPA makes the following recommendations:

- In addition to interpretation as a VMS model, continue evaluation of exploration data with respect to other potential deposit models.

- Conduct a soil sampling program between the Great Northern Zone area and the Meadow Grid and the Mega-Gossan target area on the Westmin portion of the property.

- Carry out follow-up work on the Little Grid to find the source of the widespread low-grade gold mineralization as it may be an extension of the mineralization observed in a parallel zone located 150 m northeast of Blue Bell (Ridge Target).

- Conduct trenching and drilling on the SIF Zone and between the Great Northern Grid and the Meadow Grid to verify geophysical and soil geochemistry targets and investigate the unique "cherty-exhalite" style of gold mineralization found there.

- As a means of systematically assessing mineralization at the topographically challenging Scab Zone, conduct a sampling program using a hand-operated breaker (plugger holes).

- Carry out a RQD program on available core and any subsequent drilling.

- Conduct an oriented drill core program to better understand the orientation of major and minor structures and assist in pit slope and/or underground mine design.

- Enhance drill core management by building core racks. The core, once centralized, can be more easily secured. RPA also recommends that three-tag drill core sampling books be employed so that one tag may be stapled to the core box at the start of each sample interval. Metal tape embossed with relevant hole data should also be stapled to the end of each core box to assist in future core reference.

- Implement an industry standard QA/QC program consisting of regular core, reject, and pulp duplicate analysis at a secondary independent laboratory. In addition, commercially available CRMs that represent the polymetallic nature of the mineralization and include blanks should be inserted into the sample stream. Results from this program should be scrutinized immediately upon receipt and any discrepancies reported to the primary laboratory.

- Conduct a metallurgical test program to assess recoverability of gold, silver, copper, lead, and zinc from the mineralization at Thor. Investigate the basic mineralogical characteristics, grindability characteristics, potential gravity concentration of silver and gold, flotation response to a typical polymetallic flowsheet conditions, and environmental characteristics of the flotation tailings.

- Consider conducting a study on the age of the host lithologies and the mineralization at Thor to gain greater insight into the host geological environment and processes of sulphide deposition.

- Complete further bulk density measurements on existing drill core and any new core to better understand the distribution of density at Thor. Further work should also be done to refine the stoichiometric density calculations and assess if it is reasonable to apply a correction factor.

Taranis has prepared the following program and budget on the Project (Tables 26-1, 26-2, and 26-3). A total of 26 trenches, 14 diamond drill holes, and 44 plugger holes are planned. RPA concurs with the proposed program and budget. Locations for the proposed diamond drilling and trenching are shown in Appendix 3.

**TABLE 26-1 PROPOSED TRENCHING**
**Taranis Resources Inc. - Thor Project**

| Zone | Number of Trenches | Estimated Length (m) | Target (Anomaly) |
|---|---|---|---|
| Little Grid | 1 | 70 | Float |
| Mega Gossan | 1 | 170 | |
| Ridge Zone | 4 | 230 | Conductor “Q”, Road |
| West Limb | 2 | 75 | |
| SIF Zone | 2 | 100 | |
| West of SIF | 1 | 40 | Geochemical |
| SIF/Scab Zone | 1 | 40 | |
| Scab/Great Northern | 1 | 60 | |
| Great Northern | 4 | 210 | |
| Conductor “K” | 7 | 510 | Geochemical |
| Various Geochemical Targets | 2 | 100 | |
| **Total** | **26** | **1,600** | |

## TABLE 26-2 PROPOSED DRILLING
**Taranis Resources Inc. - Thor Project**

| Proposed Hole | Objective/Description |
|---|---|
| Thor-P1 | Gold Pit, Conductor "K" and Geochemical Target |
| Thor-P2 | West side of Thor Antiform - Conductor |
| Thor-P3 | Conductor "K" and Geochemical Target |
| Thor-P4 | Area north of Great Northern Adit and Dump |
| Thor-P5 | Conductor "K" and Geochemical Target |
| Thor-P6 | Conductor "M" and Geochemical Target |
| Thor-P7 | SIF Zone - Meadow Area |
| Thor-P8 | SIF Zone - Meadow Area |
| Thor-P9 | Conductor "O", northern Extension of Blue Bell Zone |
| Thor-P10 | Ridge Target - Conductor "R" |
| Thor-P11 | Ridge Target - Conductor "R", drilled from Ridge Top |
| Thor-P12 | Mini Grid - Float Area |
| Thor-P13 | Mini Grid - Float Area |
| Thor-P14 | Mega-Gossan target |
| **Total Proposed Length** | **5,000 m** |

## TABLE 26-3 PROPOSED EXPLORATION BUDGET
**Taranis Resources Inc. - Thor Project**

| Activity | Cost Estimate (C$) |
|---|---|
| Diamond drilling (14 holes) 5,000 m @ C$175/m | 875,000 |
| Mobilization and Demobilization | 75,000 |
| Trenching 200 hrs @ C$50/hr | 10,000 |
| Assays 8,000 @ C$30/sample | 240,000 |
| Plugger Holes (44, Scab Zone) 2,200 m @ C$125/m | 275,000 |
| Labour | 50,000 |
| Reports | 25,000 |
| Travel and related | 30,000 |
| Camp Costs | 40,000 |
| Equipment Rental | 5,000 |
| Metallurgical Study (Lakefield) | 59,500 |
| Update NI 43-101 with Scab Zone Results | 50,000 |
| **Subtotal** | **1,734,500** |
| Contingency (10%) | 173,450 |
| **Total** | **1,907,950** |

# 27 REFERENCES

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Veiga M. & Huloszko M. (UBC) April 2009 Mine 338 – Final Report. Polymetallic Ore from Taranis Resources Inc.

# 28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Thor Project, British Columbia, Canada" and dated June 3, 2013, was prepared and signed by the following author:

**(Signed & Sealed) "*Barry McDonough*"**

Dated at Vancouver, BC
June 3, 2013

Barry McDonough, P.Geo.
Senior Geologist

# 29 CERTIFICATE OF QUALIFIED PERSON

## BARRY MCDONOUGH

I, Barry McDonough, P.Geo., as an author of this report entitled “Technical Report on the Thor Project, British Columbia, Canada”, prepared for Taranis Resources Inc. and dated June 3, 2013, do hereby certify that:

1. I am Senior Geologist with Roscoe Postle Associates Inc. My office address is Suite 388, 1130 West Pender Street, Vancouver, British Columbia, Canada V6E 4A4.

2. I am a graduate of McMaster University, Hamilton, Ontario, in 1986 with a B.Sc. degree in Geology.

3. I am registered as a Professional Geoscientist in the Province of British Columbia (Reg. #30663). I have worked as a geologist for a total of 26 years since my graduation. My relevant experience for the purpose of the Technical Report is:
   - Geologist at a number of Canadian open pit and underground operations
   - Management of underground geological operations, mineral reserve modelling, grade control
   - Planning and supervision of exploration programs

4. 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.

5. I visited the Thor Project on October 25, 2012.

6. I am responsible for all sections of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I have had no prior involvement with the property that is the subject of the Technical Report.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 3rd of June, 2013

**(Signed & Sealed) “*Barry McDonough*”**

Barry McDonough, P.Geo.

# 30 APPENDIX 1

## 2012 SOIL SAMPLE RESULTS

**FIGURE 30-1 MEADOW GRID – GOLD (LOG 10) IN SOIL RESULTS**

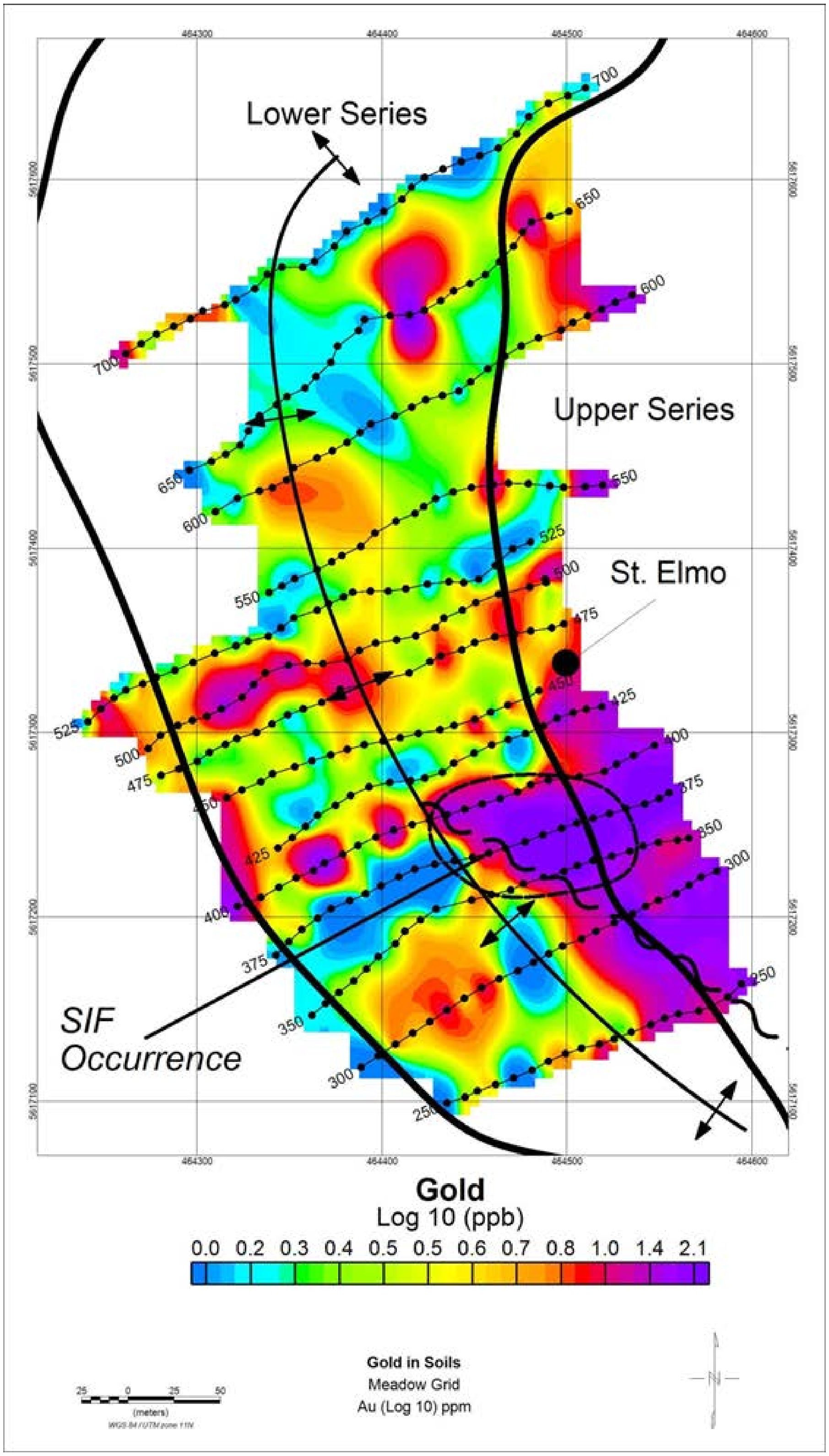


**FIGURE 30-2 MEADOW GRID – SILVER IN SOIL RESULTS**

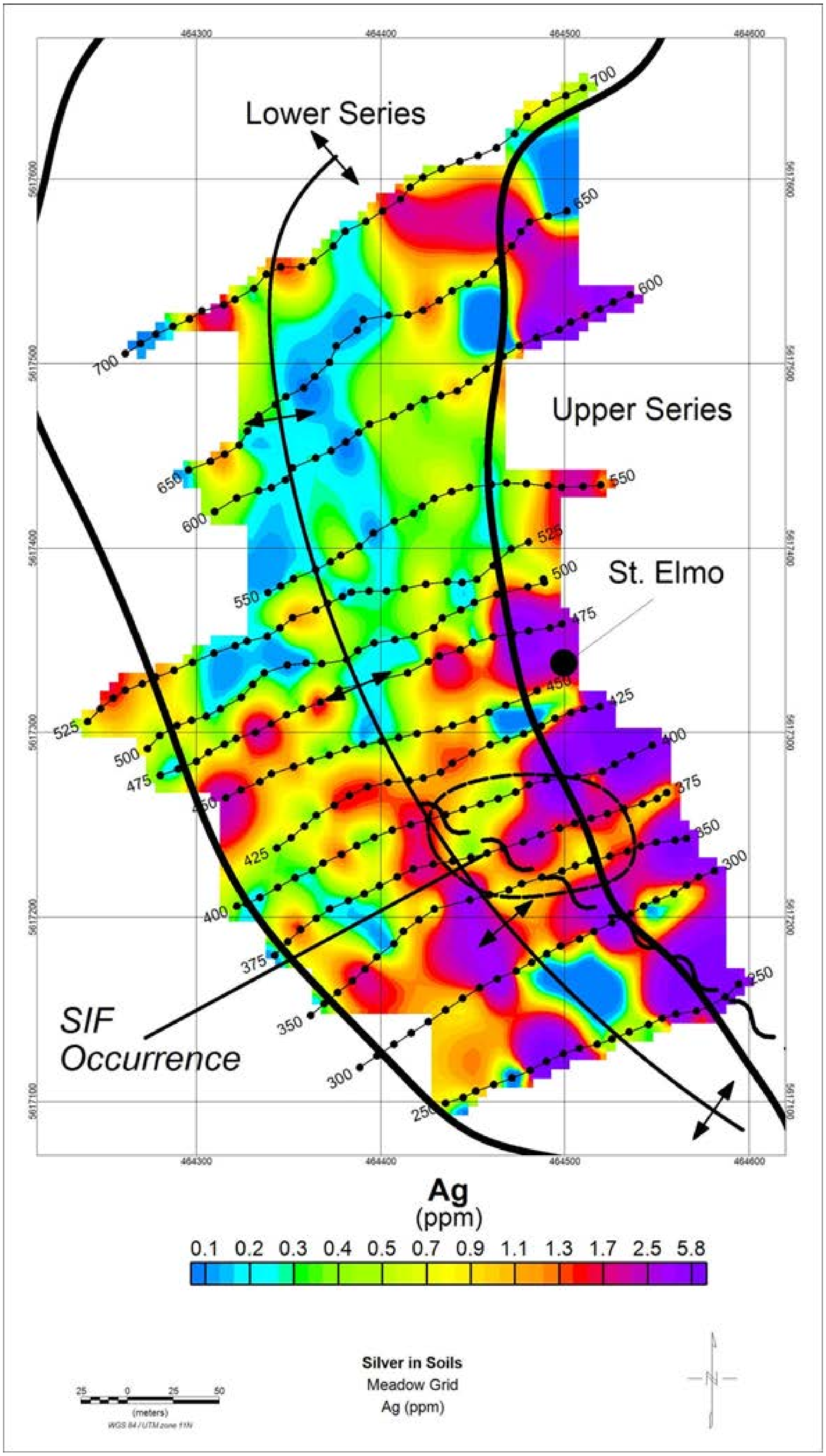
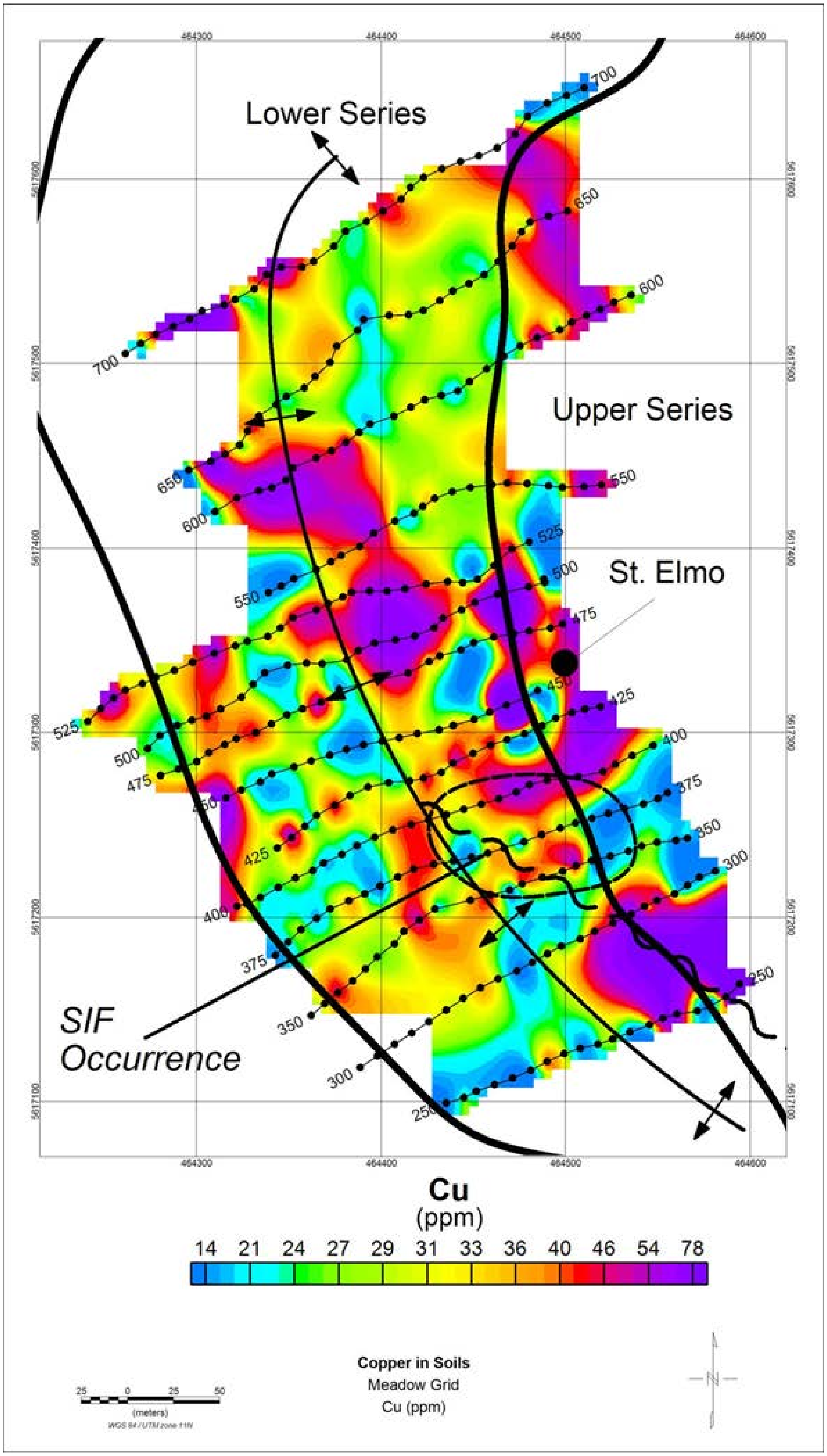


**FIGURE 30-3 MEADOW GRID – COPPER IN SOIL RESULTS**



## FIGURE 30-4 MEADOW GRID – LEAD IN SOIL RESULTS

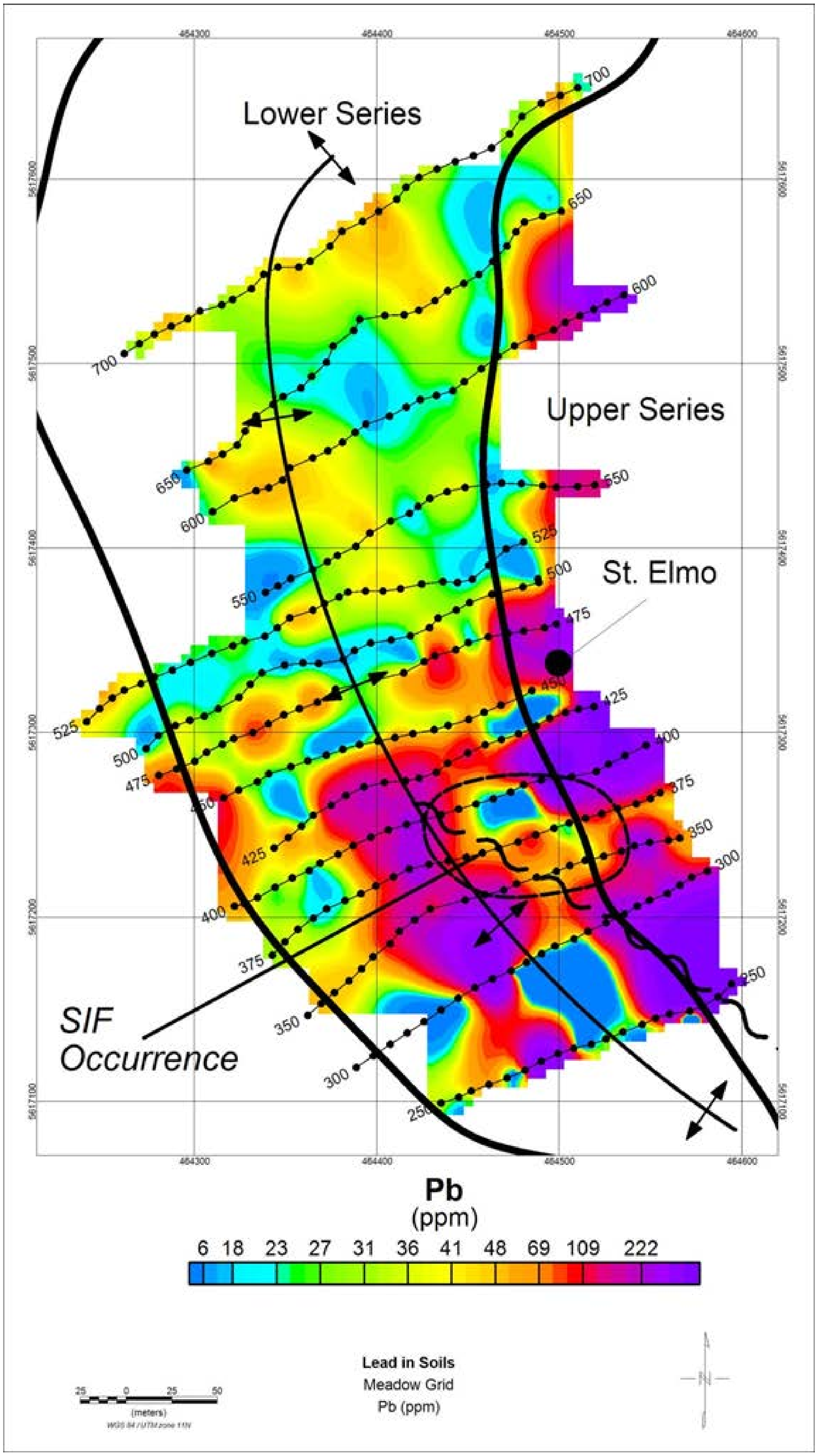


**FIGURE 30-5 MEADOW GRID – ZINC IN SOIL RESULTS**

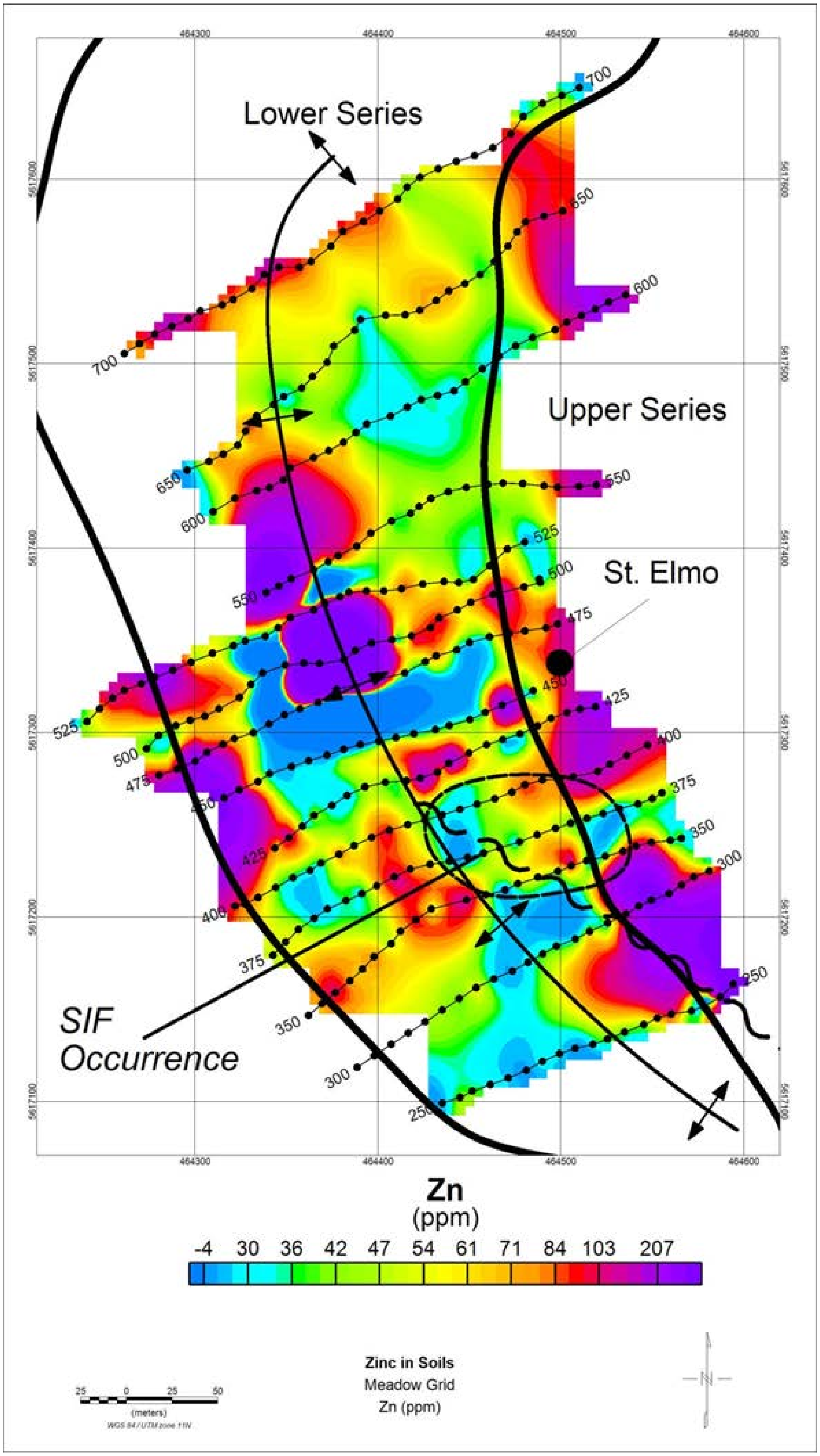


**FIGURE 30-6 GREAT NORTHERN GRID – GOLD IN SOIL RESULTS**

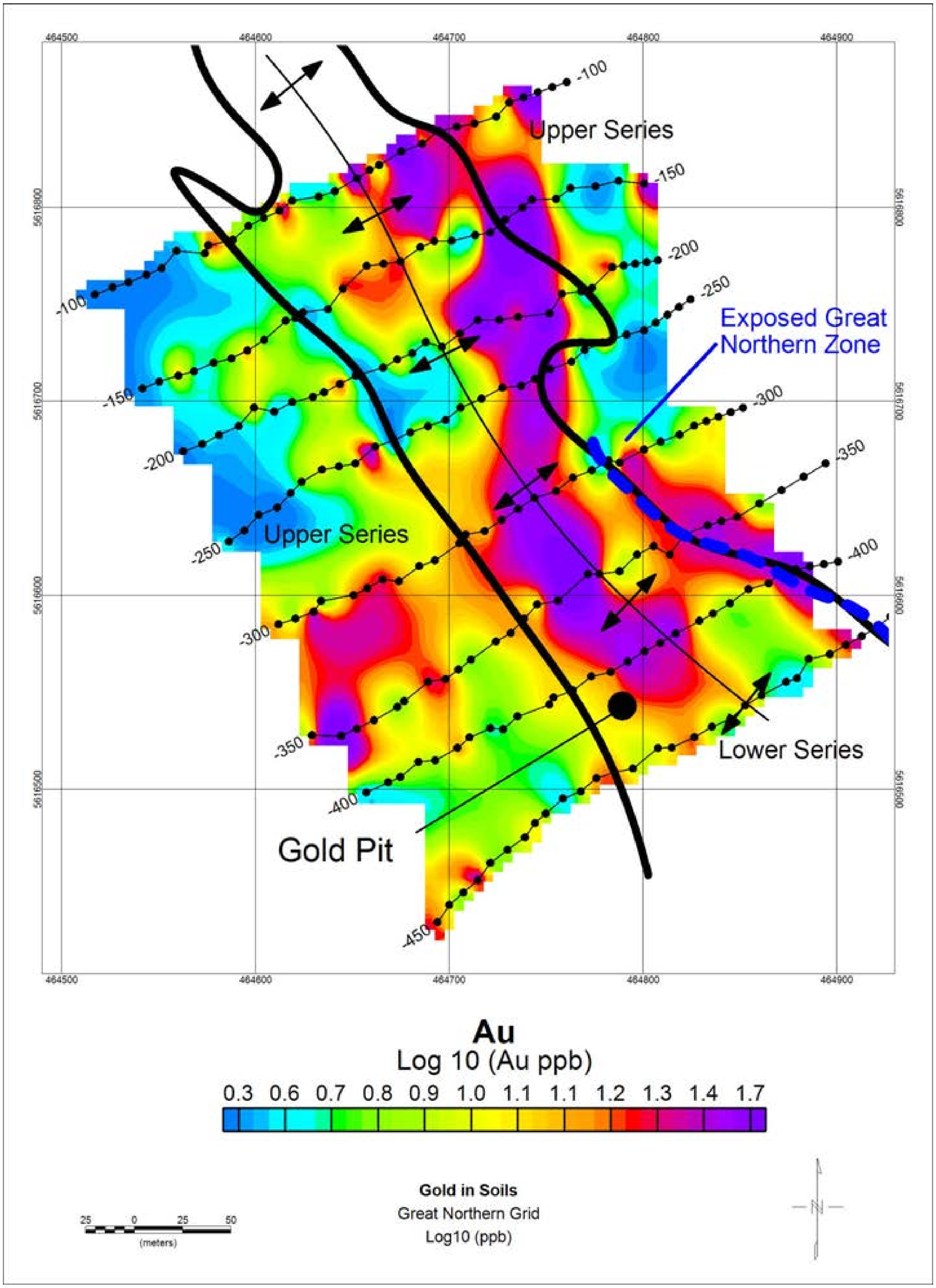


**FIGURE 30-7 GREAT NORTHERN GRID – SILVER IN SOIL RESULTS**

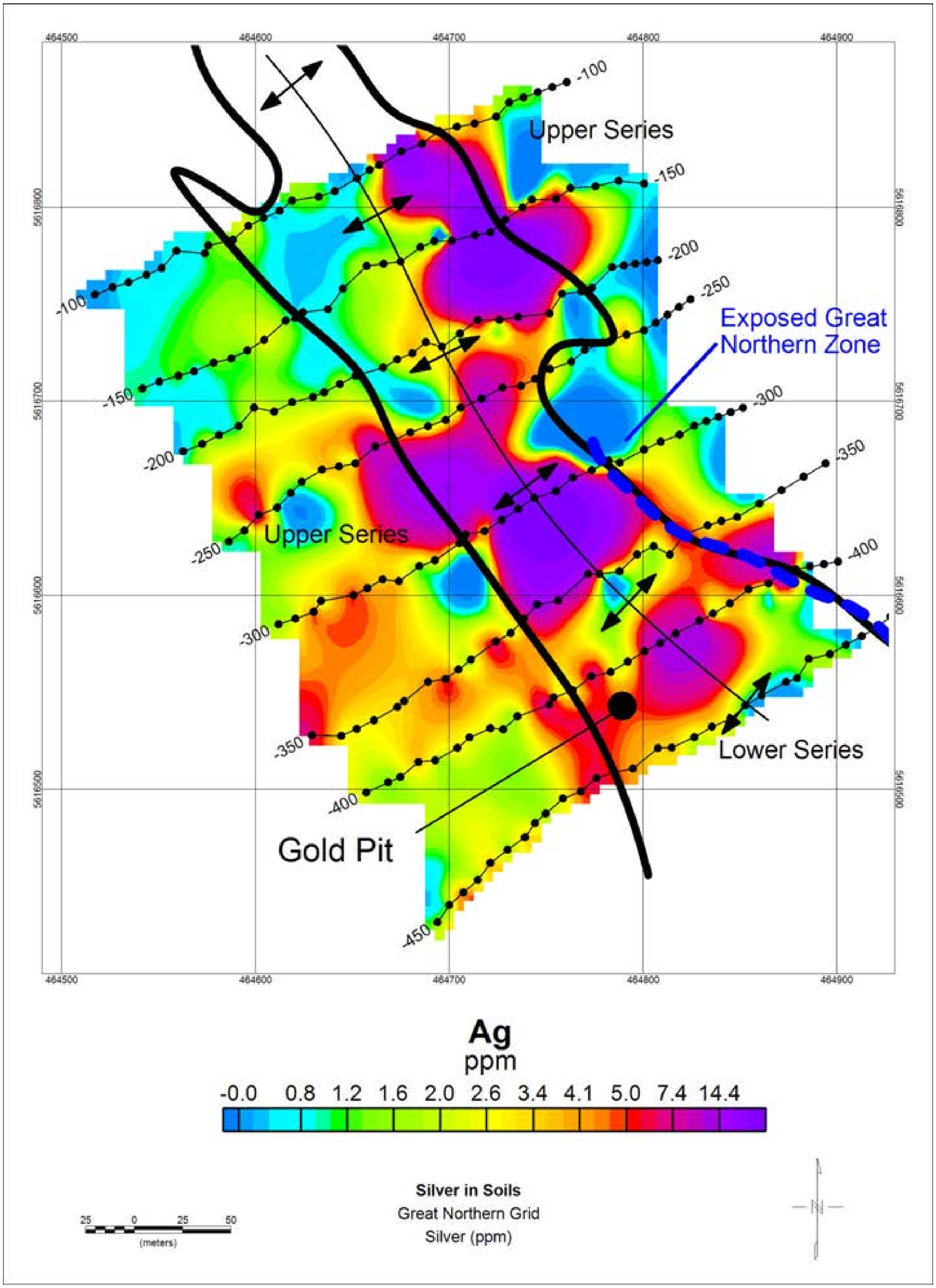


**FIGURE 30-8 GREAT NORTHERN GRID – COPPER IN SOIL RESULTS**

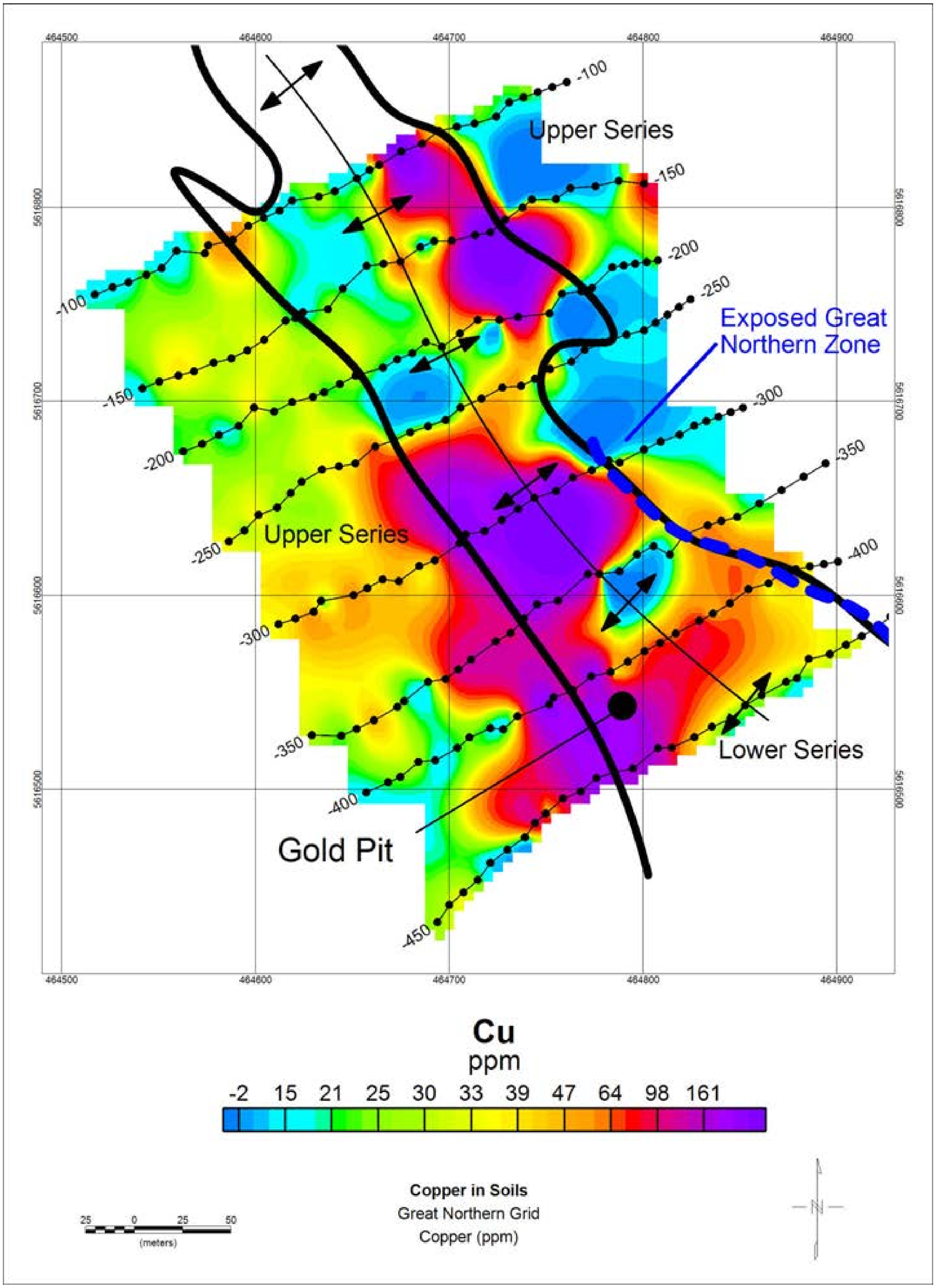


**FIGURE 30-9 GREAT NORTHERN GRID – LEAD IN SOIL RESULTS**

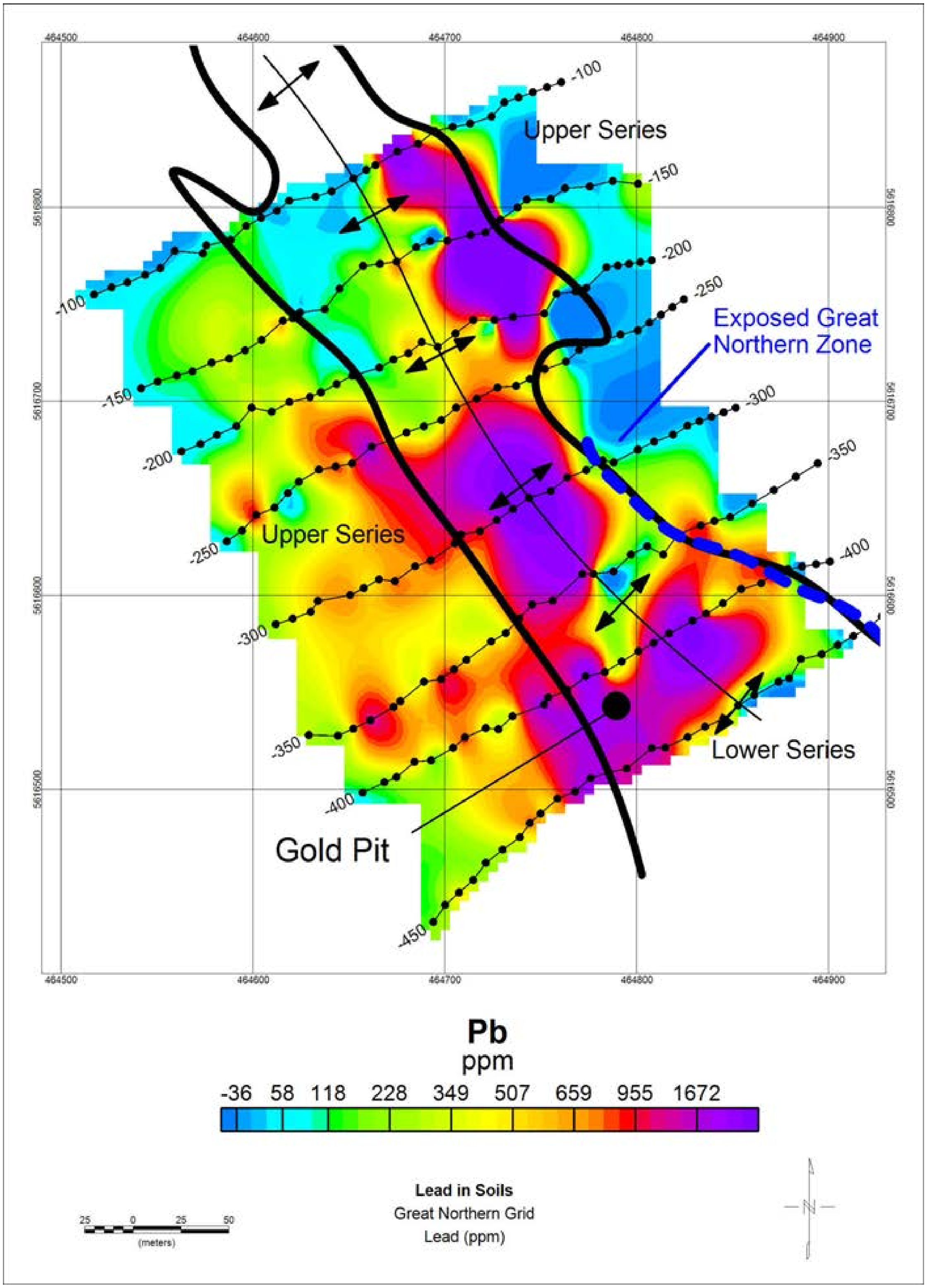
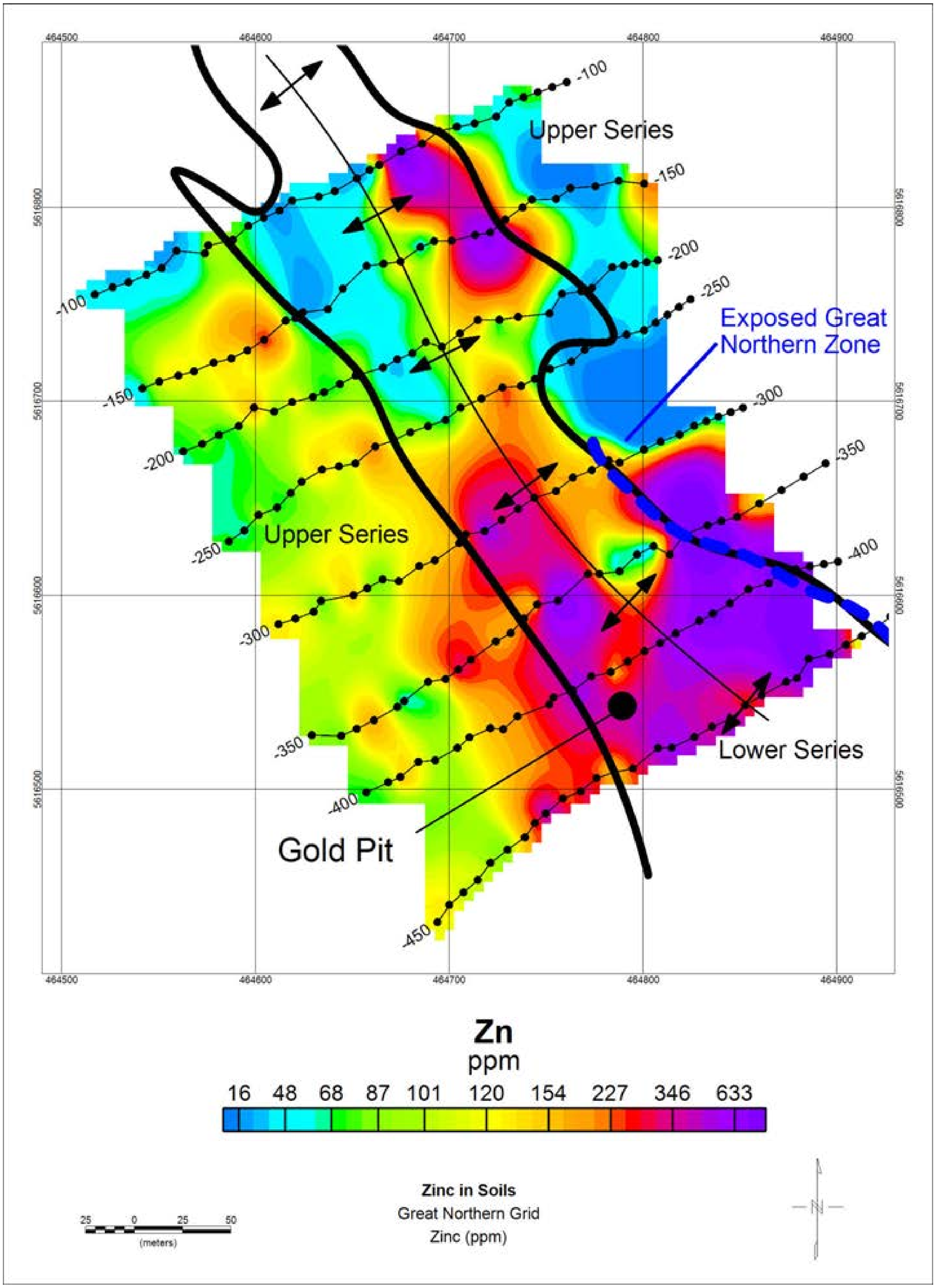


**FIGURE 30-10 GREAT NORTHERN GRID – ZINC IN SOIL RESULTS**



# 31 APPENDIX 2

## EXAMPLES OF BLOCK MODELS ON VERTICAL SECTION BY ZONE

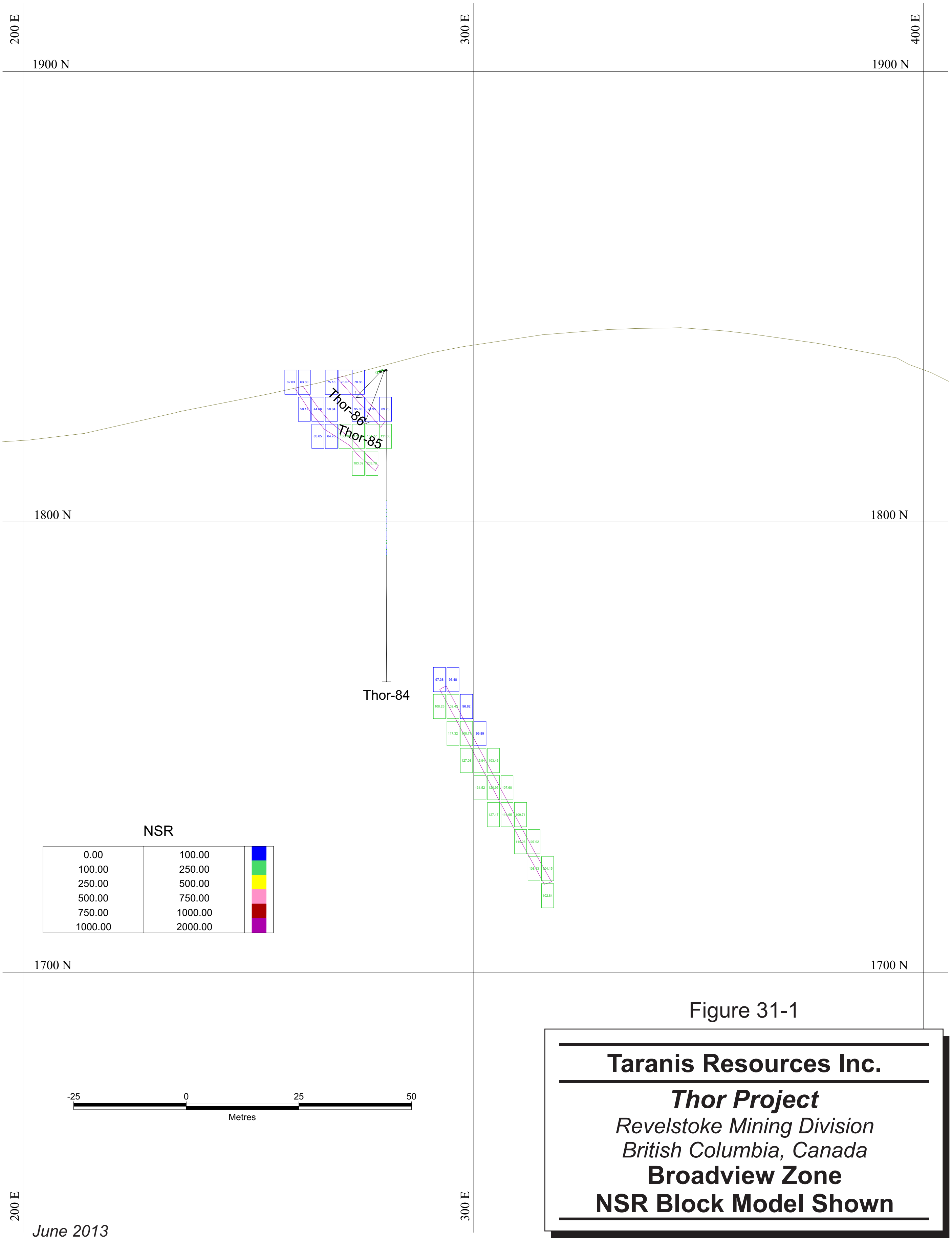



Figure 31-1

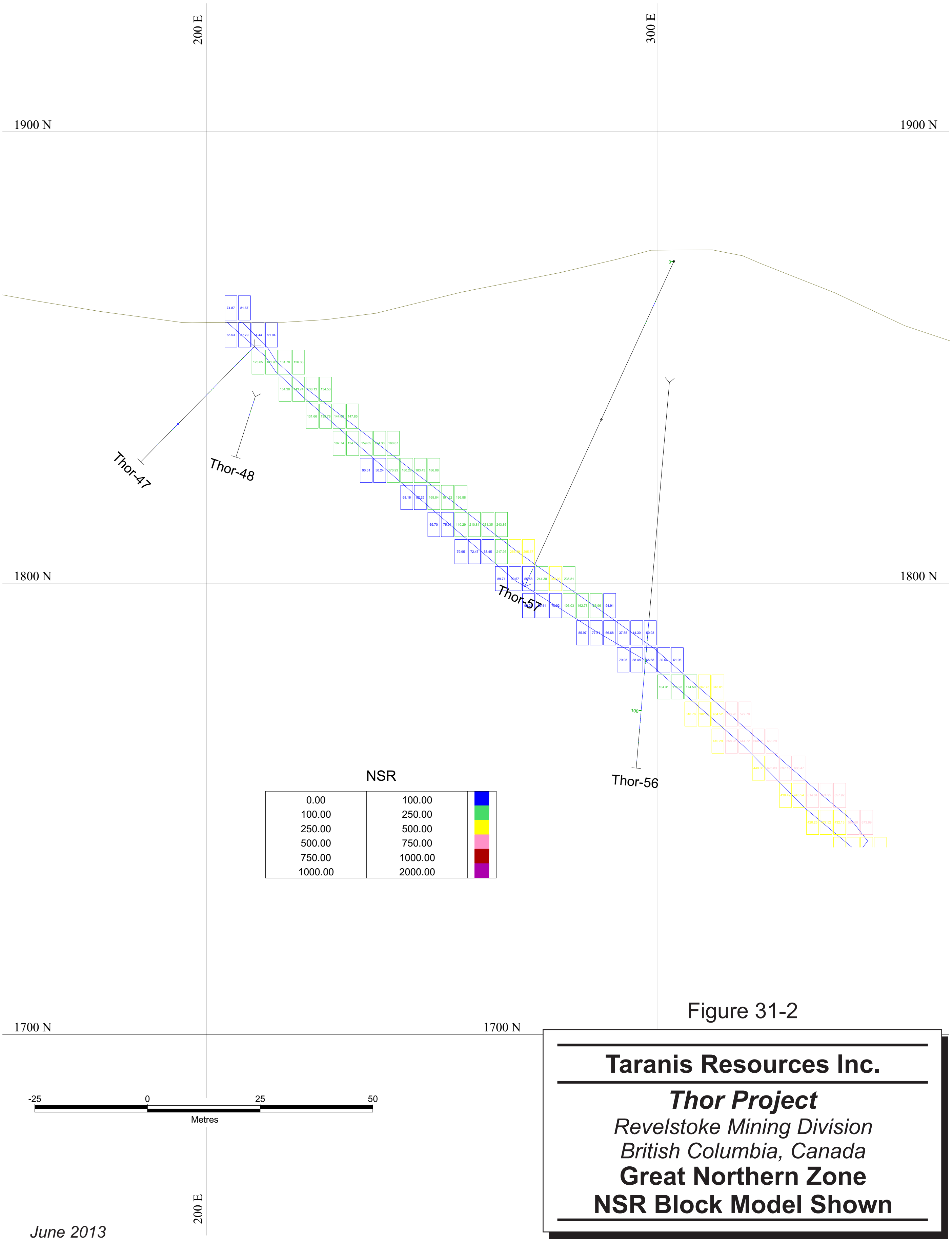
**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Broadview Zone**
**NSR Block Model Shown**

*June 2013*




NSR

| | | |
|---|---|---|
| 0.00 | 100.00 | |
| 100.00 | 250.00 | |
| 250.00 | 500.00 | |
| 500.00 | 750.00 | |
| 750.00 | 1000.00 | |
| 1000.00 | 2000.00 | |

Figure 31-2

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*
*British Columbia, Canada*

**Great Northern Zone**
**NSR Block Model Shown**

*June 2013*

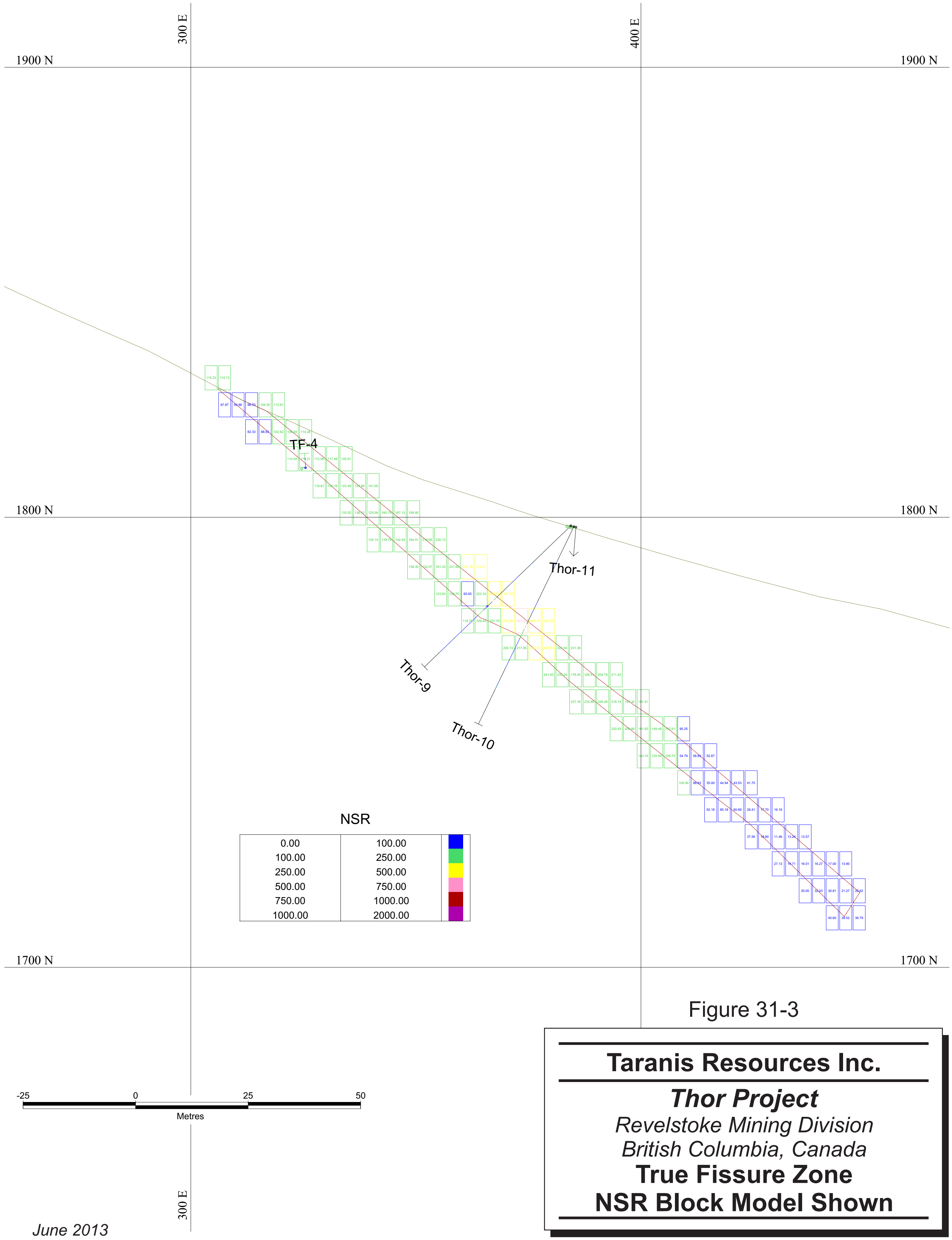



Figure 31-3

**Taranis Resources Inc.**

***Thor Project***

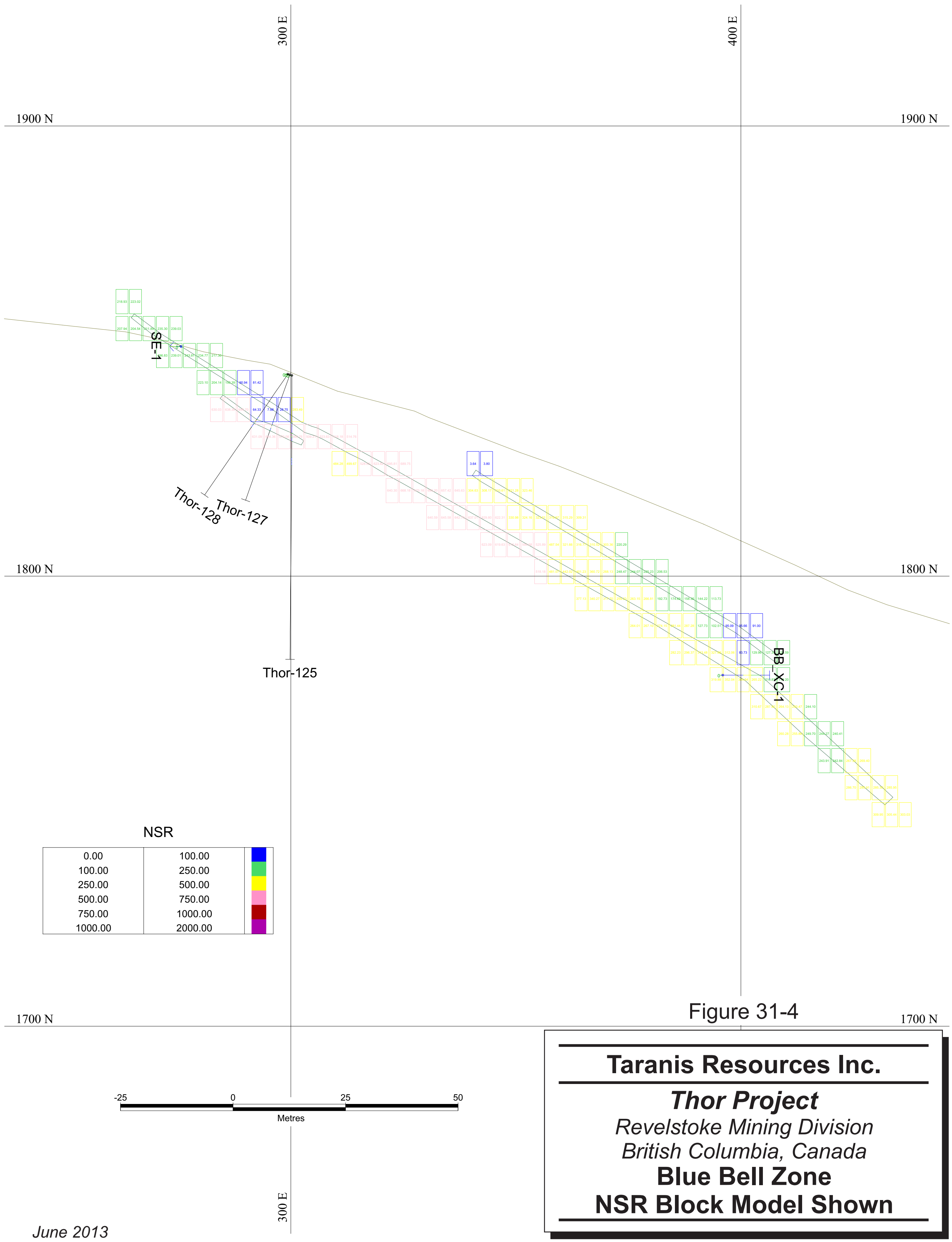
*Revelstoke Mining Division*

*British Columbia, Canada*

**True Fissure Zone**

**NSR Block Model Shown**

*June 2013*




NSR

| | | |
|---|---|---|
| 0.00 | 100.00 | |
| 100.00 | 250.00 | |
| 250.00 | 500.00 | |
| 500.00 | 750.00 | |
| 750.00 | 1000.00 | |
| 1000.00 | 2000.00 | |

Figure 31-4

**Taranis Resources Inc.**

***Thor Project***

*Revelstoke Mining Division*

*British Columbia, Canada*

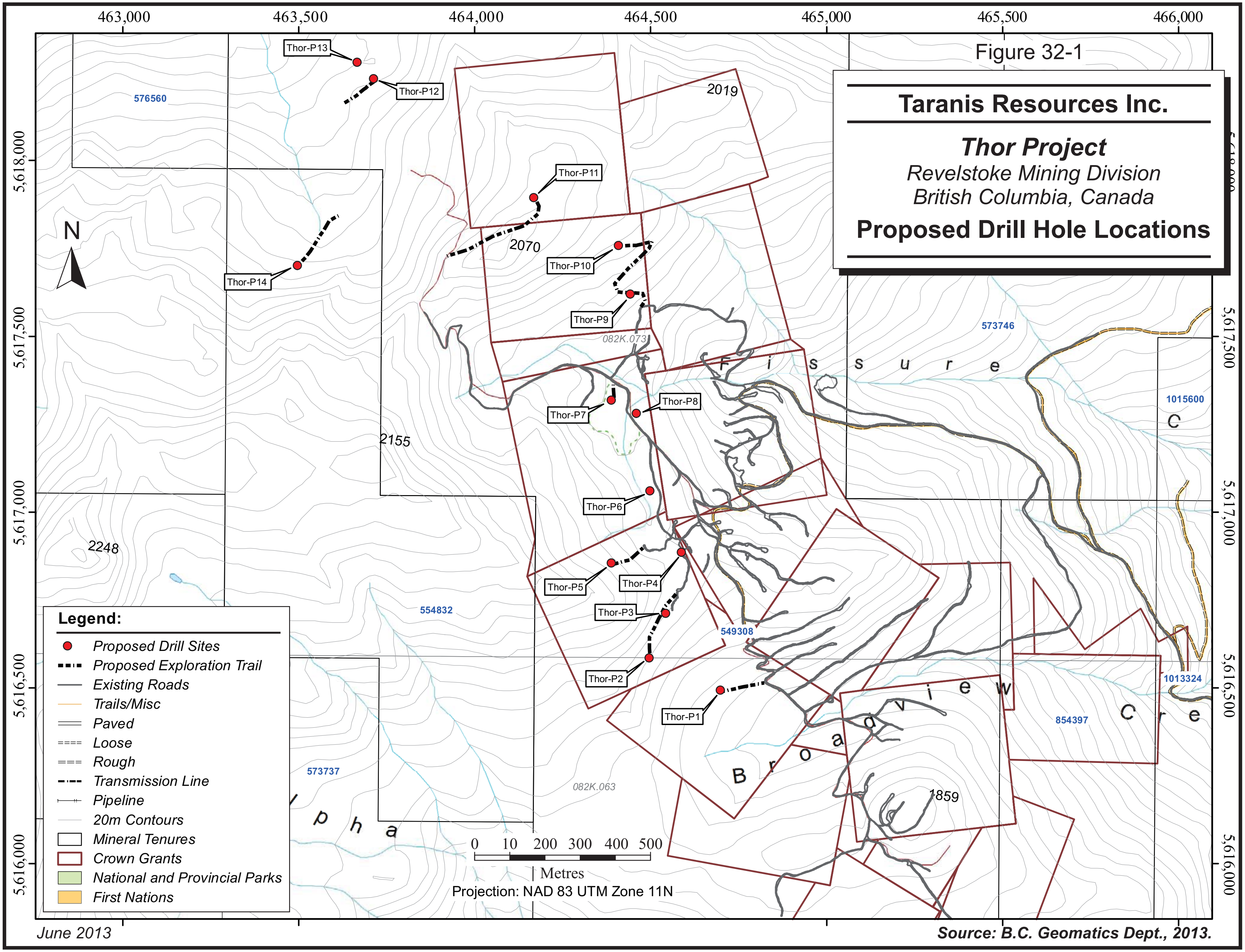
**Blue Bell Zone**

**NSR Block Model Shown**

*June 2013*

# 32 APPENDIX 3

## PROPOSED EXPLORATION LOCATIONS



www.rpacan.com

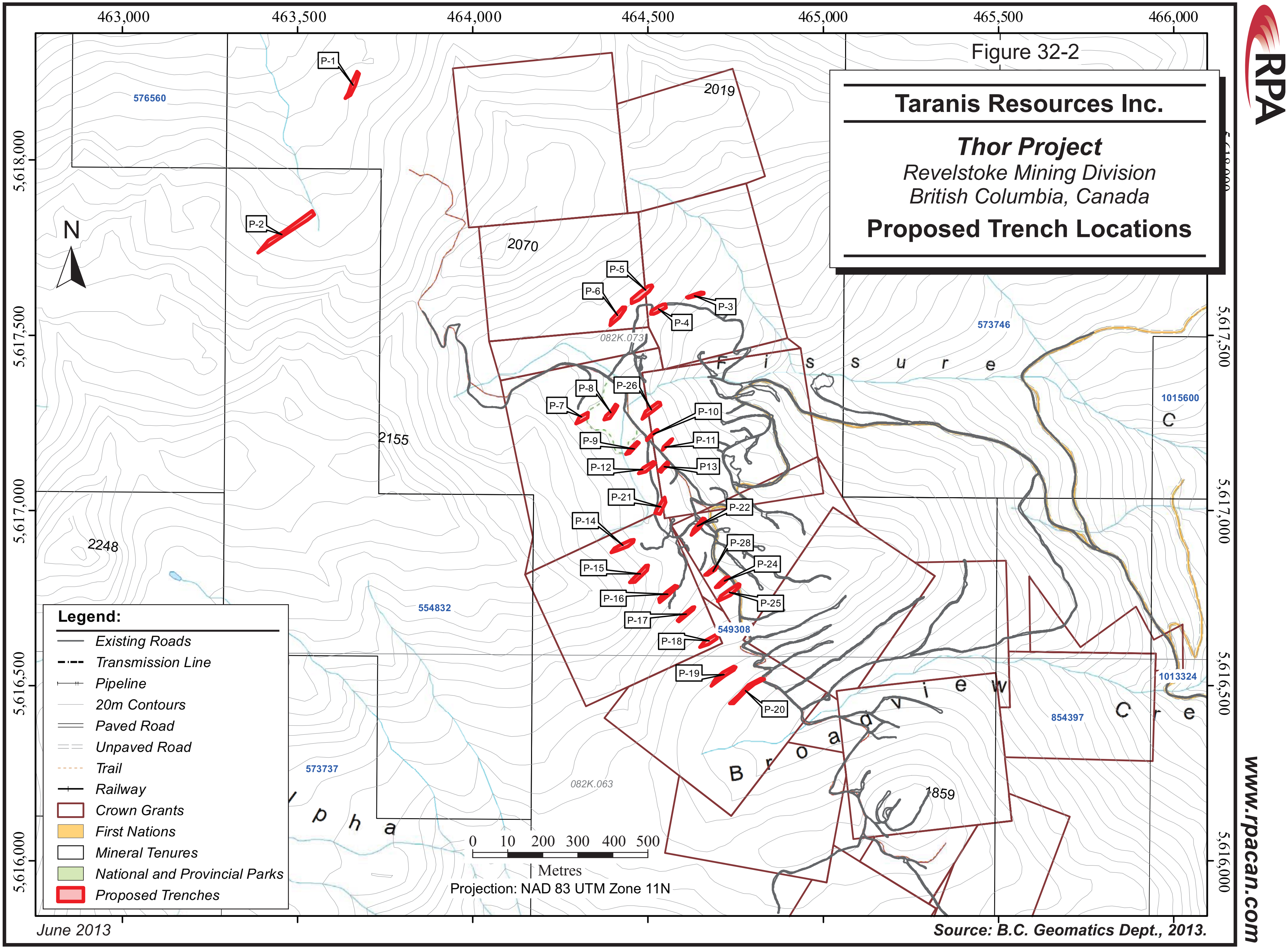


Figure 32-2
Taranis Resources Inc.
Thor Project
Revelstoke Mining Division
British Columbia, Canada
Proposed Trench Locations
RPA
www.rpacan.com
June 2013
Source: B.C. Geomatics Dept., 2013.
Projection: NAD 83 UTM Zone 11N
0 10 200 300 400 500
Metres
N
463,000
463,500
464,000
464,500
465,000
465,500
466,000
5,618,000
5,617,500
5,617,000
5,616,500
5,616,000
Legend:
Existing Roads
Transmission Line
Pipeline
20m Contours
Paved Road
Unpaved Road
Trail
Railway
Crown Grants
First Nations
Mineral Tenures
National and Provincial Parks
Proposed Trenches
576560
554832
573737
573746
1015600
1013324
854397
549308
082K.073
082K.063
2019
2070
2155
2248
1859
Fissure
Broadview
Alpha
Cre
P-1
P-2
P-3
P-4
P-5
P-6
P-7
P-8
P-9
P-10
P-11
P-12
P13
P-14
P-15
P-16
P-17
P-18
P-19
P-20
P-21
P-22
P-24
P-25
P-26
P-28