

ASSESSMENT REPORT

Prospecting Survey

On the

TULAMEEN PLATINUM PROJECT

Similkameen Mining Division

Latitude: 49° 31' 56'' N; Longitude: 120° 53' 31'' W

NTS 092H056

For

NORTH BAY RESOURCES INC.

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19474

USA

By

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September 29, 2013

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1. Summary

The Tulameen Platinum Project is located 28 km west of the town of Princeton in the Similkameen Mining Division of southern British Columbia, Canada.

The Project is 100% owned by North Bay Resources Inc. of Skippack Pennsylvania, USA. It is part of the NTS map 092H056 and is located in a transition zone between the Cascade Mountains to the west and the Interior Plateau to the east.

The 838.76 hectares mineral property straddle the Tulameen River in between Hines Creek and Britton Creek. The property is generally in steep terrain characterized by the presence of bluffs and is partially covered by coniferous type forests.

The Project lies along the western margin of the Intermontane Belt of the Quesnellia tectonostratigraphic terrane. The Quesnell Terrane is a volcano-sedimentary arc terrane that stretches along most of the length of the Canadian Cordillera. Rocks underlying the mineral property are represented by the Triassic rocks of the Tulameen Ultramafic Complex, and sedimentary and volcanic rocks of the Upper Triassic Nicola Group. The Tulameen Ultramafic Complex is an Alaskan-type magmatic intrusion that hosts platiniferous chromites in its dunite rock core. The dunite rocks represent the hardrock source for the 20,000 ounces of placer platinum that have been mined since the 1885 discovery of gold rich placer deposits on the Tulameen River and its tributaries. In late 1800s the Tulameen region was recognized as North America's premier platinum producer.

Subsequent mineral exploration activities for Platinum Group Metals (PGM) identified the hardrock source of the Tulameen placer platinum but the attempts failed to delineate economic hardrock mineralization. The hardrock source of the 37,707 ounces of gold mined in the Tulameen area proved to be even more elusive, but it is generally accepted that gold was derived from the Nicola Group rocks.

Industrial olivine uses of the Tulameen dunite rocks had also been investigated as early as 1986 and it was concluded that an important part of the dunite body favourably compare with commercially produced olivine from around the world.

The mineral sequestration of carbon dioxide (CO₂) potential of the Tulameen olivine rich dunite rocks has also been studied since the early 2000s and the test results proved that the rock represents a suitable candidate for mineral carbonation.

The 2013 prospecting survey was designed as a reconnaissance study of the main rock types, mineralization and of the mineral potential of the Tulameen ultramafic rocks. The sampling program was hindered by the extensive bluffs existent in the area. Assays returned values in line with the ones obtained by previous explorationists. Top values were 0.54 g/t platinum, 0.18 g/t gold, 0.2% copper, 0.14% nickel, 15.40% iron and 20.3% chromium.

The results of the field trip combined with an extensive literature search were used to draw conclusions and make recommendations for further exploration programs that would provide for economic mining and processing of different commodities existent within the dunite rocks of the Tulameen Ultramafic Complex.

2. Conclusions

The central part of the Tulameen Ultramafic Complex which is covered by the Company's Tulameen Platinum Project represents an attractive exploration target because of its precious and base metals content; it is also suited for industrial mineral uses, and for the carbon dioxide mineral sequestration potential of the dunite rocks.

The olivine industrial mineral potential of the Project is significant. Mining of the dunite rocks for olivine industrial mineral could be economically viable and it might have a greater potential than mining for precious and base metals.

Parts of the mineral property (Grasshopper Mt. and Britton Creek areas) that had been previously explored by industry majors and drilled by ulterior explorers are considered suitable exploration targets for PGM, chromite and magnetite mineralization.

The potential for mineral sequestration of carbon dioxide of the Tulameen dunite rocks is considered excellent and if pursued could further improve the economics of a possible olivine mining project.

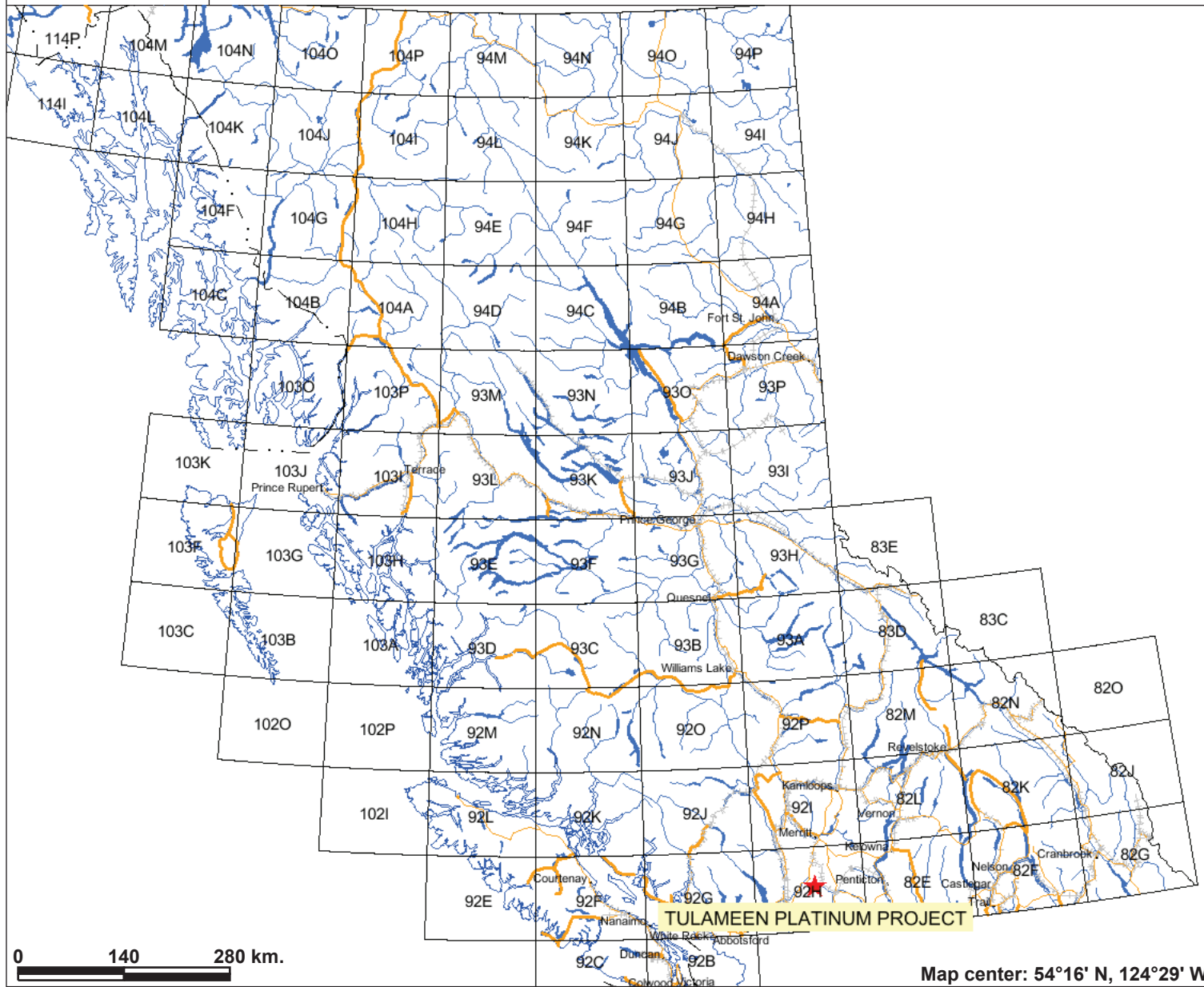
In conclusion the mining of the olivine rich core of the Tulameen Ultramafic Complex has to be envisioned as a possible open pit mining operation that would include on-site processing of the rock (crushing, grinding, flotation and/or gravity concentration) as this could be the only viable solution for moving the project forward. The main product could be represented by olivine industrial mineral, while by-products could be represented by metals (PGM, chromite, magnetite). The tailings could be marketed for their CO₂ sequestration potential.

3. Recommendations

The Tulameen Platinum Project would be further explored by prioritizing targets and focusing on prospective areas and on certain types of surveys.

The top priority for future surveys would be to identify zones of unaltered dunite rocks which would make them suitable for mining of industrial olivine. The unaltered dunite rocks areas that contain important quantities of platinum-poor chromite mineralization (1st

Fig. 1 - Tulameen Platinum Project Index Map

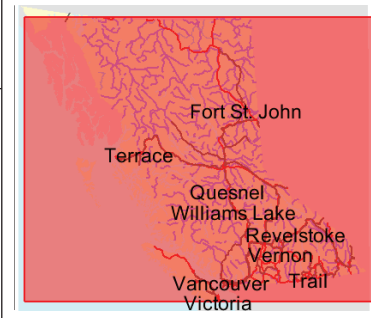


0 140 280 km.

Map center: 54°16' N, 124°29' W

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Notes: Dan Oancea, September 2013 - North Bay Resources Inc.



Legend

- Provincial Boundary (1:6M)**
- Boundary (International)
- Boundary (Interprovincial)
- NTS Grid
- Transportation - Lines (1:6M)**
- Road - Trunk
- Road - Main
- Rail Line
- Water - Lines (1:6M)**
- River/Stream - Definite
- Lake - Definite
- Island - Definite
- Coastline - Definite
- Water - Polygons (1:6M)**
- River/Stream - Definite
- Lake - Definite
- Major Cities

Scale: 1:8,000,000

generation) have to be identified and thoroughly sampled as chromite, which could represent an important by-product.

The areas known to hold anomalous to economic values of PGM and chromite mineralization have to be identified/re-located, systematically sampled and assayed.

The mapping and sampling program would build on previous results, studies and maps and would result in a better understanding of the physical and chemical characteristics of the dunite rocks (alteration and mineralization).

Drilling of the potentially economic zones has to be undertaken as a next step which is deemed necessary in understanding the 3D characteristics of the unaltered dunite rocks and associated mineralization. If successful mineral resources and reserves could be estimated and used in a Preliminary Economic Assessment (PEA) of the olivine-PGM deposit.

4. Introduction

4.1 Location, Access and Physiography

The Tulameen Platinum Project (TPP) is located approximately 28 km west of the town of Princeton in the Similkameen Mining Division of southern British Columbia. Princeton, a town of 2,700 people, can be reached by following the Highway 1 west of Vancouver over a 288 km road distance.

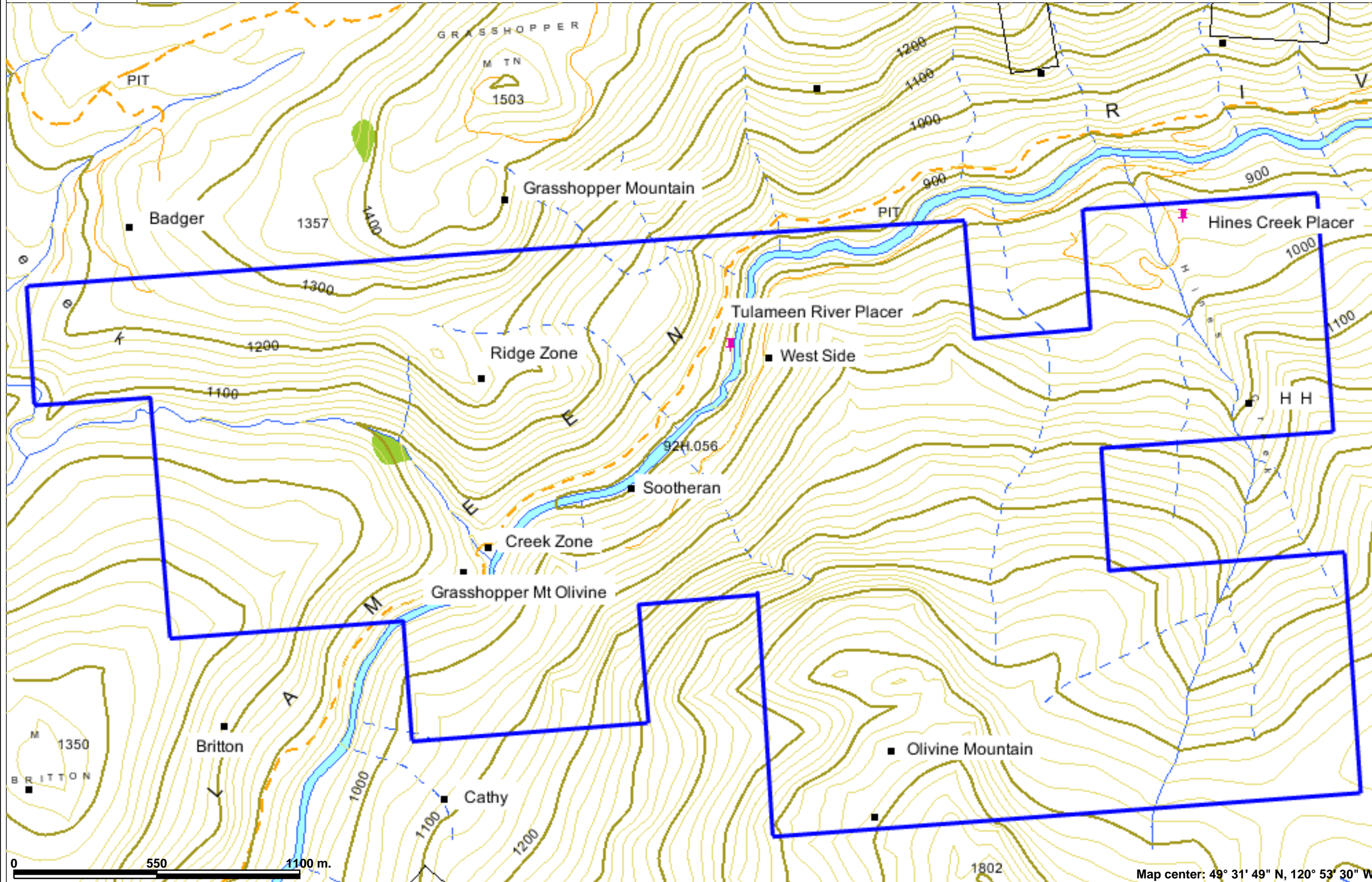
The mineral property can be accessed by driving an asphalt road (Coalmont Road) from Princeton to Tulameen, and then continuing west on the well maintained Tulameen Forestry Road for another 10 km.

The Project straddles the Tulameen River, and therefore the part of the property that lies south of the river could be accessed by crossing a bridge located 8 km west of the village of Tulameen. The aforementioned dirt road leads to the Hines Creek Placer mining operation which is on care and maintenance.

The Tulameen Platinum Project (TPP) is located in a transition zone between the Cascade Mountains to the west and the Interior Plateau to the east. On the property the elevations range from 900 m down in the Tulameen River valley to 1,250 m on the Grasshopper Mountain. The tops of the mountains are rounded by weathering and the eroding action of the glaciers. Glacial till covers many mountainous slopes.

The Tulameen River flows northward from the Cascade Mountains for 30 kilometres to Grasshopper Mountain, where it changes course and continues eastward for 10 kilometres to

Fig. 2 - Tulameen Platinum Project Topography & Access Map



Legend

MINFILE Status

- Producer
- Past Producer
- Developed Prospect
- All others

Land Status

- Indian Reserves
- National Parks
- Conservancy Areas
- Parks
- Federal Transfer Lands
- Mineral Tenure (current)
- First Nations Treaty Related Lands
- First Nations Treaty Lands
- Integrated Cadastral Fabric
- BCGS Grid

Contours (TRIM)

- Contour - Index
- Contour - Index.Indefinite
- Contour - Index.Depression
- Contour - Index.Depression Indefinite
- Contour - Intermediate
- Contour - Intermediate.Indefinite
- Contour - Intermediate.Depression
- Contour - Intermediate.Depression Indefinite

Area of Exclusion

- Area of Indefinite Contours

Annotation (1:20K)

Transportation - Points (TRIM)

- Helipad

Transportation - Lines (TRIM)

- Airfield
- Airport
- Airstrip
- Airport.Abandoned
- Ferry Route
- Road (Gravel Undivided) - 1 Lane
- Road (Gravel Undivided) - 2 Lanes
- Road (Gravel Undivided) - U/C - 1 Lane
- Road (Gravel Undivided) - U/C - 2 Lanes
- Road (Paved Divided) - Not Elevated - 1 Lane Each Way
- Road (Paved Divided) - Not Elevated - 2 Lanes Each Way
- Road (Paved Divided) - U/C - Not Elevated - 2 Lanes Each Way
- Road (Paved Undivided) Not Elevated - 3 Lanes
- Road (Paved Undivided) - Not Elevated - 1 Lane
- Road (Paved Undivided) - Not Elevated - 2 Lanes
- Road (Paved Undivided) - Not Elevated - 1 Lane

Scale: 1:15,000

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the town of Tulameen. The river then flows southeast for 25 kilometres before entering the Similkameen River at Princeton (Minfile 092HNE199).

The upper part of the river runs through a wide valley extending from its headwaters in Paradise Valley southward to Champion Creek. The river continues through a narrow rock-walled canyon between Grasshopper and Olivine Mountains to the mouth of Olivine (Slate) Creek. The gravels in this canyon are generally not more than a metre thick and occur in the creek bed and in benches on the sides of the valley, either in or above the level of the canyon. Below Olivine Creek, a broad valley floor with deep gravel deposits opens up and continues past the towns of Tulameen and Coalmont to a point 2 kilometres below Granite Creek. The river then cuts through a canyon to a point 5 kilometres west of Princeton. Here, the river enters a broad valley that eventually merges with that of the Similkameen River at Princeton (Minfile 092HNE199).

The mineral property lies mostly in between the Britton Creek to the west and the Hines Creek to the east. Britton Creek is a northern Tulameen River tributary, while Hines Creek is a southern Tulameen River tributary.

The TPP is generally in steep terrain characterized by the presence of bluffs on both the north face of the Olivine Mountain and the south face of the Grasshopper Mountain.. The Tulameen River section that flows east-west through the mineral property is narrow and is represented by a canyon..

The mineral property is partially covered by coniferous type forests usually developed on glacial till. Lower elevations are sometimes covered by dense second growth. A few types of plants that are specific to 'serpentine soils' have developed on the ultramafic rocks of the Grasshopper and Olivine Mountain. The plants that are located on the .Grasshopper Mountain are neither protected nor considered endangered.

4.2 Mineral Claims

The Tulameen Platinum Project consists of fourteen mineral claims that cover 838.76 hectares (2,072.62 acres). The claims are 100% owned by North Bay Resources Inc. and are centred at 49° 31' 56" N and 120° 53' 31" W (652534 Easting, 5488758 Northing – Zone 10). The mineral property is part of the NTS 092H056 map.

TABLE 1: MINERAL TITLES AT TULAMEEN PLATINUM PROJECT

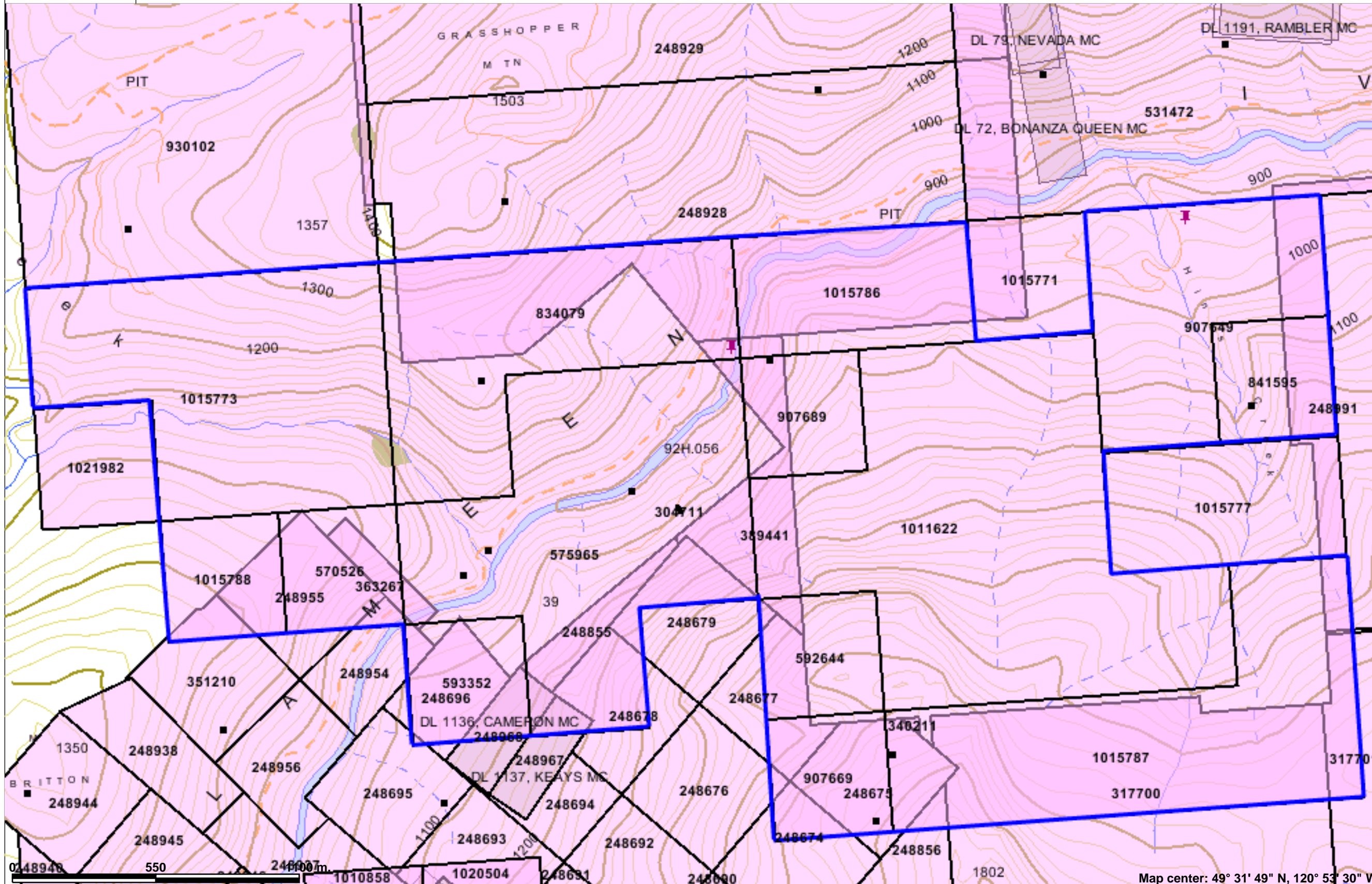
Tenure Number	Claim Name	Owner	NTS Map Number	Good to Date*	Status	Area (ha)
570526	D1	204090	092H056	2016/Jul/06	GOOD	20.97
575965	Tulameen Platinum	204090	092H056	2016/Jul/06	GOOD	125.82
592644	TP3	204090	092H056	2016/Jul/06	GOOD	20.97
593352	D2	204090	092H056	2016/Jul/06	GOOD	20.97
834079	TP N	204090	092H056	2016/Jul/06	GOOD	83.87
841595	H & H	204090	092H056	2016/Dec/22	GOOD	20.97
907649	TP E	204090	092H056	2016/Jul/06	GOOD	62.90
907669	TP FR	204090	092H056	2015/Jul/06	GOOD	20.97
907689	TP East	204090	092H056	2016/Jul/06	GOOD	20.97
1011622	TP E2	204090	092H056	2015/Dec/29	GOOD	167.76
1015773	TP NW	204090	092H056	2015/Jul/06	GOOD	104.83
1015786	TP N2	204090	092H056	2015/Jul/06	GOOD	41.93
1015787	TP FR2	204090	092H056	2015/Jan/07	GOOD	104.86
1015788	TP NW2	204090	092H056	2015/Jul/06	GOOD	20.97
TOTAL						838.76 ha

*Subject to acceptance of the present Assessment Report.

The Tulameen Platinum project's mineral claims partially overlap a number of legacy claims; as a result the area that is free of any encumbrances (i.e. 100% of the mineral rights are being held by North Bay Resources) is of approximately 546 hectares.

The writer did not research the title to the legacy claims.

Fig. 3 - Tulameen Platinum Project Mineral Titles Map



Legend

- MINFILE Status**
 - Producer
 - Past Producer
 - Developed Prospect
 - All others
- Indian Reserves
- National Parks
- Conservancy Areas
- Parks
- Federal Transfer Lands
- Mineral Tenure (current)
 - Mineral Claim
 - Mineral Lease
 - First Nations Treaty Related Lands
- First Nations Treaty Lands
- Integrated Cadastral Fabric
- Survey Parcels
- BCGS Grid
- Contours (TRIM)
 - Contour - Index
 - Contour - Index.Indefinite
 - Contour - Index.Depression
 - Contour - Index.Depression Indefinite
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 - Road (Paved Undivided) Not Elevated - 3 Lanes
 - Road (Paved Undivided) - Not Elevated -



Scale: 1:15,000

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Map center: 49° 31' 49" N, 120° 53' 30" W

4.3 Climate, Local Resources, Infrastructure

Climate is typical of southern B.C. interior mountainous areas: moderate winters with warm and semi-arid summers. The region experiences moderate precipitation (356 mm per year) due to being located on the lee side of the Cascade Mountains. Snow covers higher elevations starting in November and lasts until late May. There is usually only a light snow cover that averages 22 cm but heavier snowfalls could also happen.

The seasonal snow melt reaches its climax in June and July when it causes heavy water flows on the creeks and rivers. Starting with the month of August the water level on most of the creeks recedes and they all could be forded.

Mining and the forestry industry are mainstays of the local Princeton economy. There are three mining operations surrounding the Tulameen Platinum Project: the important Copper Mountain Mine located 14 km south of Princeton; the Basin Coal Mine located south of Coalmont about 9 km up on the Blakeburn Forestry Road; and, the Treasure Mountain silver-base metals mine located about 17 km southwest in direct line of the Tulameen Platinum Project.

Infrastructure is good with good logging roads connecting the project area with the community of Tulameen.

Accommodation, food and gas could be provided and sourced from Tulameen and Princeton.

4.4 History and Development

Gold was first discovered in the Similkameen region in 1853 by George B. McClellan but mining commenced in 1860 when placer mining activities started on the Similkameen River at the Blackfoot Camp located 11 km south of Princeton.

The 1861 discovery of gold in the Cariboo region of British Columbia caused most of the placer miners to leave the poorer diggings on the Similkameen for the prospect of new riches. A few Chinese miners stayed behind and continued mining the river for the next 25 years. They had not engaged in any prospecting activity so the 1885 Tulameen Gold Rush took them by surprise.

In 1885, cowboy Johnny Chance noticed gold nuggets in the Tulameen River next to the confluence with Granite Creek, which is Tulameen's southern tributary. Large quantities of gold were subsequently found not only on the Granite Creek but also on the Tulameen River and many of its southern tributaries. Early placer miners noticed the association of gold with a heavy whitish metal but not recognizing it as platinum they have initially discarded it. In

1891, the Tulameen mining district was considered to be the most important producer of platinum in North America.

A city was founded at the confluence of Granite Creek with the Tulameen River. Granite City boasted a population of over 700 people and was a typical city for the gold rush era. The community of Tulameen had developed during the same years, while the community of Coalmont was founded in 1912 when the gold rush subsided and the development of local coal deposits started. No hardrock platinum mine had ever been developed in the Tulameen area.

There are no records for the placer mining activity that took place before 1885 as many of the miners (Americans and Chinese alike) used to ship the gold out of the country without paying taxes. There is even less information on the quantity of platinum produced in the region as it was usually shipped and sold out of the province. The records after 1885 are 'reasonably complete'. (Bulletin 28, Placer Gold Production in BC)

In the period 1885 to 1950, some 42,719 ounces of gold were reported as being produced in the Similkameen Mining Division. It is considered that a total of 20,000 ounces of platinum have been placer mined in the region in the period leading to 1905.

Production of placer gold was first reported in 1877, and may have commenced as early as 1860. By 1887, most of the shallower gravel deposits mined along the Tulameen River are reported to be exhausted (ARMM 1887). That might be the reason why in 1890 over 100 Indians and a few Chinese were reportedly mining the Tulameen River by employing rudimentary methods (rockers). Even so during that year a Chinese miner recovered 40 ounces of platinum from the river (ARMM 1890). A few operators along the upper section persisted through the early 1900s. One operation on the Schubert lease, 10 kilometres above Tulameen, recovered 620 grams of gold and also some platinum from 1500 cubic metres of gravel (ARMM 1916). High platinum prices during the WWI and 1920s prompted a revival of placer mining along both the upper and lower sections of the river. Several deposits saw significant production during this time on the upper part of the river. The Sootheran lease, 1 kilometre below Britton (Eagle) Creek, was operated intermittently between 1925 and 1947, producing 3920 grams of platinum and 530 grams gold between 1926 and 1928. Big Bend Platinum Gold Mining Company Ltd. produced 280 grams of gold and 930 grams of platinum from the J. Marks lease, 10 kilometres upstream from Tulameen (ARMM 1928). Sporadic exploration and production occurred during the 1950s, 1960s and 1970s, mostly below the canyon, between Olivine Creek and the town of Tulameen. Crude gold production for the entire river between 1885 and 1945 is estimated at 297,000 grams (9,548 ounces). (Minfile 092HNE199)

Most of the British Columbia records of production come from the Annual Reports of the Minister of Mines (ARMM).

Gold and platinum deposits have been found over the lower 40 kilometres of the Tulameen River. Most recorded production and exploration has occurred along two stretches. The upper stretch begins about 2 kilometres west of Tulameen and continues up the river for 12 kilometres to the mouth of Champion Creek. The lower stretch begins at Coalmont, just above the mouth of Granite Creek, and continues southeast for 19 kilometres to Princeton. (Minfile 092HNE199)

The Tulameen River section in between the Olivine (Slate) Creek and Champion Creek is mostly underlain by mineral claims belonging to the Tulameen Platinum Project (TPP) and it was the richest in platinum. On this section the gold to platinum ratio was 1:1 but usually close to the mouth of the Britton Creek more platinum had been recovered than gold.

In general placer mining activities on the Tulameen River have been concentrated on areas endowed with thinner alluvium (gravels) or on higher elevation benches. This was also characteristic for the narrow rock walled canyon area located on the TPP mineral claims. Areas where the Tulameen valley was larger display thicker but poorer gravels that have never been worked for gold or platinum. (Camsel, 1913)

Kemp (1902) noted that the larger platinum nuggets found in the river are associated with chromite, olivine and pyroxenes. He was the first to propose that placer platinum was derived from ultramafic rocks that outcrop in an area cut by the river and which coincided with the richest platinum placers.

Important contributions to understanding the geology of the Tulameen Ultramafic Complex and its hosted mineralization were brought by Camsell (1913), O'Neill and Gunning (1934), Findlay (1969), Mertie (1969), St. Louis (1981), and Nixon (1987, 1990).

The platiniferous dunite rocks of the Tulammen Ultramafic Complex continued to attract the attention of numerous explorers. Explorers with notable finds include Imperial Metals (1984-1986), Newmont Exploration (1986), Longreach Resources Ltd (1987-1988) and Diamet Minerals (1986-1989).

The industrial mineral potential for olivine was evaluated by G.V. White in 1986, K.D. Hancock in 1991, and Diamet Minerals during the period from 1986 to 1989.

The carbon dioxide sequestration potential of the Tulameen ultramafic was explored by a series of authors in early 2000s.

5. Geology and Mineralization

5.1 Regional Setting

The Tulameen Platinum mineral property lies along the western margin of the Intermontane Belt of the Quesnellia tectonostratigraphic terrane. The Quesnell Terrane is a volcano-sedimentary arc terrane that could be found along most of the length of the Canadian Cordillera. The region hosts some of the southernmost exposures of the late Triassic Nicola Group. Clastic sedimentary rocks, dominated by black argillites, which are intercalated with feldspathic tuffs and tuffaceous sediments. These pass westwards, and probably upwards, into typical Nicola pyroxene-feldspar tuffs, lapilli tuffs and breccias. A sequence of massive feldspar basalt and greenstone flows occurs in the area southeast of the Granite Creek campsite. The volcanic rocks become more deformed to the west, with the change from massive to schistose rocks being transitional and gradual from east to west as foliation becomes progressively more penetrative and steeper. Both schistose metasedimentary and metavolcanic rocks occur in the aureole of the Eagle Plutonic Complex along the western margin of the map area (OF 2010-06).

The Tulameen Ultramafic-Gabbro Complex outcrops over a 60 square kilometers area and is structurally emplaced into, though probably coeval with, the Nicola Group. Several smaller bodies of diorite-gabbro or pyroxenite also occur in the map area. The structural fabric of the area is north-northwest with westward dipping foliation. The Tulameen complex is elongated and concordant with the structural grain. The Tulameen ultramafic complex consists primarily of dunite, olivine clinopyroxenite, hornblende clinopyroxenite and gabbroic rocks. Dunite is restricted to the northern part of the complex. Olivine clinopyroxenite envelopes the dunite core and extends southward. Breccia bodies occur within this unit. Hornblende clinopyroxenite occurs generally at the periphery of the complex. Gabbroic rocks are most abundant along the eastern side of the complex (OF 1988-25).

Findlay considers that the ultramafic rocks represent fractional crystallization products of an ultrabasic magma. The main ultramafic zone extends from Grasshopper Mountain south through Olivine Mountain and Lodestone Mountain to Granite Creek (Findlay, 1969).

Volcanic and sedimentary rocks of the Eocene Princeton Group occur in the northern (Tulameen Coal Basin) and eastern (Princeton Basin) parts of the area. They lie unconformably on the Nicola Group and related intrusive rocks. Comagmatic minor intrusions occur throughout the area as ubiquitous intermediate-felsic porphyry dikes.

The local ice movement during the Quaternary glaciation is considered to have been northeast to southwest. Glacial till up to 25 feet (2.4 m) was deposited on the mountainous slopes.

The most recent geological map covering the area is represented by the BCMEMPR Open File 2010-06.

5.2 Mineralization and Deposits

The most important mineralization in the Tulameen area is represented by the platinum group metals mineralization (PGM) hosted by the ultramafic rocks of the Tulameen Complex. The Complex is an Alaskan-type mafic-ultramafic zoned intrusion characterized by the presence of platiniferous cumulate chromites. Concentrations of chrome spinel and massive chromitite appear to be distributed randomly throughout the dunite as discrete layers, nodular masses and schlieren up to 1 metre in length and 6 centimeters in width. Associated with the chromite are microscopic grains of platinum minerals, nickel-iron sulphides, chalcopyrite and pyrite (St. Louis et al. 1986)

Most of the PGM mineralization is hosted by the dunite core of the ultramafic intrusion.

As a result of the weathering of the platiniferous rocks of the Tulameen Complex and of the other groups of rocks numerous platinum and gold placers have been formed on the creeks and rivers that dissect them. While no hardrock source of gold has been clearly identified the Nicola Group rocks could be one of the most important sources.

The precious metals placers of the Tulameen region had been formed before the onset of the Quaternary glacial period and as a result parts of them were obliterated by the moving ice. The wider sections of the Tulameen River valley have experienced the forming of valley glaciers which also scraped the valley's bottom and deposited glacial boulders resulting in dilution and most likely making the placers uneconomic. Therefore even though the wider sections of the valleys are abutted by productive placers they have been rarely worked because of thicker gravels and lower grades. For example in 1922 an attempt was made to dam the Tulameen River and work the bedrock immediately below the canyon (and Company's claims) but the bottom was found to be flat because of ice scouring it at winter time (ARMM 1922), or because of the work of a valley glacier in the not too distant past .

Older terraces have been preserved along the Tulameen River and they have been recognized as having a high tenor early on. The Hines Creek Placer, which is located on the Company's claims, is at over 900 m in elevation and represents an old Tulameen River bench.

The majority of gold recovered from the Tulameen River was rough and not worn denoting a local origin. Large platinum nuggets were rare but some up to 0.5 ounces had been recovered from the Tulameen River mostly from the section that is underlain by North Bay Resources' mineral claims. Typically most of the placer platinum was in the range of 1-4 mm and taking the shape of small rounded pellets. The coarsest and richest platinum was found on the stretch of the Tulameen River in between the Olivine (Slate) Creek and Champion Creek which coincides with the Company's claims and outcrops of platiniferous dunite rocks. (Mertie, 1969).

It was estimated that total platinum production in the Tulameen area exceeded 20,000 ounces of which an important part came from the Tulameen River downstream of the platiniferous dunite rocks of the Tulameen Complex and also from the Granite Creek.

The other important mineral deposits that were mined starting in 1909 are the Eocene coal deposits of the Tulameen and Princeton Basins. Nowadays the only coal producer in the Tulameen Basin is represented by the Basin Coal Mine located 9 km south of Coalmont.

Numerous other mineral occurrences are described in the Minfile database for the Tulameen region. The most important are represented by magnetite deposits in hornblende clinopyroxenite on the Lodestone Mountain (2.84 million tonnes at 24.33% magnetite) and on the Tanglewood Hill (2.84 million tonnes at 16.8% iron). They are hosted by hornblende pyroxenite rocks of the ultramafic complex.

Most of the other Minfile occurrences are represented by mineralized (copper, lead, zinc, gold, silver) quartz veins and shear zones in Nicola Group rocks or in the Tulameen Complex rocks. Many of these mineralized zones are hosted in structures parallel to the regional grain.

5.3 Property Geology and Mineralization

The Tulameen Platinum mineral property covers the exposed platiniferous dunite core of the zoned Tulameen Ultramafic Complex (TUC) and its eastern contact with the Nicola Group rocks.

The rocks making up the intrusive TUC are represented by dunite, olivine pyroxenites, hornblende pyroxenites, gabbro and monzodiorites rocks representing a typical Alaskan-type zoned intrusion.

The dunite rock is principally made of forsteritic (magnesium rich) olivine, accessory chromite, and rare diopside. The rock is medium to dark grey, buff weathering and well jointed. The serpentinized (altered) rock contain serpentine, carbonates, magnetite and talc. Concentrations of chrome spinel and massive chromitite appear to be distributed randomly throughout the dunite as discrete layers, nodular masses and schlieren up to 1 m in length and 6 cm in width. Chromitite schlieren are commonly distinguished in outcrop by a pale alteration halo (0.1 to 1 cm). Associated with chromite are microscopic grains of platinum minerals (platinum -iron alloys, sperrylite), nickel-iron sulphides (pentlandite, violarite, bravoite), chalcopyrite and pyrite (St.Louis et al. 1986).

The olivine clinopyroxenites envelop the dunite core of the Tulameen complex. The fresh rock is medium to coarse grained and has a blotchy green and black appearance due to partially serpentinized olivine (<20 per cent serpentine) and deep green clinopyroxene. Sporadic pegmatitic masses contain crystals up to 8 cm across and olivine segregations locally form schlieren (Nixon, 1987).

Breccias within the olivine clinopyroxenite unit occur near the western margin of the dunite. Angular to rounded blocks (<0.5 m) of dunite, pyroxenite and interlayered dunite-pyroxenite are enclosed in a serpentinized pyroxene-rich matrix carrying calcite and disseminated sulphides (mostly pyrite).

The hornblende clinopyroxenite occurs at the periphery of the complex. The fresh rock is medium to coarse grained and contains diopsidic augite, hornblende, relatively abundant magnetite, and minor biotite, apatite and disseminated sulphides; feldspathic variants are extremely rare. Massive magnetite could be found in this type of rocks (Nixon, 1987).

The gabbroic rocks or monzodiorites are distributed erratically on the eastern side of the complex mostly in direct contact with the olivine clinopyroxenite and hornblende clinopyroxenites rocks. The rocks are massive, sometimes well foliated, and at times affected by saussuritization processes which impart it with different shades of green (Nixon, 1987).

Nixon (1987) presents an almost continuous 530 m long section along the Tulameen River, beginning at the eastern margin of the dunite and passing through olivine clinopyroxenite into the gabbro rocks. The section is cut by unfoliated hornblende-bearing dacitic and basaltic dykes, probable feeders for Tertiary lavas in the Princeton Group and Miocene basalts, and contains major tectonic breaks at the dunite-pyroxenite and pyroxenite-gabbro contacts. Two thin gabro units are also well exposed within the pyroxenite.

Findlay (1963, 1969) concluded from contact relationship that gabbroic and ultramafic units represented two separate intrusions, an early gabbroic mass invaded by an ultramafic body in which dunite was the latest emplaced.

Nixon (1987) considers that the occurrence of pyroxenite dykes cutting dunite, suggests that dunite crystallized prior to the pyroxenites. The main body of gabbroic rocks to the east also predate emplacement of the ultramafic rocks, However there is evidence that points to a protracted history of gabbro crystallization involving more than one influx of parental magma.

The eastern part of the Tulameen Platinum Project straddles the contact between hornblende pyroxenites rocks of the ultramafic complex and the Upper Triassic undifferentiated sedimentary and volcanic rocks of the Nicola Group. According to the most recent geological map (OF 2010-6) the Hines Creek lies on the contact zone between the aforementioned units.

Chromitite schlieren are 0.5 to 2 cm in width and 5 to 25 cm in length and the most extensive concentrations were reported on the southern flank of the Grasshopper Mountain (part of them on the Company's mineral claims). Chromitite schlieren represent vestiges of formerly rich extensive cumulate layers that have been subjected to tectonic stress.

The following mineral occurrences are described in Minfile as being on the Company's 100% owned mineral tenements:

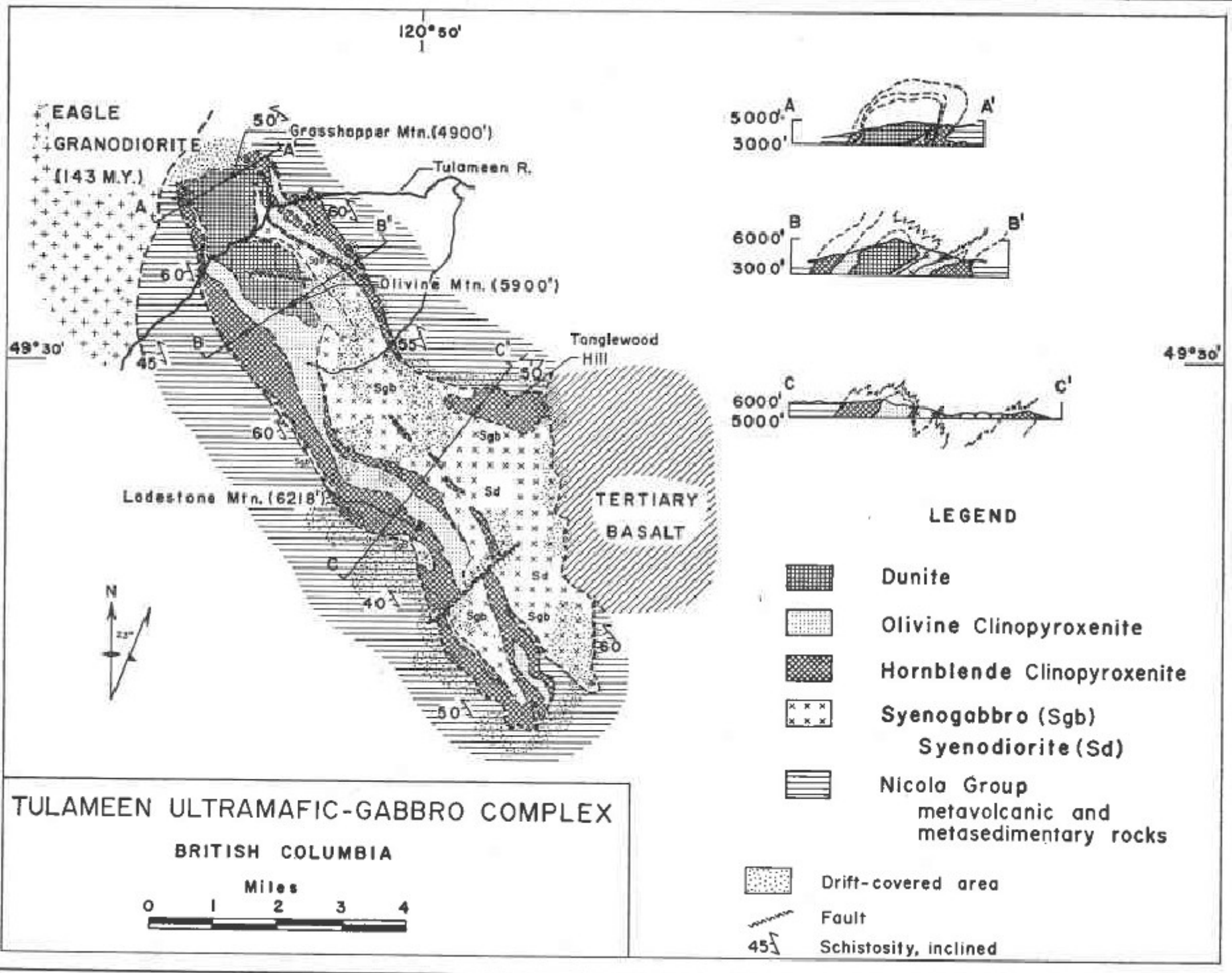


FIG. 2. Generalized geology and structure of the Tulameen Complex.



Plate 1: Chromitite schlieren in unaltered dunite boulder at the mouth of Britton Creek

The **Ridge Zone** (Minfile 092HNE207) platinum-chromite showing outcrops along a northwest-trending ridge on the southern slopes of Grasshopper Mountain, 10.5 kilometres west-southwest of the town of Tulameen.

The ridge is underlain by dunite and peridotite of the Early Jurassic Tulameen Ultramafic Complex, a zoned Alaskan-type intrusive complex. The dunite contains relatively abundant chromite in a zone trending northwest for 300 metres and varying up to 100 metres in width. Chromite comprises up to 20 per cent of the dunite in this zone (Assessment Report 17170). The mineral forms irregular lenses up to 20 centimetres long and 10 centimetres wide, fracture fillings up to 2 centimetres wide and primary layers of magmatic origin up to 15 centimetres thick.

Elevated platinum values are found in the southern half of this zone of chromite mineralization, with assays of up to 1.445 grams per tonne platinum (Assessment Report 17170, page 10). Analyses of eight samples taken in the southern half averaged 0.418 gram per tonne platinum (Assessment Reports 15516, 17170). Seven samples from the northern half assayed up to 20 percent chromium, yet yielded less than 0.050 gram per tonne platinum (Assessment Report 15516, page 28, Map 2).

This occurrence was sampled and mapped by Newmont Exploration of Canada Ltd. in 1986 and Tiffany Resources Incorporated in 1987.

The **Creek Zone** (Minfile 092HNE128) platinum-chromite showing occurs at the confluence of Britton (Eagle) Creek with the Tulameen River, 10.5 kilometres west-southwest of the town of Tulameen.

This occurrence is hosted in the dunite-rich core of the Early Jurassic Tulameen Ultramafic Complex, a zoned Alaskan-type intrusive complex. Mineralization occurs in a serpentine breccia zone containing fragments of dunite/peridotite cemented by a matrix of serpentine. The zone is 180 metres long, up to 155 metres wide and lies mostly north of the river, on either side of the creek.

Chromite occurs in the breccia and the surrounding dunite in areas of stronger magnesium alteration, mostly along Britton Creek. The mineral forms irregular lenses up to 20 centimetres long and 10 centimetres wide, fracture fillings up to 2 centimetres wide and primary layers of magmatic origin up to 15 centimetres thick.



Plate 2: Serpentinized dunite breccia outcrop of the 'Creek Zone'

Platinum occurs in elevated values in the breccia and in the surrounding dunite/peridotite. Two samples from the breccia assayed 2.150 and 4.400 grams per tonne platinum (Assessment Report 17170, page 5). Values of up to 0.481 gram per tonne platinum occur west and south of the breccia zone, in peridotite with little visible chromite (Assessment Report 17170, Figure 3).

The breccia zone is noted to be practically free of sulphides (Assessment Report 17170), yet earlier reports suggest the presence of chalcopyrite and millerite. Magnetite, sperrylite and asbestos have also been reported in the past.

The showing was mapped and sampled by Imperial Metals Corporation, Newmont Exploration of Canada and Tiffany Resources between 1984 and 1987.

The **H & H** showing (Minfile 092HNE205) occurs on Hines Creek, 1.1 kilometres southeast of the creek's confluence with the Tulameen River and 7.5 kilometres west-southwest of Tulameen.

The occurrence is hosted in hornblende clinopyroxenite of the Early Jurassic Tulameen Ultramafic Complex, a zoned Alaskan-type intrusive complex. The showing lies immediately west of the contact with metamorphosed volcanics and sediments of the Upper Triassic Nicola Group.

Medium to coarse-grained, black hornblende clinopyroxenite, comprised of augite and hornblende with minor biotite and magnetite, outcrops over a 5 by 4 metre area 5 metres east of the creek. The clinopyroxenite is cut by a pegmatite zone 0.9 metre wide containing hornblende crystals up to 5 centimetres and minor interstitial feldspar. The zone strikes 010 degrees and dips 70 degrees east.

Stronger mineralization is present in the pegmatite, which contains up to 20 per cent patchy disseminated pyrite and up to 2 per cent disseminated chalcopyrite. The surrounding clinopyroxenite contains up to 20 per cent disseminated pyrite and trace chalcopyrite, in bands to 3 centimetres wide. A grab sample of pyroxenite, with 10 per cent interstitial pyrite and malachite staining, analysed 3.603 per cent copper, 0.066 gram per tonne gold, 17.1 grams per tonne silver, 0.247 grams per tonne platinum and 0.730 grams per tonne palladium (Assessment Report 17280, page 9, sample W461).

A quartz vein, up to 10 centimetres wide, outcrops 50 metres to the south. A grab sample of the vein assayed 0.810 gram per tonne gold and 0.025 grams per tonne platinum (Assessment Report 17280, page 9, sample W637).

The copper showing was discovered in 1987 by North American Platinum Corporation while exploring for platinum in the Tulameen Ultramafic Complex.

The **Grasshopper Mountain Olivine** prospect (Minfile 092HNE189) consists of a few areas mostly north of the Tulameen River and on the Grasshopper Mountain that were sampled and analyzed for their industrial mineral potential.

Mapping by Findlay (1963), outlined areas with 20 to 80 per cent serpentinization. The degree of serpentinization decreases, in general, from east to west. Essentially unaltered olivine is required for industrial purposes.

Detailed mapping and sampling of the least altered zone of the core (less than 20 per cent serpentinized) was done in 1986 by G.V. White of the Geological Survey Branch. He found "Three zones with loss-on-ignition less than 2 per cent have been identified north of the Tulameen River on the southwest slopes of Grasshopper Mountain. The northern zone, approximately 100 metres long by 75 metres wide, is open to the east. A second, central zone is approximately 50 metres long by 40 metres wide and open to the west. The third, irregular zone, cut by the Tulameen River road, is approximately 100 metres long by 65 metres (maximum) wide." All the samples taken from Olivine Mountain had loss on ignition values in excess of 2 per cent. Sampling was not carried out on the southeastern slopes of Grasshopper Mountain or the northeastern slopes of Olivine Mountain due to the difficulty of access. These areas are within the less than 20 per cent serpentinized zone as outlined by Findlay (1963) and therefore have the potential for fresh olivine.

6. Prospecting Survey

A four day reconnaissance and prospecting survey was undertaken during the month of June 2013. The survey's focus was on identifying and sampling the different types of rocks and mineralization existent on the mineral property, understanding their relationship and assessing their potential economic value.

The part of the mineral property that lies south of the Tulameen River and which is bordered by the Hines Creek was not surveyed as access to the bridge was restricted (locked gate) because of the existence of a placer mining operation (Hines Creek Placer Mine) on the other side of the river. The operation is presently on care and maintenance. A short traverse was effectuated to assess the condition of the bridge which was found to be good.

The part of the Tulameen Platinum Project that lies to the north of the Tulameen River is mostly located east of Britton Creek on the western, southern and southeastern slopes of the Grasshopper Mountain. The part of the property that lies closer to the river is traversed by the Tulameen FSR. The road provides good access to the numerous outcrops located on the northern side of the road which consist mostly of bluffs and rock scree.

This section was researched and sampled during the prospecting survey. Hornblende pyroxenite and olivine pyroxenite rocks have been found to outcrop along that section of the road. They are displaying mineralogical/petrographic, mineralization and stratigraphic characteristics that are in accordance with those described by previous authors.

The survey's focus was on the dunite rocks that outcrop in the core of the Tulameen Ultramafic Complex. The rocks are made of olivine and they are massive medium grained buff to black in color (rusty when weathered). The dunite rocks are mostly unaltered - they are well jointed and sometimes are cut by mm wide fissures filled with serpentine minerals, magnetite and chromite. Mineralization occur as disseminated, schlieren/bands and podiform chromite at times associated with platinum group metals. Te best assays obtained by the writer in this location were 0.54 g/t platinum, 0.18 g/t gold, 0.14% nickel, 15.40% iron and 20.3% chromium.

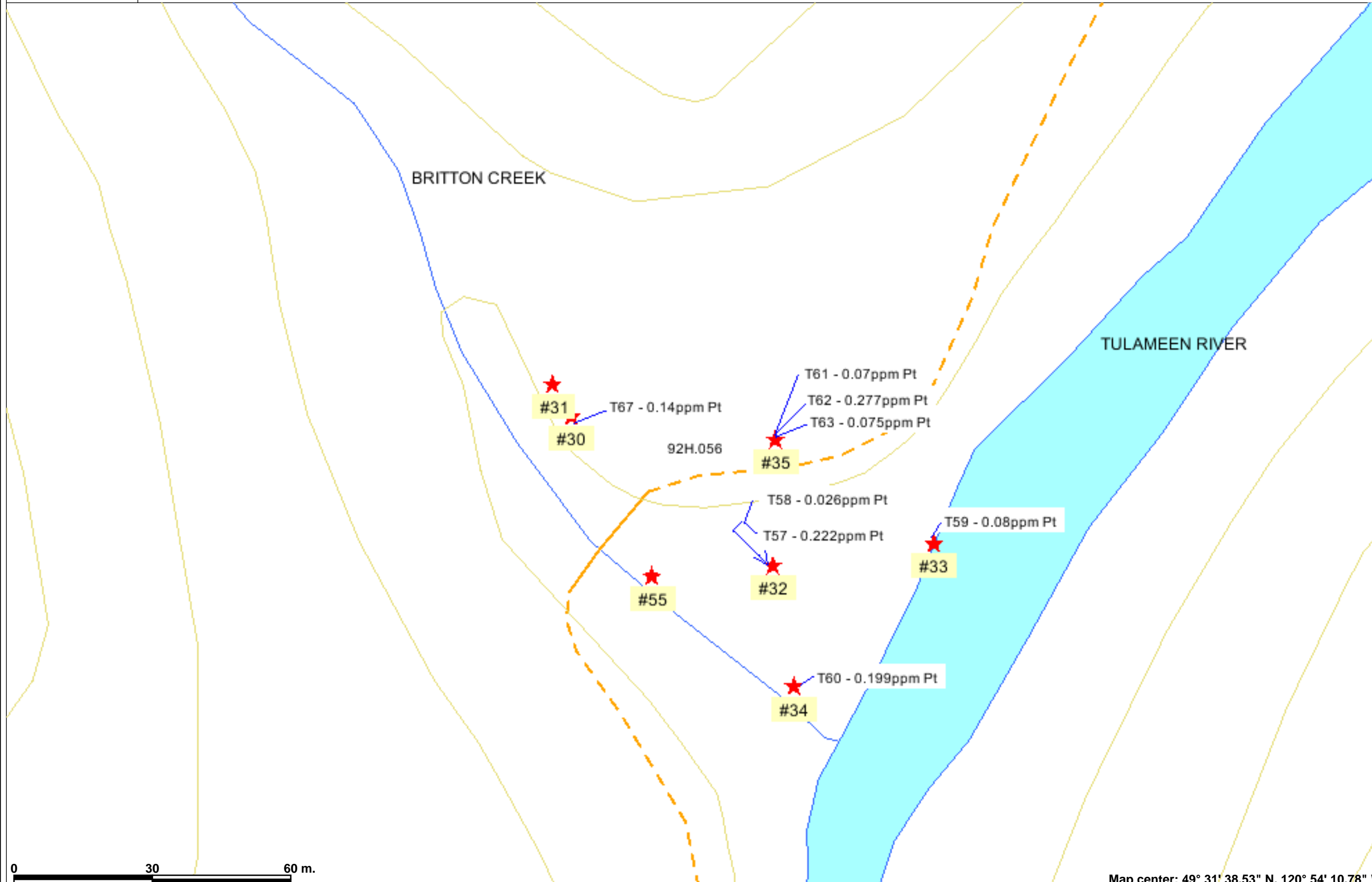


Plate 3: Unaltered dunite rock cut by chromite-rich fissures

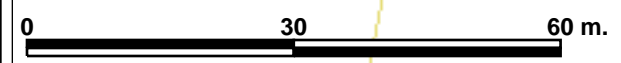
An old trail that leads to higher elevation platiniferous outcrops on the Grasshopper Mountain and which was still accessible in the 1980s (AR17170) could not be identified as it is definitely overgrown. As a result the writer could not climb the steep bluffs and therefore could not survey the higher elevations platiniferous outcrops of the Ridge Zone.

The intensity of the serpentinization process increases close to the Britton Creek where a dunite breccia features elements of mostly unaltered dunite fragments cemented by a green serpentine matrix. The sulphide mineralization is rare and only one occurrence of sulphide (0.2% copper) with malachite stains was found on the eastern side of the Britton Creek.

Fig. 4 - Tulameen Platinum Project Sampling Map (1)



- Legend**
- Indian Reserves
 - National Parks
 - Conservancy Areas
 - Parks
 - Federal Transfer Lands
 - Mineral Tenure (current)
 - First Nations Treaty Related Lands
 - First Nations Treaty Lands
 - Integrated Cadastral Fabric
 - BCGS Grid
 - Contours (TRIM)
 - Contour - Index
 - Contour - Index.Indefinite
 - Contour - Index.Depression
 - Contour - Index.Depression Indefinite
 - Contour - Intermediate
 - Contour - Intermediate.Indefinite
 - Contour - Intermediate.Depression
 - Contour - Intermediate.Depression Indefinite
 - Area of Exclusion
 - Area of Indefinite Contours
 - Annotation (1:20K)
 - Transportation - Points (TRIM)
 - Helipad
 - Transportation - Lines (TRIM)
 - Airfield
 - Airport
 - Airstrip
 - Airport.Abandoned
 - Ferry Route
 - Road (Gravel Undivided) - 1 Lane
 - Road (Gravel Undivided) - 2 Lanes
 - Road (Gravel Undivided) - U/C - 1 Lane
 - Road (Gravel Undivided) - U/C - 2 Lanes
 - Road (Paved Divided) - Not Elevated - 1 Lane Each Way
 - Road (Paved Divided) - Not Elevated - 2 Lanes Each Way
 - Road (Paved Divided) - U/C - Not Elevated - 2 Lanes Each Way
 - Road (Paved Undivided) Not Elevated - 3 Lanes
 - Road (Paved Undivided) - Not Elevated - 1 Lane
 - Road (Paved Undivided) - Not Elevated - 2 Lanes
 - Road (Paved Undivided) - Not Elevated - 4 Lanes
 - Road (Paved Undivided) - U/C - Not Elevated - 4 Lanes
 - Road (Unimproved)
 - Cut (Roadway)
 - Embankment/Fill (Roadway)



Map center: 49° 31' 38.53" N, 120° 54' 10.78" W



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.

Notes: Station numbers marked with #. Dan Oancea, Sept. 2013 - North Bay Resources Inc.

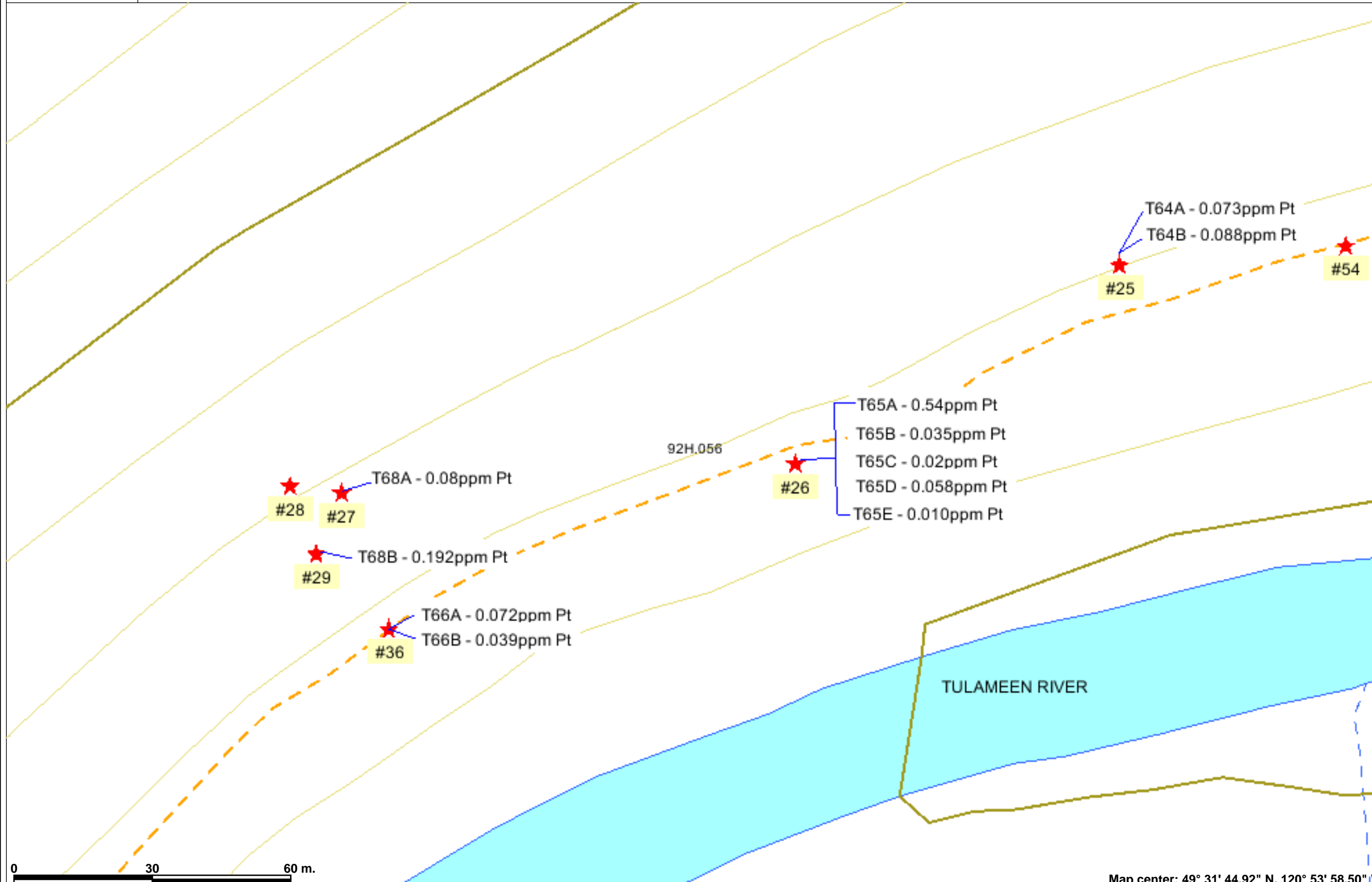
Fig. 5 - Tulameen Platinum Project Sampling Map (2)



Legend

- Indian Reserves
- National Parks
- Conservancy Areas
- Parks
- Federal Transfer Lands
- Mineral Tenure (current)
- First Nations Treaty Related Lands

- First Nations Treaty Lands
- Integrated Cadastral Fabric
- BCGS Grid
- Contours (TRIM)
 - Contour - Index
 - Contour - Index.Indefinite
 - Contour - Index.Depression
 - Contour - Index.Depression Indefinite
 - Contour - Intermediate
 - Contour - Intermediate.Indefinite
 - Contour - Intermediate.Depression
 - Contour - Intermediate.Depression Indefinite
- Area of Exclusion
- Area of Indefinite Contours
- Annotation (1:20K)
- Transportation - Points (TRIM)
 - Helipad
 - Transportation - Lines (TRIM)
 - Airfield
 - Airport
 - Airstrip
 - Airport.Abandoned
 - Ferry Route
 - Road (Gravel Undivided) - 1 Lane
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 - Road (Gravel Undivided) - U/C - 1 Lane
 - Road (Gravel Undivided) - U/C - 2 Lanes
 - Road (Paved Divided) - Not Elevated - 1 Lane Each Way
 - Road (Paved Divided) - Not Elevated - 2 Lanes Each Way
 - Road (Paved Divided) - U/C - Not Elevated - 2 Lanes Each Way
 - Road (Paved Undivided) Not Elevated - 3 Lanes
 - Road (Paved Undivided) - Not Elevated - 1 Lane
 - Road (Paved Undivided) - Not Elevated - 2 Lanes
 - Road (Paved Undivided) - Not Elevated - 4 Lanes
 - Road (Paved Undivided) - U/C - Not Elevated - 4 Lanes
 - Road (Unimproved)
 - Cut (Roadway)
 - Embankment/Fill (Roadway)



Map center: 49° 31' 44.92" N, 120° 53' 58.50" W

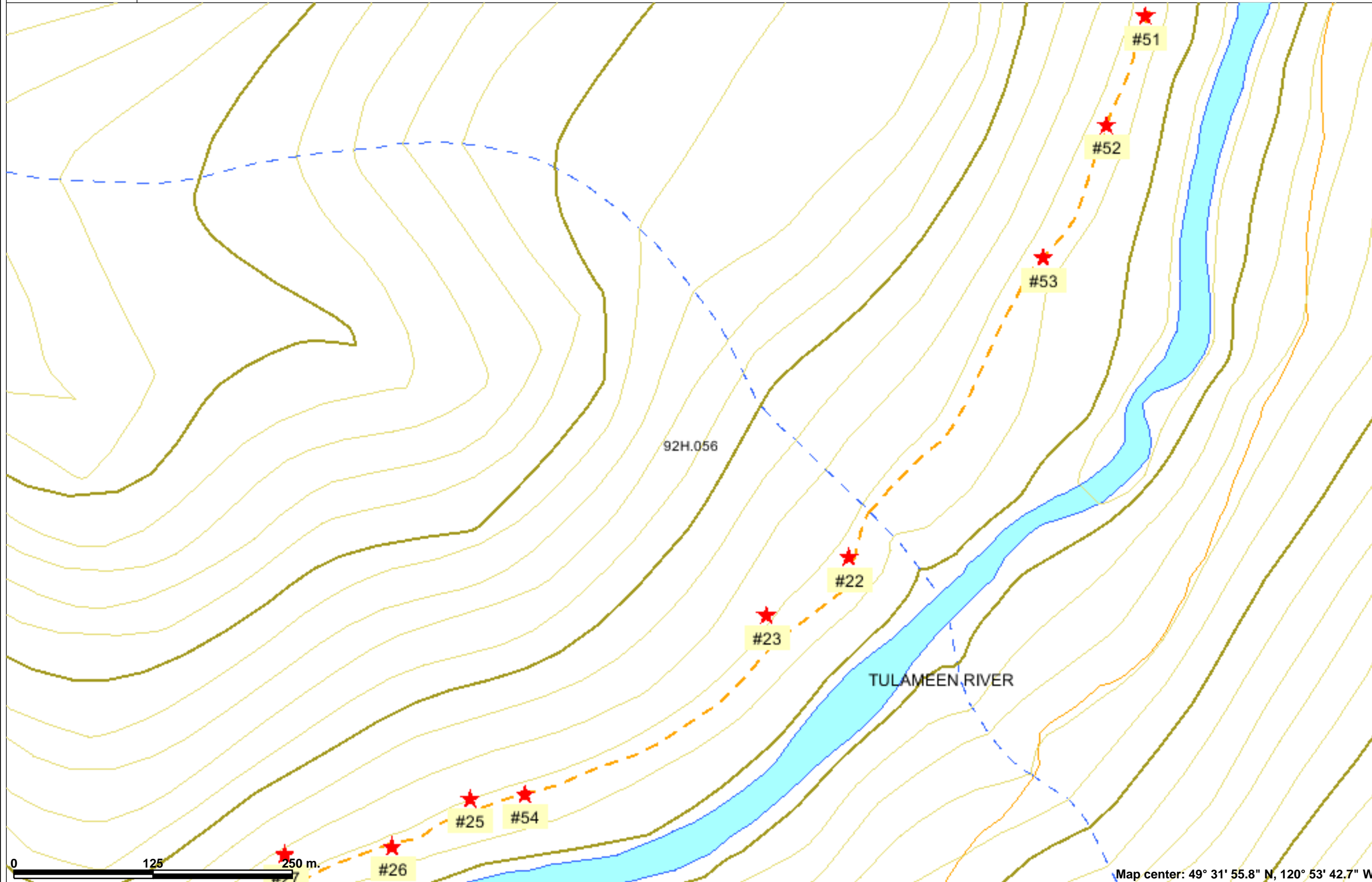


Scale: 1:850

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Notes: Station numbers are marked with #. Dan Oancea, Sept. 2013 - North Bay Resources Inc.

Fig. 6 - Tulameen Platinum Project Sampling Map Detail (3)



Legend

- Indian Reserves
- National Parks
- Conservancy Areas
- Parks
- Federal Transfer Lands
- Mineral Tenure (current)
- First Nations Treaty Related Lands

- First Nations Treaty Lands
- Integrated Cadastral Fabric
- BCGS Grid
- Contours (TRIM)
 - Contour - Index
 - Contour - Index.Indefinite
 - Contour - Index.Depression
 - Contour - Index.Depression Indefinite
 - Contour - Intermediate
 - Contour - Intermediate.Indefinite
 - Contour - Intermediate.Depression
 - Contour - Intermediate.Depression Indefinite
- Area of Exclusion
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 - Road (Paved Divided) - U/C - Not Elevated - 2 Lanes Each Way
 - Road (Paved Undivided) Not Elevated - 3 Lanes
 - Road (Paved Undivided) - Not Elevated - 1 Lane
 - Road (Paved Undivided) - Not Elevated - 2 Lanes
 - Road (Paved Undivided) - Not Elevated - 4 Lanes
 - Road (Paved Undivided) - U/C - Not Elevated - 4 Lanes
 - Road (Unimproved)
 - Cut (Roadway)
 - Embankment/Fill (Roadway)



Map center: 49° 31' 55.8" N, 120° 53' 42.7" W



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Notes: Station numbers are marked with #. Dan Oancea, Sept. 2013 - North Bay Resources Inc.

The Creek Zone located at the confluence of Britton Creek and Tulameen River was mapped and sampled. As the months of June and July coincide with the high water season the creeks had more water than usual therefore it was not possible to map it along the Britton Creek farther than the bridge that crosses the creek. The Creek Zone is hosted by the dunite breccia along the lower eastern side of the Britton Creek. The dunite breccia continues below the confluence with the Tulameen River on the river's north bank where bluffs seem to display a gradation to fissured dunite cut by serpentine veinlets. Above the road and on the eastern side of the Britton Creek there is also a transitional zone where both dunite breccia and the relatively unaltered dunite rock is present. The survey's top dunite breccia platinum assay was 0.222 g/t.

A small part of the mineral property is located west of the Britton Creek on the southeastern side of the Britton Mountain and that part of the mineral property was accessed by following the Tulameen FSR over the Britton Creek bridge. Small side-of-the-road outcrops display the same type of dunite rock as the one existent on the other side of the Britton Creek: i.e. relatively unaltered dunite rock sometimes cut by mm thick fissures filled with serpentine, chromite and magnetite minerals.

7. Discussion and Conclusions

The results of the 2013 prospecting survey as well as literature search and the interpretation of available geological data all point to the fact that the Tulameen Platinum Project is a property of merit. Before reaching a final conclusion it is important to understand and discuss geology, mineralization and the economic potential of the Tulameen Platinum Project.

Placer Platinum

Before the Quaternary glaciation the whole Tulameen River valley contained platinum-rich placer deposits. Some of them were subsequently removed by the moving ice while others were mixed with glacial material therefore making them poorer. The aforementioned processes took place in parts of the valley that are wider and provided for the forming of the so-called valley glaciers. If it were not for the destructive action of the glaciers the recovered placer platinum quantity would have been several times higher than the 20,000 ounces that is on the record.

The narrow Tulameen River valley that cuts through the platiniferous dunite rocks hosted shallow and easy to work platinum rich gravels that had been sheltered from the abrasive action of the moving ice. This section of the river which is hosted by the Company's claims was the richest and it was reported that more platinum than gold had been recovered in areas close to the mouth of the Britton Creek.

Most of the finds that have been recorded in historic documents represent larger gold or platinum nuggets but the fact remains that the majority of the placer platinum 'nuggets' that

had been recovered on the Tulameen River were in the 1-4 mm range (Mertie, 1969). This fact could represent a sampling bias of the population of in-situ platinum grains because the old timers rudimentary recovery methods in many cases didn't allow them to recover the fine precious metals.

The size of the placer platinum grains is important to be clarified because a finer size is more in line with the minute grains of platinum that could be nowadays observed in hardrock outcrops where it is associated with chromites.

Nixon (1990) also noted that the larger platinum nuggets were recovered from placers located near the eastern margin of the ultramafic complex, whereas material collected further downstream typically occurred as fine flakes.

Older reports (ARMM 1924) also mentioned that 'native platinum is very fine' and some of it is magnetic (e.g. iron rich varieties like isoferroplatinum) so it attaches to magnetite and as a result could have been easily flushed away from pans and sluices. Because of that much of the placer platinum was lost. Records are incomplete before 1885 (Holland, 1950) and much of the platinum was directly shipped away therefore it was not officially recorded as recovered. It should be noted that in the early days of placer mining the whitish metal was considered a nuisance and discarded.

All these facts contributed to diminishing the official statistics of the amount of platinum recovered on the Tulameen River. The amount of placer platinum that was recovered as well as the amount of platinum that existed before the onset of the glacial period are important because it could help in establishing a more complete picture of the present day potential of the platiniferous dunite rocks.

Genesis of the Placer Platinum

The work of Nixon (1990) established a definitive link between some large platinum nuggets and the in-situ hardrock platinum that is associated with chromitites. However, platinum alloys in chromitites contain twice as much copper and an order of magnitude more nickel than ferroan platinum in the placers. According to this interpretation the larger platinum nuggets were derived from the physical weathering of the dunite rocks.

An alternate explanation for the existence of precious metals placer deposits in zones where the hardrock sources contain only low grade and mostly disseminated mineralization (the Tulameen case included) takes into account the chemical mobilization (supergene processes) of platinum and gold. A Bowles (1994) paper documents platinum placer deposits that have been formed as a result of the weathering of low grade hardrock platinum deposits. In this case the platinum group elements had been dissolved, transported and then precipitated on nuclei in eluvial deposits which have been subsequently worked and gravitationally sorted by the action of the moving waters of creeks and rivers.

Lab experiments under conditions designed to mimic weathering processes were conducted over one year period. Results indicated that platinum and palladium solubility range from 100 ppb to 270 ppb per year. These values are comparable with many of the Tulameen dunite rocks assays (not the chromite enriched zones but the fresh rock that features small grains of disseminated chromite). In conclusion under certain conditions weathering processes could remove all the PGM mineralization from a tonne of dunite rock over a one year period.

Chemical weathering of the dunite rock involves the reaction between olivine, water and oxygen which results in the production of hematite (which explains the rusty color of weathered outcrops) and silicic acid (a potent acid that would further dissolve the silica from the rocks contributing to their disintegration and exposing them to elements).

At the present time the Tulameen dunite rocks outcrop over an area estimated to be greater than 6 million square meters. At least theoretically the 20,000 ounces platinum (the amount already recovered from placers) could have been derived from chemical weathering processes and mobilization and transport of platinum from over 6 million tonnes of dunite rocks grading 100 ppb per tonne. This could be accomplished in one year through the complete chemical weathering of a 30 cm top layer of dunite rock over the whole area that is already being exposed to elements.

Chromitites

The origin of the PGE (platinum group elements) enriched chromitites is related to segregation of predominantly Pt-Fe alloys directly from the melt during conditions that enhanced the precipitation of chromite (Nixon, 1990). This type of chromite represents the first generation of chromite.

All dunite rocks contain disseminated grains of chromite (1st generation) and at times schlieren and podiform masses of chromite (cumulate chromite).

Disruption and redistribution of chromitite horizons within the dunite appear to have been accomplished by intermittent slumping and redeposition of formerly stratified cumulates at a relatively early stage of solidification of the magma chamber (Nixon & Rublee, 1988).

A second generation of chromite was generated by the remobilization of the 1st generation as a result of the serpentinization process. The influx of meteoric water triggered the serpentinization process that resulted in the deposition of serpentine minerals accompanied by 2nd generation chromite, secondary magnetite, base metals and re-mobilized PGM on many of the fissures that cut the dunite rocks. The dunite breccia of the Britton Creek area, which is highly serpentinized, returned higher platinum assays than the composite samples collected from relatively unaltered dunite rocks. However, there is no definitive correlation between serpentinization and the platinum content.

As noted by previous explorers there are two types of chromites i.e. platinum-rich and platinum-poor chromites. The latter was also encountered during the prospecting survey when a sample (T65C) returned 20.3% chromium but platinum values were below detection limit. There is no good understanding of these two types and no way of differentiating them other than by assaying them. Generally speaking there is no good correlation between platinum and the chromium content of the rock or mineralized zone.

Findlay (1969) considers that there are no systematic variations of chromite composition in the Tulameen rocks. As a group chromites are characterized by high iron content (Cr/Fe ratios range 0.8 to 1.5) and this is reflected by the moderate to strongly magnetic properties of many samples. The author noticed though that platinum is enriched in the magnetic fraction of chromite samples relative to non-magnetic fraction.

Previous authors (Findlay, Nixon) also reported that the olivine from platinum-rich chromites is richer in magnesium than the rest of the olivine that makes up the mass of the dunite rocks. Their maps indicate the dunite rocks potential to host chromitites and PGM mineralization.

Geological Structure

The structure of the ultramafic complex is important in further testing the potential for economic platinum mineralization.

Findlay (1969) and Nixon & Rublee (1987) consider that simultaneous with the emplacement of the magmatic body (lopolith or sill) tectonic movements affected the partially consolidated intrusion and produced folds that are obvious by studying the chromitite layers (boudinaged, concentric layering) located on the southern slopes of the Grasshopper Mountain.

It is the upper part of the dunite folds that had been eroded and which released the PGM which subsequently accumulated in placers.

Mertie (1969) discusses the common situation (applicable to the Tulameen region as well) of not being able to find and delineate economic hard rock mineralization at the headwaters of a zone traversed by rivers that are richly endowed with precious metals placers. Causes that could be considered are the fact that the original mineralized rocks may have been completely eroded; the present country rock is platiniferous but represents the low grade roots of lodes that were richer in their apical horizons that had been eroded and generated placer deposits carrying larger nuggets; or, the mineral deposit was all low grade and the rich placers have been formed by sustained erosion over a long period of time.

A few conclusions could be derived from the above discussion. The apical part of the dunite rocks folds was enriched in PGM and through its erosion a significant amount of platinum

was released in the streams that drain the hardrock zone. This apical part was the hardrock source of the larger platinum nuggets (attached to chromite and olivine crystals) that had been recovered from the Tulameen River.

The writer considers that the platiniferous dunite rocks that remain in place represent the lower grade roots of the original structure. It is possible that some of the finer grains of placer platinum had been formed through a chemical weathering process. This possibility provide further support to the fact that the present day low grade platiniferous dunite rocks represent the source of the finer placer platinum and most likely there is no hidden platinum rich source to be found in the dunite rocks.

To be also noted is that previous explorers have thoroughly sampled the area and follow up drilling of the richest platinum outcrops failed to delineate economic PGM mineralization (AR 27009, p. 21).

Considering the aforementioned facts it is the writer's opinion that no large economic concentrations of PGM that could support the development of a stand-alone precious metals mine are to be found on the Grasshopper Mountain.

In order to be able to develop an economic mining operation other opportunities have to be considered as well in conjunction with the precious and base metals potential of the dunite rocks of the Tulameen Complex.

Olivine Industrial

The primary uses for olivine incorporate the refractory, chemical, strength, thermal conductivity and high density properties of the mineral. The major consumers of olivine are steel smelters and foundries. Secondary users are brick, tile, concrete, aggregate and abrasives manufacturers (OF 1991-09).

Olivine specifications include a Loss-on-Ignition (LOI) less than 2%. High magnesium levels are preferred with a minimum of 45 per cent MgO. Finally, other oxides should be below 15 weight per cent in total and iron content below 10 per cent. Unaltered Tulameen dunite rocks exceeded all these specifications and foundry testing indicated that it favourably compares with other deposits worldwide (OF 1991-09).

G.V.White (1987) and OF 1991-09 mapped fresh (not serpentized) dunite rocks having less than 2% LOI in the Mt. Britton area and southwest of the Mt. Grasshopper in open ended areas. Most of these areas are covered by the Company's Tulameen Project.

Because of the steep terrain White did not map the southern and eastern parts of the Grasshopper Mountain which also lie in areas that feature fresh dunite rocks. The present survey encountered fresh or slightly serpentized dunite/olivine in most of of the southern Grasshopper Mountain occurrences that had been visited.

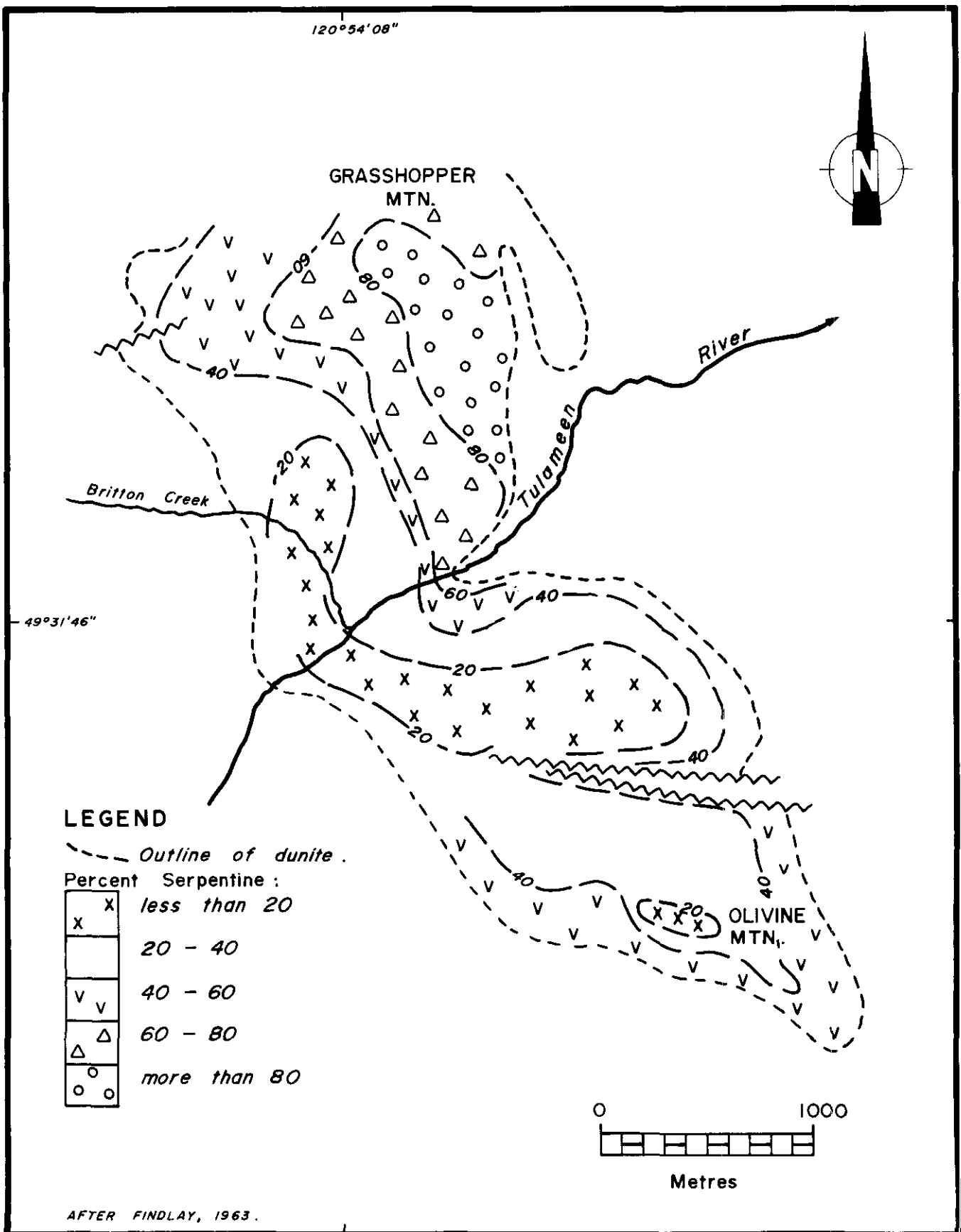


Figure 4-7-1. Serpentinized zones in the dunite core, Tulameen ultramafic complex.

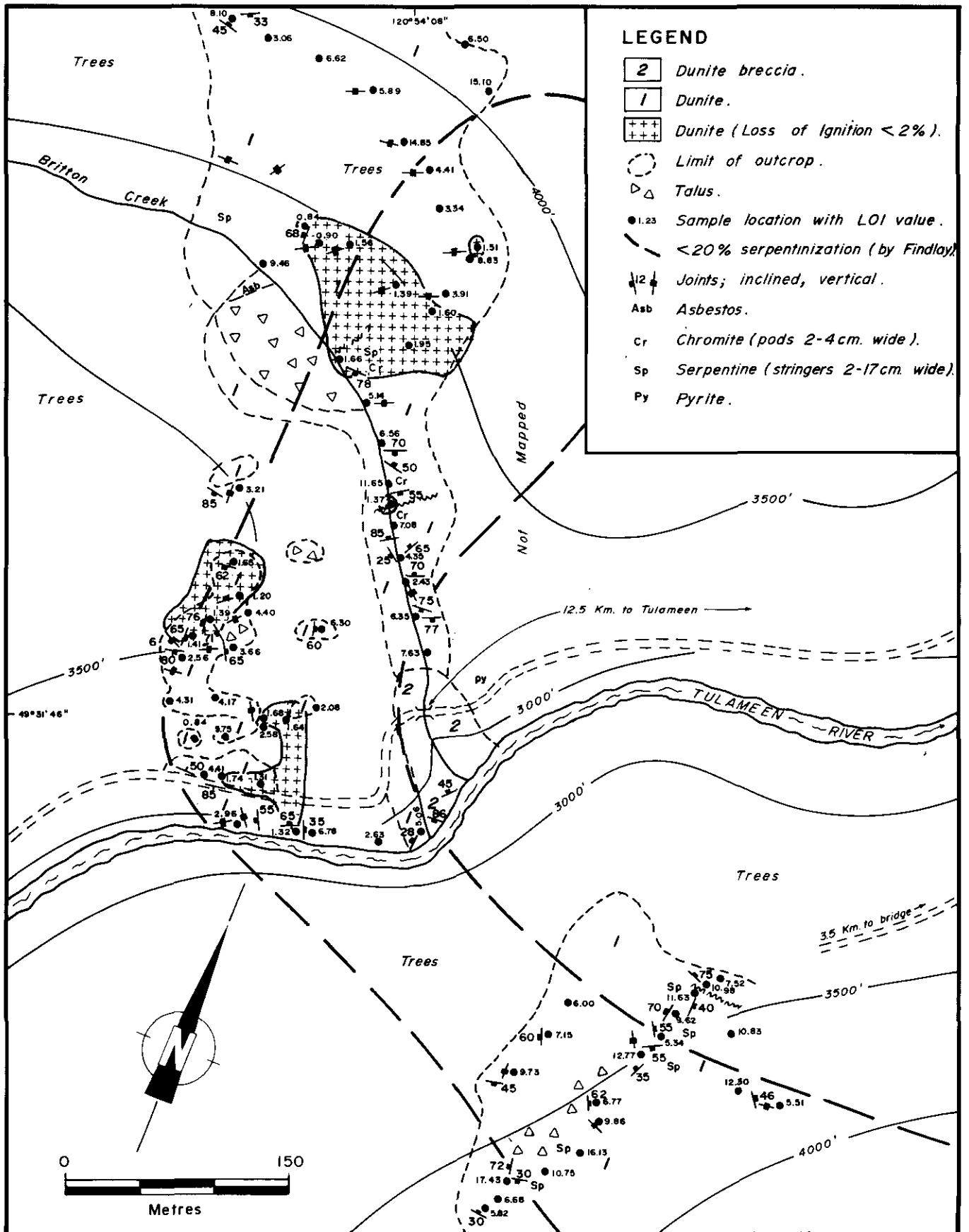


Figure 4-7-2. Geological sketch map of the study area and sample locations with reported loss-on-ignition values.

There is also additional potential for reserves of unaltered dunite on the northern slopes of the Olivine Mountain. Part of these areas are also covered by the Company's mineral claims.

A 1989 report prepared for Diamet Minerals (the original discoverers of diamonds in North America) reported on an exploratory testwork of beneficiation of olivine from the eastern side of the Britton Mountain which featured partially serpentinized dunite rock. The method (wet gravity separation) involved was not able to produce a commercial olivine concentrate (LOI < 2%) in cases where the feed had a LOI >3.5%.

The report further states that the tested serpentinized dunites could produce a clean commercial olivine concentrate by grinding to -100 mesh and possibly by using the flotation method.

In conclusion, there is a good potential for the identification and development of an industrial olivine deposit on the part of the Grasshopper Mountain covered by the Company's Tulameen Project.

Carbon Dioxide Mineral Sequestration Potential

Mineral sequestration of CO₂ involves reacting magnesium silicates (forsteritic olivine or serpentine) with CO₂ emissions. The resulting products are magnesite (MgCO₃) and silica (SiO₂).

Dunite rocks with high MgO (forsteritic olivine) and low Fe₂O₃ (iron oxide), CaO (pyroxene, amphibols and carbonates), water (serpentine) and LOI (serpentine minerals) are the most promising (Danae et al.)

Laboratory and bench-test studies conducted in 2004 by A.V. Danae indicated that the olivine from the Tulameen dunite rocks is suitable for mineral carbonation of CO₂. The results indicate that one tonne of Tulameen dunite could potentially sequester up to 0.4 tonnes of CO₂.

Final Conclusions

The mining of the olivine rich core of the Tulameen Ultramafic Complex has to be envisioned as a possible open pit mining operation that would include on-site processing of the rock (crushing, grinding, flotation and/or gravity concentration) as this could be the only viable solution for moving the project forward. The main product could be represented by olivine industrial mineral, while by-products could be represented by metals (PGM, chromite, magnetite). The tailings could be marketed for their CO₂ sequestration potential.

8. Recommended Work

North Bay Resources' Tulameen Platinum Project is considered to be a property of merit and further exploration work is warranted.. In keeping with the final conclusions of this report the main exploration target is represented by the identification and delineation of an unaltered olivine resource within the dunite rocks of the Tulameen Project. Metal by-products (PGM, chromite and magnetite) would represent a secondary exploration target.

It is recommended that a geological survey of the dunite core of the ultramafic rocks to be undertaken. The survey would consist of detailed mapping and systematic sampling with a focus on finding zones underlain by dunite rocks that are not affected by serpentinization processes. Also recommended is the use of a Portable XRF Analyzer (PXRF) to help guide the field mapping and sampling process.

As platinum group metals could represent a valuable by-product it is important to relocate the higher grade zones described by previous explorers. New high tenor zones could also be identified in the process.

The data resulting from the mapping and sampling of the dunite core would be used in building a model and understanding the chemical characteristics and relationships between different zones as well as the main commodities that could be obtained by mining them. For example, a high tenor PGM mineralization in serpentinized dunite rocks could be mined for PGM therefore in this particular case the PGM becomes the main target/product. Or a 1st generation chromite-rich but platinum-poor fresh dunite zone would be targeted for olivine industrial while chromite could be the by-product of a possible mining operation.

Important zones (olivine industrial or rich in metals of interest) would be drilled to calculate and delineate mineral resources and reserves that would allow the planning of a mining operation through a Preliminary Economic Assessment report.

The part of the mineral tenements located south of the Tulameen River should also be explored for it is hosting prospective mineralized outcrops (H & H) and soil anomalies. A mapping and soil sampling program should be designed based on the results obtained by previous explorers.

9. Cost Statement

Salaries

Dan Oancea PGeo:

- 4.0 days fieldwork @ \$500/day \$2,000.0
- 1.5 day mob/demob @ \$500/day \$750.0

Gabriela Oancea, Geologist:

- 4.0 day fieldwork @ \$250 \$1,000.0

Accommodation:

- 5.0 days @ \$100/day \$500.0

Food (2 persons):

- 5.5 days @ \$100/day \$550.0

Truck \$550.0

Gas: \$250.0

Analytical (ALS Chemex)

- 20 Rock Samples (4 analytical methods) \$1,725.97

Report Cost:

Dan Oancea PGeo

- 4.5 days @500/day \$2,250.0

TOTAL **\$9,575.97**

10. References

Assessment Reports (AR): 12190, 15516, 16125, 16323, 16691, 17170, 17280, 19480, 19825, 27009, 31256.

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Nixon, Graham T. & Rublee, V.J. (1987): Alaskan-type Ultramafic Rocks in British Columbia – New concepts of the structure of the Tulameen Complex.

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White, G.V. (1986): Olivine Potential in the Tulameen Ultramafic Complex

11. Statement of Qualifications

I, **Dan V. Oancea**, of 12-330 Angela Drive, Port Moody, British Columbia do hereby certify that:

I am a registered Professional Geoscientist in the Province of British Columbia, Canada and a Fellow of the Geological Association of Canada.

I have a B.Sc. degree in Geological Engineering and Geophysics from Babes-Bolyai University of Cluj-Napoca, Romania, which I graduated in 1987.

I have practised my profession for 14 years.

As a result of my experience and qualification I am a Qualified Person as defined in National Instrument 43-101.

I have authored this report which is based upon review and compilation of data relating to Tulameen Platinum mineral property and upon personal knowledge of the property gained from on-site survey work carried out in June 2013.

I do not own interest in the Tulameen Platinum mineral property.

Vancouver,

September 29, 2013

Respectfully submitted

Dan V. Oancea PGeo

Table 2 – Tulameen Platinum Project Samples & Other Important Locations

Station No.	Sample No. / Type	UTM E*	UTM N*	Sample/Outcrop Description
#11	-	654650	5489718	Spur road to Hines Creek Placer Mine
#22	-	652432	5488639	Forested area with black unaltered dunite floats
#23	-	652356	5488591	Black massive relatively unaltered dunite subcrop
#25	T-64 A,B / Floats	652082	5488435	Black to dark green massive relatively unaltered dunite cut by mm thick fissures with chromite, magnetite
#26	T-65 A,B,C,D,E/Grab	652011	5488395	Composite (grab) samples of fresh to slightly altered dunite cut by mm thick fissures filled with serpentine minerals, chromite, magnetite. Chromite also as dissemination, blebs. T-65 C (float) massive chromite in dunite.
#27	T-68 A / Grab	651913	5488394	Brown dunite cut by mm thick fissures with serpentine, chromite. Chromite occurs as blebs as well.
#28	-	651902	5488396	Dark coloured dunite cliffs massive relatively unaltered. Weather brown.
#29	T-68 B / Grab	651907	5488381	Brown dunite cut by mm thick

				serpentine veins ('brecciated' look) with magnetite, chromite
#30	T-67 / Grab	651722	5488204	Dark coloured dunite partially serpentinized stained by malachite. Fine disseminated sulphides present.
#31	-	651718	5488211	Bluffs made of fresh dark coloured dunite cut by mm thick serpentine veinlets. Serpentinized dunite breccia outcrops as well.
#32	T-57 / Float, T-58 / Grab	651764	5488171	Dark colored dunite with disseminated chromite cut by fissures mm thick with serpentine, chromite, magnetite
#33	T-59 / Grab	651799	5488173	Serpentinized dunite breccia bluffs
#34	T-60 / Float	651768	5488144	Outcrops of serpentinized dunite breccia.
#35	T-61, T-62, T-63 /Grab	651766	5488198	Above the road outcrops of dark colored dunite massive fine grained cut by mm thick fissures with serpentine, chromite, magnetite
#36	T-66 A,B / Floats	651922	5488364	Composite samples of brown dunite cut by frequent mm thick fissures with serpentine, magnetite, chromite
#51	-	652719	5489112	Gabbro and hornblende pyroxenite floats
#52	-	652681	5489013	Olivine pyroxenite, gabbro in a partially vegetated rock

				slide/scree (>80m wide)
#53	-	652617	5488898	Olivine pyroxenite outcrop sometimes displaying cm wide zones of olivine/diopside. Chromite disseminated.
#54	-	652131	5488433	Huge area with cliffs and covered by large blocks of black to dark green massive relatively unaltered dunite cut by mm thick fissures with chromite, magnetite
#55	-	651737	5488168	Outcrop of serpentinized matrix dunite breccia under the Britton Creek bridge

***UTM Zone 10 NAD 83**

APPENDIX 1

ALS CHEMEX INVOICES, ANALYTICAL CERTIFICATES & CHEMICAL PROCEDURES



ALS USA Inc.
 4977 Energy Way
 Reno NV 89502
 Phone: 775 356 5395 Fax: 775 355 0179 www.alsglobal.com

To: **NORTH BAY RESOURCES**
2120 BETHEL ROAD
LANSDALE PA 19446

INVOICE NUMBER 2947011

BILLING INFORMATION	
Certificate:	VA13124361
Sample Type:	Rock
Account:	NORBAY
Date:	12-AUG-2013
Project:	TLM Project
P.O. No.:	
Quote:	
Terms:	Due on Receipt C3
Comments:	

ANALYSED FOR			UNIT	TOTAL
QUANTITY	CODE	- DESCRIPTION	PRICE	
6	PREP-31	Crush, Split, Pulverize	7.20	43.20
4.30	PREP-31	Weight Charge (kg) - Crush, Split, Pulverize	0.70	3.01
6	PGM-NAA26	PGM NiS collection NAA finish	148.85	893.10
6	ME-ICP61a	High Grade Four Acid ICP-AES	20.25	121.50

SUBTOTAL (USD) \$ 1,060.81

To: **NORTH BAY RESOURCES**
 ATTN: PERRY LEOPOLD
 2120 BETHEL ROAD
 LANSDALE PA 19446

TOTAL PAYABLE (USD) \$ 1,060.81

Please Remit Payments To :
ALS USA Inc
 4977 Energy Way
 Reno NV 89502

Payment may be made by: Check or Bank Transfer

Beneficiary Name: ALS USA Inc.
 Bank: Royal Bank of Canada
 SWIFT: ROYCCAT2
 Address: Vancouver BC CAN
 Account: 003-00010-4001384
 For transfers from USA banks use Intermediate Bank
 Intermediary Bank: JP Morgan Chase Bank
 Intermediary Address: New York, NY, USA
 Intermediary Routing: ABA: 021000021



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INVOICE NUMBER 2947001

BILLING INFORMATION	
Certificate:	VA13124362
Sample Type:	Rock
Account:	NORBAY
Date:	16-JUL-2013
Project:	TLM Project
P.O. No.:	
Quote:	
Terms:	Due on Receipt C3
Comments:	

ANALYSED FOR			UNIT	TOTAL
QUANTITY	CODE	- DESCRIPTION	PRICE	
13	PREP-31	Crush, Split, Pulverize	7.20	93.60
10.58	PREP-31	Weight Charge (kg) - Crush, Split, Pulverize	0.70	7.41
13	PGM-ICP24	Pt, Pd, Au 50g FA ICP	22.05	286.65
13	ME-ICP61a	High Grade Four Acid ICP-AES	20.25	263.25

SUBTOTAL (USD) \$ 650.91

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TOTAL PAYABLE (USD) \$ 650.91

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Beneficiary Name: ALS USA Inc.
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 For transfers from USA banks use Intermediate Bank
 Intermediary Bank: JP Morgan Chase Bank
 Intermediary Address: New York, NY, USA
 Intermediary Routing: ABA: 021000021



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INVOICE NUMBER 2970520

BILLING INFORMATION	
Certificate:	VA13144802
Sample Type:	Rock
Account:	NORBAY
Date:	16-AUG-2013
Project:	TLM Project
P.O. No.:	
Quote:	
Terms:	Due on Receipt C3
Comments:	

QUANTITY	CODE	ANALYSED FOR -	DESCRIPTION	UNIT PRICE	TOTAL
1	ME-ICP81	-	ICP Fusion - Ore Grade	14.25	14.25

SUBTOTAL (USD) \$ 14.25

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TOTAL PAYABLE (USD) \$ 14.25

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 Intermediary Address: New York, NY, USA
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Page: 1
 Finalized Date: 12-AUG-2013
 Account: NORBAY

CERTIFICATE VA13124361

Project: TLM Project
 P.O. No.:
 This report is for 6 Rock samples submitted to our lab in Vancouver, BC, Canada on 8-JUL-2013.
 The following have access to data associated with this certificate:
 PERRY LEOPOLD DAN OANCEA

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
PGM-NAA26	PGM NiS collection NAA finish
ME-ICP61a	High Grade Four Acid ICP-AES ICP-AES

To: **NORTH BAY RESOURCES**
ATTN: DAN OANCEA
2120 BETHEL ROAD
LANSDALE PA 19446

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
 Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A
 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 12-AUG-2013
 Account: NORBAY

Project: TLM Project

CERTIFICATE OF ANALYSIS VA13124361

Sample Description	Method Analyte Units LOR	WEI-21	PGM-NAA26	PGM-NAA26	PGM-NAA26	PGM-NAA26	PGM-NAA26	PGM-NAA26	PGM-NAA26	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	
		Recvd Wt.	Pt	Pd	Au	Os	Ru	Ir	Rh	Ag	Al	As	Ba	Be	Bi	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
T-59		0.68	0.08	<0.02	0.046	<0.01	<0.05	0.002	<0.005	<1	0.37	<50	<50	<10	<20	0.47
T-61		1.40	0.07	<0.02	0.020	<0.01	<0.05	<0.001	<0.005	<1	0.07	<50	<50	<10	<20	0.12
T-65A		0.76	0.54	<0.02	0.037	<0.01	<0.05	0.019	0.019	<1	2.95	<50	330	<10	<20	5.75
T-65C		0.12	<0.02	<0.02	0.056	<0.01	<0.05	0.006	0.009	<1	2.22	<50	<50	<10	<20	<0.05
T-67		0.68	0.14	<0.02	0.039	<0.01	<0.05	0.003	0.006	1	0.46	<50	<50	<10	<20	0.48
T-68A		0.66	0.08	<0.02	0.180	<0.01	<0.05	0.002	<0.005	<1	0.14	<50	<50	<10	<20	0.52



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 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 12-AUG-2013
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Project: TLM Project

CERTIFICATE OF ANALYSIS VA13124361

Sample Description	Method Analyte Units LOR	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	
		Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb
		ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm
T-59		<10	110	2720	150	5.78	<50	<0.1	<50	23.3	1210	10	<0.05	1150	60	<20
T-61		<10	140	940	30	6.43	<50	<0.1	<50	24.9	1100	<10	<0.05	1050	<50	<20
T-65A		<10	90	31800	80	9.01	<50	0.5	<50	11.90	1460	<10	0.70	560	450	<20
T-65C		<10	250	>100000	<10	15.40	<50	<0.1	<50	15.20	2350	10	<0.05	1380	<50	<20
T-67		<10	130	6710	1950	6.75	<50	<0.1	<50	23.9	1250	170	0.12	1000	140	<20
T-68A		<10	140	7690	<10	7.67	<50	<0.1	<50	27.7	1460	<10	<0.05	1260	<50	<20



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 Finalized Date: 12-AUG-2013
 Account: NORBAY

Project: TLM Project

CERTIFICATE OF ANALYSIS VA13124361

Sample Description	Method Analyte Units LOR	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	
		S	Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn
		%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
		0.05	50	10	10	50	0.05	50	50	10	50	20
T-59		0.42	<50	<10	20	<50	<0.05	<50	<50	20	<50	80
T-61		<0.05	<50	<10	<10	<50	<0.05	<50	<50	<10	<50	50
T-65A		<0.05	<50	30	170	<50	0.23	<50	<50	150	<50	130
T-65C		<0.05	50	10	10	<50	0.13	<50	80	110	<50	660
T-67		0.11	<50	<10	100	<50	<0.05	<50	<50	30	<50	100
T-68A		<0.05	<50	<10	<10	<50	<0.05	<50	<50	10	<50	70



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Page: Appendix 1
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 Finalized Date: 12-AUG-2013
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Project: TLM Project

CERTIFICATE OF ANALYSIS VA13124361

	CERTIFICATE COMMENTS								
Applies to Method:	<p style="text-align: center;">LABORATORY ADDRESSES</p> <p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">CRU-31</td> <td style="width: 25%;">CRU-QC</td> <td style="width: 25%;">LOG-22</td> <td style="width: 25%;">ME-ICP61a</td> </tr> <tr> <td>PUL-31</td> <td>PUL-QC</td> <td>SPL-21</td> <td>WEI-21</td> </tr> </table>	CRU-31	CRU-QC	LOG-22	ME-ICP61a	PUL-31	PUL-QC	SPL-21	WEI-21
CRU-31	CRU-QC	LOG-22	ME-ICP61a						
PUL-31	PUL-QC	SPL-21	WEI-21						
Applies to Method:	<p>Processed at Becquerel Laboratories Inc., Mississauga, Ontario, Canada</p> <p>PGM-NAA26</p>								



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Page: 1
 Finalized Date: 16-JUL-2013
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CERTIFICATE VA13124362

Project: TLM Project
 P.O. No.:
 This report is for 13 Rock samples submitted to our lab in Vancouver, BC, Canada on 8-JUL-2013.
 The following have access to data associated with this certificate:
 PERRY LEOPOLD DAN OANCEA

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP61a	High Grade Four Acid ICP-AES	ICP-AES
PGM-ICP24	Pt, Pd, Au 50g FA ICP	ICP-AES

To: **NORTH BAY RESOURCES**
ATTN: DAN OANCEA
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
 Colin Ramshaw, Vancouver Laboratory Manager



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CERTIFICATE OF ANALYSIS VA13124362

Sample Description	Method Analyte Units LOR	WEI-21	PGM-ICP24	PGM-ICP24	PGM-ICP24	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	
		Recvd Wt.	Au	Pt	Pd	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
		kg	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
T-57		0.54	<0.001	0.222	0.001	<1	0.30	<50	<50	<10	<20	0.15	<10	120	11400	100
T-58		0.56	0.001	0.026	<0.001	<1	0.26	<50	<50	<10	<20	0.59	<10	120	2140	40
T-60		1.58	<0.001	0.199	0.001	<1	0.18	<50	<50	<10	<20	0.15	<10	110	1860	120
T-62		1.16	<0.001	0.277	0.002	<1	0.06	<50	<50	<10	<20	0.25	<10	140	220	10
T-63		1.32	<0.001	0.075	0.001	<1	0.23	<50	<50	<10	<20	0.53	<10	130	2420	20
T-64A		0.68	<0.001	0.073	0.001	<1	0.08	<50	<50	<10	<20	0.16	<10	140	1420	<10
T-64B		0.24	<0.001	0.088	<0.001	<1	0.08	<50	90	<10	<20	0.08	<10	140	1770	<10
T-65B		0.96	<0.001	0.035	<0.001	<1	0.40	<50	100	<10	<20	0.19	<10	140	2400	<10
T-65D		0.70	<0.001	0.058	<0.001	<1	0.19	<50	<50	<10	<20	0.52	<10	130	7540	<10
T-65E		0.70	0.002	0.010	0.001	<1	4.41	<50	150	<10	<20	2.77	<10	70	940	70
T-66A		0.74	0.001	0.072	<0.001	<1	0.12	<50	<50	<10	<20	0.35	<10	130	1930	<10
T-66B		0.90	<0.001	0.039	0.001	<1	0.16	<50	70	<10	<20	0.16	<10	130	1900	<10
T-68B		0.50	<0.001	0.192	0.001	<1	0.13	<50	100	<10	<20	2.57	<10	120	2670	<10



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CERTIFICATE OF ANALYSIS VA13124362

Sample Description	Method Analyte Units LOR	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	
		Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr
		%	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
T-57		6.78	<50	<0.1	<50	24.6	1220	70	0.07	1330	50	20	0.32	<50	<10	<10
T-58		6.03	<50	<0.1	<50	25.5	1170	270	0.06	1380	90	<20	0.15	<50	<10	10
T-60		5.58	<50	<0.1	<50	24.9	1030	10	0.06	1280	50	<20	0.23	<50	<10	10
T-62		7.07	<50	<0.1	<50	26.8	1310	<10	0.07	1050	<50	<20	0.08	<50	<10	10
T-63		7.26	<50	<0.1	<50	25.7	1600	<10	0.08	990	60	<20	<0.05	<50	<10	20
T-64A		7.50	<50	<0.1	<50	26.4	1490	<10	0.07	1070	120	<20	<0.05	<50	<10	<10
T-64B		9.21	<50	<0.1	<50	24.4	1450	<10	0.05	1110	180	<20	<0.05	<50	<10	<10
T-65B		7.46	<50	0.1	<50	23.2	1420	<10	0.11	1150	90	<20	<0.05	<50	<10	<10
T-65D		6.79	<50	<0.1	<50	25.2	1450	<10	0.07	950	70	<20	0.11	<50	<10	10
T-65E		7.53	<50	0.3	<50	12.95	1670	<10	1.11	400	400	<20	<0.05	<50	20	190
T-66A		6.72	<50	<0.1	<50	25.9	1480	<10	0.08	990	50	<20	<0.05	<50	<10	<10
T-66B		7.30	<50	<0.1	<50	27.7	1480	<10	0.09	1040	50	<20	<0.05	<50	<10	<10
T-68B		6.64	<50	<0.1	<50	24.2	1280	<10	0.06	940	60	<20	<0.05	<50	10	20



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Project: TLM Project

CERTIFICATE OF ANALYSIS VA13124362

Sample Description	Method Analyte Units LOR	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	ME-ICP61a	
		Th	Ti	Tl	U	V	W	Zn
		ppm	%	ppm	ppm	ppm	ppm	ppm
T-57		<50	<0.05	<50	<50	20	<50	100
T-58		<50	<0.05	<50	<50	10	<50	70
T-60		<50	<0.05	<50	<50	10	<50	50
T-62		<50	<0.05	<50	<50	10	<50	40
T-63		<50	<0.05	<50	<50	10	<50	80
T-64A		<50	<0.05	<50	<50	10	<50	60
T-64B		<50	<0.05	<50	<50	10	<50	60
T-65B		<50	<0.05	<50	<50	20	<50	70
T-65D		<50	<0.05	<50	<50	30	<50	70
T-65E		<50	0.34	<50	<50	180	<50	80
T-66A		<50	<0.05	<50	<50	10	<50	50
T-66B		<50	<0.05	<50	<50	10	<50	60
T-68B		<50	<0.05	<50	<50	10	<50	60



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CERTIFICATE OF ANALYSIS VA13124362

	CERTIFICATE COMMENTS								
Applies to Method:	<p style="text-align: center;">LABORATORY ADDRESSES</p> <p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.</p> <table><tr><td>CRU-31</td><td>CRU-QC</td><td>LOG-22</td><td>ME-ICP61a</td></tr><tr><td>PGM-ICP24</td><td>PUL-31</td><td>SPL-21</td><td>WEI-21</td></tr></table>	CRU-31	CRU-QC	LOG-22	ME-ICP61a	PGM-ICP24	PUL-31	SPL-21	WEI-21
CRU-31	CRU-QC	LOG-22	ME-ICP61a						
PGM-ICP24	PUL-31	SPL-21	WEI-21						



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Page: 1
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 19-AUG-2013
 Account: NORBAY

CERTIFICATE VA13144802

Project: TLM Project
 P.O. No.:
 This report is for 1 Rock sample submitted to our lab in Vancouver, BC, Canada on 13-AUG-2013.
 The following have access to data associated with this certificate:
 PERRY LEOPOLD DAN OANCEA

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES

To: **NORTH BAY RESOURCES**
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
 Colin Ramshaw, Vancouver Laboratory Manager



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CERTIFICATE OF ANALYSIS VA13144802

Sample Description	Method Analyte Units LOR	ME-ICP81 Cr % 0.01
T-65C		20.3



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CERTIFICATE OF ANALYSIS VA13144802

	CERTIFICATE COMMENTS
Applies to Method:	<p style="text-align: center;">LABORATORY ADDRESSES</p> <p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. FND-02 ME-ICP81</p>



Assay Procedure – ME-ICP81
Evaluation of Ores and High Grade Materials by
Fusion-ICP-AES

Sample Decomposition: Sodium Peroxide Fusion (FUS-PER02)
Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES)

A prepared sample (0.200 g) is added to sodium peroxide flux (2.6 g), mixed well and then fused in a 670 °C furnace. The resulting melt is cooled and then dissolved in 250 mL of 30% hydrochloric acid. This solution is then analyzed by inductively coupled plasma – atomic emission spectrometry and the results are corrected for spectral interelement interferences.

Element or Oxide	Symbol	Units	Lower Limit	Upper Limit
Aluminum Oxide	Al ₂ O ₃	%	0.01	30
Arsenic	As	%	0.01	10
Calcium Oxide	CaO	%	0.01	30
Cobalt	Co	%	0.002	30
Chromium	Cr	%	0.01	30
Copper	Cu	%	0.005	30
Iron	Fe	%	0.05	100
Iron Oxide	Fe ₂ O ₃	%	0.10	100
Magnesium Oxide	MgO	%	0.01	30
Manganese Oxide	MnO	%	0.01	30
Nickel	Ni	%	0.005	30
Lead	Pb	%	0.01	30



Element or Oxide	Symbol	Units	Lower Limit	Upper Limit
Sulfur	S	%	0.01	60
Silicon	Si	%	0.01	45
Silicon Oxide	SiO ₂	%	0.01	100
Titanium Oxide	TiO ₂	%	0.01	50
Zinc	Zn	%	0.01	30



Geochemical Procedure

ME-ICP61a

Evaluation of High Grade Materials Using Conventional ICP-AES Analysis

Sample Decomposition:

HNO₃-HClO₄-HF-HCl digestion (ASY-4A02)

Analytical Method:

Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)

The sample is digested in a mixture of nitric, perchloric and hydrofluoric acids. Perchloric acid is added to assist oxidation of the sample and to reduce the possibility of mechanical loss of sample as the solution is evaporated to moist salts. Elements are determined by inductively coupled plasma - atomic emission spectroscopy (ICP-AES).

NOTE: Four acid digestions are able to dissolve most minerals; however, although the term “*near-total*” is used, depending on the sample matrix, not all elements are quantitatively extracted.

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Silver	Ag	ppm	1	200	Ag-OG62
Aluminum	Al	%	0.05	50	
Arsenic	As	ppm	50	100 000	
Barium	Ba	ppm	50	50 000	
Beryllium	Be	ppm	10	10 000	
Bismuth	Bi	ppm	20	50 000	
Calcium	Ca	%	0.05	50	
Cadmium	Cd	ppm	10	10 000	
Cobalt	Co	ppm	10	50 000	Co-OG62

Revision 04.03
Nov 1, 2007

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Geochemical Procedure

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Chromium	Cr	ppm	10	100 000	
Copper	Cu	ppm	10	100 000	Cu-OG62
Iron	Fe	%	0.05	50	
Gallium	Ga	ppm	50	50 000	
Potassium	K	%	0.1	30	
Lanthanum	La	ppm	50	50 000	
Magnesium	Mg	%	0.05	50	
Manganese	Mn	ppm	10	100 000	
Molybdenum	Mo	ppm	10	50 000	Mo-OG62
Sodium	Na	%	0.05	30	
Nickel	Ni	ppm	10	100 000	Ni-OG62
Phosphorus	P	ppm	50	100 000	
Lead	Pb	ppm	20	100 000	Pb-OG62
Sulphur	S	%	0.05	10	
Antimony	Sb	ppm	50	50 000	
Scandium	Sc	ppm	50	50 000	
Strontium	Sr	ppm	10	100 000	
Thorium	Th	ppm	50	50 000	
Titanium	Ti	%	0.05	30	
Thallium	Tl	ppm	50	50 000	
Uranium	U	ppm	50	50 000	

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Geochemical Procedure

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Vanadium	V	ppm	10	100 000	
Tungsten	W	ppm	50	50 000	
Zinc	Zn	ppm	20	100 000	Zn-OG62

Elements listed below are available upon request.

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Cerium	Ce	ppm	50	500	
Hafnium	Hf	ppm	10	10000	
Lanthanum	La	ppm	10	10000	
Lithium	Li	ppm	100	10000	
Niobium	Nb	ppm	10	10000	
Phosphorus	P	ppm	10	10000	
Rubidium	Rb	ppm	10	10000	
Selenium	Se	ppm	25	10000	
Tin	Sn	ppm	10	10000	
Tantalum	Ta	ppm	10	10000	
Tellurium	Te	ppm	10	10000	
Yttrium	Y	ppm	10	10000	
Zirconium	Zr	ppm	10	10000	

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Nov 1, 2007

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Fire Assay Procedure

PGM- ICP23 and PGM- ICP24 Precious Metals Analysis Methods

Sample Decomposition:

Fire Assay Fusion (FA-FUSPG1, FA-FUSPG2)

Analytical Method:

Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP-AES)

A prepared sample (30 – 50 g) is fused with a mixture of lead oxide, sodium carbonate, borax and silica, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead. The bead is digested for 2 minutes at high power by microwave in dilute nitric acid. The solution is cooled and hydrochloric acid is added. The solution is digested for an additional 2 minutes at half power by microwave. The digested solution is then cooled, diluted to 4 mL with 2 % hydrochloric acid, homogenized and then analyzed for gold, platinum and palladium by inductively coupled plasma – atomic emission spectrometry.

Method Code	Element	Symbol	Units	Sample Mass (g)	Lower Limit	Upper Limit	Default Overlimit Method
PGM-ICP23	Gold	Au	ppm	30	0.001	10	Au-GRA21
PGM-ICP23	Platinum	Pt	ppm	30	0.005	10	PGM-ICP27
PGM-ICP23	Palladium	Pd	ppm	30	0.001	10	PGM-ICP27
PGM-ICP24	Gold	Au	ppm	50	0.001	10	Au-GRA21
PGM-ICP24	Platinum	Pt	ppm	50	0.005	10	PGM-ICP27
PGM-ICP24	Palladium	Pd	ppm	50	0.001	10	PGM-ICP27

Revision 03.01
Oct 04, 2005

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Fire Assay Procedure



Becquerel Methods

PGM-NAA26

PGM by Nickel Sulphide fusion and Neutron Activation Analysis

Sample Decomposition:

Nickel Sulphide Fusion

Analytical Method:

Gamma Ray Spectrometer

A prepared sample is fused with a mixture of soda ash, borax, silica, sulfur and nickel carbonate or nickel oxide at approximately 1200 °C. The resulting nickel sulfide button, which has a high affinity for precious group metals, is encapsulated and exposed to a neutron flux. The irradiation causes most of the elements in the sample to become radioactive and to emit radiation in the form of penetrating gamma rays. The energies of these gamma rays are characteristic of particular elements. By comparing spectral peak positions and areas with library standards, the elements are quantitatively identified.

Multiple Irradiations and spectra collections may be necessary. This analysis is carried out by Becquerel and/or McMaster University.

Element	Symbol	Units	Lower Limit	Upper Limit
Platinum	Pt	ppm	0.02	10.0
Palladium	Pd	ppm	0.02	10.0
Gold	Au	ppm	0.001	10.0
Osmium	Os	ppm	0.01	10.0
Ruthenium	Ru	ppm	0.05	10.0
Iridium	Ir	ppm	0.001	10.0
Rhodium	Rh	ppm	0.005	10.0